VERSION 11 2020-2021

TF Automation
Best Solutions



FLUID POWER CATALOGUE
2020-2021

T: **01274 308005** E: **sales@tfautomation.co.uk**

SUPPORTING MANUFACTURERS FOR OVER 40 YEARS WITH PNEUMATIC AND INDUSTRIAL COMPONENTS

TF Automation
Best Solutions

WELCOME TO OUR NEW 2020/21 CATALOGUE

With excellent customer service, next day delivery and full technical support, TF Automation can provide you with all your pneumatic and industrial component needs to ensure uninterrupted production. Based in Bradford, we have been supplying local manufacturers for over 40 years and our dedicated sales and technical teams will ensure you choose the right product solution for your requirements every time.

ENSURE YOU CHOOSE TF AUTOMATION

- Exceptional customer service from our dedicated sales team
- More than 19,000 pneumatic and industrial components from world-leading manufacturers
- Over 40 years' expertise in pneumatics and process automation
- Next day delivery or collect from our trade counter
- Technical and product support

EXPERIENCE ACROSS A WIDE RANGE OF INDUSTRIES



FOOD & BEVERAGE | AUTOMOTIVE | AEROSPACE | PRINTING | PACKAGING | MEDICAL | TEXTILES | DEFENCE | HEATING

GET IN TOUCH FOR QUERIES, QUOTES AND ORDERS

T: **01274 308005** E: **sales@tfautomation.co.uk**

ALL CATALOGUE ITEMS AVAILABLE FROM OUR WEBSHOP

www.tfautomation.co.uk/webshop

Email **webshop@tfautomation.co.uk** and we will set up an account for you

Contents

1	Pneumatics	p2-99
2	Aventics Pneumatics	p100-127
3	Vacuum	p128-225
4	Valves	p226-275
5	FRLs, Drains & Gauges	p276-353
6	Tube Fittings	p354-401
7	Hose Tails & Adaptors	p402-433
8	Quick Connects Couplings	p434-491
9	Tubing & Hose	p492-577
10	Hose Reels & Fuelling	p578-599
11	Piping Systems	p600-665
12	Malleable Iron	p666-683
13	Stainless Steel	p684-713
14	Blow Guns	p714-731
15	Air Tools	p732-743
16	Hydraulics	p744-815
17	Clamps, Adhesives & Lubricants	p816-865
18	Storage	p866-875
19	Spill Absorbents	p876-885
	Useful Information	p886-887
	Part Code & Descriptive Index	p888-988

Pneumatics



	4	Cartridge Cylinders
	5-20	Pneumatic Cylinders
	21-23	Cylinder Guide Units
	24-29	Flow Regulators & Valves
	30-35	Functional Fittings
	36	Block Fittings
	37	Air Pressure Multipliers
	39-46	Mechanical Valves
	47-50	Hand & Foot Valves
	51-54	Pneumatically Operated Valves
	55-61	Solenoid Control Valves
	62-65	ISO Valves
	66-67	Multimach Valve System
	68	Pneumatic Logic Valves
	69-77	EB 80 Electro-pneumatic System
	78-82	Special Purpose Valves
	83-86	Pressure, Vacuum & Temperature Switches
	87-90	Flow Indicators & Meters
	91-96	Air Knives & Amplifiers
	97	Vibrators

Cartridge Cylinders

- Front spring
- Non-magnetic
- With threaded or non-threaded piston rod

Material Specification

- Nickel-plated brass barrel
- Stainless steel piston rod
- Zinc coated steel nuts
- Polyurethane seals
- Steel spring

Working Temperature:

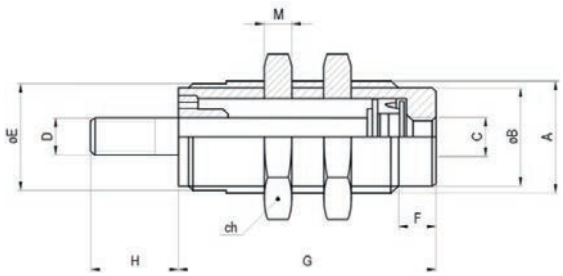
- Max +60°C

Maximum Working Pressure:

- 2 to 7 bar

Dimensions

Bore	A	B	C	D		ØE	F	H	M	ch	G		
				Threaded Piston Rod	Non-threaded Piston Rod						Cylinder Stroke		
											5	10	15
6	M10 x 1	8.5	M5	M3	Ø3	9	5	8	3	14	19.5	25.5	32.5
10	M15 x 1.5	13	M5	M4	Ø5	14	5	11.5	4	19	20.5	27	34
16	M22 x 1.5	19	M5	M5	Ø5	20	6	14	5	27	23.5	29.5	36



M5 Threaded Inlet Port

Single Acting Cylinders with Threaded Rod

Code S42	Bore mm	Stroke mm	Price
W1000060005	6	5	21.50
W1000060010	6	10	24.90
W1000060015	6	15	28.90
W1000100005	10	5	22.40
W1000100010	10	10	26.10
W1000100015	10	15	30.20
W1000160005	16	5	23.30
W1000160010	16	10	27.35
W1000160015	16	15	31.40



ISO 6432 Mini Cylinders

Technical Data for all ISO 6432 Cylinders

- Maximum operating pressure: 10 bar
- Temperature range: -10ºC to +80ºC
- Fluid: lubricated or unlubricated air
- Inrush pressure: Ø10-12 = 0.8 bar, Ø16-25 = 0.6 bar
- Forces generated at 6 bar thrust/retraction: Ø16: 108N/95N, Ø20: 169N/148N, Ø25: 265N/228N

Dimensions

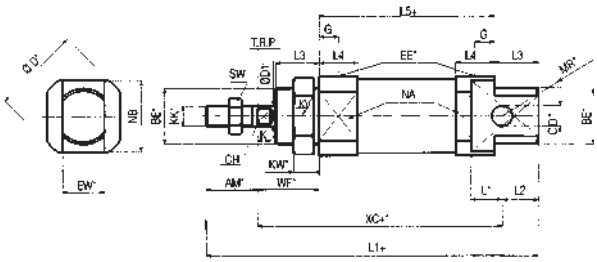
Ø	AM	BE	ØCD	ØD	ØD1	G	EE	EW	L	L1	L2	L3	L4	L5	KK	XC	WF	KW	KV	MR	NA	NB	SW	CH	K
10	12	M12 x 1.25	4	17	4	6	M5	8	6	86	10	12	10	46	M4	64	16	7	19	12	15	15	7	3	3
12	16	M16 x 1.5	6	19	6	6	M5	12	9	104	13	17	10	49	M6	75	22	8	24	16	17	17	10	5	3
16	16	M16 x 1.5	6	23	6	6	M5	12	9	111	13	17	10	56	M6	82	22	8	24	16	20	20	10	5	3.5
20	20	M22 x 1.5	8	34	8	8	G1/8	16	12	129	14	17	15	68	M8	95	24	10	32	18	28	28	13	7	4.6
25	22	M22 x 1.5	8	34	10	9	G1/8	16	12	143	17	20	18	73	M10 x 1.25	104	28	10	32	21	30	30	17	8	5

ISO 6432 Single Acting Cylinders

Non-magnetic

Code P03	Diameter mm	Stroke mm	Price
1110100010XN	10	10	38.70
1110100025XN	10	25	39.30
1110100050XN	10	50	39.85
1110120010CN	12	10	41.15
1110120025CN	12	25	41.65
1110120050CN	12	50	42.45
1110160010CN	16	10	40.45
1110160025CN	16	25	41.40
1110160050CN	16	50	43.35
1110200010CN	20	10	47.90
1110200025CN	20	25	48.65
1110200050CN	20	50	47.60
1110250010CN	25	10	52.80
1110250025CN	25	25	54.15
1110250050CN	25	50	56.55





For Flow Control Valves



See page 26

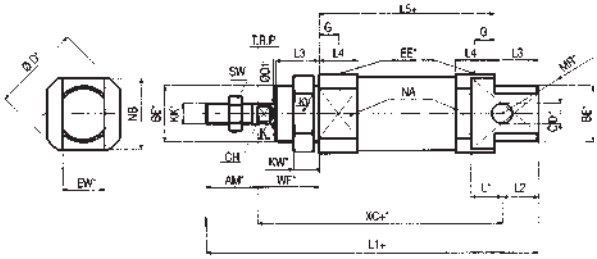
ISO 6432 Mini Cylinders

ISO 6432 Double Acting Cylinders

Magnetic

Code P03	Diameter mm	Stroke mm	Price
1120160010CN	16	10	40.95
1120160025CN	16	25	42.00
1120160050CN	16	50	43.80
1120160080CN	16	80	45.00
1120160100CN	16	100	46.05
1120160125CN	16	125	47.40
1120160160CN	16	160	49.90
1120160200CN	16	200	51.50
1120200010CN	20	10	45.30
1120200025CN	20	25	45.95
1120200050CN	20	50	47.50
1120200080CN	20	80	49.50
1120200100CN	20	100	50.55
1120200125CN	20	125	51.85
1120200160CN	20	160	55.60
1120200200CN	20	200	57.65
1120200250CN	20	250	70.50
1120250010CN	25	10	50.00
1120250025CN	25	25	51.05
1120250050CN	25	50	53.20
1120250080CN	25	80	55.35
1120250100CN	25	100	57.05
1120250125CN	25	125	58.60
1120250160CN	25	160	62.75
1120250200CN	25	200	65.70
1120250250CN	25	250	80.55
1120250320CN	25	320	86.90



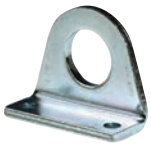


For Pneumatic Tube
in Nylon & Polyurethane



See section 9

ISO 6432 Mini Cylinders Accessories



Foot Mounting

To Suit ISO 6432 Cylinders

Code P03	To Suit	Price
W0950080001	10	3.30
W0950120001	12-16	3.90
W0950200001	20-25	4.05



Flange Mounting

To Suit ISO 6432 Cylinders

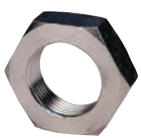
Code P03	To Suit	Price
W0950080002	10	3.30
W0950120002	12-16	3.90
W0950200002	20-25	5.10



Counter Support

To Suit ISO 6432 Cylinders

Code P03	To Suit	Price
W0950080005	10	4.45
W0950120005	12-16	5.55
W0950200005	20-25	5.65



Cylinder Head Nut

To Suit ISO 6432 Cylinders

Code P03	To Suit	Thread	Price
W0950080010	10	M12 x 1.25	0.90
W0950120010	16	M16 x 1.5	0.90
W0950200010	25	M22 x 1.5	1.50



Piston Rod Nut

To Suit ISO 6432 Cylinders

Code P03	To Suit	Thread	Price
W0950080011	10	M4	0.90
W0950120011	16	M6	0.90
W0950200011	20	M8	1.10
W0950322010	25	M10 x 1.25	1.35



Fork Clevis

To Suit ISO 6432 Cylinders

Code P03	To Suit	Thread	Price
W0950080020	10	M4	2.50
W0950120020	12-16	M6	2.50
W0950200020	20	M8	2.90
W0950322020	25	M10 x 1.25	4.35



Spherical Rod Eye

To Suit ISO 6432 Cylinders

Code P03	To Suit	Thread	Price
W0950080025	10	M4	20.50
W0950120025	12-16	M6	20.50
W0950200025	20	M8	22.95
W0950322025	25	M10 x 1.25	26.10



Reed Switch & Bracket

To Suit ISO 6432 Cylinders

Code P03	Description/To Suit	Price
W0950000201	Reed Switch	35.05
W0950000510	10	3.15
W0950000512	12	3.15
W0950000516	16	3.15
W0950000520	20	3.15
W0950000525	25	3.15

ISO 15552 Cylinders (Formerly ISO 6431)

Technical Data for ISO 15552 Cylinders

- Maximum operating pressure: 10 bar
- Temperature range: -10°C to +70°C
- Fluid: unlubricated air (lubrication, if used, must be continuous)
- Sensor magnet: all versions come complete with magnet
- Piston rod material: C40 chromed steel Ø32-63
- Piston seal: NBR

Dimensions

Ø	A	A1	A2	B	C	C1	CH	CH1	D	D1	D2	E	E1	F	G	G1	H	Ø	L	L0	L1	L2	M	N	P	Q
32	10	7	10	30	26	16	10	6	M10 x 1.25	12	15	32.5	5	22	G1/8	M6	47	32	120	94	74	146	9	4.5	6	4
40	12	9	10	35	30	20	13	6	M12 x 1.25	16	19	38	5	24	G1/4	M6	53	40	135	105	81	165	9	4.5	6	4
50	14	14	10	40	37	25	17	8	M16 x 1.5	20	19	46.5	5	32	G1/4	M8	65	50	143	106	78	180	12	5.5	6	6
63	16	14	10	45	37	25	17	8	M16 x 1.5	20	23	56.5	5	32	G3/8	M8	75	63	158	121	89	195	12	5.5	6	6
80	18	12	12	45	46	33	22	10	M20 x 1.5	25	23	72	8	40	G3/8	M10	95	80	174	128	92	220	16	5.5	10	7
100	20	14	12	55	51	38	22	10	M20 x 1.5	25	27	89	8	40	G1/2	M10	115	100	189	138	98	240	16	5.5	10	7
125	25	21	10	60	65	45	27	12	M27 x 2	32	27	110	8	54	G1/2	M12	140	125	225	160	110	290	19	6.5	12	8

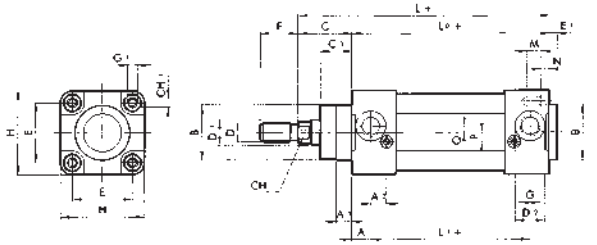
More Sizes Available
Up to 320mm diameter & 2600mm stroke



Double Acting Cylinders

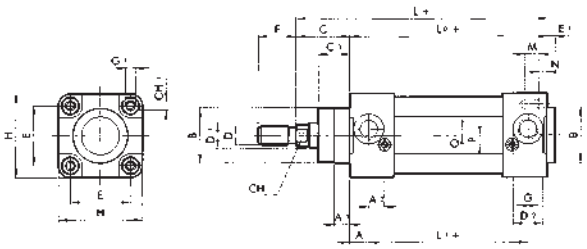
Magnetic & Cushioned

Code P54	Diameter (mm)	Stroke (mm)	Price
1213320025CN	32	25	70.75
1213320050CN	32	50	72.75
1213320080CN	32	80	76.75
1213320100CN	32	100	76.75
1213320125CN	32	125	78.70
1213320160CN	32	160	82.65
1213320200CN	32	200	84.70
1213320250CN	32	250	91.25
1213320320CN	32	320	99.60
1213320400CN	32	400	100.50
1213320500CN	32	500	108.65
1213400025CN	40	25	81.65
1213400050CN	40	50	84.25
1213400080CN	40	80	89.25
1213400100CN	40	100	89.25
1213400125CN	40	125	92.40
1213400160CN	40	160	96.95
1213400200CN	40	200	99.50
1213400250CN	40	250	104.50
1213400320CN	40	320	110.95
1213400400CN	40	400	119.75
1213400500CN	40	500	129.90



Code P54	Diameter (mm)	Stroke (mm)	Price
1213500025CN	50	25	94.90
1213500050CN	50	50	98.15
1213500080CN	50	80	104.35
1213500100CN	50	100	104.35
1213500125CN	50	125	107.50
1213500160CN	50	160	113.75
1213500200CN	50	200	118.15
1213500250CN	50	250	123.20
1213500320CN	50	320	135.70
1213500400CN	50	400	142.05
1213500500CN	50	500	154.70

ISO 15552 Cylinders (Formerly ISO 6431)





Double Acting Cylinders

Magnetic & Cushioned

Code P54	Diameter (mm)	Stroke (mm)	Price
1213630025CN	63	25	119.65
1213630050CN	63	50	123.45
1213630080CN	63	80	130.95
1213630100CN	63	100	130.95
1213630125CN	63	125	134.75
1213630160CN	63	160	142.25
1213630200CN	63	200	150.30
1213630250CN	63	250	153.45
1213630320CN	63	320	168.40
1213630400CN	63	400	175.75
1213630500CN	63	500	190.90
1213800025AN	80	25	156.40
1213800050AN	80	50	161.40
1213800080AN	80	80	169.60
1213800100AN	80	100	171.25
1213800125AN	80	125	176.25
1213800160AN	80	160	186.10
1213800200AN	80	200	191.15
1213800250AN	80	250	201.05
1213800320AN	80	320	220.80
1213800400AN	80	400	230.75
1213800500AN	80	500	250.40

Code P54	Diameter (mm)	Stroke (mm)	Price
1213A10025AN	100	25	216.50
1213A10050AN	100	50	222.65
1213A10080AN	100	80	235.05
1213A10100AN	100	100	235.05
1213A10125AN	100	125	241.10
1213A10160AN	100	160	250.55
1213A10200AN	100	200	259.60
1213A10250AN	100	250	271.95
1213A10320AN	100	320	296.60
1213A10400AN	100	400	329.55
1213A10500AN	100	500	333.50
1213A20100AN	125	100	327.05
1213A20125AN	125	125	340.65
1213A20160AN	125	160	357.10
1213A20200AN	125	200	357.05
1213A20250AN	125	250	385.85
1213A20320AN	125	320	425.10
1213A20400AN	125	400	427.35
1213A20500AN	125	500	476.25

ISO 15552 Cylinders (Formerly ISO 6431)

Technical Data for ISO 15552 Cylinders Ø 160-320

- Maximum operating pressure: 10 bar
- Temperature range: -10ºC to +80ºC
- Design: round barrel with tie rods
- Sensor magnet: all versions come complete with magnet
- Piston rod material: C45 steel, chromed
- Piston seal: NBR
- Options: available with mounted intermediate hinge

More Sizes Available
Up to 320mm diameter & 2600mm stroke



For dimensions and further technical information refer to sales team.

Double Acting Cylinders

Magnetic & Cushioned

Code P54	Diameter mm	Stroke mm	Price
W1211600025	160	25	756.50
W1211600050	160	50	766.70
W1211600080	160	80	778.85
W1211600100	160	100	787.05
W1211600125	160	125	797.20
W1211600160	160	160	811.45
W1211600200	160	200	827.75
W1211600250	160	250	848.10
W1211600320	160	320	876.55
W1211600400	160	400	848.70
W1211600500	160	500	949.75
W1212000025	200	25	951.15
W1212000050	200	50	902.50
W1212000080	200	80	920.00
W1212000100	200	100	997.95
W1212000125	200	125	1013.60
W1212000160	200	160	1035.50
W1212000200	200	200	1060.45
W1212000250	200	250	1091.70
W1212000320	200	320	1135.45
W1212000400	200	400	1185.45
W1212000500	200	500	1247.90

Code P54	Diameter mm	Stroke mm	Price
W1212500025	250	25	2250.60
W1212500050	250	50	2280.00
W1212500080	250	80	2315.30
W1212500100	250	100	2338.90
W1212500125	250	125	2368.30
W1212500160	250	160	2409.50
W1212500200	250	200	2456.60
W1212500250	250	250	2515.50
W1212500320	250	320	2597.90
W1212500400	250	400	2692.10
W1212500500	250	500	2860.60
W1213200025	320	25	3808.20
W1213200050	320	50	3862.80
W1213200080	320	80	3928.30
W1213200100	320	100	3972.00
W1213200125	320	125	4026.55
W1213200160	320	160	4102.95
W1213200200	320	200	4190.30
W1213200250	320	250	4299.45
W1213200320	320	320	4452.30
W1213200400	320	400	4626.95
W1213200500	320	500	4898.85

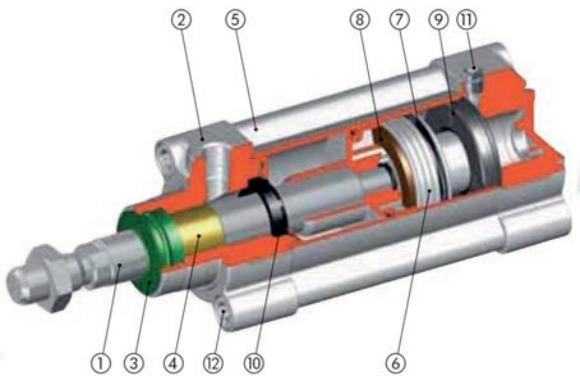
ISO 15552 Cylinders, Series HCR (High Corrosion Resistance)

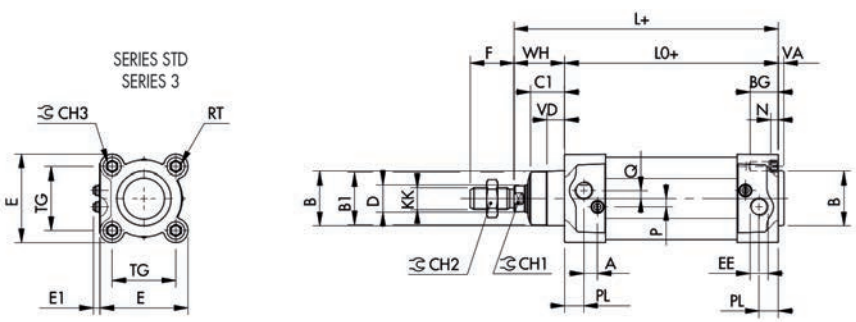
In some applications, cylinders are exposed to aggressive environments (e.g. the dairy, fruit and vegetable, and food industry) or to substances and washings with aggressive detergents (e.g. caustic soda, hydrochloric acid and lactic acid). Under these conditions, the HCR series cylinders ensure better corrosion resistance.

- Cylinders made to ISO 15552, designed and built with materials and/or surface treatments that are highly resistant to corrosion
- They come in various versions and with specific range of accessories:
  · with or without magnet
  · with single or through piston rod
- Also available with liner in the STD series or series 3



1. Piston rod: AISI 316, thickness chromed
2. Head: anodised pressure die-cast aluminium, epoxy-vinyl ester and epoxy-resin powder coating
3. Piston rod gasket: special polyurethane
4. Guide bushing: steel strip with bronze and PTFE insert
5. Barrel: drawn anodised calibrated aluminium
6. Semi-piston: made of self-lubricating technopolymer with built-in cushioning olives (aluminium with technopolymer shoe for Ø 80, 10 and 125)
7. Piston gasket: NBR
8. Magnet: plastoferrite
9. Buffer + static O-rings: NBR
10. Cushioning gasket: NBR
11. Needle: AISI 316, screws: AISI 316
12. Screws: AISI 316





Ø	PL	VD	A	B	B1	WH	C1	CH1	CH2	CH3	KK	D	TG	VA	F	EE	RT	E	E1 min	E1 max	L	L0	ZM	BG	N	P	Q
32	10	6.5	10	30	28	26	16	10	17	6	M10x1.25	12	32.5	4	22	G1/8	M6	46	5.5	8.4	120	94	146	14.5	4.5	6	4
40	12	8	10	35	33	30	20	13	19	6	M12x1.25	16	38	4	24	G1/4	M6	54	4.5	8.4	135	105	165	14.5	4.5	6	4
50	14	13	10	40	38	37	25	17	24	8	M16x1.5	20	46.5	4	32	G1/4	M8	64.5	4.5	8.9	143	106	180	17.5	5.5	6	6
63	16	14	10	45	40	37	25	17	24	8	M16x1.5	20	56.5	4	32	G3/8	M8	75.5	4.1	9.5	158	121	195	17.5	5.5	6	6
80	18	12	12	45	43	46	33	22	30	10	M20x1.5	25	72	4	40	G3/8	M10	94	6.2	12.2	174	128	220	21.5	5.5	10	7
100	20	14	12	55	49	51	38	22	30	10	M20x1.5	25	89	4	40	G1/2	M10	111	6.7	12.2	189	138	240	21.5	5.5	10	7
125	25	20	10	60	54	65	45	27	41	12	M27x2	32	110	6	54	G1/2	M12	135	5.7	12.7	225	160	290	25.5	6.5	12	8

ISO 15552 Cylinders, Series HCR (High Corrosion Resistance)



ISO 15552 HCR Double Acting Cylinders

Magnetic & Cushioned

Code P60	Diameter mm	Stroke mm	Price
1213320025BL	32	25	242.75
1213320050BL	32	50	253.20
1213320080BL	32	80	250.30
1213320100BL	32	100	253.05
1213320125BL	32	125	256.40
1213320160BL	32	160	261.20
1213320200BL	32	200	266.70
1213320250BL	32	250	273.50
1213320320BL	32	320	283.10
1213320400BL	32	400	294.05
1213320500BL	32	500	313.70
1213400025BL	40	25	285.60
1213400050BL	40	50	281.55
1213400080BL	40	80	286.65
1213400100BL	40	100	298.80
1213400125BL	40	125	294.35
1213400160BL	40	160	309.35
1213400200BL	40	200	307.20
1213400250BL	40	250	315.75
1213400320BL	40	320	327.75
1213400400BL	40	400	341.40
1213400500BL	40	500	358.50
1213500025BL	50	25	325.65
1213500050BL	50	50	330.75
1213500080BL	50	80	336.95
1213500100BL	50	100	341.05
1213500125BL	50	125	346.15
1213500160BL	50	160	353.35
1213500200BL	50	200	361.55
1213500250BL	50	250	371.85
1213500320BL	50	320	386.20
1213500400BL	50	400	414.70
1213500500BL	50	500	423.15
1213630025BL	63	25	371.50
1213630050BL	63	50	376.95
1213630080BL	63	80	383.40
1213630100BL	63	100	387.75

Code P60	Diameter mm	Stroke mm	Price
1213630125BL	63	125	393.20
1213630160BL	63	160	400.80
1213630200BL	63	200	409.45
1213630250BL	63	250	420.25
1213630320BL	63	320	435.45
1213630400BL	63	400	452.75
1213630500BL	63	500	474.40
1213800025WL	80	25	505.00
1213800050WL	80	50	512.70
1213800080WL	80	80	521.90
1213800100WL	80	100	528.10
1213800125WL	80	125	535.75
1213800160WL	80	160	546.55
1213800200WL	80	200	558.85
1213800250WL	80	250	574.30
1213800320WL	80	320	595.85
1213800400WL	80	400	620.45
1213800500WL	80	500	651.20
1213A10025WL	100	25	572.30
1213A10050WL	100	50	598.30
1213A10080WL	100	80	591.10
1213A10100WL	100	100	597.95
1213A10125WL	100	125	606.50
1213A10160WL	100	160	618.50
1213A10200WL	100	200	632.15
1213A10250WL	100	250	649.25
1213A10320WL	100	320	673.20
1213A10400WL	100	400	700.55
1213A10500WL	100	500	734.80
1213A20100WL	125	100	891.50
1213A20125WL	125	125	905.50
1213A20160WL	125	160	925.10
1213A20200WL	125	200	947.40
1213A20250WL	125	250	975.35
1213A20320WL	125	320	1014.45
1213A20400WL	125	400	1059.15
1213A20500WL	125	500	1115.05

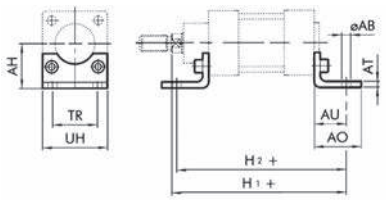
ISO 15552 Cylinders Accessories (Formerly ISO 6431)

Foot Mounting

To Suit ISO 15552 Cylinders

Code P03	Ø	AB	AH	AO	AT	AU	TR	UH	H1	H2	Price
W0950322001	32	7	32	35	4	24	32	45	144	142	**6.50**
W0950402001	40	9	36	43	4	28	36	52	163	161	**7.65**
W0950502001	50	9	45	47	4	32	45	65	175	170	**9.10**
W0950632001	63	9	50	47	6	32	50	75	190	185	**9.85**
W0950802001	80	12	63	61	6	41	63	95	215	210	**16.95**
W0951002001	100	14	71	66	6	41	75	115	230	220	**22.75**
W0951252001	125	16	90	60	7	45	90	140	270	250	**31.05**
W0951602001	160	18	115	80	10	60	115	180	319	300	**54.95**
W0952002001	200	22	135	100	10	70	135	220	345	320	**60.15**



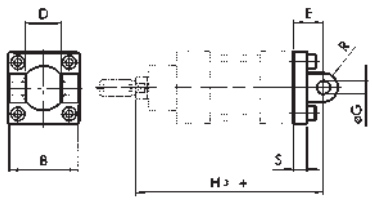


Female Hinge

To Suit ISO 15552 Cylinders

Code P03	Ø	B	D	E	ØG	H3	R	S	Price
W0950322003	32	45	26	22	10	142	11	10	**19.00**
W0950402003	40	52	28	25	12	160	13	10	**19.15**
W0950502003	50	60	32	27	12	170	13	12	**22.10**
W0950632003	63	70	40	32	16	190	17	12	**26.55**
W0950802003	80	90	50	36	16	210	17	16	**33.90**
W0951002003	100	110	60	41	20	230	21	16	**47.90**
W0951252003	125	130	70	50	25	275	26	20	**114.00**
W0951602003	160	170	90	55	30	314	25	20	**165.20**
W0952002003	200	170	90	60	30	335	25	25	**237.35**



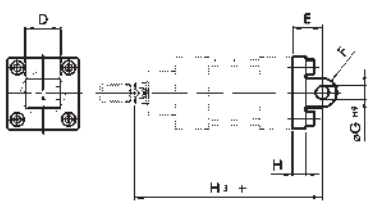


Male Hinge

To Suit ISO 15552 Cylinders

Code P03	Ø	D	E	F	ØG	H	H2	Price
W0950322004	32	26	22	11	10	10	142	**18.30**
W0950402004	40	28	25	13	12	10	160	**19.40**
W0950502004	50	32	27	13	12	12	170	**21.65**
W0950632004	63	40	32	17	16	12	190	**26.55**
W0950802004	80	50	36	17	16	16	210	**33.55**
W0951002004	100	60	41	21	20	16	230	**46.30**
W0951252004	125	70	50	26	25	20	1590	**114.00**
W0951602004	160	90	55	25	30	20	314	**151.85**
W0952002004	200	90	60	25	30	25	335	**198.10**





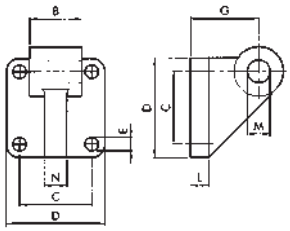
ISO 15552 Cylinders Accessories (Formerly ISO 6431)

Male 90° Hinge

To Suit ISO 15552 Cylinders



Code P03	Ø	B	C	D	E	G	L	M	N	Price
W0950322108	32	25.5	25	45	7	32	10	10	10	27.70
W0950402108	40	27.5	32	52	7	36	10	12	12	27.70
W0950502108	50	31.5	32	65	9	45	12	12	12	27.70
W0950632108	63	39.5	40	75	9	50	16	16	15	41.50
W0950802108	80	49.5	40	95	11	63	16	16	15	44.55
W0951002108	100	59.5	50	115	11	21	20	20	22	71.65
W0951252008	125	70	50	25	14	90	16	25	22	66.30

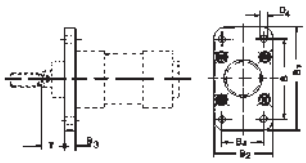


Flange Mounting

To Suit ISO 15552 Cylinders

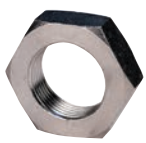


Code P03	Ø	B	B1	B2	B3	B4	ØD4	T	Price
W0950322002	32	64	80	50	10	32	7	16	11.15
W0950402002	40	72	90	55	10	36	9	20	12.30
W0950502002	50	90	110	65	12	45	9	25	14.80
W0950632002	63	100	120	75	12	50	9	25	21.65
W0950802002	80	126	153	95	16	63	12	30	26.55
W0951002002	100	150	178	115	16	75	14	35	30.90
W0951252002	125	180	220	140	20	90	16	45	75.50
W0951602002	160	230	270	180	20	115	18	59	135.05
W0952002002	200	270	312	225	25	135	22	70	198.10

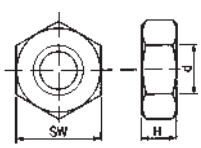


Piston Rod Nut

To Suit ISO 15552 Cylinders



Code P03	Ø	D	H	SW	Price
W0950322010	32	M10 x 1.25	6	17	1.35
W0950402010	40	M12 x 1.25	7	19	1.60
W0950502010	50-63	M16 x 1.5	8	24	1.80
W0950802010	80-100	M20 x 1.5	9	30	2.00
W0951252010	125	M27 x 2	12	74	2.80
W0951602010	160/200	M36 x 2	14	55	8.35

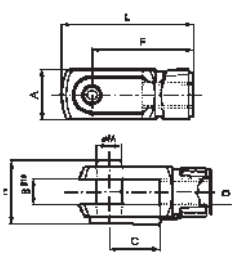


Fork Clevis

To Suit ISO 15552 Cylinders



Code P03	Ø	M	A	B	C	L	F	D	Price
W0950322020	32	10	20	10	20	52	40	M10 x 1.25	4.35
W0950402020	40	12	24	12	24	62	48	M12 x 1.25	6.75
W0950502020	50/63	16	32	16	32	83	64	M16 x 1.5	14.55
W0950802020	80/100	20	40	20	40	106	80	M20 x 1.5	25.75
W0951252020	125	30	55	30	55	148	110	M27 x 2	64.75
W0951602008	160/200	90	63	154	18	140	20	30	155.25
W0951602020	160/200	35	70	35	72	188	144	M36 x 2	135.05



ISO 15552 Cylinders Accessories (Formerly ISO 6431)

Spherical Rod Eye

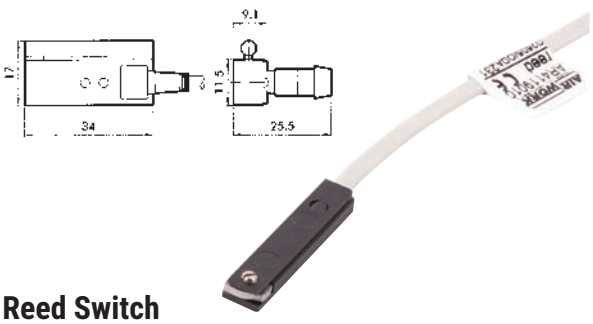
To Suit ISO 15552 Cylinders



Code P03	Ø	M	B1	B	A	L	F	D	CH	ØG	Price
W0950322025	32	10	10.5	14	28	57	43	M10 x 1.25	17	15	**26.10**
W0950402025	40	12	12	16	32	66	50	M12 x 1.25	19	17.5	**33.10**
W0950502025	50/63	16	15	21	42	85	64	M16 x 1.5	22	22	**59.20**
W0950802025	80/100	20	18	25	50	102	77	M20 x 1.5	30	27.5	**80.15**
W0951252025	125	30	25	37	70	145	110	M27 x 2	41	40	**232.25**
W0952002025	160/200	35	28	43	80	165	125	M36 x 2	58	46	**253.70**

Technical Data

Type		Contact
Maximum AC/DC voltage	V	Reed + varistor + LED 2 wires
		Reed + varistor + LED NO
		220 ISO cylinder
Maximum current at +25°C	mA	1,000
Power with inductive load	VA	15
Power with resistive load	Watt	50
Switch-on time	M sec	1.2
Switch-off time	M sec	0.1
Cable length		2.5m
Cable material		Soft PVC
Switch-on point	Gauss	110
Switch-off point	Gauss	95
Contact resistance		0.1



Reed Switch

To Suit ISO 15552 Cylinders

Code P03	Description	Price
W0950000201	Reed Sensor ACC.DSM2-C525	**35.05**



Reed Switch Bracket

To Suit ISO 15552 Cylinders

Code P03	Description	Cylinder Diameter	Price
W0950000711	Bracket ACC. D.32 DST 80	32-40	**7.20**
W0950000712	Bracket ACC. D.50 DST 81	50-63	**7.20**
W0950000713	Bracket ACC. D.80-100-125 DST 82	80-125	**7.20**
0951602093	Bracket ACC. D.160-200	160-200	**10.00**

new

Other variants available on request



Seal Kits

To Suit ISO 15552 Cylinders

Code P03	Ø	Material	Price
0090320502	32	NBR	**7.70**
0090400502	40	NBR	**8.10**
0090500502	50	NBR	**8.90**
0090630502	63	NBR	**9.70**
0090800502	80	NBR	**12.90**
0091000502	100	NBR	**17.65**
0091250502	125	NBR	**21.40**

This sensor tester features the following:

- A green light and acoustic signal indicating correct operation
- Sensors can be checked without having to be disassembled
- M8 and M12 connections and terminal board for direct connection to the wires
- PNP or NPN switching button

Technical Data

- Container material: PA 6.6 blue
- Degree of protection: IP00
- Connections: M8 and M12 plug-socket type with 40cm cable
- Additional connections: three terminals for wire connection
- Power supply: 9V DC (battery type 6LR61)
- Internal voltage: 15V DC
- Green light: tester switched on
- Yellow light: sensor in operation
- Red light: battery flat



Sensor Tester with M8 & M12 Connections

Automatic Switch Off

Code P03	Dimensions (mm)	Price
W0950060000	63 x 88 x 24	**426.20**

Round RNDC Cylinders

new

METAL WORK PNEUMATIC

Clean profile cylinders available in different versions:

- Configuration with or without magnet
- Single and double acting
- Single or through-rod
- Pneumatic cushioning on request
- Range of gaskets available in NBR, polyurethane and FKM/FPM (for high temperatures)

Technical Specifications

- Fluid: unlubricated air (lubrication, if used, must be continuous)
- Sensor magnet: all versions come complete with magnet
- Piston rod material: C45 chrome rod, technolopolymer piston rod
- Piston seal: NBR

Maximum Operating Pressure:

- 10 bar

Temperature Range:

- -10°C to +80°C

Dimensions

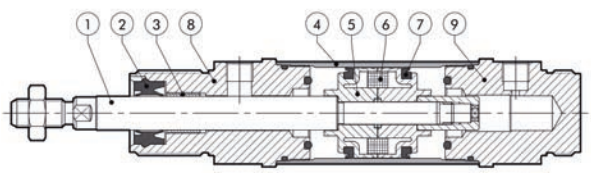
Ø	D	E	F	ØG	CH1	I	L	M	N	O	Ø P	R	ØS	SW	T	CH2	V	W	L1
32	M30x1.5	M8x1	22	30	10	96	172	M10x1.25	14	G1/8	38	78	12	17	49	36	30	40	220
40	M38x1.5	M10x1	24	38	13	113	198	M12x1.25	16	G1/4	46	89	16	19	57	43	35	45	251
50	M45x1.5	M12x1.5	32	45	17	120	220	M16x1.5	18	G1/4	57	96	20	24	62	54	38	50	284

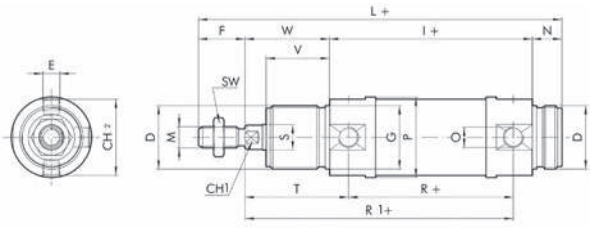
Components

1. Piston rod: C45 steel or stainless steel, thick chromed
2. Piston rod gasket: polyurethane, NBR or FKM/FPM
3. Guide bushing: steel strip with bronze and PTFE insert
4. Barrel: drawn anodised aluminium alloy
5. Half-piston: self-lubricating technopolymer with integrated cushioning olives
6. Magnet: plastoferrite
7. Piston gasket: polyurethane, NBR or FKM/FPM
8. Head: anodised aluminium alloy

Other variants available on request







Double Acting Cylinders

Magnetic & Cushioned

Code P54	Diameter mm	Stroke mm	Price
1120320025CN	32	25	81.80
1120320050CN	32	50	84.15
1120320080CN	32	80	86.45
1120320100CN	32	100	91.20
1120320125CN	32	125	98.20
1120320160CN	32	160	101.75
1120320200CN	32	200	106.45
1120320250CN	32	250	112.30
1120400025CN	40	25	96.40
1120400050CN	40	50	100.00
1120400080CN	40	80	105.90
1120400100CN	40	100	105.90

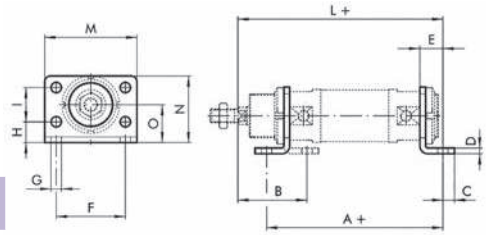
Code P54	Diameter mm	Stroke mm	Price
1120400125CN	40	125	109.45
1120400160CN	40	160	114.15
1120400200CN	40	200	124.70
1120400250CN	40	250	124.70
1120500025CN	50	25	115.35
1120500050CN	50	50	120.05
1120500080CN	50	80	124.75
1120500100CN	50	100	129.50
1120500125CN	50	125	141.25
1120500160CN	50	160	150.65
1120500200CN	50	200	150.65
1120500250CN	50	250	169.40

Round RNDC Cylinder Accessories

Foot Mounting

To Suit RNDC Cylinders



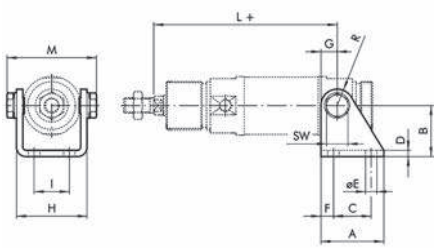


Code	P03	Ø	A	B	C	D	E	F	G	H	I	L	M	N	O	Price
W0950320002		32	124	50	7	4	14	52	7	14	28	150	66	49	28	13.75
W0950400002		40	153	60	10	5	20	60	9	18	30	178	80	58	33	16.75
W0950500002		50	160	64	10	6	20	70	9	20	40	190	90	70	40	20.60

Counter Support

To Suit RNDC Cylinders



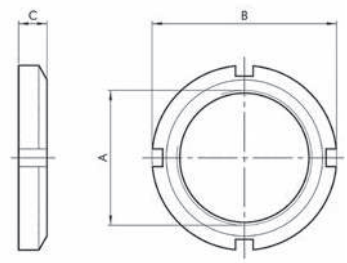


Code	P03	Ø	A	B	C	D	E	F	G	H	I	L	M	R	SW	Price
W0950320005		32	40	35	24	4	7	8	12	46.1	20	127	60	12	13	19.65
W0950400005		40	50	40	30	5	9	10	13	57.5	28	146	74	13	17	23.10
W0950500005		50	54	45	34	6	9	10	14	69.1	36	158	89	14	19	28.90

Head Lock Ring

To Suit RNDC Cylinders



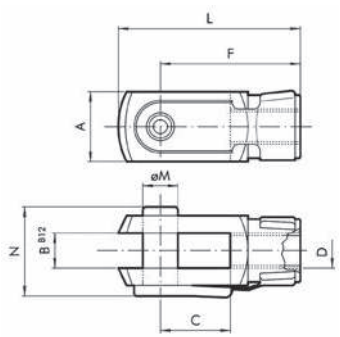


Code	P03	Ø	A	B	C	Price
W0950320010		32	M30 x 1.5	45	7	6.70
W0950400010		40	M38 x 1.5	50	8	8.30
W0950500010		50	M45 x 1.5	58	9	13.15

Fork Clevis

To Suit RNDC Cylinders



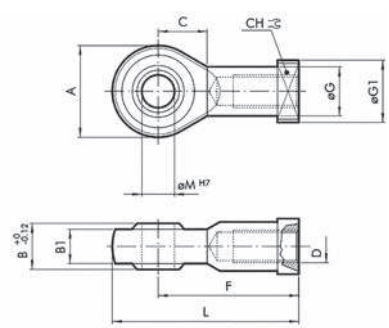


Code	P03	Ø	ØM	A	B	C	L	F	D	N	Price
W0950322020		32	10	20	10	20	52	40	M10 x 1.25	26	4.35
W0950402020		40	12	24	12	24	62	48	M12 x 1.25	32	6.75
W0950502020		50/63	16	32	16	32	83	64	M16 x 1.5	40	14.55

Spherical Rod Eye

To Suit RNDC Cylinders

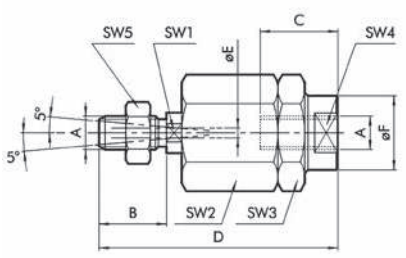




Code	P03	Ø	ØM	C	B1	B	A	L	F	D	ØG	CH	Price
W0950322025		32	10	15	10.5	14	28	57	43	M10 x 1.25	15	17	26.10
W0950402025		40	12	17	12	16	32	66	50	M12 x 1.25	17.5	19	33.10
W0950502025		50	16	22	15	21	42	85	64	M16 x 1.5	22	22	59.20

Round RNDC Cylinder Accessories



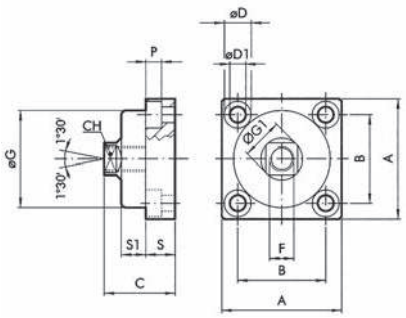


Articulated Joint

To Suit RNDC Cylinders

Code P03	Ø	A	B	C	D	ØE	ØF	SW1	SW2	SW3	SW4	SW5	Price
W0950322030	32	M10 x 1.25	20	20	71	4	22	12	30	30	19	17	**65.05**
W0950402030	40	M12 x 1.25	24	20	75	4	22	12	30	30	19	19	**68.75**
W0950502030	50	M16 x 1.5	32	32	103	4	32	20	41	41	30	24	**112.15**





Flexible Collar

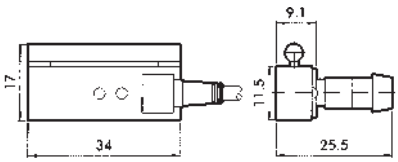
To Suit RNDC Cylinders

Code P03	Ø	A	B	C	CH	ØD	ØD1	F	ØG	ØG1	P	S	S1	Price
W0950326021	32	49	36	30	13	11	6.5	M10 x 1.25	39.5	17	6.5	12	10	**66.75**
W0950406021	40	59	42	36	15	14	8.5	M12 x 1.25	44	19	8.5	15	13.5	**85.30**
W0950506021	50	79	58	44	22	17	10.5	M16 x 1.5	59	26	10.5	20	15	**93.00**

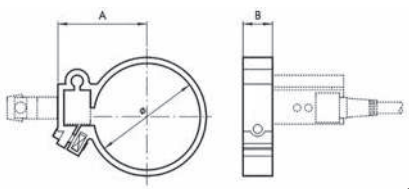
Technical Data

Type		Contact
Maximum AC/DC voltage	V	Reed + varistor + LED 2 wires
		Reed + varistor + LED NO
		220 ISO cylinder
Maximum current at +25°C	mA	1,000
Power with inductive load	VA	15
Power with resistive load	Watt	50
Switch-on time	M sec	1.2

Type		Contact
Switch-off time	M sec	0.1
Cable length		2.5m
Cable material		Soft PVC
Switch-on point	Gauss	110
Switch-off point	Gauss	95
Contact resistance		0.1









Reed Switch & Bracket

To Suit ISO 6432 Cylinders

Code P03	Description	Price
W0950000201	Reed Switch	**35.05**

Reed Switch & Bracket

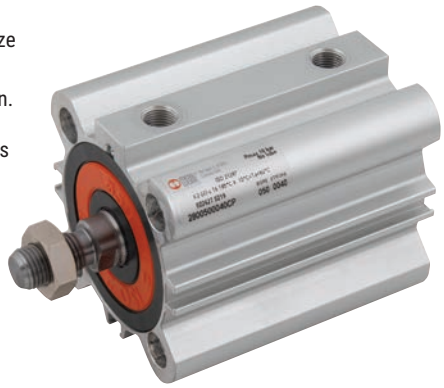
To Suit RNDC Cylinders

Code P03	Description	Price
W0950000132	Bracket for RNDC Ø32 Cylinder	**4.00**
W0950000140	Bracket for RNDC Ø40 Cylinder	**3.95**
W0950000150	Bracket for RNDC Ø50 Cylinder	**3.85**

ISO 21287 Cylinders

Compact cylinder to ISO 21287, LINER series, available in different versions to meet all possible requirements. Below sizes listed are most popular, if you require an alternative size please contact the sales office.

The heads have been eliminated for ease of installation, improved sturdiness and precision. The metal lining is designed to withstand heavy-duty work, tensile stress and impact. Technopolymer parts can withstand dynamic and pneumatic thrust. The lining virtually acts as a "bearing" to which most of user accessories are attached. The wide range of anchors provide numerous fixing points. Retractable magnetic limit switches can be mounted to identify the position in the cylinder grooves.



Compact Series Liner

Double Acting, Male Piston Rod

Code P03	Bore mm	Stroke mm	Price
2800200005XP	20	5	52.40
2800200010XP	20	10	52.80
2800200015XP	20	15	59.35
2800200020XP	20	20	53.70
2800200025XP	20	25	60.15
2800200040XP	20	40	77.85
2800200050XP	20	50	56.30
2800250005XP	25	5	55.00
2800250010XP	25	10	61.70
2800250015XP	25	15	55.80
2800250020XP	25	20	62.60
2800250025XP	25	25	63.10
2800250040XP	25	40	69.75
2800250050XP	25	50	58.70
2800320005CP	32	5	66.55
2800320010CP	32	10	67.05
2800320015CP	32	15	60.65
2800320020CP	32	20	68.10
2800320025CP	32	25	68.60
2800320040CP	32	40	62.95
2800320050CP	32	50	71.15
2800400005CP	40	5	65.30
2800400010CP	40	10	65.80
2800400015CP	40	15	66.35
2800400020CP	40	20	66.90
2800400025CP	40	25	75.05
2800400040CP	40	40	76.85
2800400050CP	40	50	78.00

Code P03	Bore mm	Stroke mm	Price
2800500005CP	50	5	72.10
2800500010CP	50	10	72.80
2800500015CP	50	15	73.50
2800500020CP	50	20	82.60
2800500025CP	50	25	74.85
2800500040CP	50	40	85.70
2800500050CP	50	50	87.25
2800630005CP	63	5	83.00
2800630010CP	63	10	83.80
2800630015CP	63	15	84.60
2800630020CP	63	20	85.40
2800630025CP	63	25	86.25
2800630040CP	63	40	88.65
2800630050CP	63	50	90.25
2800800005AP	80	5	134.60
2800800010AP	80	10	135.75
2800800015AP	80	15	136.95
2800800020AP	80	20	138.15
2800800025AP	80	25	155.15
2800800040AP	80	40	159.10
2800800050AP	80	50	161.70
2800100005AP	100	5	190.55
2800100010AP	100	10	192.05
2800100015AP	100	15	193.65
2800100020AP	100	20	195.15
2800100025AP	100	25	196.70
2800100040AP	100	40	201.35
2800100050AP	100	50	204.40

ISO 21287 Cylinders

Compact cylinder to ISO 21287, LINER series, available in different versions to meet all possible requirements. Below sizes listed are most popular, if you require an alternative size please contact the sales office.

The heads have been eliminated for ease of installation, improved sturdiness and precision. The metal lining is designed to withstand heavy-duty work, tensile stress and impact. Technopolymer parts can withstand dynamic and pneumatic thrust. The lining virtually acts as a "bearing" to which most of user accessories are attached. The wide range of anchors provide numerous fixing points. Retractable magnetic limit switches can be mounted to identify the position in the cylinder grooves.



Compact Series Liner

Double Acting, Female Piston Rod

Code P03	Bore mm	Stroke mm	Price
2900200005XP	20	5	58.35
2900200010XP	20	10	61.90
2900200015XP	20	15	53.25
2900200020XP	20	20	59.80
2900200025XP	20	25	54.15
2900200040XP	20	40	55.45
2900200050XP	20	50	56.30
2900250005XP	25	5	55.00
2900250010XP	25	10	61.70
2900250015XP	25	15	55.80
2900250020XP	25	20	56.20
2900250025XP	25	25	66.20
2900250040XP	25	40	64.45
2900250050XP	25	50	58.70
2900320005CP	32	5	59.70
2900320010CP	32	10	60.20
2900320015CP	32	15	67.60
2900320020CP	32	20	61.10
2900320025CP	32	25	68.60
2900320040CP	32	40	70.10
2900320050CP	32	50	71.15
2900400005CP	40	5	73.35
2900400010CP	40	10	73.35
2900400015CP	40	15	66.35
2900400020CP	40	20	74.50
2900400025CP	40	25	75.10
2900400040CP	40	40	76.85
2900400050CP	40	50	71.10

Code P03	Bore mm	Stroke mm	Price
2900500005CP	50	5	80.35
2900500010CP	50	10	81.10
2900500015CP	50	15	81.85
2900500020CP	50	20	82.60
2900500025CP	50	25	83.35
2900500040CP	50	40	76.90
2900500050CP	50	50	86.90
2900630005CP	63	5	83.00
2900630010CP	63	10	83.80
2900630015CP	63	15	95.20
2900630020CP	63	20	95.20
2900630025CP	63	25	86.25
2900630040CP	63	40	88.65
2900630050CP	63	50	100.55
2900800005AP	80	5	134.60
2900800010AP	80	10	146.85
2900800015AP	80	15	136.95
2900800020AP	80	20	138.15
2900800025AP	80	25	155.30
2900800040AP	80	40	159.10
2900800050AP	80	50	145.15
2900100005AP	100	5	190.55
2900100010AP	100	10	192.05
2900100015AP	100	15	193.65
2900100020AP	100	20	195.15
2900100025AP	100	25	196.70
2900100040AP	100	40	201.35
2900100050AP	100	50	204.40

Cylinder Guide Units

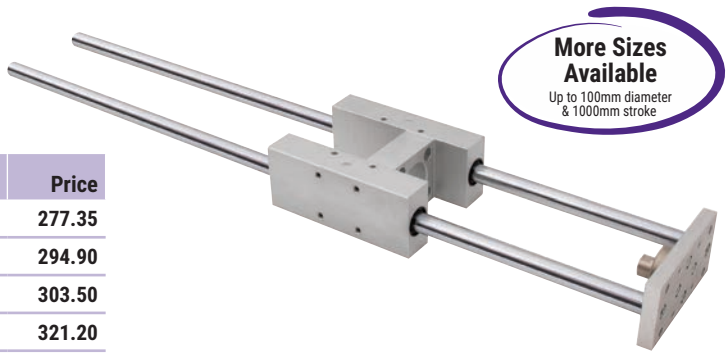
Technical Data

20 mm Diameter																															
A	B	C	Ch1	Ch2	D	D1	E	F	G	H	Ø I1	Ø I2	J	K	L1	L2	L3	L4	L5	L6	N	O	P	Q	R	S	T	T1	U	V	W	W1	X	Y	X
79	34	37	12	27	17	8.5	15	78	32	12	12	10	M5	M6	25	40	58	108	166	21	5.5	9	10	7.5	6.5	11	6.5	38	38	68	62.5	72	20	23	58

32-63 mm Diameter																										
A	B	C	Ch	D	E	F	G	H	ØI	L1	L2	L3	L4	L5	L6	N	O	P	Q	R	T	U	V	V1	Z
97	49	51	15	24	4.3	93	45	12	12	25	42	75	125	187	25	6.6	12	11	6.5	M6	78	61	32.5	82.7	74
115	58	58.2	15	28	11	112	55	12	16	25	42	80	140	207	30	6.6	12	11	6.5	M6	84	69	38	86	87
137	70	70.2	20	34	18.8	134	65	15	20	25	50	78	148	223	35	9	16	15	8.5	M8	100	85	46.5	92	104
152	85	82.5	20	34	15.3	147	80	15	20	25	50	106	178	243	25	9	16	15	9	M8	105	100	56.5	96.7	119

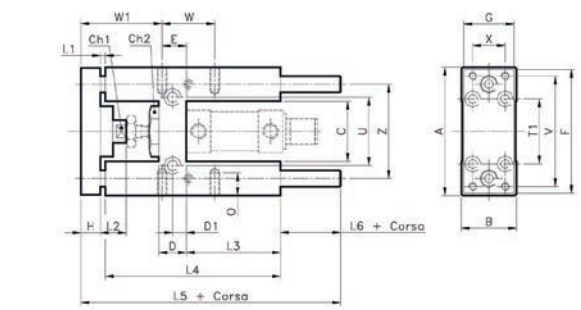
H Type Guide Unit

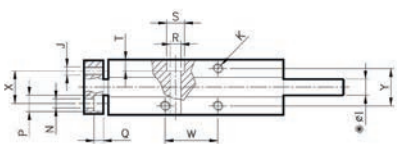
With Self-lubricating Bushings

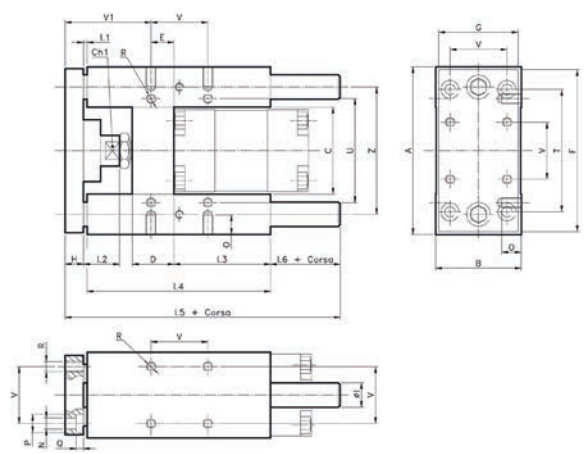


More Sizes Available
Up to 100mm diameter & 1000mm stroke

Code P04	Diameter mm	Stroke mm	Price
HGU020-0100	20	100	277.35
HGU020-0200	20	200	294.90
HGU020-0250	20	250	303.50
HGU020-0320	20	320	321.20
HGU020-0400	20	400	330.55
HGU020-0500	20	500	348.30
HGU032-0100	32	100	292.10
HGU032-0200	32	200	308.60
HGU032-0250	32	250	317.75
HGU032-0320	32	320	422.25
HGU032-0400	32	400	345.75
HGU032-0500	32	500	363.95
HGU040-0100	40	100	372.80
HGU040-0200	40	200	392.40
HGU040-0250	40	250	402.15
HGU040-0320	40	320	422.25
HGU040-0400	40	400	432.30
HGU040-0500	40	500	453.50
HGU050-0100	50	100	483.10
HGU050-0200	50	200	510.20
HGU050-0250	50	250	522.30
HGU050-0320	50	320	548.45
HGU050-0400	50	400	561.75
HGU050-0500	50	500	587.60
HGU063-0100	63	100	563.10
HGU063-0200	63	200	594.20
HGU063-0250	63	250	609.15
HGU063-0320	63	320	644.10
HGU063-0400	63	400	663.55
HGU063-0500	63	500	701.15





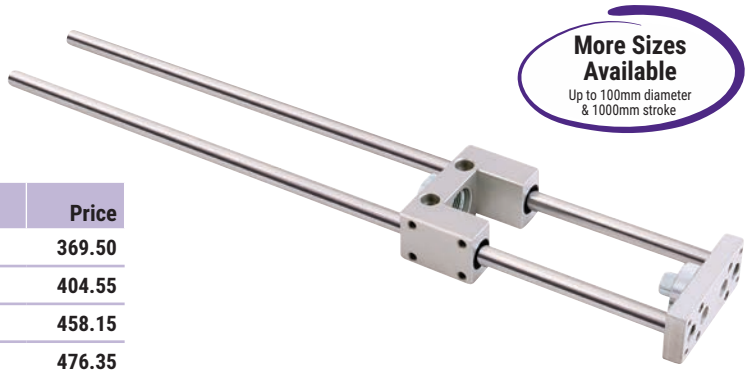


Cylinder Guide Units

Technical Data

20 mm Diameter																																
A	B	C	Ch1	Ch2	D	D1	E	F	G	H	Ø I1	Ø I2	J	K	L1	L2	L3	L4	L5	L6	N	O	P	Q	R	S	T	T1	U	V	W	W1	X	Y	X
79	34	37	12	27	17	8.5	15	78	32	12	12	10	M5	M6	25	40	58	108	166	21	5.5	9	10	7.5	6.5	11	6.5	38	38	68	62.5	72	20	23	58

32-63 mm Diameter																								
A	B	C	Ch	D	E	F	G	H	ØI	L1	L2	L3	L4	L5	L6	N	O	P	Q	R	T	U	V	V1	Z
97	49	51	15	24	4.3	93	45	12	12	25	42	75	125	187	25	6.6	12	11	6.5	M6	78	61	32.5	82.7	74
115	58	58.2	15	28	11	112	55	12	16	25	42	80	140	207	30	6.6	12	11	6.5	M6	84	69	38	86	87
137	70	70.2	20	34	18.8	134	65	15	20	25	50	78	148	223	35	9	16	15	8.5	M8	100	85	46.5	92	104
152	85	82.5	20	34	15.3	147	80	15	20	25	50	106	178	243	25	9	16	15	9	M8	105	100	56.5	96.7	119

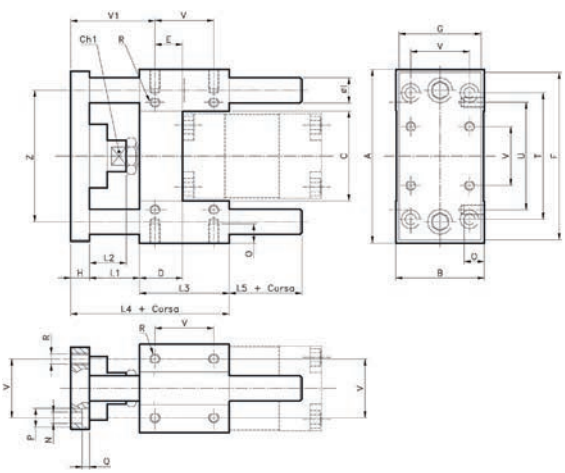


More Sizes Available
Up to 100mm diameter & 1000mm stroke

U Type Guide Unit

With Self-lubricating Bushings

Code P04	Diameter mm	Stroke mm	Price
UGU020-0100	20	100	**369.50**
UGU020-0200	20	200	**404.55**
UGU020-0320	20	320	**458.15**
UGU020-0400	20	400	**476.35**
UGU020-0500	20	500	**512.30**
UGU032-0100	32	100	**403.35**
UGU032-0200	32	200	**442.30**
UGU032-0250	32	250	**462.35**
UGU032-0320	32	320	**503.15**
UGU032-0400	32	400	**523.00**
UGU032-0500	32	500	**563.15**
UGU040-0100	40	100	**469.80**
UGU040-0200	40	200	**510.40**
UGU040-0250	40	250	**426.50**
UGU040-0320	40	320	**571.10**
UGU040-0400	40	400	**591.35**
UGU040-0500	40	500	**633.10**
UGU050-0100	50	100	**616.90**
UGU050-0200	50	200	**651.10**
UGU050-0250	50	250	**674.60**
UGU050-0320	50	320	**724.30**
UGU050-0400	50	400	**749.30**
UGU050-0500	50	500	**798.50**
UGU063-0100	63	100	**665.50**
UGU063-0200	63	200	**743.20**
UGU063-0250	63	250	**767.50**
UGU063-0320	63	320	**818.55**
UGU063-0400	63	400	**844.45**
UGU063-0500	63	500	**894.60**



Cylinder Guide Units

Technical Data

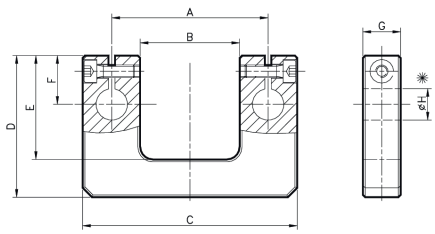
Ø	A	B	C	D	E	F	G	H	H2
20 - 25	58	51	95	70	48	23	12	12	10
32	74	31.5	68	45	33	15.5	12	12	12
40	87	58.2	113	80	55	26	12	16	16
50	104	70.2	134	100	67.5	32.5	15	20	20
63	119	91	147	120	82	39.5	15	20	20



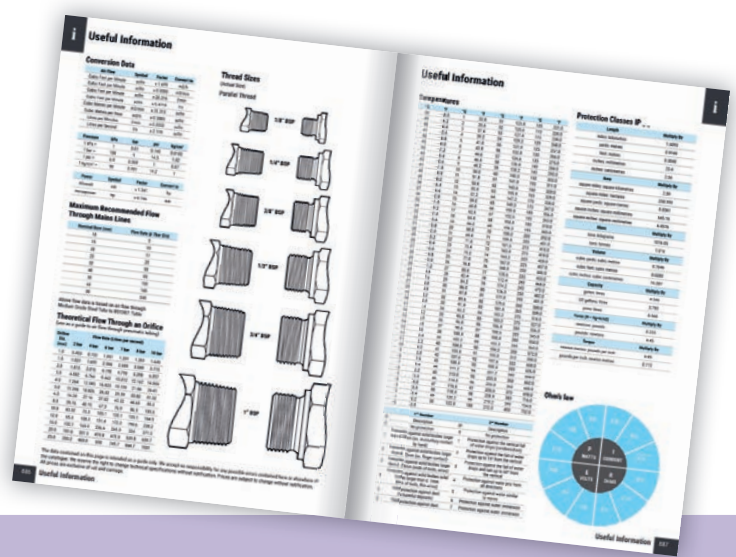
Rear End Plate

To Suit Guide Units

Code P04	Description	Price
KG3043.20	For 20/25mm Guide Units	52.85
KG3043.32	For 32mm Guide Units	52.85
KG3043.40	For 40mm Guide Units	52.85
KG3043.50	For 50mm Guide Units	61.10
KG3043.63	For 63mm Guide Units	73.15



For Useful Information



See pages 886-887

Flow Micro-regulators

Technical Features

- The job of flow micro-regulators is to regulate speed in the pneumatic cylinders. The configuration of both type C (to be mounted on the cylinder inlet) and type V (to be mounted on the valve port) is such as to ensure full flow on feed and regulated flow on charge. Type B (bidirectional) can be used to regulate the flow both on feed and discharge. Flow micro-regulators are divided into 4 series:
- MRF Compact 'O': Can be adjusted using a screwdriver; the regulation pin is lubrified with a particular antivivration grease; it has reduced dimensions and fine adjustment in the first turns; adjustment can be prevented by assembling a disposable cap (supplied separately) that can be removed using a tool.
- MRF Compact 'N': Can be adjusted using the knob and/or screwdriver; adjustment can be prevented by tightening the ring nut; it has the same regulation curve as those in series 'O'.

Main Features

- Reduced dimensions
- Excellent regulation
- Regulation with a screwdriver and disposable anti-tampering cap (Compact 'O')
- Regulation with either a screwdriver and/or a knob, can be fixed with a ring nut (Compact 'N')
- Available in all sizes (from M5 to 1/2") with a brass or a technopolymer ring
- Can be mounted with an automatic screwdriver
- Comes with a ring that can rotate even with the MRF mounted in position

Working Temperature Range:

- -10°C to +70°C (Brass Ring)
- -10°C to +50°C (Technopolymer Ring)

Maximum Working Pressure:

- 10 bar



Series Compact 'O'

MRF Compact 'O' Brass Ring

Code P05	Thread BSPT	Tube OD mm	Price
9001001C	M5	4	19.55
9001110V	M5	4	19.55
9001601B	M5	4	19.55
9001002C	M5	5	19.55
9001113V	M5	5	18.80
9001603B	M5	5	17.55
9001007C	M5	6	19.55
9001105V	M5	6	19.95
9001612B	M5	6	14.45
9001011C	R1/8"	4	19.55
9001111V	R1/8"	4	20.95
9001602B	R1/8"	4	19.55
9001012C	R1/8"	5	19.55
9001112V	R1/8"	5	20.95
9001604B	R1/8"	5	17.55

Code P05	Thread BSPT	Tube OD mm	Price
9001003C	R1/8"	6	19.55
9001101V	R1/8"	6	20.95
9001605B	R1/8"	6	20.95
9001103V	R1/8"	8	20.95
9001607B	R1/8"	8	20.95
9001004C	R1/4"	6	21.45
9001102V	R1/4"	6	22.20
9001006C	R1/4"	8	22.20
9001104V	R1/4"	8	22.20
9001608B	R1/4"	8	22.20
9001010C	R3/8"	8	19.95
9001115V	R3/8"	8	25.40
9001611B	R3/8"	8	25.40
9001008C	R1/4"	10	21.45

Code P05	Thread BSPT	Tube OD mm	Price
9001106V	R1/4"	10	22.20
9001609B	R1/4"	10	20.75
9001014C	R1/4"	12	22.00
9001123V	R1/4"	12	20.75
9001623B	R1/4"	12	20.75
9001009C	R3/8"	10	22.20
9001610B	R3/8"	10	25.40
9001015C	R3/8"	12	27.30
9001124V	R3/8"	12	25.40
9001624B	R3/8"	12	25.40
9001016C	R1/2"	12	34.50
9001125V	R1/2"	12	32.25
9001625B	R1/2"	12	32.25
9001114V	R3/8"	10	25.40

Flow Micro-regulators



Series Compact 'O'

MRF Compact 'O'
Technopolymer Ring

Code P05	Thread BSPT	Tube OD mm	Price
9011001C	M5	4	19.55
9011110V	M5	4	18.25
9011601B	M5	4	19.55
9011007C	M5	6	19.55
9011105V	M5	6	19.55
9011612B	M5	6	19.55
9011011C	R1/8"	4	18.25
9011111V	R1/8"	4	18.25
9011602B	R1/8"	4	18.25
9011003C	R1/8"	6	19.60
9011101V	R1/8"	6	20.90
9011605B	R1/8"	6	21.10
9011005C	R1/8"	8	20.90
9011103V	R1/8"	8	20.90
9011607B	R1/8"	8	19.50
9011004C	R1/4"	6	21.45
9011102V	R1/4"	6	20.75
9011606B	R1/4"	6	23.55
9011006C	R1/4"	8	22.20
9011104V	R1/4"	8	20.75
9011608B	R1/4"	8	20.75
9011008C	R1/4"	10	20.75
9011106V	R1/4"	10	20.75
9011609B	R1/4"	10	20.75
9011014C	R1/4"	12	25.40
9011123V	R1/4"	12	25.40
9011623B	R1/4"	12	25.40
9011009C	R3/8"	10	22.20
9011114V	R3/8"	10	25.40
9011610B	R3/8"	10	26.30
9011015C	R3/8"	12	25.40
9011124V	R3/8"	12	25.40
9011624B	R3/8"	12	25.40
9011016C	R1/2"	12	32.25
9011125V	R1/2"	12	32.25
9011625B	R1/2"	12	32.25



Series Compact 'O'

MRF Compact 'O'
Threaded Brass Ring

Code P05	Thread BSPT	Tube OD	Price
9001020C	R1/8"	1/8"	17.65
9001120V	R1/8"	1/8"	17.65
9001620B	R1/8"	1/8"	17.65
9001021C	R1/4"	1/4"	19.65
9001121V	R1/4"	1/4"	19.65
9001621B	R1/4"	1/4"	19.65
9001022C	R3/8"	3/8"	21.45
9001122V	R3/8"	3/8"	20.05
9001622B	R3/8"	3/8"	20.05



Accessories for MRF Compact 'O'

Anti-tampering Cap

Code P05	To Fit Thread BSPT	Price
9090001	M5	1.95
9090002	R1/8" - R1/4"	2.10
9090003	R3/8" - R1/2"	2.10

For Air Receivers





See page 351

Flow Micro-regulators



Series Compact 'N'

MRF Compact 'N' Brass Ring

Code P05	Thread BSPT	Tube OD mm	Price
9031001C	M5	4	19.55
9031101V	M5	4	20.95
9031201B	M5	4	19.55
9031003C	M5	5	19.55
9031103V	M5	5	20.95
9031203B	M5	5	19.55
9031005C	M5	6	19.55
9031105V	M5	6	20.95
9031205B	M5	6	19.55
9031002C	R1/8"	4	19.55
9031102V	R1/8"	4	20.95
9031202B	R1/8"	4	19.55
9031004C	R1/8"	5	19.55
9031104V	R1/8"	5	20.95
9031204B	R1/8"	5	19.55

Code P05	Thread BSPT	Tube OD mm	Price
9031006C	R1/8"	6	19.55
9031106V	R1/8"	6	20.95
9031206B	R1/8"	6	20.95
9031008C	R1/8"	8	20.95
9031108V	R1/8"	8	20.95
9031208B	R1/8"	8	20.95
9031007C	R1/4"	6	22.20
9031107V	R1/4"	6	22.20
9031207B	R1/4"	6	22.20
9031009C	R1/4"	8	22.20
9031109V	R1/4"	8	22.25
9031209B	R1/4"	8	22.25
9031010C	R3/8"	8	22.20
9031110V	R3/8"	8	25.40
9031210B	R3/8"	8	22.20

Code P05	Thread BSPT	Tube OD mm	Price
9031011C	R1/4"	10	22.20
9031111V	R1/4"	10	22.20
9031211B	R1/4"	10	22.20
9031014C	R1/4"	12	27.25
9031114V	R1/4"	12	27.25
9031214B	R1/4"	12	27.25
9031012C	R3/8"	10	22.20
9031112V	R3/8"	10	22.20
9031212B	R3/8"	10	22.20
9031015C	R3/8"	12	27.25
9031115V	R3/8"	12	27.25
9031215B	R3/8"	12	27.25
9031016C	R1/2"	12	34.50
9031116V	R1/2"	12	34.50
9031216B	R1/2"	12	34.50



Series Compact 'N'

MRF Compact 'N' Technopolymer Ring

Code P05	Thread BSPT	Tube OD mm	Price
9021001C	M5	4	19.55
9021101V	M5	4	20.95
9021201B	M5	4	19.55
9021005C	M5	6	19.55
9021105V	M5	6	20.95
9021205B	M5	6	20.95
9021002C	R1/8"	4	19.55
9021102V	R1/8"	4	20.95
9021202B	R1/8"	4	19.55
9021006C	R1/8"	6	19.55
9021106V	R1/8"	6	20.95
9021206B	R1/8"	6	20.95
9021008C	R1/8"	8	20.95
9021108V	R1/8"	8	20.95
9021208B	R1/8"	8	20.95
9021007C	R1/4"	6	22.20
9011107V	R1/4"	6	19.95
9021207B	R1/4"	6	22.20

Code P05	Thread BSPT	Tube OD mm	Price
9021009C	R1/4"	8	22.20
9021109V	R1/4"	8	22.20
9021209B	R1/4"	8	22.20
9021011C	R1/4"	10	22.20
9021111V	R1/4"	10	22.20
9021211B	R1/4"	10	22.20
90214014C	R1/4"	12	27.25
9021114V	R1/4"	12	27.25
9021214B	R1/4"	12	27.25
9021012C	R3/8"	10	22.20
9021112V	R3/8"	10	22.20
9021212C	R3/8"	10	19.95
9021015C	R3/8"	12	27.25
9021115V	R3/8"	12	27.25
9021215B	R3/8"	12	27.25
9021016C	R1/2"	12	34.50
9021116V	R1/2"	12	34.50
9021216B	R1/2"	12	34.50



Series Compact 'N'

MRF Compact 'N' Threaded Brass Ring

Code P05	Thread BSPT	Tube OD	Price
9031301C	R1/8"	1/8"	17.65
9031401V	R1/8"	1/8"	17.65
9031501B	R1/8"	1/8"	17.65
9031302C	R1/4"	1/4"	19.65
9031402V	R1/4"	1/4"	19.65
9031502B	R1/4"	1/4"	19.65
9031303C	R3/8"	3/8"	21.50
9031403V	R3/8"	3/8"	21.50
9031503B	R3/8"	3/8"	21.50

Flow Control Valves



Unidirectional In-line Flow Control

To Suit Cylinders

Code P05	Thread BSP	Mounting Thread	Price
9041001	M5	M10 x 0.75	11.30
9041002	G1/8"	M12 x 1	10.25
9041003	G1/4"	M12 x 1	12.65
9041004	G3/8"	M15 x 1	30.50
9041005	G1/2"	M15 x 1	36.60



Bidirectional In-line Flow Control

To Suit Cylinders

Code P05	Thread BSP	Mounting Thread	Price
9041201	M5	M10 x 0.75	11.30
9041202	G1/8"	M12 x 1	11.30
9041203	G1/4"	M12 x 1	15.15
9041204	G3/8"	M15 x 1	30.50
9041205	G1/2"	M15 x 1	36.65



Unidirectional Flow Control

With Push-in Fittings

Code P05	Ø	Mounting Thread	Price
9041301	4	M9 x 0.75	9.70
9041316	6	M12 x 0.7	9.70
9041324	8	M15 x 1	11.85

90414...



➤ Flow Direction

90415...



➤ Flow Direction

Unidirectional Flow Control

Thread to Push-in Fittings

Code P05	Thread BSP	Tube Ø	Price
9041401	M5	4	10.90
9041402	G1/8"	4	10.90
9041408	G1/8"	6	10.90
9041409	G1/4"	6	11.00
9041410	G1/8"	8	12.75
9041411	G1/4"	8	13.35
9041412	G3/8"	8	15.60
9041501	M5	4	11.25
9041502	G1/8"	4	11.20
9041508	G1/8"	6	11.20
9041509	G1/4"	6	11.30
9041510	G1/8"	8	13.10
9041511	G1/4"	8	13.80
9041512	G3/8"	8	15.55



Quick Exhaust Valves

BSP

Code P06	Thread BSP	Price
9101201	1/8"	9.30
9201201	1/4"	11.60
9401201	1/2"	19.25



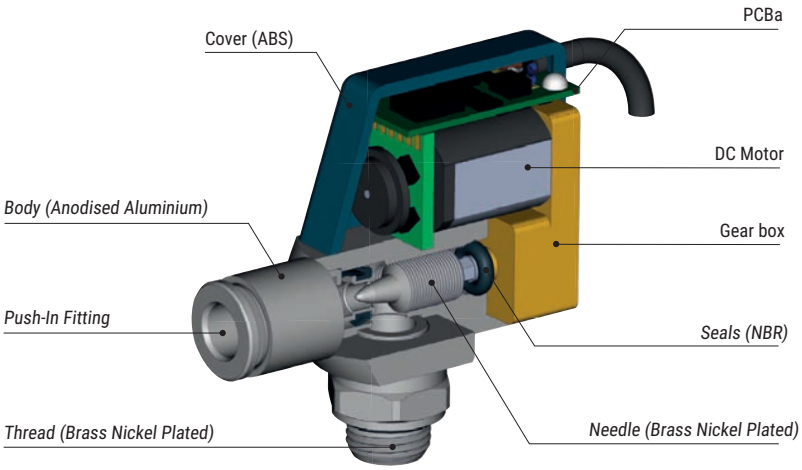
Exhaust Silencer Restrictor

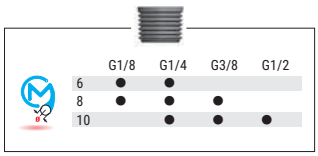
BSPP

Code S10	Thread BSPP	Price 1-9	Price 10+
ESR18	G1/8"	3.75	3.60
ESR14	G1/4"	4.15	3.95
ESR38	G3/8"	6.35	6.05
ESR12	G1/2"	10.10	9.60

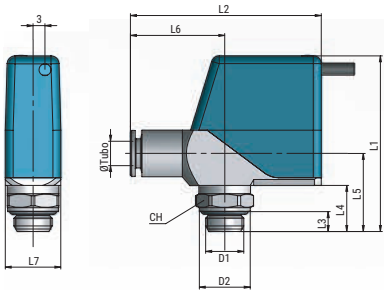
Flow Control Valves

Electronic Proportional Flow Control EV10



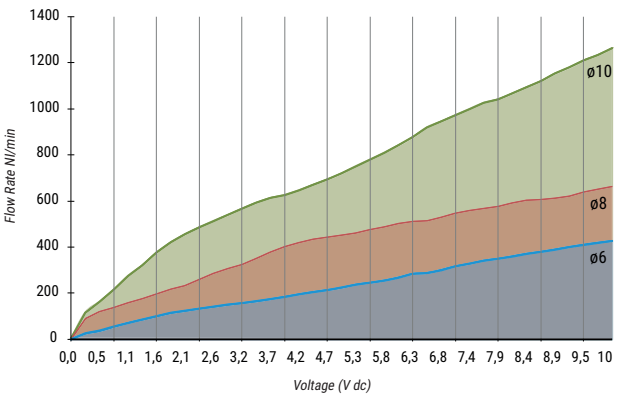


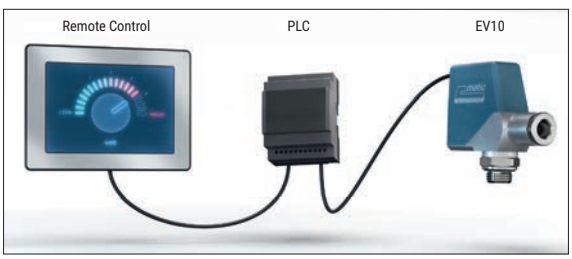
ØTube	D1	D2	L1	L2	L3	L4	L5	L6	L7	CH
Ø6	1/8"	14,5	44,2	48	5	11,6	19,7	23,7	14	13
	1/4"	16	47,7		6,5	15,1	23,2			13
Ø8	1/8"	14,5	45,2	52,2	5	11,6	20,7	26,6	14	13
	1/4"	16	48,7		6,5	15,1	24,2			13
	3/8"	20	49,2		7	15,6	24,7			13
Ø10	1/4"	16	50,8	62,4	6,5	15,5	24,8	31,7	16	16
	3/8"	20	52,8		7	19	28,3			16
	1/2"	25	54,8		8,5	21	30,3			16



Model	ø6 (mm)	ø8 (mm)	ø10 (mm)
Power supply	24V ± 4V dc		
Standby current	20 mA		
Maximum current	1,4 A		
Linearity	± 1% f.s.		
Positioning repeatability	± 0,025% f.s.		
Resolution	0,05% f.s.		
Max Flow rate (P = 6 bar & Δ 1 bar)	425 Nl/min	670 Nl/min	1300 Nl/min
Input	0-10V dc. / *protected from overvoltages*		
Input — *Impedance*	6,9 kOhm		
Input — *Filter*	*low-pass* 10Hz		
Output	*NPN with pullup at 24V dc, 6,8 kOhm*		
Output — *Current*	70 mA max		
Cavo di Alimentazione / *Cable*	*4 poles 0,2 m PVC Ø4 ± 0,2 mm*		
Standars	CE, ROHS, REACH, EMC (EN61000-6-2 & EN61000-6-4)		
Ingress Protection rating	IP40		

P = 6 bar - Δ 1 bar





Flow Control Valves

Electronic Proportional Flow Control EV10

This electronic flow control consists of a PCBa that reads an electrical input signal, processes it and operates the servo actuator that moves a needle valve inside an orifice to make a linear flow rate change proportional with the electrical input signal.

In the "/I" and "/O" configurations, a built-in non-return valve regulates the air flow in one direction and allows it to pass freely in the opposite direction.



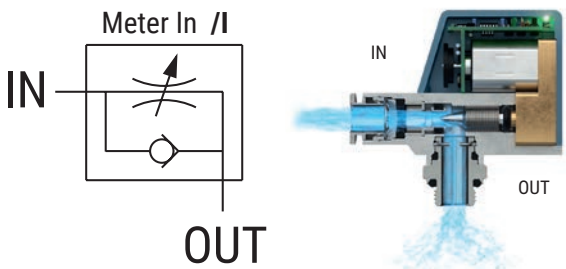
Technical Features

- **Repeatability:** +/_ 0.025%
- **Resolution:** 0.05%
- Self Compensated Hysteresis
- **Maximum Working Pressure:** 10 bar
- **Temperature Range:** 0° - 50°C
- RoHS and REACH compliant

Electronic Proportional Flow Control

Meter In

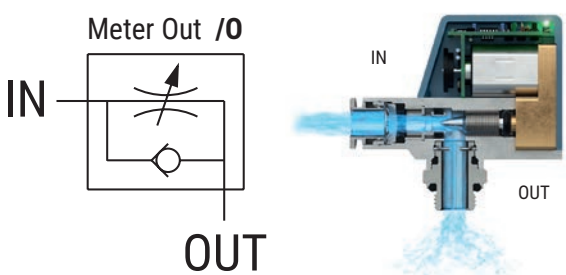
Code Q04	Tube OD mm	Thread BSPP	Price
E4000I31	6	G1/8"	149.05
E4000I32	6	G1/4"	149.05
E4000I41	8	G1/8"	149.05
E4000I42	8	G1/4"	149.05
E4000I43	8	G3/8"	149.05
E4000I52	10	G1/4"	160.25
E4000I53	10	G3/8"	160.25
E4000I54	10	G1/2"	160.25



Electronic Proportional Flow Control

Meter Out

Code 4	Tube OD mm	Thread BSPP	Price
E4000O31	6	G1/8"	149.05
E4000O32	6	G1/4"	149.05
E4000O41	8	G1/8"	149.05
E4000O42	8	G1/4"	149.05
E4000O43	8	G3/8"	149.05
E4000O52	10	G1/4"	160.25
E4000O53	10	G3/8"	160.25
E4000O54	10	G1/2"	160.25

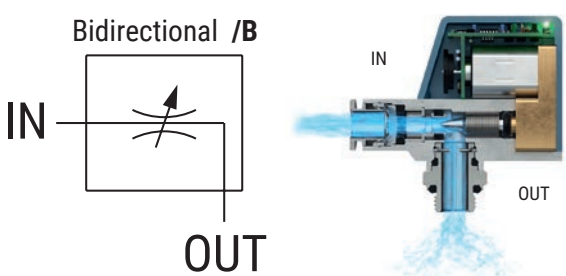


Electronic Proportional Flow Control

Bidirectional

Code Q04	Tube OD mm	Thread BSPP	Price
E4000B31	6	G1/8"	149.05
E4000B32	6	G1/4"	149.05
E4000B41	8	G1/8"	149.05
E4000B42	8	G1/4"	149.05
E4000B43	8	G3/8"	149.05
E4000B52	10	G1/4"	160.25
E4000B53	10	G3/8"	160.25
E4000B54	10	G1/2"	160.25

For further information contact the sales team



Functional Fittings

METAL WORK PNEUMATIC

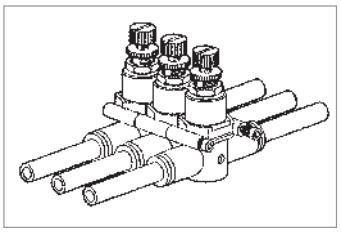
lineonline
LINE OF PRODUCTS ON LINE

Line on Line is an exclusive range of products for mounting on pneumatic circuits. With these small, highly efficient components it is possible to perform all pneumatic functions at any point of the circuit.

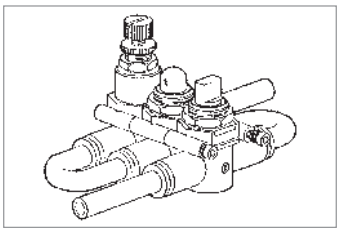
Line on Line is ultra-modular; the components can be connected in parallel, in series or combined parallel/series.

All Line on Line products are available for pipe-pipe connection with integral push-in fittings, or for thread-pipe connection with a brass nickel-plated male thread and an integral push-in fitting.

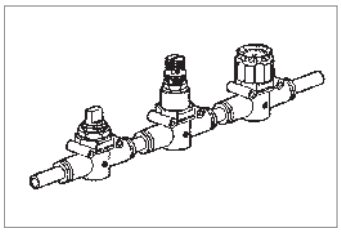
The body is made of technopolymer, giving a product that is extremely lightweight and compact. One side of the body is marked with an indelible pneumatic symbol to facilitate identification and indicate the direction of flow.



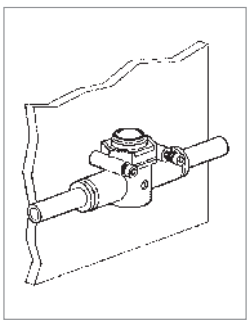
Parallel Lines



Serial Line Parallel Fittings



Serial Line In-line Fittings



Wall Fixing

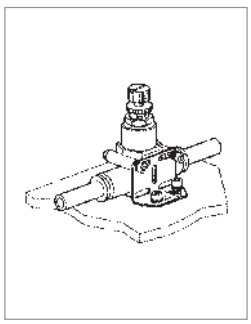
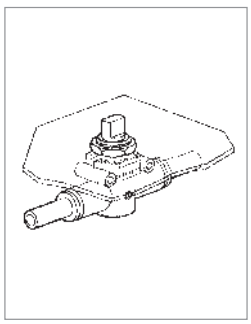
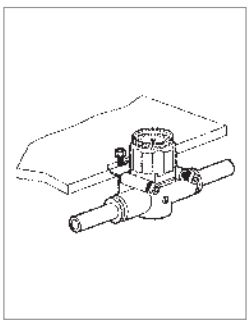


Plate Fixing



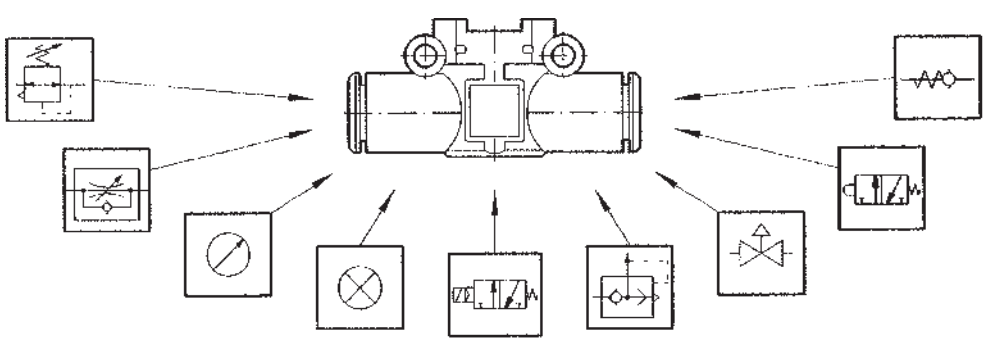
Panel Fixing

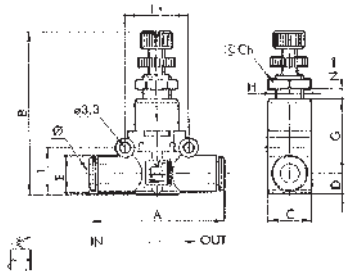


Under Wall Fixing

Technical Specifications

- Maximum operating pressure: 10 bar
- Temperature range: -20°C to +60°C
- Maximum flow rate on regulation at 6.3 bar: 155 Nl/min (4mm), 450 Nl/min (6mm), 850 Nl/min (8mm)
- Adjustment: manual or using a screwdriver
- Internal system: tapered needle
- Recommended pipe: Rilson PA 11, nylon 6, polyamide 12, polypropylene
- Fluid: lubricated or non-lubricated filtered air







Line Mounted Pressure Regulator

Tube to Tube

Code	P05	Ø	A	B	C	D	E	Price
9061316		6	47	46-52	14.7	6.4	11.4	**24.60**
9061324		8	55.5	52-58	18.7	9.1	13.8	**26.65**

Fig. A.

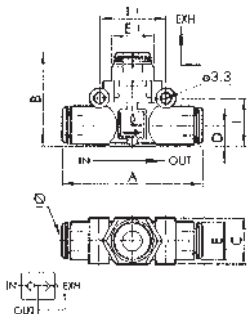
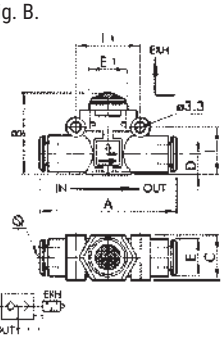


Fig. B.

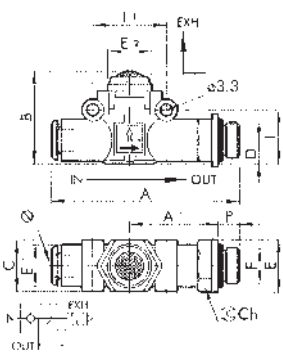




In-line Quick Exhaust Valve

Tube to Tube

Code	P05	Ø	Figure	A	B	C	D	E	E1	I	I1	Price
9063016		6	A	47	29	14.7	6.4	11.4	13	14.6	20	**10.00**
9063024		8	A	55.5	35	18.7	9.1	13.8	15	18.7	24	**10.40**
9063116		6	B	47	25.5	14.7	6.4	11.4	14	14.6	20	**11.25**
9063124		8	B	55.5	31.5	18.7	9.1	13.8	18	18.7	24	**11.45**

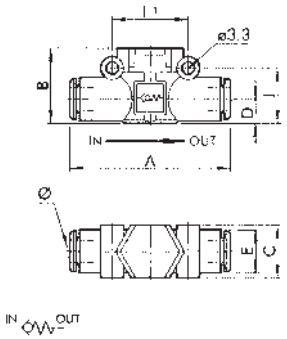




In-line Quick Exhaust Valve

Tube to Thread

Code	P05	Ø	Figure	P	A	A1	B	C	D	E	E1	E2	I	I1	I2	Price
9063308		6	1/8	6	57.3	27.8	25.5	14.7	6.4	14	11.4	14	14.6	20	12	**12.05**
9063309		6	1/4	8	60.3	28.8	25.5	14.7	6.4	18	11.4	14	14.6	20	14	**12.20**
9063310		8	1/8	6	65.5	31.8	31.5	18.7	9.1	15	13.8	18	18.7	24	13	**12.40**
9063311		8	1/4	8	69.7	34.2	31.5	18.7	9.1	18	13.8	18	18.7	24	14	**13.55**





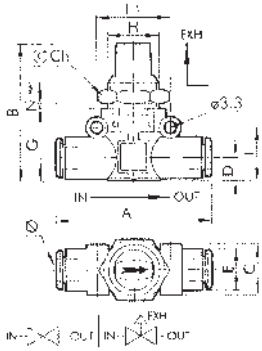
In-line Check Valve

Tube to Tube

Code	P05	Ø	A	B	C	D	E	I	I1	Price
9064016		6	47	20	14.7	6.4	11.4	14.6	20	9.70
9064024		8	55.5	25.5	18.7	9.1	13.8	18.7	24	9.80

Technical Data

- Inlet Flow rate at 6.3 bar ΔP 1 bar: 280 NI/min (6mm), 470 NI/min (8mm)
- V2V L: on/off function
- V3V L: on/off function with vent





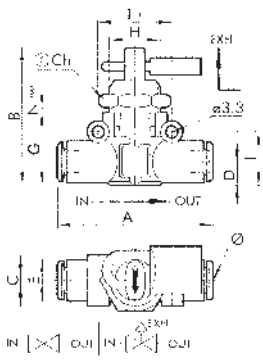
In-line Shut-off Valve

Tube to Tube

Code	P05	Function	Ø	A	B	C	D	E	G	H	I	I1	Ch	Nmax	Price
9065016		V2V L	6	47	41	14.7	6.4	11.4	21	M15 x 1	14.6	20	17	5.5	17.20
9066016		V3V L	6	47	41	14.7	6.4	11.4	21	M15 x 1	14.6	20	17	5.5	17.20
9065024		V2V L	8	55.5	46	18.7	9.1	13.8	26	M15 x 1	18.7	24	17	5.5	18.30
9066024		V3V L	8	55.5	46	18.7	9.1	13.8	26	M15 x 1	18.7	24	17	5.5	18.30

Technical Data

- V2V L: on/off function
- V3V L: on/off function with vent





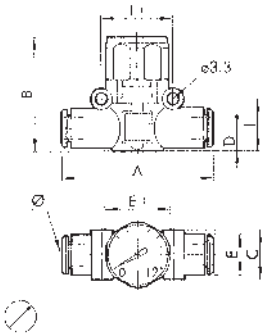
In-line Shut-off Valve, Lockable

Tube to Tube

Code	P05	Function	Ø	A	B	C	D	E	G	H	I	I1	Ch	Nmax	Price
9065116		V2V L	6	47	41	14.7	6.4	11.4	21	M15 x 1	14.6	20	17	5.5	28.75
9066116		V3V L	6	47	41	14.7	6.4	11.4	21	M15 x 1	14.6	20	17	5.5	28.75
9065124		V2V L	8	55.5	46	18.7	9.1	13.8	26	M15 x 1	18.7	24	17	5.5	30.30
9066124		V3V L	8	55.5	46	18.7	9.1	13.8	26	M15 x 1	18.7	24	17	5.5	30.30

Technical Data

- Operating pressure: 12 bar
- Precision: +4% full scale





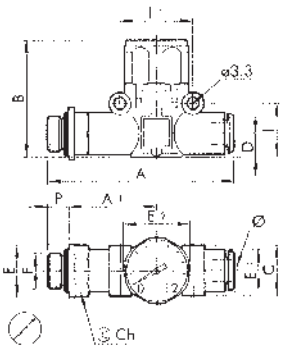
In-line Pressure Gauge

Tube to Tube

Code	P05	Ø	A	B	C	D	E	E1	I	I1	Price
9067016		6	47	35	14.7	6.4	11.4	23	14.6	20	20.35
9067024		8	55.5	41	18.7	9.1	13.8	23	18.7	24	21.85

Technical Data

- Operating pressure: 12 bar
- Precision: +4% full scale





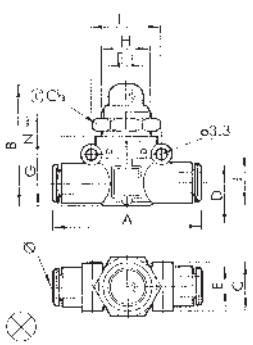
In-line Pressure Gauge

Thread to Tube

Code	P05	Function	Ø	P	A	A1	B	C	D	E	E1	E2	I	I1	Ch	Price
9067108		1/8	6	6	57.3	27.5	35	14.7	6.4	14	11.4	23	14.6	20	12	22.05
9067109		1/4	6	8	60.3	28.8	35	14.7	6.4	18	11.4	23	14.6	20	14	22.25
9067110		1/8	8	6	65.3	31.8	41	18.7	9.1	15	13.8	23	18.7	24	14	22.75
9067111		1/4	8	8	69.7	34.2	41	18.7	9.1	18	13.8	23	18.7	24	14	23.95

Technical Data

- Operating pressure: 2-12 bar
- A = Orange, V = Green





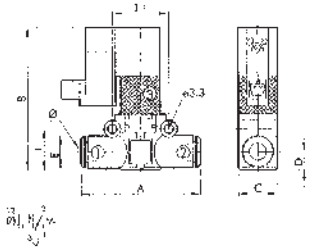
In-line Pressure Indicator

Tube to Tube

Code	P05	Type	Ø	A	B	C	D	E	E1	G	H	I	I1	Ch	NmAX	Price
9068016		A	6	47	37	14.7	6.4	11.4	10.6	21	M15 x 1	14.6	20	17	4.5	13.60
9068216		V	6	47	37	14.7	6.4	11.4	10.6	21	M15 x 1	14.6	20	17	4.5	13.60
9068024		A	8	55.5	41	18.7	9.1	13.8	10.6	26	M15 x 1	18.7	24	17	4.5	14.20
9068224		V	8	55.5	41	18.7	9.1	13.8	10.6	26	M15 x 1	18.7	24	17	4.5	14.70

Technical Data

- Operating pressure: 2.5-7 bar
- Flow rate at 6.3 bar ΔP 0.5 bar: 270 Nl/min (6mm), 500 Nl/min (8mm)
- Voltage: 24V DC
- Power: 1.2W





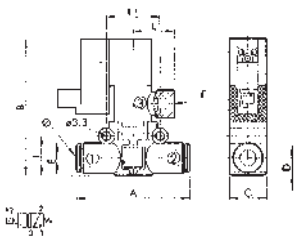
In-line 3 Port Solenoid Valve, Silenced Exhaust

Tube to Tube

Code	P05	Ø	A	B	C	D	E	I	I1	Price
9069016		6	47	55.5	14.7	6.4	11.4	14.6	20	56.80
9069024		8	55.5	63.5	18.7	9.1	13.8	18.7	24	57.25

Technical Data

- Operating pressure: 2.5 to 7 bar
- Flow rate at 6.3 bar ΔP 0.5 bar: 500 Nl/min
- Voltage: 24V DC
- Power: 1.2W





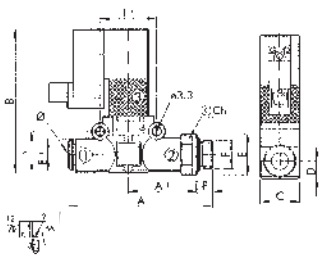
In-line 3 Port Solenoid Valve, Threaded Exhaust

Tube to Tube

Code	P05	Ø	A	B	C	D	E	E1	I	I1	L	Price
9069224		8	55.5	63.5	18.7	9.1	13.8	1/8	18.7	24	21.5	59.35

Technical Data

- Operating pressure: 2.5-7 bar
- Flow rate at 6.3 bar ΔP 0.5 bar: 270 Nl/min, 500 Nl/min
- Voltage: 24V DC
- Power: 1.2W





In-line 3 Port Solenoid Valve, Silenced Exhaust

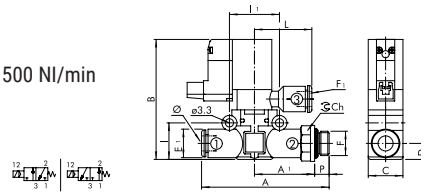
Thread to Tube

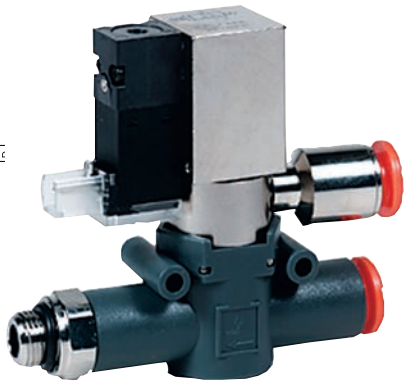
Code	P05	Ø	F	P	A	A1	B	C	I	I1	Ch1	Price
9069408		6	1/8	6	57.3	27.8	55.5	14.7	14.6	20	12	58.80
9069409		6	1/4	8	60.3	28.8	55.5	14.7	14.6	20	14	59.25
9069410		8	1/8	6	65.3	31.3	63.5	18.7	18.7	24	14	59.25
9069411		8	1/4	8	69.7	34.2	63.5	18.7	18.7	24	14	59.65

Functional Fittings

Technical Data

- Operating pressure: 2.5 to 7 bar
- Flow rate at 6.3 bar ΔP 0.5 bar: 270 Nl/min, 500 Nl/min
- Voltage: 24V DC
- Power: 1.2W





In-line 3 Port Solenoid Valve, Silenced Exhaust

Tube to Thread

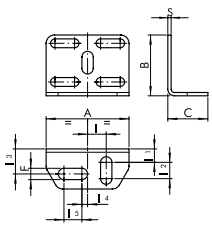
Code P05	Ø	F	P	A	A1	B	C	D	E	E1	F1	I	I1	L	Ch1	Price
9069610	8	1/8	6	65.3	31.8	63.5	18.7	9.1	15	13.8	1/8	18.7	24	25.1	1	61.30
9069611	8	1/4	8	69.7	34.2	63.5	18.7	9.1	18	13.8	1/8	18.7	24	21.5	1	61.75

Electrical Connector

Plug-in



Code P05	Description	Price
W0970512000	Plug-in Connector, 300mm Leads	1.90





Fixing Bracket

To Suit All Line on Line Products

Code P05	A	B	C	F	I	I1	I2	I3	I4	I5	S	Price
9062110	30	22	14.5	4.2	6.8	4.8	5.9	9.1	2	6.5	1.2	2.50

U Tube

Tube



Code P05	OD mm	Price
9062216	6	3.45
9062224	8	4.20

Block Fittings

Stop valves mounted on the cylinder inlets allow a flow of air only in the presence of a pneumatic pilot. This item is mainly used as a safety valve. When pressure drops in the pneumatic pilot, all cylinder movement is halted.

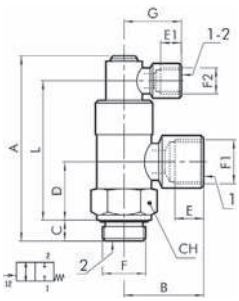


Technical Data

	Bidirectional			
	1/8"	1/4"	3/8"	1/2"
Operating Pressure bar	0.5-10			
Operating temperature °C	-10° to +60°			
Flow rate (6 bar)	320	700	1060	1700

Blocking Fitting

Fully Threaded

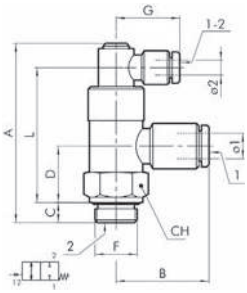




Code P05	F	F1	F2	Price
W6001101001	G1/8"	G1/8"	G1/8"	**76.20**
W6001111011	G1/4"	G1/4"	G1/8"	**85.80**
W6001121021	G3/8"	G3/8"	G1/8"	**112.65**

Blocking Fitting

Tube Fittings





Code P05	F	Ø1 mm	Ø2 mm	Price
W6001101106	G1/8"	6	4	**77.40**
W6001111106	G1/4"	6	4	**87.35**
W6001111108	G1/4"	8	4	**89.70**
W6001121108	G3/8"	8	4	**116.35**
W6001121110	G3/8"	10	4	**116.35**
W6001131112	G1/2"	12	4	**159.60**

Air Pressure Multipliers (Boosters)

The air-to-air pressure multiplier, or booster, is an automatic device that compresses air to give an outlet pressure that is double the inlet pressure. It is normally used to locally intensify the input pressure of one or more actuators. As it is entirely pneumatic it can be used when electric devices are not recommended. The booster can be supplied with or without a pressure regulator.

It is fitted with check valves that maintain the outlet pressure even when the supply of compressed air is switched off. This means it is necessary to interrupt the supply and relieve the circuit before intervening on the device in any way. It is advisable to install a tank after the booster to prevent fluctuations in outlet pressure.

Technical Data

		Booster Ø40	Booster Ø40 with regulator	Booster Ø63	Booster Ø63 with regulator
Bore		Ø 40		Ø 63	
Fluid		Filtered unlubricated compressed air. Lubrication, if used, must be continuous.			
Threaded port		G1/8		G3/8	
Inlet pressure	**MPa**	0.2-1			
	bar	2-10			
	psi	29-145			
Outlet pressure	**MPa**	Maximum 2	Maximum 1.6 (regulated)	Maximum 2	Maximum 1.6 (regulated)
	bar	Maximum 20	Maximum 16 (regulated)	Maximum 20	Maximum 16 (regulated)
	psi	Maximum 290	Maximum 232 (regulated)	Maximum 290	Maximum 232 (regulated)
Operating temperatire	**ºC**	-10º to +60º	-10º to +50º	-10º to +60º	
	ºF	+14º to +140º	+14º to +122º	+14º to +140º	
Weight	**gr**	1.380	1.600	4.240	5.350
Mounting		Wall or panel			
Installation		In any position			

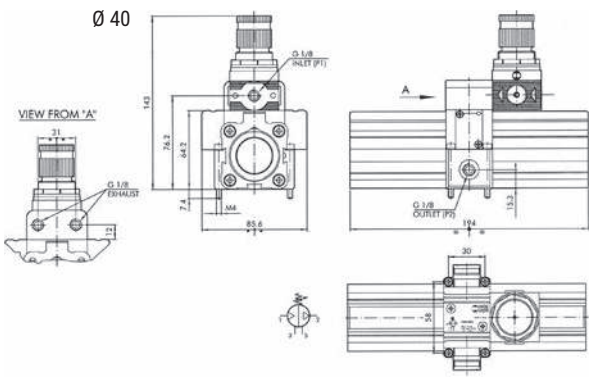
Air Pressure Booster

Without Regulator

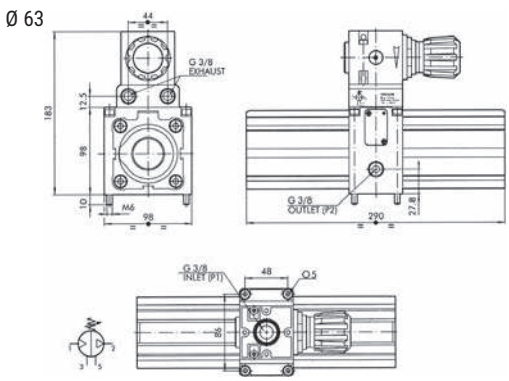
Code P03	Description	Price
9002100	40mm Diameter Booster, 1:2 Ratio	**290.60**
9002300	63mm Diameter Booster, 1:2 Ratio	**494.05**



Ø 40



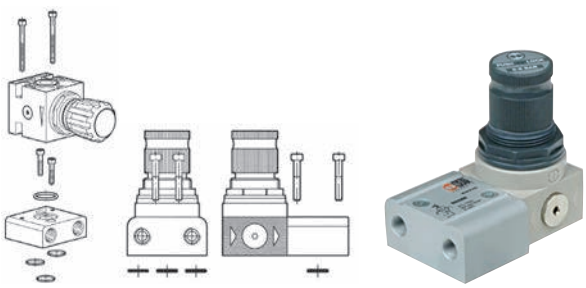
Ø 63



Air Regulators

To Suit Air Pressure Multiplier (Booster)

Code P52	Description	Price
9002180	40mm Regulator Unit	**54.45**
9002380	63mm Regulator Unit	**68.65**

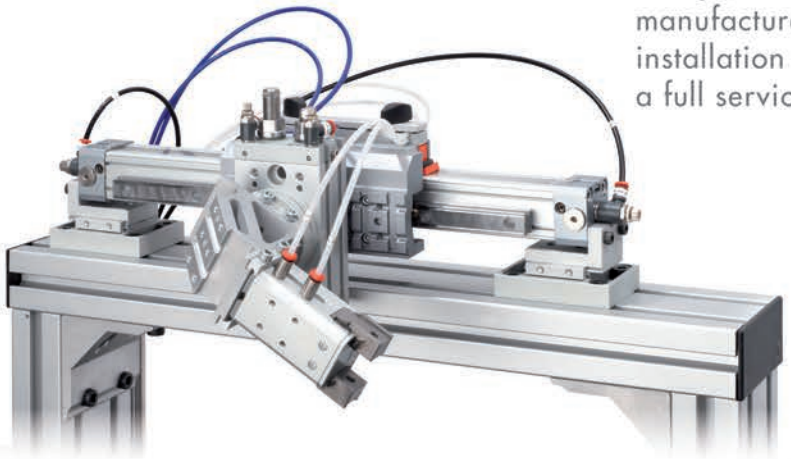


Metal Work Systems



"Why cut costs on components, putting quality and performances in jeopardy? Make your systems ultra-efficient using Metal Work expertise and technology."

Design,
manufacture,
installation and final commissioning,
a full service from **Metal Work**.



Pneumatic and Electrical
solutions from **Metal Work**,
showing full product integration.

Full automated solution provider.

METAL® WORK
PNEUMATIC

and more on www.metalwork.co.uk

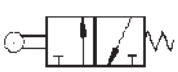
Mechanical Valves, Miniature

Technical Data

- Valve fitting port: push-in fitting for pipe diameter, 4mm tube or M5 thread
- Fluid: filtered air without lubrication. Lubrication, if used, must be continuous
- Type: with poppet
- Operating pressure: 0.5-10 bar
- Operating temperature range: -10°C to +60°C
- Nominal diameter: 2.5mm
- Conductance C: 16.5 Nl/min – bar
- Critical ratio b: 0.003 bar/bar
- Flow rate at 6 bar P 0.5 bar: 35 Nl/min
- Flow rate at 6 bar P 1 bar: 60 Nl/min
- Actuation force, plunger at 6 bar: 8N
- Recommended lubricant: ISO and UNI FD22
- Installation: in any position



A & B



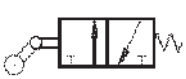
Normally closed

C & D



Normally open

E & F



Normally closed



'VME' Roller Valve

4mm Push-in Fittings

Code P06	Description	Figure	Price
W3501000200	3/2 Way, Normally Closed, Bottom Ported	A	19.50
W3501001201	3/2 Way, Normally Closed, Side Ported	B	20.65
W3501000201	3/2 Way, Normally Open, Bottom Ported	C	21.20
W3501001200	3/2 Way, Normally Open, Side Ported	D	22.30



'VME' One Way Roller Valve

4mm Push-in Fittings

Code P06	Description	Figure	Price
W3501000300	3/2 Way, Normally Closed, Bottom Ported	E	21.00
W3501001301	3/2 Way, Normally Closed, Side Ported	F	22.15

'VME' Roller Valve

M5 Thread

Code P06	Description	Figure	Price
W3501000211	3/2 Way, Normally Closed, Bottom Ported	A	19.10
W3501001211	3/2 Way, Normally Closed, Side Ported	B	20.20
W3501000210	3/2 Way, Normally Open, Bottom Ported	C	20.75
W3501001210	3/2 Way, Normally Open, Side Ported	D	21.90

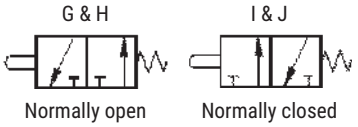
'VME' One Way Roller Valve

M5 Thread

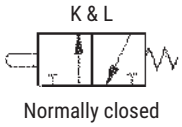
Code P06	Description	Figure	Price
W3501000311	3/2 Way, Normally Closed, Bottom Ported	E	20.55
W3501001311	3/2 Way, Normally Closed, Side Ported	F	21.70

See page 41 for dimensions.

Mechanical Valves, Miniature









'VME' Plunger Valve

4mm Push-in Fittings

Code P06	Description	Figure	Price
W3501000101	3/2 Way, Normally Open, Bottom Ported	G	18.15
W3501001100	3/2 Way, Normally Open, Side Ported	H	19.35
W3501000100	3/2 Way, Normally Closed, Bottom Ported	I	16.60
W3501001101	3/2 Way, Normally Closed, Side Ported	J	17.70

'VME' Panel Mounted Plunger Valve

4mm Push-in Fittings

Code P06	Description	Figure	Price
W3501000400	3/2 Way, Normally Closed, Bottom Ported	K	17.70
W3501001401	3/2 Way, Normally Closed, Side Ported	L	18.80

'VME' Plunger Valve

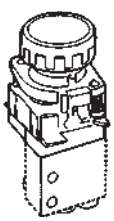
M5 Thread

Code P06	Description	Figure	Price
W3501000110	3/2 Way, Normally Open, Bottom Ported	G	16.50
W3501001110	3/2 Way, Normally Open, Side Ported	H	18.80
W3501000111	3/2 Way, Normally Closed, Bottom Ported	I	16.15
W3501001111	3/2 Way, Normally Closed, Side Ported	J	17.25

'VME' Panel Mounted Plunger Valve

M5 Thread

Code P06	Description	Figure	Price
W3501000411	3/2 Way, Normally Closed, Bottom Ported	K	17.30
W3501001411	3/2 Way, Normally Closed, Side Ported	L	17.75





Adaptor Plate

For 'VME' Push Button

Code P06	Description	Price
0351000050	For Plunger Valves	2.45

See page 41 for dimensions.

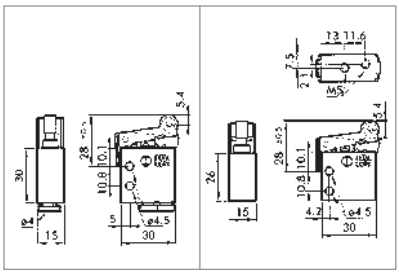


Figure: A

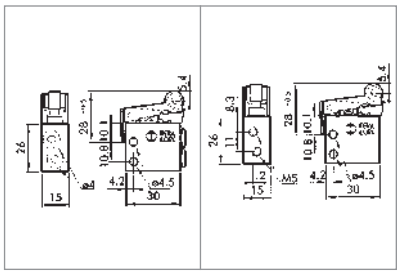


Figure: B

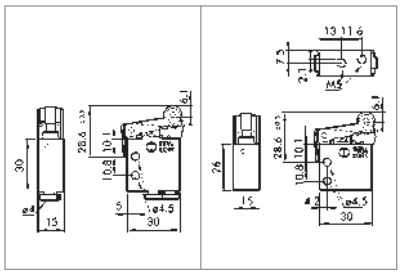


Figure: C

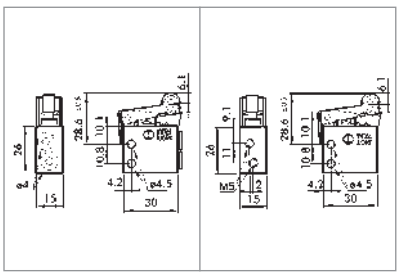


Figure: D

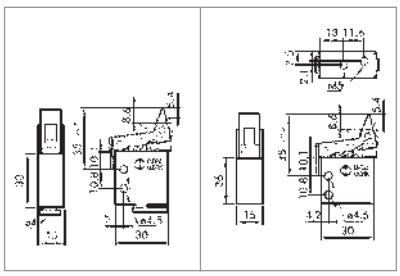


Figure: E

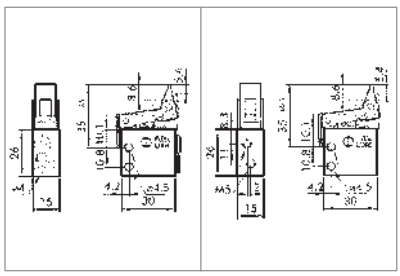


Figure: F

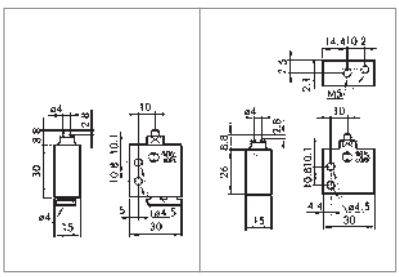


Figure: G

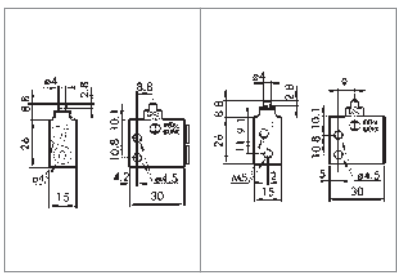


Figure: H

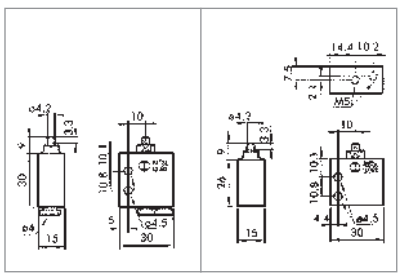


Figure: I

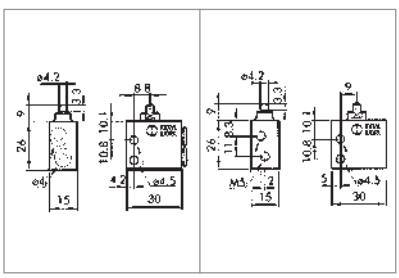


Figure: J

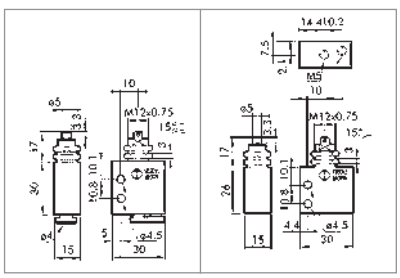


Figure: K

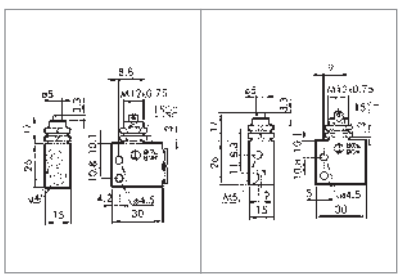


Figure: L

Mechanical Valves, Miniature

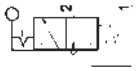
- Body: aluminium 11S
- Spring: stainless steel
- Seals: NBR
- Internal parts: brass OT58
- Nominal orifice: 2.5mm
- Nominal flow rate at 5 bar: 100Nl/min
- Maximum temperature: +60ºC
- Working pressure: 2 … 10 bar, 2 … 1 MPa
- Actuating force: 6N
- Fluid: 50µ filtered, lubricated or non lubricated air



Manual Actuator Adaptor

For Plunger Valves

Code	N17	Description	Price
08.017.2		Single	1.90
08.015.2		Double	1.75





Toggle Lever Valve

Brass

Code	N17	Description	Price
305LL		M5 Ports	20.45

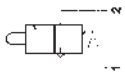




Valve for Manual Actuator

M5 Ports or 4mm Fittings

Code	N17	Description	Price
305MB		3/2 NC M5 Ports	14.85
315MB		3/2 NO M5 Ports	16.00
304MB		3/2 NC 4mm Fittings	17.10
314MB		3/2 NO 4mm Fittings	14.65

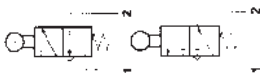




Plunger Valve

M5 Ports or 4mm Fittings

Code	N17	Description	Price
305MA		3/2 NC M5 Ports	13.25
315MA		3/2 NO M5 Ports	15.45
304MA		3/2 NC 4mm Fittings	15.55
314MA		3/2 NO 4mm Fittings	17.00

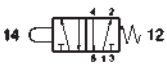




Roller Lever Valve

M5 Ports or 4mm Fittings

Code	N17	Description	Price
305MR		3/2 NC M5 Ports	16.15
315MR		3/2 NO M5 Ports	16.70
304MR		3/2 NC 4mm Fittings	18.15
314MR		3/2 NO 4mm Fittings	21.00

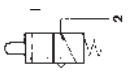




5/2 Valve for Manual Actuator

M5 Ports or 4mm Fittings

Code	N17	Description	Price
504MBCU		5/2 4mm Fittings	32.60

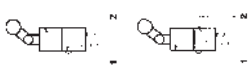




Panel Mounted Plunger Valve

M5 Ports or 4mm Fittings

Code	N17	Description	Price
305MV		3/2 NC M5 Ports	13.65
315MV		3/2 NO M5 Ports	16.85
304MV		3/2 NC 4mm Fittings	16.20
314MV		3/2 NO 4mm Fittings	14.20

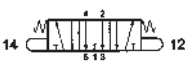




Unidirectional Lever Valve

M5 Ports or 4mm Fittings

Code	N17	Description	Price
305MS		3/2 NC M5 Ports	18.80
315MS		3/2 NO M5 Ports	20.90
304MS		3/2 NC 4mm Fittings	21.10
314MS		3/2 NO 4mm Fittings	21.05





5/3 Valve for Manual Actuator

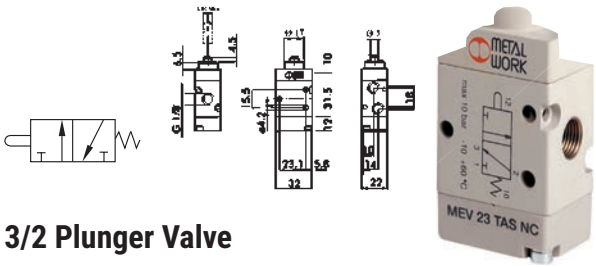
M5 Ports or 4mm Fittings

Code	N17	Description	Price
2.304MBCU		5/3 4mm Fittings	28.25

Mechanical Valves

Technical Specifications

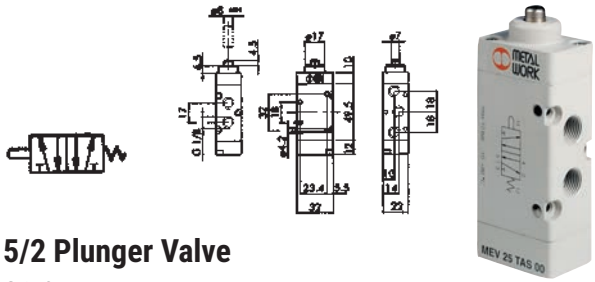
- Operating pressure range:
  - Direct control version: vacuum to 10 bar
  - Servo piloted version: 2.5 to 10 bar
- Operating temperature range: -10°C to +60°C
- Nominal diameter: 5mm
- Flow rate at 6 bar P1Δ bar: 550 Nl/min



3/2 Plunger Valve

G1/8 Ports

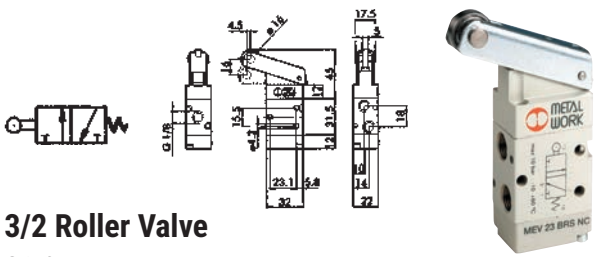
Code P06	Description	Price
7001000100	3/2 G1/8" Normally Closed	27.25



5/2 Plunger Valve

G1/8 Ports

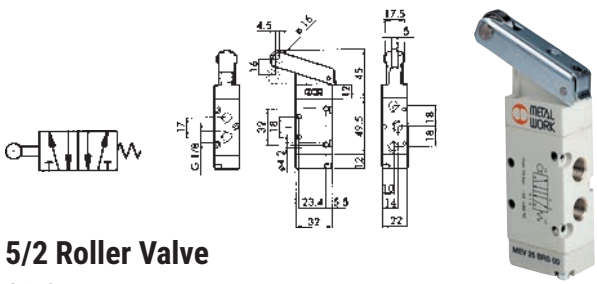
Code P06	Description	Price
7001000110	5/2 G1/8"	30.30



3/2 Roller Valve

G1/8 Ports

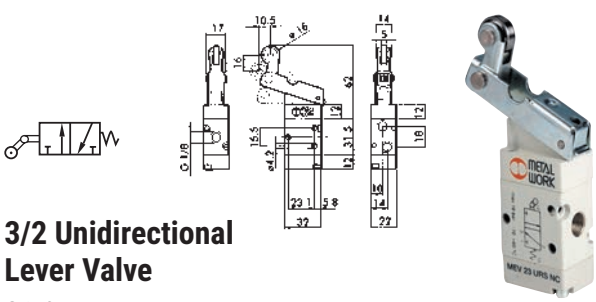
Code P06	Description	Price
7001000500	3/2 G1/8" Normally Closed	38.10



5/2 Roller Valve

G1/8 Ports

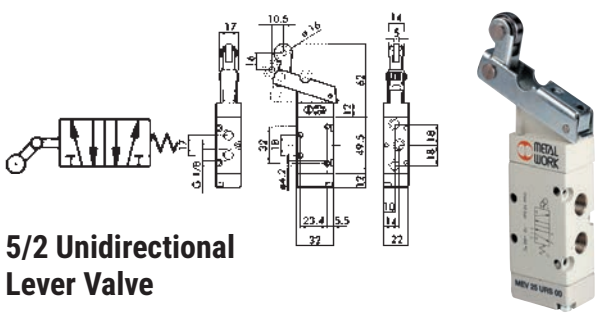
Code P06	Description	Price
7001000510	5/2 G1/8"	41.70



3/2 Unidirectional Lever Valve

G1/8 Ports

Code P06	Description	Price
7001000600	3/2 G1/8" Normally Closed	39.00

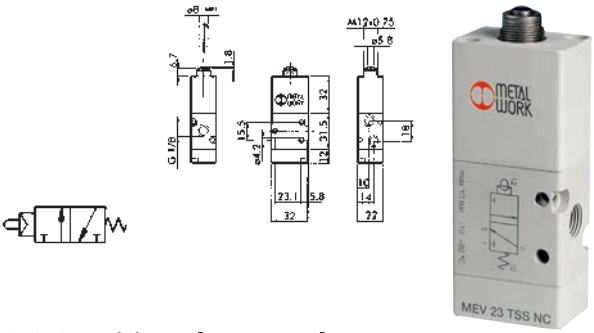


5/2 Unidirectional Lever Valve

G1/8 Ports

Code P06	Description	Price
7001000610	5/2 G1/8"	41.90

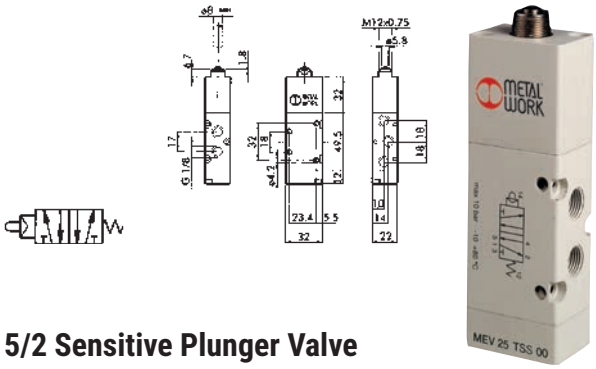
Mechanical Valves



3/2 Sensitive Plunger Valve

G1/8 Ports

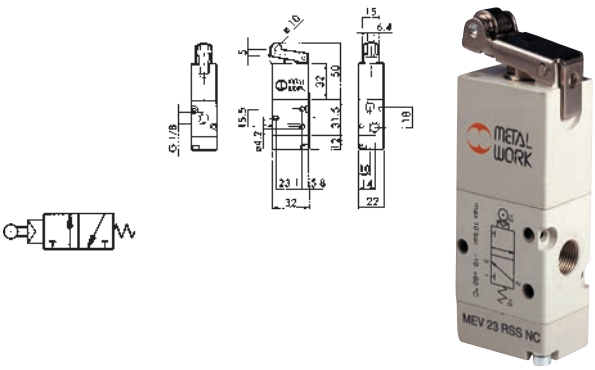
Code P06	Description	Price
7001000200	3/2 G1/8" Normally Closed	41.10



5/2 Sensitive Plunger Valve

G1/8 Ports

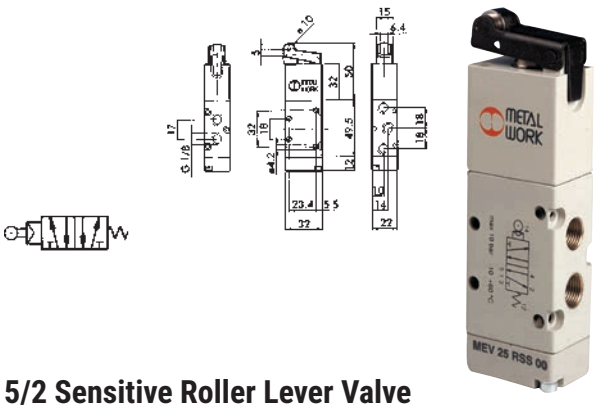
Code P06	Description	Price
7001000210	5/2 G1/8"	53.05



3/2 Sensitive Roller Lever Valve

G1/8 Ports

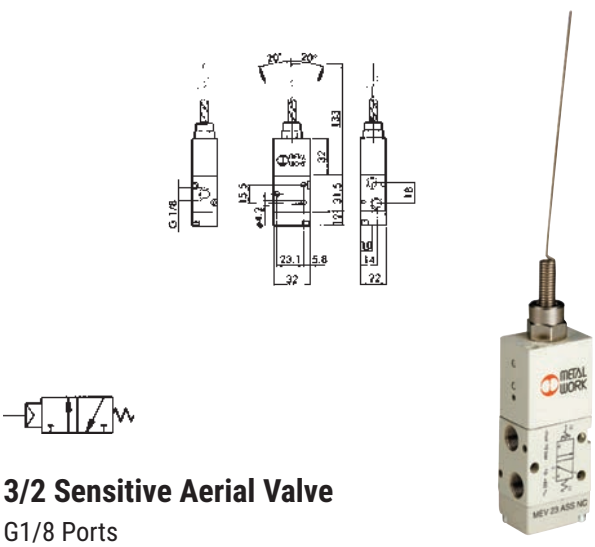
Code P06	Description	Price
7001000400	3/2 G1/8" Normally Closed	51.15



5/2 Sensitive Roller Lever Valve

G1/8 Ports

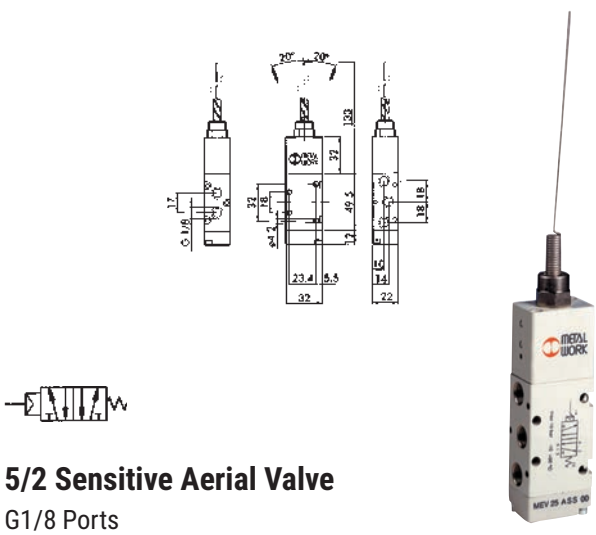
Code P06	Description	Price
7001000410	5/2 G1/8"	55.85



3/2 Sensitive Aerial Valve

G1/8 Ports

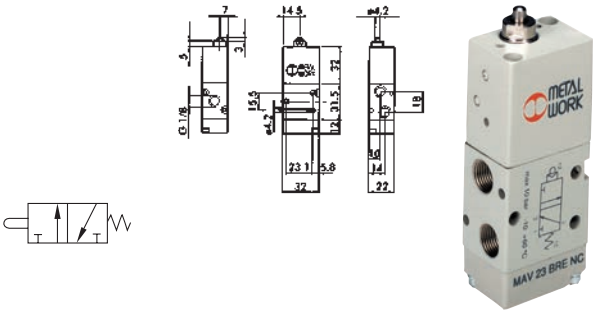
Code P06	Description	Price
7001000700	3/2 G1/8" Normally Closed	63.25



5/2 Sensitive Aerial Valve

G1/8 Ports

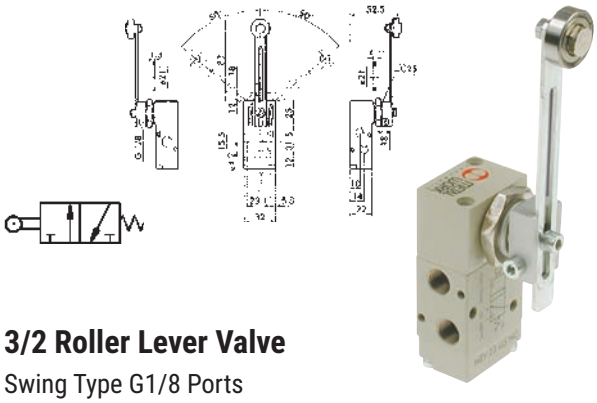
Code P06	Description	Price
7001000710	5/2 G1/8"	66.55



3/2 Plunger Valve for Manual Actuator

G1/8 Ports

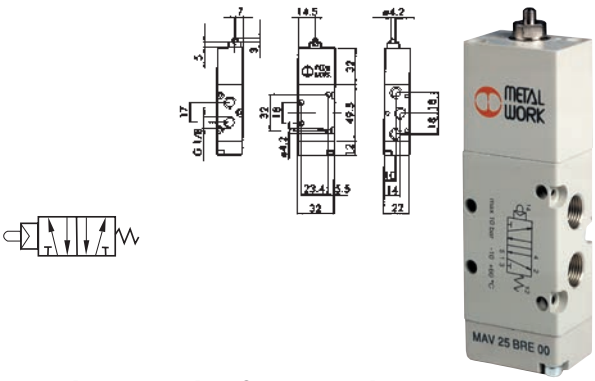
Code P06	Description	Price
7010001800	3/2 G1/8" Normally Closed	42.25



3/2 Roller Lever Valve

Swing Type G1/8 Ports

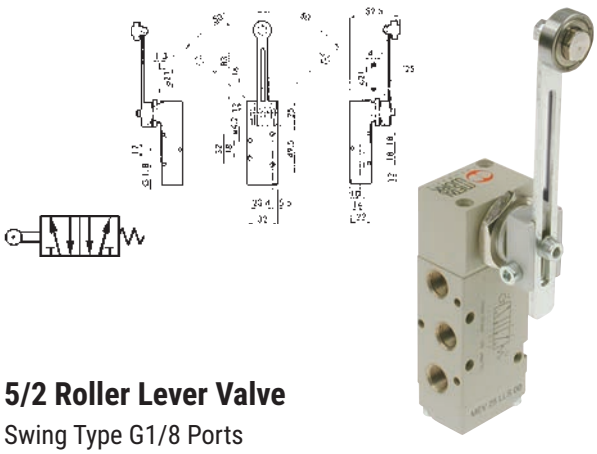
Code P06	Description	Price
7001000900	3/2 G1/8" Ports Spring Return	77.60



5/2 Plunger Valve for Manual Actuator

G1/8 Ports

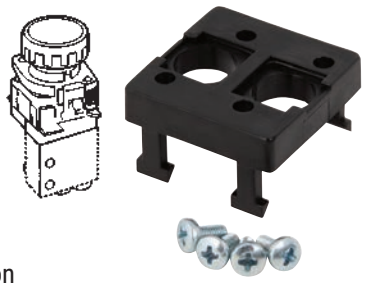
Code P06	Description	Price
7010001900	5/2 G1/8"	45.95



5/2 Roller Lever Valve

Swing Type G1/8 Ports

Code P06	Description	Price
7001000910	5/2 G1/8" Ports Spring Return	81.85



Adaptor Plate

For 'VME Push Button

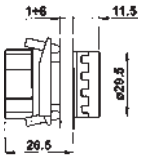
Code P06	Description	Price
0351000050	For Plunger Valves	2.45

For Push-in Fittings



See section 6

Mechanical Valves



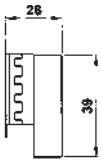


Push Button Actuator

Protected

Code	N17	Description	Price
RM010		Push Button*	10.40
P22804V		Replacement Green Button	0.55
P22804G		Replacement Yellow Button	0.30
P22804A		Replacement White Button	0.30
P22804B		Replacement Blue Button	0.30

*With red and black alternative buttons.

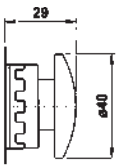




Selector Actuator

Long Lever

Code	N17	Description	Price
RM400N		Black, 0-1	19.45
RM450N		Black, 1-0	27.65
RM413N		Black, 2-0-1	23.55
RM483N		Black, 0-1-2	22.30

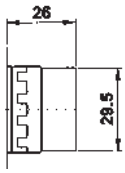




Mushroom Button Actuator

40mm

Code	N17	Description	Price
RM050R		Red, Monostable	13.60
RM050N		Black, Monostable	13.55
RM055R		Red, Multidirectional	35.25
RM055N		Black, Multidirectional	29.00
RM065R		Red, Twist to Unlock	33.30

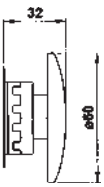




Selector Actuator

Short Lever

Code	N17	Description	Price
RM300N		Black, 0-1	17.15
RM350N		Black, 1-0	26.45
RM313N		Black, 2-0-1	17.00
RM383N		Black, 0-1-2	16.40

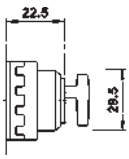




Mushroom Button Actuator

60mm

Code	N17	Description	Price
RM056R		Red, Multidirectional	33.60
RM066R		Red, Twist to Unlock	17.90
RM413N		Black, 2-0-1	23.55
RM483N		Black, 0-1-2	22.30

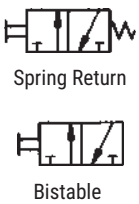


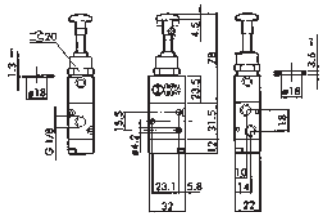


Selector Actuator

Key Operated

Code	N17	Description	Price
RM200N		Bistable Key Selector	26.85



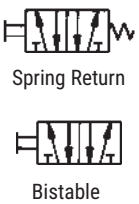


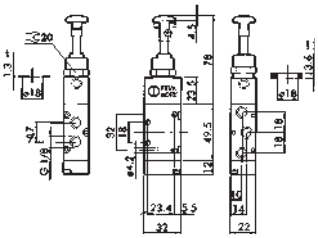


3/2 Push/Pull Valve

G1/8 Ports

Code P06	Description	Price
7010001200	3/2 NC Spring Return, G1/8"	26.55
7010001300	3/2 NC Bistable, G1/8"	26.55



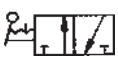


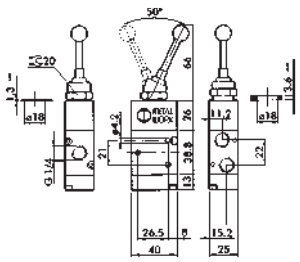


5/2 Push/Pull Valve

G1/8 Ports

Code P06	Description	Price
7010001500	5/2 Spring Return, G1/8"	29.65
7010001600	5/2 Bistable, G1/8"	29.65



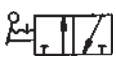


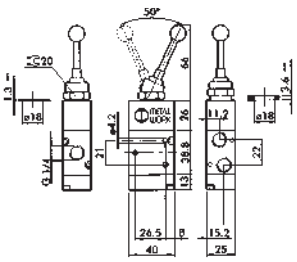


3/2 Top Lever Valve

G1/8 Ports

Code P06	Description	Price
7010001400	3/2 Bistable, G1/8"	30.90



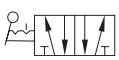


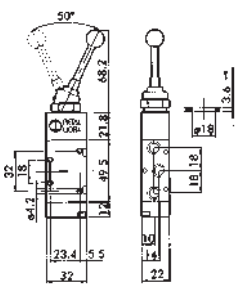


3/2 Top Lever Valve

G1/4 Ports

Code P06	Description	Price
7020001400	3/2 Bistable, G1/4"	37.40



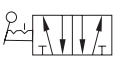


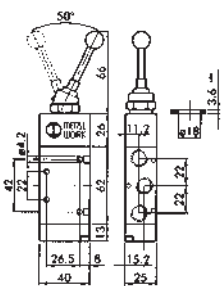


5/2 Top Lever Valve

G1/8 Ports

Code P06	Description	Price
7010001700	5/2 Bistable, G1/8"	33.90







5/2 Top Lever Valve

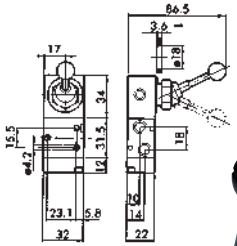
G1/4 Ports

Code P06	Description	Price
7020001700	5/2 Bistable, G1/4"	42.55

Hand Valves


Spring Return


Bistable





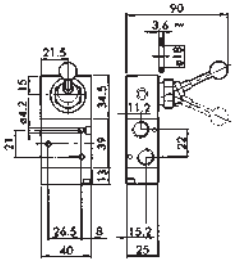
3/2 Lever Valve, 90º

G1/8 Ports

Code P06	Description	Price
7010000100	3/2 NC Spring Return, G1/8"	37.15
7010000200	3/2 Bistable, G1/8"	37.15


Spring Return


Bistable

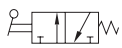


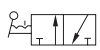


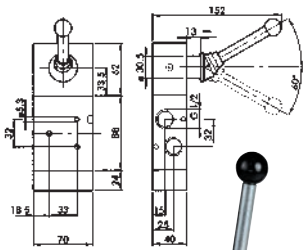
3/2 Lever Valve, 90º

G1/4 Ports

Code P06	Description	Price
7020000100	3/2 NC Spring Return, G1/4"	60.90
7020000200	3/2 Bistable, G1/4"	60.90


Spring Return


Bistable





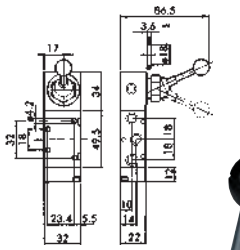
3/2 Lever Valve, 90º

G1/2 Ports

Code P06	Description	Price
7030000100	3/2 NC Spring Return, G1/2"	161.20
7030000200	3/2 Bistable, G1/2"	161.20


Spring Return


Bistable





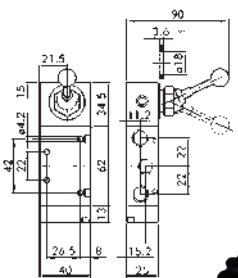
5/2 Lever Valve, 90º

G1/8 Ports

Code P06	Description	Price
7010000300	5/2 Spring Return, G1/8"	40.00
7010000400	5/2 Bistable, G1/8"	40.00


Spring Return


Bistable





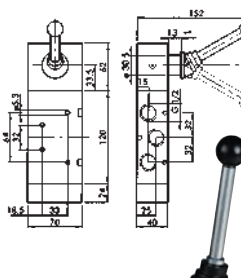
5/2 Lever Valve, 90º

G1/4 Ports

Code P06	Description	Price
7020000300	5/2 Spring Return, G1/4"	66.00
7020000400	5/2 Bistable, G1/4"	66.00


Spring Return


Bistable

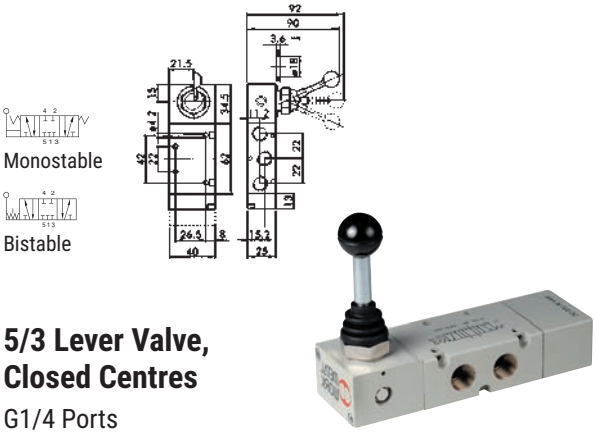




5/2 Lever Valve, 90º

G1/2 Ports

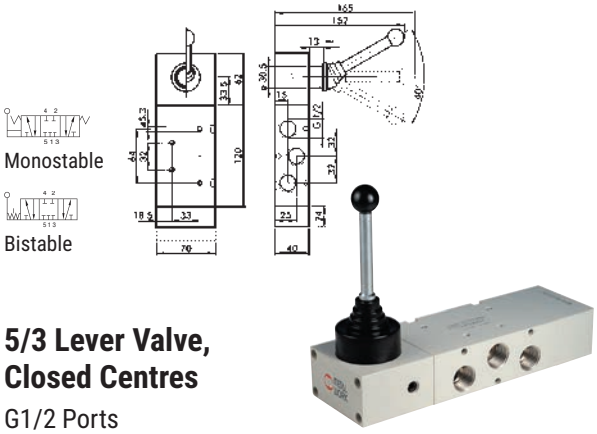
Code P06	Description	Price
7030000300	5/2 Spring Return, G1/2"	182.05
7030000400	5/2 Bistable, G1/2"	182.05



5/3 Lever Valve, Closed Centres

G1/4 Ports

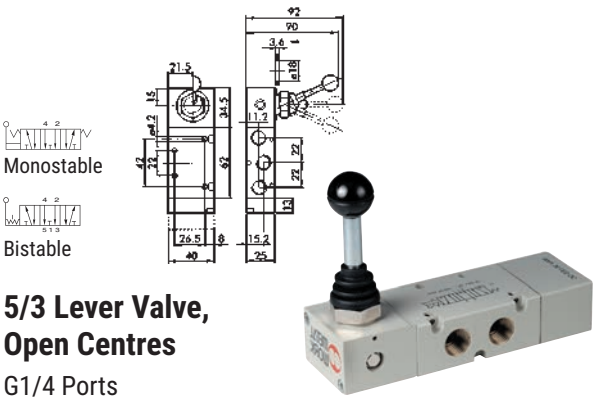
Code P06	Description	Price
7020001000	5/3 CC Monostable, G1/4"	68.70
7020000500	5/3 CC Bistable, G1/4"	68.70



5/3 Lever Valve, Closed Centres

G1/2 Ports

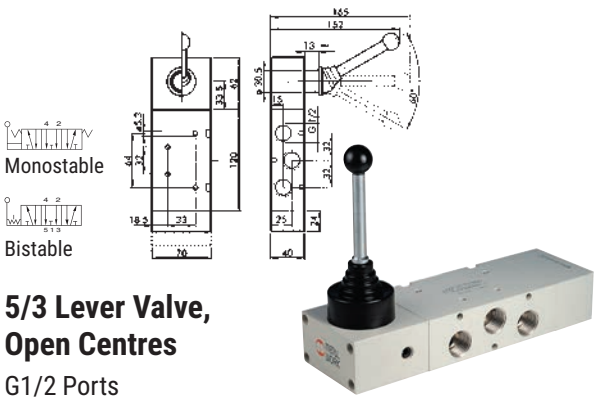
Code P06	Description	Price
7030001000	5/3 CC Monostable, G1/2"	196.95
7030000500	5/3 CC Bistable, G1/2"	196.95



5/3 Lever Valve, Open Centres

G1/4 Ports

Code P06	Description	Price
7020000900	5/3 OC Monostable, G1/4"	68.70
7020000600	5/3 OC Bistable, G1/4"	68.70



5/3 Lever Valve, Open Centres

G1/2 Ports

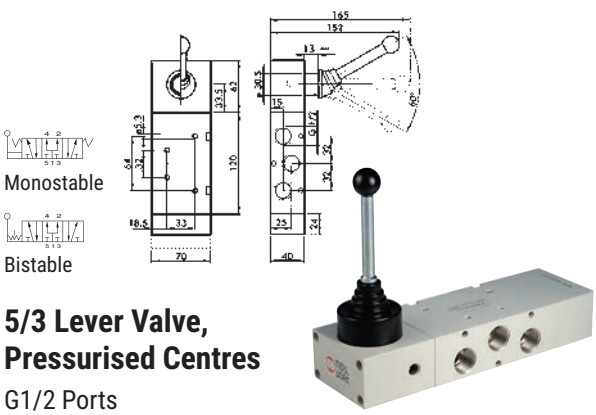
Code P06	Description	Price
7030000900	5/3 CC Monostable, G1/2"	196.95
7030000600	5/3 CC Bistable, G1/2"	196.95



5/3 Lever Valve, Pressurised Centres

G1/4 Ports

Code P06	Description	Price
7020001100	5/3 PC Monostable, G1/4"	68.70
7020000700	5/3 PC Bistable, G1/4"	66.35



5/3 Lever Valve, Pressurised Centres

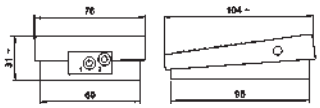
G1/2 Ports

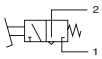
Code P06	Description	Price
7030001100	5/3 PC Monostable, G1/2"	196.95
7030000700	5/3 PC Bistable, G1/2"	196.95

Foot Pedals

Materials for all Pedal Valves

- Body: aluminium 11S
- Protection cover: shock resistant plastic material
- Nominal orifice: 7.5mm
- Maximum temperature: +60ºC
- Working pressure: 2-10 bar
- Fluid: 50µ filtered lubricated or non-lubricated air



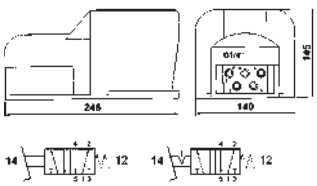




3/2 Compact Foot Pedal

Without Protective Cover

Code N17	Description	Price
PED304M	3/2 Spring Return, 4mm Fittings	47.25



Spring Return Bistable

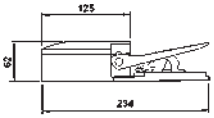


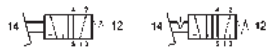
5/2 Foot Pedal

With Protective Cover

Code N17	Description	Price
PED502M	5/2 Spring Return	108.20
PED502B	5/2 G1/4" Bistable	66.85
PED502S	Safety Foot Pedal 5/2 G1/4"*	68.50

* Spring return.





Spring Return Bistable



5/2 Foot Pedal

Without Protective Cover

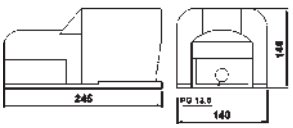
Code N17	Description	Price
PEDS502M	5/2 G1/4" Spring Return	62.20
PEDS502B	5/2 G1/4" Bistable	65.80

- Life time (cycles) 10.000.000
- Contact resistance 25 mΩ
- Electrical protection degree IP 54
- Contacts: 1 NO + 1 NC rapid switch

Utillization power, according to IEC 337-1:

DC		
V	24	220
A	6	0.1

AC				
V	24	220	380	500
A	10	10	8	6







Electric Foot Pedal

With Protective Cover

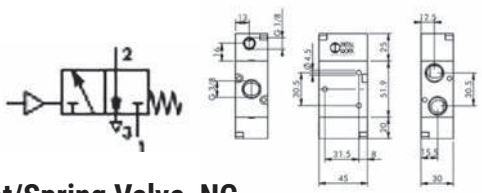
Code N17	Description	Price
01.087.0	NO-NC Contacts	40.60
01.088.0	NO-NC Contacts with Safety Feature*	46.50

Safety feature: to avoid operation the pedal must be fully depressed. Press on the pedal with the whole shoe surface.

Pneumatically Operated Valves

Pilot Valves

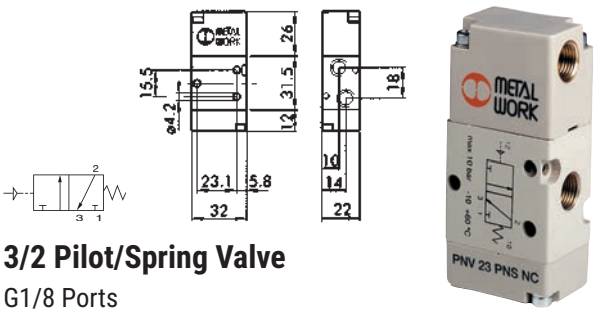
Technical Data	1/8"	1/4"	3/8"	1/2"
Operating Pressure Bar	Vacuum to 10			
Minimum pilot pressure:				
monostable bar	2.5 to 10			
bistable bar	1 to 10			
Operating temperature range	-10°C to +60°C			
Nominal diameter mm	5	7.5	13.3	15
Conductance C Nl/min - bar	121.43	264.26	505.52	971.43
Critical ratio b bar/bar	0.32	0.27	0.32	0.43
Flow rate at 6 bar ΔP 0.5 bar Nl/min	400	750	1560	3200
Flow rate at 6 bar ΔP 1 bar Nl/min	550	1100	2150	4600
TRA / TRR monostable at 6 bar ms	6/15	7/15	5/28	16/46
TRA / TRR bistable at 6 bar ms	7/7	7/7	13/13	16/16



3/2 Pilot/Spring Valve, NC

G3/8 Ports

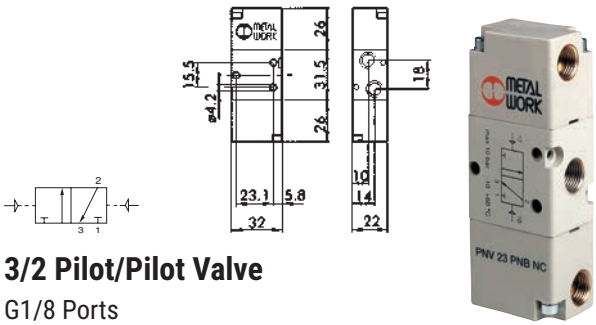
Code P06	Description	Price
7040010200	3/2 G3/8"	66.60



3/2 Pilot/Spring Valve

G1/8 Ports

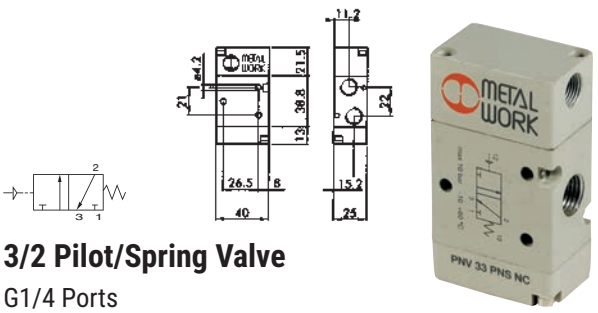
Code P06	Description	Price
7010010200	3/2 G1/8"	35.25



3/2 Pilot/Pilot Valve

G1/8 Ports

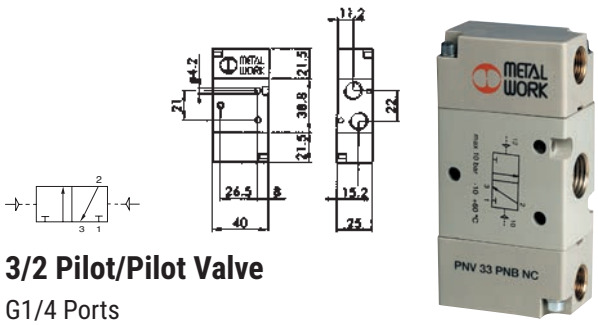
Code P06	Description	Price
7010010100	3/2 G1/8"	38.85



3/2 Pilot/Spring Valve

G1/4 Ports

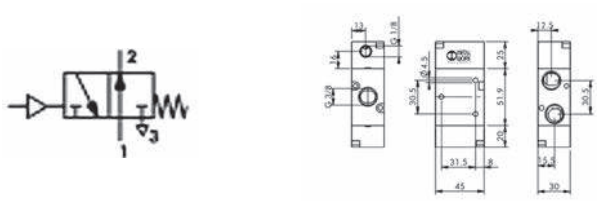
Code P06	Description	Price
7020010200	3/2 G1/4"	44.95



3/2 Pilot/Pilot Valve

G1/4 Ports

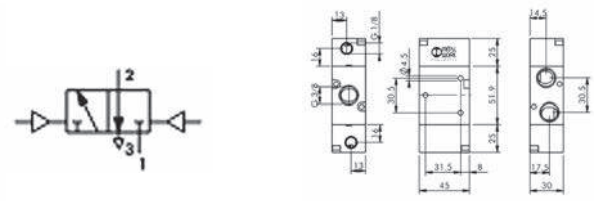
Code P06	Description	Price
7020010100	3/2 G1/4"	49.35



3/2 Pilot/Spring Valve

G3/8 Ports

Code P06	Description	Price
7040010400	3/2 G3/8" NO	66.60

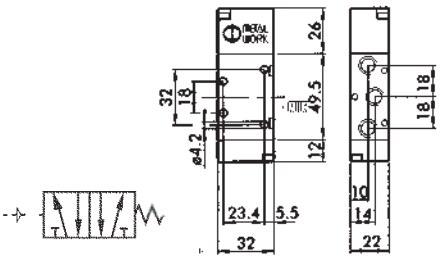


3/2 Pilot/Pilot Valve, NC

G3/8 Ports

Code P06	Description	Price
7040010100	3/2 G3/8" NC	72.10

Pneumatically Operated Valves

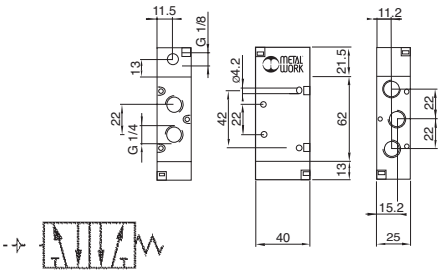




5/2 Pilot/Spring Valve

G1/8 Ports

Code	P06	Description	Price
7010011100		5/2 G1/8"	41.45

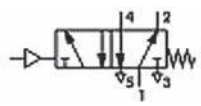


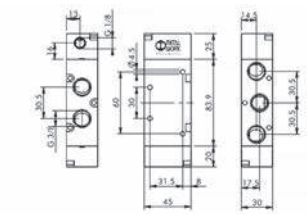


5/2 Pilot/Spring Valve

G1/4 Ports

Code	P06	Description	Price
7020011100		5/2 G1/4"	51.30

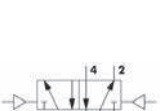


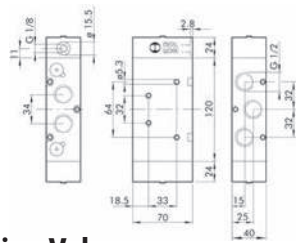


5/2 Pilot/Spring Valve

G3/8" Ports

Code	P06	Description	Price
7040011100		5/2 G3/8"	77.05





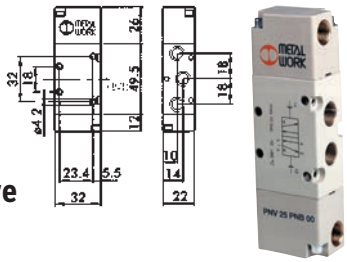


5/2 Pilot/Spring Valve

G1/2 Ports

Code	P06	Description	Price
7030011100		5/2 G1/2"	162.00

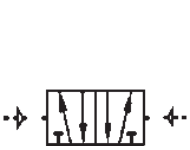


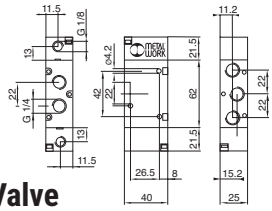


5/2 Pilot/Pilot Valve

G1/8 Ports

Code	P06	Description	Price
7010011200		5/2 G1/8	44.65



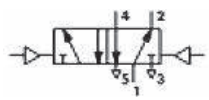


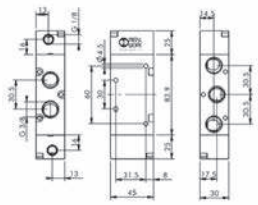


5/2 Pilot/Pilot Valve

G1/4 Ports

Code	P06	Description	Price
7020011200		5/2 G1/4	55.15

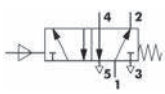


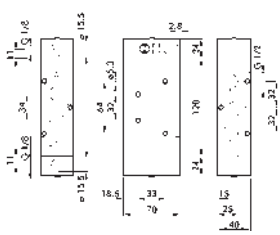


5/2 Pilot/Pilot Valve

G3/8 Ports

Code	P06	Description	Price
7040011200		5/2 G3/8"	83.45



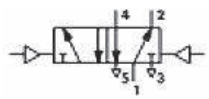


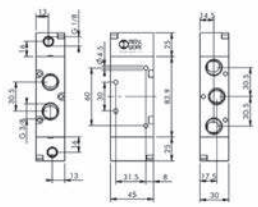


5/2 Pilot/ Pilot Valve

G1/2 Ports

Code	P06	Description	Price
7030011200		5/2 G1/2"	178.70

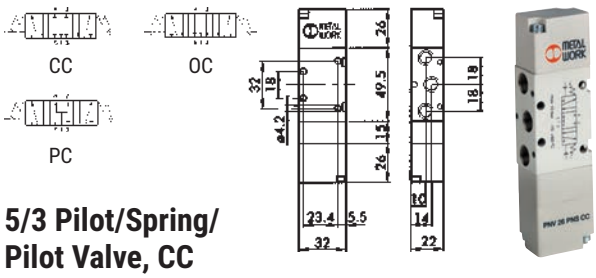




5/2 Pilot/Pilot Valve (Differential)

G3/8 Ports

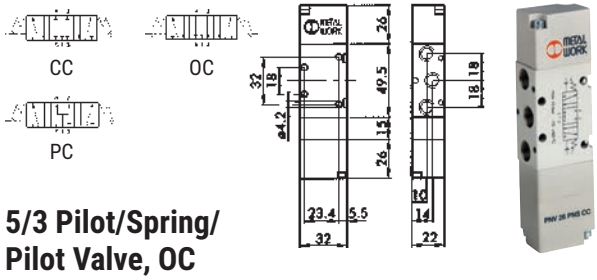
Code	P06	Description	Price
7040011300		5/2 G3/8"	83.50



5/3 Pilot/Spring/ Pilot Valve, CC

G1/8 Ports

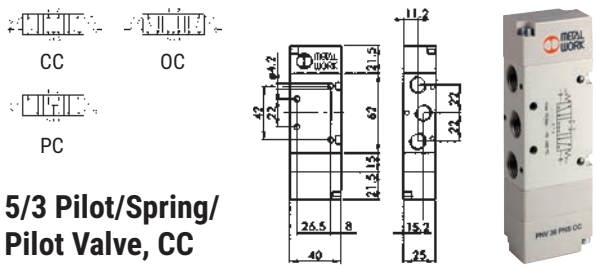
Code P06	Description	Price
7010012100	5/3 G1/8" CC	47.00



5/3 Pilot/Spring/ Pilot Valve, OC

G1/8 Ports

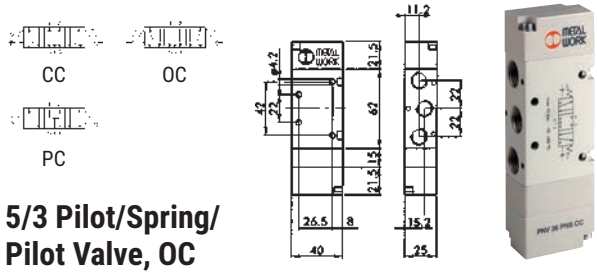
Code P06	Description	Price
7010012200	5/3 G1/8" OC	47.00



5/3 Pilot/Spring/ Pilot Valve, CC

G1/4 Ports

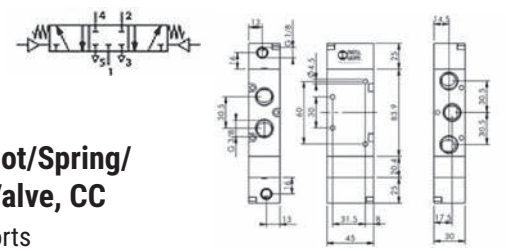
Code P06	Description	Price
7020012100	5/3 G1/4" CC	59.30



5/3 Pilot/Spring/ Pilot Valve, OC

G1/4 Ports

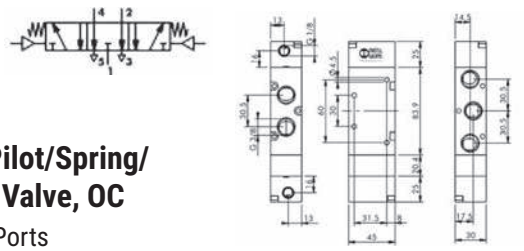
Code P06	Description	Price
7020012200	5/3 G1/4" OC	59.30



5/3 Pilot/Spring/ Pilot Valve, CC

G3/8 Ports

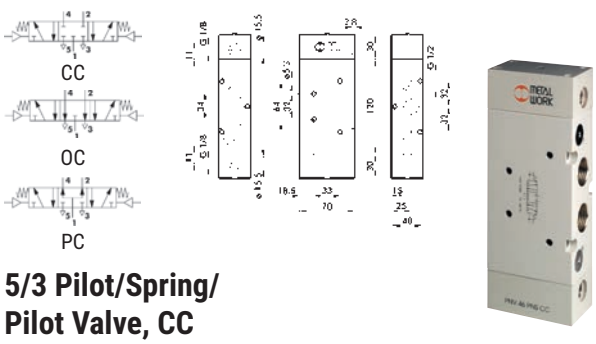
Code P06	Description	Price
7040012100	5/3 G3/8" CC	87.25



5/3 Pilot/Spring/ Pilot Valve, OC

G3/8 Ports

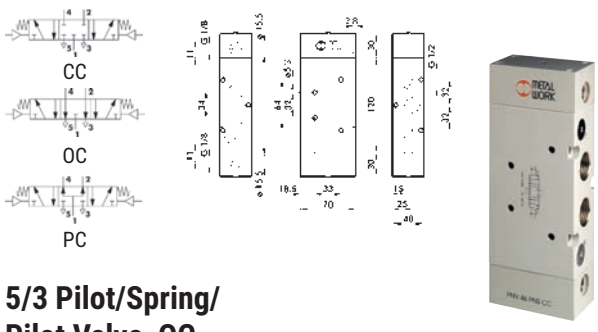
Code P06	Description	Price
7040012200	5/3 G3/8" OC	87.25



5/3 Pilot/Spring/ Pilot Valve, CC

G1/2 Ports

Code P06	Description	Price
7030012100	5/3 G1/2" CC	188.80

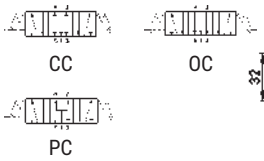


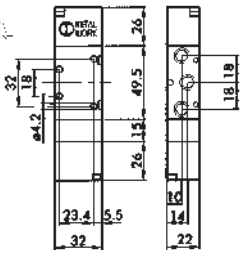
5/3 Pilot/Spring/ Pilot Valve, OC

G1/2 Ports

Code P06	Description	Price
7030012200	5/3 G1/2" OC	188.80

Pneumatically Operated Valves



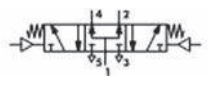


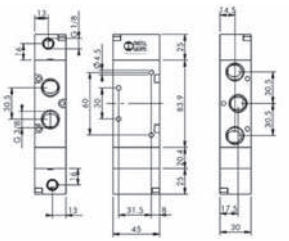


5/3 Pilot/Spring/ Pilot Valve, PC

G1/8 Ports

Code P06	Description	Price
7010012300	5/3 G1/8" PC	47.00

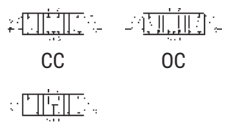


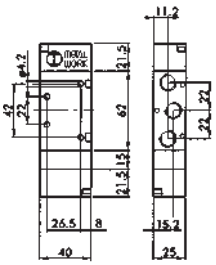


5/3 Pilot/Spring/ Pilot Valve, PC

G3/8 Ports

Code P06	Description	Price
7040012300	5/3 G3/8" PC	87.25



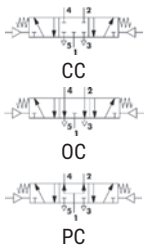


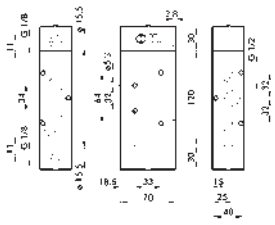


5/3 Pilot Valve, PC

G1/4 Ports

Code P06	Description	Price
7020012300	5/3 G1/4" PC	59.30







5/3 Pilot/Spring/Pilot Valve, PC

G1/2 Ports

Code P06	Description	Price
7030012300	5/3 G1/2" PC	188.80

For Silencers







See pages 432-433

Solenoid Control Valves

Solenoid Valves

Technical Data	1/8"	1/4"	3/8"	1/2"	Namur
Operating pressure:					
monostable bar	2.5 to 10				
bistable bar	1 to 10				
external pilot assisted bar	Vacuum to 10				
Minimum pilot pressure bar	2.5				
Operating temperature range	-10°C to +60°C				
Nominal diameter mm	5	7.5	13.3	15	7.5
Conductance C Nl/min - bar	121.43	264.26	505.52	971.43	264.26
Critical ratio b bar/bar	0.32	0.27	0.32	0.43	0.27
Flow rate at 6 bar ΔP 0.5 bar Nl/min	400	750	1560	3200	750
Flow rate at 6 bar ΔP 1 bar Nl/min	550	1100	2150	4600	1100
TRA / TRR monostable at 6 bar ms	15/35	19/45	21/72	36/60	7/15
TRA / TRR bistable at 6 bar ms	20/20	21/21	18/18	30/30	7/7
Coil voltage values	12; 24 VDC – 24; 110; 220 V AC 50/60Hz				
Power	2 W (DC) 3.5VA (AC)				
Voltage tolerance %	-10 to +15				
Insulation class	F 155				



Namur Interface Solenoid/ Spring Valve

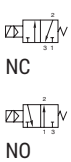
G1/4 Ports

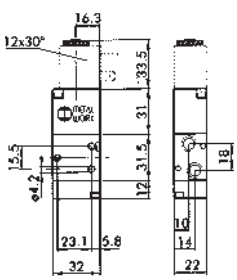
Code	P06	Description	Price
7021020100		Single Solenoid 5/2 G1/4"	64.40

Namur Interface Solenoid/Solenoid Valve

G1/4 Ports

Code	P06	Description	Price
7021020200		Double Solenoid 5/2 G1/4"	85.45



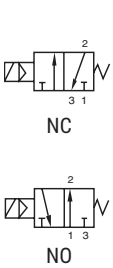


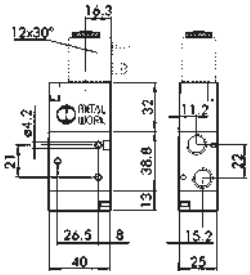


3/2 Solenoid/Spring Valve, Normally Open

G1/8 Ports

Code	P06	Description	Price
7010020400		3/2 G1/8" NO	57.55



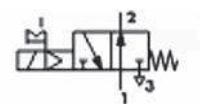


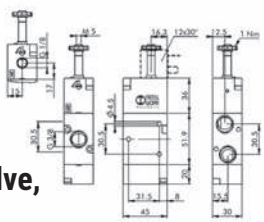


3/2 Solenoid/Spring Valve, Normally Open

G1/4 Ports

Code	P06	Description	Price
7020020400		3/2 G1/4" NO	66.00

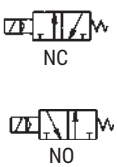


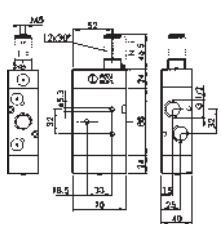


3/2 Solenoid/Spring Valve, Normally Open

G3/8 Ports

Code	P06	Description	Price
7040020400		3/2 G3/8" NO	81.45







3/2 Solenoid/Spring Valve, Normally Open

G1/2 Ports

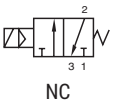
Code	P06	Description	Price
7030020400		3/2 G1/2" NO Spring	161.00

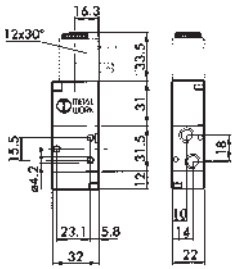
For Solenoid Plugs



See section 4

Solenoid Control Valves



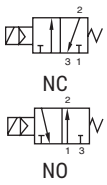


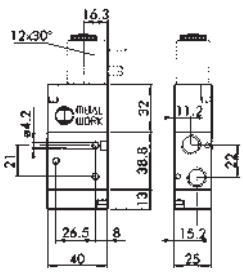


3/2 Solenoid/Spring Valve, Normally Closed

G1/8 Ports

Code	P06	Description	Price
7010020200		3/2 G1/8" NC	57.55



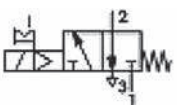


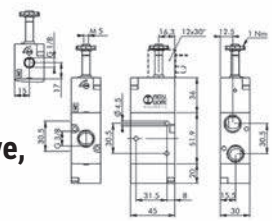


3/2 Solenoid/Spring Valve, Normally Closed

G1/4 Ports

Code	P06	Description	Price
7020020200		3/2 G1/4" NC	66.00

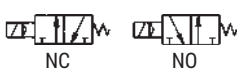


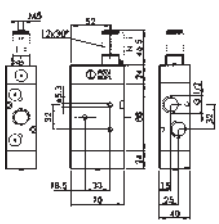


3/2 Solenoid/Spring Valve, Normally Closed

G3/8 Ports

Code	P06	Description	Price
7040020200		3/2 G3/8" NC	81.45



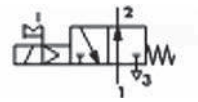


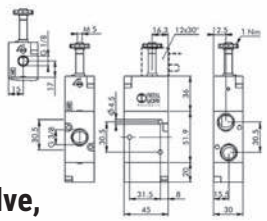


3/2 Solenoid/ Spring Valve, Normally Closed

G1/2 Ports

Code	P06	Description	Price
7030020200		3/2 G1/2 NC Spring	161.00

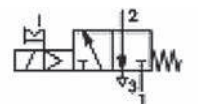


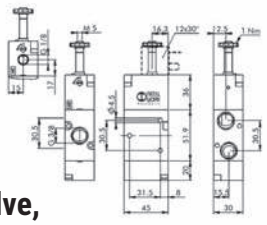


3/2 Solenoid/Spring Valve, Normally Open Assisted

G3/8 Ports

Code	P06	Description	Price
7040020600		3/2 G3/8" NO ASS	76.00



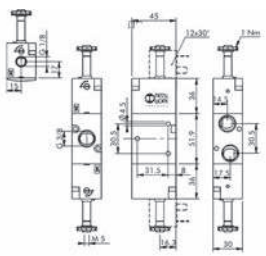


3/2 Solenoid/Spring Valve, Normally Closed Assisted

G3/8 Ports

Code	P06	Description	Price
7040020500		3/2 G3/8" NC ASS	81.45

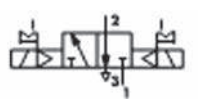


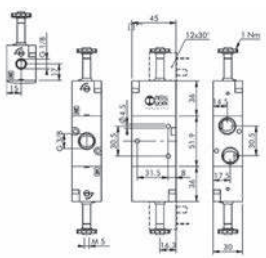


3/2 Solenoid/Solenoid Valve, Normally Closed

G3/8 Ports

Code	P06	Description	Price
7040020100		3/2 G3/8" NC	86.75





3/2 Solenoid/ Solenoid Valve, Normally Closed Assisted

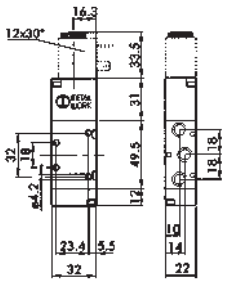
G3/8 Ports

Code	P06	Description	Price
7040020300		3/2 G3/8" ASS	86.75

Solenoid Control Valves

Note: solenoid coils must be ordered separately.







5/2 Solenoid/Spring Valve

G1/8 Ports

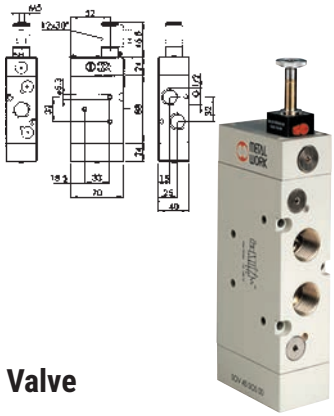
Code	P06	Description	Price
7010021100		5/2 G1/8"	63.10



Sol/Spring



Sol/Sol

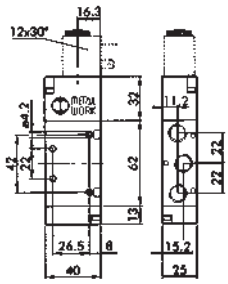


5/2 Solenoid/Spring Valve

G1/2 Ports

Code	P06	Description	Price
7030021100		5/2 G1/2" Sol/Spring	185.50



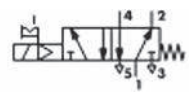


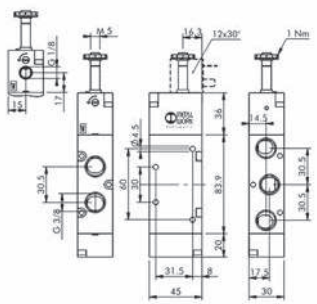


5/2 Solenoid/Spring Valve

G1/4 Ports

Code	P06	Description	Price
7020021100		5/2 G1/4"	69.65

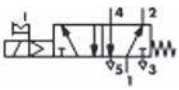


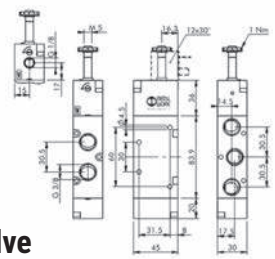


5/2 Solenoid/Spring Valve, Assisted

G3/8 Ports

Code	P06	Description	Price
7040021500		5/2 G3/8" ASS	95.00





5/2 Solenoid/Spring Valve

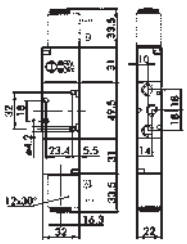
G3/8 Ports

Code	P06	Description	Price
7040021100		5/2 G3/8"	95.00

Solenoid Control Valves

Note: solenoid coils must be ordered separately.





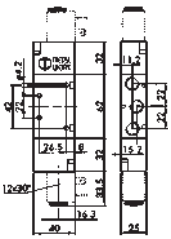
5/2 Solenoid/ Solenoid Valve

G1/8 Ports



Code P06	Description	Price
7010021200	5/2 G1/8"	88.30





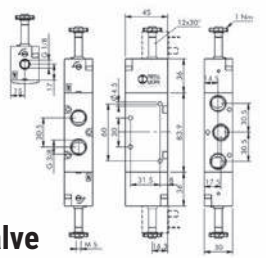
5/2 Solenoid/ Solenoid Valve

G1/4 Ports



Code P06	Description	Price
7020021200	5/2"G1/4"	92.50





5/2 Solenoid/Solenoid Valve

G3/8 Ports

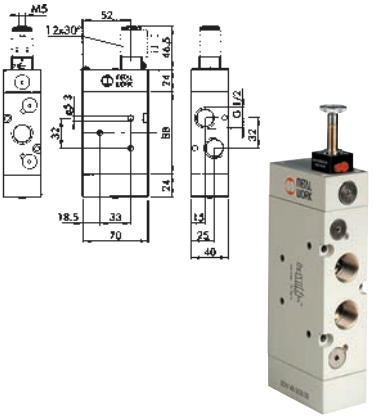
Code P06	Description	Price
7040021200	5/2 G3/8"	105.65



Sol/Spring



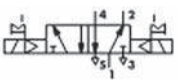
Sol/Sol

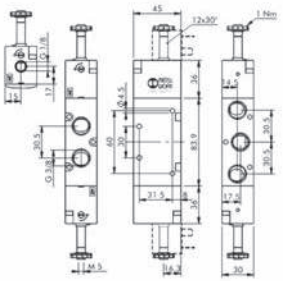


5/2 Solenoid/ Solenoid Valve

G1/2 Ports

Code P06	Description	Price
7030021200	5/2 G1/2" Sol/Sol	224.55

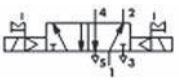


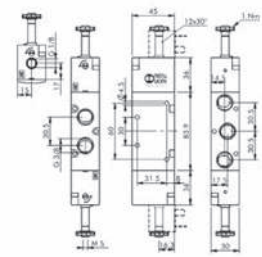


5/2 Solenoid/Solenoid Valve, Differential

G3/8 Ports

Code P06	Description	Price
7040021300	5/2 G3/8"	105.65





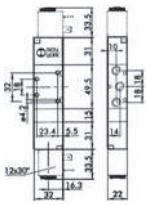
5/2 Solenoid/Solenoid Valve, Assisted

G3/8 Ports

Code P06	Description	Price
7040021600	5/2 G3/8" ASS	98.65

Technical Data

- Operating temperature range: -10°C to +60°C
- Nominal diameter: 7.5mm
- Flow rate at 6 bar Δ P 0.5 bar: 750 NI/min
- Flow rate at 6 bar Δ P 1 bar: 1100 NI/min
- Note: solenoid coils must be ordered separately.



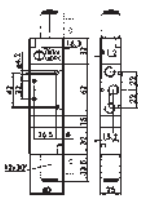




5/3 Solenoid/Spring/Solenoid Valve, Pressure Centres

G1/8 Ports

Code P06	Description	Price
7010022300	5/3 G1/8" PC	105.20





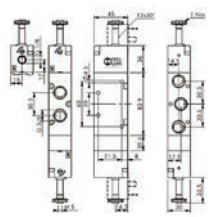
PC



5/3 Solenoid/Spring/Solenoid Valve, Pressure Centres

G1/4 Ports

Code P06	Description	Price
7020022300	5/3 G1/4" PC	117.80





PC



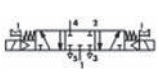
Body only

5/3 Solenoid/Spring/Solenoid Valve, Pressure Centres

G3/8 Ports

Code P06	Description	Price
7040022300	5/3 G3/8" PC	130.40

5/3 Solenoid/Spring/Solenoid Valve, Closed Centres



CC

G3/8 Ports

Code P06	Description	Price
7040022100	5/3 G3/8" CC	130.40

Technical Data



PC



CC

- Monostable solenoid/spring: 2.5 bar to 10 bar
- Bistable solenoid/solenoid: 1 to 10 bar
- Minimum actuation pressure: 2.5 bar
- Operating temperature range: -10°C to +60°C
- Nominal diameter: 15mm
- Flow rate at 6 bar ΔP 1 bar: 4600NI/min
- Absorbed power: 2W (DC) 3VA (AC)
- Voltages tolerances: -10°C to +15°C
- Degree of protection: IP65 - DIN 40050
- Solenoid rating: 100% ED
- Maximum temperature at 100% solenoid rating: +70°C at +20°C ambient

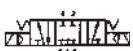


5/3 Solenoid/Spring/Solenoid Valve, Pressure Centres

G1/2 Ports

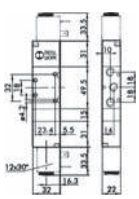
Code P06	Description	Price
7030022300	G1/2" PC Solenoid	239.50

5/3 Solenoid/Spring/ Solenoid Valve, Closed Centres



G1/2 Ports

Code P06	Description	Price
7030022100	G1/2" CC Solenoid	239.50

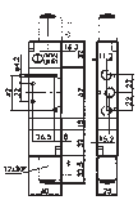




5/3 Solenoid/Spring/Solenoid Valve, Closed Centres

G1/8 Ports

Code P06	Description	Price
7010022100	5/3 G1/8" CC	105.20







5/3 Solenoid/Spring/Solenoid Valve, Closed Centres

G1/4 Ports

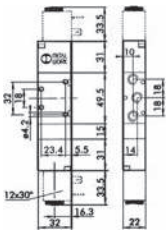
Code P06	Description	Price
7020022100	5/3 G1/4" CC	117.45

Solenoid Control Valves

Technical Data

- Operating temperature range: -10°C to +60°C
- Nominal diameter: 7.5mm
- Flow rate at 6 bar Δ P 0.5 bar: 750 Nl/min
- Flow rate at 6 bar Δ P 1 bar: 1100 Nl/min

Note: solenoid coils must be ordered separately.

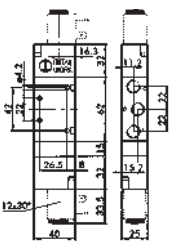




5/3 Solenoid/Spring/Solenoid Valve, Open Centres

G1/8 Ports

Code P06	Description	Price
7010022200	5/3 G1/8" OC	105.20

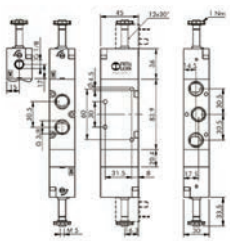


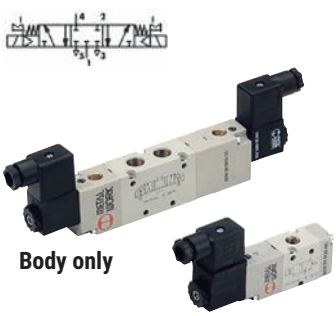


5/3 Solenoid/Spring/Solenoid Valve, Open Centres

G1/4 Ports

Code P06	Description	Price
7020022200	5/3 G1/4" OC	117.80





Body only

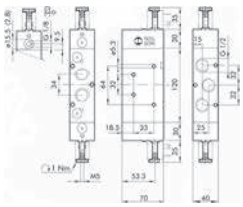
5/3 Solenoid/Spring/Solenoid Valve, Open Centres

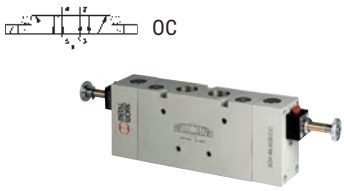
G3/8 Ports

Code P06	Description	Price
7040022200	5/3 G3/8" OC	130.40

Technical Data

- Monostable solenoid/spring: 2.5 bar to 10 bar
- Bistable solenoid/solenoid: 1 to 10 bar
- Minimum actuation pressure: 2.5 bar
- Operating temperature range: -10°C to +60°C
- Nominal diameter: 15mm
- Flow rate at 6 bar ΔP 1 bar: 4600Nl/min
- Absorbed power: 2W (DC) 3VA (AC)
- Voltages tolerances: -10°C to +15°C
- Degree of protection: IP65 - DIN 40050
- Solenoid rating: 100% ED
- Maximum temperature at 100% solenoid rating: +70°C at +20°C ambient

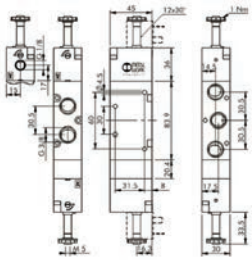


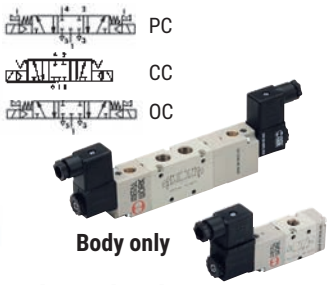


5/3 Solenoid/Spring/Solenoid Valve, Open Centres

G1/2 Ports

Code P06	Description	Price
7030022200	G1/2" OC Solenoid	239.50





Body only

5/3 Solenoid/Spring/Solenoid Valve, Pressure Centres Assisted

G3/8 Ports

Code P06	Description	Price
7040022600	5/3 G3/8" PC ASS	121.75

5/3 Solenoid/Spring/Solenoid Valve, Closed Centres Assisted

G3/8 Ports

Code P06	Description	Price
7040022400	5/3 G3/8" CC ASS	121.75

5/3 Solenoid/Spring/Solenoid Valve, Open Centres Assisted

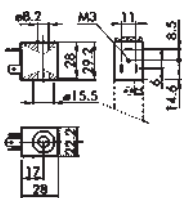
G3/8 Ports

Code P06	Description	Price
7040022500	5/3 G3/8" OC ASS	121.75

Solenoid Control Valves

Technical Data

- Voltage tolerances: -10% to +15%
- Insulation class: F155
- Degree of protection: IP65 -DIN 40050
- Solenoid rating: 100%
- Operating temperature range: -20°C to +120°C
- Electric contact: AMP DIN 43650 2 contacts + 1 earth
- Max temperature at 100% solenoid rating: +70°C at +20°C ambient temperature





Solenoid Coils for ISO 5599 Valves, Size 1

22mm

Code P40	Nominal Voltage	Power Inrush	Input Holding	Type	Price
W0215000101	24V DC	2W	2W	22 Ø8 BA 2W-24V DC	13.90
W0215000111	24V 50/60Hz	4VA	3VA	22 Ø8 BA 3V-24V AC	13.90
W0215000121	110V 50/60Hz	4VA	2W	22 Ø8 BA 3VA-110V AC	13.90
W0215000131	220V 50/60Hz	4VA	2W	22 Ø8 3VA-220V AC	13.90

Technical Data

- Monostable solenoid/spring: 2.5 bar to 10 bar
- Bistable solenoid/solenoid: 1 to 10 bar
- Minimum actuation pressure: 2.5 bar
- Operating temperature range: -10°C to +60°C
- Nominal diameter: 15mm
- Flow rate at 6 bar ΔP 1 bar: 4600NI/min
- Absorbed power: 2W (DC) 3VA (AC)
- Voltages tolerances: -10°C to +15°C
- Degree of protection: IP65 - DIN 40050
- Solenoid rating: 100% ED
- Maximum temperature at 100% solenoid rating: +70°C at +20°C ambient

Note: solenoid coils must be ordered separately.



Solenoid Coils, 5W

22mm

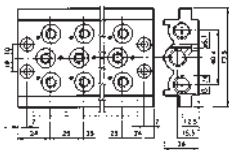
Code P40	Nominal Voltage	Power Inrush	Input Holding	Type	Price
W0215000001	24V DC	5W	5W	22 Ø8 5W-24V DC	13.90
W0215000011	24V 50/60Hz	8VA	5VA	22 Ø8 5VA-24V AC	13.90
W0215000021	110V 50/60Hz	8VA	5VA	22 Ø8 5VA-110V AC	13.90
W0215000031	220V 50/60Hz	8VA	5VA	22 Ø8 5W-220V AC	13.90



Solenoid Coil Connector

22mm

Code M18	Description	Price
M1NS2000	Form B Socket Connector	1.50



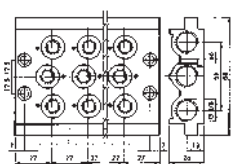


G1/8" Ports

Manifolds

In-line, 1/8" Ports

Code P06	Description	Price
0223000201	2 Position	44.45
0223000301	3 Position	54.00
0223000401	4 Position	65.85
0223000501	5 Position	78.75
0223000601	6 Position	94.45
0223000701	7 Position	94.45
0226004500	Blanking Plate Size 1/8"	2.80





G1/4" Ports

Manifolds

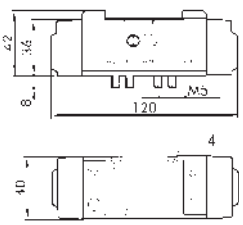
In-line, 1/4" Ports

Code P06	Description	Price
0224000201	2 Position	53.50
0224000401	4 Position	77.85
0224000501	5 Position	93.10
0224000601	6 Position	98.50
0224000701	7 Position	121.40
0226004500	Blanking Plate Size 1/8"	2.80
0226005500	Blanking Plate Size 1/4"	3.30

ISO Valves

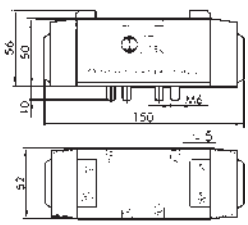
Technical Data

ISO Size	Operating Pressure	Operating Temperature Range	Nominal Diameter	Flow Rate at 6 bar ΔP 0.5 bar	Flow Rate at 6 bar ΔP 1 bar
1	Vacuum ÷≥10 bar	-10ºC to 60ºC≥	7.5mm	700 Nl/min	1100 Nl/min
2			12mm	1800 Nl/min	2700 Nl/min



ISO size 1.





ISO size 2.





Pneumatic ISO 5599 Valves

5/2 Pilot/Spring

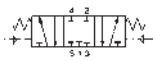
Code P06	ISO Size	Price
7051011100	1	65.35
7052011100	2	111.55



Pneumatic ISO 5599 Valves

5/2 Pilot/Pilot

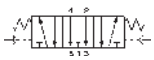
Code P06	ISO Size	Price
7051011200	1	65.35
7052011200	2	115.55



Pneumatic ISO 5599 Valves

5/3 Pilot/Pilot Closed Centres

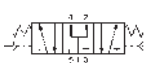
Code P06	ISO Size	Price
7051012100	1	90.10
7052012100	2	119.80



Pneumatic ISO 5599 Valves

5/3 Pilot/Pilot Open Centres

Code P06	ISO Size	Price
7051012200	1	90.10
7052012200	2	119.80



Pneumatic ISO 5599 Valves

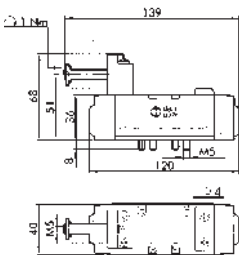
5/3 Pilot/Pilot Pressurised Centres

Code P06	ISO Size	Price
7051012300	1	90.10
7052012300	2	119.80

ISO Valves

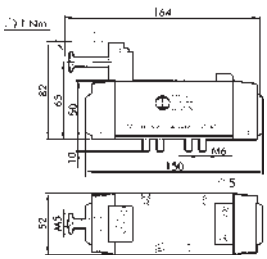
Technical Data

ISO Size	Operating Pressure	Operating Temperature Range	Nominal Diameter	Flow Rate at 6 bar ΔP 0.5 bar	Flow Rate at 6 bar ΔP 1 bar
1	2.5 ÷≥10 bar	-10°C to 60°C≥	7.5mm	700 Nl/min	1100 Nl/min
2			12mm	1800 Nl/min	2700 Nl/min



ISO size 1.





ISO size 2.

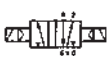




Solenoid ISO 5599 Valves

5/2 Solenoid/Spring

Code P06	ISO Size	Price
7051021100	1	91.10
7052021100	2	164.35



Solenoid ISO 5599 Valves

5/2 Solenoid/Solenoid

Code P06	ISO Size	Price
7051021200	1	119.10
7052021200	2	164.40



Solenoid ISO 5599 Valves

5/3 Solenoid/Solenoid Closed Centres

Code P06	ISO Size	Price
7051022100	1	142.30
7052022100	2	173.15



Solenoid ISO 5599 Valves

5/3 Solenoid/Solenoid Open Centres

Code P06	ISO Size	Price
7051022200	1	142.30
7052022200	2	173.15



Solenoid ISO 5599 Valves

5/3 Solenoid/Solenoid Pressurised Centres

Code P06	ISO Size	Price
7051022300	1	142.30
7052022300	2	173.15

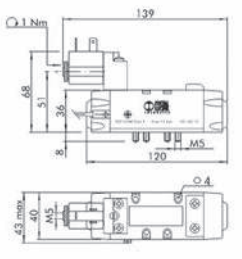
For Coils and Plugs



See page 65

ISO Valves

- Operating Pressure 2.5 to 10 bar
- Operating Temperature Range -10°C to 60°C
- Nominal Diameter 7.5
- Flow Rate at 6 bar Δp 0.5 bar 700 Nl/min
- Flowrate at 6 bar Δp 1bar 1100 Nl/min



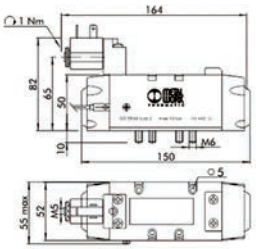


Safe Air Series Solenoid Spring Valves ISO 5599/1

ISO 1, 2.5 Metre, 3 Wires

Code P06	Description	Price
7057021100	Solenoid/Spring	174.10
7057021400	Solenoid/Spring Pilot	174.10

- Operating Pressure 2.5 to 10 bar
- Operating Temperature Range -10°C to 60°C
- Nominal Diameter 12
- Flow Rate at 6 bar Δp 0.5 bar 1800 Nl/min
- Flow Rate at 6 bar Δp 1bar 2700 Nl/min

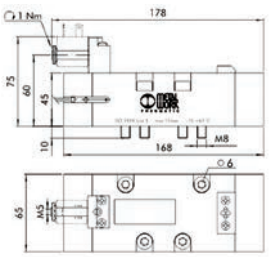


Safe Air Series Solenoid Spring Valves ISO 5599/1

ISO 2, 2.5 Metre, 3 Wires

Code P06	Description	Price
7058021100	Solenoid/Spring	207.80
7058021400	Solenoid/Spring Pilot	207.80

- Operating Pressure 2.5 to 10 bar
- Operating Temperature Range -10°C to 60°C
- Nominal Diameter 15
- Flow Rate at 6 bar Δp 0.5 bar 3200 Nl/min
- Flow Rate at 6 bar Δp 1bar 4600 Nl/min



Safe Air Series Solenoid Spring Valves ISO 5599/1

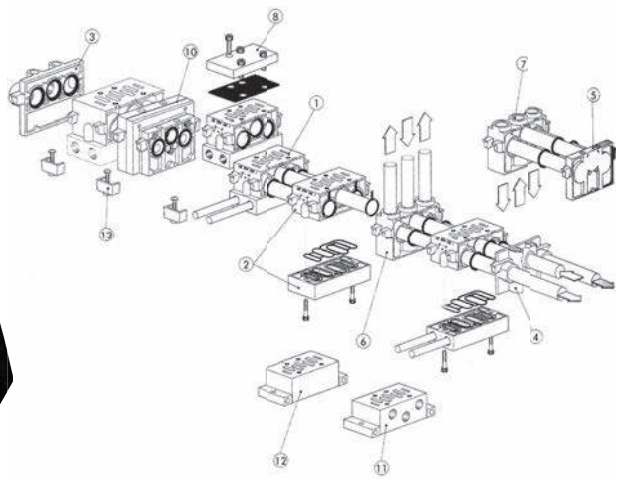
ISO 3, 2.5 Metre, 3 Wires

Code P06	Description	Price
7059021100	Solenoid/Spring	262.55
7059021400	Solenoid/Spring Pilot	262.55

Accessories for ISO Valves

Technical Data

- Voltage tolerance: -10% to +15%
- Insulation class: F155
- Degree of protection: IP65 EN60529 with connector
- Avoid prolonged exposure to atmospheric agents
- Coil temperature range, 100% ED: +20°C to +70°C (ambient temperature)





Solenoid Coils for ISO 5599 Valves, Size 1

22mm

Code P40	Description	Price
W0215000101	24V DC	13.90
W0215000111	24V AC	13.90
W0215000121	110V AC	13.90
W0215000131	220V AC	13.90

Code M18	Description	Price
M1NS2000	Form B Socket Connector	1.50



Solenoid Coils for ISO 5599 Valves, Size 2

30mm

Code P40	Description	Price
W0210010100	24V DC	12.50
W0210011100	24V AC	12.50
W0210012100	110V AC	12.50
W0210013100	220V AC	12.50



Code M18	Description	Price
G1NU2000	Form A Socket Connector	1.45

Sub-bases

For ISO 5599 Valves, Size 1

Code P06	Description	Price
0228000150	1) Manifold Base, Side Ports	27.20
0228000155	2) Manifold Base, Bottom Ports	27.20
0228000200	3) Input End Plate	11.70
0228000210	5) Blind End Plate	5.90
0228000300	6) Intermediate Plate, Top Ports	14.50
0228000301	7) Intermediate Plate, Back Ports	14.50
0228000500	8) Blanking Plate	6.10
0228000400	9) Intermediate Diaphragm	1.40
0228000100	11:) Individual Base, Side Ports	15.10
0228000700	13) Assembly Kit	2.45

Sub-bases

For ISO 5599 Valves, Size 2

Code P06	Description	Price
0228001150	1) Manifold Base, Side Ports	33.25
0228001155	2) Manifold Base, Bottom Ports	33.25
0228001200	3) Input End Plate	14.85
0228001210	5) Blind End Plate	9.50
0228001300	6) Intermediate Plate, Top Ports	18.75
0228001301	7) Intermediate Plate, Back Ports	18.75
0228001500	8) Blanking Plate	7.50
0228001400	9) Intermediate Diaphragm	2.30
0228001100	11) Individual Base, Side Ports	24.15
0228001700	13) Assembly Kit	3.20

Multimach Valve System

HDM is the ideal solution for those requiring the unbeatable performance, flexibility and modularity of Multimach valves combined with sturdy mechanics and a high degree of protection against external agents. Each valve is enclosed in a reinforced technopolymer protective shell that acts as a shock absorber and prevents the infiltration of dirt.

The class of protection is IP65. The smooth, rounded design makes HDM ideal for applications requiring frequent washing without the deposit of residues. All the pneumatic connections are on one side, with built-in push-in fittings. The user interface is on another side so the fitter and service engineer have everything at hand.

Flexibility is total: there are 1-16 valves, input and output terminals for pipes of different sizes and intermediate modules for separate inputs and outputs. One very important new feature is that valves of different capacities can be mounted as required. Three different valve sizes can be combined at will. This means a valve can be replaced at any time by another one offering a different performance. It only takes a few seconds to replace or add a valve. To do this, merely loosen the two grub screws fixing the valve to the adjacent ones.

Since the electrical signal is relayed from one valve to the next by means of gold-plated contacts connected to an electronic board, the electrical connections are entirely automatic.

The ratio of the HDM's flow rate to its dimensions are unrivalled – miniaturisation and efficiency have reached a peak.

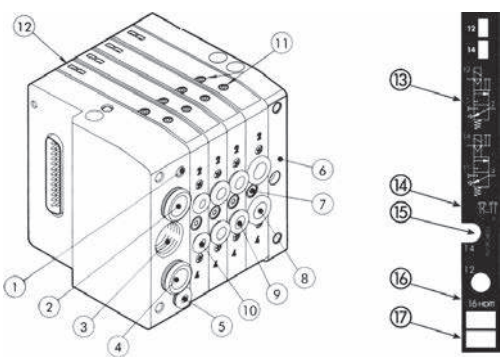


Technical Data

Valve Port Connections	Quick connection ports 2 and 4, Ø 4, 6, 8mm		Threaded exhaust port 3/8" or fitting Ø 8mm
Connection for Supply of Pilots	Automatic fitting on end plate, Ø 4		
Maximum Number of Pilots	16		
Maximum Number of Valves	16 (same as the max. no. of pilots)		
Operating Temperature Range	-10°C to ÷≤+60°C		
Fluid Rate 6 bar ΔP 1 bar	11mm Ø 4 = 200 Nl/min	11mm Ø 6 = 500 Nl/min	14mm Ø 8 = 800 Nl/min
Pressure Range	X (pilot supply)		1-11 (valve supply)
	Terminal 1-11	2 ÷ 7 bar	Vacuum at 10 bar
	Terminal 1		2 ÷ 7 bar
Voltage Range	24V DC ± 10%		
Power	0.6W		
Control	PNP o NPN		
Insulation Class	F155		
Degree of Protection	IP65 with common outlets		
Solenoid Rating	100% ED		

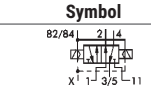
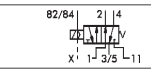
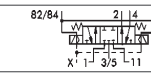
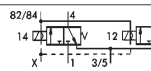
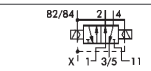
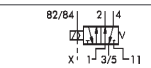
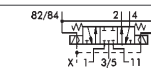
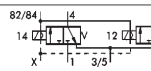
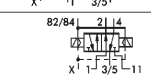
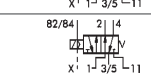
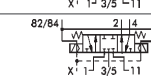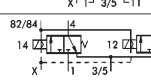
Components

1) Exhaust, solenoid pilot 8/2
2) Valve supply, port 1
3) Threaded connection of exhausts 3/5
4) Valve supply, port 11
5) Electrical control supply X
6) Blind end plate
7) Screw for valve wall mounting
8) Utility port for pipe, Ø 8mm
9) Utility port for pipe, Ø 6mm
10) Utility port for pipe, Ø 4mm
11) Manual control
12) LED (LED on, solenoid valve energised)
13) Pneumatic symbol
14) Identification of the monostable or bistable manual control
15) Valve ordering code
16) Valve identification code
17) Blank space for valve number

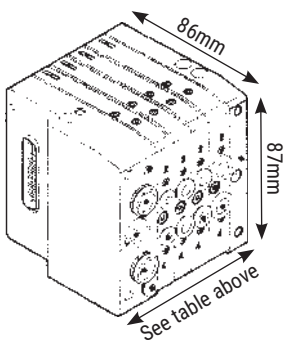


Multimach Valve System

To order your custom Multimach valve island, simply copy this page and send it completed with your order

Description	Id	Code P06	Function	Symbol	Fittings	Body Width mm	Price	Quantity	Total
Valve	K4	7071030111	5/2 Sol/Sol		4mm	11.5	**131.25**		
	V4	7071030131	5/2 Sol/Spring		4mm	11.5	**95.55**		
	O4	7071030211	5/3 Sol/Sol Cc		4mm	11.5	**133.55**		
	I4	7071030531	2 x 3/2 N/C		4mm	11.5	**135.20**		
	K6	7072030111	5/2 Sol/Sol		6mm	11.5	**134.05**		
	V6	7072030131	5/2 Sol/Spring		6mm	11.5	**97.10**		
	O6	7072030211	5/3 Sol/Sol Cc		6mm	11.5	**136.25**		
	I6	7072030531	2 x 3/2 N/C		6mm	11.5	**137.85**		
	K8	7073030111	5/2 Sol/Sol		8mm	14	**139.35**		
	V8	7073030131	5/2 Sol/Spring		8mm	14	**100.95**		
	O8	7073030211	5/3 Sol/Sol Cc		8mm	14	**141.70**		
	I8	7073030531	2 x 3/2 N/C		8mm	14	**143.35**		
End Plate	3	0227301201	Standard Inlet Plate		10mm	24.5	**76.60**		
	2	0227301200	Dual Pressure Inlet Plate			24.5	**78.45**		
	5	0227301500	Blind End Plate			11.7	**30.50**		
Intermediate Plate	6	0227301301	Intermediate Air Supply Plate			14	**70.15**		
	7	0227301302	Intermediate Blind Plate			14	**66.35**		
	20	0227301303	Intermediate Exhaust Plate			14	**60.90**		
Bracket	16	0227301600	For DIN Rail Mounting			n/a	**8.35**		
25mm Pin Connector	14	0226180101	Connector without Cable			n/a	**20.35**		
		0226900100	Connector with 1m Cable			n/a	**38.00**		
		0226900250	Connector with 2.5m Cable			n/a	**50.20**		
		0226900500	Connector with 5m Cable			n/a	**69.50**		
								Total Assembly Cost	

- **Assemblies delivered fully assembled and tested within 3-5 days as standard (1-2 days by special arrangement)**
- Manual overrides are latching type as standard (non-latching version is also available upon request)
- More valve variations available (please ask for full technical catalogue)
- CM CLEVER Multimach also available with Fieldbus and ASi interfaces



Pneumatic Logic Valves

Introduction

Logic elements are available with five different functions:
OR, AND, NOT, YES, MEMORY.

Main features common to all elements:

- Adaptor for DIN rail bar (DIN EN 50022) integral with the body
- Built-in pressure indicator
- Pipe locking system using Ø 4 built-in fittings

Technical Specifications

- Operating temperature range: -10°C to +60°C
- Pressure range:
  YES, MEMORY, OR, AND from 0 to 8 bar
  pilot pressure from 1.5 to 8 bar
  NOT from 0.4 to 6 bar
- Nominal diameter: 2.7mm
- Flow rate at 6 bar P 1 bar: 100 NI/min
- Reset:
  AND, OR via compressed air
  YES, NOT via mechanical spring



Logic Element

OR

Code P06	Description	Price
W3604000001	Function 4mm Fittings	16.20



Logic Element

AND

Code P06	Description	Price
W3604000002	Function 4mm Fittings	17.55



Logic Element

NOT

Code P06	Description	Price
W3604000003	Function 4mm Fittings	26.80



Logic Element

YES

Code P06	Description	Price
W3604000004	Function 4mm Fittings	28.25



Logic Element

MEMORY

Code P06	Description	Price
W3604000005	Function 4mm Fittings	46.75

Technical Specifications

- Delay setting range: from 0 to 30, at 6 bar
- Signal shut off time: <0.1s



Logic Element

Timer

Code P06	Description	Price
W3604000006	Timer with 4mm Fittings	131.50

EB 80 Electro-pneumatic System

EB 80 is defined as an electro-pneumatic system as it would be simplistic to use the term 'solenoid valve island'. In effect, a single assembly can combine solenoid valves of all types, multi-position bases, pneumatic and electric supplies arranged as desired in a system, digital or analogue input or output signal control modules and much more besides.

The EB 80 system is protected by numerous patents and utility models, which enhance the most innovative design solutions.

The possible combinations are endless, but the most amazing thing is that they can be obtained using a small number of basic components.

In order to achieve this objective, a single size of small yet high-performance valves to cover the vast majority of applications was conceived.

A single electronic control unit is provided when supplying 12VDC or 24VDC valves with multi-pole cables or with a field bus for each protocol.



All EB 80 versions come with an efficient diagnostic system.

NSF H1 certified grease is used to lubricate the valve spool and seals.

Technical Data

Supply voltage range	V	12 -10% 24 +30%					
Minimum operating voltage	V	10.8 *					
Maximum operating voltage	V	31.2					
Maximum admissible voltage	V	32 ***					
Power for each controlled pilot	W	3 for 15 ms, then holding 0.3					
Drive (for multi-pole)		PNP or NPN					
Solenoid rating		100% ED					
Solenoid valve supply power		See chapter "Electrical connection - E"					
Signal module supply power		See chapter "Signal module - S"					
Protection		Overload and short-circuit protected solenoid pilot Output					
Diagnostics		See chapter "Electrical connection - E"					
Maximum number of solenoid pilots		21 or 38 multi-pole connection; field bus 128					
Ambient temperature	°C	-10 to + 50 (at 8 bar)					
	°F	14 to 122 (at 8 bar)					
Operating pressure		**5/2 and 5/3**				**2/2 and 3/2**	
Non-assisted valves	bar	3 to 8				3.5 to 8	
	MPa	0.3 to 0.8				0.35 to 0.8	
	psi	43 to 116				51 to 116	
Assisted valves	bar	Vacuum to 10					
	MPa	Vacuum to 1					
	psi	Vacuum to 145					
Servo pressure	bar	3 to 8				min. / max. 8	
	MPa	0.3 to 0.8				min. / max. 0.8	
	psi	43 to 116				min. / max. 116	
Valve flow rate, at 6.3 bar ΔP 1 bar		**Ø 4 (5/32")**	**Ø 6**	**Ø 8 (5/16")**	**Ø 1/4"**	**Ø 10 ****	**Ø 3/8" ****
valve 2/2	Nl/min	350	430	500	430	-	-
valve 3/2	Nl/min	350	600	700	600	1250	1250
valve 5/2	Nl/min	350	650	800	650	1250 - 1400	1250 - 1400
valve 5/3	Nl/min	350	460	500	460	1000 - 1250	1000 - 1250
valve V3V (R)	Nl/min	-	-	-	-	1000	1000
Actuation response time (TRA) / reset response time (TRR) at 6 bar							
TRA/TRR valve 2/2 and 3/2	ms	14 / 28					
TRA/TRR valves 5/2 monostable and shut-off valve	ms	12 / 45					
TRA/TRR valve 5/2 bistable	ms	9 / 11					
TRA/TRR valve 5/3	ms	15 / 45					
TRA/TRR valve 3/2 high flow	ms	13 / 36					
Fluid		Unlubricated air					
Air quality required		ISO 8573-1 class 4-7-3					
Degree of protection		IP65 (with connectors connected or plugged if not used)					

* **Minimum voltage 10.8V required at solenoid pilots.**

** Using high-flow valves or connected valves

*** **IMPORTANT! Voltage greater than 32VDC will damage the system irreparably.**

N.B.: Refer to EB 80 sub-assembly for specific technical data.

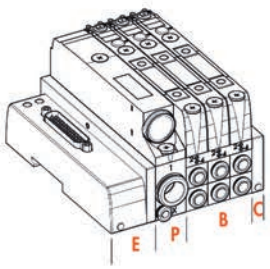
The following pages contain further technical data regarding the system.
For further information, or to request a quote, please contact our sales team.

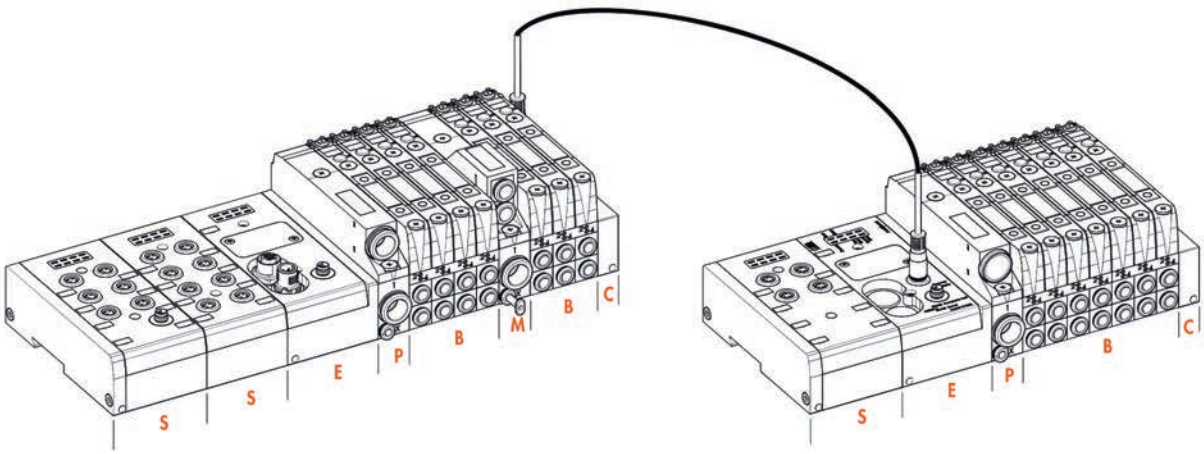
EB 80 Electro-pneumatic System

Components

EB 80 systems are identified by a set of sub-assemblies:

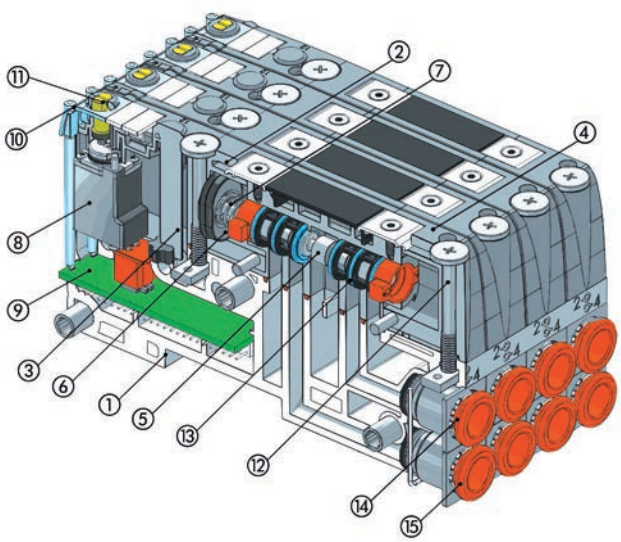
S 1/0 **S**ignal modules
E **E**lectrical connection
P **P**neumatic supply
B **B**ases for solenoid valves; the valves are fixed on the bases
M Inter**M**ediate Modules
C **C**losed end-plate





Components – Solenoid Valve & Base

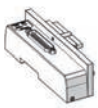
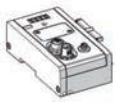
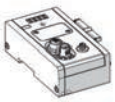
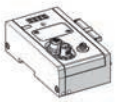
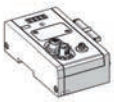
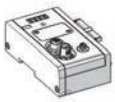
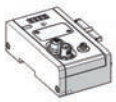
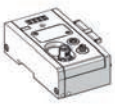
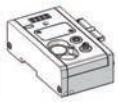
1. BASE: technopolymer
2. VALVE BODY: technopolymer
3. CONTROL: technopolymer
4. BASE: technopolymer
5. SPOOL: chemically nickel-plated aluminium
6. CONTROL PISTON: stainless steel and NBR
7. SPRING: Oteva® steel and Dacromet® treatment
8. SOLENOID VALVE
9. ELECTRONIC BOARD
10. LED light display: technopolymer
11. MANUAL CONTROL: nickel-plated brass
12. SCREW SECURING VALVE TO THE BASE: galvanised steel
13. SPOOL GASKET: NBR
14. Push-in fitting CARTRIDGE for port 2
15. Push-in fitting CARTRIDGE for port 4



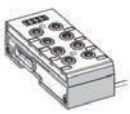
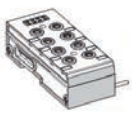
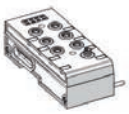
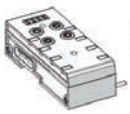
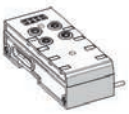
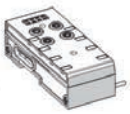
EB 80 Electro-pneumatic System

The EB 80 World

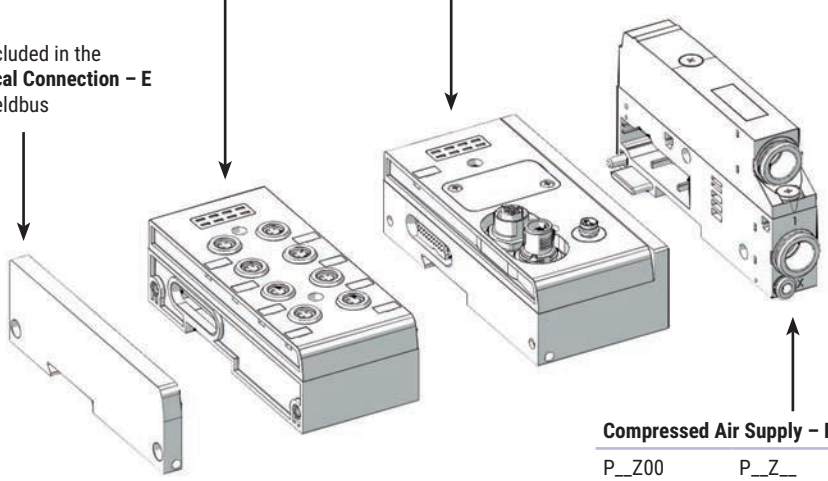
Electrical Connection – E

E025	E044	E0EN	E0EC	E0PN	E0CN	E0PB	E0PL	E01O	E0AD
									
EB 80 25-pin electrical connection	EB 80 44-pin electrical connection	EB 80 electrical connection EtherNet/IP	EB 80 electrical connection EtherCAT	EB 80 electrical connection Profinet IO	EB 80 electrical connection CANopen	EB 80 electrical connection Profibus-DP	EB 80 electrical connection Ethernet POWERLINK	EB 80 electrical connection IO-Link	Additional electrical connection EB 80

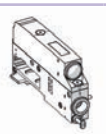
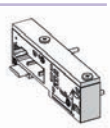
Signal Module – S

S01	S02	S03	S04	S05	S06	S07	S08
							
EB 80 module with 8 M8 digital inputs	EB 80 module with 8 M8 digital inputs	EB 80 module with 6 M8 digital outputs + electrical supply	EB 80 module with 4 M8 analogue inputs	EB 80 module with 4 M8 analogue outputs	EB 80 module with 16 digital terminal block inputs	EB 80 module with 16 digital terminal block inputs	EB 80 module with 4 M8 analogue inputs for temperature measurement

Part included in the **Electrical Connection – E** with Fieldbus



Compressed Air Supply – P

P__Z00	P__Z__	P__Z60	P91Z90
			
Compressed air supply – silenced relief	Compressed air supply – conveyed relief	Compressed air supply – separate relief	Module for electric version only

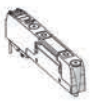
EB 80 Electro-pneumatic System

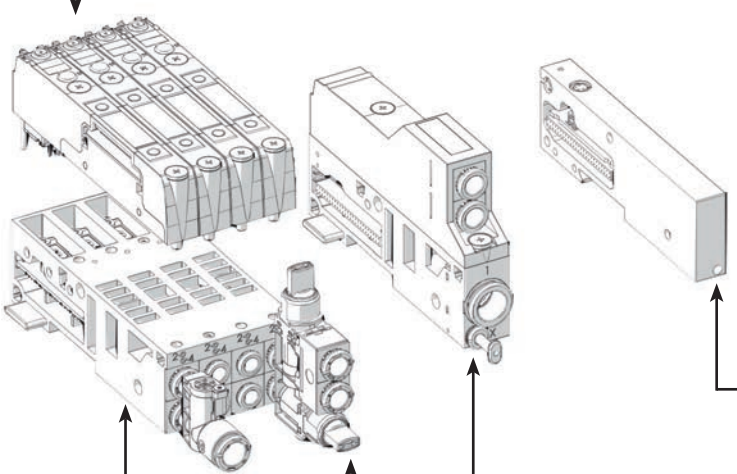
new

METAL WORK PNEUMATIC

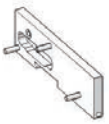
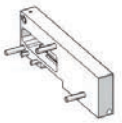
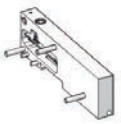
The EB 80 World

Valves

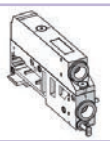
Z_	I_	W_	L_	V_	K_	O_	G_	J_	R_	N0	Y8
											
2 valves 2/2 NC	2 valves 2/2 NC (valid as 5/3 OC)	2 valves 2/2 NO (valid as 5/3 PC)	3/2 NC + 3/2 NO	Monostable 5/2	Bistable 5/2	5/3 CC	3/2 NC high flow	3/2 NO high flow	Shut-off valve	Dummy valve	Bypass



Closed End Plate – C

C1	C2	C3
		
Closed end plate for islands with multi-pole connector fieldbus	Closed end plate for islands with fieldbus	Closed end plate for electrical connection of islands with fieldbus to additional islands

Intermediate Support – M

M__Z0_	M__Z__	M__Z6__
		
Intermediate module – silenced relief	Intermediate module – conveyed relief	Intermediate module – separate relief

Bases for Valves – B

B3____0	B4_____
	
3-position base for valves	4-position base for valves

Y Fittings

R2

Y fitting

Multi-function Module



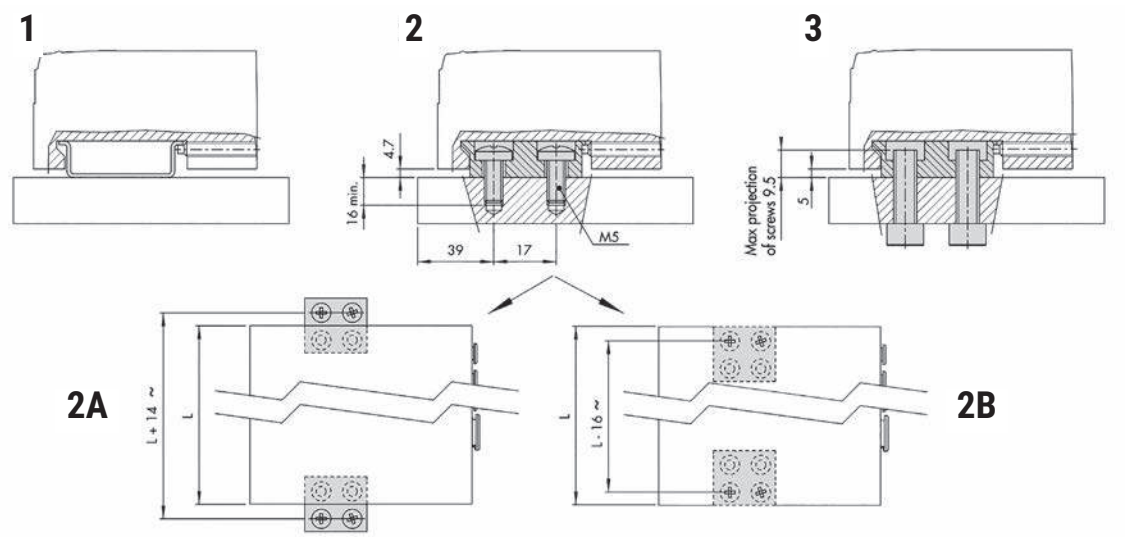
Fittings with pneumatic functions

EB 80 Electro-pneumatic System

Fixing Options

1. **Fixing on a DIN bar:** tighten the grub screws into modules E (electrical connection) and C (closed end plate).
   For islands with more than 40 valves or 5 modules, also use the additional plate, code 02282R4001.
2. **Fixing on a flat surface:** use the pair of brackets, code 02282R4000, and the M5 x 20 screws supplied.
   You can choose where to position the brackets in relation to the island:
   - **2A. Protruding brackets:** can be used to install the island plus brackets unit from above. First secure the brackets to the modules E and C using the grub screws, then secure everything with M5 x 20 screws.
   - **2B. Concealed brackets:** the overall dimensions of the island are reduced. First secure the brackets to the flat top with M5 x 20 screws, then place the island onto the brackets and lock the two grub screws provided in the modules E and C.
3. **Fixing through a wall:** use the brackets, code 02282R4000. The brackets come with M6 threaded holes and can be fixed with M6 screws (not included in the supply) passing through the wall. The brackets can be fixed either protruded or concealed.

NB: planar surfaces are required to ensure correct fixing. Avoid twisting or bending the valve units.



Lubrication

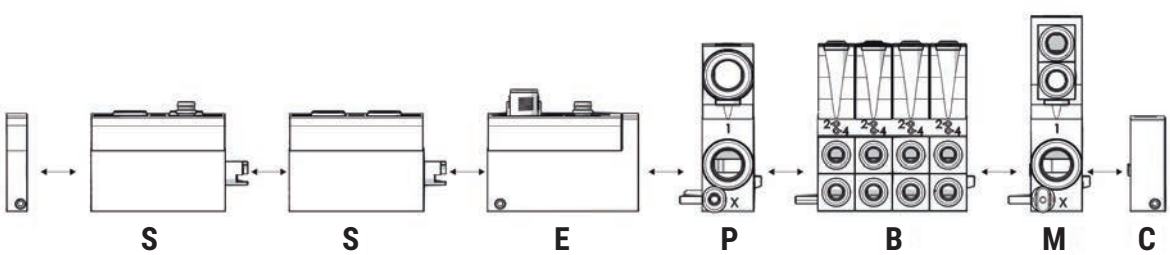
The EB 80 electro-pneumatic system is designed to run millions of cycles without the need for any lubrication. This is possible thanks to the optimisation of its components and the use of a special grease with excellent properties and NSF H1 certified. To avoid removing the grease, it is highly recommended not to lubricate the valve input and output ports and check the quality (to ISO 8573-1 class 4-7-3) of the compressed air used, which is often contaminated by particularly aggressive oils that are released by compressors and are not always compatible with the elastomers used in the valves.



Some Characteristics of EB 80 Systems

Horizontal Modularity

Easy replacement or addition of any sub-assembly. The locking tie rods are included in each sub-assembly.

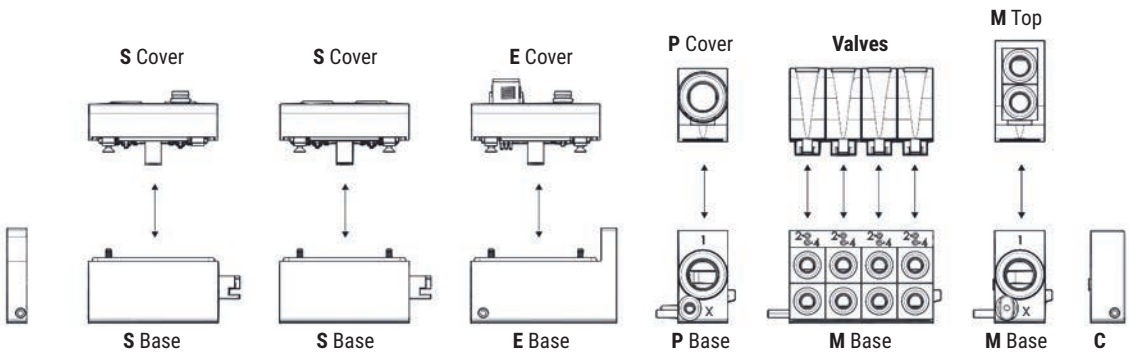


EB 80 Electro-pneumatic System

Vertical Modularity

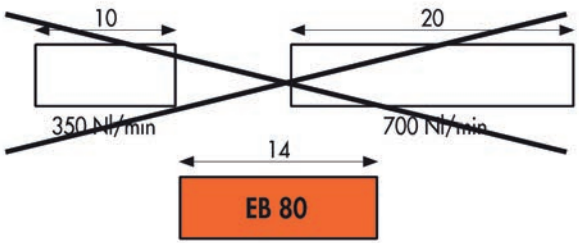
Easy replacement (no need to disassemble the pack) of the valves on the bases, and also of the top part (cover) of subsystems **S, E, P, M** using a single Phillips-head screwdriver.

NB: all protocols can be mounted on the base for field buses and all input or output modules can be mounted on the same base for signals.



One Size Fits All

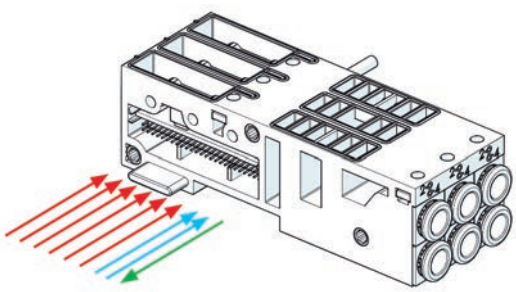
- Reduced dimensions
- High flow rate
- One warehouse and spares



800 Nl/min – 5/2
1250 Nl/min – 3/2 high flow

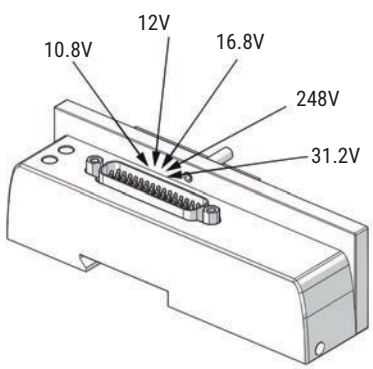
The same base fits both multi-pole connections and field buses

- Controls from multi-pole connections
- Controls from field buses
- Diagnostics



PATENTED

The same base island can be supplied 10.8 – 31.2V DC



EB 80 Electro-pneumatic System

Description

A complete system has a compound description of all its subsystems listed in sequence from left to right, as shown below.
The abbreviation of each subsystem is obtained by taking the code and omitting the first digits – 02282.

For example: the digital 8-input signal module is identified with code 02282S01; only write S01 in the description.

The abbreviation of each base for valves consists of:

Abbreviation of the Base	Manual valve control	Type of valves
Obtained from the code, after removing 02282	0 = monostable 1 = bistable	Valves Dummy valve Bypass
Example		
4-position base, 8 solenoid pilots, Ø 6 pipe; code 02282B4086666	Monostable	2 monostable 5/2 valves - V 1 double 3/2 NO - W 1 dummy valve - F
Abbreviation		
B4086666	0	VVWF

The description is therefore a sequence of this type:

EB 80	- S_ _	- E_ _ _	- P_ _ _ _ _	- B_ _ _ _ _ _ _ _ _ _ _ _	- M_ _ _ _ _ _	- C_
EB 80 system	**Signal module** (if present)	**Electrical connection**	**Compressed air supply**	**Base for valves** (as many as there are) with normal or dummy	**Intermediate** (if present)	**Closed end-plate**

Example:
EB 80-S01-E0EN-P3XZ00-B40866660VWKN-M300Z30-B30388800VVN-C2

EB 80	- S01	- E0EN	- P3XZ00	- B40866660VWKN	- M300Z30	- B30388800VVN	- C2
EB 80 system	**Signal module** complete 8 M8 digital inputs	**Electrical connection** EtherNet/IP	**Compressed air supply** - fitting Ø 12 - pilot servo Ø 4 - silenced relief	**Base for valves** - 4 positions - 8 controls - fittings for pipe Ø 6 - manual monostable control - 5/2 monostable valve - 2 3/2 NO valves - bistable 5/2 valve - dummy valve	**Intermediate** - fittings for pipe Ø 12 - through ports - without supplementary power supply	**Base** - 3 positions - 3 controls - fittings for pipe Ø 8 - manual monostable control - 5/2 monostable valve - 5/2 monostable valve - dummy valve	**Closed end-plate** for valve Island with field bus

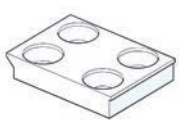
An endless number of EB 80 systems can be obtained and their description is variable in length, which can be very extended. The actual ordering CODE of an EB 80 system is created by Metal Work S.p.A. with a limited number of characters.

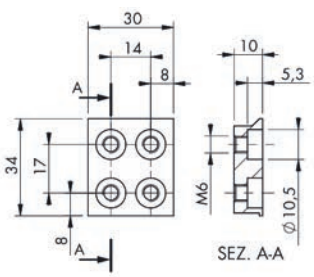
The ordering code is not explicative. The description only is univocal, complete and explicative.

Accessories

Fixing Bracket

Code	Description	Weight g
02282R4000	EB 80 base fixing bracket	47





Note: 2 pieces per pack complete with 4 M5 x 20 screws.

Further accessories (e.g. connectors) and spare parts are available.
Contact our sales team.

EB 80 Electro-pneumatic System

EB 80 Industry 4.0

The new advanced EB 80 diagnostic functions, known as EB 80 14.0, provide a powerful analysis tool for traditional maintenance operations, ensuring the safe, reliable and lasting operation of production units.

They are available for all electrical connections with field buses and bases marked 14.0, with advanced diagnostics integrated in accordance with Industry 4.0 philosophy.

These functions use the original EB 80 diagnostics, integrating them with the ability of the station itself to control IOs.

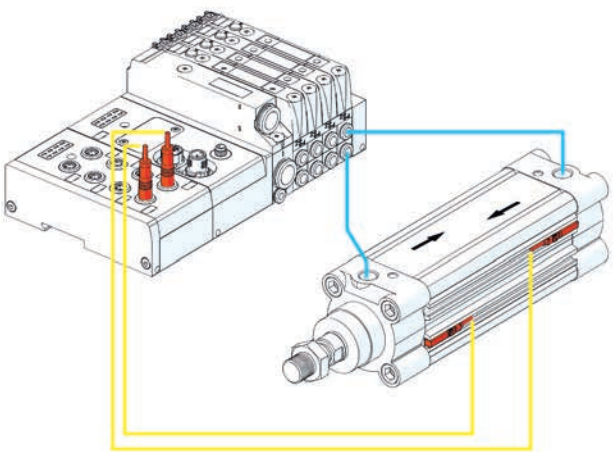
They reorganise and optimise maintenance management by developing predictive maintenance in order to:

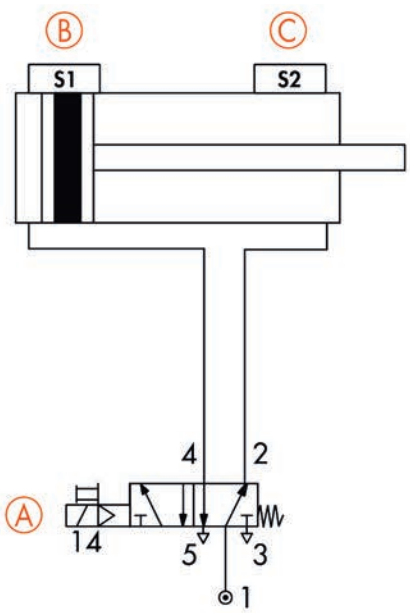
- Predict faults
- Intervene early to avoid system downtime
- Have all information on equipment operation available, in real time
- Monitor component end-of-lifetime
- Optimise warehouse spare parts management

This makes it possible to turn the data collected into concrete actions using standard EB 80 stations without needing additional modules.

Description of EB 80 14.0 Functions

- System data:
  - EB 80 system start-up counter
  - Supply alert counter
- Valve data. Each valve base for each solenoid valve permanently stores the following information:
  - Cycle counter
  - Counter for total solenoid valve excitation time
  - Activation of a flag to signal overage lifetime exceeded
  - Short circuit alert counter
  - Open circuit alert counter
- Electro-pneumatic system control functions (data updated with each cycle):
  - Measurement of the delay between activating the solenoid valve 'A' and actuator movement commencing via the signal of sensor 'B', with delays that exceed the limit flagged
  - Measurement of actuator movement time using two linked sensors 'B' and 'C', with exceeded time limits flagged
  - Measurement of the delay between deactivating the solenoid valve 'A' (or activating a second valve) and actuator return commencing via the signal of sensor 'B', with exceeded time limits flagged;
  - Measurement of actuator return time using two linked sensors 'B' and 'C', with exceeded time limits flagged
  - Counter for actuator range of motion





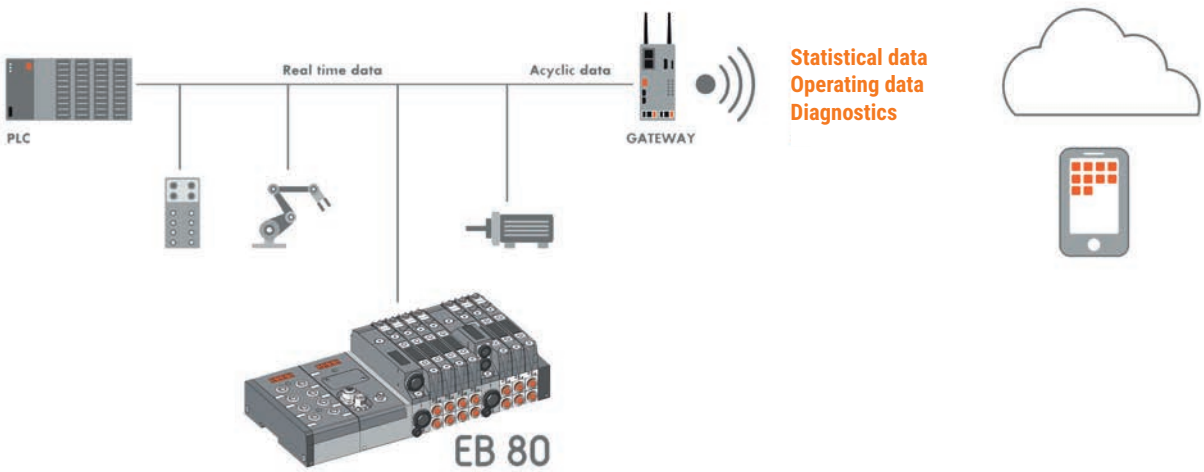
EB 80 Electro-pneumatic System

EB 80 Industry 4.0

Electrical connection modules can be used to complement the EB 80 with the main field buses available in the market. In this way, the control system (generally a PLC) can handle, in real time, the behaviour of the solenoid valve island, including signal modules.

With the introduction of the 14.0 version, the field bus connection modules also send to the network the historical and diagnostic data relating to the behaviour of the island (such as the number of cycles for each solenoid pilot, total activation time and alarms) and the controlled pneumatic circuit (such as the delay times in sensor switching and actuator activation times).

This data is also sent to the control system and can be handled differently depending on the situation: in some cases, it can be used in real time, like in the case of fault alarms; in other cases, it can be sent to a local storage unit or one remotely controlled on a cloud server, and is analysed at a subsequent stage; in other cases, the alarms can be sent to a teleservice station that can monitor the state of the system remotely.



For further information, or to request a quote, please contact our sales team.

Special Purpose Valves

- The in-line progressive starter is a valve that regulates the flow of air until the outlet pressure reaches a certain value, at which the valve opens and allows air to flow at full rate.
- This valve can be used to control a group of valves or a single valve, it can also be mounted between another valve and an actuator.
- The air that enters inlet 1 passes through a choke that has a knob adjustment to control the flow. The valve opens completely when the outlet pressure reaches about 60% of the inlet pressure. If the air supply is switched off, the valve discharges air from outlet 2 to inlet 1.

Working Temperature:

- -10°C to 70°C

Maximum Working Pressure:

- 10 bar



In-line Progressive Starter

1/4" & 1/2"

Code P06	Thread	Price
W3606000002	G1/4"	44.10
W3606000004	G1/2"	55.80

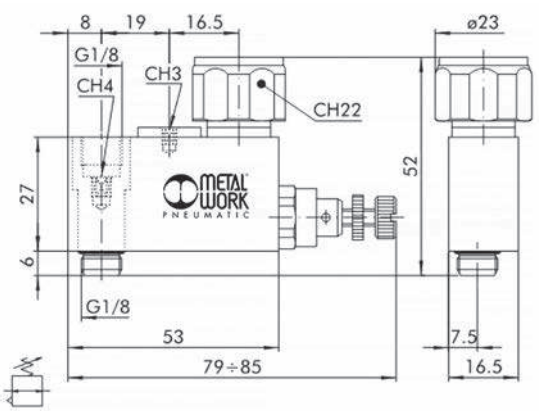
Reducer with Gauge

- The RMV-series miniature pressure regulator with pressure gauge for valves is specifically conceived for mounting on the outlets of valves with a 1/8" port.
- With limited cross dimension, it can be fitted to a series of small valves. The body is 16.5 mm wide and fits exactly on the valves of the Mach 16 series for multiple electrical connection.
- Using the RMV, it is possible to differentiate the pressure of each single output of the valves. For example, if you mount it on port 2 and not on port 4, the pressure can be reduced on port 2 only. If you mount one for each port, the pressure on port 2 will differ from that on port 4, which in turn is less than the feed pressure (outlet 1).
- There are three 1/8" threaded RMV ports that are pneumatically connected in parallel. A small pressure gauge is mounted in one port; another port is plugged by an A7-type fitting and a third can take a fitting.
- The user, however, can decide whether the layout of components is to be modified or not. He might, for example, decide to mount three fittings to create a three-port reduced-pressure distributor.
- Regulation Range 1 to 8 bar
- Input Pressure 2 to 10 bar
- Flow Rate at 6.3 bar (0.63 MPa - 91 psi) DP 1 bar 140 NI/min
- Flow Rate at free exhaust at 6.3 bar (0.63 MPa - 91 psi) 360 NI/min

Working Temperature

- -10°C to 60°C





For Valves

Series RMV

Code P06	Description	Price
9061601	Line on Line RMV 1/8" Pressure Reg Assembly	84.20

Special Purpose Valves

Valve Operation

A high flow device which allows a double acting cylinder or analogue pneumatic equipment to automatically extend and retract without the need for limit switches. The frequency of the phases is set through two adjusting screws which are placed at the end of the oscillating valve and protected by a cover. One screw is to set the retract dwell time and the other is to set the extend dwell time. When system pressure is applied or removed, the valve automatically moves to the start position ensuring no device is left in a semi-actuated position.

Three types of oscillating valve are available

Code: 01.044.4 Requires system pressure only.

Code: 01.046.4 Requires a constant pilot signal at point X. The pressure can be independent to the pressure at port 1. When the pilot signal is removed the valve reverts back to its start position.

Code: 01.008.3 Oscillations are activated by an electrical signal with separate air supply. It is therefore necessary to apply to point X a pilot pressure (that can be of a different value to port 1) and an electrical signal at the solenoid pilot. If the electrical signal is removed or the pilot air supply fails, the valve reverts back to its start position.

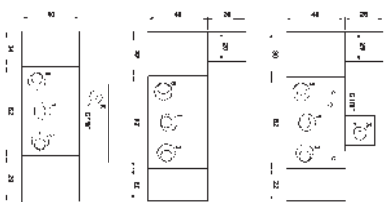
Technical Specifications

- Ports: G1/4"
- Working pressure: 2-10 bar
- Actuating pressure (X): 3-10 bar
- Maximum temperature: +60ºC
- Fluids: 50 filtered, lubricated or non-lubricated air

Materials

- Body: aluminium 11S
- Springs: stainless steel
- Seals: NBR
- Spools: nickel-plated aluminium
- Internal parts: brass OT58

Note: solenoid coils must be ordered separately.





Oscillating Valve

G1/4 Ports

Code N17	Description	Price
01.044.4	Continuous Cycle	112.70
01.046.4	Pneumatically Piloted	126.20
01.008.3	Solenoid Piloted	153.35

Valve Operation

A high flow device which, by applying a pilot pressure either pneumatic or electrical to point X, will, for example, extend and retract a double acting cylinder. The 'flip-flop' valve requires two pilot signals for a complete cycle: one momentary signal to extend the cylinder stroke and one momentary signal to retract. A maintained pilot signal will generate one half of the cycle. The valve will stay in this position until the signal is exhausted and then applied again. In the event of pilot pressure failure or system maintenance a manual override facility is provided.

Two types of flip-flop valve are available

Code: 10.035.4 Actuated by applying a pneumatic signal to point X. The signal pressure can be different to the pressure at port 1.

Code: 01.028.3 Actuated by an electrical signal with separate pilot air supply which can be different to the pressure at port 1. The pilot air supply must be maintained at point X when valve is in operation.

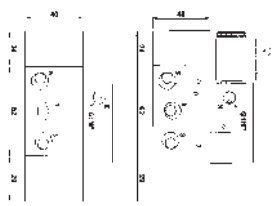
Technical Specifications

- Ports: G1/4"
- Working pressure: 2-10 bar
- Actuating pressure (X): 3-10 bar
- Maximum temperature: +60ºC

Materials

- Body: aluminium 11S
- Springs: stainless steel
- Seals: NBR
- Spools: nickel-plated aluminium
- Internal parts: brass OT58

Note: solenoid coils must be ordered separately.





Flip Flop Valve

G1/4 Ports

Code N17	Description	Price
10.035.4	Pneumatically Piloted	134.10
01.028.3	Solenoid Piloted	170.65

Special Purpose Valves

Introduction

This two way valve offers two pressure settings at the user port: system pressure or regulated pressure (0-3 bar) by adjusting screw R. A three way directional control valve must be fitted downstream of this valve if the circuit is required to exhaust. The regulated pressure can be read by connecting a manometer at point M. The valve is available either electrically or pneumatically operated, normally closed.

- Normally closed: without signal at point X the output is regulated pressure
- Normally open: without signal at point X the output is system pressure

Technical Specifications

- Ports: G1/8”
- Working pressure: 2.5-10 bar
- Adjustable pressure range: 3-10 bar (screw R)
- Maximum temperature: +60ºC
- Fluids: 50 filtered, lubricated or non-lubricated air

Materials

- Body: aluminium 11S
- Springs: stainless steel
- Seals: NBR
- Spools : nickel-plated aluminium
- Internal parts: brass OT58

Note: solenoid coils must be ordered separately.



Dual Pressure Valve

G1/8 Ports

Code	N17	Description	Price
00.008.3		NC, Solenoid Actuated	72.90
00.047.4		NC, Pneumatically Actuated	55.45

Valve Operation

Produces an adjustable impulse of fixed duration by adjusting screw R. When a signal is applied from a three way valve and maintained at port 1 the impulse generator is activated and will generate the impulse period pre-set by screw R. If the signal is interrupted, the duration of the impulse is terminated. To repeat the cycle the pilot signal must be exhausted and applied again.

Technical Specifications

- Ports: G1/8”
- Working pressure: 2-10 bar
- Maximum temperature: +60ºC
- Fluids: 50 filtered, lubricated or non-lubricated air

Materials

- Body: aluminium 11S
- Springs: stainless steel
- Seals: NBR
- Internal parts: brass OT58



Impulse Generator

G1/8 Ports

Code	N17	Price
10.001.4		45.60

Special Purpose Valves

Valve Operation

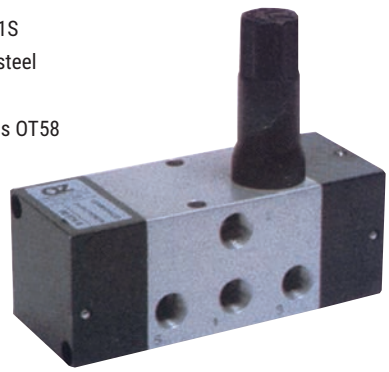
High flow five way valve with a pneumatic timer which allows the automatic return of the valve after a preset time. The time is adjusted by screw R. When a signal is applied to X the valve will stay operated until the time set at R has elapsed, then the valve will automatically re-set. To repeat the cycle the signal must be exhausted and then applied again. If a momentary signal is applied, the valve will operate as a conventional five way monostable valve without the time delay function. The valve will only operate when pressure signal is applied to X.

Technical Specifications

- Ports: G1/8”
- Working pressure: 2-10 bar
- Maximum temperature: +60ºC
- Fluids: 50 filtered, lubricated or non-lubricated air

Materials

- Body: aluminium 11S
- Springs: stainless steel
- Seals: NBR
- Internal parts: brass OT58



High Flow Pneumatic Timer

G1/8 Ports

Code	N17	Description	Price
00.074.4		With Automatic Return	87.80

Technical Specifications

- Maximum working temperature: +60ºC
- Dry cycle: ED 100%
- Power consumption: 3W / 5VA
- Protection with connector: IP 65



Solenoid Coil

To Suit Special Purpose Valves

Code	N17	Description	Price
00.028.0		24V DC Coil	7.55
00.029.0		24V AC Coil, 50/60Hz	7.55
00.030.0		110V AC Coil, 50/60Hz	7.65
00.031.0		220V AC Coil, 50/60Hz	7.65

Code	M18	Description	Price
M1NS2000		Form B Socket Connector	1.50

Valve Operation

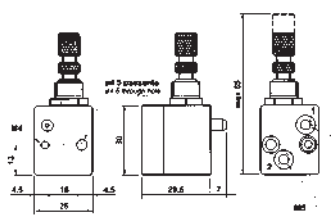
This valve works on the venturi principal and is primarily used for air driven liquid spraying applications such as conveyor lubrication and sawing machines.

Technical Specifications

- Viscosity of liquid: 3-5ºE
- Ports: M5
- Maximum temperature: +60ºC
- Working pressure: 3-8 bar
- Fluids: 50 filtered, lubricated or non-lubricated air

Materials

- Body: aluminium 11S
- Springs: stainless steel
- Seals: NBR
- Internal parts: brass OT58





Vacuum Driven Liquid Sprayer

M5 Ports

Code	N17	Price
DP2005		21.80

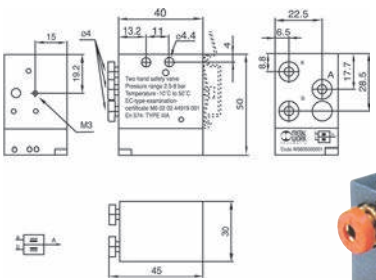
Special Purpose Valves

Technical Specifications

- Compressed air couplings: push-in fittings for Ø4mm pipe
- Fluid: filtered, non-lubricated compressed air
- Standard: EN574 type IIIA, TUV approved, certified M6020244919001
- Synchronisation, maximum time between two signals: 0.4 sec
- De-activation time, with 1000mm maximum pipe length: <0.05 sec
- Actuation: pneumatic
- Reset: spring operated
- Operating pressure: 2.5-8 bar
- Temperature range: -10°C to +60°C
- Nominal diameter: 2.7mm
- Mounting position: any direction

Materials

- Body: anodised aluminium
- Internal parts: brass and technopolymer
- Gaskets: NBR
- Spring: alloy steel





Two Hand Safety Valve

4mm Push-in Fittings

Code	P03	Price
W3605000001		196.30



Complete Two Handed Push Button Assembly

4mm Push-in Connections

Code	P03	Description	Price
0227700000		4mm OD Push-in Inlets & Outlets	494.70

Valve Operation

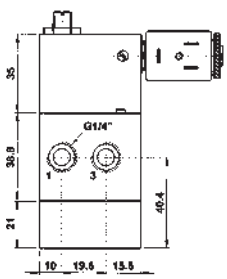
Very compact and sensitive valve designed to apply pressure to a pneumatic circuit in two phases. When the pilot solenoid valve (X) is energised, a progressively increasing pressure is applied to the circuit over a period of time set by screw S. The progressive start pressure is set by adjusting screw R. Once the set pressure (screw R) has been reached, the slow start valve begins to automatically feed the circuit with the system pressure. When the solenoid is de-energised the system pressure is exhausted at point 1.

Technical Specifications

- Ports: G1/4"
- Working pressure: 2-10 bar
- Maximum temperature: +60°C
- Fluids: 50 filtered, lubricated or non-lubricated air

Materials

- Body: aluminium 11S
- Springs: stainless steel
- Seals: NBR
- Spools: nickel-plated aluminium
- Internal parts: brass OT58





Slow Start Valve

G1/4 Ports

Code	N17	Description	Price
10.003.3		Slow Start Valve	584.00

Pressure & Vacuum Switches

- This type of pressure switch features a high degree of miniaturisation and a modern attractive design
- It can be installed in any position and also mounted onto a wall by means of two transversal holes
- In order to reduce wiring times, it is supplied ready assembled with a 2-metre electric cable or an M8 connector with a 300-mm cable
- The contact is the switching type, which means it can be normally open or normally closed
- A knurled push-lock handle is provided for regulation

Working Temperature:

- +50°C

Maximum Working Pressure:

- 15 bar



Adjustable Pressure Switch

With 2 Metre Cable

Code	P06	Thread	Price
9000401		1/8"	40.55

Adjustable Pressure Switch

With M8 Connector & 300mm Cable

Code	P06	Thread	Price
9000402		1/8"	39.40

The digital pressure switch can be used to transmit electric pressure signals and also display the pressure instantly. The signal is transmitted for two settable pressure values and with an analogue voltage signal. The values are clearly displayed on a LED video and different parameters can be entered from the keypad. Hysteresis can be adjusted and the unit of measurement for pressure can be modified. Two compressed air ports are provided, one at the back and one on the bottom. The pressure switch comes with a threaded plug in the bottom port. If you wish to connect to this port, merely unscrew the plug and screw it into the back port. A kit of accessories is provided for fixing to the top or wall, or to a panel.

Maximum Working Pressure:

- 10 bar



Digital Pressure Switch

With Digital Display Showing Pressure Reading

Code	P06	Price
9000600		106.25

- NOTE: Pull outwards to remove the knob from the pressure switch on the unit. Insert the security knob and regulate the pressure switch. Then press the handle firmly to lock it in position. If the pressure switch needs to be reset, remove the security knob by forcing it laterally with a screwdriver.



Security Knob

To Suit 9000401 & 9000402

Code	P06	Price
9200703		1.80

For Air Receivers



See page 351

Adjustable Vacuum Switches

Technical Specification:

- Maximum Voltage: 250V AC
- Temperature Range: -30°C to +140°C (according to diaphragm/gasket material)
- Adjustable Hysteresis: 10% - 30% of set-point
- Maximum Cycle Rate at 25°C: 120/min (diaphragm type)
- Maximum Cycle Rate at 25°C: 60/min (piston type)
- Recommended Tightening Torque: max. 5 kgm



VSM Series

SPDT Contacts, NBR Gasket

Code E03	Male Thread BSPP	Pressure Rating mbar	Price
VSM1-T	G1/4"	-100 to -500	91.75
VSM2-T	G1/4"	-500 to -900	91.75

Technical Specification:

- Maximum Voltage: 250V AC
- Current: 3A (resistive), 2A (inductive)
- Temperature Range: -5°C to +80°C
- Maximum Cycle Rate: 100/min
- Maximum Static Pressure: 20 bar
- Adjusting Range: -200 to -900 mbar
- Fixed Hysteresis: 30% of set-point



VMC Series

SPDT Contacts, NBR Gasket

Code E03	Male Thread BSPT	Pressure Rating mbar	Price
VMC1	R1/8"	-250 to -500	104.10
VMC1A	R1/8"	-500 to -900	104.10

Technical Specification:

- Maximum Voltage: 48V AC/DC
- Temperature Range: -30°C to +140°C (according to diaphragm material)
- Current: 0.5 (0.2)A
- Maximum Cycle Rate at 25°C: 200/min
- Strength Test: 1500V - 10 mA - 10"
- Recommended Tightening Torque: Maximum 4kgm



VCN Series

Push-on Terminals, NBR Gasket

Code E03	Male Thread BSPT	Pressure Rating mbar	Price
VCN2A-14K	R1/4"	-200 to -900	34.30



Rubber Cap

To Suit PMN & VCN Switches

Code E03	Price
31060-RC	2.20

Adjustable Pressure Switches

Technical Specification:

- Maximum Voltage: 48V AC/DC
- Temperature Range: -40°C to +140°C (according to diaphragm/gasket material)
- Current: 0.5 (0.2) A
- Maximum Cycle Rate at 25°C: 200/min (diaphragm type)
- Maximum Cycle Rate at 25°C: 80/min (piston type)



PMN Series

Push-on Terminals, NBR Gasket

Code E03	Male Thread BSPT	Pressure Rating bar	Price
PMN1A-14K	R1/4"	0.1-1	26.75
PMN2A-14K	R1/4"	0.2-2	26.75
PMN10A-14K	R1/4"	2-10	26.75
PMN20A-14K	R1/4"	10-20	31.15
PMN50A-14K	R1/4"	20-50	26.85
PMN80A-14K	R1/4"	50-80	27.50
PMN150A-14K	R1/4"	50-150	30.20
PMN250A-14K	R1/4"	100-250	33.10
PMN300A-14K	R1/4"	50-300	36.85

Technical Specification:

- Maximum Voltage: 250V AC
- Temperature Range: -30°C to +140°C (according to diaphragm/gasket material)
- Current: 6 (2) A
- Adjustable hysteresis: 10% - 30% of set-point
- Maximum Cycle Rate at 25°C: 120/min (diaphragm type)
- Maximum Cycle Rate at 25°C: 60/min (piston type)



PSM Series

SPDT Contacts, NBR Gasket

Code E03	Male Thread BSPP	Pressure Rating bar	Price
PSM2	G1/4"	0.2-2	85.45
PSM10	G1/4"	1-10	82.00
PSM50	G1/4"	10-50	93.65
PSM100	G1/4"	10-100	73.15



PSP Series

SPDT Contacts, NBR Gasket

Code E03	Male Thread BSPP	Pressure Rating bar	Price
PSP150	G1/4"	30-150	78.00
PSP300	G1/4"	50-300	86.20

Adjustable Pressure Switches

Technical Specification:

- Switch Rating: 6(2)A/250V AC
- Switch Rating: 2(1)A/24V DC
- Maximum Rating - Gold Contacts: 30mA/ 30V DC
- Temperature Range: -30°C to +140°C (according to diaphragm/gasket material)
- Maximum Cycle Rate at 25°C: 120/min (diaphragm)
- Maximum Cycle Rate at 25°C: 10/min (with SS diaphragm)
- Maximum Cycle Rate at 25°C: 60/min (piston diaphragm)



PS Series

SPDT Contacts, HNBR Gasket

Code E03	Male Thread BSPP	Pressure Rating bar	Price
PS150-14K	G1/4"	30-150	49.70
PS300-14K	G1/4"	50-300	55.75



MS Series

SPDT Contacts, HNBR Gasket

Code E03	Male Thread BSPP	Pressure Rating bar	Price
MS2-14K	G1/4"	0.2-2	36.80
MS10-14K	G1/4"	1-10	48.00
MS50-14K	G1/4"	10-50	39.95
MS100-14K	G1/4"	10-100	40.90

Technical Specification:

- Maximum Voltage: 250V AC
- Working Voltage: 220V AC
- Current: 3A (resistive), 2A (inductive)
- PMC Maximum Cycle Rate - diaphragm type: 100/min
- PPC/PPCF Maximum Cycle Rate - piston type: 60/min
- Body: Anodised aluminium
- Mounting Flange Material: Zinc plated steel



PMC Series

SPDT Contacts, NBR Gasket

Code E03	Male Thread BSPT	Pressure Rating bar	Price
PMC2-IVN	R1/8"	0.15-2	92.00
PMC5-IVN	R1/8"	0.2-5	92.00
PMC10-IVN	R1/8"	0.5-10	120.10
PMC25-IVN	R1/8"	10-25	92.00
PMC80-IVN	R1/8"	25-80	92.00



PPC Series

SPDT Contacts, NBR Gasket

Code E03	Male Thread BSPT	Pressure Rating bar	Price
PPCF150-IVN	R1/4"	30-150	104.00
PPCF300-IVN	R1/4"	150-300	105.25



PPC Series

SPDT Contacts, NBR Gasket

Code E03	Male Thread BSPT	Pressure Rating bar	Price
PPC150-IVN	R1/4"	30-150	102.25
PPC300-IVN	R1/4"	150-300	102.70

Adjustable Pressure Switches

Technical Specification:

- Maximum Voltage: 250V AC
- Maximum Cycle Rate: 100/min (diaphragm type)
- Maximum Cycle Rate: 60/min (piston type)
- Maximum Current: 3A (5A/125V AC)
- Fixed Hysteresis: Maximum 8% of set-point



PSK Series

With Graduated Knob, NBR Gasket

Code E03	Female Thread BSPP	Pressure Rating bar	Price
PSK10-N	CETOP Flange Mounting	1-10	132.55
PSK100-N	G1/4"	10-100	154.95
PSK360_N	G1/4"	100-360	154.95

Temperature Switches

Technical Specifications

- Switch Rating:
  120V AC/15A (resistive)
  240V AC/10A (resistive)
  12V DC/10A (resistive)
  24V DC/5A (resistive)
- Maximum Temperature: 125°C
- Operations: 100.000
- Maximum Pressure: 200 bar
- Maximum Differential DT: 16°C
- Tightening Torque: 30 Nm



TBF Evo Series, 3/8" BSPP, Normally Open

Fixed Set Point & Push-on Terminals

Code E03	Male Thread BSPP	Set Temperature °C	Price
TBF-EVO25C38	G3/8"	25	28.15
TBF-EVO35C38	G3/8"	35	28.15
TBF-EVO45C38	G3/8"	45	28.15
TBF-EVO50C38	G3/8"	50	28.15
TBF-EVO55C38	G3/8"	55	28.15
TBF-EVO60C38	G3/8"	60	28.15
TBF-EVO65C38	G3/8"	65	28.15
TBF-EVO70C38	G3/8"	70	28.15
TBF-EVO75C38	G3/8"	75	28.15
TBF-EVO80C38	G3/8"	80	28.15
TBF-EVO85C38	G3/8"	85	28.15
TBF-EVO90C38	G3/8"	90	28.15
TBF-EVO95C38	G3/8"	95	28.15
TBF-EVO100C38	G3/8"	100	28.15
TBF-EVO105C38	G3/8"	105	28.15
TBF-EVO110C38	G3/8"	110	28.15
TBF-EVO125C38	G3/8"	125	28.15



TBF Evo Series, 1/2" BSPP, Normally Open

Fixed Set Point & Push-on Terminals

Code E03	Male Thread BSPP	Set Temperature °C	Price
TBF-EVO25C12	G1/2"	25	28.15
TBF-EVO35C12	G1/2"	35	28.15
TBF-EVO45C12	G1/2"	45	28.15
TBF-EVO50C12	G1/2"	50	28.15
TBF-EVO55C12	G1/2"	55	28.15
TBF-EVO60C12	G1/2"	60	28.15
TBF-EVO65C12	G1/2"	65	28.15
TBF-EVO70C12	G1/2"	70	28.15
TBF-EVO75C12	G1/2"	75	28.15
TBF-EVO80C12	G1/2"	80	28.15
TBF-EVO85C12	G1/2"	85	28.15
TBF-EVO90C12	G1/2"	90	28.15
TBF-EVO95C12	G1/2"	95	28.15
TBF-EVO100C12	G1/2"	100	28.15
TBF-EVO105C12	G1/2"	105	28.15
TBF-EVO110C12	G1/2"	110	28.15
TBF-EVO125C12	G1/2"	125	28.15

Temperature Swiches

Bimetal fixed temperature switches, series NTB, designed to satisfy most requirements of temperature control in various applications, such as hydraulics, lubrication, transmission systems, etc. Switches have an anodised aluminium body, G3/8" or G1/2" thread connection, a fixed temperature sensor from +25ºC to +105ºC housed inside the thermostat, and a PG09 DIN 43650 cable clamp connector.

Once installed, it is possible to rotate and place the contact carrier body and the connector in the position required.

Technical Specification:

- Switch Rating: 10A/240V AC
  5A/24V DC
  10A/12V DC
- Maximum Pressure: 200 bar
- Maximum Differential DT: 16°C
- Maximum Temperature: 120°C
- PG09 Plug Connector: DIN 43650
- Tightening Torque: 30 Nm



NTB Series, 3/8" BSPP, Normally Open

Fixed Set Point & 360° Rotating Head

Code E03	Male Thread BSPP	Set Temperature °C	Price
NTB25BA	G3/8"	25	43.70
NTB31BA	G3/8"	31	43.70
NTB38BA	G3/8"	38	55.75
NTB47BA	G3/8"	47	43.70
NTB60BA	G3/8"	60	55.75
NTB70BA	G3/8"	70	55.75
NTB80BA	G3/8"	80	55.75
NTB90BA	G3/8"	90	55.75
NTB100BA	G3/8"	100	39.60
NTB105BA	G3/8"	105	43.70

NTB Series, 1/2" BSPP, Normally Open

Fixed Set Point & 360° Rotating Head

Code E03	Male Thread BSPP	Set Temperature °C	Price
NTB25CA	G1/2"	25	43.70
NTB31CA	G1/2"	31	53.10
NTB38CA	G1/2"	38	69.70
NTB47CA	G1/2"	47	43.70
NTB60CA	G1/2"	60	43.70
NTB70CA	G1/2"	70	43.70
NTB80CA	G1/2"	80	44.00
NTB90CA	G1/2"	90	44.00
NTB100CA	G1/2"	100	52.95
NTB105CA	G1/2"	105	43.70

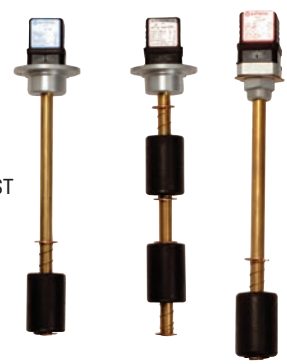
Float Level Switches

Technical Specifications

- Maximum Fluid Viscosity: 150 cSt
- Maximum Pressure: 10 bar
- Fluid Specific Gravity: ≥ 0.7
- Electrical Connection: PG09 – DIN43650
- Electrical Protection: IP65 – DIN40050
- Operating Temperature: -10°C up to +80°C
- Maximum Temperature with FKM Gasket and Silicone Cable: +130°C

Electrical Data

Standard reed switches in ELETTROTEC level switch units are hermetically-sealed, magnetically actuated, designed for reliability to millions of cycles. Switches are normally closed/normally open SPST or SPDT.



LM1FA Series

NC Contacts

Code E03	Magnet Length (mm)	Price
LM1FA100	100	73.65
LM1FA150	150	74.40
LM1FA200	200	75.25
LM1FA250	250	75.80
LM1FA300	300	76.75
LM1FA350	350	77.45
LM1FA400	400	78.00
LM1FA450	450	78.95
LM1FA500	500	80.40

LM2FA Series

SPDT Contacts

Code E03	Magnet Length (mm)	Price
LM2FA100	100	93.45
LM2FA150	150	94.20
LM2FA200	200	95.05
LM2FA250	250	95.95
LM2FA300	300	97.15
LM2FA350	350	98.15
LM2FA400	400	99.55
LM2FA450	450	100.80
LM2FA500	500	102.25

Visual Flow Indicators

The ELETTROTEC flow switches and indicators are generally used to monitor the flow of a fluid or a gas in a circuit. They have a simple reading of the flow or, when equipped, with a contact send an electric alarm signal to a remote board in case of flow decreasing under the set value.

They are normally used in circulation plants, fuel and water outlets, oil and gas systems, as well as in cooling circuits, heat pumps, welding machines, heaters, transformers, heat exchangers, compressors, food, chemical and pharmaceutical industry.

Technical Specifications:

- Operating Temperature (Standard): -10°C to +100°C
- With FKM Gasket: +130°C (on demand)
- Maximum Inclination: 15°
- Maximum Flow Rate: 60 LPM (Water)



IFV Series

Liquid/Air

Code E03	Female Thread BSPP	Operating Range LPM	Price
IF1V1/A	G1/4"	0.1-1	257.00
IF2V3/A	G1/4"	0.2-3	261.75
IF3V6/A	G1/4"	1-6	269.05
IF4V16/A	G1/2"	2-16	309.60
IF5V60/A	G1"	5-60	399.10

The IFE flow switches are generally used to monitor the flow rate of a fluid in a circuit and send an electric ON-OFF alarm to a remote board in case of the flow decreasing under a set value.

These flow switches are normally used in circulation plants, fuel and water outlets, oil systems, as well as in cooling circuits, heat pumps, welding machines, heaters, transformers, heat exchangers, compressors, food, chemical and the pharmaceutical industry.

Technical Specifications:

- Switching Voltage in DC: 60 W
- Switching Voltage in AC: 60 VA
- Maximum Operating Voltage: 220V 50Hz
- Operating Temperature (Standard): -10°C to +100°C
- With FKM Gasket: +130°C (on demand)
- Maximum Inclination: 15°C
- Maximum Flow Rate: 140 LPM (Water)



IFE Series

Liquid/Air

Code E03	Female Thread BSPP	Operating Range LPM	Price
IFE0.5R2.5	G1/8"	0-2.5	101.90
IFE1R3	G1/8"	0.3-3	103.30
IFE2R9	G1/4"	2-9	107.25
IFE3R18	G3/8"	5-18	122.90
IFE4R24	G1/2"	3-24	141.00
IFE5R35	G3/4"	6-35	184.55
IFE6R60/15	G1"	15-60	261.45

Adjustable Visual & Electric Flow Switches

The ELETTROTEC flow switches and indicators are generally used to monitor the flow of a fluid or a gas in a circuit, and have a simple reading of the flow or, when equipped with contact, send an electric alarm signal to a remote board in case of flow decreasing under the set value.

The are normally used in circulation plants, fuel and water outlets, oil and gas systems as weak as in cooling circuits, heat pumps, welding machines. heaters, transformers, heat exchangers, compressors, food, chemical and the pharmaceutical industry.

IFVE Series

Liquid/Air

Code E03	Female Thread BSPP	Operating Range LPM	Price
IF1VE1/A	G1/4"	0.1-1	355.60
IF2VE3/A	G1/4"	0.2-3	360.30
IF3VE6/A	G1/4"	1-6	364.80
IF4VE16/A	G1/2"	2-16	418.90
IF5VE60/A	G1"	5-60	567.40

Technical Specifications:

- Switching Voltage in DC: 60 W
- Switching Voltage in AC: 60 VA
- Maximum Operating Voltage: 220V 50 Hz
- Operating Temperature (Standard): -10°C to +100°C
- With FKM Gasket: +130°C (on demand)
- Maximum Inclination: 15°
- Maximum Flow Rate: 60 LPM (Water)



For other applications, please contact our sales team.

Variable Area Flow Meters

Variable area flow meters, TFM...V series, are ideal to monitor the single-phase, non-pulsating discharge of liquid.

These flow meters have been produced in acrylic with a graduated scale silk-screened directly on it.

- Polypropylene Fittings (standard) or ABS (on request)
- Stainless Steel Float
- Silicone O-ring (standard) or FPM (on request)

Tolerance:

- +/- 4%

Max Pressure:

- 10 bar

Working Pressure:

- 0-60°C



TFM Series

Liquid, Female, Silicone Gasket

Code E03	Female Thread BSPT	Operating Range LPM	Price
TFM01VL4	R1/2"	0.5-4	82.55
TFM02VL7	R1/2"	1-7	86.50
TFM03VL18	R1/2"	1.8-18	86.00
TFM04VL36	R3/4"	4-36	87.75
TFM05VL70	R1"	10-70	89.90
TFM06VL100	R1"	20-100	93.50
TFM07VL150	R1"	20-150	96.75

TFM Series

Gas/Air, Female, Silicone Gasket

Code E03	Female Thread BSPT	Operating Range Nm3/h	Price
TFM01VG10	R1/2"	1-10	82.55
TFM02VG16	R1/2"	1.6-16	84.25
TFM03VG40	R1/2"	4-40	86.00
TFM04VG60	R3/4"	6-60	87.75
TFM05VG160	R1"	16-160	89.55
TFM06VG250	R1"	25-250	93.15
TFM07VG350	R1"	35-350	96.75

TFM Series

Liquid, Male, Silicone Gasket

Code E03	Male Thread BSPT	Operating Range LPM	Price
TFM08VL110	R1.1/2"	20-110	102.00
TFM09VL150	R1.1/2"	20-150	108.15
TFM10VL220	R1.1/2"	80 -220	134.70
TFM11VL300	R2"	80-300	155.10
TFM12VL360	R2"	80-360	190.35
TFM13VL450	R2"	150-450	233.40
TFM14VL550	R2"	190-550	256.75
TFM15VL750	R2"	220-750	282.45

TFM Series

Gas/Air, Male, Silicone Gasket

Code E03	Male Thread BSPT	Operating Range Nm3/h	Price
TFM08VG250	R1.1/2"	25-250	102.00
TFM09VG350	R1.1/2"	35-350	108.15
TFM10VG400	R1.1/2"	80-400	134.70
TFM11VG500	R2"	100-500	155.10
TFM12VG600	R2"	120-600	190.35
TFM13VG850	R2"	300-850	233.40
TFM14VG1200	R2"	400-1200	256.75
TFM15VG1400	R2"	550-1400	283.20

Variable Area Flow Meters, Panel Type

Variable area flow meters, FMP...V series, are ideal to monitor the single-phase, non-pulsating discharge of liquid.

They have been designed for panel mounting with back fittings and two screws integrated in the body, with nuts for fixing.

These flow meters have been produced in acrylic with a graduated scale silk-screened directly on it.

- Polypropylene Fittings (standard) or ABS (on request)
- Stainless Steel Float
- Silicone O-ring (standard) or FPM (on request)

Tolerance:
- +/- 4%

Max. Pressure:
- 10 bar

Working Temperature:
- 0-60°C



FMP Series

Liquid, Silicone Gasket

Code E03	Male Thread BSPT	Operating Range LPM	Price
FMP03VL100	R1/2"	10-100 LPH	113.30
FMP04VL160	R1/2"	16-160 LPH	115.90
FMP05VL250	R1/2"	25-250 LPH	119.40
FMP06VL4	R1/2"	0.5-4	121.75
FMP07VL7	R1/2"	1-7	125.40
FMP08VL11	R1/2"	1-11	129.20
FMP09VL18	R1/2"	2-18	134.40
FMP10VL35	R1"	5-35	141.10
FMP11VL50	R1"	10-50	146.75
FMP12VL70	R1"	10-70	152.60
FMP13VL130	R1"	10-130	159.15
FMP14VL150	R1"	10-150	166.70
FMP15VL170	R1"	10-170	177.15

FMP Series

Gas/Air, Silicone Gasket

Code E03	Male Thread BSPT	Operating Range Nm^3/h	Price
FMP01VG1	R1/2"	0.1-1	113.30
FMP02VG6	R1/2"	0.6-6	117.05
FMP06VG10	R1/2"	1-10	121.75
FMP07VG16	R1/2"	1.6-16	125.40
FMP08VG25	R1/2"	2.5-25	129.20
FMP09VG40	R1/2"	10-100	134.40
FMP10VG100	R1"	20-100	134.40
FMP11VG100	R1"	20-100	141.10
FMP12VG160	R1"	16-160	146.75
FMP13VG250	R1"	25-250	152.60
FMP14VG300	R1"	30-300	159.15
FMP15VG350	R1"	35-350	166.70

Propeller Flow Indicators

The CFV propeller flow indicators are generally used to monitor the correct flowing and circulation of a fluid into a pipeline.

They are ideal for cooling and heating circuits, lubrication plants, water treatment, photo processing equipment, chemicals and pharmaceuticals, food and beverage and plastics processing equipment.

Body:
- Nickel-plated brass

Propeller:
- Red Hostaform®

Tube:
- Pyrex® glass

Seals:
- NBR

Max Temperature:
- 90°C



CFV Series

Liquid, Silicone Gasket

Code E03	Female Thread BSPP	Operating Range LPM	Price
CFV1B-N	G1/4"	1-10	59.75
CFV2B-N	G3/8"	2-20	81.85
CFV3B-N	G1/2"	3-30	90.60
CFV4B-N	G3/4"	4-40	155.90
CFV5B-N	G1"	6-60	169.00

Neublade Airstrip… not all compressed air products are the same

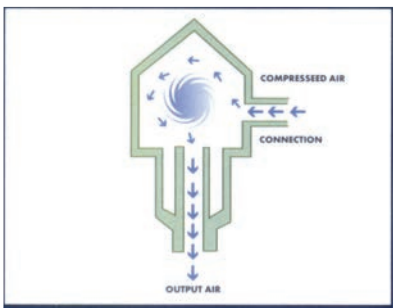
The Neublade from Beckair utilises innovative technology developed to give the highest performance, lowest noise and lowest air consumption compared to any other product.

The powerful, whisper-quiet blade of air is ideal for drying, cleaning, cooling or containing in all kinds of process, food and manufacturing applications.

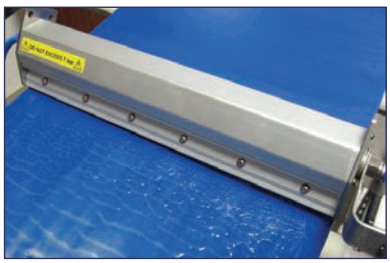
The key to its performance is our flow straightening technology (patent applied for) which provides an exceptionally laminar sheet of air. The low levels of turbulence also mean extremely low noise (65dB).

- No moving parts – the Neublade is maintenance free
- Ultra low air consumption – significantly lower running costs than standard nozzles and strips
- Ultra-quiet operation (typically 65 dB) for an improved working environment
- Easily mounted onto existing installations
- Choice of air entry for maximum flexibility

The Neublade is manufactured from extruded, anodised aluminium and comes complete with quick fit hose connector. Because of the method of construction, we are able to offer the Neublade in any length up to 2m long. Please call our sales team for further information.



HOW THE AIRSTRIP WORKS





Applications

- Drying: printing, paints, coatings, components, conveyor belts
- Cleaning: components, conveyors, instruments lens, dust removal, waste removal
- Cooling: components
- Air curtain: fume containment, heat containment from ovens and furnaces

How Neublade can reduce your operating costs

Type of Airstrip	Air Consumption at 4 bar SLPM	Air Consumption at 4 bar SCFM	Noise Level Db(A) at 1M	Power Required kW SLPM	Running Costs per Year*
5 holes in 50mm length of pipe (3mm or 1/8")	1980	70	95	10.0	£960
Standard air wipe (50mm)	450	16	85	2.3	£220
Neublade (50mm)	124	4.5	65	0.65	£62

*Based on 40 hours per week, 48 weeks per year with an energy cost of around £0.05 per kWh.

Neublade Airstrip

BSP Ports

Code E26	Length mm	Length Inches	Inlet	Air Consumption at 4 bar SLPM	Air Consumption at 4 bar SCFM	Noise Db(A) at 1M	Price
BNEUBLADE/80	80	3"	1/4" BSP + Push-in Fitting	198	7	65	**214.50**
BNEUBLADE/150	150	6"	1/4" BSP + Push-in Fitting	368	13	65	**251.40**
BNEUBLADE/300	300	12"	1/4" BSP + Push-in Fitting	736	26	65	**318.40**
BNEUBLADE/450	450	18"	1/4" BSP + Push-in Fitting	1104	39	65	**405.50**
BNEUBLADE/600	600	24"	1/4" BSP + Push-in Fitting	1471	52	65	**475.90**
BNEUBLADE/750	750	30"	1/4" BSP + Push-in Fitting	1839	65	65	**586.50**
BNEUBLADE/900	900	36"	1/4" BSP + Push-in Fitting	2207	78	65	**663.55**
BNEUBLADE/1000	1000	39"	1/4" BSP + Push-in Fitting	2462	87	65	**754.05**
BNEUBLADE/1200	1200	48"	1/4" BSP + Push-in Fitting	2943	104	65	**867.95**

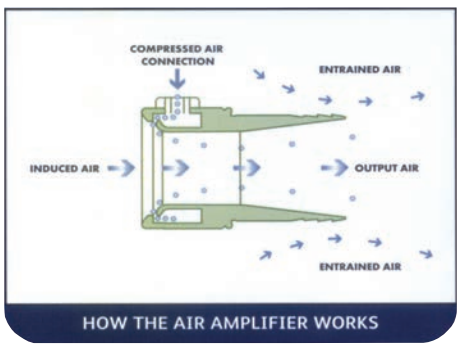
Air Knives & Amplifiers

Ringjet Air Amplifiers… just as powerful and far more efficient than conventional nozzles

Ringjets air amplifiers are bladeless, motorless fans which can be used for cooling, extracting, drying and ventilating in process, food and manufacturing industries.

Using a small volume of compressed air as the power source, Ringjets utilise the 'Coanda' effect to draw larger volumes of ambient air into the device to amplify the air flow by up to 25 times.

- No moving parts – Ringjet is maintenance free
- No electricity required – safe to use in wet locations
- Adjustable flow control using air gap and inlet pressure
- Energy efficient – low running costs
- Low cost
- Quiet operation (less than 80 dB (A))
- Also available in stainless steel



HOW THE AIR AMPLIFIER WORKS

Applications

- Cooling: components, mouldings, extrusions, people, components on test
- Extraction: fumes, water, dust, waste material
- Drying: components, printing, material



Ringjet Air Amplifiers

BSP Ports

Code E26	Throat Diameter mm	Air Inlet BSP	Air Consumption at 4 bar SLPM	Air Consumption at 4 bar SCFM	Outlet Airflow SLPM	Outlet Airflow SCFM	Hose Size for Ducting mm	Hose Size for Ducting Inches	OD mm	Length mm	Material	Price
BRJ12A	12	G1/8"	170	6	5,666	200	19	3/4"	25	63	Anodised Alloy	**70.70**
BRJ20A	20	G1/8"	283	10	6,800	240	32	1.1/4"	40	63	Anodised Alloy	**85.60**
BRJ25A	25	G1/4"	397	14	11,333	400	38	1.1/2"	50	90	Anodised Alloy	**89.90**
BRJ40A	40	G1/4"	510	18	14,150	500	50	2"	63	95	Anodised Alloy	**151.95**
BRJ50A	50	G3/8"	962	34	20,666	730	76	3"	90	135	Anodised Alloy	**250.40**
BRJ75A	75	G1/2"	1416	50	33,333	1,178	100	4"	132	165	Anodised Alloy	**579.95**
BRJ12S/S	12	G1/8"	170	6	5,666	200	19	3/4"	25	63	Stainless Steel (316)	**268.55**
BRJ20S/S	20	G1/8"	283	10	6,800	240	32	1.1/4"	40	63	Stainless Steel (316)	**357.40**
BRJ25S/S	25	G1/4"	397	14	11,333	400	38	1.1/2"	50	90	Stainless Steel (316)	**361.40**
BRJ40S/S	40	G1/4"	510	18	14,150	500	50	2"	63	95	Stainless Steel (316)	**481.55**
BRJ50S/S	50	G3/8"	962	34	20,666	730	76	3"	90	135	Stainless Steel (316)	**652.75**

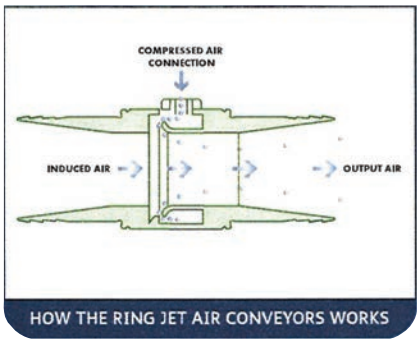
Ringjet Air Conveyors convey all kinds of parts and material without blowers, pumps or electricity

Ringjets air conveyors are bladeless, motorless fans which connect to flexible hose and are ideal for conveying and extracting all kinds of materials in process, food and manufacturing industries. Using a small volume of compressed air as the power source, Ringjets utilise the 'Coanda' effect to draw larger volumes of ambient air into the device to amplify the air by up to 25 times. Ringjet conveyors are capable of moving material over long distances and this can be increased by adding additional conveyors into the line.

- No moving parts – Ringjet is maintenance free
- No electricity required – safe to use with liquids and wet material
- Adjustable flow control using air gap and inlet pressure
- Energy efficient – low running costs
- Ideal for conveying over long distances
- Quiet operation (less than 80 dB (A))

Applications

- Conveying: plastic pellets, waste removal, food products, pills and tablets, small components, dust, liquids, paper trim
- Extraction: fumes, liquids, dust, waste material





Ringjet Air Conveyors

BSP Ports

Code E26	Throat Diameter mm	Air Inlet BSP	Air Consumption at 5 bar SLPM	Air Consumption at 5 bar SCFM	Outlet Airflow SLPM	Outlet Airflow SCFM	Hose Size for Ducting mm	Hose Size for Ducting Inches	OD mm	Length mm	Material	Price
BRJ12C	12	G1/8"	170	6	5,666	200	19	3/4"	25	95	Anodised Alloy	**87.80**
BRJ20C	20	G1/8"	283	10	6,800	240	32	1.1/4"	40	95	Anodised Alloy	**96.35**
BRJ25C	25	G1/4"	397	14	11,333	400	38	1.1/2"	50	135	Anodised Alloy	**104.90**
BRJ40C	40	G1/4"	510	18	14,150	500	50	2"	63	135	Anodised Alloy	**160.55**
BRJ50C	50	G3/8"	962	34	20,666	730	76	3"	90	203	Anodised Alloy	**271.80**
BRJ75C	75	G1/2"	1416	50	33,333	1,178	100	4"	132	248	Anodised Alloy	**622.95**
BRJ20CS/S	20	G1/8"	283	10	6,800	240	32	1.1/4"	40	63	Stainless Steel (316)	**308.20**
BRJ50CS/S	50	G3/8"	962	34	20,666	730	76	3"	90	135	Stainless Steel (316)	**652.75**

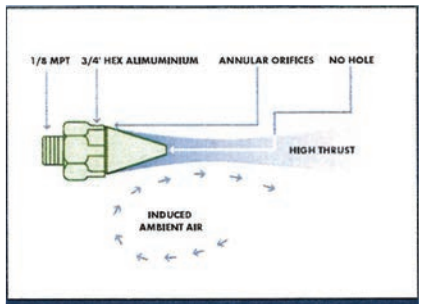
Air Knives & Amplifiers

The Airmiser uses a series of annular nozzles instead of a single hole to create a safer, more efficient, lower noise alternative to open tubes and pipes. A small volume of compressed air is amplified up to 25 times by utilising the 'Coanda' effect to induce a higher flow of ambient air into the air stream.

Because of the risk of serious injury from compressed air entering the bloodstream from single open pipes at high pressure, the multi-nozzle arrangement of the Airmiser is designed to be much safer alternative.

Replacing open jets with Airmisers will give significantly reduced air consumption and lower noise levels and, in most cases, it is a simple operation to install Airmiser nozzles. Airmisers are suitable for use individually or in multiple arrays to create a much greater effect.

- No moving parts – Airmiser is maintenance free
- Low air consumption – significantly lower running costs than open holes and pipes
- Quieter operation (below 80 DB (A) at 1m) for an improved working environment
- Easily mounted onto existing installations



HOW THE AIRMISER WORKS

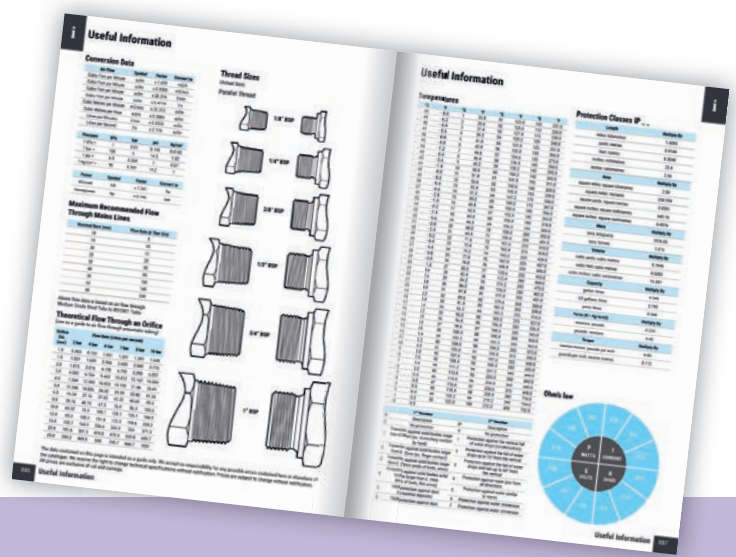


Airmiser Nozzles

BSP Ports

Code E26	Air Inlet BSP	Air Consumption at 5 bar		Thrust		Noise Level Db(A) at 1M	Price
		SLPM	SCFM	N	LBF		
BAMSA	G1/8"	225	8	1.8	0.4	65	**24.90**
BAMBH	G1/4"	566	20	5.2	1.2	74	**24.90**
BAMSASS	G1/8"	225	8	1.8	0.4	65	**51.60**
BAMBHSS	G1/4"	566	20	5.2	1.2	74	**51.60**

For Useful Information



See pages 886-887

PNEU-POWER…
High suction conveying without the hassle of pumps, blowers or electricity

The Beckair Pneu-Power is a bladeless, motorless fan which connects to flexible hose and gives high vacuum or high flow for conveying and extracting all kinds of materials in process, food and manufacturing industries.

Using a small volume of compressed air as the power source, the Pneu-Power utilises the 'Coanda' effect to draw larger volumes of ambient air into the device to amplify the air flow by up to 25 times.

The Pneu-Power has very high performance and is capable of moving material over very long distances. The Pneu-Power is extremely robust, being manufactured from cast aluminium and is designed for use in harsh environments.

For applications where extraction only is required, the silencer (supplied) diffuses the air and reduces the noise from the device.

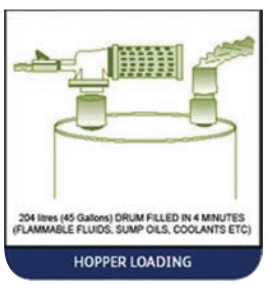
- Type A offers higher flows, type B offers higher suction
- No moving parts – Pneu-Power is maintenance free
- No electricity required – safe to use with liquids and wet material
- Adjustable flow control using air valve and inlet pressure
- Energy efficient – low running costs
- Quiet operation (less than 80 dB (A))

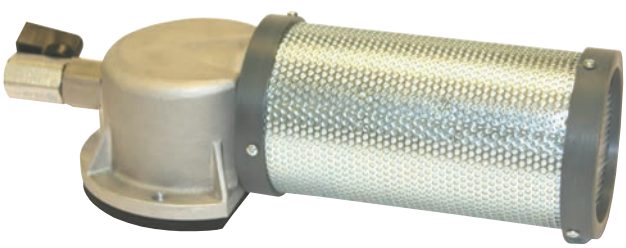
Applications

- Conveying tank filling/emptying, hopper loading, powder, granules, swarf removal, dust, liquids
- Extraction fumes, liquids, dust, waste material









Pneu-Power Air Conveyors

BSP Ports

Code E26	Air Inlet BSP	Air Consumption at 6 bar		Outlet Airflow		Vacuum			Price
		SLPM	SCFM	SPLM	SCFM	mm WG	Inch WG	Inch HG	
BNEUPOWERA	G1/4"	885	31	2250	80	2072	82"	6"	**582.85**
BNEUPOWERB	G1/4"	885	31	900	32	5700	224"	16.5"	**582.85**

CLUSTAJET VENTILATORS… High performance ventilation and extraction without motors or electricity

Clustajet ventilators are a compressed air operated fan which utilise our Ringjet technology to create a robust, maintenance free, high performance ventilator.

Because the Clustajet uses compressed air, no electrical supply is needed making it suitable for safe use in damp or wet locations.

Multiple Ringjets are positioned inside a steel casing to create a space rocket jet effect which gives the unit its high performance. For a given airflow, Clustajets are lighter in weight and smaller than equivalent electric fans.

- No moving parts – Clustajet is maintenance free
- No electricity required – safe to use in damp or wet locations
- Adjustable flow control using the control valve
- Standard Clustajets are manufactured from a strong welded steel casing
- **Other options include:**
- Plastic
- Flexible hose

Applications

- Extraction: welding fumes, solvent vapours, dust
- Ventilating: confined spaces, tanks, sewers, tunnels
- Cooling: components, pipework

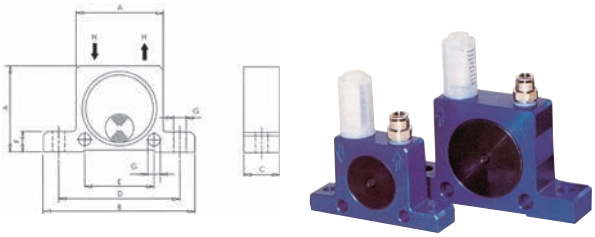


Clustajet Ventilators

BSP Ports

Code E26	Hose Size mm	Hose Size Inches	Air Inlet BSP Inches	Air Consumption at 4 bar SLPM	Air Consumption at 4 bar SLPM	Outlet Air Flow SPLM	Outlet Air Flow SCFM	Dimensions mm	Dimensions Inches	Dimensions mm	Dimensions Inches	Dimensions mm	Dimensions Inches	Price
BCJ425	102	4”	G1/4”	395	14	12,700	450	102	4”	180	7”	230	9”	**554.15**
BCJ620	150	6”	G1/2”	1130	40	18,400	650	152	6”	254	10”	356	14”	**924.55**
BCJ825	203	8”	G1”	2265	80	34,800	1230	203	8”	305	12”	457	18”	**1219.90**
BCJ1250	305	12”	G1”	5375	190	87,750	3100	305	12”	406	16”	508	20”	**1712.10**

Vibrators



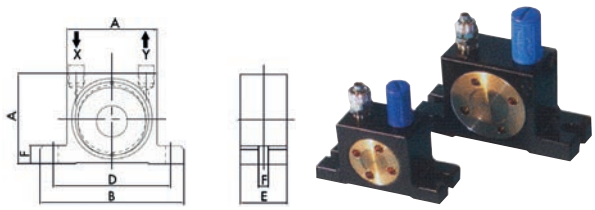
Type	Frequency VPM			Centrifugal Force			Air Consumption/Min		
	2 bar	4 bar	6 bar	2 bar	4 bar	6 bar	2 bar	4 bar	6 bar
S8	25,500	31,000	35,000	13	26	36	83	145	195
S10	22,500	28,000	34,000	25	47	71	92	150	200
S13	15,000	18,500	22,500	32	55	87	94	158	225
S16	13,000	17,000	19,500	45	80	110	122	200	280
S20	10,500	14,500	16,500	72	122	172	130	230	340
S25	9,200	12,200	14,000	93	157	205	160	290	425
S30	7,800	9,700	12,500	151	247	321	215	375	570
S36	7,300	9,000	10,000	206	315	405	260	475	675

Pneumatic Vibrators

Roller Ball

Code E23	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H Thread BSP	Price
S8	50	86	20	68	40	12	7	1/4"	**114.20**
S10	50	86	20	68	40	12	7	1/4"	**116.95**
S13	65	113	24	90	50	16	9	1/4"	**125.10**
S16	65	113	27	90	50	16	9	1/4"	**130.55**
S20	80	128	33	104	60	16	9	1/4"	**144.10**
S25	80	128	38	104	60	16	9	1/4"	**155.00**
S30	100	160	44	130	80	20	11	3/8"	**201.20**
S36	100	160	50	130	80	20	11	3/8"	**214.80**

- Lubrication-free, maintenance-free, explosion-proof
- Operating temperature: 0°C to +200°C (+32°F to +390°F)



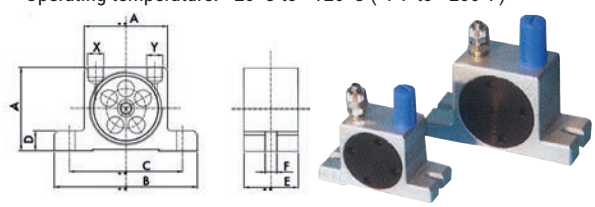
Type	Vibrations			Centrifugal Force			Air Consumption		
	2 bar	4 bar	6 bar	2 bar	4 bar	6 bar	2 bar	4 bar	6 bar
OR50	21,000	25,000	29,500	188	281	355	78	144	204
OR65	19,000	22,000	26.000	235	439	552	100	198	296
OR80	14,000	16,000	21,500	342	587	624	122	255	378
OR100	6,750	9,750	11,000	289	604	783	132	284	412

Pneumatic Vibrators

Roller Ball, Explosion-proof

Code E23	A mm	B mm	C mm	D mm	E mm	F mm	X-Y Thread	Weight kg	Price
OR50	50	86	68	12	30	7	1/8"	0.370	**214.80**
OR65	65	113	90	16	36	9	1/4"	0.760	**236.55**
OR80	80	128	104	16	40	9	1/4"	1.270	**307.25**
OR100	100	160	130	20	52	11	3/8"	2.600	**467.65**

- Lubrication-free
- Maintenance-free
- Low noise level
- Operating temperature: +20°C to +120°C (-4°F to +250°F)



Type	Vibrations			Centrifugal Force			Air Consumption		
	2 bar	4 bar	6 bar	2 bar	4 bar	6 bar	2 bar	4 bar	6 bar
OT8	34,000	38,000	42,000	110	205	292	45	81	110
OT10	26,000	33,000	38,000	105	171	252	45	81	110
OT10S	17,200	23,400	26,000	72	147	187	45	81	110
OT13	24,500	28,500	31,000	202	263	300	122	204	285
OT16	18,000	20,000	21,000	194	239	264	122	204	285
OT16S	11,500	15,000	17,500	129	196	234	122	204	285
OT20	14,500	19,000	23,000	251	404	526	184	318	452
OT25	13,200	15,500	17,000	244	336	508	184	318	452
OT25S	9,000	11,000	13,500	214	335	483	184	318	452
OT30	11,000	12,500	14,500	351	721	781	322	542	749
OT36	8,500	11,500	12,000	341	698	749	322	542	749
OT36S	6,000	7,000	8,500	406	706	754	322	542	749

Pneumatic Vibrators

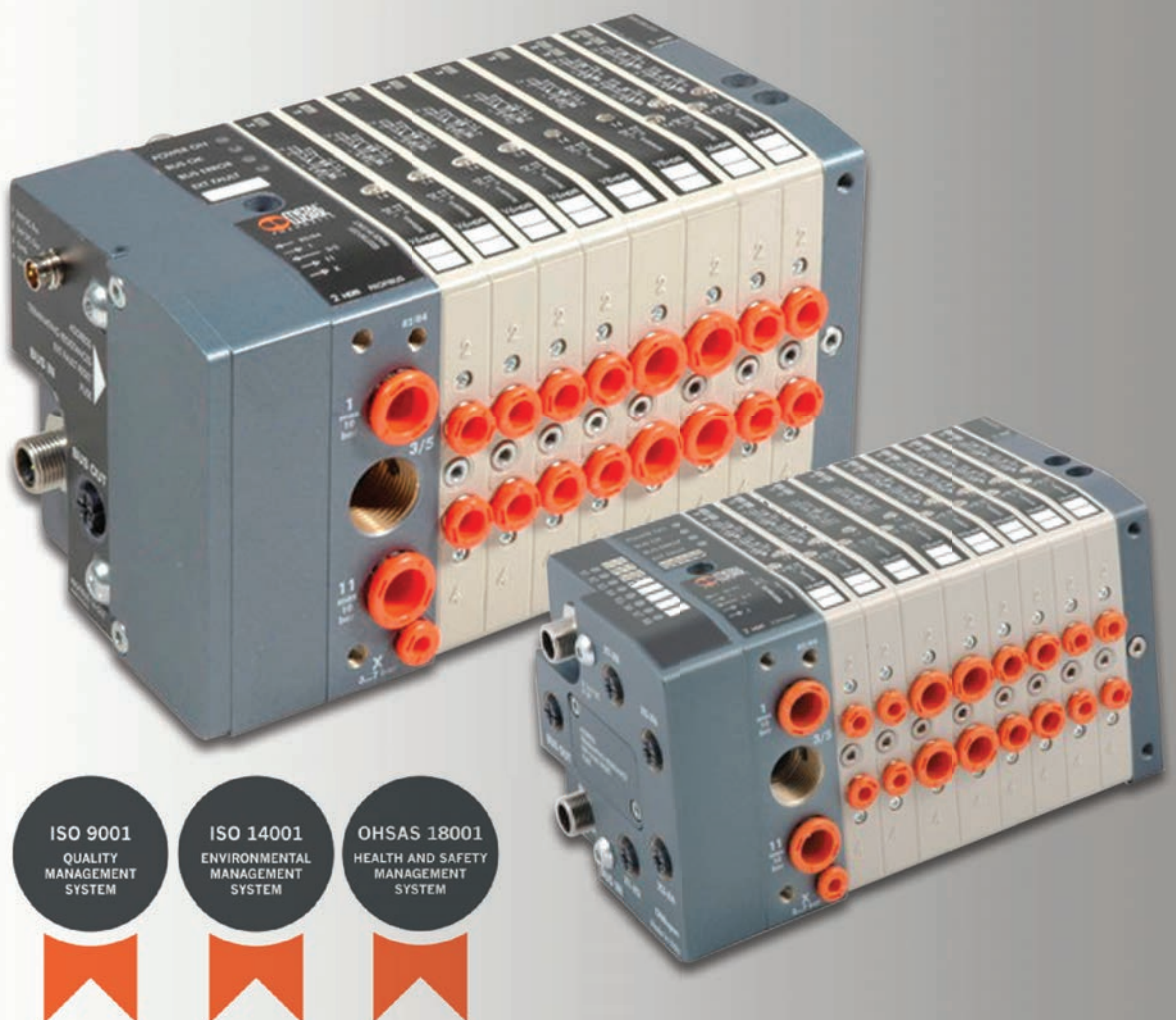
Turbine

Code E23	A mm	B mm	C mm	D mm	E mm	F mm	X-Y Thread	Weight kg	Price
OT8	50	86	68	12	30	7	1/8"	0.250	**214.80**
OT10	50	86	68	12	30	7	1/8"	0.255	**225.70**
OT10S	50	86	68	12	30	7	1/8"	0.263	**239.30**
OT13	65	113	90	16	36	9	1/4"	0.565	**247.45**
OT16	65	113	90	16	36	9	1/4"	0.580	**255.60**
OT16S	65	113	90	16	36	9	1/4"	0.614	**266.45**
OT20	80	128	104	16	40	9	1/4"	1.090	**337.15**
OT25	80	128	104	16	40	9	1/4"	1.120	**309.95**
OT25S	80	128	104	16	40	9	1/4"	1.200	**326.30**
OT30	100	160	130	20	52	11	3/8"	2.200	**377.95**
OT36	100	160	130	20	52	11	3/8"	2.300	**386.10**
OT36S	100	160	130	20	52	11	3/8"	2.530	**386.10**

METAL WORK PNEUMATIC

HDM Valve Island Technology

- IP 65 rating with clean line image, suitable for wash down applications
- Low power absorption - 0.9W
- High flows - 1200 Nl/min
- Compact in size
- Pre-wired single electric connection 24v DC
- Fieldbus compatible
- 5 valve sizes for differing flows
- All pneumatic connections on 1 interface
- Pneumatic and Vacuum in 1 island



ISO 9001 QUALITY MANAGEMENT SYSTEM

ISO 14001 ENVIRONMENTAL MANAGEMENT SYSTEM

OHSAS 18001 HEALTH AND SAFETY MANAGEMENT SYSTEM

We are back

Elettrotec is back in the UK market to meet all your needs on control devices for fluids

Pressure and Vacuum switches



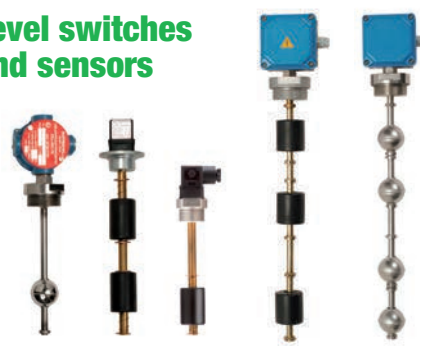
Temperature switches



Flow meters and flow switches



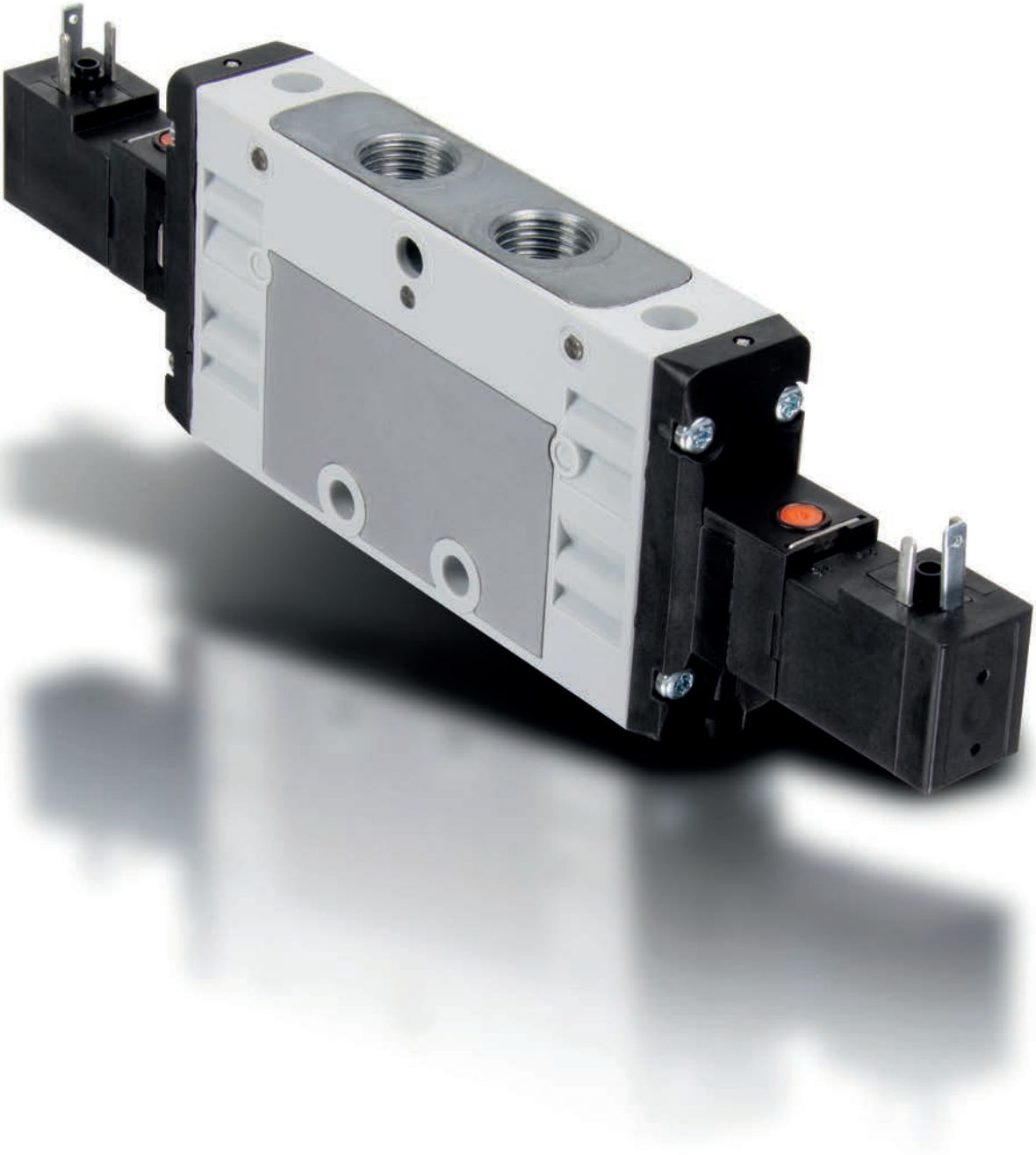
Level switches and sensors



ELETTROTEC®

CONTROL DEVICES FOR FLUIDS

www.elettrotec.com





102-103 ISO 6432 Air Cylinders



104-107 ISO 15552 Air Cylinders



108-109 Compact Cylinders



110 TC08 Series Pilot Valves



111 TC15 Series Pilot Valves



112-113 TC08 Series Solenoid Valves



114 CD7 Series Solenoid Valves



115 CD12 Series Solenoid Valves



116 740 & 840 Series Solenoid Valves



117-124 Modular FRL Series



125 Modular FRL Series Accessories



126-127 Modular FRL Series, Valves

Aventics ISO 6432 Air Cylinders

General Specifications

- Connecting threads: M5 and G1/8
- Installation position: any
- Ambient temperature: -25°C to +80°C
- Maximum temperature of medium: +80°C

Pneumatic

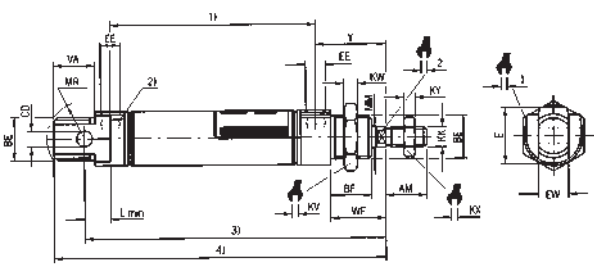
- Minimum acceptable pressure: 1 bar
- Rated pressure: 10 bar

Design

- Internationally exchangeable, standardised port threads (DIN ISO)
- Proximity switching (permanent magnet)
- Adjustable stroke-end cushioning
- Suitable for oil-free operation
- Long service life due to low-friction sealing elements and self-lubricating bearing bushing
- Cylinder tube: stainless steel, crimped at head and base
- Head and base: anodized aluminium profile
- Solid piston with stop disks
- Seals: groove rings of Perbunan 1®
- Piston rod: stainless steel, smooth rolled
- Modular system: mounting hardware 1® Bayer

Dimensions

Cyl	AM	BE	BF	CD	E	EE	EW	KK	KV	KW	KX	KY	L	MM	MR	PB	VA	WF	XC	Y	ZN	1	2
	-2			H9			d13	x 1.25						d9		±1		±1.2	±1	±1	±14	h12	h12
Ø	mm	mm	mm	mm	mm	mm	mm	mm			mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm		
10	12	M12 x 1.25	11	4	14	M5	8	M4	17	5.5	7	2.2	6	4	12	37	11	16	64	21	73.5	13	3
12	16	M16 x 1.5	16	6	19	M5	12	M8	22	6	10	3.2	9	6	16	41	16	22	75	27	88.5	19	5
16	16	M16 x 1.5	16	6	19	M5	12	M6	22	6	10	3.2	9	6	16	47	17	22	82	27	95.5	19	5
20	20	M22 x 1.5	18	8	28	G1/8	16	M8	30	7	13	4	12	8	18	51	19	24	95	32	109.5	28	6
25	22	M22 x 1.5	21	8	28	G1/8	16	M10	30	7	17	4	12	10	19	55	21	28	104	36	119.5	28	8





1) PB + stroke 2) G1/8 8 deep 3) XC + stroke 4) ZN + stroke

ISO 6432 Cylinder

Double Acting, Cushioned, Magnetic

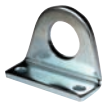
Code X01	Ø mm	Stroke mm	Price
0822332501	16	10	57.00
0822332502	16	25	58.30
0822332503	16	50	58.70
0822332504	16	80	59.10
0822332505	16	100	59.55
0822332506	16	125	59.95
0822332507	16	160	60.55
0822332508	16	200	61.25
0822333501	20	10	64.45
0822333502	20	25	64.85
0822333503	20	50	65.40
0822333504	20	80	66.75
0822333505	20	100	66.65
0822333506	20	125	67.25
0822333507	20	160	68.10

Code X01	Ø mm	Stroke mm	Price
0822333508	20	200	69.10
0822333509	20	250	70.30
0822333510	20	320	72.00
0822334501	25	10	70.35
0822334502	25	25	70.80
0822334503	25	50	71.95
0822334504	25	80	72.50
0822334505	25	100	73.10
0822334506	25	125	73.90
0822334507	25	160	74.95
0822334508	25	200	76.20
0822334509	25	250	77.70
0822334510	25	320	79.85
0822334511	25	400	82.30
0822334512	25	500	85.40

Aventics ISO 6432 Cylinder Mountings & Accessories

ISO 6432 Cylinders

Foot Mounting



Code	X01	For Cylinder Ø	Price
1821332029		10	2.70
1821332028		12/16	3.30
1821332027		20/25	4.05

ISO 6432 Cylinders

Flange Mounting



Code	X01	For Cylinder Ø	Price
1821036012		10	2.40
1821036011		12/16	2.70
1821036010		20/25	3.30

ISO 6432 Cylinders

Counter Support



Code	X01	For Cylinder Ø	Price
1827001447		10	10.50
1827001446		12/16	13.00
1827001445		20/25	14.60

ISO 6432 Cylinders

Fork Clevis



Code	X01	For Cylinder Ø	Thread	Price
1822122028		10	M4	4.35
1822122009		12/16	M6	5.05
1822122010		20	M8	5.75
1822122024		25	M10 x 1.25	6.00

ISO 6432 Cylinders

Spherical Rod Eye



Code	X01	For Cylinder Ø	Thread	Price
1822124000		10	M4	17.10
1822124001		12/16	M6	18.45
1822124002		20	M8	18.70
1822124003		25	M10 x 1.25	23.40

ISO 6432 Cylinders

Piston Rod Nut



Code	X01	For Cylinder Ø	Thread	Price
8103040114		10	M4	4.40
1823300033		12/16	M6	4.45
1823300034		20	M8	8.05
1823300020		25	M10 x 1.25	1.50

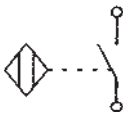
ISO 6432 Cylinders

Cylinder Head Nut



Code	X01	For Cylinder Ø	Thread	Price
1823300024		10	M12 x 1.25	2.60
2915A51204		12/16	M16 x 1.5	1.35
2915051207		20/25	M22 x 1.5	2.65

- Ambient temperature: -20°C to +75°C
- Switch point accuracy: ±0.1mm
- Maximum shock resistance: 50g/11ms (contact closes)
- Vibration resistance: 30g (50-100Hz)





ISO 6432 Cylinders

Reed Switch, with Cable

Code	X01	Designation	Cable	Price
0830100365		Cable, 2 Wire	3m PVC	33.35
0830100368		Cable, 2 Wire	3m PVC	33.10
0830100371		Cable, 3 Wire	3m PVC	40.30

ISO 6432 Cylinders

Reed Switch, with Socket Couplings

Code	X01	Description	Price
1834484166		Straight M8 x1	18.75
1834484167		Angular M8 x1	18.75

ISO 6432 Cylinders

Reed Switch Clamp



Code	X01	For Cylinder Ø	Price
1827020065		10	6.60
1827020066		12	6.60
1827020067		16	6.60
1827020068		20	6.60
1827020069		25	6.60

Aventics ISO 15552 Air Cylinders

Technical Information

- Standards: ISO 15552
- Compressed air connection: internal thread
- Working pressure range: 1.5-10 bar
- Ambient temperature range: -20°C to +80°C
- Medium: compressed air
- Maximum particle size: 50µm
- Oil content of compressed air: 0-5mg/m^3
- Pressure for determining piston forces: 6.3 bar

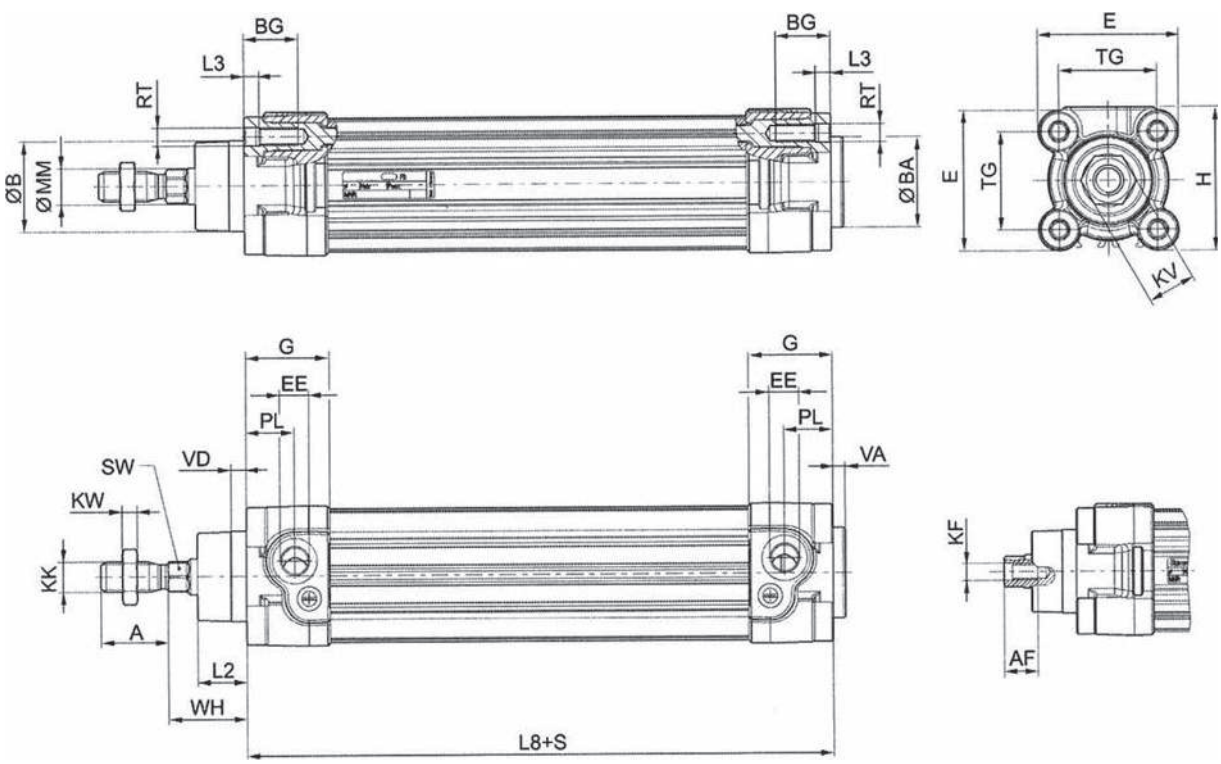
Materials

- Cylinder tube: aluminum, anodized
- Piston rod: stainless steel
- Front cover: die-cast aluminium
- End cover: die-cast aluminium
- Seal: polyurethane
- Nut for piston rod: steel, galvanized
- Scraper: polyurethane

Dimensions

Ø	A -2	AF +1	ØB d11	ØBA d11	BG min	E	EE	G	H	KF	KK
32	22	12	30	30	16	46.5	G1/8	27.75	47.5	M6	M10 x 1.25
40	24	13.5	35	35	16	53	G1/4	33.25	53	M8	M12 x 1.25
50	32	17	40	40	16	65	G1/4	31	65	M10	M16 x 1.5
63	32	17	45	45	16	75	G3/8	38.25	75	M10	M16 x 1.5
80	40	21	45	45	17	95	G3/8	38.25	95	M12	M20 x 1.5
100	40	21	55	55	17	115	G1/2	42.25	115	M12	M20 x 1.5
125	54	28	60	60	20	140	G1/2	53.85	140	M16	M27 x 2

Ø	KV	KW	Ømm f8	PL	L2	L3 ±0,5	L8	RT	SW	TG	VA -1	VD	WH
32	16	5	12	16	16.25	4.5	94 ±0.4	M6	10	32.5 ±0.5	4	5	26 ±1.4
40	18	6	16	20	18.25	4.5	105 ±0.7	M6	13	38 ±0.5	4	5	30 ±1.4
50	24	8	20	19	25	4.5	106 ±0.7	M8	17	46.5 ±0.6	4	5	37 ±1.4
63	24	8	20	24	25	4.5	121 ±0.8	M8	17	56.5 ±0.7	4	5	37 ±1.8
80	30	10	25	23.5	33	0	128 ±0.8	M10	22	72 ±0.7	4	5	46 ±1.8
100	30	10	25	25	36	0	138 ±1	M10	22	89 ±0.7	4	5	51 ±1.8
125	41	13.5	32	33	45	0	160 ±1	M12	27	110 ±1.1	6	7	65 ±2.2



Aventics ISO 15552 Air Cylinders



ISO 15552 Cylinder

Double Acting, Cushioned, Magnetic

Code X01	Ø mm	Stroke mm	Price
0822120001	32	25	101.95
0822120002	32	50	103.25
0822120003	32	80	104.80
0822120004	32	100	102.85
0822120005	32	125	107.15
0822120006	32	160	108.95
0822120007	32	200	111.05
0822120008	32	250	108.30
0822120009	32	320	109.55
0822120010	32	400	121.40
0822120011	32	500	126.55
0822121001	40	25	114.40
0822121002	40	50	116.10
0822121003	40	80	118.05
0822121004	40	100	119.40
0822121005	40	125	115.50
0822121006	40	160	123.40
0822121007	40	200	126.05
0822121008	40	250	129.40
0822121009	40	320	122.95
0822121010	40	400	139.40
0822121011	40	500	146.05
0822122001	50	25	131.40
0822122002	50	50	133.60
0822122003	50	80	136.20
0822122004	50	100	138.00
0822122005	50	125	140.20
0822122006	50	160	143.25
0822122007	50	200	146.75
0822122008	50	250	151.15
0822122009	50	320	157.25
0822122010	50	400	164.30
0822122011	50	500	173.05
0822123001	63	25	154.60
0822123002	63	50	157.15
0822123003	63	80	160.10
0822123004	63	100	162.15
0822123005	63	125	164.65
0822123006	63	160	168.15

Code X01	Ø mm	Stroke mm	Price
0822123007	63	200	160.85
0822123008	63	250	177.20
0822123009	63	320	184.25
0822123010	63	400	183.20
0822123011	63	500	202.30
0822124001	80	25	204.80
0822124002	80	50	208.25
0822124003	80	80	212.40
0822124004	80	100	215.20
0822124005	80	125	218.65
0822124006	80	160	223.50
0822124007	80	200	229.05
0822124008	80	250	235.95
0822124009	80	320	229.30
0822124010	80	400	256.70
0822124011	80	500	270.55
0822125001	100	25	286.75
0822125002	100	50	290.80
0822125003	100	80	295.60
0822125004	100	100	298.80
0822125005	100	125	302.80
0822125006	100	160	308.45
0822125007	100	200	314.85
0822125008	100	250	322.90
0822125009	100	320	334.10
0822125010	100	400	347.00
0822125011	100	500	363.05
R480140491	125	25	494.15
R480140455	125	50	479.05
R480141371	125	80	512.70
R480079499	125	100	519.45
R480140083	125	125	527.90
R480079809	125	160	539.75
R480140833	125	200	553.25
R480141106	125	250	543.50
R480140759	125	320	593.80
R480141373	125	400	620.80
R480141666	125	500	654.60

Aventics ISO15552 Cylinder Mountings & Accessories



ISO 15552 Cylinders

Foot Mounting

Code X01	For Cylinder	Price
1827001271	32	13.00
1827001272	40	13.45
1827001273	50	15.75
1827001498	63	18.05
1827001275	80	26.80
1827001276	100	30.75
1827001310	125	57.10



ISO 15552 Cylinders

Counter Support

Code X01	For Cylinder	Price
1827001283	32	18.55
1827001284	40	19.35
1827001285	50	23.10
1827020086	63	28.25
1827001287	80	35.05
1827001288	100	43.60
1827004866	125	100.20



ISO 15552 Cylinders

Flange Mounting

Code X01	For Cylinder	Price
1827001277	32	18.85
1827001278	40	19.55
1827001279	50	23.40
1827001499	63	29.30
1827001281	80	34.65
1827001282	100	41.55
1827004861	125	87.75



ISO 15552 Cylinders

90° Counter Support

Code X01	For Cylinder	Price
1825805275	32	21.40
1825805276	40	24.60
1825805277	50	28.30
1825805278	63	30.20
1825805279	80	41.95
1825805280	100	48.70
1825805281	125	76.85



ISO 15552 Cylinders

Female Hinge

Code X01	For Cylinder	Price
1827001289	32	18.55
1827001290	40	19.75
1827001291	50	24.00
1827001500	63	30.70
1827001293	80	37.25
1827001294	100	47.40
1827004862	125	97.90



ISO 15552 Cylinders

Hinge Pin

Code X01	For Cylinder	Price
1823120020	32	2.25
1823120021	40	2.45
1823120022	50	2.65
1823120023	63	4.50
1823120024	80	4.95
1823120025	100	12.40
5236000092	125	15.60

Aventics ISO 15552 Cylinder Mountings & Accessories



ISO 15552 Cylinders

Piston Rod Nut

Code X01	For Cylinder	Thread	Price
1823300020	32	M10 x 1.25	1.50
1823300021	40	M12 x 1.25	2.70
8103040314	50/63	M16 x 1.5	1.15
8103040344	80/100	M20 x 1.5	1.30
1823A00029	125	M27 x 2	5.15



ISO 15552 Cylinders

Spherical Rod Eye

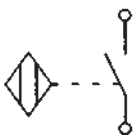
Code X01	For Cylinder	Thread	Price
1822124003	32	M10 x 1.25	23.40
1822124004	40	M12 x 1.25	29.00
1822124005	50/63	M16 x 1.5	45.25
1822124006	80/100	M20 x 1.5	57.25
1822124013	125	M27 x 2	106.00



ISO 15552 Cylinders

Fork Clevis

Code X01	For Cylinder	Thread	Price
1822122024	32	M10 x 1.25	6.00
1822122025	40	M12 x 1.25	8.55
1822122005	50/63	M16 x 1.5	15.65
1822122004	80/100	M20 x 1.5	40.50
1827001493	125	M27 x 2	76.20





ISO 15552 Cylinders

Reed Switch, with 3m Lead

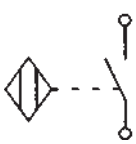
Code X01	Cable	Kg	Price
0830100629	3m, PUR	0.025	34.15

General Specifications

- Mounting: DIN 84 M1.6 x 3 straight-slotted screw-in groove for compact cylinder
- Ambient temperature: -20°C to +80°C
- Repeatability: ±0.1mm at 25°C
- Maximum shock resistance: 50g/11ms (contact dose)
- Vibration resistance: 30g (50-1000Hz)

Electrical

- Contact: 1 'n.o.' contact
- Operating voltage (AC/DC): 10 to 30V
- Load current: 0.13 A AC, 0.13 A
- Operating current switched: < 10mA (no load)
- Power: 3 W/5 VA
- Switching response time: 10 to 30V
- On: approximately 0.5ms
- Off: approximately 0.1ms
- Electrical connection: PUR cable insulation 3 x 0.14mm²
- Enclosure protection class: IP 67, fully insulated





For All Cylinders

Reed Switch, with Socket Connector

Code X01	Description	Cable	Price
0830100488	LED, 3 Wire with Plug-in Connection	0.3m, PUR	28.20
1834484166	Straight Socket Coupling with Cable, M8 x 1	3m	18.75
1834484167	Angular Socket Coupling with Cable, M8 x 1	3m	18.75

Aventics Compact Cylinders

Technical Specifications

- Ambient temperature: -25°C to +80°C
- Maximum temperature of medium: +80°C

Pneumatic

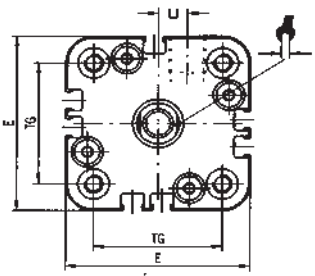
- Minimum acceptable pressure: 1 bar
- Rated pressure: 10 bar

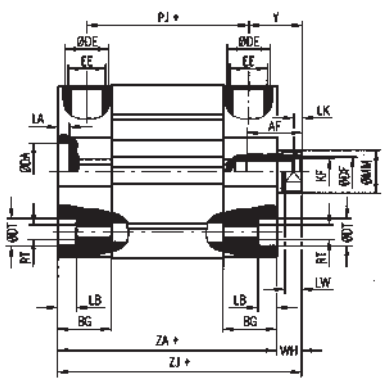
Design

- Suitable for oil-free operation
- Piston rod: stainless steel, smooth rolled
- Cylinder and cover: anodized aluminium profile
- Cover screwed to housing galvanised screws
- Proximity-type: signalling
- Seals: polyurethane
- Elastic impact cushioning on cylinder

Dimensions

Ø	AF	BG	ØDA	ØDE	ØDF	ØDT	E	EE	KF	LA	LB	LJ	LK	LW	ØMM	PJ	RT		TG	WH	Y	ZA	ZJ
20	10	12.5	12	8 +0.2	6.2	8	36	M5	M6	2.5	4.4	4.5	2.5	4	10	22	M5	8	22 ±0	6	13.5	37	43 ±1
24	10	13	12	8 +0.2	6.2	8	40	M5	M6	2.5	4.4	5.4	2.5	4	10	24	M5	8	26 ±0.4	6	13.5	39	45 ±1.4
32	12	14.5	14	15 +0.4	8.2	11	50	G1/8	M8	2.5	5.4	5.1	2.5	4.5	12	29	M6	10	32 ±0.5	7	14.5	44	51 ±1.6
40	12	14.5	14	15 +0.4	8.2	10	60	G1/8	M8	2.5	5.4	9.6	2.5	4.5	12	30	M6	10	42 ±0.5	7	14.5	45	52 ±1
50	16	14.5	18	15 +0.4	10.2	11	68	G1/8	M10	2.5	1.7	8.5	3.5	6	16	30	M8	13	50 ±0.6	8	15.5	45	53 ±1
63	16	14.5	18	15 +0.4	10.2	11	84	G1/8	M10	2.5	1.7	-17.8	3.5	6	16	34	M8	13	62 ±0.7	8	15.5	49	57 ±1
80	20	16.5	23	15 +0.4	12.2	15	103	G1/8	M12	3	0.5	-22.9	3.5	7	20	37.5	M10	16	82 ±0.7	10	18	54	64 ±2
100	24	19.5	28	15 +0.4	16.2	15	124	G1/8	M16	3	3.5	-27.4	4.5	8	25	47.5	M10	21	103 ±0.7	10	20	67	77 ±2







Compact Cylinder

Double Acting, Cushioned, Magnetic

Code X01	Ø mm	Stoke mm	Price
0822391000	20	5	61.40
0822391001	20	10	62.15
0822391002	20	15	70.00
0822391003	20	20	63.65
0822391004	20	25	64.40
0822391006	20	40	66.70
0822391007	20	50	70.00
0822392000	25	5	68.65
0822392001	25	10	69.95
0822392002	25	15	71.25
0822392003	25	20	72.60
0822392004	25	25	73.90
0822392006	25	40	77.85
0822392007	25	50	80.45
0822393000	32	5	75.20

Code X01	Ø mm	Stoke mm	Price
0822393001	32	10	77.35
0822393002	32	15	79.55
0822393003	32	20	81.75
0822393004	32	25	83.90
0822393006	32	40	90.50
0822393007	32	50	94.85
0822394001	40	10	102.30
0822394004	40	25	109.75
0822394007	40	50	122.10
0822395001	50	10	118.55
0822395004	50	25	126.95
0822395007	50	50	140.95
0822396001	63	10	145.60
0822396004	63	25	154.95
0822396007	63	50	170.50

Aventics Compact Cylinders

Technical Specifications

- Ambient temperature: -25°C to +80°C
- Maximum temperature of medium: +80°C

Pneumatic

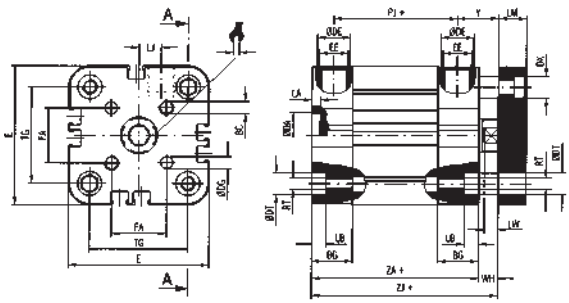
- Minimum acceptable pressure: 1 bar
- Rated pressure: 10 bar

Design

- Suitable for oil-free operation
- Piston and guide rods: stainless steel, smooth rolled
- Cylinder and cover: anodized aluminium profile
- Cover screwed to housing galvanised screws
- Proximity-type: signalling
- Seals: polyurethane
- Elastic impact cushioning on cylinder

Dimensions

Ø	BC	BG	DA	DE	DG	DT	DX	E	EE	FA	LA	LB	LE	LJ	LM	LW	PL	RT	TG	WH	Y	ZA
16	M3	12.5	10	8	3	6	6	29.5	M5	9.9	2.5	4	5	6.1	6	3.7	7.5	M4	18	4.5	12	38
20	M4	12.5	12	8	4	8	5	36	M5	12	2.5	4.4	5	4.5	8	4	7.5	M5	22	5	13.5	38
25	M5	13	12	8	5	8	6	40	M5	15.6	2.5	4.4	5	5.4	8	4	7.5	M5	26	5.5	13.5	39.5
32	M5	14,5	14	15	5	11	8	50	G1/8	19.8	2.5	5.4	8	5.1	10	4.5	7.5	M6	32	7.5	14.5	44
40	M5	14,5	14	15	5	10	8	60	G1/8	23.3	2.5	5.4	8	9.6	10	4.5	7.5	M6	42	7	14.5	45
50	M6	14,5	18	15	6	11	10	68	G1/8	29.7	2.5	1.7	8	8.5	12	6	7.5	M8	50	7.5	15.5	45.5





Compact Cylinder

Double Acting Anti-torsion, Cushioned, Magnetic

Code X01	Ø mm	Stoke mm	Price
0822391600	20	5	95.55
0822391601	20	10	96.70
0822391602	20	15	97.85
0822391603	20	20	99.00
0822391604	20	25	100.15
0822391605	20	30	101.25
0822391606	20	40	103.55
0822391607	20	50	105.85
0822392600	25	5	111.55
0822392601	25	10	113.30
0822392602	25	15	115.05
0822392603	25	20	116.80
0822392604	25	25	118.50
0822392605	25	30	120.25
0822392606	25	40	123.80
0822392607	25	50	127.25
0822393600	32	5	124.95
0822393601	32	10	127.70
0822393602	32	15	130.35
0822393603	32	20	133.10
0822393604	32	25	135.75
0822393605	32	30	138.45

Code X01	Ø mm	Stoke mm	Price
0822393606	32	40	144.45
0822393607	32	50	149.85
0822393609	32	80	165.45
0822393610	32	100	176.25
0822394601	40	10	155.65
0822394602	40	15	135.65
0822394603	40	20	161.85
0822394604	40	25	164.95
0822394605	40	30	168.00
0822394606	40	40	174.20
0822394607	40	50	180.35
0822394609	40	80	198.90
0822394610	40	100	211.25
0822395602	50	15	201.30
0822395603	50	20	205.05
0822395604	50	25	208.75
0822395605	50	30	212.45
0822395606	50	40	219.90
0822395607	50	50	227.35
0822395609	50	80	249.65
0822395610	50	100	264.50

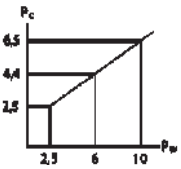
Aventics TC08 Series Pilot Valves

Technical Data

- Type: spool valve
- Working pressure: -0.9 to 10 bar (-13 to 145 psi)
- Nominal flow rate Qn at 6 bar (87 psi):
  800 Nl/min (0.8 Cv) Δp = 1 bar (15 psi)
- Ambient temperature range: 0°C to +50°C
- Medium: compressed air, lubricated or non-lubricated

Materials

- Body cover: PA 66 (polyamide 6.6)
- Seals: PU, NBR (polyurethane/nitrile butadiene rubber)
- Flange: ZnAl (zinc aluminium)



Pc: control pressure (bar)
Pw: working pressure (bar)



Model No.	Weight kg (lbs)	Min. Pressure	Min. Control Pressure
0820260002	0.097 (0.214)	3 bar	3 bar
0820260003		Vacuum	2 bar
0820261001	0.103	Vacuum	3 bar
0820261002			
0820261003			



TC08 Series Pilot Operated Valves

5/2 Pilot/Spring

Code X01	Threaded Ports	Price
0820260002	G1/8"	69.40



TC08 Series Pilot Operated Valves

5/3 Pilot/Pilot, Supply Sealed Mid Position, COE

Code X01	Threaded Ports	Price
0820261002	G1/8"	87.90



TC08 Series Pilot Operated Valves

5/2 Pilot/Pilot

Code X01	Threaded Ports	Price
0820260003	G1/8"	69.95



TC08 Series Pilot Operated Valves

5/3 Pilot/Pilot, Centre Open Pressurised Mid Position, COP

Code X01	Threaded Ports	Price
0820261003	G1/8"	87.90



TC08 Series Pilot Operated Valves

5/3 Pilot/Pilot, Fully Sealed Mid Position, APB

Code X01	Threaded Ports	Price
0820261001	G1/8"	87.90

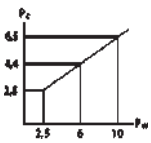
Aventics TC15 Series Pilot Valves

Technical Data

- Type: spool valve
- Working pressure: -0.9 to 10 bar (-13 to 145 psi)
- Nominal flow rate Qn at 6 bar (87 psi): 1500 Nl/min (1.5 Cv)
- Ambient temperature range: 0°C to +50°C
- Medium: compressed air, lubricated or non-lubricated

Materials

- Body cover: PA 66 (polyamide 6.6)
- Seals: HNBR, NBR (nitrile butadiene rubber)
- Flange: ZnAl (zinc aluminium)



Pc: control pressure (bar)
Pw: working pressure (bar)

Model No.	Weight kg (lbs)	Min. Pressure	Min. Control Pressure
0820260002	0.097 (0.214)	3 bar	3 bar
0820260003		Vacuum	2 bar
0820261001	0.103	Vacuum	3 bar
0820261002			
0820261003			





TC15 Series Pilot Operated Valves

5/2 Pilot/Spring

Code	X01	Threaded Ports	Price
0820258002		G1/4"	83.65



TC15 Series Pilot Operated Valves

5/3 Pilot/Pilot, Supply Sealed Mid Position, COE

Code	X01	Threaded Ports	Price
0820259002		G1/4"	112.50



TC15 Series Pilot Operated Valves

5/2 Pilot/Pilot

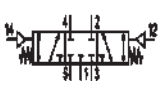
Code	X01	Threaded Ports	Price
0820258003		G1/4"	79.75



TC15 Series Pilot Operated Valves

5/3 Pilot/Pilot, Centre Open Pressurised Mid Position, COP

Code	X01	Threaded Ports	Price
0820259003		G1/4"	112.50



TC15 Series Pilot Operated Valves

5/3 Pilot/Pilot, Fully Sealed Mid Position, APB

Code	X01	Threaded Ports	Price
0820259001		G1/4"	112.50

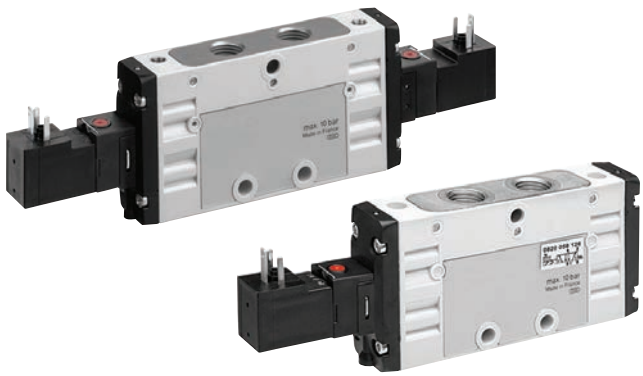
Aventics TC08 Series Solenoid Valves

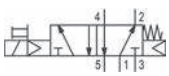
Technical Data

- Type: spool valve, zero overlap
- Ambient temperature range: -10°C to +50°C
- Medium temperature range: -10°C to +50°C
- Medium: compressed air
- Maximum particle size: 5µm
- Oil content of compressed air: 0mg/mg^3 to 5mg/m^3
- Connector standard: ISO 15217 Form C
- Operational voltage: 24V DC
- Power consumption 24 V DC (W): 2

Materials

- Housing: polyamide, fibre-glass reinforced
- Seals: acrylonitrile butadiene rubber, polyurethane
- Front plate: polyamide, fibre-glass reinforced





TC08 Series Solenoid Operated Valves

5/2 Solenoid/Spring

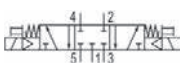
Code	X01	Flow Rate Value Qn (l/min)	Threaded Ports	Price
0820060126		800	G1/8"	73.40



TC08 Series Solenoid Operated Valves

5/2 Solenoid/Solenoid

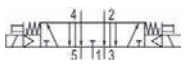
Code	X01	Flow Rate Value Qn (l/min)	Threaded Ports	Price
0820060601		800	G1/8"	111.95



TC08 Series Solenoid Operated Valves

5/3 Solenoid/Solenoid, Fully Sealed Mid Position, APB

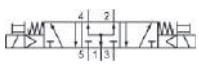
Code	X01	Flow Rate Value Qn (l/min)	Threaded Ports	Price
0820061101		800	G1/8"	138.05



TC08 Series Solenoid Operated Valves

5/3 Solenoid/Solenoid, Supply Sealed Mid Position, COE

Code	X01	Flow Rate Value Qn (l/min)	Threaded Ports	Price
0820061111		800	G1/8"	138.05



TC08 Series Solenoid Operated Valves

5/3 Solenoid/Solenoid, Centre Open Pressurised Mid Position, COP

Code	X01	Flow Rate Value Qn (l/min)	Threaded Ports	Price
0820061121		800	G1/8"	138.05

Aventics TC15 Series Solenoid Valves

Technical Data

- Type: spool valve, zero overlap
- Ambient temperature range: -10°C to +50°C
- Medium temperature range: -10°C to +50°C
- Medium: compressed air
- Maximum particle size: 5µm
- Oil content of compressed air: 0mg/mg^3 to 5mg/m^3
- Connector standard: ISO 15217
- Operational voltage: 24V DC
- Power consumption 24 V DC (W): 2

Materials

- Housing: polyamide, fibre-glass reinforced
- Seals: acrylonitrile butadiene rubber, hydrogenated nitrile butadiene rubber
- Front plate: polyamide, fibre-glass reinforced





TC15 Series Solenoid Operated Valves

5/2 Solenoid/Spring

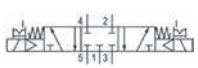
Code	X01	Flow Rate Value Qn (l/min)	Threaded Ports	Price
0820058126		1500	G1/4"	84.05



TC15 Series Solenoid Operated Valves

5/2 Solenoid/Solenoid

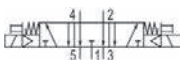
Code	X01	Flow Rate Value Qn (l/min)	Threaded Ports	Price
0820058601		1500	G1/4"	117.15



TC15 Series Solenoid Operated Valves

5/3 Solenoid/Solenoid, Fully Sealed Mid Position, APB

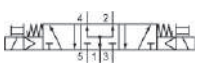
Code	X01	Flow Rate Value Qn (l/min)	Threaded Ports	Price
0820059101		1500	G1/4"	144.25



TC15 Series Solenoid Operated Valves

5/3 Solenoid/Solenoid, Supply Sealed Mid Position, COE

Code	X01	Flow Rate Value Qn (l/min)	Threaded Ports	Price
0820059111		1500	G1/4"	144.25



TC15 Series Solenoid Operated Valves

5/3 Solenoid/Solenoid, Centre Open Pressurised Mid Position, COP

Code	X01	Flow Rate Value Qn (l/min)	Threaded Ports	Price
0820059121		1500	G1/4"	144.25

Aventics CD7 Series Solenoid Valves

Technical Data

- Type: spool valve
- Medium: compressed air, lubricated or non-lubricated
- Minimum permissible pressure: 3-10 bar (44-145 psi)
- Power consumption: 24V DC = 2.14W
- Inrush power: 220/230V AC, 50/60Hz = 6.6/5.5V A
- Holding power: 220/230V AC, 50/60Hz = 4.18/3.3V A
- Insulation class: F to VDE 0580
- Protection with el. connector: IP 65 to DIN VDE 0470
- Duty cycle: ED = 100%

Materials

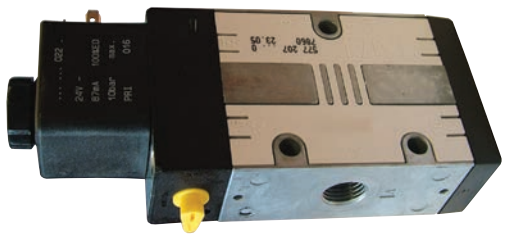
- Body: Zn-diecasting
- Seals: NBR (nitrile butadiene rubber)

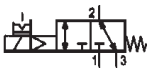
Operating Voltages, DC ±10%

- 50 Hz: AC -20% +10%
- 60 Hz: AC -10% +20%

Model No.	Nominal flow rate Qn at 6 bar (87 psi) Δp + 1 bar (15 psi)	Ambient Temperature Range	Weight Kg (lb)
577207…	1400 l/min (1.4 Cv)	-25°C to +50°C	0.54 (1.190)
577607…	1200 l/min (1.2 Cv)		0.57 (1.257)
577627…			0.75 (1.653)
577777…	900 l/min (0.9 Cv)	0°C to +50°C	0.72 (1.587)

For Socket Connector Form A (DIN 43650), see Section 4.





CD7 Series Solenoid Operated Valves

3/2 Solenoid/Spring, Fully Sealed Mid Position, APB

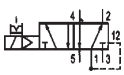
Code	X01	Threaded Ports	Price
5772075302		G1/4"	94.85



CD7 Series Solenoid Operated Valves

5/3 Solenoid/Solenoid, Fully Sealed Mid Position, APB

Code	X01	Threaded Ports	Price
5777775302		G1/4"	165.70



CD7 Series Solenoid Operated Valves

5/2 Solenoid/Spring, Fully Sealed Mid Position, APB

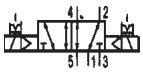
Code	X01	Threaded Ports	Price
5776075302		G1/4"	103.00



CD7 Series Solenoid Operated Valves

5/3 Solenoid/Solenoid, Supply Sealed Mid Position, COE

Code	X01	Threaded Ports	Price
5777765302		G1/4"	165.70



CD7 Series Solenoid Operated Valves

5/2 Solenoid/Solenoid, Fully Sealed Mid Position, APB

Code	X01	Threaded Ports	Price
5776275302		G1/4"	130.80



CD7 Series Solenoid Operated Valves

5/3 Solenoid/Solenoid, Centre Open Pressurised Mid Position, COP

Code	X01	Threaded Ports	Price
5777755302		G1/4"	190.85



CD7/740 Series Solenoid Coils

To Suit CD7/740 Series Valves

Code	X01	Description	Price
5420507022		24V DC, Form A	33.50
5428457022		24V AC, Form A	35.20
5428457072		110V AC, Form A	33.50
5428457082		230V AC, Form A	51.40

Aventics CD12 Series Solenoid Valves

Technical Data

- Medium: compressed air, lubricated or non-lubricated
- Minimum permissible pressure: 2-10 bar (29-145 psi)
- Power consumption: 24V DC = 2.10W
- Inrush power: 220/230V AC, 50/60Hz = 6.6/5.5V A (at 220V)
- Holding power: 220/230V AC, 50/60Hz = 4.18/3.3V A (at 220V)
- Ambient temperature range: -15°C to +50°C
- Insulation class: F to VDE 0580
- Protection with el. connector: IP 65 to DIN VDE 0470
- Duty cycle: ED = 100%

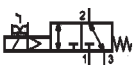
Operating Voltages, DC ±10%

- 50 Hz: 220V AC -20% +10%
- 60 Hz: 220V AC -10% +20%

For Socket Connector Form A (DIN 43650), see Section 4.

Model No.	Nominal flow rate Qn at 6 bar (87 psi) Δp = 1 bar (15 psi)	Ambient Temperature Range	Materials	Weight Kg (lb)
572455…	4100 l/min (4.1 Cv)	-25°C to +50°C	Body: Al, Seals: NBR	0.85 (1.874)
572570…			Body: Al, PAmAD6-GF 50 Seals: NBR (nitrile butadiene rubber)	1.0 (2.205)
572555…				1.2 (2.646)
572565…	3800 l/min (3.8 Cv)	0°C to +50°C		1.3 (2.866)

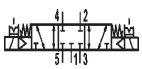




CD12 Series Solenoid Operated Valves

3/2 Solenoid/Spring, Fully Sealed Mid Position, APB

Code	X01	Threaded Ports	Price
5724555202		G1/2"	173.15



CD12 Series Solenoid Operated Valves

5/3 Solenoid/Solenoid, Fully Sealed Mid Position, APB

Code	X01	Threaded Ports	Price
5725655202		G1/2"	349.20



CD12 Series Solenoid Operated Valves

5/2 Solenoid/Spring, Fully Sealed Mid Position, APB

Code	X01	Threaded Ports	Price
5725475202		G1/2"	225.90



CD12 Series Solenoid Operated Valves

5/2 Solenoid/Solenoid, Fully Sealed Mid Position, APB

Code	X01	Threaded Ports	Price
5725555202		G1/2"	269.05



Solenoid Coils

To Suit CD12 Series Valves

Code	X01	Description	Price
5420897022		24V DC, Form A	29.20
5428117022		24V AC, Form A	34.95
5428117072		110V AC, Form A	30.80
5428117082		230V AC, Form A	29.75

Aventics 740 & 840 Series Solenoid Valves

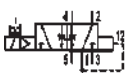
Technical Data

- Working pressure range: 1.5-10 bar (22-145 psi)
- Nominal flow rate Qn at 6 bar (87 psi) Δp + 1 bar (15 psi): 950 l/min (0.7 Cv) for plastic tube 8 x 1, 10 x 1 Ø
- Ambient temperature range: -15°C to +50°C
- Medium: compressed air, lubricated or non-lubricated
- Weight: 0.31kg (0.683 lbs)

Materials

- Body: POM
- Seals: NBR

For Socket Connector Form A (DIN 43650), see Section 4.





Series 740 Solenoid Valves

5/2 Solenoid/Spring

Code X01	Tube Size mm	Price
5727405302	8 x 1	95.50
5727455302	10 x 1	101.60



Series 740 Solenoid Valves

5/2 Solenoid/Solenoid

Code X01	Tube Size mm	Price
5727415302	8 x 1	139.75
5727465302	10 x 1	139.75



CD7/740 Series Solenoid Coils

To Suit CD7/740 Series Valves

Code X01	Description	Price
5420507022	24V DC, Form A	33.50
5428457022	24V AC, Form A	35.20
5428457072	110V AC, Form A	33.50
5428457082	230V AC, Form A	51.40

Technical Data

- Working pressure range: 1.5-10 bar (22-145 psi)
- Nominal flow rate Qn at 6 bar (87 psi) Δp + 1 bar (15 psi): 200 l/min (0.2 Cv)
- Medium: compressed air, lubricated or non-lubricated
- Weight: 0.073 kg (0.161 lbs)

Ambient Temperature Range

- -15°C to +50°C (at max. 8 bar) (at max. 145 psi)
- -15°C to +40°C (at max. 10 bar) (at max. 145 psi)

Materials

- Body: POM
- Seals: NBR/PU

For Socket Connector Form A (DIN 43650), see Section 4.





Series 840, 6 x 1mm Diameter Solenoid Valves

5/2 Solenoid/Spring

Code X01	Voltage & Frequency	Price
5728400420	24V DC	79.35
5728405420	24V AC	84.60
5728405470	110V AC	84.60
5728405480	220/230V AC	79.40



Series 840, 6 x 1mm Diameter Solenoid Valves

5/2 Solenoid/Solenoid

Code X01	Voltage & Frequency	Price
5728410420	24V DC	114.70
5728415420	24V AC	114.15
5728415470	110V AC	123.75
5728415480	220/230V AC	114.70

Aventics Modular FRL Series

Technical Data

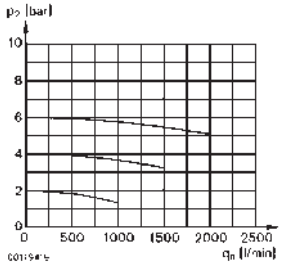
- Ambient temperature: -10°C to +50°C (with dried air)
- Medium: compressed air
- Installation position: vertical
- Filter porosity: 5µm

Materials

- Body: PA MXD 6
- Thread bushing = die-cast zinc
- Reservoir: polycarbonate with bayonet catch
- Protective guard: PA
- Cover: ABS

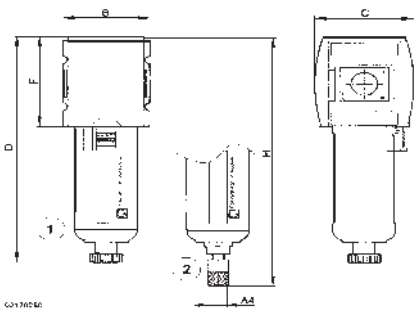
Drain Type with Options

- 1) PC container with PA protective guard semi-automatic, without pressure: open
- 2) PC container with PA protective guard fully automatic, without pressure: open

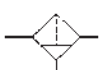


p_1 = Supply pressure; p_2 = Secondary pressure; q_n = Nominal flow

	A4	B	C	D	F	H
AS1	G1/8"	43	54	131.7	52	167.5
AS2	G1/8"	52	59	163.5	65	180.5
AS3	G1/8"	63	74	189.5	80	206
AS5	G1/8"	85	103	250	109	266



1) Semi-automatic condensate drain
2) Fully automatic condensate drain





Standard Filter

5 Micron

	Code X01	Threaded Ports	Drain Type	Nominal Flow Qn (l/min)	Inlet Pressure (bar)	Weight Kg	Price
AS1	**R412014600**	G1/4"	1	1000	1.5 - 12	0.166	**23.05**
	R412014602	G1/4"	2	1000	1.5 - 12	0.184	**78.50**
AS2	**R412006000**	G1/4"	1	2100	1.5 - 16	0.212	**38.20**
	R412006001	G1/4"	2	2100	1.5 - 16	0.255	**83.70**
	R412006009	G3/8"	1	2100	1.5 - 16	0.212	**38.20**
	R412006010	G3/8"	2	2100	1.5 - 16	0.255	**83.70**
AS3	**R412007000**	G3/8"	1	3500	1.5 - 16	0.361	**52.90**
	R412007001	G3/8"	2	3500	1.5 - 16	0.410	**90.00**
	R412007009	G1/2"	1	3500	1.5 - 16	0.361	**52.90**
	R412007010	G1/2"	2	3500	1.5 - 16	0.410	**90.00**
AS5	**R412009000**	G3/4"	1	7800	1.5 - 16	0.718	**171.95**
	R412009001	G3/4"	2	7800	1.5 - 16	0.769	**208.60**
	R412009009	G1"	1	7800	1.5 - 16	0.769	**171.95**
	R412009010	G1"	2	7800	1.5 - 16	0.769	**208.60**

Aventics Modular FRL Series

Technical Data

- Temperature range: -10°C to +50°C
- Inlet pressure: 1.5-16 bar
- Medium: compressed air
- Installation position: vertical
- Filter porosity: 0.3µm
- Reservoir capacity: 12cm³ (with semi-automatic)

Materials

- Body: PA MXD 6
- Thread bushing: die-cast zinc
- Reservoir: polycarbonate with bayonet catch
- Protective guard: PA
- Cover: ABS

Drain Type with Options

- 1) PC container with PA protective guard semi-automatic, without pressure: open
- 2) PC container with PA protective guard fully automatic, without pressure: open

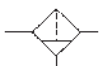




Pre-filter

0.3 Micron

	Code X01	Threaded Ports	Drain Type	Nominal Flow Qn (l/min)	Weight Kg	Price
AS2	R412006018	G1/4"	1	400	0.220	101.15
	R412006019	G1/4"	2	400	0.263	146.45
	R412006027	G3/8"	1	400	0.263	101.15
	R412006028	G3/8"	2	400	0.263	146.45
AS3	R412007018	G3/8"	1	900	0.361	123.75
	R412007019	G3/8"	2	900	0.410	160.80
	R412007027	G1/2"	1	900	0.361	123.75
	R412007028	G1/2"	2	900	0.410	160.80



Micro-filter

0.01 Micron

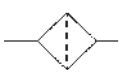
	Code X01	Threaded Ports	Drain Type	Nominal Flow Qn (l/min)	Weight Kg	Price
AS2	R412006036	G1/4"	1	350	0.220	91.55
	R412006037	G1/4"	2	350	0.263	154.65
	R412006045	G3/8"	1	350	0.220	109.35
	R412006046	G3/8"	2	350	0.263	154.65
AS3	R412007036	G3/8"	1	700	0.361	126.95
	R412007037	G3/8"	2	700	0.410	163.90
	R412007045	G1/2"	1	700	0.361	126.95
	R412007046	G1/2"	2	700	0.410	163.90

Technical Data

- Ambient temperature: -10°C to +50°C (with dried air)
- Inlet pressure: 1.5-16 bar
- Medium: compressed air
- Installation position: vertical
- Reservoir capacity: 12cm³

Materials

- Body: PA MXD 6
- Thread bushing: die-cast zinc
- Reservoir: polycarbonate with bayonet catch
- Protective guard: PA
- Cover: ABS



Active Carbon Filter for Oil Removal

0.005 Micron

	Code X01	Threaded Ports	Nominal Flow Qn (l/min)	Weight Kg	Price
AS2	R412006072	G1/4"	650	0.220	120.15
	R412006075	G3/8"	650	0.220	120.15
AS3	R412007072	G3/8"	1000	0.375	137.95
	R412007075	G1/2"	1000	0.375	137.95



Aventics Modular FRL Series

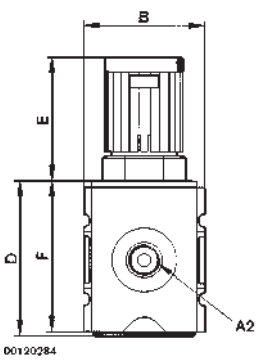
Technical Data

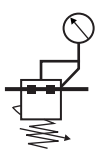
- Maximum supply pressure: 16 bar (232 psi)
- Temperature range: -10°C to +50°C
- Medium: compressed air
- Installation position: any

Materials

- Body: PA MXD 6
- Thread bushing: die-cast zinc

	A4	B	C	D	E	F
AS1	G1/4	43	63.5	52	40.80	–
AS2	G1/4	52	59	66.8	53.2	65
	G3/8	52	59	66.8	53.2	65
AS3	G3/8	63	74	82	63.5	80
	G1/2	63	74	82	63.5	80
AS5	G3/4	85	103	112	75	109
	G1	85	103	112	75	109









Pressure Regulator

Relieving

	Code X01	Threaded Ports	Nominal Flow Qn (l/min)	Adjustment Range bar	Weight Kg	Price
AS1	R412014627	G1/4"	1000	0.2-4	0.209	36.00
	R412014628	G1/4"	1000	0.5-8	0.209	36.00
	R412014629	G1/4"	1000	0.5-10	0.209	36.00
AS2	R412006101	G1/4"	2200	0.1-1	0.320	53.30
	R412006103	G1/4"	2200	0.1-2	0.320	53.30
	R412006105	G1/4"	2200	0.2-4	0.320	53.30
	R412006107	G1/4"	2200	0.5-8	0.320	53.30
	R412006109	G1/4"	2200	0.5-10	0.320	53.30
	R412006111	G1/4"	2200	0.5-16	0.320	53.30
	R412006113	G3/8"	2700	0.1-1	0.320	53.30
	R412006115	G3/8"	2700	0.1-2	0.320	53.30
	R412006117	G3/8"	2700	0.2-4	0.320	53.30
	R412006119	G3/8"	2700	0.5-8	0.320	53.30
	R412006121	G3/8"	2700	0.5-10	0.320	53.30
	R412006123	G3/8"	2700	0.5-16	0.320	53.30
AS3	R412007101	G3/8"	1600	0.1-1	0.600	73.15
	R412007103	G3/8"	4600	0.2-2	0.600	73.15
	R412007105	G3/8"	5000	0.2-4	0.600	73.15
	R412007107	G3/8"	4300	0.5-8	0.600	73.15
	R412007109	G3/8"	4300	0.5-10	0.600	73.15
	R412007111	G3/8"	3500	0.5-6	0.600	73.15
	R412007113	G1/2"	1600	0.1-1	0.600	73.15
	R412007115	G1/2"	4600	0.1-2	0.600	73.15
	R412007117	G1/2"	5000	0.2-4	0.600	73.15
	R412007119	G1/2"	5200	0.5-8	0.600	73.15
	R412007121	G1/2"	5200	0.5-10	0.600	73.15
	R412007123	G1/2"	4000	0.5-16	0.600	73.15
AS5	R412009101	G3/4"	14500	0.1-1	0.997	168.55
	R412009103	G3/4"	14500	0.1-2	0.997	168.55
	R412009105	G3/4"	14500	0.2-4	0.997	168.55
	R412009107	G3/4"	14500	0.5-8	0.997	168.55
	R412009109	G3/4"	14500	0.5-10	0.997	168.55
	R412009111	G3/4"	14500	0.5-16	0.997	141.10
	R412009113	G1"	14500	0.1-1	0.997	168.55
	R412009115	G1"	14500	0.1-2	0.997	168.55
	R412009117	G1"	14500	0.2-4	0.997	168.55
	R412009119	G1"	14500	0.5-8	0.997	168.55
	R412009121	G1"	14500	0.5-10	0.997	168.55
	R412009123	G1"	14500	0.5-16	0.997	168.55

Aventics Modular FRL Series

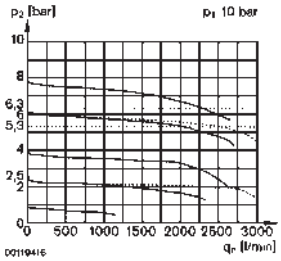
Technical Data

- Maximum supply pressure: 16 bar (232 psi)
- Temperature range: -10°C to +50°C
- Medium: compressed air
- Installation position: any

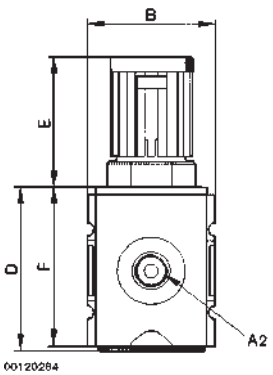
Materials

- Body: PA MXD 6
- Thread bushing: die-cast zinc

	A4	B	C	D	E	F
AS2	G1/4	52	59	66.8	53.2	65
	G3/8	52	59	66.8	53.2	65
AS3	G3/8	63	74	82	63.5	80
	G1/2	63	74	82	63.5	80



p_1 = Supply pressure;
p_2 = Secondary pressure;
q_n = Nominal flow







Precision Pressure Regulator

Relieving

	Code X01	Threaded Ports	Nominal Flow Qn (l/min)	Adjustment Range bar	Weight Kg	Price
AS2	R412006137	G1/4"	2200	0.1-1	0.320	87.05
	R412006139	G1/4"	2200	0.1-2	0.320	87.05
	R412006141	G1/4"	2200	0.2-4	0.320	87.05
	R412006143	G1/4"	2200	0.5-8	0.320	87.05
	R412006145	G1/4"	2200	0.5-10	0.320	87.05
	R412006149	G3/8"	2700	0.1-1	0.320	87.05
	R412006151	G3/8"	2700	0.1-2	0.320	87.05
	R412006153	G3/8"	2700	0.2-4	0.320	87.05
	R412006155	G3/8"	2700	0.5-8	0.320	87.05
	R412006157	G3/8"	2700	0.5-10	0.320	87.05

	Code X01	Threaded Ports	Nominal Flow Qn (l/min)	Adjustment Range bar	Weight Kg	Price
AS3	R412007137	G3/8"	1600	0.1-1	0.600	115.20
	R412007139	G3/8"	4600	0.1-2	0.600	115.20
	R412007141	G3/8"	5000	0.2-4	0.600	115.20
	R412007143	G3/8"	4300	0.5-8	0.600	115.20
	R412007145	G3/8"	4300	0.5-10	0.600	115.20
	R412007149	G1/2"	1600	0.1-1	0.600	115.20
	R412007151	G1/2"	4600	0.1-2	0.600	115.20
	R412007153	G1/2"	5000	0.2-4	0.600	115.20
	R412007155	G1/2"	5200	0.5-8	0.600	115.20
	R412007157	G1/2"	5200	0.5-10	0.600	115.20

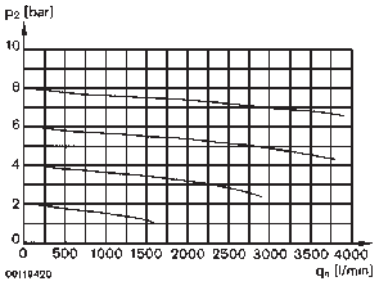
Aventics Modular FRL Series

Technical Data

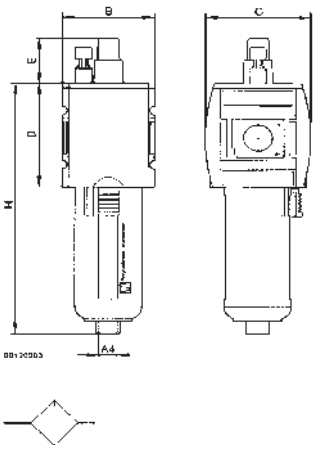
- Temperature range: -10°C to +50°C
- Installation position: vertical
- Reservoir capacity: 40cm^3

Materials

- Body: PA MXD 6
- Thread bushing: die-cast zinc
- Reservoir: polycarbonate with bayonet catch
- Protective guard: PA
- Seal: ABS



p_1 = Supply pressure; p_2 = Secondary pressure; q_n = Nominal flow



	A4	B	C	D	E	H
AS1	G1/4	43	54	52	31	124.7
AS2	G1/4	52	59	65	28.2	157
	G3/8	52	59	65	28.2	157
AS3	G3/8	63	74	80	26	183
	G1/2	63	74	80	26	183
AS5	G3/4	85	103	109	29	239
	G1	85	103	109	29	239



Standard Lubricator

Oil Mist

	Code X01	Threaded Ports	Nominal Flow Qn (l/min)	Inlet Pressure bar	Weight Kg	Price
AS1	R412014624	G1/4"	1400	0.8-12	0.187	30.50
AS2	R412006225	G1/4"	2800	0.5-16	0.229	43.70
	R412006231	G3/8"	3100	0.5-16	0.229	43.70
AS3	R412007225	G3/8"	8000	0.5-16	0.343	60.85
	R412007231	G1/2"	8000	0.5-16	0.343	62.50
AS5	R412009225	G3/4"	15800	0.5-16	0.760	174.40
	R412009231	G1"	15800	0.5-16	0.760	178.40

Aventics Modular FRL Series

Technical Data

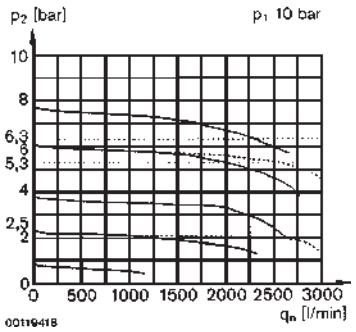
- Ambient temperature: -10°C to +50°C (with dried air)
- Max supply pressure: 16 bar
- Medium: compressed air
- Installation position: vertical
- Reservoir capacity: 28cm³
- Filter porosity: 5µm

Materials

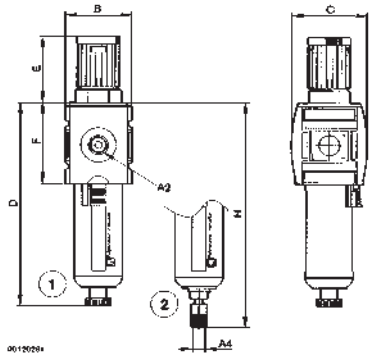
- Body: PA MXD 6
- Thread bushing: die-cast zinc
- Reservoir: polycarbonate with bayonet catch
- Protective guard: PA
- Cover: ABS

Drain Type with Options

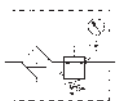
- 1) PC container with PA protective guard semi-automatic, without pressure: open
- 2) PC container with PA protective guard fully automatic, without pressure: open



	A2	A4	B	C	D	E	F	H
AS1	–	G1/8	43	63.5	131.7	35.8	52	167.5
AS2	G1/4	G1/8	52	59	163.5	53.2	65	180.5
AS3	G1/4	G1/8	63	74	189.5	63.5	80	206
AS5	G1/4	G1/8	63	103	250	75	109	266



1) Semi-automatic condensate drain
2) Fully automatic condensate drain





AS1



Unit Supplied With Gauge

Filter Regulator

Relieving

	Code X01	Threaded Ports	Drain Type	Nominal Flow Qn (l/min)	Adjustment Range bar	Weight Kg	Price
AS1	R412014645	G1/4"	1	1000	0.5-8	0.241	52.50
	R412014646	G1/4"	2	1000	0.5-8	0.259	97.20
	R412014655	G1/4"	1	1000	0.5-10	0.241	52.50
	R412014656	G1/4"	2	1000	0.5-10	0.259	97.20
AS2	R412006200	G1/4"	1	2100	0.5-8	0.394	81.00
	R412006201	G1/4"	2	2100	0.5-8	0.437	124.50
	R412006209	G3/8"	1	2600	0.5-8	0.437	79.20
	R412006210	G3/8"	2	2600	0.5-8	0.437	124.50
AS3	R412007200	G3/8"	1	5100	0.5-8	0.658	97.75
	R412007201	G3/8"	2	5100	0.5-8	0.707	134.85
	R412007209	G1/2"	1	5100	0.5-8	0.658	99.95
	R412007210	G1/2"	2	5100	0.5-8	0.707	137.95
AS5	R412009200	G3/4"	1	14000	0.5-8	1.082	244.20
	R412009201	G3/4"	2	14000	0.5-8	1.133	280.80
	R412009209	G1"	1	14000	0.5-8	1.082	244.20
	R412009210	G1"	2	14000	0.5-8	1.133	280.80

Aventics Modular FRL Series

Technical Data

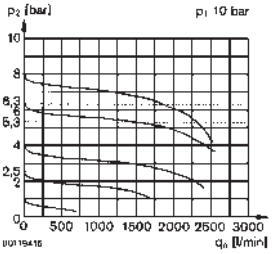
- Max supply pressure: 16 bar
- Temperature range: -10°C to +50°C (with dried air)
- Medium: compressed air
- Installation position: vertical
- Filter porosity: 5µm

Materials

- Body = PA MXD 6
- Thread bushing: die-cast zinc
- Reservoir: polycarbonate with bayonet catch
- Protective guard: PA
- Cover: ABS

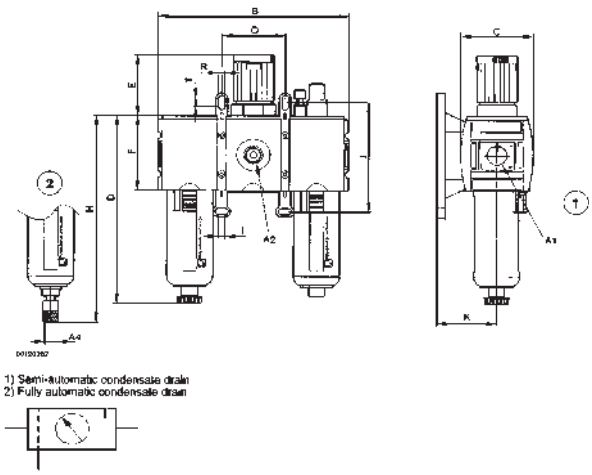
Drain Type with Options

- 1) PC container with PA protective guard semi-automatic, without pressure: open
- 2) PC container with PA protective guard fully automatic, without pressure: open



p_1 = Supply pressure; p_2 = Secondary pressure;
q_n = Nominal flow; $q_{n\,min.}$ = Min. nominal flow

	A2	A4	B	C	D	E	F	H	J	K	O	R	T
AS1	–	G1/8	129	63.5	131.7	35.8	52	159.5	–	–	–	–	–
AS2	G1/4	G1/8	156	59	163.5	53.2	65	180.5	95	49.4	52	5.4	7.3
AS3	G1/4	G1/8	189	74	189.5	63.5	80	206	104	71	63	64	8
AS4	G1/4	G1/8	255	103	250	75	109	266	140	86.5	85	8.5	10





AS1



Unit Supplied With Gauge

Filter, Regulator & Lubricator

Relieving

	Code X01	Threaded Ports	Drain Type	Nominal Flow Qn (l/min)	Adjustment Range bar	Weight Kg	Price
AS1	**R412014675**	G1/4"	1	480	0.5-8	0.628	**98.30**
	R412014676	G1/4"	2	480	0.5-8	0.646	**118.90**
AS2	**R412006318**	G1/4"	1	1400	0.5-8	0.780	**143.05**
	R412006319	G1/4"	2	1400	0.5-8	0.825	**188.20**
	R412006327	G3/8"	1	1600	0.5-8	0.780	**143.05**
	R412006328	G3/8"	2	1600	0.5-8	0.825	**188.20**
AS3	**R412007318**	G3/8"	1	3500	0.5-8	1.353	**208.15**
	R412007319	G3/8"	2	3500	0.5-8	1.402	**245.10**
	R412007327	G1/2"	1	3500	0.5-8	1.353	**208.15**
	R412007328	G1/2"	2	3500	0.5-8	1.402	**245.10**
AS5	**R412009318**	G3/4"	1	12300	0.5-8	2.627	**524.20**
	R412009319	G3/4"	2	12300	0.5-8	2.678	**560.85**
	R412009327	G1"	1	12300	0.5-8	2.627	**524.20**
	R412009328	G1"	2	12300	0.5-8	2.678	**560.85**

Aventics Modular FRL Series

Technical Data

- Max supply pressure: 16 bar
- Temperature range: -10°C to +50°C (with dried air)
- Medium: compressed air
- Installation position: vertical
- Filter porosity: 5µm

Reservoir Capacity

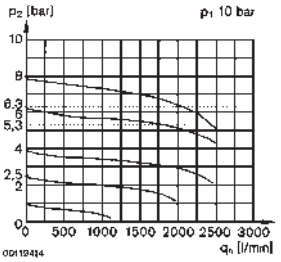
- Filter: 28 cm^3 (0.95 US fl oz)
- Lubricator: 40cm^3 (1.69 US fl oz)

Materials

- Body: PA MXD 6
- Thread bushing: die-cast zinc
- Reservoir: polycarbonate with bayonet catch
- Protective guard: PA
- Cover: ABS

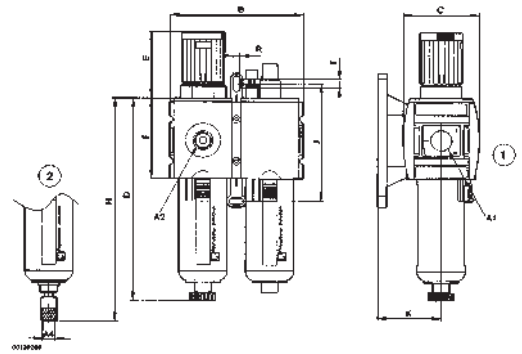
Drain Type with Options

- 1) PC container with PA protective guard semi-automatic, without pressure: open
- 2) PC container with PA protective guard fully automatic, without pressure: open

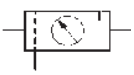


p_1 = Supply pressure; p_2 = Secondary pressure; q_n = Nominal flow; $q_{n\,min}$ = Min. nominal flow

	A2	A4	B	C	D	E	F	H	J	K	R	T
AS1	–	G1/8	86	163.5	131.7	35.3	52	159.5	–	–	–	–
AS2	G1/4	G1/8	104	59	163.5	53.2	65	180.5	95	49.4	5.4	7.3
AS3	G1/4	G1/8	126	74	189.5	63.5	80	206	104	71	6.4	8
AS4	G1/4	G1/8	170	103	250	75	109	266	140	86.5	8.5	10



1) Semi-automatic condensate drain
2) Fully automatic condensate drain





AS1



Unit Supplied With Gauge

Filter Regulator & Lubricator

Relieving

	Code X01	Threaded Ports	Drain Type	Nominal Flow Qn (l/min)	Adjustment Range bar	Weight Kg	Price
AS1	**R412014672**	G1/4"	1	700	0.5-8	0.504	**87.45**
	R412014673	G1/4"	2	700	0.5-8	0.522	**131.30**
AS2	**R412006298**	G1/4"	1	1800	0.5-8	0.633	**124.95**
	R412006299	G1/4"	2	1800	0.5-8	0.676	**170.25**
	R412006307	G3/8"	1	2000	0.5-8	0.633	**124.95**
	R412006308	G3/8"	2	2000	0.5-8	0.676	**170.25**
AS3	**R412007298**	G3/8"	1	3500	0.5-8	1.018	**169.05**
	R412007299	G3/8"	2	3500	0.5-8	1.067	**206.00**
	R412007307	G1/2"	1	3500	0.5-8	1.018	**169.05**
	R412007308	G1/2"	2	3500	0.5-8	1.067	**206.00**
AS5	**R412009298**	G3/4"	1	12300	0.5-8	1.827	**423.25**
	R412009299	G3/4"	2	12300	0.5-8	1.878	**459.90**
	R412009307	G1"	1	12300	0.5-8	1.827	**423.25**
	R412009308	G1"	2	12300	0.5-8	1.878	**459.90**

Aventics Modular FRL Series Accessories

Automatic Drain

To Suit AS2 & AS3 Models



Code X01	Description	Price
1827009352	Fully Automatic	77.00



Mounting Clip

Wall

	Code X01	Description	Price
AS1	R412014757	For All Units	4.40
AS2	R412006370	For All Units	6.70
AS3	R412007370	For All Units	7.85
AS5	R412009370	For All Units	8.30



Mounting Plate

Wall

	Code X01	Description	Price
AS1	R412014755	For All Units	6.10
AS2	R412006368	For All Units	7.20
AS3	R412007368	For All Units	9.80
AS5	R412009368	For All Units	14.90



Block Assembly Clip

Modular

	Code X01	Description	Price
AS1	R412014758	For All Units	2.50
AS2	R412006371	For All Units	3.75
AS3	R412007371	For All Units	5.20
AS5	R412009371	For All Units	7.35

Technical Specifications

- Type: bourdon tube pressure gauge
- Housing: plastic
- Maximum ambient temperature: +50°C bar
- Maximum temperature of medium: +50°C bar

Scales

- bar: green
- psi: white
- Background: black
- Pointer: white



Pressure Gauge, Back Entry

BSP, ABS Case

Code X01	Ø mm	Connection Thread	Scale Range bar	Price
1827231048	40	G1/8"	0-2.5	11.70
1827231018	40	G1/8"	0-6	14.80
1827231024	40	G1/8"	0-10	14.80
1827231009	40	G1/8"	0-16	11.90
1827231059	40	G1/4"	0-6	14.80
1827231060	40	G1/4"	0-10	14.80
1827231047	40	G1/4"	0-16	14.80
1827231023	50	G1/4"	0-1.6	14.80
1827231012	50	G1/4"	0-2.5	14.80
1827231016	50	G1/4"	0-6	14.80
1827231015	50	G1/4"	0-10	14.80
1827231010	50	G1/4"	0-16	14.80
1827231011	63	G1/4"	0-16	12.15

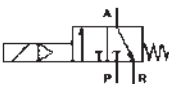
Aventics Modular FRL Series, Valves

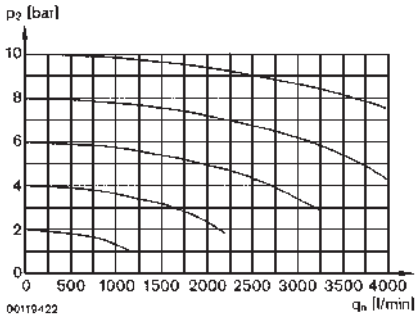
Technical Data

- Working pressure: 0 to 10 bar
- Ambient temperature: -10°C to +50°C
- Medium: compressed air
- Pickup power with AC 50 Hz: 2.2V A
- Holding power with AC 50 Hz: 1.6V A
- Power consumption with DC: 2W
- Relative switch-on duration: 100%
- Protection class (DIN 40 050) with electrical connector: IP 65
- Installation position: any

Materials

- Body: PA MXD 6
- Thread bushing: die-cast zinc
- Cover: ABS





p2 = secondary pressure
qn = nominal flow



3/2 Solenoid Valve

BSP

	Code X01	Threaded Ports	Nominal Flow Qn (l/min)	Voltage	Weight Kg	Price
AS1	R412014666	G1/4"	2000	24 VDC	0.215	108.95
	R412014668	G1/4"	2000	230V AC	0.214	122.15
AS2	R412006265	G1/4"	1800	24 VDC	0.219	124.50
	R412006266	G1/4"	1800	110V AC	0.219	124.50
	R412006267	G1/4"	1800	230V AC	0.219	124.50
	R412006269	G3/8"	2000	24 VDC	0.219	124.50
	R412006270	G3/8"	2000	110V AC	0.219	124.50
AS3	R412006271	G3/8"	2000	230V AC	0.219	124.50
	R412007265	G3/8"	4500	24 VDC	0.459	135.45
	R412007266	G3/8"	4500	110V AC 50	0.459	148.30
	R412007267	G3/8"	4500	230V DV 50	0.459	148.30
	R412007269	G1/2"	4500	24 VDC	0.459	138.55
	R412007270	G1/2"	4500	110V AC 50	0.459	148.30
	R412007271	G1/2"	4500	230V DV 50	0.459	148.30

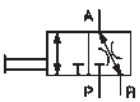
Aventics Modular FRL Series, Valves

Technical Data

- Ambient temperature: -10°C to +50°C
- Medium: compressed air
- Installation position: any

Materials

- Body: PA MXD 6
- Thread bushing: die-cast zinc
- Cover: ABS





3/2 Way Shut-off Valve

BSP

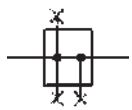
	Code X01	Threaded Ports	Nominal Flow Qn (l/min)	Weight Kg	Price
AS1	R412014664	G1/4"	2600	0.15	30.80
AS2	R412006260	G1/4"	3000	0.206	37.00
	R412006261	G3/8"	3000	0.206	36.85
AS3	R412007260	G3/8"	4500	0.446	61.75
	R412007261	G1/2"	4500	0.446	61.75
AS4	R412009260	G3/4"	14500	0.825	165.65
	R412009261	G1"	14500	0.825	165.65

Technical Data

- Medium: compressed air
- Installation position: any

Materials

- Body: PA MXD 6
- Thread bushing: die-cast zinc
- Cover: ABS





Distributor Block

BSP

	Code X01	Threaded Ports	Weight Kg	Price
AS1	R412014662	G1/4"	0.148	21.30
AS2	R412006250	G1/4"	0.250	27.55
	R412006251	G3/8"	0.250	27.55
AS3	R412007250	G3/8"	0.250	31.10
	R412007251	G1/2"	0.250	31.10
AS4	R412009250	G3/4"	0.648	113.70
	R412009251	G1"	0.648	113.70

Vacuum





142-148 Suction Cups, Single Bellows



150 Suction Cups, Direct Fitting Bellows



152-155 Suction Cups, Long Multi Bellows



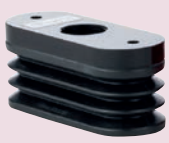
157-158 Suction Cups, Double Bellows



160 Suction Cups, Bellows & Cross Groove



161 Suction Cups, Dual Lip Structure



162 Suction Cups, Long Multi Bellows & Oval Type



164-173 Suction Cups, Oval Universal & Universal



175-176 Suction Cups, Mark-free, Flat Structure



178-183 Suction Cups, Deep



185-187 Suction Cups, Flat & Curve



189-193 Suction Cups, Flat



195 Suction Cups, Flat Dual Lip Structure



200-201 Suction Cups, Fittings



207-220 Vacuum Pumps & Magic Grippers

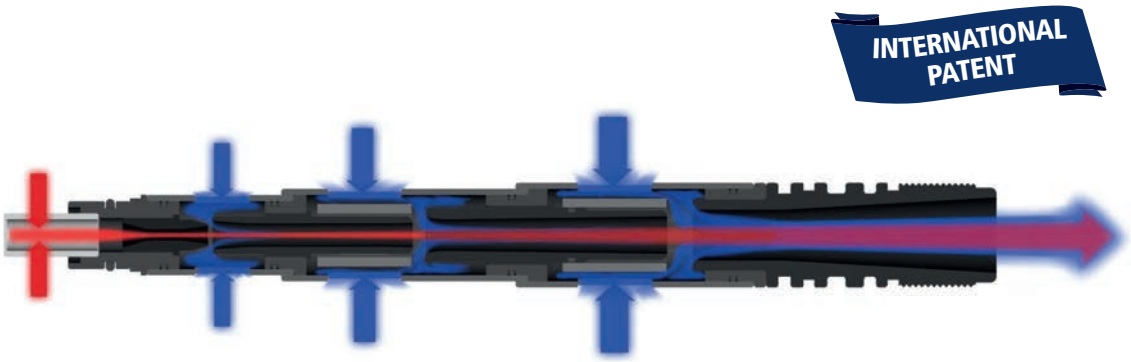


222-224 Filters & Filter Elements

Introducing To You
The World's Best Vacuum Products



VMECA Vacuum Principle



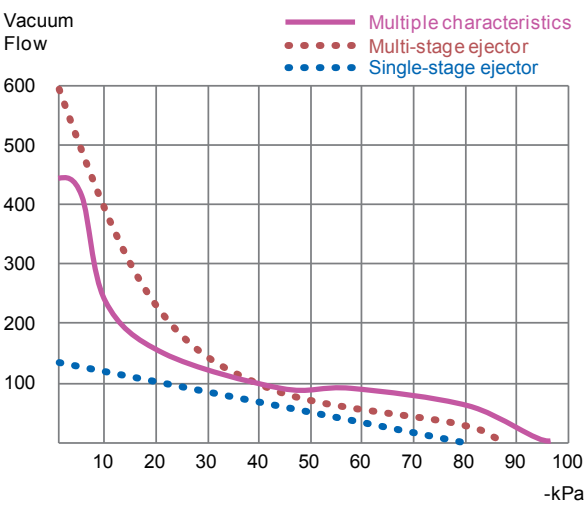
Vacuum is created with an air jet system when compressed air (1.7 to 6 bar) passes at high speed through the pump nozzles.

VMECA vacuum cartridge is a new and innovative multi-stage vacuum pump.

It is extremely compact in size and very light weight.

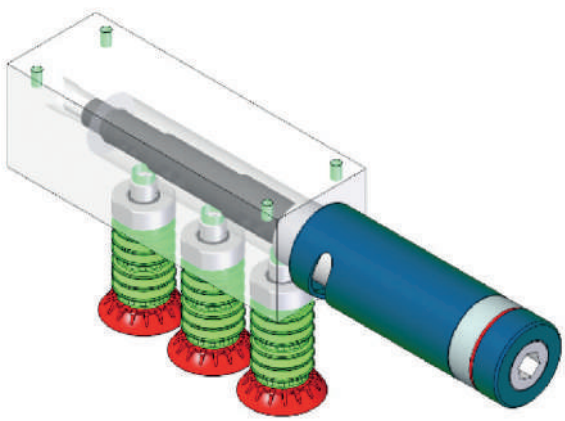
It is 'engineering and design friendly' making it easy to create a vacuum pump and system for a specific application or machine.

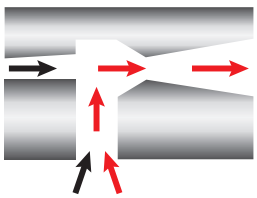
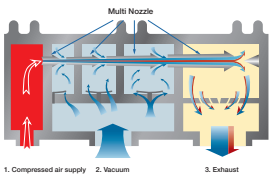
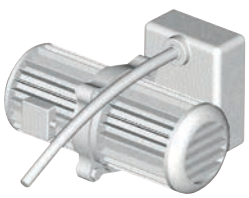
The VMECA vacuum cartridge provides a high vacuum flow rate (3 times higher) and an extremely quick response time (about 1.5 times faster) compared to typical and conventional ejectors.



The VMECA vacuum cartridge operates using compressed air at a pressure of 1.7 to 6 bar and maintains vacuum despite fluctuations and drops in air pressure.

The VMECA vacuum cartridge design allows the pump to be located near or at the point of use reducing system volume, increasing speed and reducing cycle time. Reduced system volume means fewer connections, fewer potential leaks, and less air to evacuate, allowing for an incrementally smaller pump using less compressed air.



Specification			Advantages	Disadvantages
	Compressed air driven pumps	Single stage	Low-priced Compact size and light weight No heat emission	Low vacuum flow High energy consumption Weak from dust
		Multi stage	Good efficiency Low air consumption High vacuum flow Compact size and light weight No heat emission	
		Multi stage VMECA cartridge	Excellent efficiency Low air consumption Reliable in fluctuation or drop of compressed air pressure Compact size and light weight No heat emission Low noise level Easy to clean and maintenance Strong in chemical environment Long life span	
	Electronic motor pumps	Rotary vane pump	High vacuum or high flow	Frequent service required High cost for maintenance Heat emission Big size and heavy weight High noise level Weak from dust and chemical environment

VMECA Vacuum Principle

1. Pressure Conversion Table

	Pa(N/m²)	bar	Kg/cm²	Torr	psi(lbf/in²)	kPa	inHg
1 Pa	1	0.00001	10.1972x10X10-5	75.0062X10-3	0.145038X10-3	0.001	0.3X10-3
1 kPa	1000	0.1	10.1972X10-3	7.50062	0.145038	1	0.3
1 bar	100000	1	1.01972	750.062	14.5038	100	30
1 kg/cm²	98066.5	0.980665	1	735.559	14.2233	98.0665	29.42
1 Torr	133.322	1.33322X10-3	1.35951X10-3	1	19.3368X10-3	0.133322	0.04
1 Psi	6894.76	68.9476XX10-3	70.3069X10-3	51.7149	1	6.89476	2.07

1 Torr = 1mmHg(0 °C) 1mm column of water = 9.81 Pa

2. Vacuum Comparison Table (Pressure Below Atmospheric)

	mbar	kPa	-kPa	%vacuum	Torr	-mmHg	-inHg
Values at sea level	1013	101.3	0	0	760	0	0
	913	913.3	10	9.9	685	75	3
	813	81.3	20	19.7	610	150	6
	713	71.3	30	29.6	535	225	9
	613	61.3	40	39.5	460	300	12
	513	51.3	50	49.3	385	375	15
	413	41..3	60	59.2	310	450	18
	313	31.3	70	69.1	235	525	21
	213	21.3	80	79	160	600	24
	113	11.3	90	89	85	675	27
Absolute vacuum	0	0	101.3	100	0	760	30

3. Pressure Comparison Table (Pressure Above Atmospheric)

kPa	bar	psi(lbf/in²)	At(kg/cm²)
1013	10.13	146.9	10.3
1000	10	145	10.2
900	9	130.5	9.2
800	8	116	8.2
700	7	101.5	7.1
600	6	87	6.1
500	5	72.5	5.1
400	4	58	4.1
300	3	43.5	3.1
200	2	29	2
100	1	14.5	1
0	0	0	0

4. Flow Rate Comparison Tables

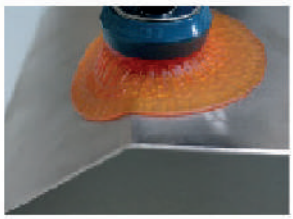
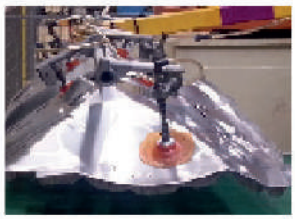
Flow: volume per unit of time.
Quantity designations: Q,q(Q)=V/t(volume/time).
SI-unit: cubic meters per second (m^3/s).
Common multiple units: litre/min, litre/s, litre/h.

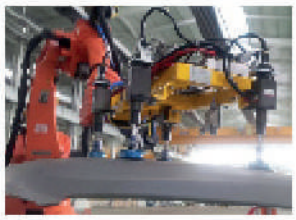
	m^3/s	m^3/h	l / min	l / s	ft^3 / min(scfm)
$1m^3/s$	1	3600	60000	1000	2118.9
$1m^3/h$	0.28X10-3	1	16.6667	0.2778	0.5885
1 l/min	16.67X10-6	3.6	60	1	2.1189
1 l/s	1X10-3	3.6	60	1	2.1189
1 ft^3/min	0.472X10-3	1.6992	28.32	0.4720	1

Flow Comparison Table

l / s	m^3/min	m^3/h	scfm	l / min
1	0.06	3.60	2.12	60
2	0.12	7.20	4.24	120
3	0.18	10.80	6.36	180
4	0.24	14.40	8.47	240
5	0.30	18.00	10.59	300
6	0.36	21.60	12.71	360
7	0.42	25.20	14.83	420
8	0.48	28.80	16.95	480
9	0.54	32.40	19.07	540
10	0.60	36.00	21.19	600
11	0.66	39.60	23.30	660
12	0.72	43.20	25.42	720
13	0.78	46.80	27.54	780
14	0.84	50.40	29.66	840
15	0.90	54.00	31.78	900
16	0.96	57.60	33.90	960
17	1.02	61.20	36.02	1020
18	1.08	64.80	38.13	1080
19	1.14	68.40	40.25	1140
20	1.20	72.00	42.37	1200
25	1.50	90.00	52.97	1500
30	1.80	108.00	63.56	1800
35	2.10	126.00	74.15	2100
40	2.40	144.00	84.74	2400
45	2.70	162.00	95.34	2700
50	3.00	180.00	105.93	3000

Applications



Automotive Industry

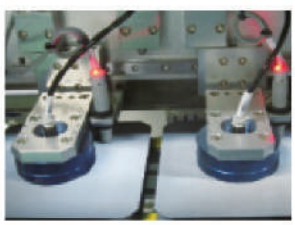
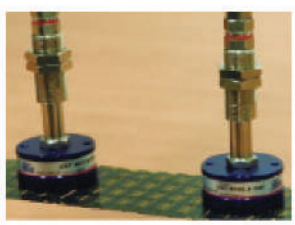
VMECA has supplied high quality vacuum products for all automobile sessions such as press, body, assembly and plastic injection lines according to the application and it has contributed much more beneficial to a production line by increasing productivity, but reducing downtime. It means the customer can save the cost for labour and energy consumption – air saving technology is one of the key to save energy.





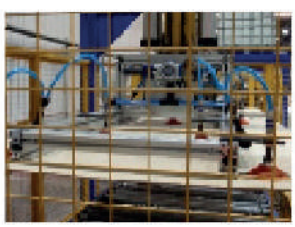
Packaging Industry

Following the trends which have been getting faster and faster in operation, VMECA vacuum products can provide the best solution for all lines in packaging the industry. Also, our patented technology offers an increase in productivity, but make the maintenance much less than other competitors.

Semiconductor – Solar Industry

VMECA special product for semincon/solar industries guarantee safety during handling your product in the gentle and precise way. It can make the process faster as well as being more reliable.


Wood Industry

VMECA vacuum pumps which have an auto-filter cleaning system can provide the ideal solution to customers who have a problem with dust from wooden sheeting. Suction cups are of a high quality and long-life span, which can shorten the downtime.

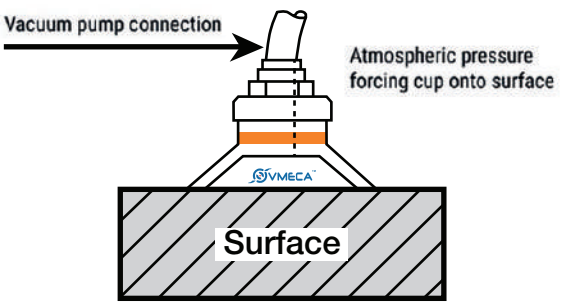
Material handling with suction cup is very simple and reliable with low cost. It is therefore a worthwhile solution before considering more complicated handling techniques.

Suction cups can lift and hold objects from a few grams up to several kg.

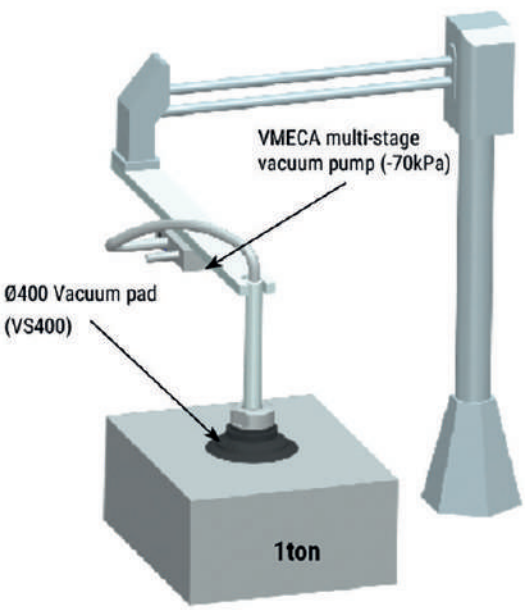
Features

- Easy installation
- Low service requirement
- Low price
- Does not damage the goods
- Fast attachment and detachment

Why does a suction cup suck onto the surface it is placed on? It is quite simple and is all to do with atmospheric pressure. Atmospheric pressure can generally be defined as the weight of the air above us on earth. When a lower pressure is created (vacuum), then atmospheric pressure (1 bar) forces are produced; these forces are required to enable suction cups to work. As a vacuum is drawn through the cup, the atmospheric pressure outside the cup is greater than that inside the cup, thus creating a holding force between the cup and the surface; the larger the cup and deeper the vacuum then the greater the holding force.



How a suction cup works



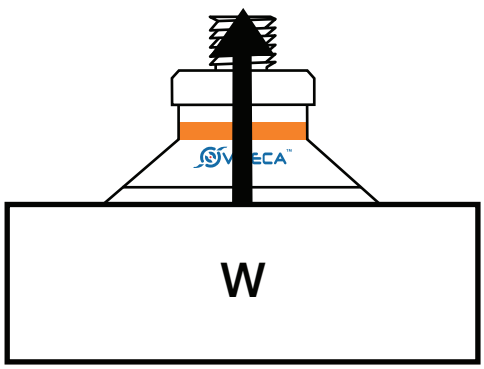
Weights that can be lifted with suction cup

How to select suction cup

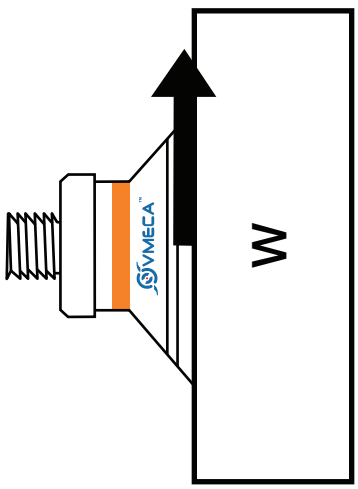
$$D = 113 \times \sqrt{\frac{m \times n}{U \times s}}$$

D : Suction cup diameter (mm)
m : Mass to life (kg)
u : Vacuum level (-kPa)
n : Safety factor
s : The number of suction cup

Perpendicular



Parallel



Lift : Formula

W : Lifting force (N)
P : Vacuum level (-kPa)
S : Size of suction cup (cm^2)
n : Safety factor { Perpendicular : insert 2 or 3 / Parallel : 3 insert or 4

$$W = P \times S \times 0.1 \times \frac{1}{n}$$

Index

VB Series

Page 141



- Single-bellow suction cup
- Diameter range: Ø5 to 150
- Material selection: NBR, silicone, conductive silicone, urethane, polyurethane

Features & Strengths

- Compensating for a difference in level
- Various materials for a wide range of applications

Advantages

- Particularly good for use on curved surfaces and for separating thin sheets of materials in stacks
- The bellows cup is very good at compensating for a degree of difference in level and curvature of the work piece

VBU Series

Page 156



- Bellows and universal suction cup
- Diameter range: Ø35 to 55
- Material selection: NBR, silicone, polyurethane

Features & Strengths

- Wide cover for increased degree of height compensation
- Excellent for curved products and separating thin sheet in stocks

Advantages

- Particularly good for use on curved surfaces and for separating thin sheets of materials in stacks with long bellows
- Can cope with an increased degree of height compensation and is particularly good for handling fragile objects
- The bellows cup is very good at compensating for a degree of difference in level and curvature of the work piece
- Enhancing the adhesion to the surface

VB-M Series (Direct Fitting Bellows)

Page 149



- Single-bellow suction cup for direct fitting
- Diameter range: Ø20 to 50
- Material selection: NBR, silicone, conductive silicone, urethane

Features & Strengths

- Compensating for a difference in level
- Various materials for a wide range of applications

Advantages

- Particularly good for use on curved surfaces and for separating thin sheets of materials in stacks
- The bellows cup is very good at compensating for a degree of difference in level and curvature of the work piece
- Fitted directly onto a piece of pipe for making installation very simple and reducing cup cost

VBX Series

Page 159



- Bellows and cross groove suction cup
- Diameter range: Ø35 to 55
- Material selection: polyurethane

Features & Strengths

- Wide cover for increased degree of height compensation
- Excellent for curved products and separating thin sheet in stocks

Advantages

- Particularly good for use on curved surfaces and for separating thin sheets of materials in stacks with long bellows
- Can cope with an increased degree of height compensation and is particularly good for handling fragile objects
- The bellows cup is very good at compensating for a degree of difference in level and curvature of the work piece
- Enhancing the adhesion to the surface

VBL Series

Page 151



- Long multi-bellow suction cup
- Diameter range: Ø15 to 50
- Material selection: NBR, silicone, conductive silicone, urethane

Application

- Widely cover for increased degree of height compensation
- Excellent for fragile products

Advantages

- Particularly good for use on curved surfaces and for separating thin sheets of materials in stacks with long bellows
- Can cope with an increased degree of height compensation and is particularly good for handling fragile objects
- The bellows cup is very good at compensating for a degree of difference in level and curvature of the work piece

BL5040

Page 161



- Dual lip structure suction cup
- Diameter range: Ø50
- Material selection: NBR, silicone

Features & Strengths

- Excellent for irregular curved surfaces and rough surfaces
- Dual lip structure to increase safety caused by lip wear and tear

Advantages

- Stable and reliable performance by dual lip structure to increase safety caused by lip wear and tear

Vacuum Technology – Suction Cups

new

VMECA™

Index

VOBL Series

Page 162



- Long multi bellows and oval suction cup
- Diameter range: Ø35 x 90
- Material selection: NBR, silicone, conductive silicone

Features & Strengths

- Wide cover for increased degree of height compensation
- Excellent for fragile products

Advantages

- Particularly good for use on curved surfaces and for separating thin sheets of materials in stacks with long bellows
- Can cope with an increased degree of height compensation and is particularly good for handling fragile objects
- The bellows cup is very good at compensating for a degree of difference in level and curvature of the work piece

VOU Series

Page 163



- Oval universal suction cup
- Diameter range: Ø4 x 10 to Ø20 x 60
- Material selection: NBR, silicone, conductive silicone, urethane

Features & Strengths

- Great performance for handling long objects with flat and curved surfaces

Advantages

- Good lifting forces can be achieved with small size
- Conductive silicon is excellent for handling PCB board or electronic components
- Easily mountable without detaching a fitting from the machine (saving maintenance time)

VU Series

Page 167



- Universal suction cup
- Diameter range: Ø1.5 to 80
- Material selection: NBR, silicone, conductive silicone, urethane

Features & Strengths

- Excellent performance for flat stable and slightly curved surfaces
- Suitable for concave surfaces

Advantages

- Good lifting forces can be achieved with this cup, is best suited to flat stable surfaces but can cope with a small degree of curvature
- Very small cups are available down to just 1.5mm diameter

FF Series

Page 174



- Mark free and flat suction cup
- Diameter range: Ø10 to 30
- Material selection: NBR, silicone, conductive silicone, urethane

Features & Strengths

- Excellent performance for very thin and light weight products
- Handling product without mark and damage

Examples of use

- Semiconductor, display, thin film

VD Series

Page 177



- Deep suction cup
- Diameter range: Ø30 to 90
- Material selection: NBR, silicone, conductive silicone, urethane, polyurethane

Features & Strengths

- Suitable for curved or irregular surfaces
- Excellent performance for round corners and edges

Advantages

- Best suited to curved or irregular surfaces
- Strong lifting force when transferring without shaking goods

VFC Series

Page 184



- Flat curved suction cup
- Diameter range: Ø50 to 100
- Material selection: NBR, silicone, conductive silicone, urethane, polyurethane

Features & Strengths

- Specifically designed for flat and curved surface
- Available to handle multiple objects with the same suction cup

Advantages

- Strong lifting force for both vertical and horizontal application
- Stable gripping without sliding and shaking

Vacuum Technology – Suction Cups

new

VMECA™

Index

VF Series

Page 188



- Flat suction cup
- Diameter range: Ø15 to 300
- Material selection: NBR, silicone, conductive silicone, urethane, polyurethane

Features & Strengths

- Specifically designed for flat and curved surface
- Available to handle multiple objects with the same suction cup

Advantages

- Strong lifting force for both vertical and horizontal application
- Stable gripping without sliding and shaking

VBF Series

Available on request



- Bellows flat suction cup
- Diameter range: Ø25 to 100
- Material selection: NBR, silicone, polyurethane

Features & Strengths

- Highly fast operation in automobile, glass and wooden panel industry
- Excellent for oily surface products and convex products
- Innovatively designed for slightly curved and flat material

Advantages

- Very flexible adjustment according to different surface and shape
- Excellent for thin, oily and flat and slightly curved metal sheets and automotive panels
- Longer life time with PU material (three times longer than NBR of competitor)

FCF Series

Available on request



- Flat curve suction cup
- Diameter range: Ø30 to 125
- Material selection: NBR, silicone, polyurethane

Features & Strengths

- Excellent for flat and curved material in both vertical and horizontal application
- No vibration when transferring

Advantages

- High speed handling without deformation
- Excellent for thin, oily and flat and slightly curved metal sheets and automotive panels
- Great designed pattern for anti sliding

VOBF Series

Available on request



- Oval flat bellow suction cup
- Diameter range: Ø30 x 60 to Ø55 x 100
- Material selection: Polyurethane

Features & Strengths

- Over bellows shaped for handling long, narrow, curved and oily work pieces
- The feet inside the cup provide an anti-slide

Advantages

- Excellent performance in high speed application – fast cycle time
- Stable gripping without sliding
- Longer life time with PU material (three times longer than NBR of competitor)

VDF Series

Available on request



- Deep flat suction cup
- Diameter range: Ø25 to 100
- Material selection: polyurethane

Features & Strengths

- Highly fast operation in automobile, glass and wooden panel industry
- Excellent for oily surface products and convex products
- Innovatively designed for slightly curved and flat material

Advantages

- Very flexible adjustment according to different surface and shape
- Excellent for thin, oily and flat and slightly curved metal sheets and automotive panels
- Longer life time with PU material (three times longer than NBR of competitor)

VOC Series

Available on request



- Oval curved suction cup
- Diameter range: Ø11 x 23 to Ø60 x 180
- Material selection: NBR, silicone, conductive silicone, urethane

Features & Strengths

- Good for long objects with flat and curved surfaces
- Strong lifting force and long life span

Advantages

- Good lifting forces can be achieved with small size
- Excellent for parallel to the surface of the object by thick and durable lip structure

Vacuum Technology – Suction Cups

Index

VS Series

Available on request



- Sponge suction cup
- Diameter range: Ø35 to 400
- Material selection: EPDM

Features & Strengths

- Excellent performance for rough and uneven surfaces

Advantages

- Used for handling rough surfaces and when used with ball joint option and level compensator surfaces

KPS Series

Available on request



- Customized suction cup
- Diameter range: Ø13 to 68
- Material selection: NBR, silicone, conductive silicone, urethane

Features & Strengths

- Developed to be used specially for bag opening applications
- Suitable to be used on thin plastic and film type material

Advantages

- Excellent for bag opening with good adhesion



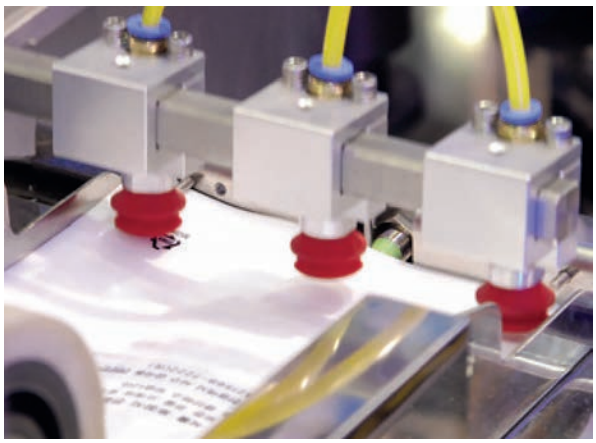
VB Series Technical Information

Features & Strengths

- Suitable for smaller objects
- Compensating for a difference in level
- Various materials for a wide range of applications

Examples of Use

- Cardboards, veneer sheets, packaging materials, plastic sheets, thin film sheets





Recommended Lifting Force (Maximum)

Model	Volume (cm^3)	Lifting Force (Kg) Perpendicular		
		-20 kPa	-60 kPa	-90 kPa
VB5	0.05	0.03	0.08	0.10
VB6X	0.09	0.05	0.11	0.14
VB8	0.15	0.08	0.16	0.25
VB10	0.48	0.15	0.34	0.50
VB12	0.59	0.20	0.41	0.62
VB15	1.10	0.29	0.60	0.90
VB17	1.50	0.40	0.80	1.00
VB20	2.70	0.60	1.00	1.42
VB30	10	1.22	2.24	2.42
VB40	15	2.24	3.97	5
VB50	32	3.36	6.63	8.36
VB75	110	7.65	17.04	23.06
VB75B	110	7.65	17.04	23.06
VB110	310	13.97	35	47.04
VB110B	310	13.97	35	47.04
VB150	650	30	70	90.1

Material Specifications

Material	Hardness Shore (°)	Colour	Temperature (°C)
NBR	60	Black	-20 to +110
Silicone	55	Red	-70 to +200
White Silicone	55	Translucent White	-70 to +200
White Silicone (FDA)	55	Translucent White	-70 to +200
High temperature Silicone	50	Blue	-70 to +280
Conductive Silicone	70	Smoky Black	-45 to +90
Urethane	60	Dark Green	0 to +100
Mark Free	75	Black	-10 to +100

Material Resistance

Description	NBR	Silicone	White Silicone	High Temperature Silicone	Conductive Silicone	Urethane	Mark Free
Wear Resistance	Excellent	Good	Good	Good	Good	Excellent	Good
Oil	Excellent	Poor	Poor	Poor	Poor	Excellent	Excellent
Weather/Ozone	Fair	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Alcohol	Good	Good	Good	Good	Good	Fair	Good
Acid	Fair	Poor	Poor	Poor	Poor	Poor	Excellent

The lifting force above does not include safety factor.

Specifications subject to change without notice.

Suction Cups – Single Bellows

Features & Strengths

- Compensating for a difference in level
- Various materials for a wide range of applications

Advantages

- Particularly good for use on curved surfaces and for seperating thin sheets of material in stacks.
- The bellows cup is very good at compensating for a degree of difference in level and curvature of the work piece.

Examples of Use

- Cardboards
- Veneer sheets
- Packaging materials
- Plastic sheets
- Thin film sheets

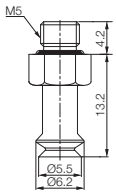
VB Series

5mm, Cup Only

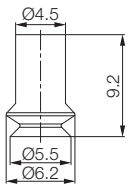
Code B02	Material	Colour	Temperature	Hardness	Price
VB5-N	Nitrile	Black	-20°C-110°C	60	2.40
VB5-S	Silicone	Red	-70°C-200°C	55	5.55
VB5-WS	White Silicone	Translucent White	-70°C-200°C	55	5.60
VB5-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55	6.70
VB5-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	9.10
VB5-U	Urethane	Dark Green	0°C-100°C	60	13.85
VB5-A	Mark Free	Black	-10°C-100°C	75	27.85



Dimensions



With M5M fitting



Cup only

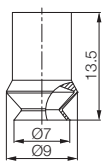
VB Series

6mm, Cup Only

Code B02	Material	Colour	Temperature	Hardness	Price
VB6X-N	Nitrile	Black	-20°C-110°C	60	4.50
VB6X-S	Silicone	Red	-70°C-200°C	55	12.25
VB6X-WS	White Silicone	Translucent White	-70°C-200°C	55	12.25
VB6X-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55	14.70
VB6X-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	12.25
VB6X-U	Urethane	Dark Green	0°C-100°C	60	36.70
VB6X-A	Mark Free	Black	-10°C-100°C	75	61.20



Dimensions



Cup only

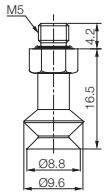
VB Series

8mm, Cup Only

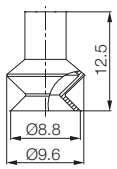
Code B02	Material	Colour	Temperature	Hardness	Price
VB8X-N	Nitrile	Black	-20°C-110°C	60	2.70
VB8X-S	Silicone	Red	-70°C-200°C	55	6.70
VB8X-WS	White Silicone	Translucent White	-70°C-200°C	55	6.70
VB8X-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55	8.05
VB8X-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	9.80
VB8X-U	Urethane	Dark Green	0°C-100°C	60	19.50
VB8X-A	Mark Free	Black	-10°C-100°C	75	32.45



Dimensions



With M5M fitting



Cup only

For technical information see page 141

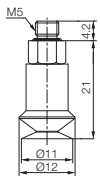
VB Series

10mm, Cup Only

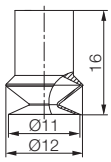
Code B01	Material	Colour	Temperature	Hardness	Price
VB10-N	Nitrile	Black	-20°C-110°C	60	2.90
VB10-S	Silicone	Red	-70°C-200°C	55	7.35
VB10-WS	White Silicone	Translucent White	-70°C-200°C	55	7.80
VB10-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55	9.40
VB10-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	9.10
VB10-U	Urethane	Dark Green	0°C-100°C	60	14.15
VB10-A	Mark Free	Black	-10°C-100°C	75	26.10



Dimensions



With M5M fitting



Cup only

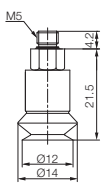
VB Series

12mm, Cup Only

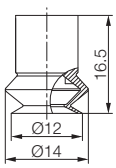
Code B01	Material	Colour	Temperature	Hardness	Price
VB12-N	Nitrile	Black	-20°C-110°C	60	3.70
VB12-S	Silicone	Red	-70°C-200°C	55	8.45
VB12-WS	White Silicone	Translucent White	-70°C-200°C	55	8.45
VB12-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55	10.15
VB12-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	10.50
VB12-U	Urethane	Dark Green	0°C-100°C	60	15.60
VB12-A	Mark Free	Black	-10°C-100°C	75	42.15



Dimensions



With M5M fitting



Cup only

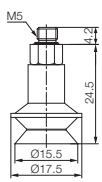
VB Series

15mm, Cup Only

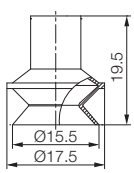
Code B01	Material	Colour	Temperature	Hardness	Price
VB15-N	Nitrile	Black	-20°C-110°C	60	3.70
VB15-S	Silicone	Red	-70°C-200°C	55	8.45
VB15-WS	White Silicone	Translucent White	-70°C-200°C	55	8.45
VB15-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55	10.05
VB15-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	10.50
VB15-U	Urethane	Dark Green	0°C-100°C	60	15.60
VB15-A	Mark Free	Black	-10°C-100°C	75	26.90
VB15-PU	Polyurethane	Translucent Orange	0°C-60°C	60	4.50



Dimensions



With M5M fitting



Cup only

For technical information see page 141

Suction Cups – Single Bellows

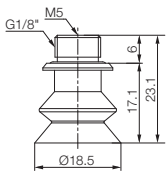
VB Series

17mm, Cup Only

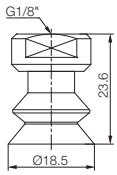


Code B01	Material	Colour	Temperature	Hardness	Price
VB17-N	Nitrile	Black	-20°C-110°C	60	3.85
VB17-S	Silicone	Red	-70°C-200°C	55	7.65
VB17-WS	White Silicone	Translucent White	-70°C-200°C	55	7.65
VB17-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55	9.20
VB17-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	9.45
VB17-U	Urethane	Dark Green	0°C-100°C	60	17.50
VB17-A	Mark Free	Black	-10°C-100°C	75	38.15

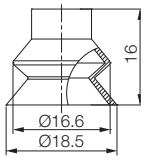
Dimensions



With M518MF fitting



With 18F fitting



Cup only

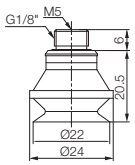
VB Series

20mm, Cup Only

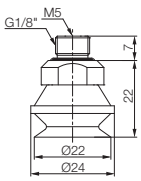


Code B01	Material	Colour	Temperature	Hardness	Price
VB20-N	Nitrile	Black	-20°C-110°C	60	4.50
VB20-S	Silicone	Red	-70°C-200°C	55	9.45
VB20-WS	White Silicone	Translucent White	-70°C-200°C	55	9.45
VB20-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55	11.30
VB20-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	11.75
VB20-U	Urethane	Dark Green	0°C-100°C	60	18.75
VB20-PU	Polyurethane	Translucent Orange	0°C-60°C	60	5.60

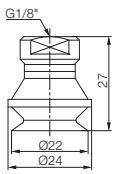
Dimensions



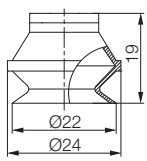
With M518MF fitting



With M518MFB fitting



With 18F fitting



Cup only

For technical information see page 141

Suction Cups – Single Bellows

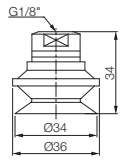
VB Series

30mm, Cup Only

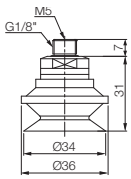


Code B01	Material	Colour	Temperature	Hardness	Price
VB30-N	Nitrile	Black	-20°C-110°C	60	5.90
VB30-S	Silicone	Red	-70°C-200°C	55	12.45
VB30-WS	White Silicone	Translucent White	-70°C-200°C	55	12.45
VB30-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55	14.90
VB30-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	15.40
VB30-U	Urethane	Dark Green	0°C-100°C	60	27.05
VB30-A	Mark Free	Black	-10°C-100°C	75	88.35
VB30-PU	Polyurethane	Translucent Orange	0°C-60°C	60	7.35

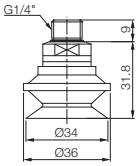
Dimensions



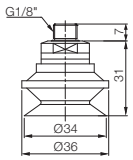
With 18F fitting



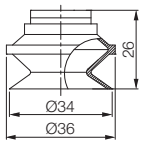
With M518MF fitting



With 14M fitting



With 18M fitting



Cup only

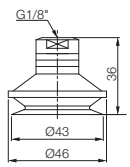
VB Series

40mm, Cup Only

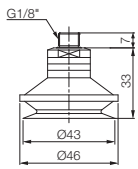


Code B01	Material	Colour	Temperature	Hardness	Price
VB40-N	Nitrile	Black	-20°C-110°C	60	7.65
VB40-S	Silicone	Red	-70°C-200°C	55	14.95
VB40-WS	White Silicone	Translucent White	-70°C-200°C	55	14.95
VB40-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55	17.95
VB40-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	18.60
VB40-U	Urethane	Dark Green	0°C-100°C	60	37.30
VB40-A	Mark Free	Black	-10°C-100°C	75	106.00
VB40-PU	Polyurethane	Translucent Orange	0°C-60°C	60	9.45

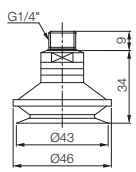
Dimensions



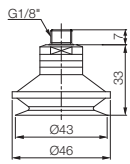
With 18F fitting



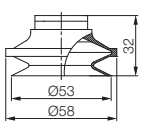
With 18M fitting



With 14M fitting



With 18M fitting



Cup only

For technical information see page 141

Suction Cups – Single Bellows

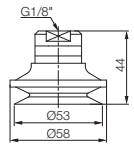


VB Series

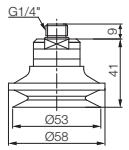
50mm, Cup Only

Code B01	Material	Colour	Temperature	Hardness	Price
VB50-N	Nitrile	Black	-20°C-110°C	60	**9.50**
VB50-S	Silicone	Red	-70°C-200°C	55	**18.75**
VB50-WS	White Silicone	Translucent White	-70°C-200°C	55	**18.95**
VB50-WS-FDA	White Silicone FDA	Translucent White	-70°C-200°C	55	**22.70**
VB50-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	**23.70**
VB50-U	Urethane	Dark Green	0°C-100°C	60	**31.50**
VB50-A	Mark Free	Black	-10°C-100°C	75	**94.60**
VB50-PU	Polyurethane	Translucent Orange	0°C-60°C	60	**12.45**

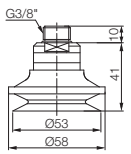
Dimensions



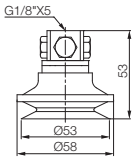
With 18F fitting



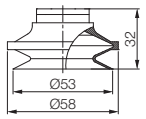
With 14M fitting



With 38M fitting



With 18x5F fitting



Cup only

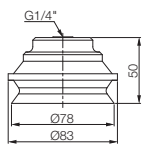


VB Series

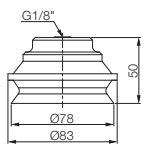
75mm, Cup Only

Code B01	Material	Colour	Temperature	Hardness	Price
VB75-N	Nitrile	Black	-20°C-110°C	60	**20.85**
VB75-S	Silicone	Red	-70°C-200°C	55	**32.00**
VB75-WS	White Silicone	Translucent White	-70°C-200°C	55	**42.60**
VB75-WS-FDA	White Silicone FDA	Translucent White	-70°C-200°C	55	**51.10**
VB75-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	**37.60**
VB75-U	Urethane	Dark Green	0°C-100°C	60	**95.85**
VB75-A	Mark Free	Black	-10°C-100°C	75	**254.30**
VB75-PU	Polyurethane	Translucent Orange	0°C-60°C	60	**28.95**

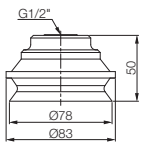
Dimensions



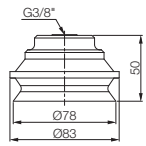
With 14F fitting



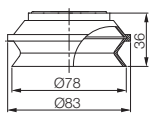
With 18F fitting



With 12F fitting



With 38F fitting



Cup only

For technical information see page 141

Suction Cups – Single Bellows

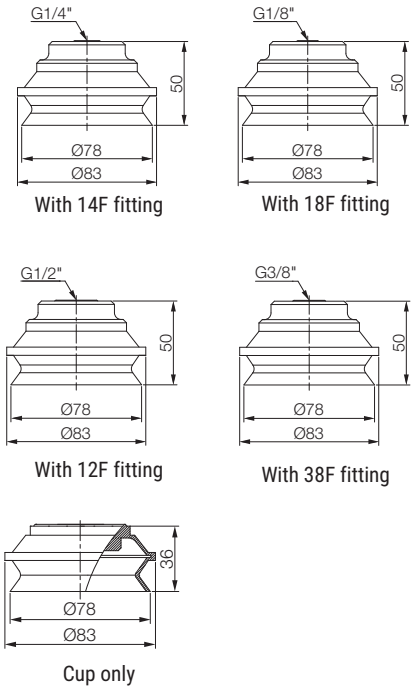


VB Series

75mm with Large Cleats, Cup Only

Code B01	Material	Colour	Temperature	Hardness	Price
VB75B-N	Nitrile	Black	-20°C-110°C	60	**20.85**
VB75B-S	Silicone	Red	-70°C-200°C	55	**32.00**
VB75B-WS	White Silicone	Translucent White	-70°C-200°C	55	**42.60**
VB75B-WS-FDA	White Silicone FDA	Translucent White	-70°C-200°C	55	**51.10**
VB75B-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	**37.60**
VB75B-U	Urethane	Dark Green	0°C-100°C	60	**95.85**
VB75B-A	Mark Free	Black	-10°C-100°C	75	**254.30**

Dimensions



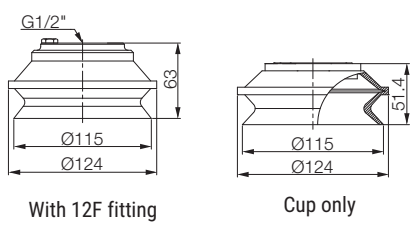


VB Series

110mm, Cup Only

Code B01	Material	Colour	Temperature	Hardness	Price
VB110-N	Nitrile	Black	-20°C-110°C	60	**42.45**
VB110-S	Silicone	Red	-70°C-200°C	55	**56.10**
VB110-WS	White Silicone	Translucent White	-70°C-200°C	55	**74.85**
VB110-WS-FDA	White Silicone FDA	Translucent White	-70°C-200°C	55	**89.85**
VB110-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	**69.40**
VB110-U	Urethane	Dark Green	0°C-100°C	60	**260.25**
VB110-A	Mark Free	Black	-10°C-100°C	75	**280.35**

Dimensions



For technical information see page 141

Suction Cups – Single Bellows

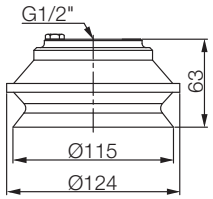
VB Series

110mm with Large Cleats, Cup Only

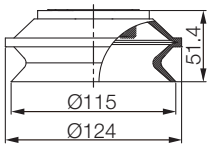


Code B01	Material	Colour	Temperature	Hardness	Price
VB110B-N	Nitrile	Black	-20°C-110°C	60	42.45
VB110B-S	Silicone	Red	-70°C-200°C	55	56.10
VB110B-WS	White Silicone	Translucent White	-70°C-200°C	55	74.85
VB110B-WS-FDA	White Silicone FDA	Translucent White	-70°C-200°C	55	89.85
VB110B-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	69.40
VB110B-U	Urethane	Dark Green	0°C-100°C	60	260.25
VB110B-A	Mark Free	Black	-10°C-100°C	75	280.35

Dimensions



With 12F fitting



Cup only

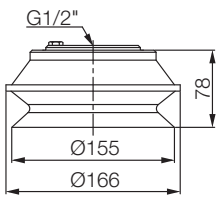
VB Series

150mm, Cup Only

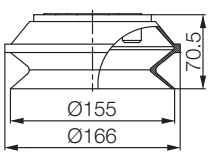


Code B01	Material	Colour	Temperature	Hardness	Price
VB150-N	Nitrile	Black	-20°C-110°C	60	64.00
VB150-S	Silicone	Red	-70°C-200°C	55	83.15
VB150-WS	White Silicone	Translucent White	-70°C-200°C	55	128.00
VB150-WS-FDA	White Silicone FDA	Translucent White	-70°C-200°C	55	153.60
VB150-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	110.90
VB150-U	Urethane	Dark Green	0°C-100°C	60	380.45
VB150-A	Mark Free	Black	-10°C-100°C	75	415.85

Dimensions



With 12F fitting



Cup only

Disc Filters

To Suit VB Series Cups

Code B01	Material	To Suit	Price
VTFE-B30	Polyethylene	VB30/30M	2.70
VTFE-B40	Polyethylene	VB40	2.80
VTFE-B50	Polyethylene	VB50/50M	3.05
VTFE-B75	Polyethylene	VB75	4.50
VTFE-B110	Polyethylene	VB110	6.55

For technical information see page 141

VBM Series Technical Information

Features & Strengths

- Suitable for smaller objects
- Compensating for a difference in level
- Various materials for a wide range of applications

Examples of Use

- Cardboards, veneer sheets, packaging materials, plastic sheets, thin film sheets





Recommended Lifting Force (Maximum)

Model	Volume (cm3)	Lifting Force (Kg) Perpendicular		
		- 20 kPa	- 60 kPa	- 90 kPa
VB30M	1	1.50	2.60	3.90
VB50M	32.00	3.20	7.90	10.50

The lifting force above does not include safety factor.

Material Specifications

Material	Hardness Shore (°)	Colour	Temperature (°C)
NBR	60	Black	-20 to +110
Silicone	55	Red	-70 to +200
White Silicone	55	Translucent White	-70 to +200
White Silicone (FDA)	55	Translucent White	-70 to +200
High Temperature Silicone	50	Blue	-70 to +280
Conductive Silicone	70	Smoky Black	-45 to +90
Urethane	60	Dark Green	0 to +100
Mark Free	75	Black	-10 to +100
Polyurethane	60	Translucent Orange	0 to +60

Material Resistance

Description	NBR	Silicone	White Silicone	High Temperature Silicone	Conductive Silicone	Urethane	Mark Free	Polyurethane
Wear Resistance	Excellent	Good	Good	Good	Good	Excellent	Good	Excellent
Oil	Excellent	Poor	Poor	Poor	Poor	Excellent	Excellent	Excellent
Weather/Ozone	Fair	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Alcohol	Good	Good	Good	Good	Good	Fair	Good	Fair
Acid	Fair	Poor	Poor	Poor	Poor	Poor	Excellent	Fair

Suction Cups – Direct Fitting Bellows

Features & Strengths

- Compensating for a difference in level
- Various materials for a wide range of applications

Advantages

- Particularly good for use on curved surfaces and for seperating thin sheets of material in stacks
- The bellows cup is very good at compensating for a degree of difference in level and curvature of the work piece
- Fitted directly onto a piece of pipe, making installation very simple and reducing cup cost

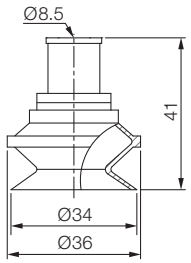
Examples of Use

- Cardboards
- Veneer sheets
- Packaging materials
- Plastic sheets
- Thin film sheets



VB-M Series

30mm with Long Neck, Cup Only



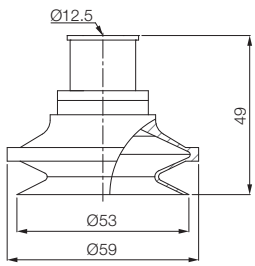
Cup only

Code B01	Material	Colour	Temperature	Hardness	Price
VB30M-N	Nitrile	Black	-20°C-110°C	60	7.35
VB30M-S	Silicone	Red	-70°C-200°C	55	12.45
VB30M-WS	White Silicone	Translucent White	-70°C-200°C	55	12.45
VB30M-WS-FDA	White Silicone FDA	Translucent White	-70°C-200°C	55	14.90
VB30M-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	21.10
VB30M-U	Urethane	Dark Green	0°C-100°C	60	37.25
VB30M-A	Mark Free	Black	-10°C-100°C	75	62.05
VB30M-PU	Polyurethane	Translucent Orange	0°C-60°C	60	7.35



VB-M Series

50mm with Long Neck, Cup Only



Cup Only

Code B01	Material	Colour	Temperature	Hardness	Price
VB50M-N	Nitrile	Black	-20°C-110°C	60	8.75
VB50M-S	Silicone	Red	-70°C-200°C	55	18.95
VB50M-WS	White Silicone	Translucent White	-70°C-200°C	55	18.95
VB50M-WS-FDA	White Silicone FDA	Translucent White	-70°C-200°C	55	22.70
VB50M-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	23.70
VB50M-U	Urethane	Dark Green	0°C-100°C	60	56.80
VB50M-A	Mark Free	Black	-10°C-100°C	75	94.60
VB50M-PU	Polyurethane	Translucent Orange	0°C-60°C	60	12.45

Disc Filters

To Suit VB-M Series Cups

Code B01	Material	To Suit	Price
VTFE-B30	Polyethylene	VB30/30M	2.70
VTFE-B50	Polyethylene	VB50/50M	3.05

For technical information see page 149

VBL Series Technical Information

Features & Strengths

- Wide cover for increased degree of height compensation
- Excellent for fragile products

Examples of Use

- Fragile objects, general food products, glass, metal ball, plastic bag, bread





Recommended Lifting Force (Maximum)

Model	Volume (cm³)	Lifting Force (Kg) Perpendicular	
		- 20 kPa	- 60 kPa
VBL10	0.54	0.15	0.34
VBL15	1.95	0.30	0.60
VBL20	4.00	0.40	0.90
VBL30	13.00	0.90	2.20
VBL40	27.00	1.40	3.60
VBL35M	21.00	1.20	3.30
VBL40B	26.00	1.90	4.30
VBL50	55.00	2.50	6.00

The lifting force above does not include safety factor.

Material Specifications

Material	Hardness Shore (°)	Colour	Temperature (°C)
NBR	60	Black	-20 to +110
Silicone	55	Red	-70 to +200
White Silicone	55	Translucent White	-70 to +200
White Silicone (FDA)	55	Translucent White	-70 to +200
High Temperature Silicone	50	Blue	-70 to +280
Conductive Silicone	70	Smoky Black	-45 to +90
Urethane	60	Dark Green	0 to +100
Mark Free	75	Black	-10 to +100

Material Resistance

Description	NBR	Silicone	White Silicone	High Temperature Silicone	Conductive Silicone	Urethane	Mark Free
Wear Resistance	Excellent	Good	Good	Good	Good	Excellent	Good
Oil	Excellent	Poor	Poor	Poor	Poor	Excellent	Excellent
Weather/Ozone	Fair	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Alcohol	Good	Good	Good	Good	Good	Fair	Good
Acid	Fair	Poor	Poor	Poor	Poor	Poor	Excellent

Specifications subject to change without notice.

Suction Cups – Long Multi Bellows

Applications

- Wide cover for increased degree of height compensation
- Excellent for fragile products

Advantages

- Particularly good for use on curved surfaces and for separating thin sheets of material in stacks with long bellows
- The bellows cup is very good at compensating for a degree of difference in level and curvature of the work piece

Examples of Use

- Fragile objects
- General food products
- Glass
- Eggs
- Bread

VBL Series

10mm, Cup Only



Code B01	Material	Colour	Temperature	Hardness	Price
VBL10-N	Nitrile	Black	-20°C-110°C	60	**6.10**
VBL10-S	Silicone	Red	-70°C-200°C	55	**9.45**
VBL10-WS	White Silicone	Translucent White	-70°C-200°C	55	**9.45**
VBL10-WS-FDA	White Silicone FDA	Translucent White	-70°C-200°C	55	**11.75**
VBL10-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	**11.75**
VBL10-U	Urethane	Dark Green	0°C-100°C	60	**18.80**
VBL10-A	Mark Free	Black	-10°C-100°C	75	**47.05**

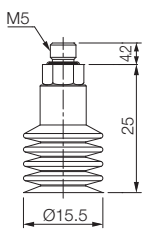
VBL Series

15mm, Cup Only

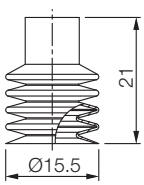


Code B01	Material	Colour	Temperature	Hardness	Price
VBL15-N	Nitrile	Black	-20°C-110°C	60	**6.05**
VBL15-S	Silicone	Red	-70°C-200°C	55	**9.45**
VBL15-WS	White Silicone	Translucent White	-70°C-200°C	55	**9.45**
VBL15-WS-FDA	White Silicone FDA	Translucent White	-70°C-200°C	55	**11.30**
VBL15-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	**11.75**
VBL15-U	Urethane	Dark Green	0°C-100°C	60	**18.75**
VBL15-A	Mark Free	Black	-10°C-100°C	75	**46.90**

Dimensions



With M5M fitting



Cup only

For technical information see page 151

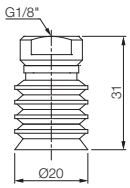
VBL Series

20mm, Cup Only

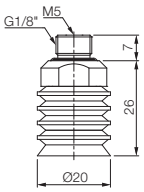


Code B01	Material	Colour	Temperature	Hardness	Price
VBL20-N	Nitrile	Black	-20°C-110°C	60	6.05
VBL20-S	Silicone	Red	-70°C-200°C	55	9.45
VBL20-WS	White Silicone	Translucent White	-70°C-200°C	55	9.45
VBL20-WS-FDA	White Silicone FDA	Translucent White	-70°C-200°C	55	11.30
VBL20-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	11.75
VBL20-U	Urethane	Dark Green	0°C-100°C	60	18.75
VBL20-A	Mark Free	Black	-10°C-100°C	75	46.90

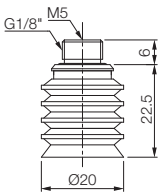
Dimensions



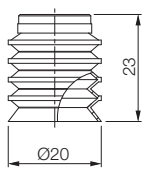
With 18F fitting



With M518MFB fitting



With M518MF fitting



Cup only

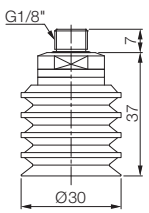
VBL Series

30mm, Cup Only

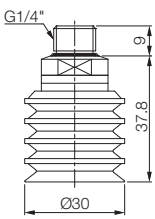


Code B01	Material	Colour	Temperature	Hardness	Price
VBL30-N	Nitrile	Black	-20°C-110°C	60	7.95
VBL30-S	Silicone	Red	-70°C-200°C	55	12.45
VBL30-WS	White Silicone	Translucent White	-70°C-200°C	55	12.45
VBL30-WS-FDA	White Silicone FDA	Translucent White	-70°C-200°C	55	14.90
VBL30-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	15.40
VBL30-U	Urethane	Dark Green	0°C-100°C	60	27.05
VBL30-A	Mark Free	Black	-10°C-100°C	75	62.00

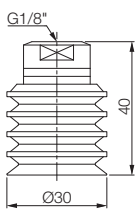
Dimensions



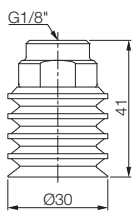
With 18M fitting



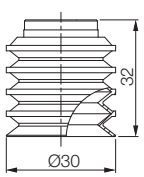
With 14M fitting



With 18F fitting



With 18FB fitting



Cup only

For technical information see page 151

Suction Cups – Long Multi Bellows

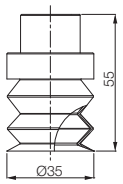


VBL Series

35mm, with Pipe Mount Neck, Cup Only

Code B01	Material	Colour	Temperature	Hardness	Price
VBL35M-N	Nitrile	Black	-20°C-110°C	60	10.35
VBL35M-S	Silicone	Red	-70°C-200°C	55	18.00
VBL35M-WS	White Silicone	Translucent White	-70°C-200°C	55	18.00
VBL35M-FDA-30	White Silicone FDA	Translucent White	-70°C-200°C	55	22.50
VBL35M-FDA-55	White Silicone FDA	Translucent White	-70°C-200°C	55	22.50
VBL35M-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	30.55
VBL35M-U	Urethane	Dark Green	0°C-100°C	60	53.85
VBL35M-A	Mark Free	Black	-10°C-100°C	75	89.80

Dimension



Cup only

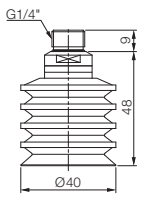


VBL Series

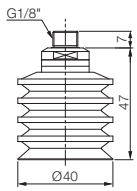
40mm, Cup Only

Code B01	Material	Colour	Temperature	Hardness	Price
VBL40-N	Nitrile	Black	-20°C-110°C	60	10.50
VBL40-S	Silicone	Red	-70°C-200°C	55	16.20
VBL40-WS	White Silicone	Translucent White	-70°C-200°C	55	16.20
VBL40-WS-FDA	White Silicone FDA	Translucent White	-70°C-200°C	55	19.50
VBL40-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	27.60
VBL40-U	Urethane	Dark Green	0°C-100°C	60	37.30
VBL40-A	Mark Free	Black	-10°C-100°C	75	81.10

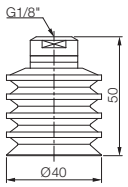
Dimensions



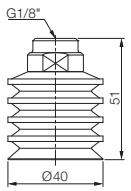
With 14M fitting



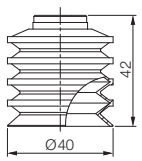
With 18M fitting



With 18F fitting



With 18FB fitting



Cup only

For technical information see page 151

Suction Cups – Long Multi Bellows

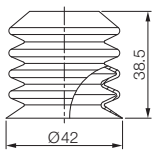


VBL Series

40mm, Alternate Design, Cup Only

Code B01	Material	Colour	Temperature	Hardness	Price
VBL40B-N	Nitrile	Black	-20°C-110°C	60	10.55
VBL40B-S	Silicone	Red	-70°C-200°C	55	16.25
VBL40B-WS	White Silicone	Translucent White	-70°C-200°C	55	16.25
VBL40B-FDA-30	White Silicone FDA	Translucent White	-70°C-200°C	30	20.35
VBL40B-FDA-55	White Silicone FDA	Translucent White	-70°C-200°C	55	20.35
VBL40B-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	27.60
VBL40B-U	Urethane	Dark Green	0°C-100°C	60	37.45
VBL40B-A	Mark Free	Black	-10°C-100°C	75	81.25

Dimensions



Cup only

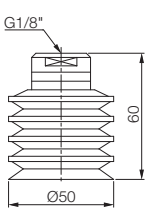


VBL Series

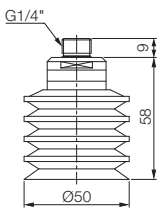
50mm, Cup Only

Code B01	Material	Colour	Temperature	Hardness	Price
VBL50-N	Nitrile	Black	-20°C-110°C	60	15.95
VBL50-S	Silicone	Red	-70°C-200°C	55	21.00
VBL50-WS	White Silicone	Translucent White	-70°C-200°C	55	21.00
VBL50-WS-FDA	White Silicone FDA	Translucent White	-70°C-200°C	55	25.20
VBL50-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	26.25
VBL50-U	Urethane	Dark Green	0°C-100°C	60	43.25
VBL50-A	Mark Free	Black	-10°C-100°C	75	104.85

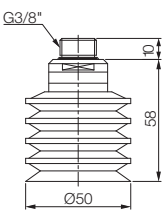
Dimensions



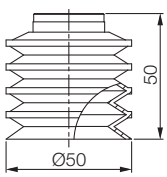
With 18F fitting



With 14M fitting



With 38M fitting



Cup only

Disc Filters

To Suit VBL Series

Code B01	Material	To Suit	Price
VTFE-BL20	Polyethylene	VBL20	2.76
VTFE-BL30	Polyethylene	VBL30	2.76
VTFE-BL40B	Polyethylene	VBL40B	4.10
VTFE-BL40	Polyethylene	VBL40	2.93
VTFE-BL50	Polyethylene	VBL50	3.10

For technical information see page 151

VBU Series Technical Information

Features & Strengths

- Wide cover for increased degree of height compensation
- Excellent for curved products and separating thin sheets in stocks

Advantages

- Particularly good for use on curved surfaces and for separating thin sheets of materials in stacks with long bellows
- Can cope with an increased degree of height compensation and is particularly good for handling fragile objects

Examples of Use

- Convex surface
- Plastic bag
- Metal sheets
- Plywood
- Carton box
- Cement sack





Recommended Lifting Force (Maximum)

Model	Volume (cm^3)	Lifting Force (Kg) Perpendicular		
		- 20 kPa	- 60 kPa	- 90 kPa
VBU35	6.20	2.26	4.28	5.75
VBU45	12.50	4.08	7.30	10.00

The lifting force above does not include safety factor.

Material Specifications

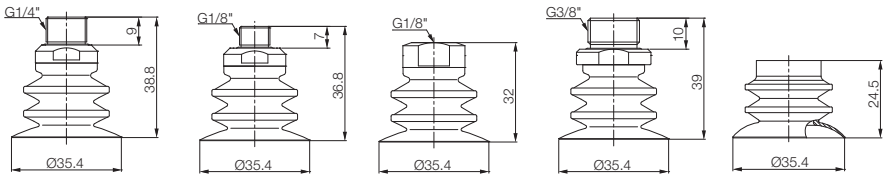
Material	Hardness Shore (°)	Colour	Temperature (°C)
NBR	60	Black	-20 to +110
Silicone	55	Red	-70 to +200
White Silicone	55	Translucent White	-70 to +200
White Silicone (FDA)	55	Translucent White	-70 to +200
Polyurethane	60	Translucent Orange	0 to +60

Material Resistance

Description	NBR	Silicone	White Silicone	Polyurethane
Wear Resistance	Excellent	Good	Good	Excellent
Oil	Excellent	Poor	Poor	Excellent
Weather/Ozone	Fair	Excellent	Excellent	Excellent
Alcohol	Good	Good	Good	Fair
Acid	Fair	Poor	Poor	Fair

Suction Cups – Double Bellows

Dimensions



With 14M fitting | With 18M fitting | With 18F fitting | With 38M fitting | Cup only

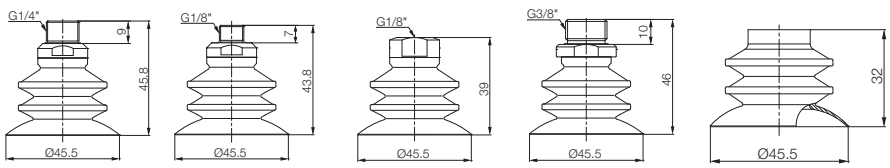
VBU Series

35mm, Cup Only



Code B01	Material	Colour	Temperature	Hardness	Price
VBU35-N	Nitrile	Black	-20°C-110°C	60	**13.25**
VBU35-S	Silicone	Red	-70°C-200°C	55	**20.70**
VBU35-WS	White Silicone	Translucent White	-70°C-200°C	55	**20.70**
VBU35-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55	**24.80**
VBU35-PU	Polyurethane	Translucent Orange	0°C-60°C	60	**16.55**

Dimensions



With 14M fitting | With 18M fitting | With 18F fitting | With 38M fitting | Cup only

VBU Series

45mm, Cup Only

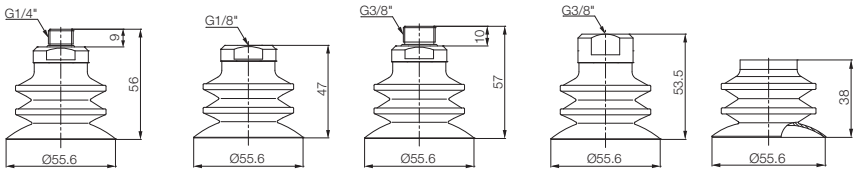


Code B01	Material	Colour	Temperature	Hardness	Price
VBU45-N	Nitrile	Black	-20°C-110°C	60	**14.80**
VBU45-S	Silicone	Red	-70°C-200°C	55	**23.85**
VBU45-WS	White Silicone	Translucent White	-70°C-200°C	55	**23.85**
VBU45-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55	**28.65**
VBU45-PU	Polyurethane	Translucent Orange	0°C-60°C	60	**18.45**

For technical information see page 156

Suction Cups – Double Bellows

Dimensions



With 14M fitting | With 18F fitting | With 38M fitting | With 38F fitting | Cup only

VBU Series

55mm, Cup Only



Code B02	Material	Colour	Temperature	Hardness	Price
VBU55-N	Nitrile	Black	-20°C-110°C	60	**16.20**
VBU55-S	Silicone	Red	-70°C-200°C	55	**27.05**
VBU55-WS	White Silicone	Translucent White	-70°C-200°C	55	**27.05**
VBU55-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55	**32.50**
VBU55-PU	Polyurethane	Translucent Orange	0°C-60°C	60	**20.20**

Disc Filters

To Suit VBU Series Cups

Code B01	Material	To Suit	Price
VTFE-BU35	Polyethylene	VBU35	**3.55**
VTFE-BU45	Polyethylene	VBU45	**3.85**
VTFE-BU55	Polyethylene	VBU55	**4.00**

For technical information see page 156

VBX Series Technical Information

Features & Strengths

- Wide cover for increased degree of height compensation
- Excellent for curved products and separating thin sheets in stocks

Advantages

- Particularly good for use on curved surfaces and for separating thin sheets of material in stacks with long bellows
- The bellows cup is very good at compensating for a degree of difference in level and curvature of the work piece

Examples of Use

- Metal sheets
- Plywood
- Carton box
- Cement sack
- Glasses
- Veneer sheets





Recommended Lifting Force (Maximum)

Model	Volume (cm^3)	Lifting Force (Kg) Perpendicular		
		- 20 kPa	- 60 kPa	- 90 kPa
VBX35	5.80	2.63	4.38	6.95
VBX45	13.00	6.40	8.80	10.50
VBX55	29.50	7.60	10.10	12.20

The lifting force above does not include safety factor.

Material Specifications

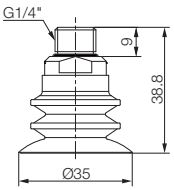
Material	Hardness Shore (°)	Colour	Temperature (°C)
Polyurethane	60	Translucent Orange	0 to +60

Material Resistance

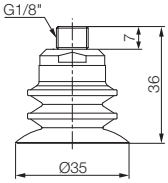
Description	Polyurethane
Wear Resistance	Excellent
Oil	Excellent
Weather / Ozone	Excellent
Alcohol	Fair
Acid	Fair

Suction Cups – Bellows & Cross Groove

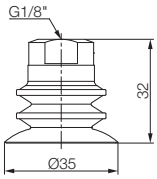
Dimensions



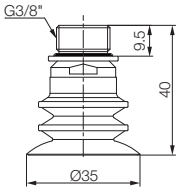
With 14M fitting



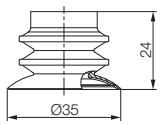
With 18M fitting



With 18F fitting



With 38M fitting



Cup only

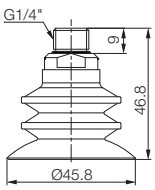
VBX Series

35mm, Cup Only

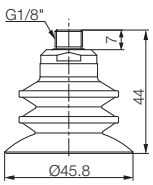


Code B01	Material	Colour	Temperature	Hardness	Price
VBX35-PU	Polyurethane	Translucent Orange	0°C-60°C	60	**16.60**

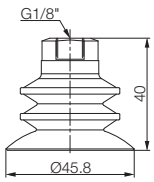
Dimensions



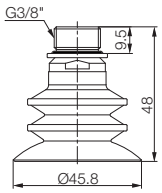
With 14M fitting



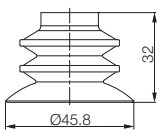
With 18M fitting



With 18F fitting



With 38M fitting



Cup only

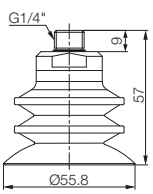
VBX Series

45mm, Cup Only

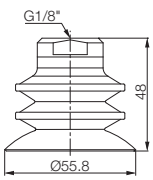


Code B01	Material	Colour	Temperature	Hardness	Price
VBX45-PU	Polyurethane	Translucent Orange	0°C-60°C	60	**18.45**

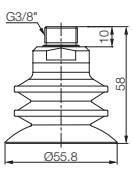
Dimensions



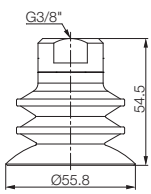
With 14M fitting



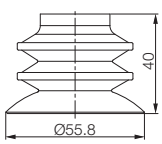
With 18F fitting



With 38M fitting



With 38F fitting



Cup only

VBX Series

55mm, Cup Only



Code B01	Material	Colour	Temperature	Hardness	Price
VBX55-PU	Polyurethane	Translucent Orange	0°C-60°C	60	**20.20**

Disc Filters

To Suit VBX Series

Code B01	Material	To Suit	Price
VTFE-BX35	Polyethylene	VBX35-PU	**3.35**
VTFE-BX45	Polyethylene	VBX45-PU	**3.65**
VTFE-BX55	Polyethylene	VBX55-PU	**3.80**

For technical information see page 159

BL Series Technical Information

Features & Strengths

- Excellent for irregular curved surface and rough surface
- Dual lip structure to increase safety caused by lip worn and torn

Examples of use

- Food (orange, apple, cheese ball, etc.)
- Convex surface







Recommended Lifting Force (Maximum)

Model	Volume (cm³)	Lifting Force (Kg) Perpendicular		
		- 20 kPa	- 60 kPa	- 90 kPa
BL5040	32.30	1.90	3.98	5.25

The lifting force above does not include safety factor.

Material Resistance

Description	NBR	Silicone	White silicone
Wear Resistance	Excellent	Good	Good
Oil	Excellent	Poor	Poor
Weather/Ozone	Fair	Excellent	Excellent
Alcohol	Good	Good	Good
Acid	Fair	Poor	Poor

Material Specifications

Material	Hardness Shore (°)	Colour	Temperature (°C)
NBR	60	Black	-20 to +110
Silicone - S3	30	Translucent Blue	-70 to +200
Silicone - S5	55	Red	-70 to +200
White Silicone – WS3	30	Translucent White	-70 to +200
White Silicone – WS5	55	Translucent White	-70 to +200
White Silicone – WS3 (FDA)	30	Translucent White	-70 to +200
White Silicone – WS5 (FDA)	55	Translucent White	-70 to +200

Suction Cups – Dual Lip Structure

Features & Strengths

- Excellent for irregular curved surfaces and rough surfaces and has a dual lip structure to increase safety

Advantages

- Particularly good for use on curved surfaces and for separating thin sheets of materials in stacks with long bellows
- Can cope with an increased degree of heights compensation and is particularly good for handling fragile objects

Examples of Use

- Round food types (such as apples, oranges)
- Convex surface

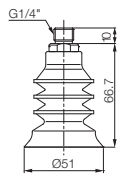


BL5040 Series

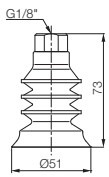
40mm Inner x 50mm Outer, Cup Only

Code B01	Material	Colour	Temperature	Hardness	Price
BL5040-N	Nitrile	Black	-20°C-110°C	60	**23.00**
BL5040-S3	Silicone - S3	Translucent Blue	-70°C-200°C	30	**28.50**
BL5040-S5	Silicone - S5	Red	-70°C-200°C	55	**28.50**
BL5040-WS3	White Silicone - WS3	Translucent White	-70°C-200°C	30	**28.50**
BL5040-WS5	White Silicone - WS5	Translucent White	-70°C-200°C	55	**28.50**
BL5040-WS3-FDA	White Silicone - WS3 (FDA)	Translucent White	-70°C-200°C	30	**35.60**
BL5040-WS5-FDA	White Silicone - WS5 (FDA)	Translucent White	-70°C-200°C	55	**35.60**

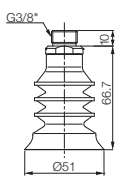
Dimension



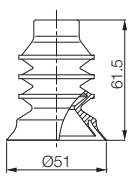
With 14M fitting



With 18F fitting



With 38M fitting

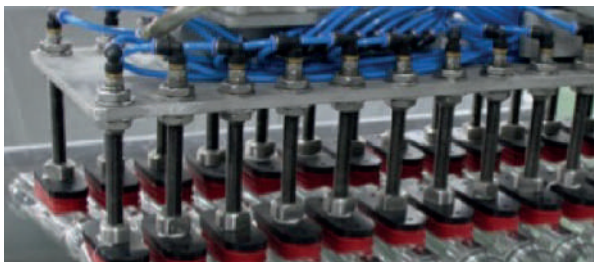


Cup only

VOBL Series Technical Information

Features & Strengths

- Wide cover for increased degree of height compensation
- Excellent for fragile products



Examples of Use

- Fragile objects, general food products, glass, bread



Recommended Lifting Force (Maximum)

Model	Volume (cm³)	Lifting Force (Kg) Perpendicular	
		- 20 kPa	- 60 kPa
VOBL35x90	43.00	2.90	5.00

The lifting force above does not include safety factor.

Material Specifications

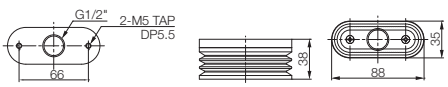
Material	Hardness Shore (°)	Colour	Temperature (°C)
NBR	60	Black	-20 to +110
Silicone	55	Red	-70 to +200
White Silicone	55	Translucent White	-70 to +200
White Silicone (FDA)	55	Translucent White	-70 to +200
High Temp. Silicone	50	Blue	-70 to +280
Conductive Silicone	70	Smoky Black	-45 to +90
Urethane	60	Dark Green	0 to +100
Mark Free	75	Black	-10 to +100

Material Resistance

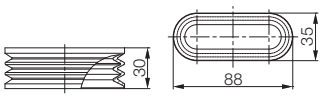
Description	NBR	Silicone	White Silicone	High Temperature Silicone	Conductive Silicone	Urethane	Mark Free
Wear Resistance	Excellent	Good	Good	Good	Good	Excellent	Good
Oil	Excellent	Poor	Poor	Poor	Poor	Excellent	Excellent
Weather/Ozone	Fair	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Alcohol	Good	Good	Good	Good	Good	Fair	Good
Acid	Fair	Poor	Poor	Poor	Poor	Poor	Excellent

Suction Cups – Long Multi Bellows & Oval Type

Dimensions



With 12F fitting



Cup only

VOBL Series

35 x 90mm, Cup Only

Code B01	Material	Colour	Temperature	Hardness	Price
VOBL35X90-N	Nitrile	Black	-20°C-110°C	60	31.80
VOBL35X90-S	Silicone	Red	-70°C-200°C	55	39.70
VOBL35X90-WS	White Silicone	Translucent White	-70°C-200°C	55	39.70
VOBL35X90-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55	47.70
VOBL35X90-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	67.65
VOBL35X90-U	Urethane	Dark Green	0-100°C	60	119.40
VOBL35X90-A	Mark Free	Black	-10°C-100°C	75	198.65



Disc Filter

To Suit VOBL Series

Code B01	Material	Price
VTFE-OBL35X90	Polyethylene	5.30

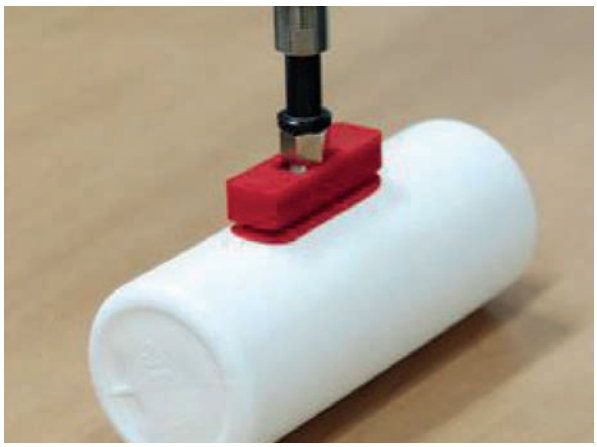
VOU Series Technical Information

Features & Strengths

- Great performance for handling long objects with flat and curved surfaces

Examples of Use

- Semiconductor chips, PCB boards, electronic component
- Solar cell, small glass cases, pipes





Recommended Lifting Force (Maximum)

Model	Volume (cm^3)	Minimum Curvature Radius R(mm)	Lifting Force (Kg) Perpendicular		
			- 20 kPa	- 60 kPa	- 90 kPa
VOU4x10	0.064	3.50	0.19	0.30	0.35
VOU6x10	0.081	4.50	0.21	0.39	0.49

The lifting force above does not include safety factor.

Material Specifications

Material	Hardness Shore (°)	Colour	Temperature (°C)
NBR	60	Black	-20 to +110
Silicone	55	Red	-70 to +200
White Silicone	55	Translucent White	-70 to +200
White Silicone (FDA)	55	Translucent White	-70 to +200
High Temp. Silicone	50	Blue	-70 to +280
Conductive Silicone	70	Smoky Black	-45 to +90
Urethane	60	Dark Green	0 to +100

Material Resistance

Description	NBR	Silicone	White Silicone	High Temperature Silicone	Conductive Silicone	Urethane
Wear Resistance	Excellent	Good	Good	Good	Good	Excellent
Oil	Excellent	Poor	Poor	Poor	Poor	Excellent
Weather/Ozone	Fair	Excellent	Excellent	Excellent	Excellent	Excellent
Alcohol	Good	Good	Good	Good	Good	Fair
Acid	Fair	Poor	Poor	Poor	Poor	Poor

Suction Cups – Oval Universal

Features & Strengths

- Great performance for handling long objects with flat and curved surfaces

Advantages

- Good lifting forces can be achieved with even the small sizes
- Conductive silicone material provides excellent handling of PCB boards or electronic components
- Easily mountable without having to detach a fitting from the machine (saving in maintenance time)

Examples of Use

- Semiconductor chips
- PCB boards
- Electronic components
- Solar cells
- Small glass cases

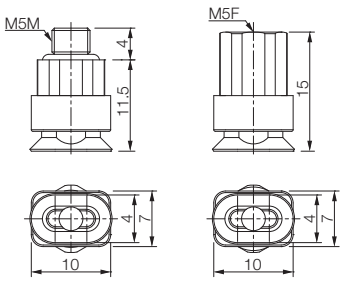
VOU Series

4 x 10mm, Cup Only



Code B01	Material	Colour	Temperature	Hardness	Price
VOU4X10-N	Nitrile	Black	-20°C-110°C	60	5.75
VOU4X10-S	Silicone	Red	-70°C-200°C	55	7.80
VOU4X10-WS	White Silicone	Translucent White	-70°C-200°C	55	7.80
VOU4X10-WS(FDA)	White Silicone (FDA)	Translucent White	-70°C-200°C	55	9.40
VOU4X10-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	13.00
VOU4X10-U	Urethane	Dark Green	0-100°C	60	23.40

Dimensions



With M5M Fitting

With M5F Fitting

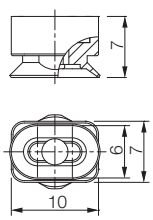
VOU Series

6 x 10mm, Cup Only



Code B01	Material	Colour	Temperature	Hardness	Price
VOU6X10-N	Nitrile	Black	-20°C-110°C	60	5.75
VOU6X10-S	Silicone	Red	-70°C-200°C	55	7.80
VOU6X10-WS	White Silicone	Translucent White	-70°C-200°C	55	7.80
VOU6X10-WS(FDA)	White Silicone (FDA)	Translucent White	-70°C-200°C	55	9.40
VOU6X10-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	13.00
VOU6X10-U	Urethane	Dark Green	0-100°C	60	23.40

Dimensions



Cup only

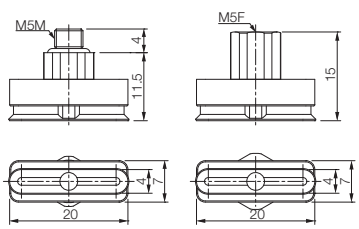
VOU Series

4 x 20mm, Cup Only



Code B02	Material	Colour	Temperature	Hardness	Price
VOU4X20-N	Nitrile	Black	-20°C-110°C	60	6.70
VOU4X20-S	Silicone	Red	-70°C-200°C	55	9.10
VOU4X20-WS	White Silicone	Translucent White	-70°C-200°C	55	9.10
VOU4X20-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55	10.90
VOU4X20-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	15.15
VOU4X20-U	Urethane	Dark Green	0-100°C	60	27.20

Dimensions



With M5M Fitting

With M5F Fitting

For technical information see page 163

Suction Cups – Oval Universal

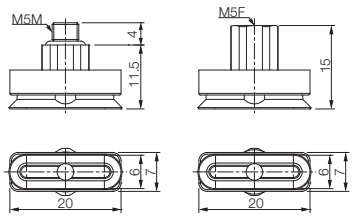
VOU Series

6 x 20mm, Cup Only



Code B02	Material	Colour	Temperature	Hardness	Price
VOU6X20-N	Nitrile	Black	-20°C-110°C	60	6.70
VOU6X20-S	Silicone	Red	-70°C-200°C	55	9.10
VOU6X20-WS	White Silicone	Translucent White	-70°C-200°C	55	9.10
VOU6X20-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55	10.90
VOU6X20-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	15.15
VOU6X20-U	Urethane	Dark Green	0-100°C	60	27.20

Dimensions



With M5M Fitting

With M5F Fitting

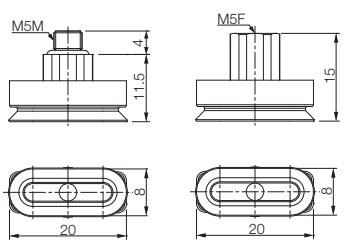
VOU Series

8 x 20mm, Cup Only



Code B02	Material	Colour	Temperature	Hardness	Price
VOU8X20-N	Nitrile	Black	-20°C-110°C	60	6.70
VOU8X20-S	Silicone	Red	-70°C-200°C	55	9.10
VOU8X20-WS	White Silicone	Translucent White	-70°C-200°C	55	9.10
VOU8X20-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55	10.90
VOU8X20-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	15.15
VOU8X20-U	Urethane	Dark Green	0-100°C	60	27.20

Dimensions



With M5M Fitting

With M5F Fitting

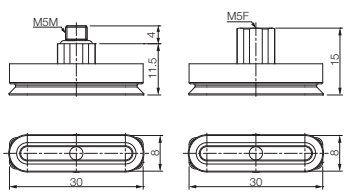
VOU Series

8 x 30mm, Cup Only



Code B02	Material	Colour	Temperature	Hardness	Price
VOU8X30-N	Nitrile	Black	-20°C-110°C	60	9.20
VOU8X30-S	Silicone	Red	-70°C-200°C	55	12.25
VOU8X30-WS	White Silicone	Translucent White	-70°C-200°C	55	12.25
VOU8X30-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55	14.70
VOU8X30-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	20.40
VOU8X30-U	Urethane	Dark Green	0-100°C	60	36.70

Dimensions



With M5M Fitting

With M5F Fitting

For technical information see page 163

Suction Cups – Oval Universal

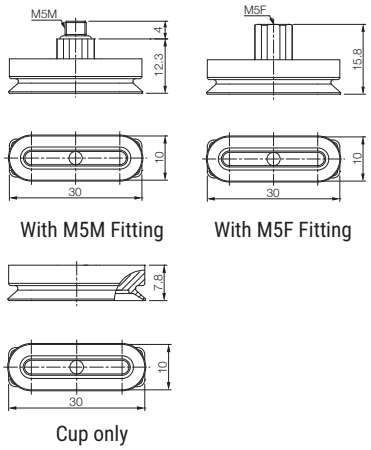
VOU Series

10 x 30mm, Cup Only



Code B02	Material	Colour	Temperature	Hardness	Price
VOU10X30-N	Nitrile	Black	-20°C-110°C	60	10.05
VOU10X30-S	Silicone	Red	-70°C-200°C	55	13.40
VOU10X30-WS	White Silicone	Translucent White	-70°C-200°C	55	13.40
VOU10X30-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55	16.05
VOU10X30-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	22.25
VOU10X30-U	Urethane	Dark Green	0-100°C	60	40.10

Dimensions



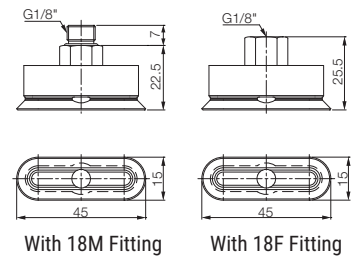
VOU Series

15 x 45mm, Cup Only



Code B02	Material	Colour	Temperature	Hardness	Price
VOU15X45-N	Nitrile	Black	-20°C-110°C	60	24.70
VOU15X45-S	Silicone	Red	-70°C-200°C	55	32.75
VOU15X45-WS	White Silicone	Translucent White	-70°C-200°C	55	32.75
VOU15X45-WS(FDA)	White Silicone (FDA)	Translucent White	-70°C-200°C	55	39.35
VOU15X45-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	54.55
VOU15X45-U	Urethane	Dark Green	0-100°C	60	98.30

Dimensions



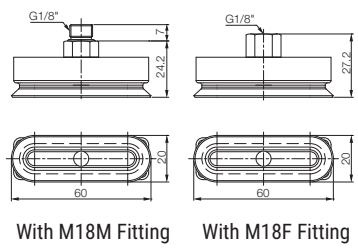
VOU Series

20 x 60mm, Cup Only



Code B02	Material	Colour	Temperature	Hardness	Price
VOU20X60-N	Nitrile	Black	-20°C-110°C	60	27.05
VOU20X60-S	Silicone	Red	-70°C-200°C	55	36.15
VOU20X60-WS	White Silicone	Translucent White	-70°C-200°C	55	36.15
VOU20X60-WS(FDA)	White Silicone (FDA)	Translucent White	-70°C-200°C	55	43.35
VOU20X60-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	60.15
VOU20X60-U	Urethane	Dark Green	0-100°C	60	108.30

Dimensions



For technical information see page 163

VU Series Technical Information

Features & Strengths

- Excellent performance for flat stable and slightly curved surfaces with direct fitting
- Suitable for concave surface



Examples of Use

- Good lifting forces can be achieved with this cup; is best suited to flat stable surfaces, but can cope with a small degree of curvature
- Very small cups are available down to just 1.5mm diameter



Recommended Lifting Force (Maximum)

Model	Volume (cm3)	Lifting Force (Kg) Perpendicular			Lifting Force (Kg) Parallel		
		- 20 kPa	- 60 kPa	- 90 kPa	- 20 kPa	- 60 kPa	- 90 kPa
VU1.5X	0.0015	0.0008	0.003	0.004	-	-	-
VU2X	0.0025	0.003	0.01	0.015	-	-	-
VU3	0.005	0.009	0.04	0.06	-	-	-
VU3K	0.018	0.014	0.06	0.09	-	-	-
VU4	0.03	0.02	0.09	0.13	0.02	0.08	0.10
VU4X	0.03	0.02	0.09	0.13	0.02	0.08	0.10
VU6	0.05	0.05	0.17	0.25	0.03	0.15	0.20
VU8	0.10	0.10	0.29	0.39	0.10	0.29	0.34
VU10	0.18	0.15	0.44	0.70	0.15	0.44	0.50
VU15	0.50	0.35	0.85	1.12	0.35	0.55	0.60
VU20	1.00	0.60	1.22	1.63	0.60	0.89	1.00
VU25	1.50	0.91	1.98	2.50	0.70	0.95	1.05
VU30	2.00	1.22	2.55	3.06	0.79	1.00	1.12
VU30X	1.80	0.65	1.48	1.78	-	-	-
VU40	5.50	2.04	3.97	5.00	1.42	2.24	2.80
VU50	12.00	3.57	7.44	9.38	2.04	3.77	4.48
VU80	32.00	7.77	19.80	25.21	4.53	12.70	16.94

The lifting force above does not include safety factor.

Material Specifications

Material	Hardness Shore (°)	Colour	Temperature (°C)
NBR	60	Black	-20 to +110
Silicone	55	Red	-70 to +200
White Silicone	55	Translucent White	-70 to +200
White Silicone (FDA)	55	Translucent White	-70 to +200
High Temp. Silicone	50	Blue	-70 to +280
Conductive Silicone	70	Smoky Black	-45 to +90
Urethane	60	Dark Green	0 to +100
Mark Free	75	Black	-10 to +100

Material Resistance

Description	NBR	Silicone	White Silicone	High Temperature Silicone	Conductive Silicone	Urethane	Mark Free
Wear Resistance	Excellent	Good	Good	Good	Good	Excellent	Good
Oil	Excellent	Poor	Poor	Poor	Poor	Excellent	Excellent
Weather/Ozone	Fair	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Alcohol	Good	Good	Good	Good	Good	Fair	Good
Acid	Fair	Poor	Poor	Poor	Poor	Poor	Excellent

Specifications subject to change without notice.

Suction Cups – Universal

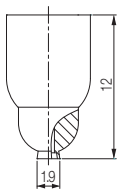
VU Series

1.5mm to Suit Level Compensator, Cup Only



Code B01	Material	Colour	Temperature	Hardness	Price
VU1.5X-N	Nitrile	Black	-20°C-110°C	60	4.00
VU1.5X-S	Silicone	Red	-70°C-200°C	55	4.75
VU1.5X-WS	White Silicone	Translucent White	-70°C-200°C	55	4.75
VU1.5X-WS(FDA)	White Silicone (FDA)	Translucent White	-70°C-200°C	55	5.75
VU1.5X-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	7.65
VU1.5X-U	Urethane	Dark Green	0-100°C	60	17.85
VU1.5X-A	Mark Free	Black	-10°C-100°C	75	23.90

Dimensions



Cup only

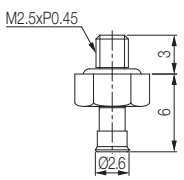
VU Series

2mm, Cup Only

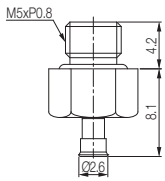


Code B01	Material	Colour	Temperature	Hardness	Price
VU2-N	Nitrile	Black	-20°C-110°C	60	3.95
VU2-S	Silicone	Red	-70°C-200°C	55	8.00
VU2-WS	White Silicone	Translucent White	-70°C-200°C	55	8.20
VU2-WS(FDA)	White Silicone (FDA)	Translucent White	-70°C-200°C	55	9.80
VU2-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	8.20
VU2-U	Urethane	Dark Green	0°C-100°C	60	24.50
VU2-A	Mark Free	Black	-10°C-100°C	75	40.90

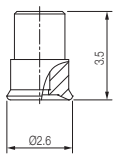
Dimensions



With M2.5M fitting



With M5M fitting



Cup only

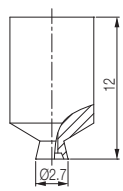
VU Series

2mm to Suit Level Compensator, Cup Only



Code B01	Material	Colour	Temperature	Hardness	Price
VU2X-N	Nitrile	Black	-20°C-110°C	60	3.70
VU2X-S	Silicone	Red	-70°C-200°C	55	4.30
VU2X-WS	White Silicone	Translucent White	-70°C-200°C	55	4.30
VU2X-WS(FDA)	White Silicone (FDA)	Translucent White	-70°C-200°C	55	5.15
VU2X-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	6.85
VU2X-U	Urethane	Dark Green	0-100°C	60	12.90
VU2X-A	Mark Free	Black	-10°C-100°C	75	21.45

Dimensions



Cup only

For technical information see page 167

VU Series

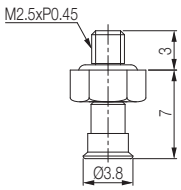
3mm, Cup Only



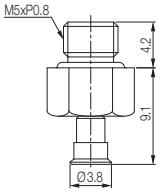


Code B01	Material	Colour	Temperature	Hardness	Price
VU3-N	Nitrile	Black	-20°C-110°C	60	5.25
VU3-S	Silicone	Red	-70°C-200°C	55	9.45
VU3-WS	White Silicone	Translucent White	-70°C-200°C	55	9.45
VU3-WS(FDA)	White Silicone (FDA)	Translucent White	-70°C-200°C	55	11.30
VU3-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	9.45
VU3-U	Urethane	Dark Green	0-100°C	60	28.20
VU3-A	Mark Free	Black	-10°C-100°C	75	46.90

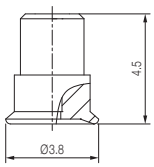
Dimensions



With M2.5M fitting



With M5M fitting



Cup only

VU Series

4mm, Cup Only

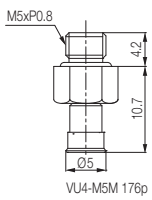




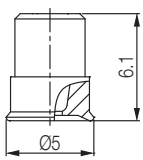


Code B01	Material	Colour	Temperature	Hardness	Price
VU4-N	Nitrile	Black	-20°C-110°C	60	3.05
VU4-S	Silicone	Red	-70°C-200°C	55	7.15
VU4-WS	White Silicone	Translucent White	-70°C-200°C	55	7.15
VU4-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55	8.60
VU4-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	7.15
VU4-U	Urethane	Dark Green	0-100°C	60	21.50
VU4-A	Mark Free	Black	-10°C-100°C	75	35.80

Dimensions



With M5M fitting



Cup only

VU Series

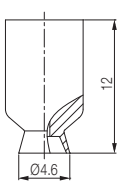
4mm to Suit Level Compensators, Cup Only





Code B01	Material	Colour	Temperature	Hardness	Price
VU4X-N	Nitrile	Black	-20°C-110°C	60	4.30
VU4X-S	Silicone	Red	-70°C-200°C	55	6.70
VU4X-WS	White Silicone	Translucent White	-70°C-200°C	55	6.70
VU4X-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55	8.05
VU4X-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	8.30
VU4X-U	Urethane	Dark Green	0-100°C	60	20.05
VU4X-A	Mark Free	Black	-10°C-100°C	75	33.40

Dimensions



Cup only

For technical information see page 167

Suction Cups – Universal

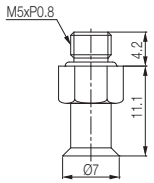
VU Series

6mm, Cup Only

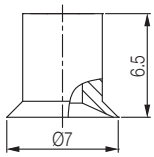


Code	B01	Material	Colour	Temperature	Hardness	Price
VU6-N		Nitrile	Black	-20°C-110°C	60	2.60
VU6-S		Silicone	Red	-70°C-200°C	55	5.40
VU6-WS		White Silicone	Translucent White	-70°C-200°C	55	5.40
VU6-WS-FDA		White Silicone (FDA)	Translucent White	-70°C-200°C	55	6.50
VU6-CS		Conductive Silicone	Smoky Black	-45°C-90°C	70	6.85
VU6-U		Urethane	Dark Green	0-100°C	60	16.20
VU6-A		Mark Free	Black	-10°C-100°C	75	27.00

Dimensions



With M5M fitting



Cup only

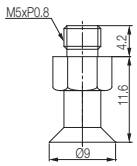
VU Series

8mm, Cup Only

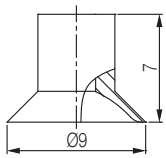


Code	B01	Material	Colour	Temperature	Hardness	Price
VU8-N		Nitrile	Black	-20°C-110°C	60	2.70
VU8-S		Silicone	Red	-70°C-200°C	55	5.60
VU8-WS		White Silicone	Translucent White	-70°C-200°C	55	5.60
VU8-WS-FDA		White Silicone (FDA)	Translucent White	-70°C-200°C	55	6.70
VU8-CS		Conductive Silicone	Smoky Black	-45°C-90°C	70	7.15
VU8-U		Urethane	Dark Green	0-100°C	60	16.70
VU8-A		Mark Free	Black	-10°C-100°C	75	27.85

Dimensions



With M5M fitting



Cup only

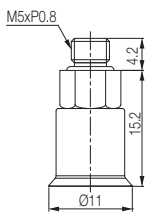
VU Series

10mm, Cup Only

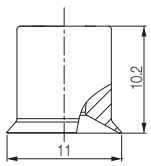


Code	B01	Material	Colour	Temperature	Hardness	Price
VU10-N		Nitrile	Black	-20°C-110°C	60	2.70
VU10-S		Silicone	Red	-70°C-200°C	55	5.90
VU10-WS		White Silicone	Translucent White	-70°C-200°C	55	5.90
VU10-WS(FDA)		White Silicone (FDA)	Translucent White	-70°C-200°C	55	7.10
VU10-CS		Conductive Silicone	Smoky Black	-45°C-90°C	70	7.35
VU10-U		Urethane	Dark Green	0-100°C	60	10.85
VU10-A		Mark Free	Black	-10°C-100°C	75	29.40

Dimensions



With M5M fitting



Cup only

For technical information see page 167

Suction Cups – Universal

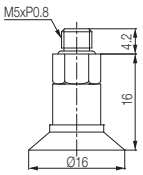
VU Series

15mm, Cup Only

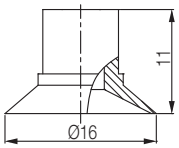


Code B01	Material	Colour	Temperature	Hardness	Price
VU15-N	Nitrile	Black	-20°C-110°C	60	3.20
VU15-S	Silicone	Red	-70°C-200°C	55	6.05
VU15-WS	White Silicone	Translucent White	-70°C-200°C	55	6.05
VU15-WS(FDA)	White Silicone (FDA)	Translucent White	-70°C-200°C	55	7.25
VU15-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	7.65
VU15-U	Urethane	Dark Green	0-100°C	60	13.85
VU15-A	Mark Free	Black	-10°C-100°C	75	30.20

Dimensions



With M5M fitting



Cup only

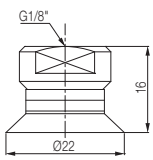
VU Series

20mm, Cup Only

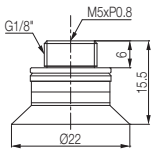


Code B01	Material	Colour	Temperature	Hardness	Price
VU20-N	Nitrile	Black	-20°C-110°C	60	4.00
VU20-S	Silicone	Red	-70°C-200°C	55	6.70
VU20-WS	White Silicone	Translucent White	-70°C-200°C	55	6.70
VU20-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55	8.05
VU20-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	8.45
VU20-U	Urethane	Dark Green	0-100°C	60	16.70
VU20-A	Mark Free	Black	-10°C-100°C	75	33.40

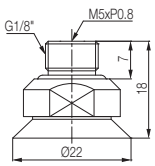
Dimensions



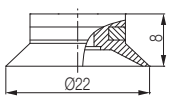
With 18F fitting



With M518MF fitting



With M518MFX fitting



Cup only

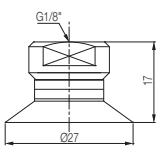
VU Series

25mm, Cup Only

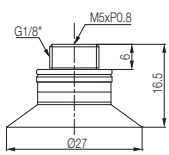


Code B01	Material	Colour	Temperature	Hardness	Price
VU25-N	Nitrile	Black	-20°C-110°C	60	4.60
VU25-S	Silicone	Red	-70°C-200°C	55	7.65
VU25-WS	White Silicone	Translucent White	-70°C-200°C	55	7.65
VU25-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55	9.20
VU25-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	9.45
VU25-U	Urethane	Dark Green	0-100°C	60	22.95
VU25-A	Mark Free	Black	-10°C-100°C	75	31.80

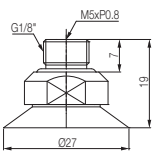
Dimensions



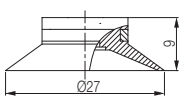
With 18F fitting



With M518F fitting



With 18MFX fitting



Cup only

For technical information see page 167

Suction Cups – Universal

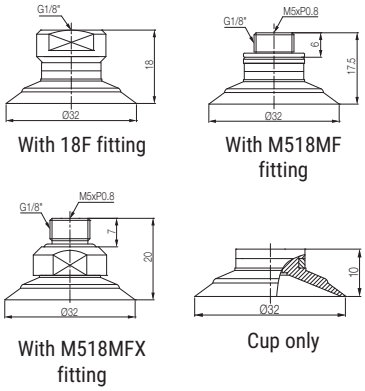
VU Series

30mm, Cup Only



Code B01	Material	Colour	Temperature	Hardness	Price
VU30-N	Nitrile	Black	-20°C-110°C	60	4.75
VU30-S	Silicone	Red	-70°C-200°C	55	6.85
VU30-WS	White Silicone	Translucent White	-70°C-200°C	55	6.85
VU30-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55	8.25
VU30-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	8.60
VU30-U	Urethane	Dark Green	0-100°C	60	22.75
VU30-A	Mark Free	Black	-10°C-100°C	75	34.20

Dimensions



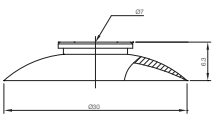
VU Series

30mm to Suit Level Compensators, Cup Only



Code B01	Material	Colour	Temperature	Hardness	Price
VU30X-N	Nitrile	Black	-20°C-110°C	60	4.35
VU30X-S	Silicone	Red	-70°C-200°C	55	6.10
VU30X-WS	White Silicone	Translucent White	-70°C-200°C	55	6.10
VU30X-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55	7.60
VU30X-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	10.30
VU30X-U	Urethane	Dark Green	0-100°C	60	18.20

Dimensions



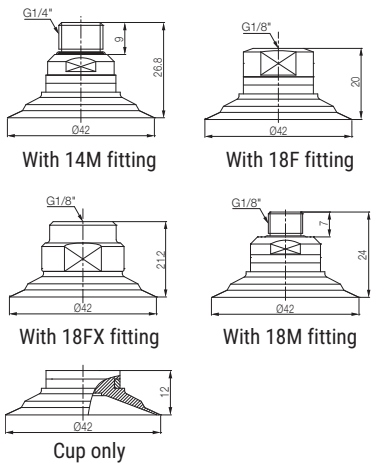
VU Series

40mm, Cup Only



Code B01	Material	Colour	Temperature	Hardness	Price
VU40-N	Nitrile	Black	-40°C-110°C	60	5.75
VU40-S	Silicone	Red	-70°C-400°C	55	9.25
VU40-WS	White Silicone	Translucent White	-70°C-400°C	55	9.25
VU40-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-400°C	55	11.05
VU40-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	11.45
VU40-U	Urethane	Dark Green	0-100°C	60	25.45
VU40-A	Mark Free	Black	-10°C-100°C	75	46.10

Dimensions



For technical information see page 167

Suction Cups – Universal

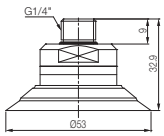
VU Series

50mm, Cup Only

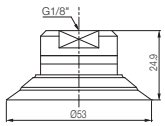


Code B01	Material	Colour	Temperature	Hardness	Price
VU50-N	Nitrile	Black	-40°C-110°C	60	7.00
VU50-S	Silicone	Red	-70°C-400°C	55	10.50
VU50-WS	White Silicone	Translucent White	-70°C-400°C	55	10.50
VU50-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-400°C	55	12.65
VU50-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	13.05
VU50-U	Urethane	Dark Green	0-100°C	60	30.55
VU50-A	Mark Free	Black	-10°C-100°C	75	52.50

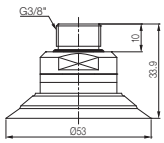
Dimensions



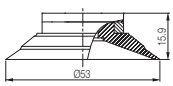
With 14M fitting



With 18F fitting



With 38M fitting



Cup only

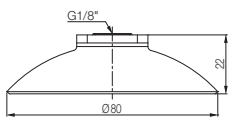
VU Series

80mm, Cup Only

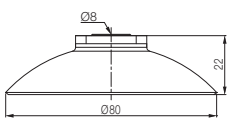


Code B01	Material	Colour	Temperature	Hardness	Price
VU80-N	Nitrile	Black	-40°C-110°C	60	29.60
VU80-S	Silicone	Red	-70°C-400°C	55	45.05
VU80-WS	White Silicone	Translucent White	-70°C-400°C	55	60.15
VU80-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-400°C	55	72.15
VU80-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	76.50
VU80-U	Urethane	Dark Green	0-100°C	60	135.05
VU80-A	Mark Free	Black	-10°C-100°C	75	225.05

Dimensions



With 18F fitting



8Ø Hole

For technical information see page 167

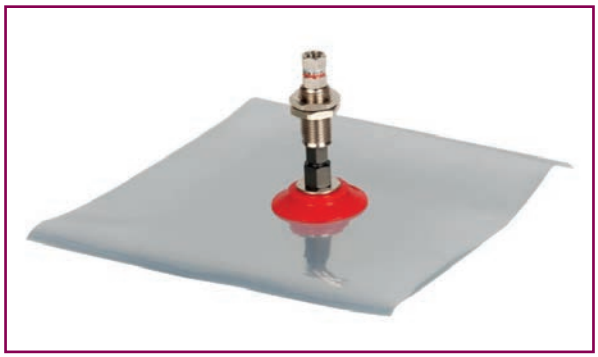
FF Series Technical Information

Features & Strengths

- Excellent performance for very thin and light weight products
- Mark free

Examples of Use

- Semiconductor, display, thin film





Material Specifications

Material	Hardness Shore (°)	Colour	Temperature (°C)
NBR	60	Black	-20 to +110
Silicone	55	Red	-70 to +200
White Silicone	55	Translucent White	-70 to +200
White Silicone (FDA)	55	Translucent White	-70 to +200
High Temperature Silicone	50	Blue	-70 to +280
Conductive Silicone	70	Smoky Black	-45 to +90
Urethane	60	Dark Green	0 to +100
Mark Free	75	Black	-10 to +100

Recommended Lifting Force (Maximum)

Model	Volume (cm^3)	Lifting Force (Kg) Perpendicular		
		- 20 kPa	- 60 kPa	- 90 kPa
FF10	0.01	0.18	0.38	0.55
FF15	0.04	0.35	0.9	1.20
FF20	0.07	0.54	1.35	1.6
FF25	0.11	0.86	1.40	1.60
FF30	0.17	1.15	1.50	1.60
FF15X	0.12	0.35	0.36	0.50
FF20X	0.12	0.35	0.36	0.50

The lifting force above does not include safety factor.

Material Resistance

Description	NBR	Silicone	White Silicone	High Temperature Silicone	Conductive Silicone	Urethane	Mark Free
Wear Resistance	Excellent	Good	Good	Good	Good	Excellent	Good
Oil	Excellent	Poor	Poor	Poor	Poor	Excellent	Excellent
Weather/Ozone	Fair	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Alcohol	Good	Good	Good	Good	Good	Fair	Good
Acid	Fair	Poor	Poor	Poor	Poor	Poor	Excellent

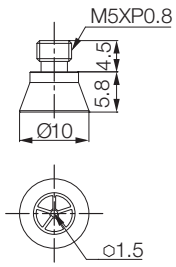


FF Series

10mm Cups with M5 Male Fitting

Code B01	Material	Colour	Temperature	Hardness	Price
FF10-N-M5M	Nitrile	Black	-20°C-110°C	60	15.35
FF10-S-M5M	Silicone	Red	-70°C-200°C	55	15.35
FF10-WS-M5M	White Silicone	Translucent White	-70°C-200°C	55	15.35
FF10-WS-M5M-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55	19.15
FF10-CS-M5M	Conductive Silicone	Smoky Black	-45°C-90°C	70	15.35

Dimensions



With M5M fitting

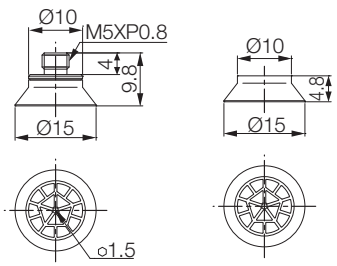


FF Series

15mm, Cup Only

Code B01	Material	Colour	Temperature	Hardness	Price
FF15-N	Nitrile	Black	-20°C-110°C	60	13.40
FF15-S	Silicone	Red	-70°C-200°C	55	13.40
FF15-WS	White Silicone	Translucent White	-70°C-200°C	55	13.40
FF15-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55	16.75
FF15-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	13.40

Dimensions



With M5M fitting

Cup only

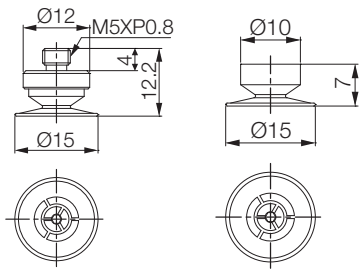


FF Series

15mm with 7mm Neck, Cup Only

Code B01	Material	Colour	Temperature	Hardness	Price
FF15X-N	Nitrile	Black	-20°C-110°C	60	19.30
FF15X-S	Silicone	Red	-70°C-200°C	55	19.30
FF15X-WS	White Silicone	Translucent White	-70°C-200°C	55	19.30
FF15X-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55	24.15
FF15X-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	19.30

Dimensions



With M5M fitting

Cup only

For technical information see page 174

Suction Cups – Mark Free, Flat Structure

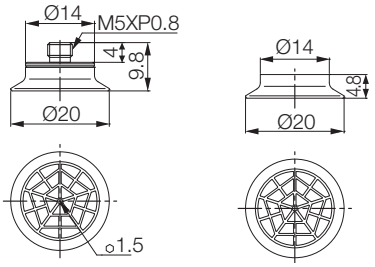
FF Series

20mm, Cup Only



Code	B01	Material	Colour	Temperature	Hardness	Price
FF20-N		Nitrile	Black	-20°C-110°C	60	14.35
FF20-S		Silicone	Red	-70°C-200°C	55	14.35
FF20-WS		White Silicone	Translucent White	-70°C-200°C	55	14.35
FF20-WS-FDA		White Silicone (FDA)	Translucent White	-70°C-200°C	55	17.95
FF20-CS		Conductive Silicone	Smoky Black	-45°C-90°C	70	14.35

Dimensions



With M5M fitting | Cup only

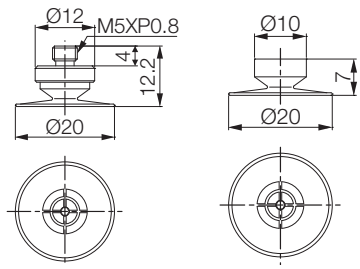
FF Series

20mm with 7mm Neck, Cup Only



Code	B01	Material	Colour	Temperature	Hardness	Price
FF20X-N		Nitrile	Black	-20°C-110°C	60	22.10
FF20X-S		Silicone	Red	-70°C-200°C	55	22.10
FF20X-WS		White Silicone	Translucent White	-70°C-200°C	55	22.10
FF20X-WS-FDA		White Silicone (FDA)	Translucent White	-70°C-200°C	55	27.60
FF20X-CS		Conductive Silicone	Smoky Black	-45°C-90°C	70	22.10

Dimensions



With M5M fitting | Cup only

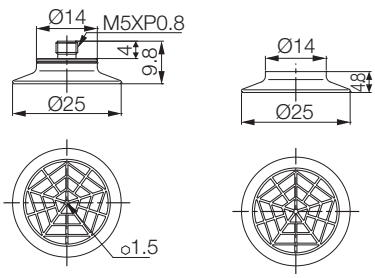
FF Series

25mm, Cup Only



Code	B01	Material	Colour	Temperature	Hardness	Price
FF25-N		Nitrile	Black	-20°C-110°C	60	19.90
FF25-S		Silicone	Red	-70°C-200°C	55	19.90
FF25-WS		White Silicone	Translucent White	-70°C-200°C	55	19.90
FF25-WS-FDA		White Silicone (FDA)	Translucent White	-70°C-200°C	55	24.80
FF25-CS		Conductive Silicone	Smoky Black	-45°C-90°C	70	19.90

Dimensions



With M5M fitting | Cup only

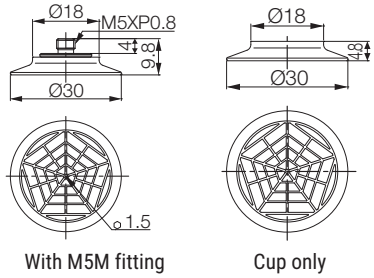
FF Series

30mm, Cup Only



Code	B01	Material	Colour	Temperature	Hardness	Price
FF30-N		Nitrile	Black	-20°C-110°C	60	21.00
FF30-S		Silicone	Red	-70°C-200°C	55	21.00
FF30-WS		White Silicone	Translucent White	-70°C-200°C	55	21.00
FF30-WS-FDA		White Silicone (FDA)	Translucent White	-70°C-200°C	55	26.20
FF30-CS		Conductive Silicone	Smoky Black	-45°C-90°C	70	21.00

Dimensions



With M5M fitting | Cup only

For technical information see page 174

VD Series Technical Information

Features & Strengths

- Suitable for curved or irregular surfaces
- Excellent performance for round corners and edges

Examples of Use

- Automobile roofs and doors, metal sheets, plastic sheets, veneer sheets, shaped metal panels





Material Specifications

Material	Hardness Shore (°)	Colour	Temperature (°C)
NBR	60	Black	-20 to +110
Silicone	55	Red	-70 to +200
White Silicone	55	Translucent White	-70 to +200
White Silicone (FDA)	55	Translucent White	-70 to +200
High Temp. Silicone	50	Blue	-70 to +280
Conductive Silicone	70	Smoky Black	-45 to +90
Urethane	60	Dark Green	0 to +100
Mark Free	75	Black	-10 to +100
Polyurethane	60	Translucent Orange	0 to +60

Recommended Lifting Force (Maximum)

Model	Volume (cm^3)	Lifting Force (Kg) Perpendicular			Lifting Force (Kg) Parallel		
		- 20 kPa	- 60 kPa	- 90 kPa	- 20 kPa	- 60 kPa	- 90 kPa
VD30	4.50	1.22	2.55	3.06	0.73	1.53	1.83
VD40	7.00	2.04	3.97	5.00	1.22	2.38	3.00
VD50	13.50	3.57	7.44	9.38	2.14	4.46	5.62
VD60	22.00	5.50	14.00	18.50	3.30	8.40	11.10
VD70	38.00	7.15	18.80	24.90	4.20	11.60	16.20
VD85	60.00	10.00	28.00	39.00	6.00	16.80	23.40
VD90F	56.00	9.25	24.36	32.17	7.97	14.42	18.15

The lifting force above does not include safety factor.

Material Resistance

Description	NBR	Silicone	White Silicone	High Temperature Silicone	Conductive Silicone	Urethane	Mark Free	Polyurethane
Wear Resistance	Excellent	Good	Good	Good	Good	Excellent	Good	Excellent
Oil	Excellent	Poor	Poor	Poor	Poor	Excellent	Excellent	Excellent
Weather/Ozone	Fair	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Alcohol	Good	Good	Good	Good	Good	Fair	Good	Fair
Acid	Fair	Poor	Poor	Poor	Poor	Poor	Excellent	Fair

Suction Cups – Deep

Features & Strengths

- This cup is best suited to curved or irregular surfaces
- Excellent performance for round corners and edge

Suitable for Handling

- Automotive roof and doors
- Sheet metals, plastics and veneers
- Shaped sheet metal
- Pre-mounted fitting

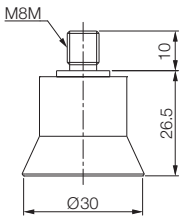


VD Series

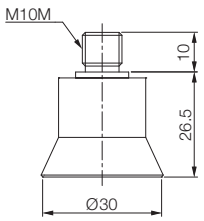
30mm Cups with Fitting

Code B01	Material	Connection	Colour	Temperature	Hardness	Type	Price
VD30-N-M8M	Nitrile	M8	Black	-20°C-110°C	60	Male	**17.05**
VD30-S-M8M	Silicone	M8	Red	-70°C-200°C	55	Male	**28.30**
VD30-WS-M8M	White Silicone	M8	Translucent White	-70°C-200°C	55	Male	**28.30**
VD30-WS-FDA-M8M	White Silicone (FDA)	M8	Translucent White	-70°C-200°C	55	Male	**33.95**
VD30-CS-M8M	Conductive Silicone	M8	Smoky Black	-45°C-90°C	70	Male	**35.50**
VD30-U-M8M	Urethane	M8	Dark Green	0°C-100°C	60	Male	**84.85**
VD30-A-M8M	Mark Free	M8	Black	-10°C-100°C	75	Male	**141.40**
VD30-PU-M8M	Polyurethane	M8	Translucent Orange	0°C-60°C	60	Male	**18.10**
VD30-N-M10M	Nitrile	M10	Black	-20°C-110°C	60	Male	**17.05**
VD30-S-M10M	Silicone	M10	Red	-70°C-200°C	55	Male	**28.30**
VD30-WS-M10M	White Silicone	M10	Translucent White	-70°C-200°C	55	Male	**28.30**
VD30-WS-FDA-M10M	White Silicone (FDA)	M10	Translucent White	-70°C-200°C	55	Male	**33.95**
VD30-CS-M10M	Conductive Silicone	M10	Smoky Black	-45°C-90°C	70	Male	**35.50**
VD30-U-M10M	Urethane	M10	Dark Green	0°C-100°C	60	Male	**84.85**
VD30-A-M10M	Mark Free	M10	Black	-10°C-100°C	75	Male	**141.40**
VD30-PU-M10M	Polyurethane	M10	Translucent Orange	0°C-60°C	60	Male	**18.10**
VD30-N-18F	Nitrile	G1/8"	Black	-20°C-110°C	60	Female	**17.05**
VD30-S-18F	Silicone	G1/8"	Red	-70°C-200°C	55	Female	**28.30**
VD30-WS-18F	White Silicone	G1/8"	Translucent White	-70°C-200°C	55	Female	**28.30**
VD30-WS-FDA-18F	White Silicone (FDA)	G1/8"	Translucent White	-70°C-200°C	55	Female	**33.95**
VD30-CS-18F	Conductive Silicone	G1/8"	Smoky Black	-45°C-90°C	70	Female	**35.50**
VD30-U-18F	Urethane	G1/8"	Dark Green	0°C-100°C	60	Female	**84.85**
VD30-A-18F	Mark Free	G1/8"	Black	-10°C-100°C	75	Female	**141.40**
VD30-PU-18F	Polyurethane	G1/8"	Translucent Orange	0°C-60°C	60	Female	**18.10**

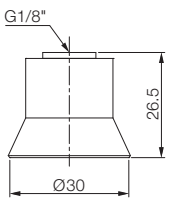
Dimensions



With M8M fitting



With M10M fitting



With 18F fitting

For technical information see page 177

Suction Cups – Deep

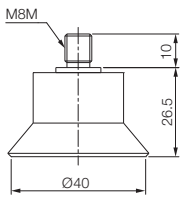
VD Series

40mm Cups with Fitting

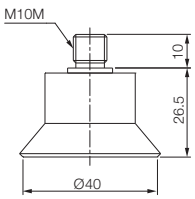


Code B02	Material	Connection	Colour	Temperature	Hardness	Type	Price
VD40-N-M8M	Nitrile	M8	Black	-20°C-110°C	60	Male	**18.10**
VD40-S-M8M	Silicone	M8	Red	-70°C-200°C	55	Male	**29.70**
VD40-WS-M8M	White Silicone	M8	Translucent White	-70°C-200°C	55	Male	**29.70**
VD40-WS-FDA-M8M	White Silicone (FDA)	M8	Translucent White	-70°C-200°C	55	Male	**35.70**
VD40-CS-M8M	Conductive Silicone	M8	Smoky Black	-45°C-90°C	70	Male	**50.55**
VD40-U-M8M	Urethane	M8	Dark Green	0°C-100°C	60	Male	**89.20**
VD40-A-M8M	Mark Free	M8	Black	-10°C-100°C	75	Male	**148.60**
VD40-PU-M8M	Polyurethane	M8	Translucent Orange	0°C-60°C	60	Male	**18.75**
VD40-N-M10M	Nitrile	M10	Black	-20°C-110°C	60	Male	**18.10**
VD40-S-M10M	Silicone	M10	Red	-70°C-200°C	55	Male	**29.70**
VD40-WS-M10M	White Silicone	M10	Translucent White	-70°C-200°C	55	Male	**29.70**
VD40-WS-FDA-M10M	White Silicone (FDA)	M10	Translucent White	-70°C-200°C	55	Male	**35.70**
VD40-CS-M10M	Conductive Silicone	M10	Smoky Black	-45°C-90°C	70	Male	**50.55**
VD40-U-M10M	Urethane	M10	Dark Green	0°C-100°C	60	Male	**89.20**
VD40-A-M10M	Mark Free	M10	Black	-10°C-100°C	75	Male	**148.60**
VD40-PU-M10M	Polyurethane	M10	Translucent Orange	0°C-60°C	60	Male	**18.75**
VD40-N-18F	Nitrile	G1/8"	Black	-20°C-110°C	60	Female	**18.10**
VD40-S-18F	Silicone	G1/8"	Red	-70°C-200°C	55	Female	**29.70**
VD40-WS-18F	White Silicone	G1/8"	Translucent White	-70°C-200°C	55	Female	**29.70**
VD40-WS-FDA-18F	White Silicone (FDA)	G1/8"	Translucent White	-70°C-200°C	55	Female	**35.70**
VD40-CS-18F	Conductive Silicone	G1/8"	Smoky Black	-45°C-90°C	70	Female	**50.55**
VD40-U-18F	Urethane	G1/8"	Dark Green	0°C-100°C	60	Female	**89.20**
VD40-A-18F	Mark Free	G1/8"	Black	-10°C-100°C	75	Female	**148.60**
VD40-PU-18F	Polyurethane	G1/8"	Translucent Orange	0°C-60°C	60	Female	**18.75**

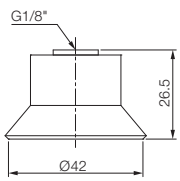
Dimensions



With M8M fitting



With M10M fitting



With 18F fitting

For technical information see page 177

Suction Cups – Deep

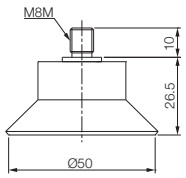
VD Series

50mm Cups with Fitting

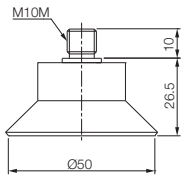


Code B01	Material	Connection	Colour	Temperature	Hardness	Type	Price
VD50-N-M8M	Nitrile	M8	Black	-20°C-110°C	60	Male	23.40
VD50-S-M8M	Silicone	M8	Red	-70°C-200°C	55	Male	33.25
VD50-WS-M8M	White Silicone	M8	Translucent White	-70°C-200°C	55	Male	33.25
VD50-WS-FDA-M8M	White Silicone (FDA)	M8	Translucent White	-70°C-200°C	55	Male	39.90
VD50-CS-M8M	Conductive Silicone	M8	Smoky Black	-45°C-90°C	70	Male	56.45
VD50-U-M8M	Urethane	M8	Dark Green	0°C-100°C	60	Male	99.65
VD50-A-M8M	Mark Free	M8	Black	-10°C-100°C	75	Male	166.10
VD50-PU-M8M	Polyurethane	M8	Translucent Orange	0°C-60°C	60	Male	23.40
VD50-N-M10M	Nitrile	M10	Black	-20°C-110°C	60	Male	23.40
VD50-S-M10M	Silicone	M10	Red	-70°C-200°C	55	Male	33.25
VD50-WS-M10M	White Silicone	M10	Translucent White	-70°C-200°C	55	Male	33.25
VD50-WS-FDA-M10M	White Silicone (FDA)	M10	Translucent White	-70°C-200°C	55	Male	39.90
VD50-CS-M10M	Conductive Silicone	M10	Smoky Black	-45°C-90°C	70	Male	56.45
VD50-U-M10M	Urethane	M10	Dark Green	0°C-100°C	60	Male	99.65
VD50-A-M10M	Mark Free	M10	Black	-10°C-100°C	75	Male	166.10
VD50-PU-M10M	Polyurethane	M10	Translucent Orange	0°C-60°C	60	Male	23.40
VD50-N-18F	Nitrile	G1/8"	Black	-20°C-110°C	60	Female	23.40
VD50-S-18F	Silicone	G1/8"	Red	-70°C-200°C	55	Female	33.25
VD50-WS-18F	White Silicone	G1/8"	Translucent White	-70°C-200°C	55	Female	33.25
VD50-WS-FDA-18F	White Silicone (FDA)	G1/8"	Translucent White	-70°C-200°C	55	Female	39.90
VD50-CS-18F	Conductive Silicone	G1/8"	Smoky Black	-45°C-90°C	70	Female	56.45
VD50-U-18F	Urethane	G1/8"	Dark Green	0°C-100°C	60	Female	99.65
VD50-A-18F	Mark Free	G1/8"	Black	-10°C-100°C	75	Female	166.10
VD50-PU-18F	Polyurethane	G1/8"	Translucent Orange	0°C-60°C	60	Female	23.40

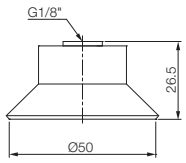
Dimensions



With M8M fitting



With M10M fitting



With 18F fitting

For technical information see page 177

Suction Cups – Deep

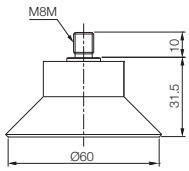
VD Series

60mm Cups with Fitting

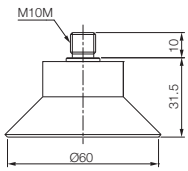


Code B01	Material	Connection	Colour	Temperature	Hardness	Type	Price
VD60-N-M8M	Nitrile	M8	Black	-20°C-110°C	60	Male	26.85
VD60-S-M8M	Silicone	M8	Red	-70°C-200°C	55	Male	35.30
VD60-WS-M8M	White Silicone	M8	Translucent White	-70°C-200°C	55	Male	35.30
VD60-WS-FDA-M8M	White Silicone (FDA)	M8	Translucent White	-70°C-200°C	55	Male	42.40
VD60-CS-M8M	Conductive Silicone	M8	Smoky Black	-45°C-90°C	70	Male	60.00
VD60-U-M8M	Urethane	M8	Dark Green	0°C-100°C	60	Male	105.90
VD60-A-M8M	Mark Free	M8	Black	-10°C-100°C	75	Male	176.45
VD60-PU-M8M	Polyurethane	M8	Translucent Orange	0°C-60°C	60	Male	31.15
VD60-N-M10M	Nitrile	M10	Black	-20°C-110°C	60	Male	26.85
VD60-S-M10M	Silicone	M10	Red	-70°C-200°C	55	Male	35.30
VD60-WS-M10M	White Silicone	M10	Translucent White	-70°C-200°C	55	Male	35.30
VD60-WS-FDA-M10M	White Silicone (FDA)	M10	Translucent White	-70°C-200°C	55	Male	42.40
VD60-CS-M10M	Conductive Silicone	M10	Smoky Black	-45°C-90°C	70	Male	60.00
VD60-U-M10M	Urethane	M10	Dark Green	0°C-100°C	60	Male	105.90
VD60-A-M10M	Mark Free	M10	Black	-10°C-100°C	75	Male	176.45
VD60-PU-M10M	Polyurethane	M10	Translucent Orange	0°C-60°C	60	Male	31.15
VD60-N-18F	Nitrile	G1/8"	Black	-20°C-110°C	60	Female	26.85
VD60-S-18F	Silicone	G1/8"	Red	-70°C-200°C	55	Female	35.30
VD60-WS-18F	White Silicone	G1/8"	Translucent White	-70°C-200°C	55	Female	35.30
VD60-WS-FDA-18F	White Silicone (FDA)	G1/8"	Translucent White	-70°C-200°C	55	Female	42.40
VD60-CS-18F	Conductive Silicone	G1/8"	Smoky Black	-45°C-90°C	70	Female	60.00
VD60-U-18F	Urethane	G1/8"	Dark Green	0°C-100°C	60	Female	105.90
VD60-A-18F	Mark Free	G1/8"	Black	-10°C-100°C	75	Female	176.45
VD60-PU-18F	Polyurethane	G1/8"	Translucent Orange	0°C-60°C	60	Female	31.15

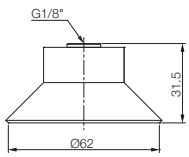
Dimensions



With M8M fitting



With M10M fitting



With 18F fitting

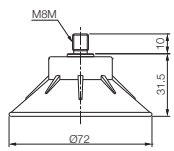
VD Series

70mm Cups with Fitting

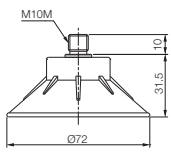


Code B01	Material	Conection	Colour	Temperature	Hardness	Type	Price
VD70-PU-M8M	Polyurethane	M8	Translucent Orange	0°C-60°C	60	Male	38.80
VD70-PU-M10M	Polyurethane	M10	Translucent Orange	0°C-60°C	60	Male	38.80
VD70-PU-18F	Polyurethane	G1/8"	Translucent Orange	0°C-60°C	60	Female	38.80

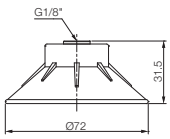
Dimensions



With M8M fitting



With M10M fitting

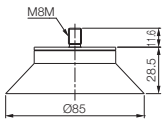


With 18F fitting

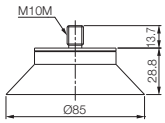
For technical information see page 177

Suction Cups – Deep

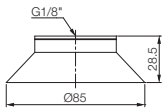
Dimensions



With M8M fitting



With M10M fitting



With 18F fitting





VD Series

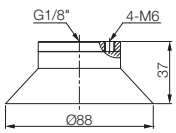
85mm Cups with Fitting

Code B01	Material	Connection	Colour	Temperature	Hardness	Type	Price
VD85-N-M8M	Nitrile	M8	Black	-20°C-110°C	60	Male	**52.00**
VD85-S-M8M	Silicone	M8	Red	-70°C-200°C	55	Male	**64.70**
VD85-WS-M8M	White Silicone	M8	Translucent White	-70°C-200°C	55	Male	**86.30**
VD85-WS-FDA-M8M	White Silicone (FDA)	M8	Translucent White	-70°C-200°C	55	Male	**103.55**
VD85-CS-M8M	Conductive Silicone	M8	Smoky Black	-45°C-90°C	70	Male	**109.95**
VD85-U-M8M	Urethane	M8	Dark Green	0°C-100°C	60	Male	**144.80**
VD85-A-M8M	Mark Free	M8	Black	-10°C-100°C	75	Male	**323.45**
VD85-N-M10M	Nitrile	M10	Black	-20°C-110°C	60	Male	**52.00**
VD85-S-M10M	Silicone	M10	Red	-70°C-200°C	55	Male	**64.70**
VD85-WS-M10M	White Silicone	M10	Translucent White	-70°C-200°C	55	Male	**86.30**
VD85-WS-FDA-M10M	White Silicone (FDA)	M10	Translucent White	-70°C-200°C	55	Male	**103.55**
VD85-CS-M10M	Conductive Silicone	M10	Smoky Black	-45°C-90°C	70	Male	**109.95**
VD85-U-M10M	Urethane	M10	Dark Green	0°C-100°C	60	Male	**144.80**
VD85-A-M10M	Mark Free	M10	Black	-10°C-100°C	75	Male	**323.45**
VD85-N-18F	Nitrile	G1/8"	Black	-20°C-110°C	60	Female	**52.00**
VD85-S-18F	Silicone	G1/8"	Red	-70°C-200°C	55	Female	**64.70**
VD85-WS-18F	White Silicone	G1/8"	Translucent White	-70°C-200°C	55	Female	**86.30**
VD85-WS-FDA-18F	White Silicone (FDA)	G1/8"	Translucent White	-70°C-200°C	55	Female	**103.55**
VD85-CS-18F	Conductive Silicone	G1/8"	Smoky Black	-45°C-90°C	70	Female	**109.95**
VD85-U-18F	Urethane	G1/8"	Dark Green	0°C-100°C	60	Female	**144.80**
VD85-A-18F	Mark Free	G1/8"	Black	-10°C-100°C	75	Female	**323.45**
VD85-N-12F	Nitrile	G1/2"	Black	-20°C-110°C	60	Female	**52.00**
VD85-S-12F	Silicone	G1/2"	Red	-70°C-200°C	55	Female	**64.70**
VD85-WS-12F	White Silicone	G1/2"	Translucent White	-70°C-200°C	55	Female	**86.30**
VD85-WS-FDA-12F	White Silicone (FDA)	G1/2"	Translucent White	-70°C-200°C	55	Female	**103.55**
VD85-CS-12F	Conductive Silicone	G1/2"	Smoky Black	-45°C-90°C	70	Female	**109.95**
VD85-U-12F	Urethane	G1/2"	Dark Green	0°C-100°C	60	Female	**144.80**
VD85-A-12F	Mark Free	G1/2"	Black	-10°C-100°C	75	Female	**323.45**

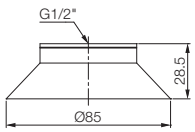
For technical information see page 177

Suction Cups – Deep

Dimensions



With 18F fitting



With 12F fitting

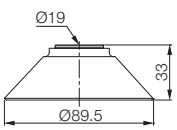


VD Series

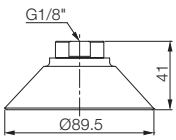
85mm Cups with Fitting (inc. 4 x M6)

Code B01	Material	Connection	Colour	Temperature	Hardness	Type	Price
VD85X-N-18F	Nitrile	G1/8"	Black	-20°C-110°C	60	Female	**60.40**
VD85X-S-18F	Silicone	G1/8"	Red	-70°C-200°C	55	Female	**75.20**
VD85X-WS-18F	White Silicone	G1/8"	Translucent White	-70°C-200°C	55	Female	**100.25**
VD85X-WS-FDA-18F	White Silicone (FDA)	G1/8"	Translucent White	-70°C-200°C	55	Female	**120.25**
VD85X-CS-18F	Conductive Silicone	G1/8"	Smoky Black	-45°C-90°C	70	Female	**127.80**
VD85X-U-18F	Urethane	G1/8"	Dark Green	0°C-100°C	60	Female	**150.05**
VD85X-A-18F	Mark Free	G1/8"	Black	-10°C-100°C	75	Female	**375.85**

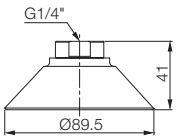
Dimensions



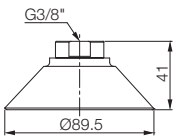
19Ø Hole



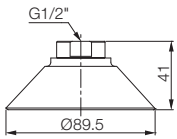
With 18F fitting



With 14F fitting



With 38F fitting



With 12F fitting



VD Series

90mm Cups with Fitting

Code B01	Material	Connection	Colour	Temperature	Hardness	Type	Price
VD90F-PU-M10M	Polyurethane	M10	Translucent Orange	0°C-60°C	60	Male	**53.00**
VD90F-PU-18F	Polyurethane	G1/8"	Translucent Orange	0°C-60°C	60	Female	**53.10**
VD90F-PU-14F	Polyurethane	G1/4"	Translucent Orange	0°C-60°C	60	Female	**53.10**
VD90F-PU-38F	Polyurethane	G3/8"	Translucent Orange	0°C-60°C	60	Female	**53.10**
VD90F-PU-12F	Polyurethane	G1/2"	Translucent Orange	0°C-60°C	60	Female	**53.10**
VD90F-PU-H19	Polyurethane	19Ø Hole	Translucent Orange	0°C-60°C	60	N/A	**53.10**

For technical information see page 177

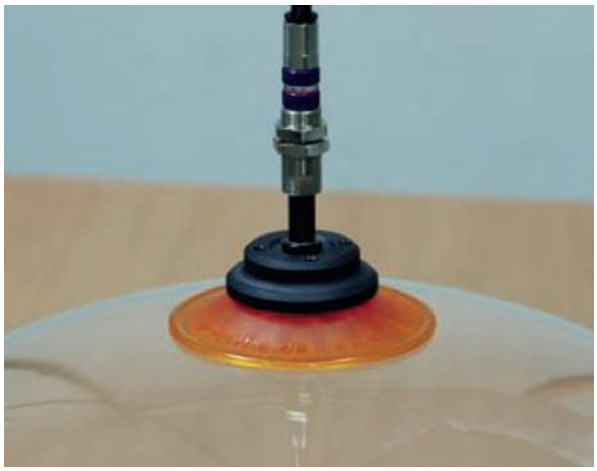
VFC Series Technical Information

Features & Strengths

- Specifically designed for flat and curved surface
- Available to handle multiple objects with the same suction cup

Examples of Use

- Automobile windscreens, roof and door, metal sheet, shaped metal panel, TV cathode ray tube









Material Specifications

Material	Hardness Shore (°)	Colour	Temperature (°C)
NBR	60	Black	-20 to +110
Silicone	55	Red	-70 to +200
White Silicone	55	Translucent White	-70 to +200
White Silicone (FDA)	55	Translucent White	-70 to +200
High Temperature Silicone	50	Blue	-70 to +280
Conductive Silicone	70	Smoky Black	-45 to +90
Urethane	60	Dark Green	0 to +100
Mark Free	75	Black	-10 to +100
Polyurethane	60	Translucent Orange	0 to +60

Recommended Lifting Force (Max.)

Model	Volume (cm^3)	Lifting Force (Kg) Perpendicular			Lifting Force (Kg) Parallel		
		- 20 kPa	- 60 kPa	- 90 kPa	- 20 kPa	- 60 kPa	- 90 kPa
VFC50	10.00	2.85	6.94	10.20	2.61	6.34	8.20
VFC60	20.00	4.55	11.57	15.30	3.05	7.92	10.70
VFC75	30.00	7.65	19.38	25.51	6.19	15.46	20.90
VFC90	60.00	9.80	24.82	32.65	9.52	21.59	27.89
VFC100	80.00	12.75	35.71	46.93	12.24	23.97	28.57

The lifting force above does not include safety factor.

Material Resistance

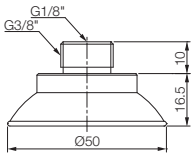
Description	NBR	Silicone	White Silicone	High Temperature Silicone	Conductive Silicone	Urethane	Mark Free	Polyurethane
Wear Resistance	Excellent	Good	Good	Good	Good	Excellent	Good	Excellent
Oil	Excellent	Poor	Poor	Poor	Poor	Excellent	Excellent	Excellent
Weather/Ozone	Fair	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Alcohol	Good	Good	Good	Good	Good	Fair	Good	Fair
Acid	Fair	Poor	Poor	Poor	Poor	Poor	Excellent	Fair

VFC Series

50mm Cup with Fitting



Dimensions



With 1838MF fitting

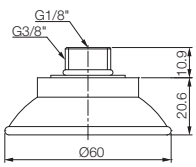
Code B01	Material	Connection Male	Connection Female	Colour	Temperature	Hardness	Price
VFC50-N-1838MF	Nitrile	3/8"	1/8"	Black	-20°C-110°C	60	19.40
VFC50-S-1838MF	Silicone	3/8"	1/8"	Red	-70°C-200°C	55	27.20
VFC50-WS-1838MF	White Silicone	3/8"	1/8"	Translucent White	-70°C-200°C	55	27.20
VFC50-WS-FDA	White Silicone FDA	3/8"	1/8"	Translucent White	-70°C-200°C	55	32.60
VFC50-CS-1838MF	Conductive Silicone	3/8"	1/8"	Smoky Black	-45°C-90°C	70	46.20
VFC50-U-1838MF	Urethane	3/8"	1/8"	Dark Green	0°C-100°C	60	106.95
VFC50-A-1838MF	Mark Free	3/8"	1/8"	Black	-10°C-100°C	75	95.35
VFC50-PU-1838MF	Polyurethane	3/8"	1/8"	Translucent Orange	0°C-60°C	60	23.70

VFC Series

60mm Cup with Fitting



Dimensions



With 1838MF fitting

Code B01	Material	Connection Male	Connection Female	Colour	Temperature	Hardness	Price
VFC60-N-1838MF	Nitrile	3/8"	1/8"	Black	-20°C-110°C	60	21.15
VFC60-S-1838MF	Silicone	3/8"	1/8"	Red	-70°C-200°C	55	35.30
VFC60-WS-1838MF	White Silicone	3/8"	1/8"	Translucent White	-70°C-200°C	55	35.30
VFC60-WS-FDA	White Silicone FDA	3/8"	1/8"	Translucent White	-70°C-200°C	55	42.40
VFC60-CS-1838MF	Conductive Silicone	3/8"	1/8"	Smoky Black	-45°C-90°C	70	63.60
VFC60-U-1838MF	Urethane	3/8"	1/8"	Dark Green	0°C-100°C	60	105.90
VFC60-A-1838MF	Mark Free	3/8"	1/8"	Black	-10°C-100°C	75	127.15
VFC60-PU-1838MF	Polyurethane	3/8"	1/8"	Translucent Orange	0°C-60°C	60	28.65
VFC60X1-N-M10M	Nitrile	M10	-	Black	-20°C-110°C	60	24.95
VFC60X1-S-M10M	Silicone	M10	-	Red	-70°C-200°C	55	39.15
VFC60X1-WS-M10M	White Silicone	M10	-	Translucent White	-70°C-200°C	55	39.15
VFC60X1-WSA-FDA	White Silicone FDA	M10	-	Translucent White	-70°C-200°C	55	47.00
VFC60X1-CS-M10M	Conductive Silicone	M10	-	Smoky Black	-45°C-90°C	70	67.35
VFC60X1-U-M10M	Urethane	M10	-	Dark Green	0°C-100°C	60	117.35
VFC60X1-A-M10M	Mark Free	M10	-	Black	-10°C-100°C	75	130.95
VFC60X1-PU-M10M	Polyurethane	M10	-	Translucent Orange	0°C-60°C	60	32.50

For technical information see page 184

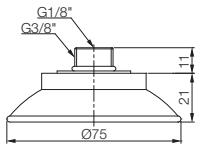
Suction Cups – Flat & Curve

VFC Series

75mm Cup with Fitting



Dimensions



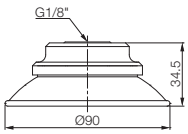
With 1838MF fitting

Code B01	Material	Connection		Colour	Temperature	Hardness	Price
		Male	Female				
VFC75-N-1838MF	Nitrile	3/8"	1/8"	Black	-20°C-110°C	60	**27.20**
VFC75-S-1838MF	Silicone	3/8"	1/8"	Red	-70°C-200°C	55	**47.10**
VFC75-WS-1838MF	White Silicone	3/8"	1/8"	Translucent White	-70°C-200°C	55	**62.80**
VFC75-WS-FDA	White Silicone FDA	3/8"	1/8"	Translucent White	-70°C-200°C	55	**75.35**
VFC75-CS-1838MF	Conductive Silicone	3/8"	1/8"	Smoky Black	-45°C-90°C	70	**80.10**
VFC75-U-1838MF	Urethane	3/8"	1/8"	Dark Green	0°C-100°C	60	**141.10**
VFC75-A-1838MF	Mark Free	3/8"	1/8"	Black	-10°C-100°C	75	**178.00**
VFC75-PU-1838MF	Polyurethane	3/8"	1/8"	Translucent Orange	0°C-60°C	60	**31.15**
VFC75X1-N-M10M	Nitrile	3/8"	1/8"	Black	-20°C-110°C	60	**31.05**
VFC75X1-S-M10M	Silicone	M10	–	Red	-70°C-200°C	55	**50.90**
VFC75X1-WS-M10M	White Silicone	M10	–	Translucent White	-70°C-200°C	55	**66.65**
VFC75X1-WS-FDA	White Silicone FDA	M10	–	Translucent White	-70°C-200°C	55	**79.95**
VFC75X1-CS-M10M	Conductive Silicone	M10	–	Smoky Black	-45°C-90°C	70	**86.45**
VFC75X1-U-M10M	Urethane	M10	–	Dark Green	0°C-100°C	60	**152.55**
VFC75X1-A-M10M	Mark Free	M10	–	Black	-10°C-100°C	75	**181.85**
VFC75X2-N-M16M	Nitrile	M16	–	Black	-20°C-110°C	60	**31.05**
VFC75X2-S-M16M	Silicone	M16	–	Red	-70°C-200°C	55	**50.90**
VFC75X2-WS-M16M	White Silicone	M16	–	Translucent White	-70°C-200°C	55	**66.65**
VFC75X2-WS-FDA	White Silicone FDA	M16	–	Translucent White	-70°C-200°C	55	**79.95**
VFC75X2-CS-M16M	Conductive Silicone	M16	–	Smoky Black	-45°C-90°C	70	**86.45**
VFC75X2-U-M16M	Urethane	M16	–	Dark Green	0°C-100°C	60	**152.55**
VFC75X2-A-M16M	Mark Free	M16	–	Black	-10°C-100°C	75	**181.85**

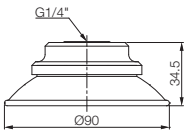
For technical information see page 184

Suction Cups – Flat & Curve

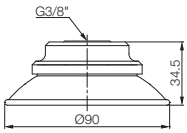
Dimensions



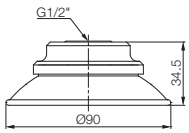
With 18F fitting



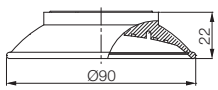
With 14F fitting



With 38F fitting



With 12F fitting



Cup only

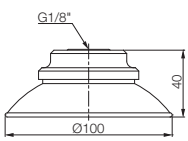
VFC Series

90mm Cups, Cup Only

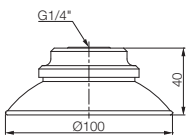


Code B01	Material	Colour	Temperature	Hardness	Price
VFC90-PU	Polyurethane	Translucent Orange	0°C-60°C	60	**23.70**

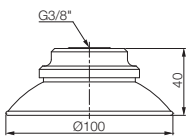
Dimensions



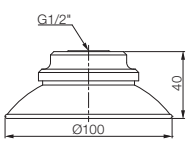
With 18F fitting



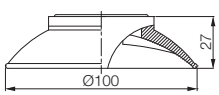
With 14F fitting



With 38F fitting



With 12F fitting



Cup only

VFC Series

100mm Cups, Cup Only





Code B01	Material	Colour	Temperature	Hardness	Price
VFC100-N	Nitrile	Black	-20°C-110°C	60	**22.00**
VFC100-S	Silicone	Red	-70°C-200°C	55	**44.20**
VFC100-WS	White Silicone	Translucent White	-70°C-200°C	55	**59.00**
VFC100-WS-FDA	White Silicone FDA	Translucent White	-70°C-200°C	55	**70.80**
VFC100-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	**75.25**
VFC100-U	Urethane	Dark Green	0°C-100°C	60	**198.65**
VFC100-A	Mark Free	Black	-10°C-100°C	75	**220.90**
VFC100-PU	Polyurethane	Translucent Orange	0°C-60°C	60	**25.75**

For technical information see page 184

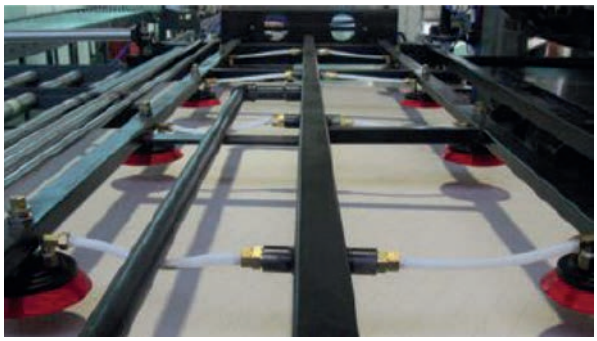
VF Series Technical Information

Features & Strengths

- Specifically designed for flat and curved surface
- Available to handle multiple objects with the same suction cup

Examples of Use

- Metal sheet, veneer sheets, glass, electronic components





Material Specifications

Material	Hardness Shore (°)	Colour	Temperature (°C)
NBR	60	Black	-20 to +110
Silicone	55	Red	-70 to +200
White Silicone	55	Translucent White	-70 to +200
White Silicone (FDA)	55	Translucent White	-70 to +200
High Temp. Silicone	50	Blue	-70 to +280
Conductive Silicone	70	Smoky Black	-45 to +90
Urethane	60	Dark Green	0 to +100
Mark Free	75	Black	-10 to +100

Recommended Lifting Force (Maximum)

Model	Volume (cm3)	Lifting Force (Kg) Perpendicular			Lifting Force (Kg) Parallel		
		- 20 kPa	- 60 kPa	- 90 kPa	- 20 kPa	- 60 kPa	- 90 kPa
VF15	0.037	0.35	0.86	1.12	0.35	0.66	0.76
VF20	1.00	0.61	1.47	1.93	0.51	0.81	0.86
VF25	1.10	0.91	1.98	2.55	0.81	0.91	1.02
VF30	2.00	1.22	2.55	3.16	1.12	1.63	2.04
VF40	4.80	2.04	4.08	5.10	1.53	2.55	3.06
VF50	10.00	3.67	7.55	9.79	2.44	4.08	5.10
VF75	20.00	8.16	20.40	27.55	6.12	11.22	14.28
VF90	50.00	10.20	27.83	37.41	8.84	15.98	19.72
VF110	70.00	14.28	42.58	57.14	14.28	25.51	30.61
VF150	160.00	30.61	86.73	112.24	25.51	61.22	81.63
VF200	460.00	76.53	193.87	275.51	38.30	96.90	137.50
VF300	820.00	163	438	653	135	307	476

The lifting force above does not include safety factor.

Material Resistance

Description	NBR	Silicone	White Silicone	High Temperature Silicone	Conductive Silicone	Urethane	Mark Free
Wear Resistance	Excellent	Good	Good	Good	Good	Excellent	Good
Oil	Excellent	Poor	Poor	Poor	Poor	Excellent	Excellent
Weather/Ozone	Fair	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Alcohol	Good	Good	Good	Good	Good	Fair	Good
Acid	Fair	Poor	Poor	Poor	Poor	Poor	Excellent

VF Series

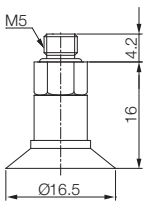
15mm, Cup Only



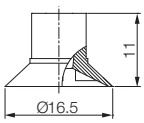


Code	B01	Material	Colour	Temperature	Hardness	Price
VF15-N		Nitrile	Black	-20°C-110°C	60	3.05
VF15-S		Silicone	Red	-70°C-200°C	55	5.60
VF15-WS		White Silicone	Translucent White	-70°C-200°C	55	5.60
VF15-WS-FDA		White Silicone (FDA)	Translucent White	-70°C-200°C	55	6.70
VF15-CS		Conductive Silicone	Smoky Black	-45°C-90°C	70	7.00
VF15-U		Urethane	Dark Green	0°C-100°C	60	15.60
VF15-A		Mark Free	Black	-10°C-100°C	75	28.30

Dimensions



With M5M fitting



Cup only

VF Series

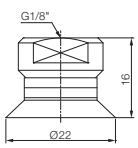
20mm, Cup Only



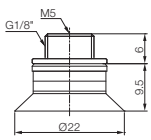


Code	B01	Material	Colour	Temperature	Hardness	Price
VF20-N		Nitrile	Black	-20°C-110°C	60	3.85
VF20-S		Silicone	Red	-70°C-200°C	55	6.05
VF20-WS		White Silicone	Translucent White	-70°C-200°C	55	6.05
VF20-WS-FDA		White Silicone (FDA)	Translucent White	-70°C-200°C	55	7.25
VF20-CS		Conductive Silicone	Smoky Black	-45°C-90°C	70	7.50
VF20-U		Urethane	Dark Green	0°C-100°C	60	16.70
VF20-A		Mark Free	Black	-10°C-100°C	75	28.30

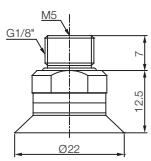
Dimensions



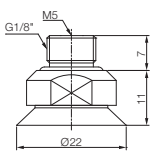
With 18F fitting



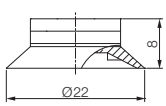
With M518MF fitting



With M518MFO fitting



With M518MFX fitting



Cup only

For technical information see page 188

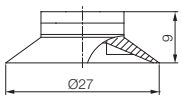
Suction Cups – Flat

VF Series

25mm, Cup Only



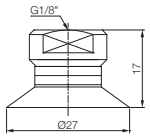




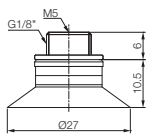
Cup only

Code	B01	Material	Colour	Temperature	Hardness	Price
VF25-N		Nitrile	Black	-20°C-110°C	60	4.30
VF25-S		Silicone	Red	-70°C-20°C	55	5.90
VF25-WS		White Silicone	Translucent White	-70°C-200°C	55	6.25
VF25-WS-FDA		White Silicone (FDA)	Translucent White	-70°C-200°C	55	7.50
VF25-CS		Conductive Silicone	Smoky Black	-45°C-90°C	70	7.80
VF25-U		Urethane	Dark Green	0°C-100°C	60	19.40
VF25-A		Mark Free	Black	-10°C-100°C	75	31.80

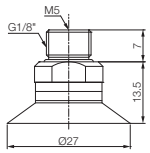
Dimensions



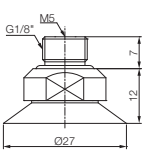
With 18F fitting



With M518MF fitting



With M518MFO fitting



With M518MFX fitting

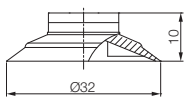
VF Series

30mm, Cup Only





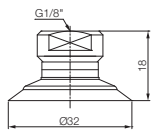




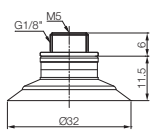
Cup only

Code	B01	Material	Colour	Temperature	Hardness	Price
VF30-N		Nitrile	Black	-20°C-110°C	60	4.75
VF30-S		Silicone	Red	-70°C-200°C	55	6.85
VF30-WS		White Silicone	Translucent White	-70°C-200°C	55	6.85
VF30-WS-FDA		White Silicone (FDA)	Translucent White	-70°C-200°C	55	8.25
VF30-CS		Conductive Silicone	Smoky Black	-45°C-90°C	70	8.45
VF30-U		Urethane	Dark Green	0°C-100°C	60	22.75
VF30-A		Mark Free	Black	-10°C-100°C	75	34.20

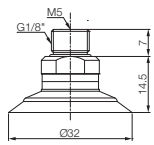
Dimensions



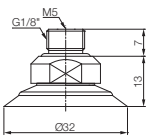
With 18F fitting



With M518MF fitting



With M518MFO fitting



With M518MFX fitting

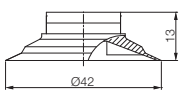
VF Series

40mm, Cup Only





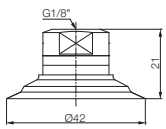




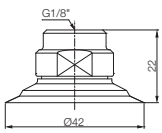
Cup only

Code	B01	Material	Colour	Temperature	Hardness	Price
VF40-N		Nitrile	Black	-20°C-110°C	60	6.05
VF40-S		Silicone	Red	-70°C-200°C	55	10.35
VF40-WS		White Silicone	Translucent White	-70°C-200°C	55	10.35
VF40-WS-FDA		White Silicone (FDA)	Translucent White	-70°C-200°C	55	12.40
VF40-CS		Conductive Silicone	Smoky Black	-45°C-90°C	70	10.85
VF40-U		Urethane	Dark Green	0°C-100°C	60	25.45
VF40-A		Mark Free	Black	-10°C-100°C	75	51.70
VF40-PU		Polyurethane	Translucent Orange	0°C-60°C	60	7.50

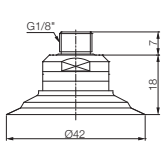
Dimensions



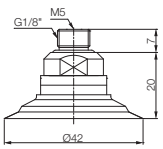
With 18F fitting



With 18FX fitting



With 18M fitting



With M518MFX fitting

For technical information see page 188

Suction Cups – Flat

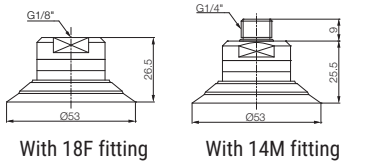
VF Series

50mm, Cup Only

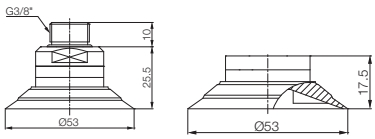


Code B01	Material	Colour	Temperature	Hardness	Price
VF50-N	Nitrile	Black	-20°C-110°C	60	7.35
VF50-S	Silicone	Red	-70°C-200°C	55	11.65
VF50-WS	White Silicone	Translucent White	-70°C-200°C	55	11.65
VF50-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55	13.95
VF50-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	13.50
VF50-U	Urethane	Dark Green	0°C-100°C	60	30.55
VF50-A	Mark Free	Black	-10°C-100°C	75	58.00
VF50-PU	Polyurethane	Translucent Orange	0°C-60°C	60	9.45

Dimensions



With 18F fitting | With 14M fitting



With 38M fitting | Cup only

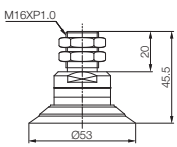
VF Series

50mm with M16M Fitting



Code B01	Material	Colour	Temperature	Hardness	Price
VF50X2-N	Nitrile	Black	-20°C-110°C	60	25.75
VF50X2-S	Silicone	Red	-70°C-200°C	55	29.90
VF50X2-WS	White Silicone	Translucent White	-70°C-200°C	55	29.90
VF50X2-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55	35.85
VF50X2-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	31.80
VF50X2-U	Urethane	Dark Green	0°C-100°C	60	48.80
VF50X2-A	Mark Free	Black	-10°C-100°C	75	51.70

Dimensions



With M16M fitting

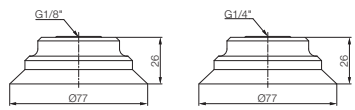
VF Series

75mm, Cup Only

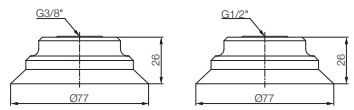


Code B01	Material	Colour	Temperature	Hardness	Price
VF75-N	Nitrile	Black	-20°C-110°C	60	15.85
VF75-S	Silicone	Red	-70°C-200°C	55	21.60
VF75-WS	White Silicone	Translucent White	-70°C-200°C	55	28.90
VF75-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55	34.65
VF75-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	36.65
VF75-U	Urethane	Dark Green	0°C-100°C	60	163.85
VF75-A	Mark Free	Black	-10°C-100°C	75	186.70
VF75-PU	Polyurethane	Translucent Orange	0°C-60°C	60	24.50

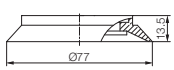
Dimensions



With 18F fitting | With 14F fitting



With 38F fitting | With 12F fitting

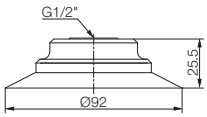


Cup only

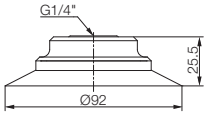
For technical information see page 188

Suction Cups – Flat

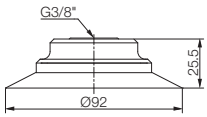
Dimensions



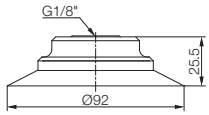
With 12F fitting



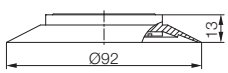
With 14F fitting



With 38F fitting



With 18F fitting



Cup only

VF Series

90mm, Cup Only



Code	B01	Material	Colour	Temperature	Hardness	Price
VF90-PU		Polyurethane	Translucent Orange	0°C-60°C	60	40.70

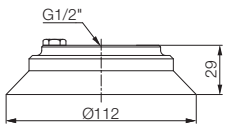
VF Series

110mm, Cup Only

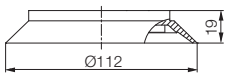


Code	B01	Material	Colour	Temperature	Hardness	Price
VF110-N		Nitrile	Black	-20°C-110°C	60	24.35
VF110-S		Silicone	Red	-70°C-200°C	55	40.20
VF110-WS		White Silicone	Translucent White	-70°C-200°C	55	53.70
VF110-WS-FDA		White Silicone (FDA)	Translucent White	-70°C-200°C	55	64.40
VF110-CS		Conductive Silicone	Smoky Black	-45°C-90°C	70	68.35
VF110-U		Urethane	Dark Green	0°C-100°C	60	219.25
VF110-A		Mark Free	Black	-10°C-100°C	75	368.80

Dimensions



With 12F fitting



Cup only

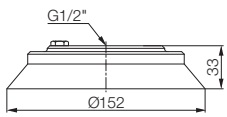
VF Series

150mm, Cup Only

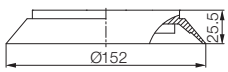


Code	B01	Material	Colour	Temperature	Hardness	Price
VF150-N		Nitrile	Black	-20°C-110°C	60	42.85
VF150-S		Silicone	Red	-70°C-200°C	55	58.50
VF150-WS		White Silicone	Translucent White	-70°C-200°C	55	90.00
VF150-WS-FDA		White Silicone (FDA)	Translucent White	-70°C-200°C	55	108.00
VF150-CS		Conductive Silicone	Smoky Black	-45°C-90°C	70	73.25
VF150-U		Urethane	Dark Green	0°C-100°C	60	263.55
VF150-A		Mark Free	Black	-10°C-100°C	75	292.30

Dimensions



With 12F fitting



Cup only

For technical information see page 188

Suction Cups – Flat

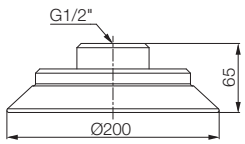
VF Series

200mm, Cup Only

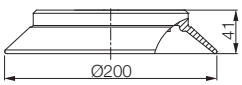


Code B01	Material	Colour	Temperature	Hardness	Price
VF200-N	Nitrile	Black	-20°C-110°C	60	123.65
VF200-S	Silicone	Red	-70°C-200°C	55	155.45
VF200-WS	White Silicone	Translucent White	-70°C-200°C	55	239.20
VF200-WS-FDA	White Silicone (FDA)	Translucent White	-70°C-200°C	55	287.00
VF200-CS	Conductive Silicone	Smoky Black	-45°C-90°C	70	194.15
VF200-U	Urethane	Dark Green	0°C-100°C	60	466.25
VF200-A	Mark Free	Black	-10°C-100°C	75	953.45

Dimensions



With 12F fitting



Cup only

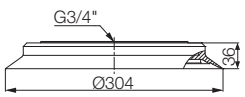
VF Series

300mm Cups with Female Fitting



Code B01	Material	Female Thread	Colour	Temperature	Hardness	Price
VF300-N-34F	Nitrile	G3/4"	Black	-20°C-110°C	60	123.65
VF300-S-34F	Silicone	G3/4"	Red	-70°C-200°C	55	155.45
VF300-WS-34F	White Silicone	G3/4"	Translucent White	-70°C-200°C	55	239.20
VF300-WS-FDA-34F	White Silicone (FDA)	G3/4"	Translucent White	-70°C-200°C	55	287.00
VF300-CS-34F	Conductive Silicone	G3/4"	Smoky Black	-45°C-90°C	70	194.15
VF300-U-34F	Urethane	G3/4"	Dark Green	0°C-100°C	60	466.25
VF300-A-34F	Mark Free	G3/4"	Black	-10°C-100°C	75	953.45

Dimensions



With 34F fitting

For technical information see page 188

LF Series Technical Information

Features & Strengths

- Excellent lifting force in both horizontal and vertical application

Examples of Use

- Flat metal sheets and glass, veneer sheets, electronic components, marbles



Material Specifications

Material	Hardness Shore (°)	Colour	Temperature (°C)
NBR	60	Black	-20 to +110
Silicone	55	Red	-70 to +200
White Silicone	55	Translucent White	-70 to +200
White Silicone (FDA)	55	Translucent White	-70 to +200
High Temperature Silicone	50	Blue	-70 to +280
Conductive Silicone	70	Smoky Black	-45 to +90
Urethane	60	Dark Green	0 to +100
Mark Free	75	Black	-10 to +100



Recommended Lifting Force (Maximum)

Model	Volume (cm^3)	Lifting Force (Kg) Perpendicular			Lifting Force (Kg) Parallel		
		- 20 kPa	- 60 kPa	- 90 kPa	- 20 kPa	- 60 kPa	- 90 kPa
LF150	145.00	34.00 / 53.00	51.00 / 79.00	80.00 / 115.00	39.00	43.00	68.00
LF200	275.00	78.00 / 150.00	115.00 / 154.00	176.00 / 224.00	65.00	98.00	149.00
LF250	435.00	134.00 / 167.00	199.00 / 251.00	293.00 / 361.00	114.00	168.00	260.00
LF300	666.00	219.00 / 267.00	327.00 / 384.00	472.00 / 556.00	187.00	278.00	402.00

The lifting force above does not include safety factor.

Material Resistance

Description	NBR	Silicone	White Silicone	High Temperature Silicone	Conductive Silicone	Urethane	Mark Free
Wear Resistance	Excellent	Good	Good	Good	Good	Excellent	Good
Oil	Excellent	Poor	Poor	Poor	Poor	Excellent	Excellent
Weather/Ozone	Fair	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Alcohol	Good	Good	Good	Good	Good	Fair	Good
Acid	Fair	Poor	Poor	Poor	Poor	Poor	Excellent

Suction Cups – Flat, Dual Lip Structure

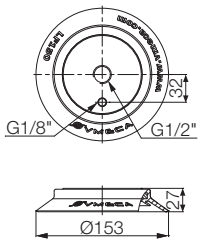
LF Series

150mm, Cup Only



Code B01	Female Thread	Material	Colour	Temperature	Hardness	Price
LF150-N-12F	G1/2"	Nitrile	Black	-20°C-110°C	60	113.50
LF150-S-12F	G1/2"	Silicone	Red	-70°C-200°C	55	189.10
LF150-WS-12F	G1/2"	White Silicone	Translucent White	-70°C-200°C	55	189.10
LF150-WS-12FDA	G1/2"	White Silicone FDA	Translucent White	-70°C-200°C	55	226.90

Dimensions



With 12F fitting

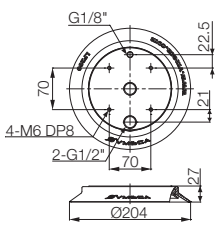
LF Series

200mm, Cup Only



Code B01	Female Thread	Material	Colour	Temperature	Hardness	Price
LF200-N-12F	G1/2"	Nitrile	Black	-20°C-110°C	60	198.70
LF200-S-12F	G1/2"	Silicone	Red	-70°C-200°C	55	331.15
LF200-WS-12F	G1/2"	White Silicone	Translucent White	-70°C-200°C	55	331.15
LF200-WS-12FDA	G1/2"	White Silicone FDA	Translucent White	-70°C-200°C	55	397.40

Dimensions



With 12F fitting

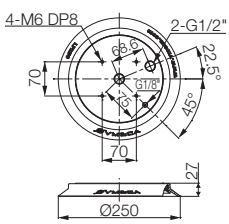
LF Series

250mm, Cup Only



Code B01	Female Thread	Material	Colour	Temperature	Hardness	Price
LF250-N-12F	G1/2"	Nitrile	Black	-20°C-110°C	60	266.45
LF250-S-12F	G1/2"	Silicone	Red	-70°C-200°C	55	444.10
LF250-WS-12F	G1/2"	White Silicone	Translucent White	-70°C-200°C	55	444.10
LF250-WS-12FDA	G1/2"	White Silicone FDA	Translucent White	-70°C-200°C	55	532.85

Dimensions



With 12F fitting

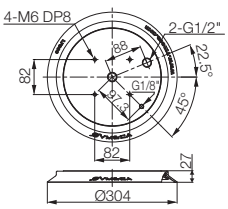
LF Series

300mm, Cup Only



Code B01	Female Thread	Material	Colour	Temperature	Hardness	Price
LF300-N-12F	G1/2"	Nitrile	Black	-20°C-110°C	60	369.15
LF300-S-12F	G1/2"	Silicone	Red	-70°C-200°C	55	642.80
LF300-WS-12F	G1/2"	White Silicone	Translucent White	-70°C-200°C	55	642.80
LF300-WS-12FDA	G1/2"	White Silicone FDA	Translucent White	-70°C-200°C	55	771.35

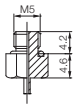
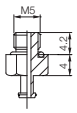
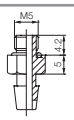
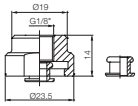
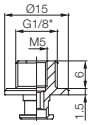
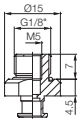
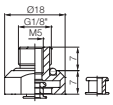
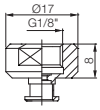
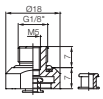
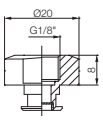
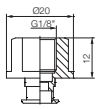
Dimensions



With 12F fitting

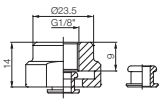
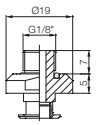
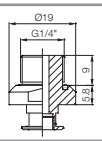
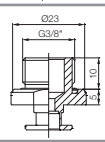
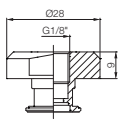
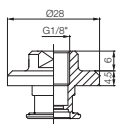
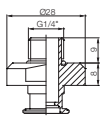
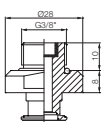
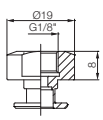
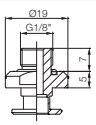
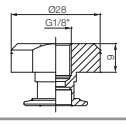
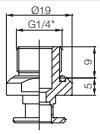
For technical information see page 194

Fittings – VU/VB/VF/VBL/VBU/VBX/VFC Series

Type	Code No.	Description	Dimension	Available suction cups	Weight (g)
M2.5M	350 000 3000	Standard		VU2, VU3	0.47
M5M	350 000 3100	Standard		VU2, VU3	0.54
M5M	350 000 3101	Standard		VU4, VU6, VU8, VB5, VB8	1.84
M5M	350 000 3102	Standard		VU10, VU15, VF15, VB10, VB12, VB15, VBL15	2.52
	350 010 3102	Built in efficiency valve			2.63
18FX (For silicone material)	350 000 3321	Standard		VU40, VF40	8.46
M518MF	350 000 3209	Standard		VU20, VU25, VU30, VF20, VF25, VF30, VB17, VB20, VBL20	1.82
	350 000 5209	Built in mesh-filter			1.92
	350 010 4209	Built in efficiency valve			1.94
	350 020 4209	Built in button valve			2.21
M518MFO	350 000 1209	Standard		VU20, VU25, VU30, VF20, VF25, VF30, VB17, VB20, VBL20	2.88
	350 000 1109	Built in mesh-filter			2.94
	350 010 1209	Built in efficiency valve			2.87
M518MFB (For silicone material)	350 000 3239	Standard		VB17, VB20, VBL20	3.56
18F	350 000 3310	Standard		VU20, VU25, VU30, VF20, VF25, VF30, VB17, VB20, VBL20	3.23
	350 000 4310	Built in mesh-filter			3.3
	350 010 3310	Built in efficiency valve			3.43
	350 020 3310	Built in button valve			
M518MFX (For silicone material)	350 000 3229	Standard		VU20, VU25, VU30, VF20, VF25, VF30	3.71
18F	350 000 3311	Standard		VU40, VF40, VB30, VB40, VBL30, VBL40, VBU35, VBU45, VBX35, VBX45	5.62
	350 000 4311	Built in mesh-filter			5.72
	350 010 3311	Built in efficiency valve			5.86
	350 020 3311	Built in button valve			8.97
18FO	350 000 2311	Standard		VU40, VF40, VB30, VB40, VBL30, VBL40, VBU35,VBU45, VBX35, VBX45	8.24
	350 000 4811	Built in mesh-filter			8.41

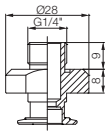
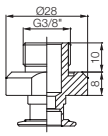
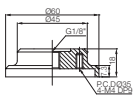
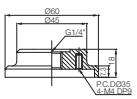
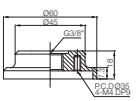
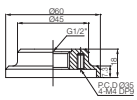
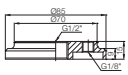
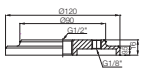
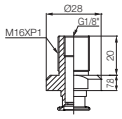
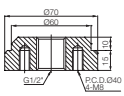
For prices see pages 200-201

Fittings – VU/VB/VF/VBL/VBU/VBX/VFC Series

Type	Code No.	Description	Dimension	Available suction cups	Weight (g)
18FB (For silicone material)	350 000 3331	Standard		VB30, VB40, VBL30, VBL40, VBU35, VBU45	9.78
18M	350 000 2304	Standard		VU40, VF40, VB30, VB40, VBL30, VBL40, VBU35, VBU45, VBX35, VBX45	5.68
	350 000 4304	Built in mesh-filter			5.73
	350 010 2304	Built in efficiency valve			5.63
14M	350 000 3404	Standard		VU40, VF40, VB30, VB40, VBL30, VBL40, VBU35, VBU45, VBX35, VBX45	5.88
	350 000 3804	Built in mesh-filter			5.92
	350 010 3404	Built in efficiency valve			6.03
38M	350 000 3504	Standard		VBU35, VBU45, VBX35, VBX45	9.16
	350 000 3904	Built in mesh-filter			9.56
	350 010 3504	Built in efficiency valve			9.72
18F	350 000 3312	Standard		VU50, VF50 VB50, VBL50 VBU55, VBX55	14.47
	350 000 4312	Built in mesh-filter			14.58
	350 010 3312	Built in efficiency valve			15.81
18FO	350 000 1312	Standard		VU50, VF50, VB50, VBL50, VBU55, VBX55	10.12
	350 000 4912	Built in mesh-filter			10.2
	350 010 1312	Built in efficiency valve			10.22
14M	350 000 3405	Standard		VU50, VF50, VB50, VBL50, VBU55, VBX55	14.18
	350 000 3805	Built in mesh-filter			14.42
	350 010 3405	Built in efficiency valve			14.38
38M	350 000 3505	Standard		VU50, VF50, VB50, VBL50, VBU55, VBX55	18.14
	350 000 3905	Built in mesh-filter			17.75
	350 010 3505	Built in efficiency valve			17.53
18FB2 (For silicone material)	350 000 3342	Standard		VBU35, VBU45	5.4
	350 000 3442	Built in mesh-filter			5.5
	350 010 3342	Built in efficiency valve			5.64
18MB2 (For silicone material)	350 000 3341	Standard		VBU35, VBU45	5.44
	350 000 4341	Built in mesh-filter			5.33
	350 010 3341	Built in efficiency valve			5.47
18FB2 (For silicone material)	350 010 3342	Built in efficiency valve		VBU55, VBX55	15.95
14MB2 (For silicone material)	350 000 3441	Standard		VBU35, VBU45	5.88
	350 000 3841	Built in mesh-filter			6
	350 010 3441	Built in efficiency valve			6.14

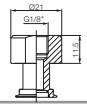
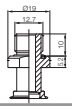
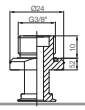
For prices see pages 200-201

Fittings – VU/VB/VF/VBL/VBU/VBX/VFC Series

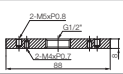
Type	Code No.	Description	Dimension	Available suction cups	Weight (g)
14MB2 (For silicone material)	350 000 3443	Standard		VBU55	16.69
	350 000 3843	Built in mesh-filter			17.22
	350 010 3441	Built in efficiency valve			17.26
38MB2 (For silicone material)	350 000 3543	Standard		VBU55	16.69
	350 000 3943	Built in mesh-filter			17.05
	350 010 3543	Built in efficiency valve			17.11
18F	350 000 3323	Standard		VB75, VB75B, VF75, VF90, VFC90, VFC100	59.36
	350 000 4323	Built in mesh-filter			59.76
	350 020 3323	Built in button valve		VF75, VF90	83.56
14F	350 000 3423	Standard		VB75, VB75B, VF75, VF90, VFC90, VFC100	56.92
	350 000 3823	Built in mesh-filter			57.32
38F	350 000 3523	Standard		VB75, VB75B, VF75, VF90, VFC90, VFC100	55.08
	350 000 3923	Built in mesh-filter			55.48
12F	350 000 3623	Standard		VB75, VB75B, VF75, VF90, VFC90, VFC100	51.50
	350 000 4023	Built in mesh-filter			51.90
12F	350 000 3614	Standard		VB110, VB110B, VF110	103.70
	350 000 4014	Built in mesh-filter			10.50
	350 020 3614	Built in button valve		VF110	115.54
12F	350 000 3615	Standard		VB150, VF150	198.93
	350 000 4015	Built in mesh-filter			199.73
	350 020 3615	Built in button valve		VF150	314.47
M16M	350 000 1405	Standard		VF50X2	52.23
12F	350 000 3616	Standard		VF200	555
	350 000 4016	Built in mesh-filter			555.3

For prices see pages 200-201

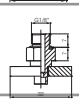
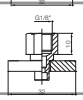
Fittings – BL5040 Series

Type	Code No.	Description	Dimension	Available suction cups	Weight (g)
18F	350 005 0101	Standard		BL5040	11.24
	350 005 0103	Built in mesh-filter			11.27
14M	350 005 0202	Standard		BL5040	7.92
	350 005 0204	Built in mesh-filter			8.96
38M	350 005 0302	Standard		BL5040	11.47
	350 005 0304	Built in mesh-filter			11.51

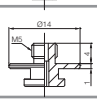
Fittings – VOBL35x90 Series

Type	Code No.	Description	Dimension	Available suction cups	Weight (g)
12F	350 000 3660	Standard		VOBL35x90	18.7

Fittings – VOU Series

Type	Code No.	Description	Dimension	Available suction cups	Weight (g)
M5M	350 002 1012	Standard		VOU4x20, VOU6X20, VOU8X20, VOU8X30, VOU10X30	1.78
M5F	350 002 1112	Standard		VOU4x20, VOU6X20, VOU8X20, VOU8X30, VOU10X30	2.82
18M	350 002 3021	Standard		VOU15x45, VOU20X60	13.74
	350 002 3022	Built in mesh-filter			13.84
18F	350 002 3121	Standard		VOU15x45, VOU20X60	10.32
	350 002 3122	Built in mesh-filter			10.46

Fittings – FF Series

Type	Code No.	Description	Dimension	Available suction cups	Weight (g)
M5M	350 007 0101	Standard		FF15	1.41
M5M	350 007 0102	Standard		FF20, FF25, FF30	2.59
M5M	350 007 0103	Standard		FF15X, FF20X	2.41

For prices see pages 200-201



VU/VB/VF/VBL/VBU/VBX/VFC Series

Code	B02	Price
350 000 3000		1.80
350 000 3100		1.80
350 000 3101		1.80
350 000 3102		1.80
350 010 3102		10.55
350 000 3321		8.45
350 000 3209		6.40
350 000 5209		7.10
350 010 4209		13.50
350 020 4209		15.30
350 000 1209		7.20
350 000 1109		8.00
350 010 1209		13.50
350 000 3239		7.20
350 000 3310		7.95
350 000 4310		8.85
350 010 3310		16.25
350 020 3310		16.85
350 000 3311		7.80
350 000 4311		8.75
350 010 3311		17.05
350 020 3311		21.05
350 000 2311		8.45
350 000 4811		9.45
350 000 3331		8.90
350 000 2304		7.80

Code	B02	Price
350 000 4304		8.75
350 010 2304		17.05
350 000 3404		10.20
350 000 3804		11.45
350 010 3404		18.10
350 000 3504		12.60
350 000 3904		14.05
350 010 3504		21.75
350 000 3312		9.90
350 000 4312		11.00
350 010 3312		18.60
350 000 1312		14.30
350 000 4912		15.95
350 010 1312		18.60
350 000 3405		11.75
350 000 3805		13.20
350 010 3405		20.35
350 000 3505		11.75
350 000 3905		13.20
350 010 3505		20.35
350 000 3342		7.80
350 010 3342		18.65
350 000 3341		7.80
350 000 4341		8.80
350 010 3341		17.10
350 000 3441		10.20

Code	B02	Price
350 000 3841		11.50
350 010 3441		18.20
350 000 3443		11.75
350 000 3843		13.25
350 000 3543		11.75
350 000 3943		13.25
350 010 3543		20.40
350 000 3323		15.15
350 000 4323		16.85
350 020 3323		40.40
350 000 3423		15.15
350 000 3823		16.85
350 000 3523		15.15
350 000 3923		16.85
350 000 3623		15.15
350 000 4023		16.85
350 000 3614		41.15
350 000 4014		45.80
350 020 3614		84.25
350 000 3615		44.20
350 000 4015		49.10
350 020 3615		87.40
350 000 1405		18.50
350 000 3616		65.30
350 000 4016		72.65

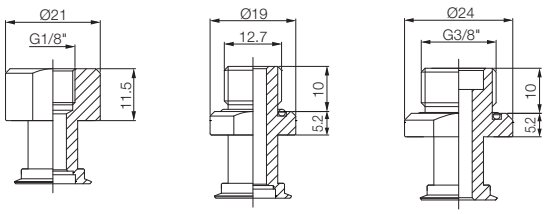
For technical information see pages 196-199

Suction Cups – Fittings

BL5040 Series

Code	B02	Price
350 005 0101		9.30
350 005 0103		10.40
350 005 0202		11.10
350 005 0204		12.50
350 005 0302		11.10
350 005 0304		12.50

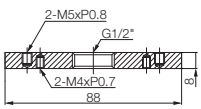
Dimensions



VOBL 35 x 90 Series

Code	B02	Price
350 000 3660		39.80

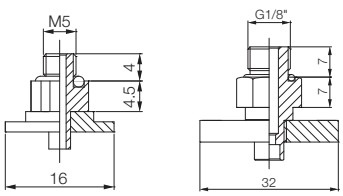
Dimensions



VOU Series

Code	B02	Price
350 002 1012		8.35
350 002 1112		8.35
350 002 3021		15.80
350 002 3022		18.50
350 002 3121		17.55
350 002 3122		20.25

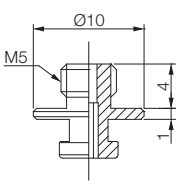
Dimensions



FF Series

Code	B02	Price
350 007 0101		3.35
350 007 0102		4.15
350 007 0103		3.35

Dimensions



For technical information see pages 196-199

Vacuum Technology – Vacuum Pumps

Index

Green Pump

Page 208



- VMECA vacuum cartridge technology integrated
- High polished clean surface (= for food, pharma industry)
- Vacuum filter self-cleaning system

Features & Strengths

- Excellent hygiene products for food, pharma and chemical industry
- Integrated vacuum filter with high dirt capacity
- Single/dual cartridge option selectable
- Compact size and light weight

Advantages

- Reliable and stable operation – high vacuum level and vacuum flow in efficient air consumption
- Suitable in application where high level hygiene standard is needed in
- Compact size and easy installation

PM Pump

Page 208



- VMECA vacuum cartridge technology integrated
- High vacuum flow with durable aluminum body

Features & Strengths

- Highly operational reliability despite fluctuating or low compressed-air pressure
- Various connection ports
- Durable aluminum body

Advantages

- Excellent performance in application that the large vacuum flow is needed
- Reliable and stable operation – high vacuum level and vacuum flow in efficient air consumption
- Optional air saving kit (AS-KIT) to minimise energy consumption

Turtle Pump

Page 208



- VMECA vacuum cartridge technology integrated
- Vacuum filter in one body with auto filter cleaning system

Features & Strengths

- Highly operational reliability despite fluctuating or low compressed-air pressure
- Integrated pleated filter with high dirt capacity and auto-cleaning system

Advantages

- Excellent performance in most of every automation application – especially, dust environment application
- Reliable and stable operation – high vacuum level and vacuum flow in efficient air consumption
- Optional air-saving kit (AS-KIT) to minimise energy consumption

MPM Pump

Page 208



- VMECA vacuum cartridge technology integrated
- Large vacuum flow with up to 16 VMECA vacuum cartridgee

Features & Strengths

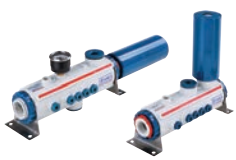
- Highly operational reliability despite fluctuating or low compressed-air pressure
- Extremely low noise level
- Available with a three-stage MIDI vacuum cartridge pump integrate
- Up to 16 cartridges with high vacuum flow

Advantages

- Large vacuum flow to replace 4kw (5Hp) electric motor pump
- Reliable and stable operation – high vacuum level and vacuum flow in efficient air consumption
- Durable and light aluminum body

Magic Pump

Page 208



- VMECA vacuum cartridge technology integrated
- Flexibly rotatable vacuum pump
- Easy to distribute vacuum connections with integrated distribution body module

Features & Strengths

- Highly operational reliability despite fluctuating or low compressed-air pressure
- Available to select various port options and port position/ direction
- Integrated pleated filter with high dirt capacity and auto-cleaning system

Advantages

- Flexible structure to fit various application such as limited space, vacuum distribution, etc
- Reliable and stable operation – high vacuum level and vacuum flow in efficient air consumption
- Optional air-saving kit (AS-KIT) to minimise energy consumption
- High durable and corrosion resistant
- Light weight

VCS Pump

Page 207



- VMECA vacuum cartridge technology integrated
- Level compensator and vacuum ejector in one body

Features & Strengths

- Highly operational reliability despite fluctuating or low compressed air pressure
- Integrated with level compensator and vacuum ejector in one body

Advantages

- No need additional level compensator
- Reliable and stable operation – high vacuum level and vacuum flow in efficient air consumption
- Compact size and light weight

VSM Pump

Page 207



- VMECA vacuum cartridge technology integrated
- Various mounting options for easy installation
- Extremely low noise level

Features & Strengths

- Highly operational reliability despite fluctuating or low compressed-air pressure
- Multiple connection ports

Advantages

- Fast response time with individual vacuum system available
- Reliable and stable operation – high vacuum level and vacuum flow in efficient air consumption

Vacuum Pumps – Technical Information

Features & Strengths

- Highly operational reliability despite fluctuating or low compressed-air pressure
- Integrated vacuum filter with high dirt capacity and auto-cleaning system
- High polished clean surface for food, pharma and chemical industry
- Easy to install in limited space due to compact size
- Quick response time



GS Range

Technical Data

Model	Max. Vacuum level (- kPa)	Supply Air Pressure (bar)	Max. Vacuum Flow(Nl/m)	Air Consumption (Nl/m)	Noise level (dBA)	Min. hose inner Ø (within 2m)		
						Air supply	Vacuum	Exhaust
GS203	90	3 - 4	85.8	21 - 32	52 - 58	4 - 6	6	8
GS252	94	5 - 6	113	70.5 - 83.5	60 - 68	6 - 8	6	10
GS253	94	5 - 6	146	70.5 - 83.5		6 - 8	8	10
GS302	93	3 - 4	171	97 - 152		6 - 8	8	10
GSL302	75	4 - 6	200	70 - 104		6 - 8	8	10

Features & Strengths

- Dual vacuum cartridge structure
- Highly operational reliability despite fluctuating or low compressed-air pressure
- Integrated vacuum filter with high dirt capacity and auto-cleaning system
- High polished clean surface for food, pharma and chemical industry
- Easy to install in limited space due to compact size
- Quick response time



GH Range

Technical Data

Model	Max. Vacuum level (- kPa)	Supply Air Pressure (bar)	Max. Vacuum Flow(Nl/m)	Air Consumption (Nl/m)	Noise level (dBA)	Min. hose inner Ø (within 2m)		
						Air supply	Vacuum	Exhaust
GH203	90	3 - 4	172	40 - 64	52 - 58	6 - 8	8	10
GH252	94	5 - 6	222	141 - 167	60 - 68	6 - 8	8	10
GH253	94	5 - 6	292	141 - 167		6 - 8	8	10
GH302	93	3 - 4	343	194 - 304		6 - 8	8	10
GHL302	75	4 - 6	400	140 - 208		6 - 8	8	10

Please contact our sales office for full technical information

Vacuum Pumps – Technical Information

Features & Strengths

- Efficient individual and independent point-of-use vacuum
- Highly operational reliability despite fluctuating or low compressed-air pressure
- Extremely quick response
- Available for multiple connection ports
- Extremely low noise level with VMECA twofold silencer



VSM Range

Technical Data

Model	Max. Vacuum level (- kPa)	Supply Air Pressure (bar)	Max. Vacuum Flow(Nl/m)	Air Consumption (Nl/m)	Noise level (dBA)	Min. hose inner Ø (within 2m)		
						Air supply	Vacuum	Exhaust
VSM202	90	3 - 4	44	22 - 40.5	55 - 65	8	8	8
VSM203	90	3 - 4	84.5	21 - 40		8	8	10
VSM303	92	4	341	82 - 152		8	12	14

Features & Strengths

- Built in level compensator in one body
- Highly operational reliability despite fluctuating or low compressed air pressure
- Quick response time
- Compact size and light weight



VCS Range

Technical Data

Model	Max. Vacuum level (- kPa)	Supply Air Pressure (bar)	Max. Vacuum Flow(Nl/m)	Air Consumption (Nl/m)	Noise level (dBA)	Min. hose inner Ø (within 2m)		
						Air supply	Vacuum	Exhaust
VCS102	85	1.2 - 2.6	16.5	6.8 - 10.6	55 - 65	4 - 6	8	6
VCS102C								

Please contact our sales office for full technical information

Vacuum Pumps – Technical Information

PM Range

Features & Strengths

- Highly operational reliability despite fluctuating or low compressed air pressure
- Top and side vacuum connection ports available
- Optional air-saving kit available to minimise energy consumption
- Quick response time
- Strong aluminium body



Technical Data

Model	Max. Vacuum level (- kPa)	Supply Air Pressure (bar)	Max. Vacuum Flow(Nl/m)	Air Consumption (Nl/m)	Noise level (dBA)	Min. hose inner Ø (within 2m)		
						Air supply	Vacuum	Exhaust
PM303X1	92	3 - 4	341	97 - 158	60 - 65	8	12	12
PM303X2	92	3 - 4	682	194 - 340		8	15	15
PM303X3	92	3 - 4	1023	291 - 456		10	19	22
PM303X4	92	3 - 4	1364	388 - 608		10	22	32

MPM Range

Features & Strengths

- Highly operational reliability despite fluctuating or low compressed-air pressure
- High vacuum flow with low energy consumption
- Available to replace 4kw(5Hp) electric motor pump
- Very low noise level
- Durable and light aluminium body



Technical Data

Model	Max. Vacuum level (- kPa)	Supply Air Pressure (bar)	Max. Vacuum Flow(Nl/m)	Air Consumption (Nl/m)	Noise level (dBA)	Min. hose inner Ø (within 2m)		
						Air supply	Vacuum	Exhaust
MPM303x6	93	3 - 4	2048	804	55 - 62	11	35	40
MPM303x8	93	3 - 4	2728	1072	55 - 62	11	40	40
MPM303x10	93	3 - 4	3410	1340	55 - 62	11	40	45
MPM303x12	93	3 - 4	4092	1608	55 - 62	12	40	50
MPM303x14	93	3 - 4	4774	1876	55 - 62	13	45	50
MPM303x16	93	3 - 4	5456	2144	55 - 62	14	35	60

Please contact our sales office for full technical information

Vacuum Pumps – Technical Information

Features & Strengths

- Highly operational reliability despite fluctuating or low compressed-air pressure
- Integrated pleated filter with high dirt capacity and auto-cleaning system
- Flexible structure available to select various port options and port position/direction
- Easy to assemble and disassemble without any tools
- Quick response time
- Patented design



M3000 Range

Technical Data

Model	Max. Vacuum level (- kPa)	Supply Air Pressure (bar)	Max. Vacuum Flow(Nl/m)	Air Consumption (Nl/m)	Noise level (dBA)	Min. hose inner Ø (within 2m)		
						Air supply	Vacuum	Exhaust
M3122	92	3 - 4	342	194 - 304	50 - 60	8	15	15
M3123	92	3 - 4	513	291 - 456		10	19	22
M3124	92	3 - 4	684	388 - 608		10	22	32
M3132	92	3 - 4	682	194 - 304	50 - 60	8	15	15
M3133	92	3 - 4	1023	291 - 456		10	19	22
M3134	92	3 - 4	1364	388 - 608		10	22	32

Features & Strengths

- Highly operational reliability despite fluctuating or low compressed-air pressure
- Integrated pleated filter with high dirt capacity and auto-cleaning system
- Optional air-saving kit available to minimise energy consumption
- Quick response time
- Patented design



VTC Range

Technical Data

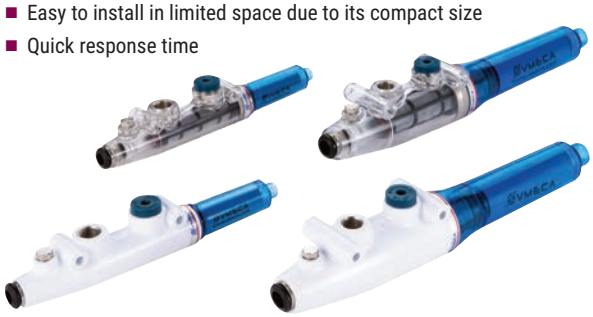
Model	Max. Vacuum level (- kPa)	Supply Air Pressure (bar)	Max. Vacuum Flow(Nl/m)	Air Consumption (Nl/m)	Noise level (dBA)	Min. hose inner Ø (within 2m)		
						Air supply	Vacuum	Exhaust
VTC3021	92	3 - 4	171	97 - 152	50 - 60	6	8	10
VTC3031	92	3 - 4	341	97 - 152		6	8	10
VTC3122	92	3 - 4	342	194 - 304	60 - 65	8	15	15
VTC3032	92	3 - 4	682	194 - 304		8	12	18
VTC3022	92	3 - 4	342	194 - 304		8	12	18
VTC3132	92	3 - 4	682	194 - 304		8	15	15
VTC3123	92	3 - 4	513	291 - 456		10	19	22
VTC3133	92	3 - 4	1023	291 - 456		10	19	22
VTC3124	92	3 - 4	684	388 - 608		10	22	32
VTC3134	92	3 - 4	1364	388 - 608		10	22	32

Please contact our sales office for full technical information

Vacuum Pumps

Features & Strengths

- Highly operational reliability despite fluctuating or low compressed air pressure
- Integrated vacuum filter with high dirt capacity and auto cleaning system
- High polished clean surface for food, pharma and chemical industry
- Easy to install in limited space due to its compact size
- Quick response time



Green Pumps

GS Range

Code B02	Max. Vacuum (-kPa)	Open Vacuum Flow (Nl/min)	Max. Feed Pressure (bar)	Price
GS203	90	85	4	174.35
GS252	94	113	6	332.05
GS253	94	146	6	363.90
GS302	92	171	4	336.35
GSL302	75	200	6	336.45

Features & Strengths

- Dual vacuum cartridge structure
- Highly operational reliability despite fluctuating or low compressed air pressure
- Integrated vacuum filter with high dirt capacity and auto-cleaning system
- Easy to install in limited space due to its compact size
- Quick response time



Green Pumps

GH Range

Code B02	Max. Vacuum Level (-kPa)	Open Vacuum Flow (Nl/min)	Max. Feed Pressure (bar)	Price
GH203	90	172	4	329.45
GH252	94	222	6	510.00
GH253	94	292	6	532.05
GH302	92	343	4	479.70
GHL302	75	400	6	479.85

Features & Strengths

- Efficient individual and independent point of use vacuum
- Highly operational reliability despite fluctuating or low compressed air pressure
- Extremely quick response
- Available for multiple connection ports
- Extremely low noise level with VMECA twofold silencer



VSM Pumps

VSM Range

Code B02	Open Vacuum Flow (Nl/min)	Vacuum Connection	Type	Price
VSM202	44	3/8" (x1), 1/8" (x3)	Holding Plug	134.35
VSM203	84.5	3/8" (x1), 1/8" (x3)	Silencer	155.70
VSM303	34.1	1/2" (x1), 1/4" (x3)	Silencer	304.70

Features & Strengths

- Built in level compensator
- Highly operational reliability despite fluctuating or low compressed air pressure
- Quick response time
- Compact size and light weight



VCS Pumps

VCS Range

Code B02	Male Thread	Female Thread	Check Valve	Price
VCS102	M5	N/A	No	118.20
VCS102C	N/A	G1/8"	Yes	98.80

Vacuum Pumps

Features & Strengths

- Highly operational reliability despite fluctuating or low compressed air pressure
- Various connection ports
- Durable aluminium

Advantages

- Excellent performance when a large vacuum flow is needed
- Reliable and stable operation – high vacuum level and vacuum flow in efficient air consumption
- Operational Air saving kit (AS-KIT) to minimise energy consumption



Premium Pumps

PM Range with Side Vacuum Port

Code B02	No. of Cartridges	Thread	Price
PM303X1	1	G1"	459.80
PM303X2	2	G1"	559.10
PM303X3	3	G1"	658.40
PM303X4	4	G1"	757.75

Features & Strengths

- Highly operational reliability despite fluctuating or low compressed air pressure
- Extremely low noise level
- Available with three-stage MIDI vacuum cartridge pump
- Up to 16 cartridges with high vacuum flow

Advantages

- Large vacuum flow to replace 4kw (5Hp) electric motor pump
- Reliable and stable operation – high vacuum level and vacuum flow in efficient air consumption
- Durable and light aluminium body



Mega Premium Pumps

MPM Range without Vacuum Filter

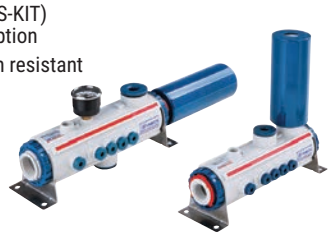
Code B02	No. of Cartridges	Thread	Price
MPM303X6	6	G2"	1309.55
MPM303X8	8	G2"	1592.20
MPM303X10	10	G2"	1874.70
MPM303X12	12	G2"	2157.30
MPM303X14	14	G2"	2439.85
MPM303X16	16	G2"	2722.45

Features & Strengths

- Highly operational reliability despite fluctuating or low compressed air pressure
- Available to select various port options and port positions/direction
- Integrated pleated filter with high dirt capacity and auto-cleaning system

Advantages

- Flexible structure to fit various applications such as limited space, vacuum distribution, etc
- Reliable and stable operation – high vacuum level and vacuum flow in efficient air consumption
- Operational air saving kit (AS-KIT) to minimise energy consumption
- Highly durable and corrosion resistant
- Light weight



Magic Pumps

M3000 Range

Code B02	No. of Cartridges	Thread	Stage	Price
M3122	2	G3/4"	2	682.60
M3123	3	G3/4"	2	775.15
M3124	4	G3/4"	2	869.50
M3132	2	G3/4"	3	760.40
M3133	3	G3/4"	3	890.65
M3134	4	G3/4"	3	1020.85

Features & Strengths

- Highly operational reliability despite fluctuating or low compressed air pressure
- Integrated pleated filter with high dirt capacity and auto-cleaning system

Advantages

- Excellent performance in most every automation application
- Reliable and stable operation – high vacuum level and vacuum flow in efficient air consumption
- Operational air saving kit (AS-KIT) to minimise energy consumption



Turtle Pumps

VTC Range with Bowl Vacuum Port

Code B02	No. of Cartridges	Thread	Silencer	Stage	Price
VTC3021-2	1	G3/4"	-	2	398.60
VTC3031-2	1	G3/4"	Two Fold	3	463.35
VTC3122-2	2	G3/4"	Standard	2	604.40
VTC3032-2	2	G3/4"	Two Fold	3	608.05
VTC3022-2	2	G3/4"	-	3	549.80
VTC3132-2	2	G3/4"	Standard	3	673.25
VTC3123-2	3	G3/4"	Standard	2	686.35
VTC3133-2	3	G3/4"	Standard	3	650.70
VTC3124-2	4	G3/4"	Standard	2	769.90
VTC3134-2	4	G3/4"	Standard	3	903.90

For more specific technical information on any of these ranges contact sales office.

Easy, Efficient, Reliable & Compact!

Magic Grippers



What is the Magic Gripper?

The Magic Grippers are a general purpose, all-in-one vacuum system that covers most applications. The Magic Gripper has eliminated the need to purchase separate fittings, connection hoses, filters, and suction cups as they come as a one-piece standard. The ultra-lightweight and compact design allows for easy mounting options. Easy to use, and no tools required when replacing spare parts. A variety of sealing lip options allow for the Magic Gripper to grasp all different kinds of objects.

Disadvantages of Conventional Systems

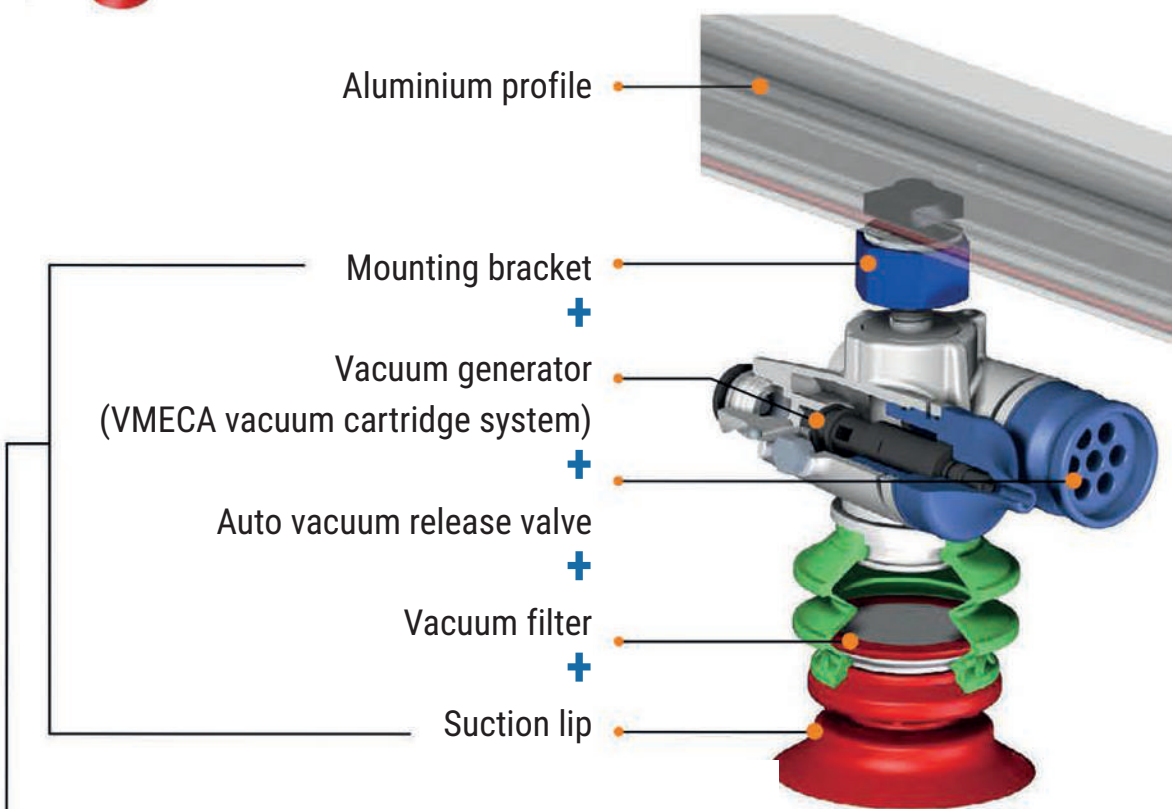
- High cost for installation and process
- Various piping and connectors needed
- High energy consumption
- Difficult installation and complicated structure
- Difficult to select suitable model without vacuum knowledge
- Not available as an individual vacuum system

Features

- Cost efficient
- Easy to build vacuum systems
- Various suction lips
- Fast response and excellent performance
- Individual vacuum systems
- 73% less energy consumption
- Custom profile options – easy mounting
- Various flow rate options available
- VMECA multi-stage vacuum cartridge integrated







All in the "Magic Gripper"

How to select proper vacuum pump

Sealed system

For sealed system the capacity of the pump is determined by how fast the system can be evacuated to a certain vacuum level.

This capacity is called the evacuation time of the pump and is normally specified in sec/l. This value is multiplied by the volume of the system in order to obtain the evacuation time to the desired vacuum level.

Non-sealed system

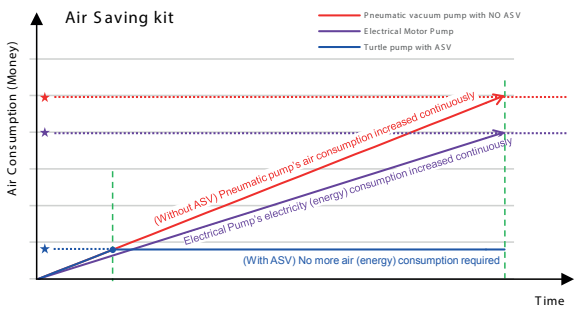
With non-sealed system (lifting porous material), the case is different. To maintain the desired vacuum level the pump must have the capacity to pump away the air-leaking in by establishing the leaking flow; it is possible, by reading the pump data, to find the right pump for the application in question. If the leakage occurs via a known aperture, the flow can be established according to the diagram.

When the leakage occurs through a porous material or in an unknown way, the flow can be established by a test with a vacuum pump. The pump is connected to the system and the obtained vacuum level is read. (It should be at least -20kPa).

Air saving system

Electrically driven, mechanical vacuum pumps normally work during the whole working period and the vacuum requirements are controlled by a valve on the vacuum side. In system with compressed air-driven vacuum pumps it is often possible to save a lot of energy. As these pumps have a faster reaction time (fast start-up) the pump can be shut off when the vacuum is no longer needed. Many pumps can be delivered with air saving system as option.





Vacuum Grippers – Magic Grippers

VMECA™

Features

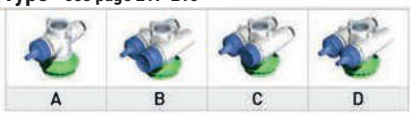
- Various suction lips
- Cost efficient
- Easy to build vacuum systems
- Various suction lips
- Fast response and excellent performance
- Individual vacuum systems
- 73% less energy consumption
- Custom profile options – easy mounting
- Various flow rate options available
- VMECA multi-stage vacuum cartridge integrated





Suction lip - see page 219

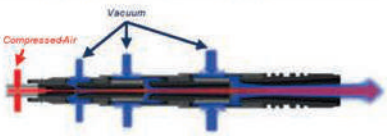
Type - see page 217-218



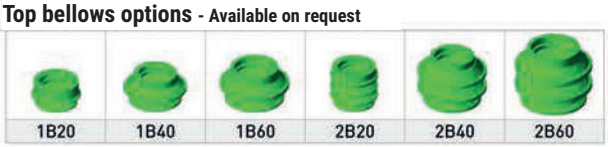
Mount options - Available on request



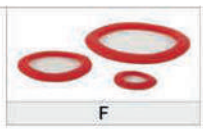
Cartridge - see page 131



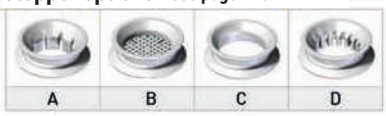
Top bellows options - Available on request



Vacuum filter - Available on request



Stopper options - see page 220



Various Suction Lips



X-Lip | U-Lip | P-Lip | F-Lip | DD-Lip



Page 219 | Page 219 | Page 219 | Available on request | Available on request



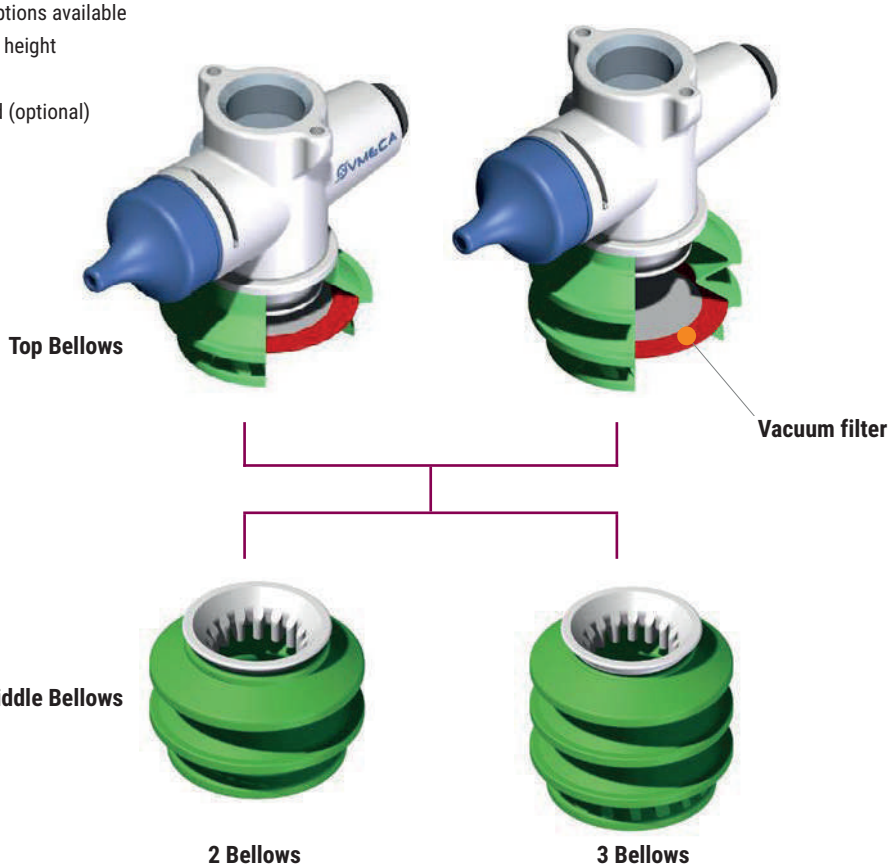
MBU-Lip | MD-Lip | S-Lip | MU/MF-Lip



Available on request | Available on request | Available on request | Available on request | Available on request

Top & Middle Bellows/Vacuum Filter

- Easy to connect with suction lips
- Several bellows folds options available
- Compensating different height
- Long lifetime
- Vacuum filter integrated (optional)



Stoppers



Stopper A

- Recommended with X suction lip
- Suitable for thin and light plastic bags



Stopper C

- Recommended with X, U and F suction lip
- Vacuum filter (PE) integrated
- No mark for film, aluminium foil and thin sheets



Stopper E

- Recommended with S suction lip
- Sponge suction lip



Stopper B

- Recommended with X, U and F suction lip
- Suitable for plastic bags, flexible objects
- Minimised mark for plastic bags



Stopper D

- Recommended with X, U, F, P, MBU, DD and MD suction lip
- Use for connecting each bellows cartridge
- Suitable for flat and thin objects



Stopper F

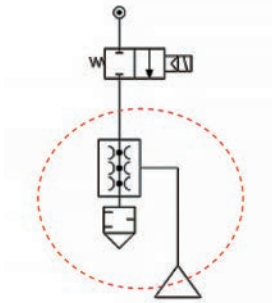
- Recommended with MU and MF suction lip
- Stopper is not visible when used with suction lip MU and MF type

Vacuum Generator options

1. Single cartridge – A-TYPE

- Single cartridge

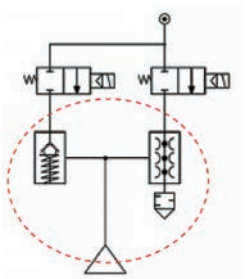




3. Single cartridge & Check valve – C-TYPE

- Check valve integrated and it makes fast evacuation time
- Vacuum release control valve is required

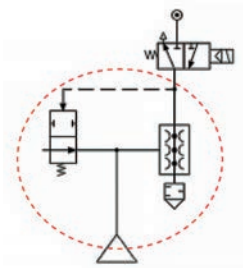




2. Single cartridge & automatic vacuum release function – B-TYPE

- Automatic vacuum release function is available
- Vacuum release valve is not necessary
- 3/2 way valve is required for air control valve

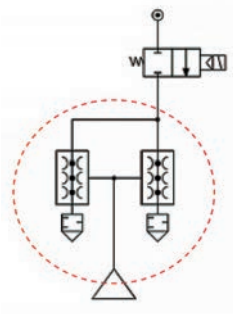




4. Dual cartridges – D-TYPE

- Dual cartridges for large vacuum flow





Vacuum Technology – Suction Cups/Magic Suction Cup

Suction Lips

X Lip



- X suction lip is excellent in handling thin, light and flexible plastic bag applications
- Ice cream bags, aluminium foil



U Lip



- U suction lip is excellent in handling flat and slightly curved object applications
- Carton boxes, flat objects



F Lip



- F suction lip is excellent in handling flat object applications
- Thin boxes, wooden panel, glass



P Lip



- P suction lip is excellent for handling heavy or thick plastic bag applications
- Liquid filled plastic bags, powder filled plastic bags



DD Lip



- DD suction lip is excellent for irregular curved surface, rough surface, and dual lip design offers a safety factor against suction lip wear and tear



MBU Lip



- MBU suction lip is excellent in compensating the height difference for curved objects and dual lip design offers a safety factor against suction lip wear and tear



Vacuum Technology – Suction Cups/Magic Suction Cup

Suction Lips

MD Lip



- MD suction lip is suitable for curved or uneven surface with excellent performance for rounded corners and edges



S Lip



- S suction lip is excellent in handling uneven surface and mark free as optional material



MU Lip



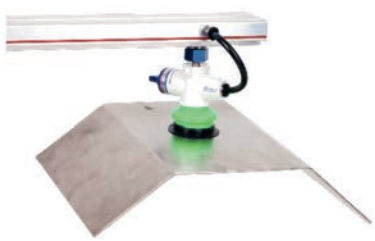
- MU suction lip offers great gripping force for flat and stable surfaces
- Carton boxes, glass, veneer sheets



MF Lip



- MF suction lip offers great gripping force for both horizontal and vertical applications
- Metal sheets, carton boxes, glass, veneer sheets



Vacuum Grippers – Magic Grippers

VMECA™

Features & Strengths

- Reliable performance despite inconsistent compressed air pressure
- Extremely compact and light weight
- Low air consumption
- Various mounting options
- Excellent gripping power
- Various suction lips for different applications





A-Type – Single Cartridge

Micro Cartridge, 2-Stage

Code B02	Bellow Size mm	Material	Price
MC10A1-20	20	Nitrile	68.45
MC10A2-20	20	Nitrile	68.45
MC10A1-40	40	Nitrile	96.25
MC10A2-40	40	Nitrile	79.90

B Type – Single Cartridge/Auto Vac Release

Micro Cartridge, 2-Stage

Code B02	Bellow Size mm	Material	Price
MC10B1-20	20	Nitrile	100.20
MC10B2-20	20	Nitrile	100.20
MC10B1-40	40	Nitrile	111.60
MC10B2-40	40	Nitrile	111.60

A-Type – Single Cartridge

Mini Cartridge, 2-Stage

Code B02	Bellow Size mm	Material	Price
MC20A1-40	40	Nitrile	105.25
MC20A2-40	40	Nitrile	105.25
MC20A1-60	60	Nitrile	125.55
MC20A2-60	60	Nitrile	125.55

B Type – Single Cartridge/Auto Vac Release

Mini Cartridge, 2-Stage

Code B02	Bellow Size mm	Material	Price
MC20B1-40	40	Nitrile	149.60
MC20B2-40	40	Nitrile	149.60
MC20B1-60	60	Nitrile	163.55
MC20B2-60	60	Nitrile	163.55

A-Type – Single Cartridge

Mini Cartridge, 3-Stage

Code B02	Bellow Size mm	Material	Price
MC23A1-40	40	Nitrile	133.55
MC23A2-40	40	Nitrile	133.55
MC23A1-60	60	Nitrile	154.35
MC23A2-60	60	Nitrile	154.35

B Type – Single Cartridge/Auto Vac Release

Mini Cartridge, 3-Stage

Code B02	Bellow Size mm	Material	Price
MC23B1-40	40	Nitrile	178.95
MC23B2-40	40	Nitrile	178.95
MC23B1-60	60	Nitrile	193.20
MC23B2-60	60	Nitrile	193.20

A-Type – Single Cartridge

Mini Premium Cartridge, 2-Stage

Code B02	Bellow Size mm	Material	Price
MC25A1-40	40	Nitrile	176.50
MC25A2-40	40	Nitrile	180.40
MC25A1-60	60	Nitrile	195.90
MC25A2-60	60	Nitrile	195.90

B Type – Single Cartridge/Auto Vac Release

Mini Premium Cartridge, 2-Stage

Code B02	Bellow Size mm	Material	Price
MC25B1-40	40	Nitrile	231.70
MC25B2-40	40	Nitrile	236.80
MC25B1-60	60	Nitrile	259.30
MC25B2-60	60	Nitrile	259.30

Vacuum Grippers – Magic Grippers

VMECA™

Features & Strengths

- Reliable performance despite inconsistent compressed air pressure
- Extremely compact and light weight
- Low air consumption
- Various mounting options
- Excellent gripping power
- Various suction lips for different applications





C Type – Single Cartridge/Check Valve

Micro Cartridge, 2-Stage

Code B02	Bellow Size mm	Material	Price
MC10C1-20	20	Nitrile	102.45
MC10C2-20	20	Nitrile	102.45
MC10C1-40	40	Nitrile	114.10
MC10C2-40	40	Nitrile	114.10

D-Type – Dual Cartridge

Micro Cartridge, 2-Stage

Code B02	Bellow Size mm	Material	Price
MC10D1-20	20	Nitrile	121.35
MC10D2-20	20	Nitrile	121.35
MC10D1-40	40	Nitrile	125.80
MC10D2-40	40	Nitrile	125.80

C Type – Single Cartridge/Check Valve

Mini Cartridge, 2-Stage

Code B02	Bellow Size mm	Material	Price
MC20C1-40	40	Nitrile	153.00
MC20C2-40	40	Nitrile	153.00
MC20C1-60	60	Nitrile	167.30
MC20C2-60	60	Nitrile	167.30

D-Type – Dual Cartridge

Mini Cartridge, 2-Stage

Code B02	Bellow Size mm	Material	Price
MC20D1-40	40	Nitrile	159.50
MC20D2-40	40	Nitrile	159.50
MC20D1-60	60	Nitrile	173.75
MC20D2-60	60	Nitrile	173.75

C Type – Single Cartridge/Check Valve

Mini Cartridge, 3-Stage

Code B02	Bellow Size mm	Material	Price
MC23C1-40	40	Nitrile	178.95
MC23C2-40	40	Nitrile	178.95
MC23C1-60	60	Nitrile	193.20
MC23C2-60	60	Nitrile	193.20

D-Type – Dual Cartridge

Mini Cartridge, 3-Stage

Code B02	Bellow Size mm	Material	Price
MC23D1-40	40	Nitrile	185.45
MC23D2-40	40	Nitrile	185.45
MC23D1-60	60	Nitrile	199.70
MC23D2-60	60	Nitrile	199.70

C Type – Single Cartridge/Check Valve

Mini Premium Cartridge, 2-Stage

Code B02	Bellow Size mm	Material	Price
MC25C1-40	40	Nitrile	231.70
MC25C2-40	40	Nitrile	236.80
MC25C1-60	60	Nitrile	259.30
MC25C2-60	60	Nitrile	259.30

Vacuum Grippers - Magic Grippers

- X type suction lips are excellent in handling thin and light plastic bag applications such as ice cream bags and aluminium foil.
- P type suction lips are excellent in handling heavy or thick plastic bags containing liquid and powder substances.
- Various stopper and lip material options to cover a wide range of vacuum applications.
- U type suction lips are excellent in handling flat and slightly curved objects such as carton boxes and tubes.







Suction Lips

X Type

Code B02	Ø mm	Material	Price
X25-N6	25	Nitrile	**17.10**
X30-N6	30	Nitrile	**20.00**
X45-N6	45	Nitrile	**23.65**
X55-N6	55	Nitrile	**30.55**
X65-N6	65	Nitrile	**35.95**
X75-N6	75	Nitrile	**39.75**
X25-S3	25	Silicone	**16.95**
X30-S3	30	Silicone	**17.05**
X45-S3	45	Silicone	**23.40**
X55-S3	55	Silicone	**30.20**
X65-S3	65	Silicone	**36.35**
X75-S3	75	Silicone	**40.20**
X25-W3	25	White Silicone	**16.95**
X30-W3	30	White Silicone	**17.05**
X45-W3	45	White Silicone	**23.40**
X55-W3	55	White Silicone	**30.20**
X65-W3	65	White Silicone	**36.35**
X75-W3	75	White Silicone	**40.20**

Suction Lips

P Type

Code B02	Ø mm	Material	Price
P15-N6	15	Nitrile	**17.10**
P17-N6	17	Nitrile	**17.10**
P20-N6	20	Nitrile	**18.10**
P27-N6	27	Nitrile	**17.10**
P32-N6	32	Nitrile	**17.25**
P48-N6	48	Nitrile	**30.55**
P60-N6	60	Nitrile	**35.95**
P15-S3	15	Silicone	**16.90**
P17-S3	17	Silicone	**16.90**
P20-S3	20	Silicone	**17.95**
P27-S3	27	Silicone	**16.95**
P32-S3	32	Silicone	**17.05**
P48-S3	48	Silicone	**30.20**
P60-S3	60	Silicone	**36.35**
P85-S3	85	Silicone	**58.80**
P15-W3	15	White Silicone	**16.90**
P17-W3	17	White Silicone	**16.90**
P20-W3	20	White Silicone	**17.95**
P27-W3	27	White Silicone	**16.95**
P32-W3	32	White Silicone	**17.05**
P48-W3	48	White Silicone	**30.20**
P60-W3	60	White Silicone	**36.35**

Suction Lips

U Type

Code B02	Ø mm	Material	Price
U25-N6	25	Nitrile	**6.10**
U30-N6	30	Nitrile	**7.60**
U45-N6	45	Nitrile	**10.30**
U55-N6	55	Nitrile	**13.35**
U65-N6	65	Nitrile	**15.75**
U75-N6	75	Nitrile	**19.15**
U25-S3	25	Silicone	**6.75**
U30-S3	30	Silicone	**8.35**
U45-S3	45	Silicone	**11.35**
U55-S3	55	Silicone	**14.65**
U65-S3	65	Silicone	**15.60**
U75-S3	75	Silicone	**18.95**
U25-W3	25	White Silicone	**6.75**
U30-W3	30	White Silicone	**8.35**
U45-W3	45	White Silicone	**11.35**
U55-W3	55	White Silicone	**14.65**
U65-W3	65	White Silicone	**15.60**
U75-W3	75	White Silicone	**18.95**

NB: Other materials available on request

Vacuum Grippers – Magic Grippers





Stoppers – A-Type

To Suit X Type Lips

Code B02	Stopper Size mm	Price
MS20-A	20	3.00
MS40-A	40	4.40
MS60-A	60	6.35

Stoppers – C-Type

To Suit U & X Type Lips

Code B02	Stopper Size mm	Price
MS20-C	20	2.95
MS40-C	40	4.40
MS60-C	60	6.35





Stoppers – B-Type

To Suit U & X Type Lips

Code B02	Stopper Size mm	Price
MS20-B	20	2.95
MS40-B	40	4.40
MS60-B	60	6.35

Stoppers – D-Type

To Suit P, U & X Type Lips

Code B02	Stopper Size mm	Price
MS20-D	20	2.95
MS40-D	40	4.40
MS60-D	60	6.35

Applications



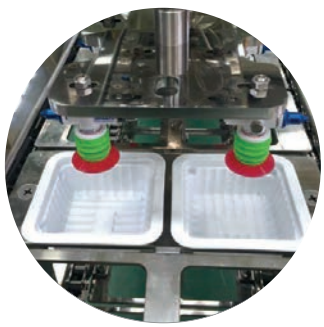






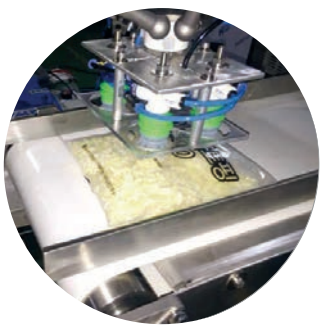












Inline Vacuum Filter

These filters provide a cost effective in-line vacuum filtration method.

The 6mm push fit version is useful for individual lines particularly with the Oneline pump and multiple stack pumps. The 3/8" version can be screwed directly into the mini type vacuum pump as well as any other port using a 3/8" BSP connection. When used with the mini pumps and midi multiple pumps, it provides a very compact set up.

Features & Strengths

- Simply pushing the tube into the LV-filter
- No other operation is required
- Excellent filtering – minimum particle : 10 micron
- Easy to check and replace filter element



VTF Filters

Code B02	OD (mm)	Price
VTF-0706	6	35.05
VTF-1208	8	36.65

VTFB Filters

Code B02	Vacuum Connection	Price
VTF38-96	G3/8"	59.85
VTF38-141	G3/8"	60.05
VTF12-96	G1/2"	57.00
VTF12-141	G1/2"	60.05
VTF34-96	G3/4"	57.00
VTF34-141	G3/4"	60.05
VTF01-118	G1"	88.05
VTF01-154	G1"	92.35
VTF02-118	G1.1/2"	94.75
VTF02-154	G1.1/2"	100.00

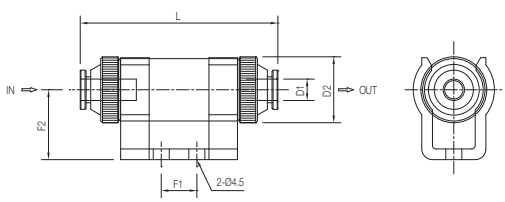
VTF Replacement Elements

Code B02	To Suit	Price
VTFE27.5-39096	VTF38-96, 12-96, 34-96	15.80
VTFE27.5-39141	VTF38-141,12-141, 34-141	21.85
VTFE47.4-62118	VTF01-118, 02-118	21.20
VTFE47.4-62154	VTF01-154, 02-154	24.55

Specifications

Model	Tube size (mm) (Outer diameter)	Removal efficiency (μ)	Filter area (mm^2)	Temperature (°C)	Weight (g)
VTF-0706	6	10	7.5	0 to +60	25.0
VTF-1208	8	10	12.5	0 to +60	39.5

Dimensions



Dimensions

Unit: mm

Model	L	D1	D2	F1	F2
VTF-0706	55.5	Ø6	Ø18.5	10	20
VTF-1208	65.2	Ø8	Ø22.5	14	44

Spare Parts – Filter Element

Model No.	Description	Weight (g)
VTFE0706	Filter Element for VTF-0706	0.74
VTFE1208	Filter Element for VTF-1208	1.2

Interchange Filter Elements

Please request a technical data sheet.



Vacuum Pump Filters

BSP

Code P13	d1	Male/ Female	d2 mm	h1 mm	h2 mm	Dh3 mm	h4 mm	Flow Rate m³/h	Element ref	Price
SA6654	G3/8"	F	80	66	12	39	45	24	SA6715	41.90
SA6058	G3/4"	F	110	76	14	53	54	42	SA6091	51.75
SA6647	G1/2"	F	110	76	14	53	54	42	SA6091	51.25
SA6952	G1"	F	133	85	17	53	78	85	SA6120	96.85
SA6059	G1.1/4"	F	133	85	17	53	78	96	SA6120	53.20
SA6061	G1.1/4"	F	170	141	17	93	96	108	SA6122	96.85
SA6648	G1.1/2"	F	170	170	18	124	100	192	SA6651	128.30
SA6649	G2"	F	200	240	18	124	114	310	SA6096	160.15
SA6060	G2.1/2"	F	200	240	18	124	114	360	SA6096	158.65
SA6650	G3"	F	270	180	50	145	165	550	SA6095	771.40
SA6652	G4"	F	270	180	50	145	165	720	SA6095	773.45
SA6749	G3"	F	280	395	50	330	190	1080	SA6005	952.25
SA6750	G4"	F	360	590	50	400	230	1260	SA6005	1263.15



Vacuum Pump Spare Filter Elements

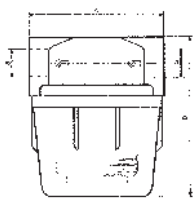
BSP

Code P13	Description	Price
SA6715	Element for SA6654	7.60
SA6091	Element for SA6647 & SA6058	6.90
SA6120	Element for SA6952 & SA6059	8.50
SA6122	Element for SA6061	15.25
SA6651	Element for SA6648	24.10
SA6096	Element for SA6649 & SA6060	30.75
SA6095	Element for SA6650 & SA6652	7.60
SA6005	Element for SA6749	52.40
SA6025	Element for SA6750	79.80

(1) Flow rates measured with 10 mbar pressure loss

(2) C = paper
R = stainless steel net

(3) Metallic frame

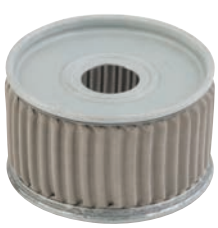




In-line Vacuum Filter

BSP

Code E16	Flow Rate m³/h	A inches	B mm	C mm	Element (2)	Weight kg	Price
9001003	12	G1/4"	82	62	C	0.16	49.35
9001004	12	G1/4"	76	62	R	0.13	47.10
9001069	12	G1/4"	74	62	C	0.13	76.40
9001004/0	12	G3/8"	76	62	R	0.13	47.10
9001009	24	G3/8"	138	85	C	0.37	69.55
9001070	24	G3/8"	117	80	C	0.37	121.40
9001008	30	G1/2"	88	85	R	0.25	69.55
9001010	30	G1/2"	88	80	C	0.25	74.85
9001030	90	G1"	240	145	C	1.16	116.35
9001016	90	G1"	175	120	R	0.85	159.35



In-line Vacuum Spare Filter Elements

Spare Filter Elements

Code E16	Element to Suit Nl/ min(1)	µm	Temperature Maximum °C	Price
1801001	9001069, 9001003	30	80	11.55
1803002	9001004, 9001004/0	100	50	8.90
1802003	9001008	44	50	36.45
1801006	9001009, 9001010	30	50	16.45
1802011	9001016	60	50	72.10
1801047	9001070	15	80	29.60
1801021	9001030	25	50	44.55

Vacuum Filters





Blower Intake Filter

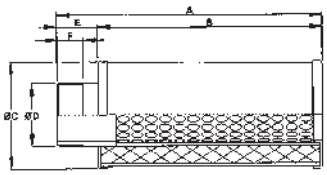
Female

Code	E17	Female Thread	A	D	H	S	L	M	Capacity m³/h	Price
FL1		1/2"	75	21	62	23	100	15	25	**54.85**
FL2		3/4"	150	27	105	23	130	15	85	**64.35**
FL3		1"	150	33	105	23	130	15	85	**67.15**
FL4		1.1/4"	150	42	105	23	200	15	85	**72.75**
FL5		1.1/2"	180	48	155	23	200	15	250	**94.20**
FL6		2"	230	60	155	23	200	15	400	**122.50**
FL8		3"	280	89	180	35	200	15	700	**181.90**
FL9		4"	410	114	330	35	200	15	1400	**292.55**

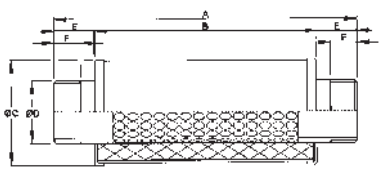
Blower Intake Spare Filter Elements

Spare Filter Elements

Code	E17	Element For	A	D	H	Price
CF1		FL1	55	25	50	**9.20**
CF4		FL2, FL3, FL4	110	55	83	**13.75**
CF5		FL5	150	80	135	**19.90**
CF6		FL6	180	80	135	**31.70**
CF8		FL8	225	100	150	**53.45**
CF9		FL9, FL10	300	215	300	**84.25**



Type SS



Type SI





High Volume Muffler

Pump Mounted, Male

Code	E17	D	A	B	C	E	Price
SS4		G1.1/4"	190	138	69	52	**33.15**
SS5		G1.1/2"	200	168	80	32	**63.75**
SS6		G2"	230	198	89	32	**70.80**
SS8		G3"	390	350	152	40	**192.00**

High Volume Muffler

In-line, Male x Male

Code	E17	D	A	B	C	E	Price
SI4		G1.1/4"	242	138	69	52	**47.75**
SI5		G1/2"	232	168	80	32	**43.25**
SI6		G2"	262	198	89	32	**58.90**
SI8		G3"	430	350	152	40	**84.75**



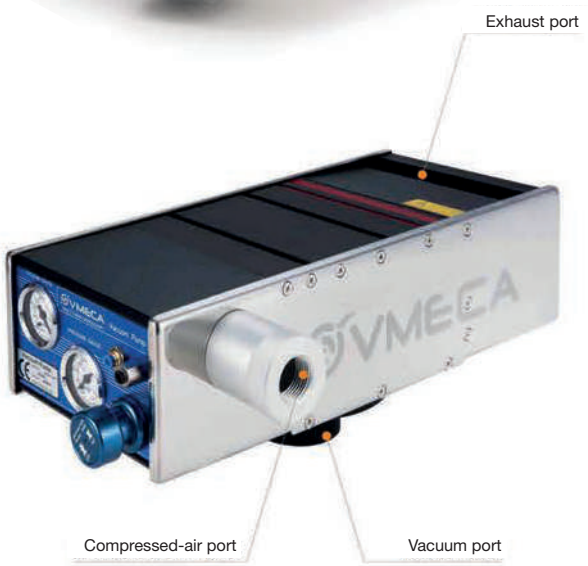
VMECA™

Tomorrow's Vacuum Technology Today



Vacuum Conveyor System

- Minimal Maintenance
- Low Noise Level
- Automatic Filter Cleaning System
- Low Energy Consumption
- Simple to Install
- Compact Size
- Easy to Clean
- Dustless Conveying
- Acid-Proof
- Polished Stainless Steel
- Lightweight
- Quick Delivery





Available upon request


1/2"



228-232 Ball Valves



233-234 Manual Valves & Strainers



235 Plastic Valves



236 Non-return Valves



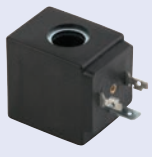
237-240 Safety Valves



241 Safety Excess Flow Valve (Air Fuse)



242-248 Solenoid Valves



247 Solenoid Coils



249-252 Electrical Socket Connectors



253-254 M8 Electrical Cable



255-263 Actuated Ball Valves



264-267 Wafer Butterfly Valves



268-270 Actuated Valves



271-272 Butterfly Valves



273 Actuated Angle Seat Valves



274 VIP Actuated Valves

Ball Valves

- Aluminium handle

Working Temperature:

- -15°C to +150°C



Full Flow Lever Ball Valve

Female x Female

Code N27	Thread BSPP	Working Pressure bar	Price 1-9	Price 10+
BV14FF	G1/4"	40	5.25	5.00
BV38FF	G3/8"	40	3.90	3.75
BV12FF	G1/2"	25	4.70	4.50
BV34FF	G3/4"	25	9.60	9.15
BV1FF	G1"	25	11.95	11.40
BV114FF	G1.1/4"	25	27.45	26.10
BV112FF	G1.1/2"	25	30.95	29.45
BV2FF	G2"	25	46.40	44.10
BV212FF	G2.1/2"	18	153.15	145.50
BV3FF	G3"	16	167.05	158.70
BV4FF	G4"	14	289.60	275.15

Working Temperature:

- -15°C to +120°C

Maximum Working Pressure:

- 25 bar



Full Flow Ball Valve

Male x Female

Code N27	Thread BSPP	Price 1-9	Price 10+
BV12MF	G1/2"	7.55	7.20
BV34MF	G3/4"	8.55	8.15
BV1MF	G1"	15.45	14.70
BV114MF	G1.1/4"	27.00	25.65
BV112MF	G1.1/2"	35.85	34.10
BV2MF	G2"	62.20	59.10

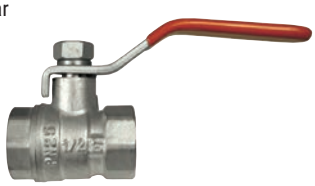
- Steel handle

Working Temperature:

- -15°C to +120°C

Maximum Working Pressure:

- 25 bar



Full Flow Ball Valve

Female x Female

Code N27	Thread BSPP	Price 1-9	Price 10+
BV14FF-S	G1/4"	5.30	5.05
BV38FF-S	G3/8"	6.05	5.75
BV12FF-S	G1/2"	6.80	6.50
BV34FF-S	G3/4"	9.35	8.90
BV1FF-S	G1"	14.95	14.25
BV114FF-S	G1.1/4"	20.25	19.25
BV112FF-S	G1.1/2"	39.80	37.85
BV2FF-S	G2"	62.35	59.25

- Steel handle
- BS EN 331

Working Temperature:

- Gas: -5°C to +60°C
- Water/Oil: -5°C to +150°C

Maximum Working Pressure:

- Gas: 5 bar
- Water/Oil: 20 bar



Full Flow Long Thread Ball Valve for Gas

Red Handle, Female x Female

Code N27	Thread BSPP	Price 1-9	Price 10+
ISOLTDBV12FF	G1/2"	9.55	9.10
ISOLTDBV34FF	G3/4"	12.95	12.35
ISOLTDBV1FF	G1"	20.60	19.60
ISOLTDBV114FF	G1.1/4"	34.05	32.35
ISOLTDBV112FF	G1.1/2"	47.35	45.00
ISOLTDBV2FF	G2"	84.90	80.70

- Steel handle
- BS EN 331

Working Temperature:

- Gas: -5°C to +60°C
- Water/Oil: -5°C to +150°C

Maximum Working Pressure:

- Gas: 5 bar
- Water/Oil: 20 bar



Full Flow Long Thread Ball Valve for Gas

Yellow Handle, Female x Female

Code N28	Thread BSPP	Price 1-9	Price 10+
GBV14FF	G1/4"	5.10	4.85
GBV38FF	G3/8"	6.85	6.55
GBV12FF	G1/2"	8.05	7.65
GBV34FF	G3/4"	10.85	10.35
GBV1FF	G1"	17.65	16.80
GBV114FF	G1.1/4"	28.65	27.25
GBV112FF	G1.1/2"	38.35	36.45
GBV2FF	G2"	70.00	66.50

Ball Valves

- BS EN 331

Working Temperature

- -20°C to +60°C

Maximum Working Pressure:

- Gas: 5 bar



Full Flow Ball Valve for Gas

Male x Female

Code N28	Thread BSPP	Price 1-9	Price 10+
GBV14MF	G1/4"	5.65	5.40
GBV38MF	G3/8"	5.55	5.30
GBV12MF	G1/2"	10.00	9.50
GBV34MF	G3/4"	15.25	14.50
GBV1MF	G1"	20.20	19.20
GBV114MF	G1.1/4"	31.85	30.30
GBV112MF	G1.1/2"	44.70	42.50
GBV2MF	G2"	69.25	65.80

- BS EN 331

Working Temperature

- -20°C to +60°C

Maximum Working Pressure:

- Gas: 5 bar



T Handle Gas Ball Valve

Female x Female

Code N28	Thread BSPP	Price
GBVT12FF	G1/2"	10.25
GBVT34FF	G3/4"	14.25
GBVT1FF	G1"	22.50

- BS EN 331

Working Temperature

- -20°C to +60°C

Maximum Working Pressure:

- Gas: 5 bar



T Handle Gas Ball Valve

Male x Female

Code N28	Thread BSPP	Price
GBVT12MF	G1/2"	9.00
GBVT34MF	G3/4"	22.25
GBVT1MF	G1"	20.55

Working Temperature:

- -20°C to +110°C

Maximum Working Pressure:

- 40 bar



Full Flow Lever Ball Valve, Lockable

Female x Female

Code P24	Thread BSPT	Price
BV14FFL	R1/4"	13.40
BV38FFL	R3/8"	13.40
BV12FFL	R1/2"	11.80
BV34FFL	R3/4"	15.30
BV1FFL	R1"	15.95

Working Temperature

- -20°C to +150°C in the absence of steam



T Handle Full Flow Ball Valve

Female x Female

Code N27	Thread BSPP	Working Pressure bar	Price 1-9	Price 10+
BVT14FF	G1/4"	50	6.35	6.05
BVT38FF	G3/8"	50	5.80	5.55
BVT12FF	G1/2"	30	7.70	7.35
BVT34FF	G3/4"	30	10.20	9.70
BVT1FF	G1"	30	15.60	14.85

Working Temperature

- -20°C to +150°C in the absence of steam



T Handle Full Flow Ball Valve

Male x Female

Code N27	Thread BSPP	Working Pressure bar	Price 1-9	Price 10+
BVT14MF	G1/4"	50	6.70	6.40
BVT38MF	G3/8"	50	6.85	6.55
BVT12MF	G1/2"	30	7.25	6.90
BVT34MF	G3/4"	30	11.90	11.35
BVT1MF	G1"	30	17.45	16.60

Ball Valves

WRAS APPROVED PRODUCT

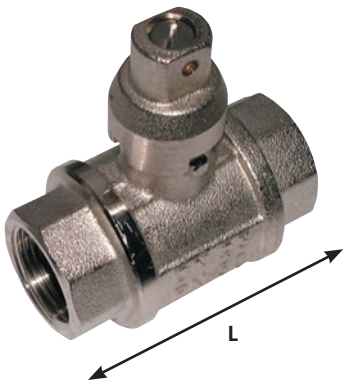
British Gas Approved Valves
Tested and certified by BG plc to EN331 1997.

Temperature Range

- Fluids: -20˚C to +150˚C
- Gas: -20˚C to +60˚C

Working Pressure

- 25 bar (at 25ºC)



- Manufactured in accordance to EN331
- Threads to EN10226-1, ISO 228 parallel female threads
- Full port to DIN 3357 for maximum flow
- PED 97/23 CE

Quality:

- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction, making installation easier
- No metal to metal moving parts
- Clear handle markings showing position of valve
- Silicone-free lubricant on all seals
- Blowout proof nickel-plated brass stem
- Two FPM o-rings at the stem for maximum safety
- Pure PTFE self-lubricating seals with flexible lip design

Lockable, Gas Full Bore Valve

BSPP

Code P55	Thread BSPP	L mm	Price
BGLFB-1	G1"	89	32.05
BGLFB-11.1/2	G1.1/2"	114	151.35
BGLFB-2	G2"	134	178.90

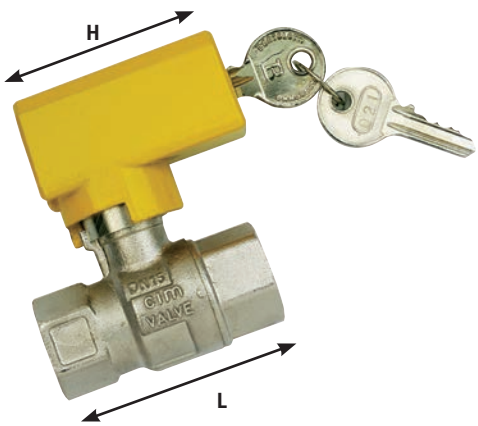
Working Temperature:

-20°C to +60°C

Gas Nominal Pressure:

- MOP5

- Complete with 2 keys
- EN 12266-1:2003 standard



Lockable, Gas Full Bore Valve

Type BV76, Female x Female, Locking, BSPP

Code P55	Thread BSPP	L mm	H mm	Price
BGLOCKBV-12	G1/2"	61	56	112.90
BGLOCKBV-34	G3/4"	68	56	119.85
BGLOCKBV-1	G1"	82	56	116.30

Approvals:

- WRAS
- BSI
- RoHS Compliant
- DIN-DVGW

Working Temperature:

- -40°C to +170°C

Maximum Working Pressure:

- 40 bar up to 2"
- 30 bar over 2"

AS4617 Limitations for GAS:

- 0°C to +60°C AS4617 Limitations for GAS:
- 2100Kpa up to 2"
- 150Kpa from 2.1/2" to 4"



Dual Sealing WRAS/Gas Approved Ball Valve

BSPP

Code P55	Thread BSPP	Price
BVWRGA-1/4	G1/4"	10.00
BVWRGA-3/8	G3/8"	9.00
BVWRGA-1/2	G1/2"	10.60
BVWRGA-3/4	G3/4"	15.20
BVWRGA-1	G1"	26.10
BVWRGA-1.1/4	G1.1/4"	43.40
BVWRGA-1.1/2	G1.1/2"	47.75
BVWRGA-2	G2"	83.60
BVWRGA-2.1/2	G2.1/2"	254.80
BVWRGA-3	G3"	338.60
BVWRGA-4	G4"	482.80

Ball Valves

- Full Bore
- ISO 5211 Direct Mount

Working Temperature:

- -20°C to +95°C

Maximum Working Pressure:

- 40 bar



ISO 5211 Pad, WRAS Approved

Female x Female, BSPP

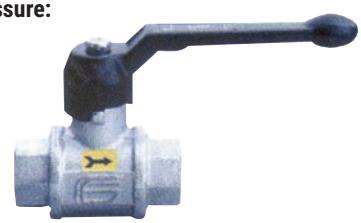
Code P55	Thread BSPT	Price
BV12FF-ISOP	G1/2"	38.05
BV34FF-ISOP	G3/4"	50.20
BV1FF-ISOP	G1"	70.10
BV1.1/4FF-ISOP	G1.1/4"	113.10
BV1.1/2FF-ISOP	G1.1/2"	150.35
BV2FF-ISOP	G2"	205.95
BV2.1/2IFF SOP	G2.1/2"	562.00

Working Temperature

- 0°C to +60°C

Maximium Working Pressure:

- 12 bar



Full Flow Lever Ball Valve, Vented

Female x Female

Code P23	Thread BSPP	Price
BV14FFV	G1/4"	24.40
BV38FFV	G3/8"	23.85
BV12FFV	G1/2"	26.30
BV34FFV	G3/4"	35.00
BV1FFV	G1"	49.95

Working Temperature

- -20°C to +150°C

Maximium Working Pressure:

- 25 bar



3 Way L Port Ball Valve

Female x Female

Code N28	Thread BSPP	Price
BV3L14	G1/4"	30.55
BV3L38	G3/8"	34.85
BV3L12	G1/2"	34.20
BV3L34	G3/4"	56.25
BV3L1	G1"	75.90
BV3L114	G1.1/4"	127.35
BV3L112	G1.1/2"	175.55
BV3L2	G2"	269.25



3 Way T Port Ball Valve

Female x Female

Code N28	Thread BSPP	Price
BV3T14	G1/4"	35.20
BV3T38	G3/8"	34.20
BV3T12	G1/2"	36.75
BV3T34	G3/4"	57.55
BV3T1	G1"	79.70
BV3T114	G1 1/4"	126.55
BV3T112	G1 1/2"	175.50
BV3T2	G2"	261.00

Ball Valves

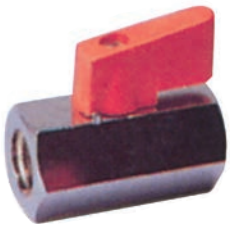
- Polished Chrome Finish
- Seal Matrial PTFE

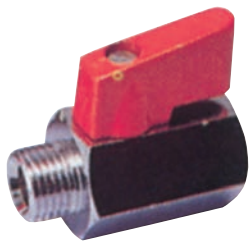
Working Temperature:

- -15°C to +100°C

Maximum Working Pressure:

- 8 bar





Mini Ball Valve

Female x Female

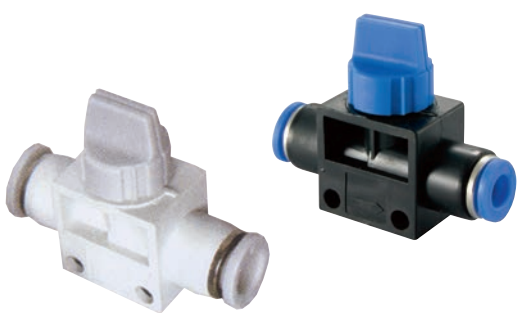
Code	N25	Thread BSPP	Price 1-9	Price 10+
MBV1FF		G1/8"	3.70	3.55
MBV2FF		G1/4"	4.25	4.05
MBV3FF		G3/8"	3.50	3.35
MBV4FF		G1/2"	6.45	6.15
MBV5FF		G3/4"	8.30	7.90

Mini Ball Valve

Male x Female

Code	N25	Thread BSPP	Price 1-9	Price 10+
MBV1MF		G1/8"	3.35	3.20
MBV2MF		G1/4"	3.20	3.05
MBV3MF		G3/8"	4.15	3.95
MBV4MF		G1/2"	6.25	5.95
MBV5MF		G3/4"	7.45	7.10

For Push-in Ball Valves



See Sections 6 pages 360, 365-366

Manual Valves & Strainers

Working Temperature:
- -20°C to +100°C

Maximum Working Pressure:
- 16 bar



Heavy Duty Gate Valve

Brass

Code N56	Thread BSPP	Price
GV38B	G3/8"	7.50
GV12B	G1/2"	8.05
GV34B	G3/4"	11.40
GV1B	G1"	16.25
GV114B	G1.1/4"	25.00
GV112B	G1.1/2"	33.65
GV2B	G2"	50.95
GV212B	G2.1/2"	90.15
GV3B	G3"	95.65
GV4B	G4"	264.70

Working Temperature:
- -20°C to +110˚C

Mesh Size:
- 400 Micron (up to 1')
  470 Micron (1.1/4" to 2")
  530 Micron (2.1/2" to 4")



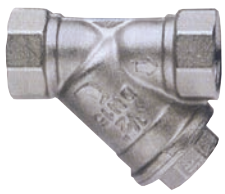
Y Strainer

Brass

Code N58	Thread BSPP	Price
YS38B	G3/8"	5.10
YS12B	G1/2"	5.90
YS34B	G3/4"	6.85
YS1B	G1"	12.25
YS114B	G1.1/4"	22.90
YS112B	G1.1/2"	30.55
YS2B	G2"	51.35
YS212B	G2.1/2"	107.60
YS3B	G3"	163.60
YS4B	G4"	340.50

Working Temperature:
- -20°C to +110˚C

Maximum Working Pressure:
- 19 bar



Y Strainer

Nickel Plated Brass

Code N59	Thread BSPP	Price
YS12BN	G1/2"	15.00
YS34BN	G3/4"	21.90
YS1BN	G1"	29.65
YS114BN	G1.1/4"	36.90
YS112BN	G1.1/2"	55.40
YS2BN	G2"	86.60

Manual Valves & Strainers

- SV73 is manufactured in accordance with BS5154/B - PN20
- PTFE Disc
- Cold Service: 20 bar at -10 to 100°C
- Saturated Steam: 9 bar at 180°C.



Bronze Oblique Seating Stop Valve

Type SV73, Female x Female, BSPP

Code	P56	Thread BSPP	Price
ANGSV-12		G1/2"	31.45
ANGSV-34		G3/4"	40.00
ANGSV-1		G1"	111.30
ANGSV-2		G2"	270.50

Temperature Range:

- 0°C to +100°C



Needle Valve, Brass

Female x Female, BSPP

Code	P56	Thread BSPP	Price
NVB18-FF		G1/8"	18.05
NVB14-FF		G1/4"	18.05
NVB38-FF		G3/8"	19.50
NVB12-FF		G1/2"	25.05

Maximum Working Pressure:

- 100 bar



Needle Valve, Brass

Male x Male, BSPT

Code	P56	Thread BSPT	Price
NVB18-MM		R1/8"	30.05
NVB14-MM		R1/4"	12.55
NVB38-MM		R3/8"	30.85
NVB12-MM		R1/2"	23.00

Maximum Working Pressure:

- 32 bar



NPT Full Way Ball Valve, Brass, Unplated

Type BV50, Female x Female, Lever Handle, NPT

Code	P56	Thread NPT	Price
BV12FFNPT		1/2"	18.65
BV34FFNPT		3/4"	26.45

- Complete with 2 keys



Full Flow Locking Ball Valve

Type BV77, Female x Female, BSPP

Code	P56	Thread BSPP	Price
KEYBV-12		G1/2"	95.80
KEYBV-34		G3/4"	88.10
KEYBV-1		G1"	106.95

Working Temperature:

- -10°C to +80°C

Maximum Working Pressure:

- 210 bar



High Pressure 2 Way Valve, Brass

Type BV210, Female x Female, BSPP

Code	P56	Thread BSPP	Price
HPTV-38		G3/8"	42.15
HPTV-12		G1/2"	48.65
HPTV-34		G3/4"	74.20
HPTV-1		G1"	99.20

Plastic Valves

- Body: Polypropylene with NBR Seal

Operating Pressure:
- 3.5 bar

Plastic Ball Valve Hose Tail x Hose Tail

Hose Tail x Hose Tail



Code	S34	Hose ID mm	Price
PBVHT-12		12	1.40
PBVHT-16		16	1.15
PBVHT-20		20	1.15

Plastic Ball Valve Male BSPP x Male BSPP

Male BSPP x Male BSPP



Code	S34	Thread BSPP	Price
PBVMP-1/2		1/2"	1.15
PBVMP-1/2-3/4		1/2" x 3/4"	1.15
PBVMP-3/4		3/4"	1.15

Plastic Ball Valve Hose Tail x Female BSPP

Hose Tail x Female BSPP



Code	S34	Hose ID mm	Thread BSPP	Price
PBVFHT-16-1/2		16	1/2"	2.05
PBVFHT-16-3/4		16	3/4"	2.00
PBVFHT-20-1/2		20	1/2"	2.00
PBVFHT-20-3/4		20	3/4"	2.00

Plastic Ball Valve Hose Tail x Male BSPP

Hose Tail x Male BSPP



Code	S34	Hose ID mm	Thread BSPP	Price
PBVMPHT-12-1/2		12	1/2"	1.45
PBVMPHT-12-3/4		12	3/4"	1.45
PBVMPHT-16-1/2		16	1/2"	1.15
PBVMPHT-16-3/4		16	3/4"	1.15
PBVMPHT-20-1/2		20	1/2"	1.15
PBVMPHT-20-3/4		20	3/4"	1.15

Suitable for use in the food industry

Temperature Range:
- 30˚C to 85˚C

Maximum Pressure:
- 11 bar

Plastic Push-in Valves

Tube x Tube



Code	S34	Tube OD mm	Price
PBVTT-6		6	5.00
PBVTT-10		10	5.20
PBVTT-12		12	5.40

Plastic Push-in Valves

BSPT Male x Tube



Code	S34	Tube OD mm	Thread BSPT	Price
PBVTMT-6-1/4		6	1/4"	4.80
PBVTMT-10-3/8		10	3/8"	5.10
PBVTMT-12-1/2		12	1/2"	5.35

Plastic Push-in Valves

BSPP Female 90°



Code	S34	Tube OD mm	Thread BSPP	Price
PBV90-6-1/4		6	1/4"	5.50
PBV90-10-3/8		10	3/8"	5.85
PBV90-12-1/2		12	1/2"	8.65

Plastic Push-in Valves

In-line Mini Filter



Code S34	Tube OD mm	Price
PMFIL-6	6	10.40
PMFIL-8	8	10.65
PMFIL-10	10	9.70
PMFIL-12	12	11.95

Non-return Valves

Working Temperature:
- 0°C to +100°C

Cracking Pressure:
- 0.5 psi



Brass Check Valve with Metal Disc

Female x Female

Code N57	Thread BSPP	Price
100CV38	G3/8"	5.75
100CV12	G1/2"	7.05
100CV34	G3/4"	11.70
100CV1	G1"	13.55
100CV114	G1.1/4"	17.90
100CV112	G1.1/2"	40.00
100CV2	G2"	48.30
100CV212	G2.1/2"	132.00
100CV3	G3"	192.55
100CV4	G4"	333.70

Working Temperature:
- 0°C to +90°C



Brass Swing Check Valve

Female x Female

Code N57	Thread BSPP	Working Pressure bar	Price
130CVR12	G1/2"	16	10.00
130CVR34	G3/4"	16	11.75
130CVR1	G1"	12	20.30
130CVR114	G1.1/4"	10	29.65
130CVR112	G1.1/2"	10	34.70
130CVR2	G2"	10	55.40
130CVR212	G2.1/2"	8	99.30
130CVR3	G3"	8	143.45
130CVR4	G4"	8	257.05

Working Temperature:
- -10°C to +180°C

Maximum Working Pressure:
- 16 bar

Cracking Pressure:
- 0.1 bar
- Viton Seal



Brass Non-return Valve, Heavy Duty

Female x Female

Code P26	Thread BSPP	Price
392.022	G1/4"	14.40
392.023	G3/8"	17.70
392.024	G1/2"	21.80
392.025	G3/4"	39.25
392.026	G1"	57.10

Working Temperature:
- -15°C to +150°C

- Stainless Steel



Filter for Check Valve

Male Thread

Code N57	Thread BSPP	Price
102CVF38	G3/8"	1.35
102CVF12	G1/2"	1.50
102CVF34	G3/4"	1.70
102CVF1	G1"	1.90
102CVF114	G1.1/4"	2.60
102CVF112	G1.1/2"	3.15
102CVF2	G2"	4.05
102CVF212	G2.1/2"	7.70
102CVF3	G3"	9.35
102CVF4	G4"	13.05

Working Temperature:
- NBR: -10°C to +70°C
- Viton: -20°C to +150°C

Cracking Pressure:
- 0.5 psi

Maximum Working Pressure:
- 10 bar



Compact Non-return Valve

Male x Female

Code P25	Seal Material	Thread BSPP	Price
VUP8.M	NBR	G1/8"	6.70
VUP8.VM	Viton	G1/8"	7.65
VUP4.M	NBR	G1/4"	8.00
VUP4.VM	Viton	G1/4"	9.25

Working Temperature:
- NBR: -18°C to +70°C
- Viton: -20°C to + 150°C

Maximum Working Pressure:
- NBR: 8 bar
- Viton: 10 bar

Cracking Pressure:
0.5 psi



Compact Non-return Valve

Female x Female

Code T07	Seal Material	Thread BSPP	Price
CNRVM5	NBR	M5	5.60
CNRV18	NBR	G1/8"	6.10
CNRV18-V	Viton	G1/8"	12.75
CNRV14	NBR	G1/4"	6.80
CNRV14-V	Viton	G1/4"	12.85
CNRV38	NBR	G3/8"	14.70
CNRV38-V	Viton	G3/8"	18.10
CNRV12	NBR	G1/2"	15.05
CNRV12-V	Viton	G1/2"	18.55

Safety Valves

Technical Data

General

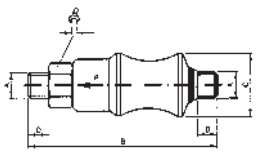
- Ambient Temperature: 80˚C Max
- Temperature of Medium: 80˚C Max

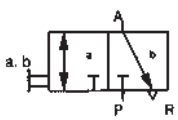
Pneumatic

- Rated Pressure: Vacuum to 16 bar
- Nominal Flow Rate P to A: 750, 1300, 3300
- Nominal Flow Rate A to R: 1300, 2100, 7600
- Nominal Size: 6, 8, 13

Hand Slide Valve with Vent

Male Thread







Code P27	Thread BSPP	B mm	ØC mm	D mm	mm	Weight kg	Price
HSV18M	G1/8"	72	26	8	14	0.09	**34.25**
HSV14M	G1/4"	81	32	10	19	0.16	**31.70**
HSV12M	G1/2"	98	44	12	2	0.35	**44.70**

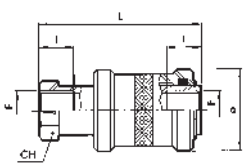
Technical Data

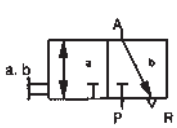
General

- Pressure Range: 0 - 10 bar
- Temperature Range: -10˚C to +80˚C

Hand Slide Valve with Vent

Female Thread







Code P27	Thread BSPT	Ø mm	l mm	L mm	CH	Price
HSV18F	R1/8"	25	10	48	11	**9.95**
HSV14F	R1/4"	30	12	58	19	**12.70**
HSV38F	R3/8"	35	12	68	22	**16.50**
HSV12F	R1/2"	40	15	80	27	**20.50**

Safety Valves

Safety valves to blow out non-poisonous and non-flammable gases into the atmosphere in order to protect pressure tanks against overpressure.
Please note: Only safety valves that have been set and sealed with lead (plumbed) by us can be delivered with the component symbols, it is thus absolutely necessary to indicate the setting pressure in bar. As functional test, safety valves may be aerated by the way of pulling the haul-off bolt. Repairs may only be carried out by the manufacturer.

Technical Data

- Connection thread: G1/4, G3/8
- Max. operating pressure: 24 bar (PN24)
- Operating temperature: -10˚C to +150˚C
- Setting range: 4,5 to 24 bar (5 steps)
- Opening pressure difference: <10%
- Closing pressure difference: <10%
- Material: Brass
- Seal: Viton

Important: The supply connection to the safety valve should not be <DN6, the pressure drop in the supply connection not >3%.

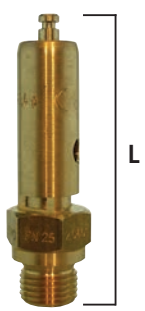
Exhaust Capacity Air

The exhaust capacities indicated in the table are the minimum values reached when air pressure is raised by 10% above the set pressure.

Set Pressure bar	Exhaust Flow Capacity (normal condition)	
	m^3/h	l/m
6	60	1000
10	110	1833
11	125	2083
14	155	2583

Intermediate values can be interpolated.

More Variations Available
Special Set Pressures, Body Materials, Large Threads



Compact Safety Valve DN6

Male Thread

Code P26	Thread BSPP	Set At bar	Dimensions mm L	Dimensions mm Hex	Price
469.23-5.0BAR	G1/4"	5.0	65	17	**22.20**
469.24-7.0BAR	G1/4"	7.0	65	17	**22.20**
469.24-9.0BAR	G1/4"	9.0	65	17	**22.20**
469.25-11.0BAR	G1/4"	11.0	65	17	**22.20**
469.26-16.0BAR	G1/4"	16.0	65	17	**22.20**
469.27-20.0BAR	G1/4"	20.0	65	17	**22.20**

Code P26	Thread BSPP	Set At bar	Dimensions mm L	Dimensions mm Hex	Price
469.33-5.0BAR	G3/8"	5.0	65	19	**22.20**
469.34-7.0BAR	G3/8"	7.0	65	19	**22.20**
469.34-9.0BAR	G3/8"	9.0	65	19	**22.20**
469.35-11.0BAR	G3/8"	11.0	65	19	**22.20**
469.36-16.0BAR	G3/8"	16.0	65	19	**22.20**
469.37-20.0BAR	G3/8"	20.0	65	19	**22.20**

Safety Valves

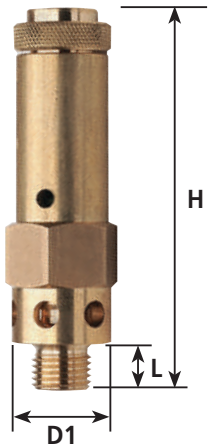
new

LORCH

The introduction of the European Pressure Equipment Directive recommends relevant testing and quality assurance with appropriate certification with regard to safety.

- Manufactured and tested in accordance to national and international regulations (DIN 3320.AD SHEET A2/A4)
- Compliant with component test reports, by the identification of the manufacturer, provides a guarantee for specified setting values
- Test certificates come as standard

More Variations Available
Special Set Pressures, Body Materials, Large Threads



Standard Safety Valve DN8

Male Thread, 1/4" BSPP

Code P26	Set At bar	Price
SVD8-14-1.0BAR	1	23.35
SVD8-14-1.5BAR	1.5	24.00
SVD8-14-2.0BAR	2	24.00
SVD8-14-2.5BAR	2.5	23.90
SVD8-14-3.0BAR	3	23.90
SVD8-14-3.5BAR	3.5	23.35
SVD8-14-4.0BAR	4	23.90
SVD8-14-4.5BAR	4.5	23.35
SVD8-14-5.0BAR	5	23.35
SVD8-14-5.5BAR	5.5	23.90
SVD8-14-6.0BAR	6	23.90
SVD8-14-6.5BAR	6.5	23.35
SVD8-14-7.0BAR	7	23.90
SVD8-14-7.5BAR	7.5	24.00
SVD8-14-8.0BAR	8	24.90
SVD8-14-8.5BAR	8.5	23.35
SVD8-14-9.0BAR	9	23.90
SVD8-14-10.0BAR	10	23.90
SVD8-14-10.5BAR	10.5	23.90
SVD8-14-11.0BAR	11	23.90
SVD8-14-11.5BAR	11.5	26.65
SVD8-14-12.0BAR	12	24.00
SVD8-14-15.0BAR	15	26.55

Standard Safety Valve DN10

Male Thread, 3/8" BSPP

Code P26	Set At bar	Price
SVD10-38-5.0BAR	5	30.10
SVD10-38-6.0BAR	6	30.75
SVD10-38-7.0BAR	7	29.65
SVD10-38-8.0BAR	8	33.30
SVD10-38-10.0BAR	10	33.20
SVD10-38-11.0BAR	11	29.00
SVD10-38-12.0BAR	12	33.20
SVD10-38-15.0BAR	15	33.20

NB: the product is CE marked, to comply with legislation.

Type	Inlet connection	Pressure range (bar)	Torque (Nm)	Width across Hex (mm)	H (mm)	L (mm)	D1 (mm)
DN8	G 1/4" M	0,3 - 9,3	14	22	72	10	21,6
		9,4 - 21,0	14	22	81	10	21,6
		21,1 - 47,0	14	24	88	10	23,6
DN10	G 3/8" M	0,3 - 16,0	40	22	72	10	21,6
		16,1 - 42,0	40	22	89	10	21,6
DN10	G 1/2" M	0,3 - 16,0	65	27	74	12	26,6
		16,1 - 42,0	65	27	91	12	26,6
DN10	G 3/4" M	0,3 - 16,0	160	30	74	12	29,6
		16,1 - 42,0	160	30	91	12	29,6

Exhaust Flow (m³/h)		
Set Pressure bar	DN8	DN10
0,5	40	46
0,6	43	50
0,8	49	57
1	55	67
1,5	69	84
2	83	107
2,5	98	125
3	112	148
3,5	126	168
4	141	190
4,5	155	209
5	169	232
5,5	184	252
6	198	275
6,5	212	295
7	226	318
7,5	241	340
8	255	362
8,5	270	381
9	284	406
9,5	298	428

Exhaust Flow (m³/h)		
Set Pressure bar	DN8	DN10
10	313	450
11	341	489
12	371	539
13	399	580
14	428	629
15	456	673
16	485	720
17	513	758
18	543	811
19	570	855
20	601	903
21	628	941
22	659	995
23	685	1041
24	716	1088
25	742	1128
26	774	1182
27	780	1232
28	832	1276
29	857	1321
30	889	1370

Safety Valves

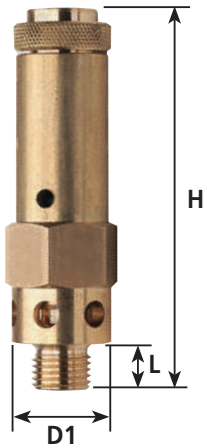
new

LORCH

The introduction of the European Pressure Equipment Directive recommends relevant testing and quality assurance with appropriate certification with regard to safety.

- Manufactured and tested in accordance to national and international regulations (DIN 3320.AD SHEET A2/A4)
- Compliant with component test reports, by the identification of the manufacturer, provides a guarantee for specified setting values
- Test certificates come as standard

More Variations Available
Special Set Pressures, Body Materials, Large Threads



Standard Safety Valve DN10

Male Thread, 1/2" BSPP

Code P26	Set At bar	Price
SVD10-12-0.5BAR	0.5	29.55
SVD10-12-1.5BAR	1.5	29.65
SVD10-12-2.5BAR	2.5	29.55
SVD10-12-3.5BAR	3.5	29.55
SVD10-12-4.0BAR	4	30.10
SVD10-12-5.0BAR	5	29.65
SVD10-12-5.5BAR	5.5	28.90
SVD10-12-6.0BAR	6	29.55
SVD10-12-6.5BAR	6.5	30.75
SVD10-12-7.0BAR	7	29.00
SVD10-12-7.5BAR	7.5	33.20
SVD10-12-8.0BAR	8	29.55
SVD10-12-8.5BAR	8.5	29.65
SVD10-12-9.0BAR	9	29.55
SVD10-12-10.0BAR	10	29.55
SVD10-12-10.5BAR	10.5	30.75
SVD10-12-11.0BAR	11	29.55
SVD10-12-11.5BAR	11.5	33.70
SVD10-12-12.0BAR	12	29.55
SVD10-12-12.5BAR	12.5	29.00
SVD10-12-15.0BAR	15	29.65
SVD10-12-16.0BAR	16	28.90
SVD10-12-30.0BAR	30	30.30

Standard Safety Valve DN10

Male Thread, 3/4" BSPP

Code P26	Set At bar	Price
SVD10-34-6.0BAR	6	33.50
SVD10-34-7.0BAR	7	32.95
SVD10-34-8.0BAR	8	32.70
SVD10-34-10.0BAR	10	32.70
SVD10-34-11.0BAR	11	32.85

NB: the product is CE marked, to comply with legislation.

Type	Inlet connection	Pressure range (bar)	Torque (Nm)	Width across Hex (mm)	H (mm)	L (mm)	D1 (mm)
DN10	G 3/8" M	0,3 - 16,0	40	22	72	10	21,6
		16,1 - 42,0	40	22	89	10	21,6
DN10	G 1/2" M	0,3 - 16,0	65	27	74	12	26,6
		16,1 - 42,0	65	27	91	12	26,6
DN10	G 3/4" M	0,3 - 16,0	160	30	74	12	29,6
		16,1 - 42,0	160	30	91	12	29,6

Exhaust Flow (m^3/h)		
Set Pressure bar	DN8	DN10
0,5	40	46
0,6	43	50
0,8	49	57
1	55	67
1,5	69	84
2	83	107
2,5	98	125
3	112	148
3,5	126	168
4	141	190
4,5	155	209
5	169	232
5,5	184	252
6	198	275
6,5	212	295
7	226	318
7,5	241	340
8	255	362
8,5	270	381
9	284	406
9,5	298	428

Exhaust Flow (m^3/h)		
Set Pressure bar	DN8	DN10
10	313	450
11	341	489
12	371	539
13	399	580
14	428	629
15	456	673
16	485	720
17	513	758
18	543	811
19	570	855
20	601	903
21	628	941
22	659	995
23	685	1041
24	716	1088
25	742	1128
26	774	1182
27	780	1232
28	832	1276
29	857	1321
30	889	1370

Safety Excess Flow Valve (Air Fuse)

The safety excess flow check valve is designed to automatically shut off air flow upon a sudden break in the air line, thereby protecting personnel and property from “whipping” air hoses. Allows full unrestricted flow of air flow while in normal open position. Entire unit is corrosion free. It automatically re-sets itself after repair is made. Unit is tamper-proof. Meets OSHA safety regulations.

Installation

The unit is to be installed on compressed air lines leading to pneumatic tools.

Technical Data

Select the same nominal size safety valve as the hose size leading to the respective air tool. Air flow must be in the direction of the arrow marked in the check valve. A safety check valve should be installed for use before each air tool. The actual length of hose from safety check valve to air tool must not exceed a certain length depending upon the inlet pressure. The volume of air flow (CFM) through an air line will vary according to its length. A longer line will offer more resistance to flow and thus reduce the volume. The length of a hose extending from the safety valve to the air tool must, therefore, be limited to a certain length to insure sufficient flow to trigger the safety valve in case of a break. Check with us for hose length limitations. The closing flow rate (CFM) at various inlet pressure can be obtained from the flow rate chart.

Caution

Do not reduce safety valve with bushings for use with a smaller air line. If this is done, there will not be a sufficient CFM flow during a line break to shut off the air flow through the safety valve (see technical data).

NB

Nominal sizes of valve and connecting hose must be consistent i.e. 1/4” valve to be used with 1/4” hose.



Safety Excess Flow Check Valves

Female x Female

Code	P22	Thread NPT	Price
SV802		1/4”	50.40
SV803		3/8”	50.40
SV804		1/2”	50.40

For Whip Check Hose Safety Device



See page 480

Solenoid Valves

Construction

- Body and cover: Brass
- Armature tube: Stainless steel
- Armature and core: Stainless steel
- Spring: Stainless steel
- Seal material: NBR

Technical Specifications

- Maximum fluid viscosity: 25cSt ($mm^2/2$)
- Ambient temperature: with class F coil -10˚ +55˚C



2 Way Valve

2/2 Direct Acting, Normally Closed

Code P28	Thread BSPP	Orifice mm	Differential Pressure bar			Nominal Power			Coil Type	Price
			Min	Max AC	Max DC	AC Inrush	VA Holding	DC Watt		
E106AB25///	G1/8"	2.5	0	16	14	20	15	10	2	**35.85**
E106BB25///	G1/4"	2.5	0	16	14	20	15	10	2	**35.80**
E106AB35///	G1/8"	3.5	0	10	8	20	15	10	2	**35.05**
E106BB35///	G1/4"	3.5	0	10	8	20	15	10	2	**35.70**
E106CB35///	G3/8"	3.5	0	10	8	20	15	10	2	**41.65**
E106DB35///	G1/2"	3.5	0	10	8	20	15	10	2	**41.50**
E106CB40///	G3/8"	4	0	8	5	20	15	10	2	**40.55**
E106DB40///	G1/2"	4	0	8	5	20	15	10	2	**41.65**
E106CB45///	G3/8"	4.5	0	14	13	40	30	27	5	**40.55**
E106DB52///	G1/2"	5.2	0	10	9	40	30	27	5	**41.65**

Select Coil and Plug from following pages

Construction

- Body and cover: Brass
- Armature tube: Stainless steel
- Armature and core: Stainless steel
- Spring: Stainless steel
- Seal material: NBR

Technical Specifications

- Maximum fluid viscosity: 25cSt ($mm^2/2$)
- Ambient temperature: with class F coil -10º +55ºC



3 Way Valve

3/2 Direct Acting, Normally Closed

Code P28	Thread BSPP	Orifice mm		Differential Pressure bar		Nominal Power			Coil Type	Price
		Inlet	Exhaust	Max AC	Max DC	AC Inrush	VA Holding	DC Watt		
E306AB25///	G1/8"	2.5	2.4	10	10	20	15	10	2	**43.55**
E306BB25///	G1/4"	2.5	2.4	10	10	20	15	10	2	**43.55**

To select coil and plug go to pages 247,249, 250 and 251

Solenoid Valves

Construction

- Body and cover: Stainless steel
- Armature tube: Stainless steel
- Armature and core: Stainless steel
- Spring: Stainless steel
- Seal material: EPDM

Technical Specifications

- Maximum fluid viscosity: 25cSt ($mm^2/2$)
- Ambient temperature: with class F coil -10˚ +55˚C
  with class H coil -10˚ +80˚C



2 Way Valve, Stainless Steel Body & EPDM Seals

2/2 Direct Acting, Normally Closed

Code P28	Thread BSPP	Orifice mm	Differential Pressure bar			Nominal Power			Coil Type	Price
			Min	Max AC	Max DC	AC Inrush	VA Holding	DC Watt		
E111AE20///	G1/8"	2	0	12	10	12	8	6.5	3	**52.90**
E111AE25///	G1/8"	2.5	0	8	5.5	12	8	6.5	3	**61.75**
E110BE35///	G1/4"	3.5	0	10	8	20	15	10	5	**89.55**
E110BE52///	G1/4"	5.2	0	10	9	40	30	27	5	**91.95**
E110CE35///	G3/8"	3.5	0	10	8	20	15	10	5	**97.50**
E110CE52///	G3/8"	5.2	0	10	9	40	30	27	5	**97.50**
E110DE52///	G1/2"	5.2	0	10	9	40	30	27	5	**98.80**

Select Coil and Plug from following pages

Construction

- Body and cover: Stainless steel
- Armature tube: Stainless steel
- Armature and core: Stainless steel
- Spring: Stainless steel
- Seal material: EPDM

Technical Specifications

- Maximum allowable pressure: +10%
- Maximum differential pressure: +10%
- Maximum fluid viscosity: 25st (mm^2/s)
- Ambient temperature: with class F coil only -10º +50ºC
  with class H coil only -10º +80ºC
- Universal mounting
- Temp. Range: E311A: -10ºC +90ºC, E310B: <+40ºC



3 Way Valve, Stainless Steel Body & EPDM Seals

3/2 Direct Acting, Normally Closed

Code P28	Thread BSPP	Orifice mm		Differential Pressure bar			Nominal Power			Coil Type	Seal	Price
		Inlet	Exhaust	Min	Max AC	Max DC	AC Inrush	VA Holding	DC Watt			
E311AE15///	G1/8"	1.5	1.7	0	10	10	12	8	6.5	3	EPDM	**65.25**
E311AE20///	G1/8"	2	1.7	0	6	6	12	8	6.5	3	EPDM	**74.45**
E310BE25///	G1/4"	2.5	2.4	0	10	10	20	15	10	2	EPDM	**102.75**

To select coil and plug go to pages 247,249, 250 and 251

Solenoid Valves

Construction

- Body and cover: Brass
- Armature tube: Stainless steel
- Armature and core: Stainless steel
- Spring: Stainless steel
- Seal material: NBR

Technical Specifications

- Minimum differential pressure: 0.15 bar
- Maximum allowable pressure: 25 bar
- Ambient temperature: with class F coil -10˚ +55˚C



General Purpose Valve

2/2 Servo Assisted, Normally Closed

Code P28	Thread BSPP	Orifice mm	Differential Pressure bar		Nominal Power			Coil Type	Price
			Min	Max	AC Inrush	VA Holding	DC Watt		
E107CB10///	G3/8"	10	0.15	15	12	8	6.5	3	**41.65**
E107DB12///	G1/2"	12	0.15	15	12	8	6.5	3	**53.10**
E107EB18///	G3/4"	18	0.15	13	12	8	6.5	3	**70.85**
E107FB24///	G1"	24	0.15	10	12	8	6.5	3	**109.65**
E107GB38///	G1.1/4"	37	0.15	10	20	15	10	2	**304.45**
E107HB38///	G1.1/2"	37	0.15	10	20	15	10	2	**315.55**
E107IB50///	G2"	50	0.15	10	20	15	10	2	**417.65**

Select Coil and Plug from following pages

Construction

- Body and cover: Brass
- Armature tube: Up to 1" stainless steel
  over 1" brass
- Armature and core: Stainless steel
- Spring: Stainless steel
- Seal material: NBR, FPM, EPDM

Technical Specifications

- Minimum differential pressure: 0.15 bar
- Maximum allowable pressure: 25 bar
- Maximum fluid viscosity: 25cSt (mm ^{2}/s)
- Ambient temperature: with class F coil -10˚ +55˚C
  with class H coil -10˚ +80˚C
- Preferred mounting position with vertical coil above



General Purpose Valve

2/2 Servo Assisted, Normally Open

Code P28	Thread BSPP	Orifice mm	Differential Pressure bar		Nominal Power			Coil Type	Price
			Min	Max	AC Inrush	VA Holding	DC Watt		
E207CB12///	G3/8"	12	0.15	15	12	8	6.5	3	**73.35**
E207DB12///	G1/2"	12	0.15	15	12	8	6.5	3	**74.30**
E207EB18///	G3/4"	18	0.15	13	12	8	6.5	3	**94.85**
E207FB25///	G1"	24	0.15	10	12	8	6.5	3	**132.80**
E207GB37///	G1.1/4"	37	0.15	10	20	15	10	2	**321.05**
E207HB37///	G1.1/2"	37	0.15	10	20	15	10	2	**345.90**
E207IB50///	G2"	50	0.15	10	20	15	10	2	**418.95**

To select coil and plug go to pages 247,249, 250 and 251

Solenoid Valves

Construction

- Body and cover: Brass
- Armature tube: Stainless steel
- Armature and core: Stainless steel
- Seal material: NBR

Technical Specifications

- Minimum differential pressure: 0.15 bar
- Maximum fluid viscosity: 25cSt (mm ^{2}/s)
- Ambient temperature: with class F coil -10˚ +55˚C



General Purpose Valve

2/2 Assisted Lift Diaphragm, Normally Closed

Code P28	Thread BSPP	Orifice mm	Differential Pressure bar			Nominal Power			Coil Type	Price
			Min	Max AC	Max DC	AC Inrush	VA Holding	DC Watt		
E108CB12///	G3/8"	12	0	12	10	20	15	-	5	**69.80**
E108DB12///	G1/2"	12	0	12	10	20	15	-	5	**69.95**
E108EB18///	G3/4"	18	0	9	-	40	30	-	5*	**90.80**
D108EB18///	G3/4"	18	0	-	7	7	-	27	5**	**84.45**
E108FB24///	G1"	24	0	7	-	40	30	-	5*	**140.90**
D108FB24///	G1"	24	0	-	4	-	-	27	5**	**137.75**

Select Coil and Plug from following pages

*=AC only
**=DC only

Construction

- Body and cover: Brass
- Armature tube: Stainless steel
- Armature and core: Stainless steel
- Spring: Stainless steel
- Seal material: NBR

Technical Specifications

- Ambient temperature: -10˚ +55˚C



Valve for Vacuum

2/2 Servo Assisted, Normally Closed

Code P28	Thread BSPP	Orifice mm	Differential Pressure bar			Nominal Power			Coil Type	Price
			Min	Max AC	Max DC	AC Inrush	VA Holding	DC Watt		
E107CB12/5/	G3/8"	10	Vacuum	15	15	12	8	6.5	3	**60.75**
E107DB12/5/	G1/2"	12	Vacuum	15	15	12	8	6.5	3	**61.40**
E107EB18/5/	G3/4"	18	Vacuum	13	13	12	8	6.5	3	**80.35**
E107FB24/5/	G1"	24	Vacuum	10	10	12	8	6.5	3	**122.10**
E107GB38/5/	G1.1/4"	37	Vacuum	10	10	20	15	10	2	**322.80**
E107HB38/5/	G1.1/2"	37	Vacuum	10	10	20	15	10	2	**327.80**
E107IB50/5/	G2"	50	Vacuum	10	10	20	15	10	2	**419.15**

To select coil and plug go to pages 247, 249, 250 and 251

Solenoid Valves

Construction

- Body and cover: Brass
- Armature tube: Stainless steel
- Armature and core: Stainless steel
- Spring: Stainless steel
- Piston: Brass
- Piston ring: PTFE reinforced
- Seal material: Main seal PTFE otherwise FPM

Technical Specifications

- Minimum differential pressure: 1 bar
- Maximum allowable pressure: 60 bar
- Ambient temperature: with class F coil -10˚ +55˚C



High Pressure Valve

2/2 Servo Assisted Piston, Normally Closed, 50 bar

Code P28	Thread BSPP	Orifice mm	Differential Pressure bar		Nominal Power			Coil Type	Price
			Min	Max	AC Inrush	VA Holding	DC Watt		
E119CV12/1/	G3/8"	12	1	50	40	30	27	5	**96.25**
E119DV12/1/	G1/2"	12	1	50	40	30	27	5	**99.35**

Select Coil and Plug from following pages

Construction

- Body and cover: Brass
- Armature tube: Stainless steel
- Armature and core: Stainless steel
- Spring: Stainless steel
- Piston: Brass
- Piston ring: PTFE reinforced
- Seal material: Main seal PTFE otherwise FPM

Technical Specifications

- Minimum differential pressure: 2.5 bar
- Ambient temperature: with class H coil -10˚ +80˚C
- Preferred mounting position with vertical coil above



Valve for Steam

2/2 Servo Assisted Piston, Normally Closed, 180ºC

Code P28	Thread BSPP	Orifice mm	Differential Pressure bar		Nominal Power			Coil Type	Price
			Min	Max	AC Inrush	VA Holding	DC Watt		
E119CW12/1/	G3/8"	12	2.5	9	20	15	10	2H	**124.85**
E119DW12/1/	G1/2"	12	2.5	9	20	15	10	2H	**108.10**

To select plugs go to pages 249, 250 and 215

Solenoid Coils



Type 2 Solenoid Coil

Class “F”

Code	P28	Description	Type	Price
20E		230V AC 30mm Wide	2	15.15
20D		110V AC 30mm Wide	2	15.50
20B		24V AC 30mm Wide	2	15.55
201		24V DC 30mm Wide	2	15.50
200		12V DC 30mm Wide	2	15.20



Type 2 Solenoid Coil

Class “H” High Temperature Applications

Code	P28	Description	Type	Price
22E		230V AC 30mm Wide	2	19.55
22D		110V AC 30mm Wide	2	20.05
22B		24V AC 30mm Wide	2	19.85
221		24V DC 30mm Wide	2	20.10
220		12V DC 30mm Wide	2	20.10



Type 3 Solenoid Coil

22mm Coil

Code	P28	Description	Type	Price
30E		230V AC 22mm Wide	3	10.85
30D		110V AC 22mm Wide	3	10.75
30B		24V AC 22mm Wide	3	10.95
301		24V DC 22mm Wide	3	10.75
300		12V DC 22mm Wide	3	10.75



G1NU2000



M1NS2000

Type 2 & Type 3 Electrical Socket Connector

Electrical Socket Connector

Code	M18	Type	Price 1-49	Price 50+
G1NU2000		2/5	1.45	1.40
M1NS2000		3	1.50	1.45

To select plugs go to pages 249, 250 and 215



Type 5 Solenoid Coil

36mm Coil

Code	P28	Description	Type	Price
52E		230V AC 36mm Wide	5	24.10
52D		110V AC 36mm Wide	5	24.10
52B		24V AC 36mm Wide	5	24.65
521		24V DC 36mm Wide	5	24.20
520		12V DC 36mm Wide	5	24.65

Features

- Selectable timing range
- 24 - 240 V AC 50/60Hz 24 - 240V DC
- DIN 43650 ISO-4400/6952
- IP65 NEMA IV
- Test facility
- Dual earth O/P 6 and 12 o’clock. Form A
- Special timing ranges available on request



Electrical Timer Module

IP65 NEMA IV

Code	L14	On Time	Off Time	Price
720-01-000		0.5-10 Sec	0.5-45 Min	25.10

Technical Data

- Fluid media: Air - Water - Oil
- Operation: 2/2 direct acting, N.C.
- Internal diameter: 8mm
- Cv value: 1.00
- Max inlet pressure: 0 - 7 bar
- Working temperature: -5 to +80 °C



Timed Drain Valve

Female x Female

Code	S18	Thread BSPP	Working Pressure bar	Price 1-9	Price 10+
PU220i-03ST-230V		G3/8”	0 - 7	69.65	66.20

Solenoid Valves

- Suitable for use on air, gas, hot water and oil applications
- Normally closed
- Comes complete with solenoid coil and plug
- Direct acting - no minimum pressure
- Rated IP 65



ZS Series 2/2 Solenoid Valve

Brass Body NBR Seals

Code N44	Thread BSPP	Orifice mm	CV Value	Min pressure	Max Working Pressure						Max Temp C	Power		Voltage	Price	
					Air,	Gas	Water, Hot Water, Liquid		Light Oil							
					AC	DC	AC	DC	AC	DC		VA AC 220	W DC 24V		1-9	10+
ZS15E2-10L	G1/2"	10	1.9	0	20	16	20	16	20	16	80	22	13	220V AC	44.50	42.30
ZS15E1-10L	G1/2"	10	1.9	0	20	16	20	16	20	16	80	22	13	110V AC	44.50	42.30
ZS15E4-10L	G1/2"	10	1.9	0	20	16	20	16	20	16	80	22	13	24V DC	44.50	42.30
ZS15E7-10L	G1/2"	10	1.9	0	20	16	20	16	20	16	80	22	13	24V AC	44.50	42.30
ZS20E2	G3/4"	20	7.6	0	10	6	10	6	7	4	80	33	20	220V AC	63.00	59.85
ZS20E1	G3/4"	20	7.6	0	10	6	10	6	7	4	80	33	20	110V AC	63.00	59.85
ZS20E4	G3/4"	20	7.6	0	10	6	10	6	7	4	80	33	20	24V DC	63.00	59.85
ZS20E7	G3/4"	20	7.6	0	10	6	10	6	7	4	80	33	20	24V AC	63.00	59.85
ZS25E2	G1"	25	12	0	10	6	10	6	7	4	80	33	20	220V AC	97.50	92.65
ZS25E1-25L	G1"	25	12	0	10	6	10	6	7	4	80	33	20	110V AC	97.50	92.65
ZS25E4	G1"	25	12	0	10	6	10	6	7	4	80	33	20	24V DC	97.50	92.65
ZS25E7	G1"	25	12	0	10	6	10	6	7	4	80	33	20	24V AC	97.50	92.65

- Suitable for use on air, gas, hot water and oil applications
- Normally closed
- Comes complete with solenoid coil and plug
- Direct acting - no minimum pressure
- Rated IP 65



ZS Series 2/2 Solenoid Valve

Stainless Steel Body Viton Seals

Code N44	Thread BSPP	Orifice mm	CV Value	Min pressure	Max Working Pressure						Max Temp C	Power		Voltage	Price	
					Air,	Gas	Water, Hot Water, Liquid		Light Oil							
					AC	DC	AC	DC	AC	DC		VA AC 220	W DC 24V		1-9	10+
ZS15VE2-10LS2	G1/2"	10	1.9	0	20	16	20	16	20	16	80	22	13	220V AC	61.30	58.25
ZS15VE1-10LS2	G1/2"	10	1.9	0	20	16	20	16	20	16	80	22	13	110V AC	61.30	58.25
ZS15VE4-10LS2	G1/2"	10	1.9	0	20	16	20	16	20	16	80	22	13	24V DC	61.30	58.25
ZS15VE7-10LS2	G1/2"	10	1.9	0	20	16	20	16	20	16	80	22	13	24V AC	61.30	58.25
ZS20VE2S2	G3/4"	20	7.6	0	10	6	10	6	7	4	80	33	20	220V AC	68.60	65.20
ZS20VE1S2	G3/4"	20	7.6	0	10	6	10	6	7	4	80	33	20	110V AC	68.60	65.20
ZS20VE4S2	G3/4"	20	7.6	0	10	6	10	6	7	4	80	33	20	24V DC	68.60	65.20
ZS20VE7S2	G3/4"	20	7.6	0	10	6	10	6	7	4	80	33	20	24V AC	68.60	65.20
ZS25VE2S2	G1"	25	12	0	10	6	10	6	7	4	80	33	20	220V AC	90.90	86.40
ZS25VE1S2	G1"	25	12	0	10	6	10	6	7	4	80	33	20	110V AC	90.90	86.40
ZS25VE4S2	G1"	25	12	0	10	6	10	6	7	4	80	33	20	24V DC	90.90	86.40
ZS25VE7S2	G1"	25	12	0	10	6	10	6	7	4	80	33	20	24V AC	90.90	86.40

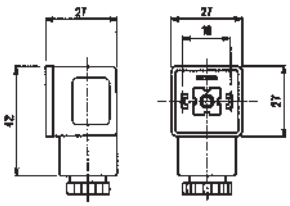
Electrical Socket Connectors

- Housing colour: Black, grey
- Type of contact: Screw with conductor protection
- Contact spacing: 18mm
- Number of poles: 2 poles + ⏚ /3 + ⏚
- Cable entry: PG9 / PG11 (unified)
- Max conductor section: 1.5mm²
- Fixing screw: M3 x 32.5
- Profile gasket: NBR (other types upon request)
- Protection class: IP65 assembled
- Packing unit: *100 pcs with fixing screw and standard gasket

Connector DIN43650/A

Standard

Code	M18	Description	Price 1-49	Price 50+
G1NU2000		PG9 / PG11 Black 2 Poles + Earth	1.45	1.40



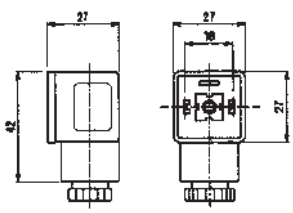


- Housing colour: Transparent
- Type of contact: Screw with conductor protection
- Contact spacing: 18mm
- Number of poles: 2 poles + ⏚
- Cable entry: PG9 / PG11 (unified)
- Max conductor section: 1.5mm²
- Fixing screw: M3 x 32.5
- Profile gasket: NBR (other types upon request)
- Protection class: IP65 assembled

Connector DIN43650/A

LED & Protection Circuit

Code	M18	Description	Price 1-49	Price 50+
G1TU2VL1		PG9 / PG11 24V 2 Poles + Earth	5.90	5.65
G1TU2VL2		PG9 / PG11 115V 2 Poles + Earth	5.90	5.65
G1TU2VL3		PG9 / PG11 230V 2 Poles + Earth	5.80	5.55



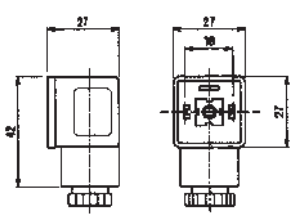


- Housing colour: Black
- Type of contact: Soldered
- Contact spacing: 18mm
- Number of poles: 2 poles + 2 ⏚
- Earth position: h6/h12 (ground connection)
- Type of cable: PVC H05VVD
- Cable length: 1 or 2 metres (other length upon request)
- Max conductor section: IP 65 with moulded cable
- Fixing screw: M3 x 28.7
- Profile gasket: NBR (other types upon request)

Connector DIN43650/A

Moulded Cable

Code	M18	Description	Price 1-19	Price 20+
CG1N02000C022		2 Metres 2 Poles + Double Earth	7.05	6.70





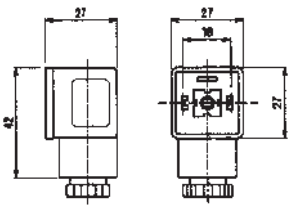
Electrical Socket Connectors

- Housing colour: Black
- Type of contact: Soldered, 18mm
- Number of poles: 2 poles + 2 ⏚
- Earth position: h6/h12 (ground connection)
- Type of cable: PVC H05VVD
- Cable length: 1 or 2 metres (other length upon request)
- Max conductor section: 1.5 mm²
- Protection class: IP 65 with moulded cable
- Fixing screw: M3 x 28.7
- Profile gasket: NBR (other types upon request)

Connector DIN43650/A

Moulded Cable, LED & Protection Circuit

Code	M18	Description	Price 1-19	Price 20+
CG1N02VL1C022		2 Metre 24V 2 Poles + Double Earth	12.55	11.95
CG1N02VL2C022		2 Metre 115V 2 Poles + Double Earth	12.55	11.95
CG1N02VL3C022		2 Metre 230V 2 Poles + Double Earth	12.55	11.95



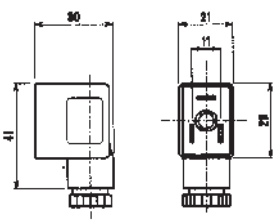


- Housing colour: Black, grey
- Type of contact: Screw with conductor protection
- Contact spacing: 11mm
- Number of poles: 2 poles + ⏚
- Cable entry: PG9
- Max conductor section: 1.5mm²
- Fixing screw: M3 x 28.7
- Profile gasket: NBR (other types upon request)
- Protection class: IP 65 assembled

Connector DIN43650/B-Industrial

Standard

Code	M18	Description	Price 1-49	Price 50+
M1NS2000		PG9 Black 2 Poles + Earth	1.50	1.45



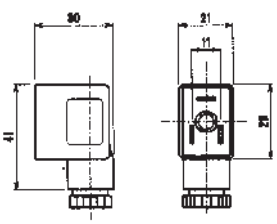


- Housing colour: Transparent
- Type of contact: Screw with conductor protection
- Contact spacing: 11mm
- Number of poles: 2 poles + ⏚
- Cable entry: PG9
- Max conductor section: 1.5mm²
- Fixing screw: M3 x 28.7
- Profile gasket: NBR (other types upon request)
- Protection class: IP 65 assembled

Connector DIN43650/B-Industrial

LED & Protection Circuit

Code	M18	Description	Price 1-49	Price 50+
M1TS2VL1		PG9 24V 2 Poles + Earth	5.90	5.65
M1TS2VL2		PG9 115V 2 Poles + Earth	5.65	5.40
M1TS2VL3		PG9 230V 2 Poles + Earth	5.80	5.55





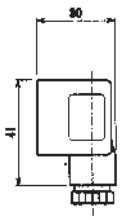
Electrical Socket Connectors

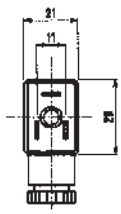
- Housing colour: Black
- Type of contact: Soldered
- Contact spacing: 11mm
- Number of poles: 2 poles + ⏚
- Earth position: h6 or h12
- Type of cable: PVC H05VVF
- Cable length: 1 or 2 metres (other length upon request)
- Max conductor section: 1.5mm²
- Protection class: IP 65 with moulded cables
- Fixing screw: M3 x 28.7
- Profile gasket: NBR (other types upon request)

Connector DIN43650/B-Industrial Moulded Cabled

Connector DIN43650/B-Industrial Moulded Cabled

Code	M18	Description	Price 1-19	Price 20+
CM1N02000A022		2 Metre 2 Poles + Earth at Cable End	6.85	6.55
CM1N02000B022		2 Metre 2 Poles + Earth Opposite Cable End	10.15	9.65





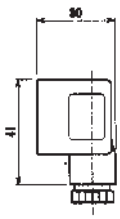


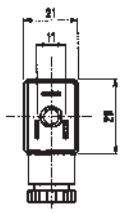
- Housing colour: Black
- Type of contact: Soldered
- Contact spacing: 11mm
- Number of poles: 2 poles + ⏚
- Earth position: h6 or h12
- Type of cable: PVC H05VVF
- Cable length: 1 or 2 metres (other length upon request)
- Max conductor section: 1.5mm²
- Protection class: IP 65 with moulded cables
- Fixing screw: M3 x 28.7
- Profile gasket: NBR (other types upon request)

Connector DIN43650/B-Industrial

Moulded Cabled, LED & Protection Circuit

Code	M18	Description	Price 1-19	Price 20+
CM1N02VL1A022		2 Metre 24V Poles + Earth at Cable End	12.55	11.95
CM1N02VL2A022		2 Metre 115V Poles + Earth at Cable End	12.55	11.95
CM1N02VL3A022		2 Metre 230V Poles + Earth at Cable End	12.55	11.95
CM1N02VL1B022		2 Metre 24V Poles + Earth Opposite End	12.55	11.95
CM1N02VL2B022		2 Metre 115V Poles + Earth Opposite End	12.55	11.95
CM1N02VL3B022		2 Metre 230V Poles + Earth Opposite End	12.85	12.25





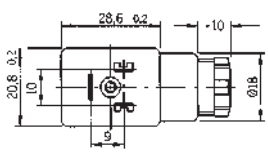


- Housing colour: Black, grey
- Type of contact: Screw with conductor protection
- Contact spacing: 10mm
- Number of poles: 2 poles + ⏚
- Cable entry: PG9
- Max conductor section: 1.5mm²
- Fixing screw: M3 x 32.5
- Profile gasket: NBR (other types upon request)
- Protection class: IP 65 assembled

Connector DIN43650/B-ISO6952

Standard

Code	M18	Description	Price 1-49	Price 50+
M2NS2000		PG9 Black 2 Poles + Earth	1.35	1.30





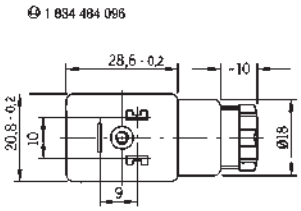
Electrical Socket Connectors

- Housing colour: Transparent
- Type of contact: Screw with conductor protection
- Contact spacing: 10mm
- Number of poles: 2 poles + ⏚
- Cable entry: PG9
- Max conductor section: 1.5mm²
- Fixing screw: M3 x 32.5
- Profile gasket: NBR (other types upon request)
- Protection class: IP 65 assembled

Connector DIN43650/B-ISO6952

LED & Protection Circuit

Code	M18	Description	Price 1-49	Price 50+
M2TS2VL1		PG9 24V 2 Poles + Earth	5.80	5.55
M2TS2VL2		PG9 115V 2 Poles + Earth	5.90	5.65
M2TS2VL3		PG9 230V 2 Poles + Earth	5.80	5.55



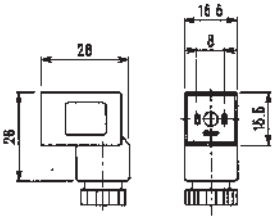


- Housing colour: Black, grey
- Type of contact: Screw with conductor protection
- Contact spacing: 9.4mm
- Number of poles: 3 poles + ⏚
- Cable entry: PG7
- Max conductor section: 0.75mm²
- Fixing screw: M3 x 28.8
- Profile gasket: NBR (other types upon request)
- Protection class: IP 65 assembled

Connector DIN43650/C

Standard

Code	M18	Description	Price 1-49	Price 50+
P1NZ3000		PG7 Black 3 Poles + Earth	1.40	1.35





For Metal Work Valves



See pages 43-65

M8 Electrical Cable

Temperature Range
- -25˚C to +70˚C

Environmental Conditions
- Protection class (IEC 60529): IP 67

Technical Data
- Rated voltage: 60V AC/DC
- Rated current: 4A

Material
- Contact material: Phosphorous bronze
- Contact surface material: Nickel + 0,45µm, AU gold plated
- Housing material: Nylon 6 + 30% glass fibre
- Coupling nut material: An AI/NI
- O-Ring: NBR

Product Description
- M8 male/female connector with cable, 3/4 poles, straight 180˚
- Type of contact: male/female
- Number of contacts: 3/4 poles
- Cable material: PUR
- Cable colour: black
- Cable length: 1 metre
- Conductor size: 0.25 mm^2
- Standard: IEC 61076-2-101. (Ed, 1) / IEC 60947-5-2
- Housing colour: black

M8 Electrical Connector with PVC Cable

Straight



Code	M18	Description	Price 1-9	Price 10+
08FD3A1Z		Female 3-Pole 1 metre cable	8.30	7.90
08FD4A1Z		Female 4-Pole 1 metre cable	8.40	8.00
08MD3A1Z		Male 3-Pole 1 metre cable	7.30	6.95
08MD4A1Z		Male 4-Pole 1 metre cable	8.55	8.15

Temperature Range
- -25˚C to +70˚C

Environmental Conditions
- Protection class (IEC 60529): IP 67

Technical Data
- Rated voltage: 60V AC/DC
- Rated current: 4A

Material
- Contact material: Phosphorous bronze
- Contact surface material: Nickel + 0,45µm, AU gold plated
- Housing material: Nylon 6 + 30% glass fibre
- Coupling nut material: An AI/NI
- O-Ring: NBR

Product Description
- M8 male/female connector with cable, 3/4 poles, angled 90˚
- Type of contact: male/female
- Number of contacts: 3/4 poles
- Cable material: PUR
- Cable colour: black
- Cable length: 1 metre
- Conductor size: 0.25 mm^2
- Standard: IEC 61076-2-101. (Ed, 1) / IEC 60947-5-2
- Housing colour: black

M8 Electrical Connector with PVC Cable

Angled



Code	M18	Description	Price 1-9	Price 10+
08FA3A1Z		Female 3-Pole 1 metre cable	7.25	6.90
08FA4A1Z		Female 4-Pole 1 metre cable	8.40	8.00
08MA3A1Z		Male 3-Pole 1 metre cable	6.85	6.55
08MA4A1Z		Male 4-Pole 1 metre cable	9.85	9.40

M8 Electrical Cable

Temperature Range
- -25˚C to +70˚C

Environmental Conditions
- Protection class (IEC 60529): IP 67

Material
- Contact material: Phosphorous bronze
- Contact surface material: Nickel + 0,45µm, AU gold plated
- Housing material: Nylon 6 + 30% glass fibre
- Coupling nut material: An AI/NI
- O-Ring: NBR

Product Description
- Extension M8 male and M8 female connector with PVC 0.25mm² moulded cable or shielded, straight 180º
- Number of poles: 3/4
- Operating voltage: 60V AC/DC
- Operating current: 4A
- Max. conductor size: 0.25 mm²
- Pin dimension: 1mm

M8 Electrical Connector with PUR Cable

Straight

Code M18	Description	Price 1-9	Price 10+
08FD3C1Z	Female 3-Pole 1 metre cable	7.80	7.45
08FD4C1Z	Female 4-Pole 1 metre cable	9.20	8.75
08MD3C1Z	Male 3-Pole 1 metre cable	7.40	7.05
08MD4C1Z	Male 4-Pole 1 metre cable	9.30	8.85



Temperature Range
- -25˚C to +70˚C

Environmental Conditions
- Protection class (IEC 60529): IP 67

Material
- Contact material: Phosphorous bronze
- Contact surface material: Nickel + 0,45µm, AU gold plated
- Housing material: Nylon 6 + 30% glass fibre
- Coupling nut material: An AI/NI
- O-Ring: NBR

Product Description
- Extension M8 male and M8 female connector with PVC 0.25mm² moulded cable or shielded, angled 90º
- Number of poles: 3/4
- Operating voltage: 60V AC/DC
- Operating current: 4A
- Max. conductor size: 0.25 mm²
- Pin dimension: 1mm

M8 Electrical Connector with PUR Cable

Angled

Code M18	Description	Price 1-9	Price 10+
08FA3C1Z	Female 3-Pole 1 metre cable	7.80	7.45
08FA4C1Z	Female 4-Pole 1 metre cable	9.20	8.75
08MA3C1Z	Male 3-Pole 1 metre cable	8.90	8.50
08MA4C1Z	Male 4-Pole 1 metre cable	10.35	9.85



Actuated Ball Valves

- Brass Nickel Plated
- Full Bore
- Direct Mount

Maximum Working Pressure:

- 40 bar up to 2" 30 bar 2.1/2" and 3"



Working Temperature:

- 0°C to 80°C



Working Temperature:

- 0°C to 70°C

Actuated Brass Ball Valve

Double Acting, Pneumatic Actuator

Code S40	Thread BSPP	DN	Price
TMDA14E	G1/4"	8	222.40
TMDA38E	G3/8"	10	222.40
TMDA12E	G1/2"	15	205.65
TMDA34E	G3/4"	20	161.25
TMDA1E	G1"	25	185.25
TMDA114E	G1.1/4"	32	274.35
TMDA112E	G1.1/2"	40	308.80
TMDA2E	G2"	50	401.70
TMDA212E	G2.1/2"	65	790.75
TMDA3E	G3"	80	1131.45

Actuated Brass Ball Valve

Electric Low Voltage (24V AC/DC)

Code S40	Thread BSPP	DN	Price
TMEL2014E	G1/4"	8	644.40
TMEL2038E	G3/8"	10	644.40
TMEL2012E	G1/2"	15	627.60
TMEL2034E	G3/4"	20	636.90
TMEL201E	G1"	25	656.40
TMEL20114E	G1.1/4"	32	696.30
TMEL20112E	G1.1/2"	40	747.00
TMEL202E	G2"	50	917.15
TMEL140212E	G2.1/2"	65	2033.20
TMEL1403E	G3"	80	2108.15

Actuated Brass Ball Valve

Single Acting, Pneumatic Actuator

Code S40	Thread BSPP	DN	Price
TMSA14E	G1/4"	8	247.85
TMSA38E	G3/8"	10	247.85
TMSA12E	G1/2"	15	198.60
TMSA34E	G3/4"	20	240.45
TMSA1E	G1"	25	221.70
TMSA114E	G1.1/4"	32	299.80
TMSA112E	G1.1/2"	40	368.85
TMSA2E	G2"	50	503.90
TMSA212E	G2.1/2"	65	1144.15
TMSA3E	G3"	80	1196.05

Actuated Brass Ball Valve

Electric High Voltage (85-220V AC/DC)

Code S40	Thread BSPP	DN	Price
TME2014E	G1/4"	8	644.40
TME2038E	G3/8"	10	644.40
TME2012E	G1/2"	15	627.60
TME2034E	G3/4"	20	636.90
TME201E	G1"	25	656.40
TME20114E	G1.1/4"	32	696.30
TME20112E	G1.1/2"	40	747.00
TME202E	G2"	50	822.55
TME140212E	G2.1/2"	65	2033.20
TME1403E	G3"	80	2108.15

Actuated Ball Valves

- Brass Nickel Plated
- Full Bore
- 3 Way L Port

Maximum Working Pressure:

- 40 bar up to 1.1/4" 25 bar 1.1/2" and 2"





Working Temperature:

- 0°C to 80°C

Working Temperature:

- 0°C to 70°C

Actuated Brass Ball Valve, 3 Way

Double Acting, Pneumatic Actuator, L Port

Code S40	Thread BSPP	DN	Price
TMDA14L	G1/4"	8	245.75
TMDA38L	G3/8"	10	245.75
TMDA12L	G1/2"	15	245.75
TMDA34L	G3/4"	20	269.90
TMDA1L	G1"	25	288.40
TMDA114L	G1.1/4"	32	460.00
TMDA112L	G1.1/2"	40	554.50
TMDA2L	G2"	50	656.80

Actuated Brass Ball Valve, 3 Way

Electric Low Voltage (24V AC/DC), L Port

Code S40	Thread BSPP	DN	Price
TMEL2014L	G1/4"	8	667.65
TMEL2038L	G3/8"	10	667.65
TMEL2012L	G1/2"	15	667.65
TMEL2034L	G3/4"	20	691.80
TMEL201L	G1"	25	715.85
TMEL35114L	G1.1/4"	32	992.80
TMEL35112L	G1.1/2"	40	1027.35
TMEL352L	G2"	50	1327.60

Actuated Brass Ball Valve, 3 Way

Single Acting, Pneumatic Actuator, L Port

Code S40	Thread BSPP	DN	Price
TMSA14L	G1/4"	8	271.20
TMSA38L	G3/8"	10	271.20
TMSA12L	G1/2"	15	271.20
TMSA34L	G3/4"	20	295.30
TMSA1L	G1"	25	319.35
TMSA114L	G1.1/4"	32	525.50
TMSA112L	G1.1/2"	40	710.65
TMSA2L	G2"	50	813.00

Actuated Brass Ball Valve, 3 Way

Electric High Voltage (85-220V AC/DC), L Port

Code S40	Thread BSPP	DN	Price
TME2014L	G1/4"	8	667.65
TME2038L	G3/8"	10	667.65
TME2012L	G1/2"	15	667.65
TME2034L	G3/4"	20	691.80
TME201L	G1"	25	715.85
TME35114L	G1.1/4"	32	992.80
TME35112L	G1.1/2"	40	1027.35
TME352L	G2"	50	1366.20

Actuated Ball Valves

- Brass Nickel Plated
- Full Bore
- 3 Way T Port

Maximum Working Pressure:

- 40 bar up to 1.1/4" 25 bar 1.1/2" and 2"





Working Temperature:

- 0°C to 80°C

Working Temperature:

- 0°C to 70°C

Actuated Brass Ball Valve, 3 Way

Double Acting, Pneumatic Actuator, T Port

Code S40	Thread BSPP	DN	Price
TMDA14T	G1/4"	8	245.75
TMDA38T	G3/8"	10	245.75
TMDA12T	G1/2"	15	245.75
TMDA34T	G3/4"	20	269.90
TMDA1T	G1"	25	288.40
TMDA114T	G1.1/4"	32	460.00
TMDA112T	G1.1/2"	40	554.50
TMDA2T	G2"	50	691.25

Actuated Brass Ball Valve, 3 Way

Electric Low Voltage (24V AC/DC), T Port

Code S40	Thread BSPP	DN	Price
TME2014T	G1/4"	8	667.65
TME2038T	G3/8"	10	667.65
TME2012T	G1/2"	15	667.65
TME2034T	G3/4"	20	691.80
TME201T	G1"	25	715.85
TME35114T	G1.1/4"	32	992.80
TME35112T	G1.1/2"	40	1027.35
TME352T	G2"	50	1327.60

Actuated Brass Ball Valve, 3 Way

Single Acting, Pneumatic Actuator, T Port

Code S40	Thread BSPP	DN	Price
TMSA14T	G1/4"	8	271.20
TMSA38T	G3/8"	10	271.20
TMSA12T	G1/2"	15	271.20
TMSA34T	G3/4"	20	295.30
TMSA1T	G1"	25	319.35
TMSA114T	G1.1/4"	32	525.50
TMSA112T	G1.1/2"	40	710.65
TMSA2T	G2"	50	813.00

Actuated Brass Ball Valve, 3 Way

Electric High Voltage (85-220V AC/DC), T Port

Code S40	Thread BSPP	DN	Price
TMEL2014T	G1/4"	8	667.65
TMEL2038T	G3/8"	10	667.65
TMEL2012T	G1/2"	15	667.65
TMEL2034T	G3/4"	20	691.80
TMEL201T	G1"	25	715.85
TMEL35114T	G1.1/4"	32	992.80
TMEL35112T	G1.1/2"	40	1027.35
TMEL352T	G2"	50	1327.60

Actuated Ball Valves

- Stainless Steel
- 2 Piece
- Full Bore



Working Temperature:

- 0°C to 80°C

Actuated, Stainless Steel, Direct Mount Ball Valve, 2 Piece

Double Acting, Pneumatic Actuator

Code S40	Thread BSPP	DN	Price
TMDA14SS2	G1/4"	8	282.15
TMDA38SS2	G3/8"	10	282.15
TMDA12SS2	G1/2"	15	243.15
TMDA34SS2	G3/4"	20	262.15
TMDA1SS2	G1"	25	281.00
TMDA114SS2	G1.1/4"	32	338.55
TMDA112SS2	G1.1/2"	40	374.05
TMDA2SS2	G2"	50	603.20

Actuated, Stainless Steel, Direct Mount Ball Valve, 2 Piece

Single Acting, Pneumatic Actuator

Code S40	Thread BSPP	DN	Price
TMSA14SS2	G1/4"	8	307.40
TMSA38SS2	G3/8"	10	307.40
TMSA12SS2	G1/2"	15	268.60
TMSA34SS2	G3/4"	20	234.30
TMSA1SS2	G1"	25	346.45
TMSA114SS2	G1.1/4"	32	457.75
TMSA2SS2	G2"	50	680.00

Maximum Working Pressure:

- 63 bar (1000psi)



Working Temperature:

- 0°C to 70°C

Actuated, Stainless Steel, Direct Mount Ball Valve, 2 Piece

Electric Low Voltage (24V AC/DC)

Code S40	Thread BSPP	DN	Price
TMEL2014SS2	G1/4"	8	704.05
TMEL2038SS2	G3/8"	10	704.05
TMEL2012SS2	G1/2"	15	665.15
TMEL2034SS2	G3/4"	20	684.05
TMEL201SS2	G1"	25	646.80
TMEL20114SS2	G1.1/4"	32	766.05
TMEL35112SS2	G1.1/2"	40	964.95
TMEL552SS2	G2"	50	1258.20

Actuated, Stainless Steel, Direct Mount Ball Valve, 2 Piece

Electric High Voltage (85-220V AC/DC)

Code S40	Thread BSPP	DN	Price
TME2014SS2	G1/4"	8	704.05
TME2038SS2	G3/8"	10	704.05
TME2012SS2	G1/2"	15	665.15
TME3034SS2	G3/4"	20	684.05
TME201SS2	G1"	25	708.45
TME20114SS2	G1.1/4"	32	766.05
TME35112SS2	G1.1/2"	40	964.95
TME552SS2	G2"	50	1258.20

Actuated Ball Valves

- Stainless Steel
- 3 Piece
- Full Bore

Maximum Working Pressure:

- 63 bar (1000psi)



Working Temperature:

- 0°C to 80°C



Working Temperature:

- 0°C to 70°C

Actuated, Stainless Steel, Direct Mount Ball Valve, 3 Piece

Double Acting, Pneumatic Actuator

Code S40	Thread BSPP	DN	Price
TMDA14SS	G1/4"	8	283.25
TMDA38SS	G3/8"	10	283.25
TMDA12SS	G1/2"	15	252.00
TMDA34SS	G3/4"	20	262.40
TMDA1SS	G1"	25	298.00
TMDA114SS	G1.1/4"	32	371.40
TMDA112SS	G1.1/2"	40	507.35
TMDA2SS2	G2"	50	603.20
TMDA212SS	G2.1/2"	65	1013.05
TMDA3SS	G3"	80	1221.60
TMDA4SS	G4"	100	1982.45

Actuated, Stainless Steel, Direct Mount Ball Valve, 3 Piece

Electric Low Voltage (24V AC/DC)

Code S40	Thread BSPP	DN	Price
TMEL2014SS	G1/4"	8	705.20
TMEL2038SS	G3/8"	10	705.20
TMEL2012SS	G1/2"	15	673.90
TMEL2034SS	G3/4"	20	689.90
TMEL201SS	G1"	25	725.50
TMEL35114SS	G1.1/4"	32	904.20
TMEL35112SS	G1.1/2"	40	980.20
TMEL552SS	G2"	50	1280.35
TMEL140212SS	G2.1/2"	65	2255.55
TMEL1403SS	G3"	80	2464.05
TMEL3004SS	G4"	100	3302.00

Actuated, Stainless Steel, Direct Mount Ball Valve, 3 Piece

Single Acting, Pneumatic Actuator

Code S40	Thread BSPP	DN	Price
TMSA14SS	G1/4"	8	308.75
TMSA38SS	G3/8"	10	308.75
TMSA12SS	G1/2"	15	277.45
TMSA34SS	G3/4"	20	327.90
TMSA1SS	G1"	25	363.50
TMSA114SS	G1.1/4"	32	490.65
TMSA112SS	G1.1/2"	40	663.50
TMSA2SS	G2"	50	767.25
TMSA212SS	G2.1/2"	65	1366.50
TMSA3SS	G3"	80	1575.05
TMSA4SS	G4"	100	2693.25

Actuated, Stainless Steel, Direct Mount Ball Valve, 3 Piece

Electric High Voltage (85-220V AC/DC)

Code S40	Thread BSPP	DN	Price
TME2014SS	G1/4"	8	705.20
TME2038SS	G3/8"	10	705.20
TME2012SS	G1/2"	15	673.90
TME2034SS	G3/4"	20	689.90
TME201SS	G1"	25	725.50
TME35114SS	G1.1/4"	32	904.20
TME35112SS	G1.1/2"	40	980.20
TME552SS	G2"	50	1280.35
TME140212SS	G2.1/2"	65	2255.55
TME1403SS	G3"	80	2464.05
TME3004SS	G4"	100	3302.00

Actuated Ball Valves

- Stainless Steel
- 3 Way L Port

Maximum Working Pressure:

- 63 bar (1000psi)





Working Temperature:

- 0°C to 80°C

Working Temperature:

- 0°C to 70°C

Actuated, Stainless Steel, Direct Mount Ball Valve

Double Acting, Pneumatic Actuator, 3 Way L Port

Code S40	Thread BSPP	DN	Price
TMDA14SSL	G1/4"	8	360.45
TMSA38SSL	G3/8"	10	425.95
TMSA12SSL	G1/2"	15	443.50
TMSA34SSL	G3/4"	20	513.50
TMSA1SSL	G1"	25	642.10
TMSA114SSL	G1.1/4"	32	847.00
TMSA112SSL	G1.1/2"	40	1024.90
TMSA2SSL	G2"	50	1360.40

Actuated, Stainless Steel, Direct Mount Ball Valve

Electric Low Voltage (24V AC/DC), 3 Way L Port

Code S40	Thread BSPP	DN	Price
TMEL2014SSL	G1/4"	8	788.00
TMEL2038SSL	G3/8"	10	788.00
TMEL2012SSL	G1/2"	15	805.50
TMEL2034SSL	G3/4"	20	875.55
TMEL351SSL	G1"	25	1055.70
TMEL35114SSL	G1.1/4"	32	1163.65
TMEL55112SSL	G1.1/2"	40	1538.00
TMEL852SSL	G2"	50	2169.55

Actuated, Stainless Steel, Direct Mount Ball Valve

Single Acting, Pneumatic Actuator, 3 Way L Port

Code S40	Thread BSPP	DN	Price
TMSA14SSL	G1/4"	8	425.95
TMSA38SSL	G3/8"	10	425.95
TMSA12SSL	G1/2"	15	443.50
TMSA34SSL	G3/4"	20	513.50
TMSA1SSL	G1"	25	642.10
TMSA114SSL	G1.1/4"	32	847.00
TMSA112SSL	G1.1/2"	40	1024.90
TMSA2SSL	G2"	50	1360.40

Actuated, Stainless Steel, Direct Mount Ball Valve

Electric High Voltage (85-220V AC/DC), 3 Way L Port

Code S40	Thread BSPP	DN	Price
TME2014SSL	G1/4"	8	788.00
TME2038SSL	G3/8"	10	788.00
TME2012SSL	G1/2"	15	805.50
TME2034SSL	G3/4"	20	875.55
TME351SSL	G1"	25	1055.70
TME35114SSL	G1.1/4"	32	1163.65
TME44112SSL	G1.1/2"	40	1538.00
TME852SSL	G2"	50	2169.55

Actuated Ball Valves

- Stainless Steel
- 3 Way T Port

Maximum Working Pressure:

- 63 bar (1000psi)





Working Temperature:

- 0°C to 80°C

Working Temperature:

- 0°C to 70°C

Actuated, Stainless Steel, Direct Mount Ball Valve

Double Acting, Pneumatic Actuator, 3 Way T Port

Code S40	Thread BSPP	DN	Price
TMDA14SST	G1/4"	8	360.45
TMDA38SST	G3/8"	10	360.45
TMDA12SST	G1/2"	15	378.00
TMDA34SST	G3/4"	20	448.05
TMDA1SST	G1"	25	582.80
TMDA114SST	G1.1/4"	32	690.85
TMDA112SST	G1.1/2"	40	882.95
TMDA2SST	G2"	50	1133.75

Actuated, Stainless Steel, Direct Mount Ball Valve

Electric Low Voltage (24V AC/DC), 3 Way T Port

Code S40	Thread BSPP	DN	Price
TMEL2014SST	G1/4"	8	788.00
TMEL2038SST	G3/8"	10	788.00
TMEL12SST	G1/2"	15	805.50
TMEL2034SST	G3/4"	20	875.55
TMEL351SST	G1"	25	1055.70
TMEL35114SST	G1.1/4"	32	1163.65
TMEL55112SST	G1.1/2"	40	1538.00
TMEL852SST	G2"	50	2169.55

Actuated, Stainless Steel, Direct Mount Ball Valve

Single Acting, Pneumatic Actuator, 3 Way T Port

Code S40	Thread BSPP	DN	Price
TMSA14SST	G1/4"	8	425.95
TMSA38SST	G3/8"	10	425.95
TMSA12SST	G1/2"	15	443.50
TMSA34SST	G3/4"	20	513.50
TMSA1SST	G1"	25	642.10
TMSA114SST	G1.1/4"	32	847.00
TMSA112SST	G1.1/2"	40	938.80
TMSA2SST	G2"	50	1360.40

Actuated, Stainless Steel, Direct Mount Ball Valve

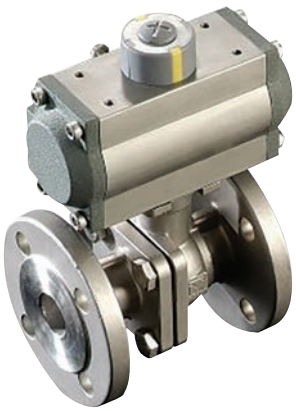
Electric High Voltage (85-220V AC/DC), 3 Way T Port

Code S40	Thread BSPP	DN	Price
TME14SST	G1/4"	8	788.00
TME38SST	G3/8"	10	788.00
TME20SST	G1/2"	15	805.50
TME2034SST	G3/4"	20	875.55
TME351SST	G1"	25	1055.70
TME35114SST	G1.1/4"	32	1163.65
TME55112SST	G1.1/2"	40	1538.00
TME85SST	G2"	50	2169.55

Actuated Ball Valves

- Stainless Steel
- Full Bore
- Direct Mount

Working Temperature:
- 0°C to 80°C



ANSI150 Flanged, Stainless Steel, Ball Valve

Double Acting, Pneumatic Actuator

Code S40	Thread BSPP	DN	Price
TMDA12SSANSI150	1/2"	15	376.40
TMDA34SSANSI150	3/4"	20	416.00
TMDA1SSANSI150	1"	25	466.65
TMDA112SSANSI150	1.1/2"	40	781.60
TMDA2SSANSI150	2"	50	911.45
TMDA212SSANSI150	2.1/2"	65	1397.60
TMDA3SSANSI150	3"	80	1660.40
TMDA4SSANSI150	4"	100	2550.95
TMDA6SSANSI150	6"	150	5916.45
TMDA8SSANSI150	8"	200	11228.95

ANSI150 Flanged, Stainless Steel, Ball Valve

Single Acting, Pneumatic Actuator

Code S40	Thread BSPP	DN	Price
TMSA12SSANSI150	1/2"	15	401.80
TMSA34SSANSI150	3/4"	20	441.45
TMSA1SSANSI150	1"	25	532.05
TMSA112SSANSI150	1.1/2"	40	994.05
TMSA2SSANSI150	2"	50	1069.15
TMSA212SSANSI150	2.1/2"	65	1502.10
TMSA3SSANSI150	3"	80	1764.85
TMSA4SSANSI150	4"	100	2656.10
TMSA6SSANSI150	6"	150	6577.85
TMSA8SSANSI150	8"	200	12293.00

Maximum Working Pressure:
- 20 bar



Working Temperature:
- 0°C to 70°C

ANSI150 Flanged, Stainless Steel, Ball Valve

Electric Low Voltage (24V AC/DC)

Code S40	Thread BSPP	DN	Price
TMELV2020D08	1/2"	15	798.30
TMELV2020D12	3/4"	20	837.95
TMELV2020D16	1"	25	894.10
TMELV2020D24	1.1/2"	40	1254.50
TMELV2020D32	2"	50	1384.30
TMELV2020D40	2.1/2"	65	2015.20
TMELV2020D48	3"	80	2277.95
TMELV2020D64	4"	100	3465.25

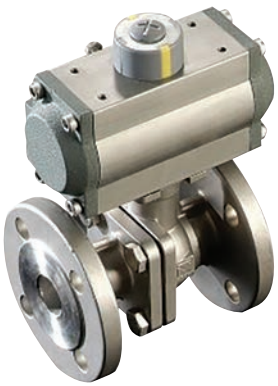
ANSI150 Flanged, Stainless Steel, Ball Valve

Electric High Voltage (85-220V AC/DC)

Code S40	Thread BSPP	DN	Price
TMEHV2020D08	1/2"	15	798.30
TMEHV2020D12	3/4"	20	837.95
TMEHV2020D16	1"	25	894.10
TMEHV2020D24	1.1/2"	40	1254.50
TMEHV2020D32	2"	50	1384.30
TMEHV2020D40	2.1/2"	65	2015.20
TMEHV2020D48	3"	80	2277.95
TMEHV2020D64	4"	100	3465.25

Actuated Ball Valves

- Stainless Steel
- Full Bore
- Direct Mount



Working Temperature:

- 0°C to 80°C

Actuated PN16 Flanged, Stainless Steel, Ball Valve

Double Acting, Pneumatic Actuator

Code S40	Thread BSPP	DN	Price
TMDA12SSPN16	G1/2"	15	446.15
TMDA34SSPN16	G3/4"	20	502.85
TMDA1SSPN16	G1"	25	559.70
TMDA114SSPN16	G1.1/4"	32	754.25
TMDA112SSPN16	G1.1/2"	40	1011.55
TMDA2SSPN16	G2"	50	1031.20
TMDA212SSPN16	G2.1/2"	65	1197.60
TMDA3SSPN16	G3"	80	1720.65
TMDA4SSPN16	G4"	100	2387.35
TMDA5SSPN16	G5"	125	4861.25
TMDA6SSPN16	G6"	150	6337.35
TMDA8SSPN16	G8"	200	12871.90

Actuated PN16 Flanged, Stainless Steel, Ball Valve

Single Acting, Pneumatic Actuator

Code S40	Thread BSPP	DN	Price
TMSA12SSPN16	G1/2"	15	471.60
TMSA34SSPN16	G3/4"	20	528.35
TMSA1SSPN16	G1"	25	625.20
TMSA114SSPN16	G1.1/4"	32	819.65
TMSA112SSPN16	G1.1/2"	40	1070.80
TMSA2SSPN16	G2"	50	1188.95
TMSA212SSPN16	G2.1/2"	65	1302.10
TMSA3SSPN16	G3"	80	1825.15
TMSA4SSPN16	G4"	100	2492.50
TMSA5SSPN16	G5"	125	4937.45
TMSA6SSPN16	G6"	150	6998.75
TMSA8SSPN16	G8"	200	13935.95

Maximum Working Pressure:

- 40 bar up to 2" 16 bar over 2"



Working Temperature:

- 0°C to 70°C

Actuated PN16 Flanged, Stainless Steel, Ball Valve

Electric Low Voltage (24V AC/DC)

Code S40	Thread BSPP	DN	Price
TMELV2019D08	G1/2"	15	798.30
TMELV2019D12	G3/4"	20	837.95
TMELV2019D16	G1"	25	894.10
TMELV2019D20	G1.1/4"	32	894.10
TMELV2019D24	G1.1/2"	40	1254.50
TMELV2019D32	G2"	50	1384.30
TMELV2019D40	G2.1/2"	65	2015.20
TMELV2019D48	G3"	80	2277.95
TMELV2019D64	G4"	100	3465.25
TMELV2019D80	G5"	125	5546.20

Actuated PN16 Flanged, Stainless Steel, Ball Valve

Electric High Voltage (85-220V AC/DC)

Code S40	Thread BSPP	DN	Price
TMEHV2019D08	G1/2"	15	868.10
TMEHV2019D12	G3/4"	20	924.80
TMEHV2019D16	G1"	25	987.20
TMEHV2019D20	G1.1/4"	32	1181.70
TMEHV2019D24	G1.1/2"	40	1484.40
TMEHV2019D32	G2"	50	1504.10
TMEHV2019D40	G2.1/2"	65	1815.20
TMEHV2019D48	G3"	80	2338.20
TMEHV2019D64	G4"	100	3301.70
TMEHV2019D80	G5"	125	5546.20

Wafer Butterfly Valves

Wafer Butterfly Valves

- Cast Iron Body, Stainless Steel Disc, NBR Liner, Lockable Lever
- Suitable for mounting between Flanges: BS10 Table D/E, PN6/10/16 and ANSI150

Working Temperature:

- -20°C to 80°C

Maximum Working Pressure:

- 16 bar





Cast Iron Body, Stainless Steel Disc, NBR Liner

Lever Operated

Code S40	Size	DN	Face to Face mm	Price
BFWL112-NBR	1.1/2"	40	33	98.20
BFWL2-NBR	2"	50	43	99.85
BFWL212-NBR	2.1/2"	65	46	116.80
BFWL3-NBR	3"	80	46	118.00
BFWL4-NBR	4"	100	52	157.70
BFWL5-NBR	5"	125	56	237.45
BFWL6-NBR	6"	150	56	284.55
BFWL8-NBR	8"	200	60	457.60
BFWL10-NBR	10"	250	68	765.00

Cast Iron Body, Stainless Steel Disc, NBR Liner

Gear Operated

Code S40	Size	DN	Face to Face mm	Price
BFVW9112-NBR	1.1/2"	40	33	182.55
BFVW92-NBR	2"	50	43	195.80
BFVW9212-NBR	2.1/2"	65	46	215.20
BFVW93-NBR	3"	80	46	228.55
BFVW94-NBR	4"	100	52	277.60
BFVW95-NBR	5"	125	56	344.10
BFVW96-NBR	6"	150	56	430.05
BFVW98-NBR	8"	200	60	719.95
BFVW910-NBR	10"	250	68	1070.75
BFVW912-NBR	12"	300	78	1520.75
BFVW914-NBR	14"	350	78	2008.40
BFVW916-NBR	16"	400	87	3584.55
BFVW918-NBR	16"	450	114	5032.30
BFVW920-NBR	20"	500	127	6451.45
BFVW924-NBR	24"	600	154	9135.35

Wafer Butterfly Valves

Wafer Butterfly Valves

- Cast Iron Body, Stainless Steel Disc, NBR Liner, Lockable Lever
- Suitable for mounting between Flanges: BS10 Table D/E, PN6/10/16 and ANSI150

Working Temperature:

- -20°C to 80°C

Maximum Working Pressure:

- 16 bar





Cast Iron Body, Stainless Steel Disc, NBR Liner

Pneumatic Double Acting

Code S40	Size	DN	Face to Face mm	Price
BFVWA112-NBR	1.1/2"	40	33	275.20
BFVWA2-NBR	2"	50	43	275.20
BFVWA212-NBR	2.1/2"	65	46	352.55
BFVWA3-NBR	3"	80	46	365.90
BFVWA4-NBR	4"	100	52	438.00
BFVWA5-NBR	5"	125	56	549.15
BFVWA6-NBR	6"	150	56	678.80
BFVWA8-NBR	8"	200	60	1061.25
BFVWA10-NBR	10"	250	68	1458.80
BFVWA12-NBR	12"	300	78	2516.30

Cast Iron Body, Stainless Steel Disc, NBR Liner

Pneumatic Single Acting

Code S40	Size	DN	Face to Face mm	Price
BFVWSA112-NBR	1.1/2"	40	33	340.65
BFVWSA2-NBR	2"	50	43	340.65
BFVWSA212-NBR	2.1/2"	65	46	411.75
BFVWSA3-NBR	3"	80	46	522.00
BFVWSA4-NBR	4"	100	52	579.95
BFVWSA5-NBR	5"	125	56	743.90
BFVWSA6-NBR	6"	150	56	1037.85
BFVWSA8-NBR	8"	200	60	1624.95
BFVWSA10-NBR	10"	250	68	3151.25
BFVWSA12-NBR	12"	300	78	4436.85

Cast Iron Body, Stainless Steel Disc, NBR Liner

Electric Actuated, Multi Voltage (24-240 AC/DC)

Code S40	Size	DN	Face to Face mm	Price
BFVWEA112-NBRMV	1.1/2"	40	33	888.80
BFVWEA2-NBRMV	2"	50	43	888.80
BFVWEA212-NBRMV	2.1/2"	65	46	901.60
BFVWEA3-NBRMV	3"	80	46	1022.20
BFVWEA4-NBRMV	4"	100	52	1393.80
BFVWEA5-NBRMV	5"	125	56	1882.90

Cast Iron Body, Stainless Steel Disc, NBR Liner

Electric Actuated, High Voltage (110-240V AC/DC)

Code S40	Size	DN	Face to Face mm	Price
BFVWEA6-NBRHV	6"	150	56	2987.30
BFVWEA8-NBRHV	8"	20	60	2225.40

Cast Iron Body, Stainless Steel Disc, NBR Liner

Electric Actuated, Low Voltage (12-24V AC/DC)

Code S40	Size	DN	Face to Face mm	Price
BFVWEA6-NBRLV	6"	150	56	2520.55
BFVWEA8-NBRLV	8"	200	60	2970.95

Wafer Butterfly Valves

Wafer Butterfly Valves

- Cast Iron Body, Stainless Steel Disc, EPDM Liner, Lockable Lever
- Suitable for mounting between Flanges: BS10 Table D/E, PN6/10/16 and ANSI150

Working Temperature:

- -20°C to 80°C

Maximum Working Pressure:

- 16 bar



Cast Iron Body, Stainless Steel Disc, EPDM Liner

Lever Operated

Code S40	Size	DN	Face to Face mm	Price
BFVWL112-EPDM	1.1/2"	40	33	**182.55**
BFVWL2-EPDM	2"	50	43	**99.85**
BFVWL212-EPDM	2.1/2"	65	46	**103.35**
BFVWL3-EPDM	3"	80	46	**118.00**
BFVWL4-EPDM	4"	100	52	**152.55**
BFVWL5-EPDM	5"	125	56	**237.45**
BFVWL6-EPDM	6"	150	56	**284.55**
BFVWL8-EPDM	8"	200	60	**360.40**
BFVWL10-EPDM	10"	250	68	**766.00**



Cast Iron Body, Stainless Steel Disc, EPDM Liner

Gear Operated

Code S40	Size	DN	Face to Face mm	Price
BFVWG112-EPDM	1.1/2"	600	154	**99.35**
BFVWG2-EPDM	2"	50	43	**195.80**
BFVWG212-EPDM	2.1/2"	65	46	**215.20**
BFVWG3-EPDM	3"	80	46	**228.55**
BFVWG4-EPDM	4"	100	52	**277.60**
BFVWG5-EPDM	5"	125	56	**344.10**
BFVWG6-EPDM	6"	150	56	**325.65**
BFVWG8-EPDM	8"	200	60	**719.95**
BFVWG10-EPDM	10"	250	68	**1070.75**
BFVWG12-EPDM	12"	300	78	**1520.75**
BFVWG14-EPDM	14"	350	78	**2008.40**
BFVWG16-EPDM	16"	400	87	**3584.55**
BFVWG18-EPDM	18"	450	114	**5032.30**

Wafer Butterfly Valves

Wafer Butterfly Valves

- Cast Iron Body, Stainless Steel Disc, EPDM Liner, Lockable Lever
- Suitable for mounting between Flanges: BS10 Table D/E, PN6/10/16 and ANSI150

Working Temperature:

- -20°C to 80°C

Maximum Working Pressure:

- 16 bar





Cast Iron Body, Stainless Steel Disc, EPDM Liner

Pneumatic Double Acting

Code S40	Size	DN	Face to Face mm	Price
BFVWDA112-EPDM	1.1/2"	40	33	275.20
BFVWDA2-EPDM	2"	50	43	275.20
BFVWDA212-EPDM	2.1/2"	65	46	352.55
BFVWDA3-EPDM	3"	80	46	365.90
BFVWDA4-EPDM	4"	100	52	438.00
BFVWDA5-EPDM	5"	125	56	549.15
BFVWDA6-EPDM	6"	150	56	681.10
BFVWDA8-EPDM	8"	300	60	1061.25
BFVWDA10-EPDM	10"	250	68	1458.80
BFVWDA12-EPDM	12"	300	78	2516.30

Cast Iron Body, Stainless Steel Disc, EPDM Liner

Pneumatic Single Acting

Code S40	Size	DN	Face to Face mm	Price
BFVWSA112-EPDM	1.1/2"	40	33	340.65
BFVWSA2-EPDM	2"	50	43	340.65
BFVWSA212-EPDM	2.1/2"	65	46	411.75
BFVWSA3-EPDM	3"	80	46	522.00
BFVWSA4-EPDM	4"	100	52	506.00
BFVWSA5-EPDM	5"	125	56	743.90
BFVWSA6-EPDM	6"	150	56	1037.85
BFVWSA8-EPDM	8"	200	60	1624.95
BFVWSA10-EPDM	10"	250	68	3151.25
BFVWSA12-EPDM	12"	300	78	4436.85

Cast Iron Body, Stainless Steel Disc, EPDM Liner

Electric Actuated, Multi Voltage (24-240 AC/DC)

Code S40	Size	DN	Face to Face mm	Price
BFVWEA112-EPDMMV	1.1/2"	40	33	893.40
BFVWEA2-EPDMMV	2"	50	43	893.40
BFVWEA212-EPDMMV	2.1/2"	65	46	906.80
BFVWEA3-EPDMMV	3"	80	46	1026.50
BFVWEA4-EPDMMV	4"	100	52	1386.70
BFVWEA5-EPDMMV	5"	125	56	1895.05

Cast Iron Body, Stainless Steel Disc, EPDM Liner

Electric Actuated, High Voltage (110-240V AC/DC)

Code S40	Size	DN	Face to Face mm	Price
BFVWEA6-EPDMHV	6"	150	56	2259.85
BFVWEA8-EPDMHV	8"	200	60	2614.05

Cast Iron Body, Stainless Steel Disc, EPDM Liner

Electric Actuated, Low Voltage (12-24V AC/DC)

Code S40	Size	DN	Face to Face mm	Price
BFVWEA6-EPDMLV	6"	150	56	2259.80
BFVWEA8-EPDMLV	8"	200	60	2614.05

Actuated Valves

Valve Features

- The valve is suitable for medium pressures on condition that non aggressive fluids are used
- Working temperature: from -20˚C to +150˚C for fluids
- Fluid range: air, water, oil, gas, petroliferous and petrochemical products, vacuum
- Threaded ends as per UNI/ISO 7/1 Rp specifications
- Head of the valve as per ISO 5211 specifications

NOTE: spring return version valves are mounted in normally closed position; please specify if other positions are required.

Actuator Features

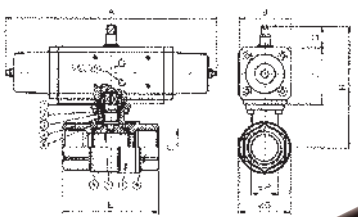
- Rotation angle: 90˚
- Temperature from 0˚C to +80˚C; from -20˚C to +80˚C with dry air only
- Air supply: 5,6 bar, maximum working supply 8,4 bar
- Operating media: dry filtered air, not necessary lubricated. In case of lubricated air, either non detergent oil or NBR-compatible oil must be used
- Automatic closing in a clockwise direction (for spring return version)

Valve Materials

1) Shaft: Brass
2) O-Ring: FKM
3) Gland Nut: Brass
4) Shaft Seal: P.T.F.E.
5) Anti-friction Rings: P.T.F.E.
6) Seals: P.T.F.E.
7) Ball: Brass chromium plated
8) Body: Brass
9) Threaded End: Brass

Surface treatment: bright nickel plating

Actuators	
Type	**Suits**
SR 15	**DN 10 - DN 25 Valves**
SR 30	**DN 32 - DN 40 Valves**
SR 45	**DN 50 Valves**





Actuated Ball Valve, Nickel Plated

Brass Body Single Acting

Code P46	DN mm	Thread BSP	A mm	B mm	C mm	D mm	E mm	ØG mm	KV m³/h	H mm	Weight kg	Price
S101H003	10	3/8"	221	55	60	20	69	31.8	11	110	1.52	**200.30**
S101H004	15	1/2"	221	55	60	20	69	31.8	20	110	1.5	**215.70**
S101H005	20	3/4"	221	55	60	20	77	40	60	117	1.64	**220.00**
S101H006	25	1"	221	55	60	20	89	48	100	121	1.88	**228.65**
S101H007	32	1.1/4"	240	65	70	20	103	60	130	141	2.97	**261.55**
S101H008	40	1.1/2"	240	65	70	20	114	70.6	170	148	3.39	**281.55**
S101H009	50	2"	294	72	77.2	20	134	86.5	280	162.5	5.42	**380.05**

Actuated Valves

Valve Features

- The valve is suitable for medium pressures on condition that non aggressive fluids are used
- Working temperature: from -20˚C to +150˚C for fluids
- Fluid range: air, water, oil, gas, petroliferous and petrochemical products, vacuum
- Threaded ends as per UNI/ISO 7/1 Rp specifications
- Head of the valve as per ISO 5211 specifications

NOTE: spring return version valves are mounted in normally closed position; please specify if other positions are required.

Actuator Features

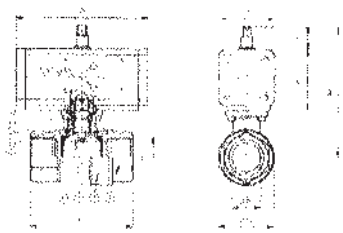
- Rotation angle: 90˚
- Temperature from 0˚C to +80˚C; from -20˚C to +80˚C with dry air only
- Air supply: 5,6 bar, maximum working supply 8,4 bar
- Operating media: dry filtered air, not necessary lubricated. In case of lubricated air, either non detergent oil or NBR-compatible oil must be used
- Automatic closing in a clockwise direction (for spring return version)

Valve Materials

1) Shaft: Brass
2) O-Ring: FKM
3) Gland Nut: Brass
4) Shaft Seal: P.T.F.E.
5) Antifriction Rings: P.T.F.E.
6) Seals: P.T.F.E.
7) Ball: Brass chromium plated
8) Body: Brass
9) Threaded End: Brass

Surface treatment: bright nickel plating

Actuators	
Type	**Suits**
DA 8	DN 15 Valves
DA 15	DN 20 - DN 25 Valves
DA 30	DN 32 - DN 40 Valves
DA 45	DN 50 Valves
DA 90	DN 65 Valves
DA 120	DN 80 Valves





Actuated Ball Valve, Nickel Plated

Brass Body Double Acting

Code P46	DN mm	Thread BSP	A mm	B mm	C mm	D mm	E mm	ØG mm	KV m³/h	H mm	Weight kg	Price
D101H004	15	1/2"	70	43.2	42.7	15	69	31.8	20	88	0.59	**144.60**
D101H005	20	3/4"	114	48	52	20	77	40	60	103.5	1.09	**183.25**
D101H006	25	1"	114	48	52	20	89	48	100	107.5	1.33	**180.60**
D101H007	32	1.1/4"	130	55	60	20	103	60	130	131	2.03	**197.10**
D101H008	40	1.1/2"	130	55	60	20	114	70.6	170	138	2.45	**218.95**
D101H009	50	2"	144	60	65.7	20	134	86.5	280	150.7	4.64	**317.75**
D101H010	65	2.1/2"	168.5	72	77.5	20	161	111	510	180.5	6.5	**453.15**
D101H011	80	3"	184	80.5	86.5	30	185	136.5	770	211	10.3	**672.60**

Actuated Valves

Valve Features

- Suitable for medium pressure applications.
- Working temperature: from -20˚C to +150˚C for fluids
- Working pressure: see diagram
- Fluid range: air, water, oil, gas, petroliferous and petrochemical products, aggressive media.
- Surface threaded ends as per UNI/ISO 7/1 Rp specifications

NOTE: spring return version valves are mounted in normally closed position; please specify if other positions are required.

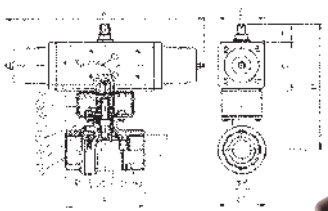
Actuator Features

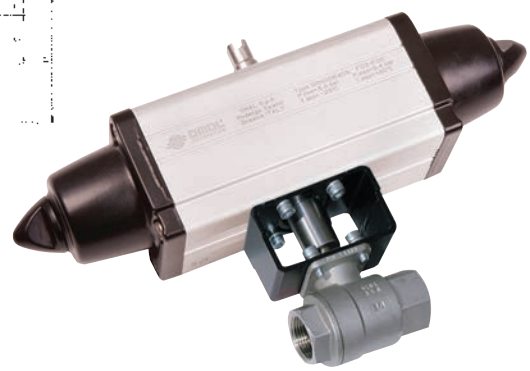
- Rotation angle: 90˚
- Temperature from 0˚C to +80˚C; from -20˚C to +80˚C with dry air only
- Air supply: 5,6 bar, maximum working supply 8,4 bar
- Operating media: dry filtered air, not necessary lubricated. In case of lubricated air, either non detergent oil or NBR-compatible oil must be used
- Automatic closing in a clockwise direction (for spring return version)

Valve Materials

1) Shaft: AISI 316
2) Nut holder: AISI 304
3) Lock nut: AISI 304
4) Spring: AISI 301
5) Washer: AISI 304
6) Gland nut ring: AISI 304
7) Static ring: P.T.F.E.
8) End: AISI 316
9) Seals: P.T.F.E.
10) Ball: AISI 316
11) O-Ring: FKM
12) Bottom tight ring: P.T.F.E.
13) Body with female end: AISI 316
14) Top Sealing: P.T.F.E.

Actuators	
Type	**Suits**
SR 15	**DN 10 - DN 15 Valves**
SR 30	**DN 20 - DN 25 Valves**
SR 45	**DN 32 Valves**
SR 60	**DN 40 Valves**
SR 90	**DN 50 Valves**





Actuated Ball Valve

Stainless Steel Body Single Acting

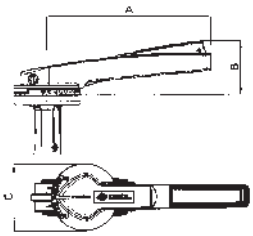
Code P46	DN mm	Thread BSP	A mm	B mm	C mm	D mm	E mm	ØG mm	H mm	Weight kg	Price
S401H003	10	G3/8"	221	55	60	20	50	29	141.5	1.7	**288.45**
S401H004	15	G1/2"	221	55	60	20	60	34	145.5	1.8	**323.90**
S401H005	20	G3/4"	240	65	70	20	70	42.5	162.5	2.6	**367.55**
S401H006	25	G1"	240	65	70	20	85	50.5	166.5	2.9	**434.75**
S401A007	32	G1.1/4"	294	72	78	20	95	63	183	3.7	**491.25**
S401H008	40	G1.1/2"	320	80	86	30	105	75.5	207	5.4	**580.45**
S401A009	50	G2"	357	90	96	30	125	89.1	234	7.7	**820.05**

Namur Interface Plate

For Actuated Ball Valves

Code P46	To Suit Actuator	Price
KBN10008	DA 8	**17.35**
KBN10015	DA 15	**17.10**
KBN17030	DA 30 - DA 45, SR 15 - SR 90	**18.60**



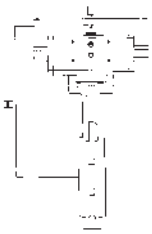




Wafer Type Butterfly Valve, Manual

EPDM Liner

Code P48	DN mm	A mm	B mm	C mm	Price
L375XE69	50	166	63	90	84.55
L375XE70	65	220	75	90	98.65
L375XE71	80	220	75	90	105.35
L375XE72	100	220	75	90	133.50
L375XE73	125	350	86	90	193.20
L375XE74	150	350	86	90	211.30
L375XE75	200	350	86	90	313.30





Wafer Type Butterfly Valve, Double Acting, Pneumatically Actuated

EPDM Liner

Code P48	DN mm	L mm	H mm	Weight kg	Actuator Size	Price
D375XE69	50	168	242	4	DA 30	211.30
D375XE70	65	182	260	4.8	DA 45	235.50
D375XE71	80	182	267	5	DA 45	242.20
D375XE72	100	190	290	6.5	DA 60	314.00
D375XE73	125	225	310	9.1	DA 90	350.85
D375XE74	150	240	342	11.5	DA 120	386.40
D375XE75	200	314	397	18.7	DA 240	629.25

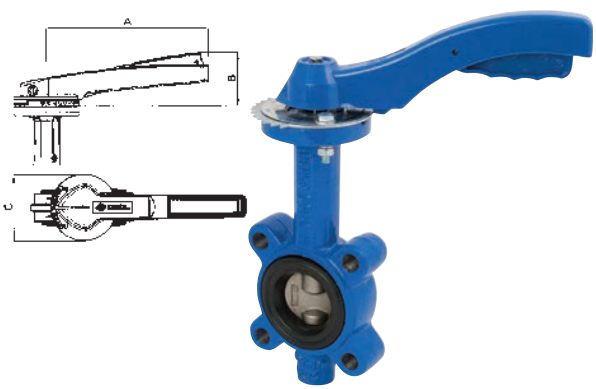




Wafer Type Butterfly Valve, Single Acting, Pneumatically Actuated

EPDM Liner

Code P48	DN mm	L mm	H mm	Weight kg	Actuator Size	Price
S375XE69	50	240	252	5	SR 30	260.30
S375XE70	65	294	272	6.1	SR 45	323.35
S375XE71	80	294	279	6.3	SR 45	330.05
S375XE72	100	320	316	8.5	SR 60	377.00
S375XE73	125	357	339	11.9	SR 90	529.95
S375XE74	150	368	362	15.4	SR 120	650.05
S375XE75	200	456	421	24.4	SR 1240	957.95

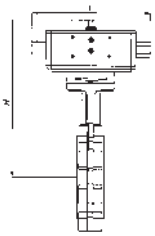


Lug Type Butterfly Valve, Manual

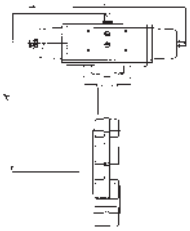
EPDM Liner

Code P48	DN mm	A mm	B mm	C mm	Price
L385XE69	50	166	63	90	97.15
L385XE70	65	220	75	90	111.35
L385XE71	80	220	75	90	121.45
L385XE72	100	220	75	90	157.65
L385XE73	125	350	86	90	221.40
L385XE74	150	350	86	90	251.60
L385FE75	200	350	86	90	336.80

Butterfly Valves









Lug Type Butterfly Valve, Double Acting, Pneumatically Actuated

EPDM Liner

Code P48	DN mm	L mm	H mm	Weight kg	Actuator Size	Price
D385XE69	50	168	242	4.4	DA 30	222.75
D385XE70	65	182	260	5.4	DA 45	248.20
D385XE71	80	182	267	6.2	DA 45	258.25
D385XE72	100	190	290	6.9	DA 60	311.25
D385XE73	125	225	310	11.5	DA 90	379.05
D385XE74	150	240	342	14.4	DA 120	426.65
D385FE75	200	314	397	21.9	DA 240	652.75

Lug Type Butterfly Valve, Single Acting, Pneumatically Actuated

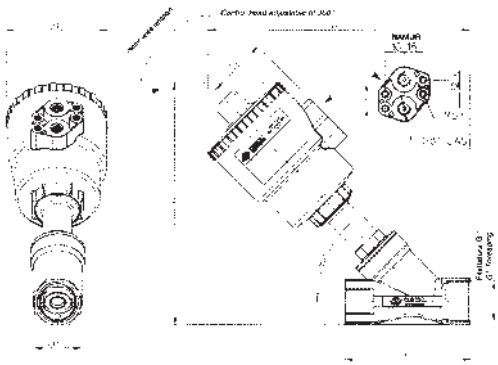
EPDM Liner

Code P48	DN mm	L mm	H mm	Weight kg	Actuator Size	Price
S385XE69	50	168	242	4.4	DA 30	269.00
S385XE70	65	182	260	5.4	DA 45	336.10
S385XE71	80	182	267	6.2	DA 45	346.15
S385XE72	100	190	290	6.9	DA 60	401.85
S385XE73	125	225	310	11.5	DA 90	558.15
S385XE74	150	240	342	14.4	DA 120	690.25
S385FE75	200	314	397	21.9	DA 240	905.60

For Namur Interface Solenoid Valve



See page 55

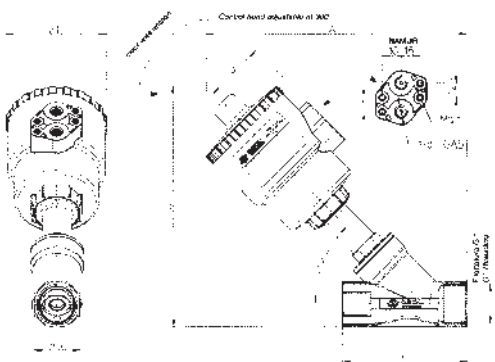




Zeus Angle Seat Valve

Bronze Body Water-Hammer Free

Code P20	DN mm	Thread BSPP	Actuator	A mm	C mm	D mm	ØE mm	F mm	CH.L.	Price
J9SPG1603	15	G3/8"	DN 50	163	153	44	70	65	27	**141.20**
J9SPG1604	15	G1/2"	DN 50	163	153	44	70	65	27	**144.75**
J9SPG1605	20	G3/4"	DN 50	173	163	44	70	75	27.5	**163.65**
J9SPG1805	20	G3/4"	DN 63	191	181	50.5	84.4	75	27.5	**182.55**
J9SPG1806	20	G1"	DN 63	206	196	50.5	84.4	90	41	**210.60**
J9SPG2106	25	G1"	DN 90	246	236	66.2	116.4	90	41	**275.95**
J9SPG2107	32	G1.1/4"	DN 90	255	245	66.2	116.4	110	50	**300.20**
J9SPG2108	40	G1.1/2"	DN 90	270	264	66.2	116.4	120	58	**413.70**
J9SPG2309	50	G2"	DN 90	280	275	77.4	116.4	150	70	**472.75**





Zeus Angle Seat Valve

Bronze Body with Flow from Above Seat

Code P20	DN mm	Thread BSPP	Actuator	A mm	C mm	D mm	ØE mm	F mm	CH.L.	Price
J9CPG1603	15	G3/8"	DN 50	163	153	44	70	65	27	**138.75**
J9CPG1604	15	G1/2"	DN 50	163	153	44	70	65	27	**141.70**
J9CPG1605	20	G3/4"	DN 40**	173	163	44	70	75	27.5	**194.65**
J9CPG1806	25	G1"	DN 63	206	196	50.5	84.4	90	41	**190.40**
J9CPG2107	32	G1.1/4"	DN 90	255	245	66.2	116.4	110	50	**279.50**
J9CPG2108	40	G1.1/2"	DN 90	270	264	66.2	116.4	120	58	**313.65**
J9CPG2109	50	G2"	DN 110	316	311	77.4	140.6	100	70	**366.50**

VIP Actuated Valves

VIP Actuated Slide Valves

A VIP valve (patented by OMAL exclusively) is a proper automatic valve embodying both interception device (between pipe C-D) and control device (A-B). It works thanks to the internal movement of a piston supplied with air. At the end of its stroke (a VIP valve is an ON/OFF valve), the piston presses on the seat seal or moves away from it letting the intercepted fluid pressures discharge on it, the pressure necessary to move the piston is completely independent of the fluid pressure. As a result OMAL has been able to design a light space saving and lasting valve. Its full bore and its improved internal dynamics allow minimum pressure losses, too.

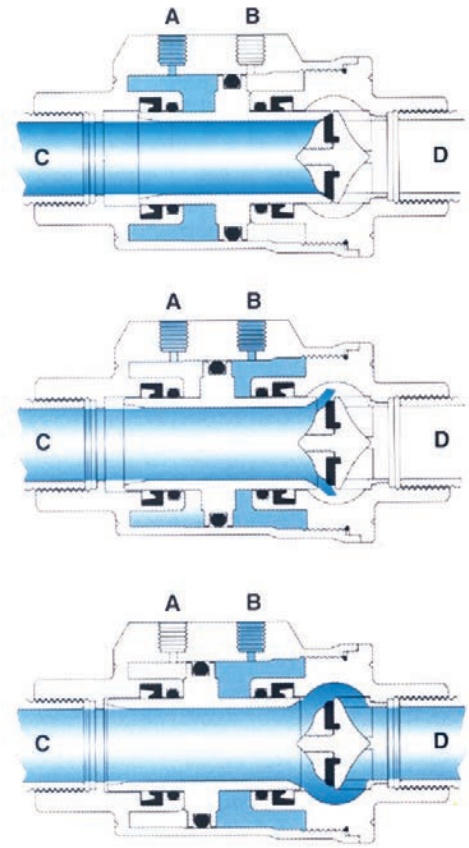
Improved fluid dynamics allow minimum pressure losses. See Flow Pressure Diagram. VIP valves can be used in any mounting position. They can be provided with seals in NBR, FKM or EPDM:

Control Media

- Filtered compressed air, not necessarily lubricated.
- At temperatures from -20˚C to 0˚C, use dry air.
  In case of lubricated air, seal compatible oil must be used.
- Air supply: 3 bar min. - 8 bar max. in Double Acting execution.
  4.2 bar min. - 8 bar max. in Spring Return execution.

Operating Media

- Pressure: 10 bar max.
- Temperature: from -20˚C to +80˚C (NBR)
  from -20˚C to +150˚C (FKM)
  from -20˚C to +150˚C (EPDM)
- Vacuum tightness: 740 mm Hg







VIP Valve, Double Acting

Brass with NBR Seals

Code P47	Thread BSPP	Bore	Price
VDA10003	G3/8"	10	95.70
VDA10004	G1/2"	15	107.55
VDA10005	G3/4"	20	131.50
VDA10006	G1"	25	139.00
VDA10007	G1.1/4"	32	180.25
VDA10008	G1.1/2"	40	239.15
VDA10009	G2"	50	319.65

VIP Valve, Single Acting

Brass with NBR Seals

Code P47	Thread BSPP	Bore	Price
VNC10003	G3/8"	10	101.40
VNC10004	G1/2"	15	116.90
VNC10005	G3/4"	20	138.80
VNC10006	G1"	25	155.05
VNC10007	G1.1/4"	32	203.05
VNC10008	G1.1/2"	40	253.20
VNC10009	G2"	50	362.80

Techmatic Valves













Section 4

Solenoid Valves
See page 248

Pneumatic & Electric Drive Actuated Ball Valves
See pages 255-263

Wafer Butterfly Valves
See pages 264, 267

Pneumatic & Electric Drive Actuated Butterfly Valves
See page 265, 267

FRLs, Drains & Gauges




278-280 Miniature FRLs, 'BIT'


281-282 Filter Regulator for Water, 'BIT' Series F


284-293 Standard Series FRLs, 'Syntesi' & Accessories


294-299 Standard Series FRLs, 'New Deal' & Accessories


300 Standard Series FRLs, 'New Deal' Breathe Air Set


301-305 FRLs, 'Skillair'


306 FRLs, 'ONE' Air Treatment Unit


307 Micro FRL Units


308-312 FRL Units & Accessories

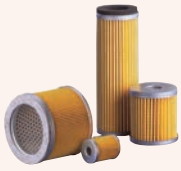

313-318 Insert Deal Range


319-325 Filtration & Compressed Air Quality Technical Information


326-334 Filtration & Compressed Air Dryers


335-336 Condensate Drains

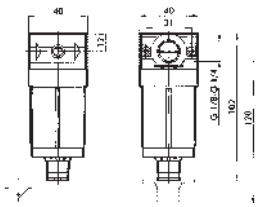

337-340 Pressure & Vacuum Gauges


341-350 Interchange Filter Elements


351-352 Air Receivers

Miniature FRLs, 'BIT'

- Maximum inlet pressure: 13 bar
- Flow rate at 6 bar ΔP 0.5 bar: 860 Nl/min
- Fluid: compressed air
- Maximum temperature at 10 bar: +50°C
- Weight: 40g
- Mounting position: vertical
- Condensate drain: manual/semi-auto
- Bowl capacity: 16cm³



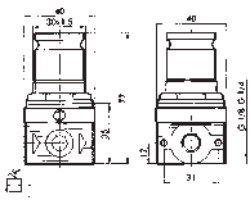


Miniature Filter

BSPP

Code	P11	Thread BSPP	Micron µm	Price
5101002		G1/8"	20	22.75
5101001		G1/8"	5	22.75
5201002		G1/4"	20	22.75
5201001		G1/4"	5	22.75

- Maximum inlet pressure: 13 bar
- Flow rate at 6 bar ΔP 0.5 bar: 340 Nl/min
- Fluid: filtered, lubricated or non-lubricated compressed air
- Maximum temperature at 10 bar: +50°C
- Weight: 80g
- Mounting position: any
- Gauge port: G1/8"



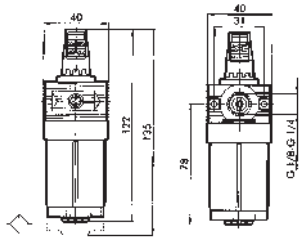


Miniature Pressure Regulator

BSPP

Code	P11	Thread BSPP	Pressure Range bar	Price
5107003		G1/8"	0 to 8	25.40
5107004		G1/8"	0 to 12	25.40
5207003		G1/4"	0 to 8	25.40
5207004		G1/4"	0 to 12	25.40

- Type of lubrication: oil mist
- Bowl capacity: 26.5cm³
- Maximum inlet pressure: 13 bar
- Flow rate at 6 bar ΔP 0.5 bar: 400 Nl/min
- Fluid: compressed air
- Maximum temperature at 1MPa, 10 bar (145 psi): +50°C
- Weight: 40g





Miniature Lubricator

BSPP

Code	P11	Thread BSPP	Price
5103001		G1/8"	33.85
5203001		G1/4"	33.85



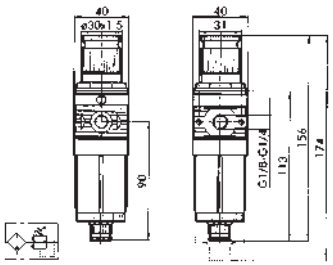
Miniature Pressure Regulator, Padlockable

BSPP

Code	P11	Thread BSPP	Pressure Range bar	Price
5110003		G1/8"	0 to 8	27.45
5110004		G1/8"	0 to 12	27.45
5210003		G1/4"	0 to 8	27.45
5210004		G1/4"	0 to 12	27.45

Miniature FRLs, 'BIT'

- Maximum inlet pressure: 13 bar
- Flow rate at 6 bar ΔP 0.5 bar: 290 Nl/min
- Fluid: compressed air
- Maximum temperature at 10 bar: +50°C
- Weight: 110g
- Mounting position: vertical
- Gauge port: G1/8"
- Bowl capacity: 16cm^3
- Condensate drain: manual/semi-auto





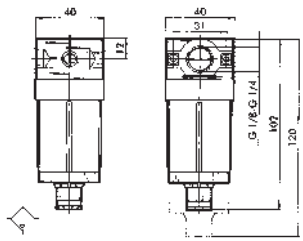
Miniature Filter Regulator

BSPP

Code P11	Thread BSPP	Micron µm	Pressure Range bar	Price
5105008	G1/8"	20	0 to 8	**40.95**
5105011	G1/8"	20	0 to 12	**40.95**
5205008	G1/4"	20	0 to 8	**40.95**
5205011	G1/4"	20	0 to 12	**40.95**

- Degree of filtration: 99.97% 0.01µm
- Maximum inlet pressure: 13 bar
- Flow rate at 6 bar ΔP 0.5 bar: 700 Nl/min
- Fluid: compressed air
- Maximum temperature at 10 bar: +50°C
- Weight: 65g
- Mounting position: vertical
- Condensate drain: manual/semi-auto
- Bowl capacity: 16cm^3

NB: it is advisable to mount a 5µm filter upstream acting as a rough filter.



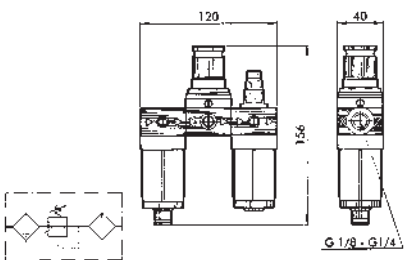


Miniature Oil Removal Filter

BSPP

Code P11	Thread BSPP	Price
5212001	G1/4"	**86.90**

- Maximum inlet pressure: 13 bar
- Flow rate at 6 bar ΔP 0.5 bar: 150 Nl/min
- Fluid: compressed air
- Maximum temperature at 1 MPa, 10 bar (145 psi): +50°C
- Weight: 160g
- Mounting position: any
- Gauge port: G1/8"





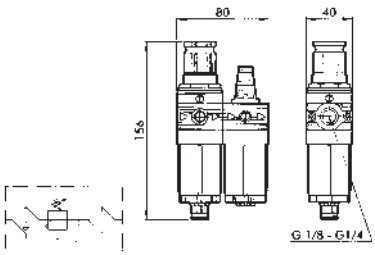
Miniature Filter + Regulator + Lubricator Set

BSPP

Code P11	Thread BSPP	Micron µm	Pressure Range bar	Price
5104008	G1/8"	20	0 to 8	**83.75**
5104011	G1/8"	20	0 to 12	**83.75**
5204008	G1/4"	20	0 to 8	**83.75**
5204011	G1/4"	20	0 to 12	**83.75**

Miniature FRLs, 'BIT'

- Maximum inlet pressure: 13 bar
- Flow rate at 6 bar ΔP 0.5 bar: 140 Nl/min
- Flow rate at 6 bar ΔP 1 bar: 260 Nl/min
- Fluid: compressed air
- Weight: 170g
- Mounting: vertical
- Gauge port: G1/8"





Miniature Filter Regulator + Lubricator Set

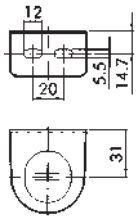
BSPP

Code	P11	Thread BSPP	Micron µm	Pressure Range bar	Price
5106008		G1/8"	20	0 to 8	79.40
5106011		G1/8"	20	0 to 12	79.40
5206008		G1/4"	20	0 to 8	79.40
5206011		G1/4"	20	0 to 12	79.40

For Gauges



See page 337





Mounting Hardware

Bit Regulator Bracket

Code	P11	Description	Price
9200701		Mounting Bracket	3.95
9170301		Wall Mounting Kit	3.95



Automatic Drain

To Suit Miniature Filters

Code	P11	Description	Price
9000803		For Miniature Filters	16.85



Filter Bowl, Semi-automatic

To Suit Miniature Filters

Code	P11	Description	Price
9255101		Miniature Filter Bowl	16.50



Filter Elements

Spare

Code	P11	Micron µm	Price
9251708		5	8.40
9251709		20	8.40
9251712		For Coalescing Filter, 0.001	59.80

Filter Regulator for Water, 'BIT' Series F

new

Filtering and/or water pressure regulation units, characterised by the use of materials certified to specific standards on products for use in contact with foodstuff or drinking water.

Declarations of conformity and release test reports are available on request for those who need them to certify our product incorporated in their own systems.

The white colour surface finish of the body was chosen to enhance the highly hygienic properties of the product.

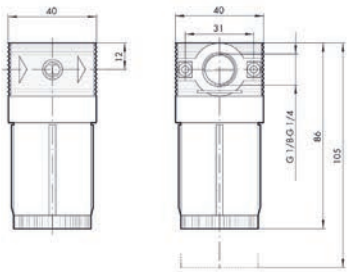
If the pressure regulator works with incompressible fluids (water) and there is a valve leak, the downstream pressure could rise up to reach the inlet pressure and then it re-stabilises with water consumption.

If necessary, consider the possibility of installing a safety valve that relieves any excess pressure.

- Maximum inlet pressure: 13 bar
- Fluid: water, air and fluids compatible with materials used
- Maximum temperature at 10 bar: +50°C
- Flow rate at 6.3 bar ΔP 1 bar: 6 up to 14.5 l/min dependant on model (refer to sales department)
- Gauge port: regulator, filter regulator, 1/8" BSPP
- Mounting: fixing plates 9170301, regulator bracket 9200701

Certifications

- European Regulation (EU) 10/2011, KTW, W270, WRAS, ACS, NSF61
- Approved for compliance with the UBA list, NSF/ANSI 372
- European Regulation (EU) 10/2011, KTW, W270, WRAS, NSF61, DM174/04, KTW, W270, WRAS, ACS, NSF61
- Approved for compliance with the UBA list, DM174/04, KTW, W270, WRAS, ACS, NSF61





Filter for Water

BSPP

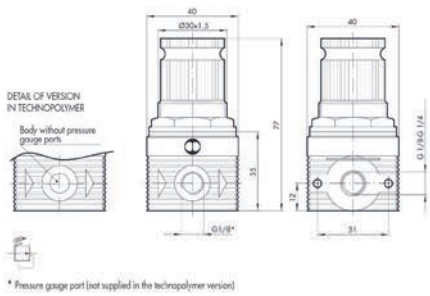
Code	P11	Thread BSPP	Micron µm	Price
5101002F		G1/8"	20	27.15
5201002F		G1/4"	20	27.15



Regulator for Water

Brass Ports, BSPP

Code	P11	Thread BSPP	Pressure Range bar	Price
5108001F		G1/8"	0 to 2	30.40
5108002F		G1/8"	0 to 4	30.40
5108003F		G1/8"	0 to 8	30.40
5108004F		G1/8"	0 to 12	31.35
5208001F		G1/4"	0 to 2	30.40
5208002F		G1/4"	0 to 4	30.40
5208003F		G1/4"	0 to 8	30.40
5208004F		G1/4"	0 to 12	31.35



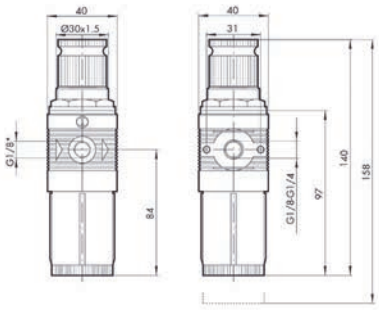


Regulator for Water

Technopolymer Ports
(No Gauge Port), BSPP

Code	P11	Thread BSPP	Pressure Range bar	Price
5228001F		G1/4"	0 to 2	27.50
5228002F		G1/4"	0 to 4	27.50
5228003F		G1/4"	0 to 8	27.50
5228004F		G1/4"	0 to 12	28.30

Filter Regulator for Water, 'BIT' Series F







Filter Regulator for Water

BSPP

Code P11	Thread BSPP	Micron µm	Pressure Range bar	Price
5105102F	G1/8"	20	0 to 2	46.65
5105105F	G1/8"	20	0 to 4	46.65
5105108F	G1/8"	20	0 to 8	46.65
5105111F	G1/8"	20	0 to 12	48.05
5205102F	G1/4"	20	0 to 2	48.05
5205105F	G1/4"	20	0 to 4	46.65
5205108F	G1/4"	20	0 to 8	46.65
5205111F	G1/4"	20	0 to 12	48.05

Accessories for BIT Series F for Water

Filter Cartridge Element Assembly

Code P11	Micron µm	Price
9251709	20	8.40

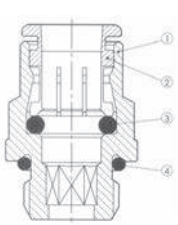
Food Grade Fittings

Series F Push-in Fittings, safe for use in the Food Industry

Brass parts are chemically treated with phosphorus nickel-plating according to the NSF®/ANSI 51 standard of the food programme. The seals are made of FDA-approved FKM/FPM. Fittings contain no technopolymer, solving the problem of incompatibility with detergents and other chemicals.

The fittings can be used up to +150°C, making them suitable for high temperature applications in other industries. The threads are cylindrical and under-head O-rings provide a pneumatic seal. This avoids the need for sealants (e.g. Teflon®) which could release solid fragments during screwing and unscrewing that would contaminate the environment or the fluid. Our fittings can be screwed and unscrewed any number of times and still remain clean and pneumatically sealed.

This choice of materials and treatments make these fittings suitable for use in the chemical, pharmaceutical, medical and electronics industry.



1. Body: chemically nickel-plated brass to NSF®/ANSI 51 standards
2. Gripper: chemically nickel-plated brass to NSF®/ANSI 51 standards
3. Fitting seal: FKM/FPM
4. Port seal: FKM/FPM

See pages 385-386



Technical Features

- Threaded ports: M5, G1/8", G1/4", G3/8", G1/2"
- Pipe diameter: 4, 6, 8 and 10mm
- Recommended pipe: Rilsan PA 11, nylon 6, polyamide 12, polypropylene
- Under-head O-ring can be screwed and unscrewed any number of times; no fragments of Teflon or sealant will contaminate the fluid
- Corrosion proof: chemical nickel-plating + FKM/FPM, compatible with numerous substances
- No plastic parts, so no risk of incompatibility

Driven by Customers Designed by Metal Work



Why cut costs on components, putting quality and performance in jeopardy? Make your systems ultra efficient with Metal Work Pneumatics.

METAL WORK PNEUMATIC®

ISO 9001 QUALITY MANAGEMENT SYSTEM

ISO 14001 ENVIRONMENTAL MANAGEMENT SYSTEM

OHSAS 18001 HEALTH AND SAFETY MANAGEMENT SYSTEM



SYNTESI MONITORED DUMP VALVE

Standard Series FRLs, 'Syntesi'

Syntesi® is an important milestone achieved by Metal Work, the result of thirty years' experience producing air treatment units. Syntesi® obtains the best possible performance in a reduced space and with limited weight. The capacity is much higher than that of other units of the same size. These modular units feature a very simple yet effective system that requires no brackets, stay bolts or yoke for assembling the elements.

The basic version of Syntesi® incorporates numerous functions that are not provided or are only optional with traditional units:

- Padlockable knobs
- Additional pneumatic ports on the front and back
- Flow options from left to right or vice versa
- Regulators with compensation system which are accurate even when the upstream pressure changes, with rapid downstream pressure relief
- Full indelible marking
- Automatic condensate drain even in size 1
- 360º visual inspection of oil and condensate levels

The basic materials – technopolymer and nickel-plated brass – have excellent corrosion resistance. An anti-corrosion version is available with stainless steel components (screws and plates) or Geomet® related ones (regulator springs).



Technical Specifications

- Padlockable knob: the knobs of the regulators, filter regulators and standard sectioning valves can all be padlocked
- Fluid: compressed air or other inert gases

Body Size	Threaded Port BSP	Maximum Input Pressure bar	Temperature Range at 1 MPa, 10 bar (145 psi)
1	1/8"	15	-10°C to +50°C
	1/4"		
	3/8"		
2	3/8"	13	-10°C to +50°C
	1/2"		
	3/4"		
	1"		

Technical Data	Body Size 1			Body Size 2			
Maximum Input Pressure bar	15			13			
Flow Rate Nl/min at 6.3 bar (0.63 MPa, 91 psi) ΔP 1 bar (0.1 MPa, 14 psi)	1300	1650	1750	4500	5200	5200	
Weight g	178	173	164	488	461	457	445
Condensate Bowl Capacity cm^3	30			70			
Mounting Position	Vertical			Vertical			
Wall Fixing Screws	No. 2 M4 Screws			No. 2 M5 Screws			



Standard Filter, Body Size 1

Manual Drain, BSPP

Code P44	Thread BSPP	Micron µm	Price
5611F201	G1/8"	20	20.90
5612F202	G1/4"	20	22.35
5613F203	G3/8"	20	20.70

Standard Filter, Body Size 1

Auto Drain, BSPP

Code P44	Thread BSPP	Micron µm	Price
5611F501	G1/8"	20	38.85
5612F502	G1/4"	20	41.60
5613F503	G3/8"	20	41.60

Standard Filter, Body Size 2

Manual Drain, BSPP

Code P44	Thread BSPP	Micron µm	Price
5623F203	G3/8"	20	40.85
5624F204	G1/2"	20	40.85
5625F205	G3/4"	20	44.90
5626F206	G1"	20	44.90

Standard Filter, Body Size 2

Auto Drain, BSPP

Code P44	Thread BSPP	Micron µm	Price
5623F503	G3/8"	20	61.35
5624F504	G1/2"	20	61.35
5625F505	G3/4"	20	69.05
5626F506	G1"	20	69.05

Standard Series FRLs, 'Syntesi'

Technical Data	Body Size 1			Body Size 2			
Maximum Input Pressure bar	15			13			
Suggested Flow Rate Nl/min at 6.3 bar (0.63 MPa, 91 psi)	460			620			
Weight g	194	189	180	483	456	452	440
Bowl Capacity cm³	15			40			
Mounting Position	Vertical			Vertical			
Wall Fixing Screws	No. 2 M4 Screws			No. 2 M5 Screws			



Oil Removal Filter, Body Size 1

Manual Drain, BSPP

Code P44	Thread BSPP	Micron µm	Price
5611D101	G1/8"	0.01	60.70
5612D102	G1/4"	0.01	65.05
5613D103	G3/8"	0.01	65.05

Oil Removal Filter, Body Size 2

Manual Drain, BSPP

Code P44	Thread BSPP	Micron µm	Price
5623D103	G3/8"	0.01	99.10
5624D104	G1/2"	0.01	107.20
5625D105	G3/4"	0.01	106.20
5626D106	G1"	0.01	114.90

Technical Data	Body Size 1			Body Size 2			
Maximum Input Pressure bar	15			13			
Suggested Flow Rate Nl/min at 6.3 bar (0.63 MPa, 91 psi)	350			800			
Weight g	195	190	181	483	456	452	440
Inlet Fluid	0.01 πm filtred and depurated air			0.01 πm filtred and depurated air			
Mounting Position	Any			Any			
Wall Fixing Screws	No. 2 M4 Screws			No. 2 M5 Screws			



Active Carbon Filter, Body Size 1

Manual Drain, BSPP

Code P44	Thread BSPP	Micron µm	Price
5611C101	G1/8"	0.003	61.30
5612C102	G1/4"	0.003	65.70
5613C103	G3/8"	0.003	65.70

Active Carbon Filter, Body Size 2

Manual Drain, BSPP

Code P44	Thread BSPP	Micron µm	Price
5623C103	G3/8"	0.003	107.20
5624C104	G1/2"	0.003	107.20
5625C105	G3/4"	0.003	106.20
5626C106	G1"	0.003	107.75

For Piping Systems



See section 11

Standard Series FRLs, 'Syntesi'

Technical Data	Body Size 1			Body Size 2			
Maximum Input Pressure bar	15			13			
Flow Rate Nl/min at 6.3 bar (0.63 MPa, 91 psi) ΔP 1 bar (0.1 MPa, 14 psi)	570	1650	2900	3000	4300		4700
Weight g	193	188	179	546	519	515	503
Mounting Position	Any			Any			
Wall Fixing Screws	No. 2 M4 Screws			No. 2 M5 Screws			
Gauge Port	1/8" BSP			1/4" BSP			



Pressure Regulator, Body Size 1

Relieving, BSPP

Code P44	Thread BSPP	Pressure Range bar	Price
5611R141	G1/8"	0 to 8	27.40
5611R161	G1/8"	0 to 12	25.55
5612R142	G1/4"	0 to 8	27.40
5612R162	G1/4"	0 to 12	27.40
5613R143	G3/8"	0 to 8	27.40
5613R163	G3/8"	0 to 12	27.40

Pressure Regulator, Body Size 2

Relieving, BSPP

Code P44	Thread BSPP	Pressure Range bar	Price
5623R143	G3/8"	0 to 8	46.55
5623R163	G3/8"	0 to 12	46.55
5624R144	G1/2"	0 to 8	46.55
5624R164	G1/2"	0 to 12	46.55
5625R145	G3/4"	0 to 8	50.40
5625R165	G3/4"	0 to 12	54.25
5626R146	G1"	0 to 8	54.25
5626R166	G1"	0 to 12	54.25

For BSP Adaptors



See page 414

Standard Series FRLs, 'Syntesi'

The in-series regulator is used to take air at a set pressure from the ports on the front and back of the body, while the pneumatic inlet and outlet ports are connected directly.

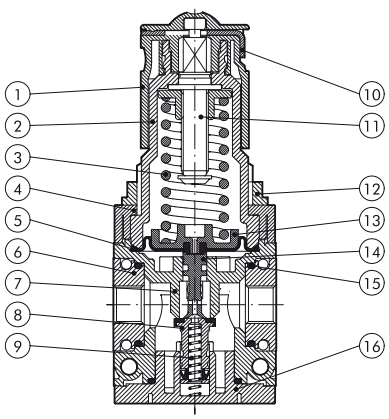
It is possible to assemble several regulators side by side, all supplied at the same pressure, and obtain different regulated pressures, regardless of the pressure of the previous module.

The in-series regulator uses the same construction principles as the standard regulator, so the advantages are the same, such as compensation for upstream pressure changes, relief valve, rapid relief of the downstream pressure and a padlockable push-lock knob.



Technical Data	Body Size 1			Body Size 2			
Maximum Input Pressure bar	15			13			
Flow Rate Nl/min at 6.3 bar (0.63 MPa, 91 psi) ΔP 1 bar (0.1 MPa, 14 psi)	500			1000			
Weight g	193	188	179	546	519	515	503
Mounting Position	Any			Any			
Wall Fixing Screws	No. 2 M4 Screws			No. 2 M5 Screws			
Gauge Port	1/8" BSP			1/4" BSP			

1. Technopolymer adjusting knob
2. Technopolymer bell
3. Steel adjusting spring (with Geomet. treatment for anti-corrosion version)
4. Technopolymer flange
5. Rolling diaphragm
6. IN/OUT bushing made of OT58 nickel-plated brass or passivated aluminium for 3/4" - 1"
7. Technopolymer body
8. OT58 brass valve, with NBR vulcanized gasket
9. Stainless steel valve spring
10. Galvanised steel plate for knob locking (stainless steel for anti-corrosion version)
11. OT58 brass adjusting screw
12. Technopolymer ring nut
13. Technopolymer plate
14. Technopolymer rod
15. NBR o-ring gaskets
16. Technopolymer plug



In-series Regulator, Body Size 1

Relieving, BSPP

Code P44	Thread BSPP	Pressure Range bar	Price
5611R241	G1/8"	0 to 8	25.55
5611R261	G1/8"	0 to 12	27.40
5612R242	G1/4"	0 to 8	27.40
5612R262	G1/4"	0 to 12	25.55
5613R243	G3/8"	0 to 8	27.40
5613R263	G3/8"	0 to 12	27.40

In-series Regulator, Body Size 2

Relieving, BSPP

Code P44	Thread BSPP	Pressure Range bar	Price
5623R243	G3/8"	0 to 8	43.45
5623R263	G3/8"	0 to 12	43.45
5624R244	G1/2"	0 to 8	46.55
5624R264	G1/2"	0 to 12	43.45
5625R245	G3/4"	0 to 8	50.65
5625R265	G3/4"	0 to 12	50.65
5626R246	G1"	0 to 8	50.65
5626R266	G1"	0 to 12	50.65

Standard Series FRLs, 'Syntesi'

Technical Data	Body Size 1			Body Size 2			
Maximum Input Pressure bar	15			13			
Flow Rate Nl/min at 6.3 bar (0.63 MPa, 91 psi) ΔP 1 bar (0.1 MPa, 14 psi)	500	800	2200	3200	4300		5200
Weight g	244	239	230	623	596	592	580
Bowl Capacity cm^3	30			70			
Mounting Position	Vertical			Vertical			
Wall Fixing Screws	No. 2 M4 Screws			No. 2 M5 Screws			
Gauge Port	1/8" BSP			1/4" BSP			



Standard Filter Regulator, Body Size 1

Relieving Manual Drain, BSPP

Code P44	Thread BSPP	Micron µm	Pressure Range bar	Price
5611B241	G1/8"	20	0 to 8	37.25
5611B261	G1/8"	20	0 to 12	34.80
5612B242	G1/4"	20	0 to 8	37.25
5612B262	G1/4"	20	0 to 12	36.75
5613B243	G3/8"	20	0 to 8	37.25
5613B263	G3/8"	20	0 to 12	37.25

Standard Filter Regulator, Body Size 1

Relieving Auto Drain, BSPP

Code P44	Thread BSPP	Micron µm	Pressure Range bar	Price
5611B541	G1/8"	20	0 to 8	56.50
5611B561	G1/8"	20	0 to 12	56.50
5612B542	G1/4"	20	0 to 8	56.50
5612B562	G1/4"	20	0 to 12	56.50
5613B543	G3/8"	20	0 to 8	56.50
5613B563	G3/8"	20	0 to 12	56.50

Standard Filter Regulator, Body Size 2

Relieving Manual Drain, BSPP

Code P44	Thread BSPP	Micron µm	Pressure Range bar	Price
5623B243	G3/8"	20	0 to 8	62.95
5623B263	G3/8"	20	0 to 12	62.95
5624B244	G1/2"	20	0 to 8	63.00
5624B264	G1/2"	20	0 to 12	62.95
5625B245	G3/4"	20	0 to 8	70.65
5625B265	G3/4"	20	0 to 12	70.65
5626B246	G1"	20	0 to 8	65.35
5626B266	G1"	20	0 to 12	70.65

Standard Filter Regulator, Body Size 2

Relieving Auto Drain, BSPP

Code P44	Thread BSPP	Micron µm	Pressure Range bar	Price
5623B543	G3/8"	20	0 to 8	78.30
5623B563	G3/8"	20	0 to 12	77.15
5624B544	G1/2"	20	0 to 8	83.50
5624B564	G1/2"	20	0 to 12	77.15
5625B545	G3/4"	20	0 to 8	91.20
5625B565	G3/4"	20	0 to 12	84.30
5626B546	G1"	20	0 to 8	91.20
5626B566	G1"	20	0 to 12	84.30

Standard Series FRLs, 'Syntesi'

Technical Data	Body Size 1			Body Size 2			
Maximum Input Pressure bar	15			13			
Flow Rate Nl/min at 6.3 bar (0.63 MPa, 91 psi) ΔP 1 bar (0.1 MPa, 14 psi)	1300	1700	2200	2300	3900		3900
Weight g	185	180	171	480	453	449	437
Quantity of Fitted Oil cm^3	60			130			
Mounting Position	Vertical			Vertical			
Wall Fixing Screws	No. 2 M4 Screws			No. 2 M5 Screws			



Standard Lubricator, Body Size 1

BSPP

Code P11	Thread BSPP	Price
5611L101	G1/8"	27.20
5612L102	G1/4"	27.20
5613L103	G3/8"	27.20

Standard Lubricator, Body Size 2

BSPP

Code P44	Thread BSPP	Price
5623L103	G3/8"	50.40
5624L104	G1/2"	50.40
5625L105	G3/4"	53.70
5626L106	G1"	53.70

For Pneumatic Oil



See page 829

Standard Series FRLs, 'Syntesi'

Technical Data	Body Size 1			Body Size 2			
Maximum Input Pressure bar	15			13			
Flow Rate Nl/min at 6.3 bar (0.63 MPa, 91 psi) ΔP 0.5 bar (0.05 MPa, 7 psi)	800	1000	1100	2800	3000		3000
Weight g	197	192	183	476	449	445	433
Mounting Position	Any			Any			
Wall Fixing Screws	No. 2 M4 Screws			No. 2 M5 Screws			



Shut-off Valve, Body Size 1

Manual, BSPP

Code	P44	Thread BSPP	Price
5611V101		G1/8"	35.30
5612V102		G1/4"	35.30
5613V103		G3/8"	35.30

Shut-off Valve, Body Size 2

Manual, BSPP

Code	P44	Thread BSPP	Price
5623V103		G3/8"	49.30
5624V104		G1/2"	53.35
5625V105		G3/4"	56.45
5626V106		G1"	56.45

Shut-off Valve, Body Size 1

Pneumatic, BSPP

Code	P44	Thread BSPP	Price
5611V201		G1/8"	46.80
5612V202		G1/4"	50.15
5613V203		G3/8"	50.15

Shut-off Valve, Body Size 2

Pneumatic, BSPP

Code	P44	Thread BSPP	Price
5623V203		G3/8"	79.95
5624V204		G1/2"	80.35
5625V205		G3/4"	87.05
5626V206		G1"	87.05

Shut-off Valve, Body Size 1

Solenoid, BSPP

Code	P44	Thread BSPP	Price
5611V701		G1/8"	65.95
5612V702		G1/4"	70.65
5613V703		G3/8"	70.65

Shut-off Valve, Body Size 2

Solenoid, BSPP

Code	P44	Thread BSPP	Price
5623V703		G3/8"	84.15
5624V704		G1/2"	84.15
5625V705		G3/4"	98.75
5626V706		G1"	98.75

Standard Series FRLs, 'Syntesi'

Technical Data	Body Size 1			Body Size 2			
Input Pressure Range bar	3 to 10			3 to 10			
Flow Rate Nl/min at 6.3 bar (0.63 MPa, 91 psi) ΔP 0.5 bar (0.05 MPa, 7 psi)	900	1000	1100	2800	3600		3600
Weight g	203	198	189	503	476	472	460
Mounting Position	Any			Any			
Wall Fixing Screws	No. 2 M4 Screws			No. 2 M5 Screws			



Progressive Starter, Body Size 1

BSPP

Code P44	Thread BSPP	Price
5611A701	G1/8"	92.00
5612A702	G1/4"	92.00
5613A703	G3/8"	92.00

Progressive Starter, Body Size 2

BSPP

Code P44	Thread BSPP	Price
5623A703	G3/8"	111.15
5624A704	G1/2"	120.15
5625A705	G3/4"	118.25
5626A706	G1"	118.25

Technical Data	Body Size 1	Body Size 2
Maximum Pressure bar	15	13
Maximum Current A	2	2
Maximum Voltage V	250	250
Cable OD mm	4.9	4.9
Fluid	Filtered lubricated or non-lubricated compressed air Lubrication, if used, must be continuous	
Mounting Position	Any	Any
Wall Fixing Screws	No. 2 M4 Screws	No. 2 M5 Screws



Pressure Switch, Body Size 1

M8 Connector, BSPP

Code P44	Thread BSPP	Price
5611S201	G1/8"	54.70
5612S202	G1/4"	58.65
5613S203	G3/8"	58.65

Pressure Switch, Body Size 2

M8 Connector, BSPP

Code P44	Thread BSPP	Price
5623S203	G3/8"	78.40
5624S204	G1/2"	78.40
5625S205	G3/4"	85.55
5626S206	G1"	85.55

NOTE: pull outwards to remove the knob from the pressure switch on the unit. Insert the security knob and regulate the pressure switch. Then press the handle firmly to lock it in position. If the pressure switch needs to be reset, remove the security knob by forcing it laterally with a screwdriver.



Security Knob

To Suit 9000401 & 9000402

Code	P06	Price
9200703		1.80

Standard Series FRLs, 'Syntesi'

Technical Data	Body Size 1			Body Size 2			
Input Pressure bar	15			13			
Flow Rate Nl/min at 6.3 bar (0.63 MPa, 91 psi) ΔP 0.5 bar (0.05 MPa, 7 psi)	350			1200			
Weight g	414	409	400	1074	1074	1043	1031
Mounting Position	Vertical			Vertical			
Wall Fixing Screws	No. 2 M4 Screws			No. 2 M5 Screws			
Gauge Port	1/8" BSP			1/4" BSP			



Filter Regulator + Lubricator Set, Body Size 1

Manual Drain, BSPP

Code P44	Thread BSPP	Micron µm	Pressure Range bar	Price
5611B24L101	G1/8"	20	0 to 8	65.50
5612B24L102	G1/4"	20	0 to 8	65.50
5613B24L103	G3/8"	20	0 to 8	65.50

Filter Regulator + Lubricator Set, Body Size 2

Manual Drain, BSPP

Code P44	Thread BSPP	Micron µm	Pressure Range bar	Price
5623B24L103	G3/8"	20	0 to 8	113.30
5624B24L104	G1/2"	20	0 to 8	113.30
5625B24L105	G3/4"	20	0 to 8	119.55
5626B24L106	G1"	20	0 to 8	128.70

Filter Regulator + Lubricator Set, Body Size 1

Auto Drain, BSPP

Code P44	Thread BSPP	Micron µm	Pressure Range bar	Price
5611B54L101	G1/8"	20	0 to 8	79.10
5612B54L102	G1/4"	20	0 to 8	84.75
5613B54L103	G3/8"	20	0 to 8	84.75

Filter Regulator + Lubricator Set, Body Size 2

Auto Drain, BSPP

Code P44	Thread BSPP	Micron µm	Pressure Range bar	Price
5623B54L103	G3/8"	20	0 to 8	123.75
5624B54L104	G1/2"	20	0 to 8	149.20
5625B54L105	G3/4"	20	0 to 8	137.95
5626B54L106	G1"	20	0 to 8	149.20

For Metal Work Valves



See pages 43-65



Connecting Nipple Kit

Body Size 1

Code	P44	Price
9210000		2.20

Connecting Nipple Kit

Body Size 2

Code	P44	Price
9210010		6.00



Threaded Port Kit

Body Size 1

Code	P44	Thread BSPP	Price
9210001		G1/8"	1.55
9210002		G1/4"	1.55
9210003		G3/8"	1.55

Threaded Port Kit

Body Size 2

Code	P44	Thread BSPP	Price
9210011		G3/8"	5.15
9210012		G1/2"	5.15
9210013		G3/4"	8.95
9210014		G1"	8.95



Automatic Drain

To Suit Body Sizes 1 & 2

Code	P44	Price
9000802		38.15



Replacement Elements

Spare, Body Size 1

Code	P44	Micron µm	Price
9210150		5	4.40
9210151		20	4.40

Replacement Elements

Spare, Body Size 2

Code	P44	Micron µm	Price
9210155		5	5.65
9210156		20	5.65



Replacement Elements

Oil Removal, Body Size 1

Code	P44	Price
9210160		45.15

Replacement Elements

Oil Removal, Body Size 2

Code	P44	Price
9210165		80.35



Replacement Elements

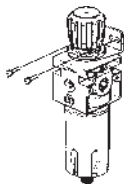
Active Carbon, Body Size 1

Code	P44	Price
9210161		45.85

Replacement Elements

Active Carbon, Body Size 2

Code	P44	Price
9210166		80.35



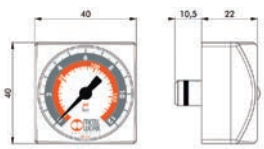


Mountings

Bracket for Regulators

Code	P11	To Suit Sizes	Price
9200701		Body size 1	3.95
9400701		Body size 2	5.30

- A compact pressure gauge with a square dial suitable for air treatment units.
- Suitable for use with Metal Work Bit, Syntesi, New Deal & Skillair ranges.
- A PTFE ring seal mounted on the 1/8" thread of the fiting ensures a perfect pneumatic seal.
- To mount it, screw the gauge in as far as it will go, then loosen enough to align the dial. A sealant is not required.
- The pressure gauge has a neck to dampen pressure vibration and absorb water hammer. This improves overall reliability and guarantees longer life.





Square Dial Pressure Gauge

G1/8" Thread

Code	P11	Pressure Range (bar)	Price
9700109		0 to 4	9.50
9700110		0 to 12	9.50

Standard Series FRLs, 'New Deal'

Technical Specifications

- Maximum inlet pressure: 18 bar
- Fluid: compressed air
- Maximum temperature at 10 bar: +50°C
- Mounting position: vertical
- Condensate drain: manual/semi-auto

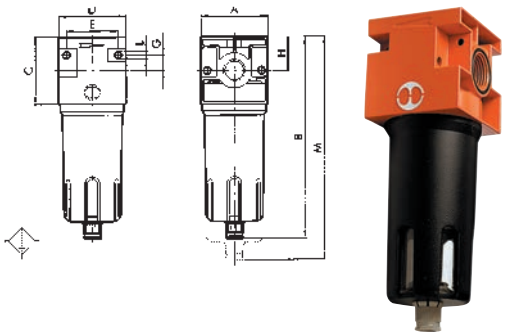
Dimensions

Thread BSP	A	B	C	D	E	G	H	L (Hole)	M	kg
G1/4"	42	142	42	42	32	10	21	M4	185	0.4
G3/8"	60	180	60	60	46	14	30	M4	230	0.9
G1/2"	60	180	60	60	46	14	30	M4	230	0.9
G3/4"	80	235	80	80	66	22	40	M6	325	1.9
G1"	80	235	80	80	66	22	40	M6	325	1.9

Standard Filter

Manual/Semi-auto, BSPP

Code	P11	Thread BSPP	Micron µm	Price
1221006		G1/4"	20	**27.75**
1321006		G3/8"	20	**43.85**
1421006		G1/2"	20	**43.85**
1521006		G3/4"	20	**108.50**
1621006		G1"	20	**108.50**



Technical Specifications

- Degree of filtration: 99.97% 0.01µm
- Maximum inlet pressure: 18 bar
- Flow rate at 6 bar ΔP 1 bar: 1600 Nl/min
- Fluid: filtered 4µm compressed air
- Maximum temperature at 10 bar: +50°C
- Weight: 0.9kg
- Mounting position: vertical
- Bowl capacity: 45cm^3

NB: It is advisable to mount a 4µ filter upstream acting as a rough filter.

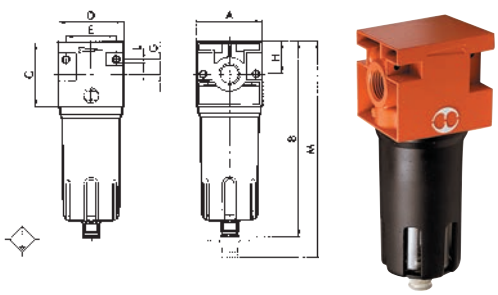
Dimensions

Thread BSP	A	B	C	D	E	G	H	L (Hole)	M
G1/2"	60	180	60	60	46	14	30	M4	230

Oil Removal Filter

BSPP

Code	P11	Thread BSPP	Price
1422002		G1/2"	**109.60**



Standard Series FRLs, 'New Deal'

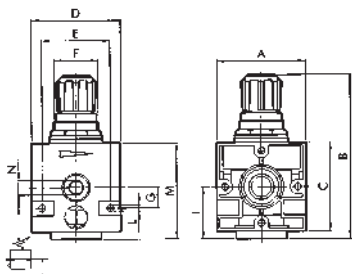
Technical Specifications

- Maximum inlet pressure: 18 bar
- Fluid: filtered, lubricated or non-lubricated compressed air*
- Maximum temperature at 10 bar: +50°C

*Lubrication, if used, must be continuous.

Dimensions

Thread BSP	A	B	C	D	E	F	G	H	I	L (Hole)	M	N	kg
G1/4"	42	142	42	42	32	30 x 1.5	10	21	25	M4	185	G1/8"	0.3
G3/8"	60	180	60	60	46	38 x 2	14	30	35	M4	230	G1/8"	0.8
G1/2"	60	180	60	60	46	38 x 2	14	30	35	M4	230	G1/8"	0.8
G3/4"	80	235	80	80	66	55 x 2	22	40	47	M6	325	G1/4"	2.2
G1"	80	235	80	80	66	55 x 2	22	40	47	M6	325	G1/4"	2.2







Pressure Regulator

BSPP

Code	P11	Thread BSPP	Pressure Range bar	Price
1202002		G1/4"	0 to 8	32.45
1202003		G1/4"	0 to 12	32.45
1302002		G3/8"	0 to 8	50.70
1302003		G3/8"	0 to 12	50.70
1402002		G1/2"	0 to 8	50.70
1402003		G1/2"	0 to 12	50.70
1502003		G3/4"	0 to 12	138.05
1602003		G1"	0 to 12	138.05

Pressure Regulator, Padlockable

BSPP

Code	P11	Thread BSPP	Pressure Range bar	Price
1210013		G1/4"	0 to 8	35.05
1210014		G1/4"	0 to 12	35.00
1310013		G3/8"	0 to 8	54.75
1310014		G3/8"	0 to 12	54.75
1410013		G1/2"	0 to 8	54.80
1410014		G1/2"	0 to 12	54.80

For Gauges





See page 337

Standard Series FRLs, 'New Deal'

Technical Specifications

- Maximum inlet pressure: 18 bar
- Maximum temperature at 10 bar: +50°C
- Mounting position: vertical

NB: the regulator pressure must always be set upwards.

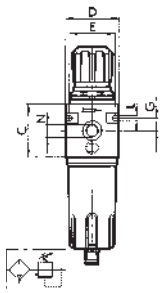
Dimensions

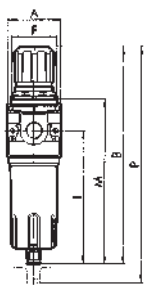
Thread BSP	A	B	C	D	E	F	G	I	L (Hole)	M	N	P	kg
G1/4"	42	190	42	42	36	30 x 1.5	10	121	M4	145	G1/8"	233	0.5
G3/8"	60	245	60	60	52	30 x 1.5	14	150	M4	185	G1/8"	295	1
G1/2"	60	245	60	60	52	30 x 1.5	14	150	M4	185	G1/8"	295	1

Filter Regulator

BSPP

Code P44	Thread BSPP	Micron µm	Pressure Range bar	Price
1225030	G1/4"	20	0 to 8	**51.85**
1225054	G1/4"	20	0 to 12	**51.80**
1325030	G3/8"	20	0 to 8	**76.65**
1325054	G3/8"	20	0 to 12	**76.65**
1425030	G1/2"	20	0 to 8	**76.65**
1425054	G1/2"	20	0 to 12	**76.65**







Technical Specifications

- Maximum inlet pressure: 18 bar
- Fluid: filtered compressed air
- Maximum temperature at 10 bar: +50°C
- Mounting position: vertical

Notes

- Use the screw provided to set the drip rate to drop every 300-600ml.
- Fit the lubricator as close as possible to the point of use
- Fill the bowl with oil before pressurising the system
- Do not use cleaning oil, brake fluid or solvents in general
- Recommended lubricants: ISO and UNI FD22, e.g. Energol HLP 22(BP), Spinesso 22 (Esso), Mobil, Tellus Oil 22 (Shell)
- Automatic filling lubricator and minimum level lubricator

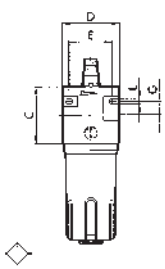
Dimensions

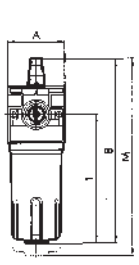
Thread BSP	A	B	C	D	E	G	I	L (Hole)	M	kg
G1/4"	42	156	42	42	32	10	121	M4	176	0.4
G3/8"	60	195	60	60	46	14	136	M4	220	0.9
G1/2"	80	195	80	80	66	22	182	M4	290	0.9
G3/4"	80	260	80	80	66	22	182	M6	290	1.8
G1"	80	260	80	80	66	22	182	M6	290	1.8

Lubricator

BSPP

Code P11	Thread BSPP	Price
1223001	G1/4"	**43.80**
1323001	G3/8"	**51.65**
1423001	G1/2"	**51.65**
1523001	G3/4"	**124.45**
1623001	G1"	**125.25**







Standard Series FRLs, 'New Deal'

Technical Specifications

- Maximum inlet pressure: 18 bar
- Fluid: compressed air
- Maximum temperature at 10 bar: +50°C

Notes

- Highly reliable, heavy duty, piston operated
- FRL unit
- Stability of the set pressure as the upstream pressure varies
- Metal bowl with external sight glass
- Semi-automatic and automatic condensate drain
- Lubrication proportional to flow rate
- Micrometric lubrication regulation
- Activation guaranteed with low flow rates

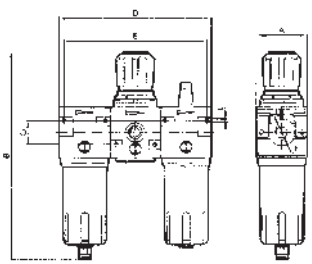
Dimensions

Thread BSPP	A	B	D	E	G	L (Hole)	kg
G1/4"	42	190	126	116	20	M4	1
G3/8"	60	245	180	166	28	M4	2.5
G1/2"	60	245	180	166	28	M4	2.5
G3/4"	80	332	240	226	44	M6	5.8
G1"	80	332	240	226	44	M6	5.8

Filter + Regulator + Lubricator Set

BSPP

Code	P44	Thread BSPP	Micron µm	Pressure Range bar	Price
1224030		G1/4"	20	0 to 8	**106.10**
1224054		G1/4"	20	0 to 12	**106.10**
1324030		G3/8"	20	0 to 8	**151.55**
1324054		G3/8"	20	0 to 12	**151.55**
1424030		G1/2"	20	0 to 8	**151.55**
1424054		G1/2"	20	0 to 12	**151.55**
1524030		G3/4"	20	0 to 12	**405.55**
1624030		G1"	20	0 to 12	**405.55**





Technical Specifications

- Maximum inlet pressure: 18 bar
- Fluid: compressed air
- Maximum temperature at 10 bar: +50°C

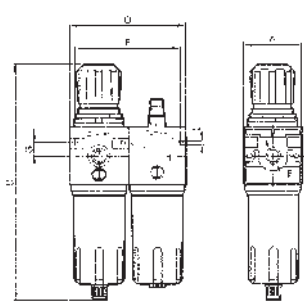
Dimensions

Thread BSPP	A	B	D	E	G	L (Hole)	kg
G1/4"	42	190	84	76	10	M4	0.9
G3/8"	60	240	120	109	14	M4	2
G1/2"	60	240	120	109	14	M6	2

Filter Regulator + Lubricator Sets

BSPP

Code	P44	Thread BSPP	Micron µm	Pressure Range bar	Price
1226030		G1/4"	20	0 to 8	**98.60**
1226054		G1/4"	20	0 to 12	**98.60**
1326030		G3/8"	20	0 to 8	**132.15**
1326054		G3/8"	20	0 to 12	**132.15**
1426030		G1/2"	20	0 to 8	**132.15**
1426054		G1/2"	20	0 to 12	**132.15**





Standard Series FRLs, 'New Deal' Accessories

Technical Specifications

- Inlet pressure: 18 bar
- Fluid: filtered, lubricated or non-lubricated compressed air*
- Maximum temperature at 10 bar: +50°C

* Lubrication, if used, must be continuous.

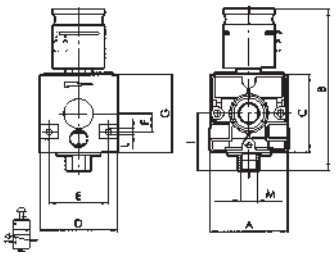
Dimensions

Thread BSPP	A	B	C	D	E	F	G	I	L (Hole)	kg
G1/4"	42	105	42	42	32	10	42	32	M4	0.35
G3/8"	60	126	60	60	46	14	60	43	M4	0.8
G1/2"	60	126	60	60	46	14	60	43	M4	0.8

Shut-off Valve

Lockable

Code	P11	Thread BSPP	Price
1270001		G1/4"	56.15
1370001		G3/8"	66.35
1470001		G1/2"	74.30



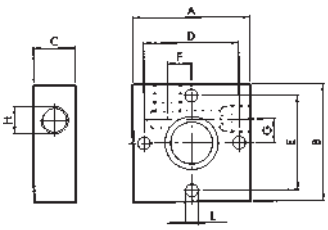


Technical Specifications

- Maximum working temperature at 10 bar: +50°C
- Maximum admissible pressure: 18 bar

Dimensions

Thread BSPP	A	B	C	D	E	F	G	H (No2 pos)	L (Hole)
G1/4"	42	42	15	34	34	8.5	8.5	21	M4
G3/8"	60	60	20	49	49	14	14	30	M4
G1/2"	60	60	20	49	49	14	14	30	M4
G3/4"	80	80	30	64	64	16	16	40	M6
G1"	80	80	30	64	64	16	16	40	M6





Distribution Block

BSPP

Code	P11	To Suit	Price
9200401		G1/8" for G1/4	19.55
9400401		G1/4" for G3/8 to G1/2	29.35
9600401		G1/2" for G3/4 to G1	57.10

Technical Specifications

- Threaded port: G1/2"
- Maximum working temperature at 10 bar: +50°C
- Maximum admissible pressure: 18 bar
- Wall fixing screws: M6 x 75

System supply condensate drain:

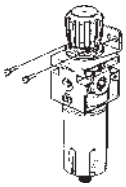
- All-round condensate level viewing
- Automatic drain from inside the bowl
- Axial coupling



Drip Leg Drain

BSPP

Code	P11	Thread BSPP	Price
4589003		G1/2"	77.55

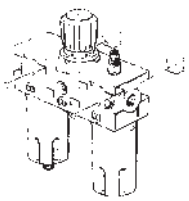




Mountings

Bracket for Regulators

Code	P11	To Suit Sizes	Price
9200701		G1/4"	3.95
9400701		G3/8" to G1/2"	5.30





Mountings

Spacers for Wall Mount FRLs

Code	P11	To Suit Sizes	Price
9200601		G1/4"	6.55
9400601		G3/8" to G1/2"	7.20
9600601		G3/4"	13.10



Filter Element

Spare

Code	P11	To Suit Sizes	Micron µm	Price
9250103		G1/4"	4	11.00
9250102		G1/4"	20	11.00
9450103		G3/8" to G1/2"	4	14.35
9450102		G3/8" to G1/2"	20	14.35
9650103		G3/4" to G1"	4	19.95
9650102		G3/4" to G1"	20	19.95
9450105		G3/8" to G1/2"	0.01	50.05



Shut-off Valve Adaptor

Brass

Code	P11	To Suit Sizes	Price
9201001		G1/4"	0.95
9401001		G3/8"	1.00
9401002		G1/2"	1.15



Automatic Drains

Fully Automatic

Code	P11	To Suit Sizes	Price
9000802		G3/8" to G1"	38.15

Automatic Drains

Semi-automatic

Code	P11	To Suit Sizes	Price
9000803		G1/4" to G1/2"	16.85

Automatic Drains

Metal Bowl for use with Semi-auto & Auto Drains

Code	P11	To Suit Sizes	Price
9255201		G1/4"	19.70
9455201		G3/8" to G1/2"	23.95

- A compact pressure gauge with a square dial suitable for air treatment units.
- Suitable for use with Metal Work Bit, Syntesi, New Deal and Skillair ranges.
- A PTFE ring seal mounted on the 1/8" thread of the fitting ensures a perfect pneumatic seal.
- To mount it, screw the gauge in as far as it will go, the loosen enough to align the dial. A sealant is not required.
- The pressure gauge has a neck to dampen pressure vibration and absorb water hammer. This improves overall reliability and guarantees longer life.





Square Dial Pressure Gauge

G1/8" Thread

Code	P11	Pressure Range (bar)	Price
9700109		0 to 4	9.50
9700110		0 to 12	9.50

Standard Series FRLs, 'New Deal' Breathe Air Set

Breathe provides high quality, clean air, essential for paint spraying and breathing air applications. Designed for self-contained operations, it will filter compressed air directly from most types of compressor and ring main systems.

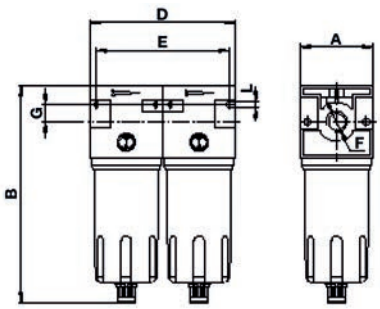
Breathe will supply sufficient breathable air for up to two men on constant demand and will provide breathing quality air to a higher standard than specified in BS4275: 1974.

Technical Specifications

- Element grade: XA and AC
- Threaded port: 1/2" BSP
- Particle removal: 0.01 microns
- Maximum oil carry over @ +20°C: 0.005 mg/cu m
- Maximum recommended temperature: +25°C
- Pressure loss, clean and dry: 150 mbar
- Pressure loss, saturated: 350 mbar
- Pressure loss, change element: 400 mbar
- Maximum working pressure: 16 bar

Dimensions

A	60mm	E	121mm
B	180mm	G	14mm
D	135mm	L	4mm Hole



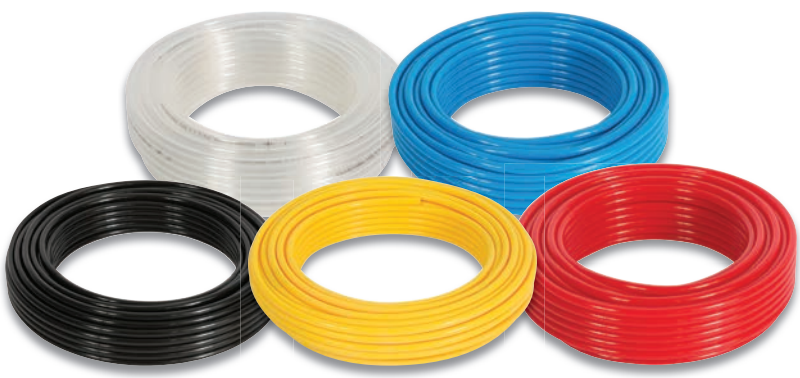


Breathe Air Set

BSP

Code	P11	Element Grade	Thread Size BSP	Micron µm	Pressure Range Bar	Price
Z29100BREATHE		XA & SC	1/2"	0.01	0 to 16	237.95

For Pneumatic Tube in Nylon & Polyurethane



See page 498-507

FRLs, ‘Skillair’

Technical Specifications

- Degree of filtration: 20µm
- Maximum input pressure: 13 bar
- Flow rate at 6.3 bar: 2400 Nl/min
- Fluid: compressed air
- Maximum temperature at 10 bar: +50°C
- Weight: 0.7kg



Filter, 200 Series

BSPP

Code	P52	Thread BSPP	Price
3480002		G1/4”	53.25
3580002		G3/8”	53.25
3680002		G1/2”	53.25

Technical Specifications

- Degree of filtration: 20µm
- Maximum input pressure: 13 bar
- Flow rate at 6.3 bar:
  16500 (G11/2”) Nl/min, 20000 (G2”) Nl/min
- Fluid: compressed air
- Maximum temperature at 10 bar: +50°C
- Weight: 1.4kg



Filter, 400 Series

BSPP

Code	P52	Thread BSPP	Price
6380002		G1.1/2”	594.50
6480002		G2”	594.50

Technical Specifications

- Degree of filtration: 20µm
- Maximum input pressure: 13 bar
- Flow rate at 6.3 bar: 3800 Nl/min
- ΔP 0.5 bar (0.005 MPa, 7 psi): 135 scfm
- Fluid: compressed air
- Maximum temperature at 10 bar: +50°C
- Weight: 1.4 kg



Filter, 300 Series

BSPP

Code	P52	Thread BSPP	Price
4480002		G1/2”	81.45
4580002		G3/4”	81.45
4680002		G1”	81.45

Technical Specifications

- Setting range: 0 to 8 bar
- Maximum input pressure: 13 bar
- Flow rate at 6.3 bar: 25000 Nl/min
- Weight: 0.7kg
- Mounting: any position
- Pressure gauge port: G1/8”



Regulator, 200 Series

BSPP

Code	P52	Thread BSPP	Price
3402003		G1/4”	58.35
3502003		G3/8”	58.35
3602003		G1/2”	58.35

FRLs, 'Skillair'

Technical Specifications

- Setting range: 0 to 8 bar
- Maximum input pressure: 13 bar
- Flow rate at 6.3 bar: 35000 Nl/min
- Maximum temperature at 10 bar: +50°C
- Weight: 1.4kg



Regulator, 300 Series

BSPP

Code	P52	Thread BSPP	Price
4402002		G1/2"	93.60
4502002		G3/4"	93.60
4602002		G1"	93.60

Technical Specifications

- Maximum input pressure: 13 bar
- Flow rate at 6.3 bar ΔP 0.5 bar: 120 Nl/min
- Maximum temperature at 10 bar: +50°C
- Weight: 0.6kg
- Pressure gauge port: G1/8"



Pilot Regulator, 400 Series

BSPP

Code	P52	Thread BSPP	Pressure Range bar	Price
3206001		G1/4"	2	52.00
3206002		G1/4"	4	52.00
3206003		G1/4"	8	52.00
3206004		G1/4"	12	52.00

Technical Specifications

- Setting range: dependent on pilot operating regulator
- Maximum input pressure: 13 bar
- Flow rate at 6.3 bar:
  18000 (G1.1/2") Nl/min, 20000 (G2") Nl/min
- Maximum temperature at 10 bar: +50°C
- Weight: 4.8kg (G1.1/2"), 5.6kg (G2")
- Mounting: any position
- Pressure gauge port: G1/4"
- Requires pilot regulator



Regulator, 400 Series

BSPP

Code	P52	Thread BSPP	Price
6302001		G1.1/2'	688.05
6402001		G2"	688.05

Technical Specifications

- Setting range: 0 to 8 bar
- Degree of filtration: 20µm
- Maximum input pressure: 13 bar
- Flow rate at 6.3 bar ΔP 0.5 bar: 1600 Nl/min
- Maximum temperature: +50°C
- Weight: 1kg
- Pressure gauge port: G1/8"



Filter Regulator, 200 Series

BSPP

Code	P52	Thread BSPP	Price
3483008		G1/4"	86.45
3583008		G3/8"	86.45
3683008		G1/2"	86.45

FRLs, ‘Skillair’

Technical Specifications

- Setting range: 0 to 8 bar
- Degree of filtration: 20µm
- Maximum input pressure: 13 bar
- Flow rate at 6.3 bar: 3500 Nl/min
- ΔP 0.5 bar: 57 scfm
- Maximum temperature: +50°C
- Weight: 1.8kg
- Pressure gauge port: G1/8”



Filter Regulator, 300 Series

BSPP

Code	P52	Thread BSPP	Price
4483005		G1/2”	125.40
4583005		G3/4”	125.40
4683005		G1”	125.40

Technical Specifications

- Bowl capacity: 160
- Maximum input pressure: 13 bar
- Flow rate at 6.3 bar: 3500 Nl/min
- Maximum temperature: +50°C
- Weight: 1.4kg



Lubricator, 300 Series

BSPP

Code	P52	Thread BSPP	Price
4481001		G1/2”	81.20
4581001		G3/4”	84.05
4681001		G1”	84.05

Technical Specifications

- Bowl capacity: 95
- Maximum input pressure: 13 bar
- Flow rate at 6.3 bar: 2200 Nl/min
- Maximum temperature: +50°C
- Weight: 0.7kg



Lubricator, 200 Series

BSPP

Code	P52	Thread BSPP	Price
3481001		G1/4”	57.35
3581001		G3/8”	57.35
3681001		G1/2”	57.35

Technical Specifications

- Type of lubrication: mist
- Bowl capacity: 800
- Maximum input pressure: 13 bar
- Flow rate at 6.3 bar:
  18.000 (G1.1/2”) Nl/min, 21.000 (G2”) Nl/min
- Maximum temperature: +50°C
- Weight: 4.9kg (G1.1/2”), 5.7kg (G2”)



Lubricator, 400 Series

BSPP

Code	P52	Thread BSPP	Price
6381001		G1.1/2”	618.75
6481001		G2”	618.75

FRLs, ‘Skillair’

Technical Specifications

- Maximum inlet pressure (solenoid version): 3 bar
- Maximum inlet pressure: 13 bar
- Flow rate at 6.3 bar: 24000 Nl/min
- Maximum temperature at 1 MPa, 10 bar (145 psi): +50°C
- Weight: 0.8kg



Manual Shut-off Valve, 200 Series

BSPP

Code	P52	Thread BSPP	Price
3470001		G1/4”	82.65
3570001		G3/8”	82.65
3670001		G1/2”	82.65

Technical Specifications

- Setting range: 0 to 8 bar
- Degree of filtration: 20µm
- Maximum inlet pressure: 13 bar
- Flow rate at 6.3 bar: 1300 Nl/min
- Maximum temperature: +50°C
- Weight: 1.5kg



Filter + Regulator + Lubricator, 200 Series

BSPP

Code	P52	Thread BSPP	Price
3482008		G1/4”	163.20
3582008		G3/8”	163.20
3682008		G1/2”	163.20

Technical Specifications

- Maximum inlet pressure (solenoid version): 2 bar
- Maximum inlet pressure: 13 bar
- Flow rate at 6.3 bar: 32000 Nl/min
- Maximum temperature at 1 MPa, 10 bar (145 psi): +50°C
- Weight: 1.2kg



Manual Shut-off Valve, 300 Series

BSPP

Code	P52	Thread BSPP	Price
4470001		G1/2”	91.15
4570001		G3/4”	91.15
4670001		G1”	91.15

Technical Specifications

- Setting range: 0 to 8 bar
- Degree of filtration: 20µm
- Maximum inlet pressure: 13 bar
- Flow rate at 6.3 bar: 2500 Nl/min
- Maximum temperature: +50°C
- Weight: 2.9kg



Filter + Regulator + Lubricator, 300 Series

BSPP

Code	P52	Thread BSPP	Price
4482005		G1/2”	238.95
4582005		G3/4”	238.95
4682005		G1”	238.95

FRLs, ‘Skillair’

Technical Specifications

- Setting range: 0 to 8 bar
- Degree of filtration: 20µm
- Maximum inlet pressure: 13 bar
- Flow rate at 6.3 bar: 1200 Nl/min
- Maximum temperature: +50°C
- Weight: 1.35kg



Filter Regulator + Lubricator, 200 Series

BSPP

Code	P52	Thread BSPP	Price
3484008		G1/4”	142.65
3584008		G3/8”	142.65
3684008		G1/2”	142.70

Technical Specifications

- Setting range: 0 to 8 bar
- Degree of filtration: 20µm
- Maximum inlet pressure: 13 bar
- Flow rate at 6.3 bar: 2300 Nl/min
- Maximum temperature: +50°C
- Weight: 2.7kg



Filter Regulator + Lubricator, 300 Series

BSPP

Code	P52	Thread BSPP	Price
4484005		G1/2”	205.10
4584005		G3/4”	205.10
4684005		G1”	205.10



Solenoid Coil, 200 Series

Form B/Industrial, 22mm Coil

Code	P40	Voltage	Price
W0215000101		24V DC 2W	13.90
W0215000111		24V AC	13.90
W0215000121		110V AC	13.90
W0215000131		230V AC	13.90

M1NS2000: Socket Connector, Form B, see section 09 for pricing.



Solenoid Coil, 300 Series

Form B/Industrial, 30mm Coil

Code	P40	Voltage	Price
W0210010100		24V DC 2W	12.50
W0210011100		24V AC	12.50
W0210012100		110V AC	12.50
W0210013100		230V AC	12.50

G1NU2000: Socket Connector, Form A, see section 09 for pricing.



Mounting Bracket

To Suit 200 & 300 Series

Code	P11	To Suit Series	Price
9400701		200	5.30
9400702		300	6.30

FRLs, ‘ONE’ Air Treatment Unit

In the world of pneumatics, which is considered mature, it is rare to encounter completely new and different products.

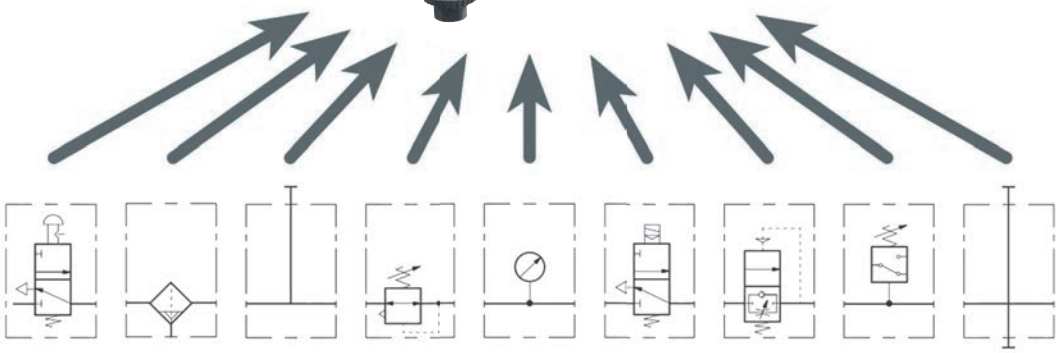
ONE is a compressed air treatment unit with a high degree of integration, that encompassed numerous pneumatic functions.
In fact, it contains so many innovations that a single patent is not enough to safeguard it against imitation – three separate patent applications have been registered with a total of 39 claims.
This unit is so innovative that it won the international novelty award at Fluidtrons Compomac.

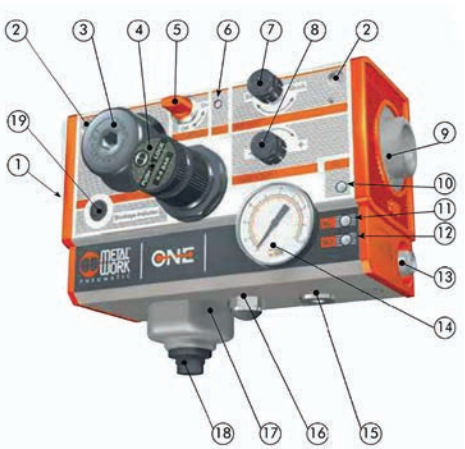
ONE has a single high-performance valve on the main row that handles all the functions from regulation to relief. It is controlled by a high-precision pilot regulator with controlled relief, in series with the manual on-off valve, the electric valve and the progressive actuator. Unification of the valve has led to a significant reduction in overall dimensions, enhanced capacity, precision and response speed.

The **ONE** single unit houses the threaded ports, filter, condensate drain, pressure regulator, shut-off valve, soft start valve, pressure switch and three supplementary air intakes.

The single unit houses the threaded ports, filter, condensate drain, pressure regulator, shut-off valve, soft start valve, pressure switch and three supplementary air intakes.







1. Air intake, with swivel threaded port
2. Fixing hole
3. Access to filter cartridge
4. Pressure regulation
5. Manual override (shut-off valve, electrical)
6. Soft start valve regulation
7. Switching pressure regulation
8. Air outlet with swivel threaded port
9. LED signalling unit, ON
10. LED signalling pressure below the value set on pressure switch
11. LED signalling pressure over the value set on pressure switch
12. 5-pin M12x1 electrical connector
13. Pressure gauge
14. 1/4” air intake; another regulated air intake and a filtered non-regulated air intake are situated on the top
15. Air exhaust with a G1/4” silencer
16. Condensate tank
17. Condensate drain
18. Clogged filter signal

Other versions and further technical information available on request

‘ONE’ Integrated Compressed Air Treatment Unit

BSPP

Code P52	Version	Air Inlet/Outlet BSPP	Micron µm	Clogged Filter Signal	Condensate Drain	Pressure Range Bar	Valves	Pressure Switch	Price
543211881300	Electric*	1/2”	20	Yes	Automatic	0.5 to 8	Padlock and APR	Yes	**391.15**

*A pressure switch version and/or electric V3V and/or electric progressive actuator.

Micro FRL Units

Technical Specifications

- Maximum pressure: 10 bar
- Ambient and fluid temperature range: +5ºC to +60ºC
- Filtration: 25µm
- Recommended oil: Turbine No.1, Oil ISOVG32
- Container material: polycarbonate
- Range: 0.5 to 8 bar

Micro Filter + Regulator + Lubricator Set

M5 Ports



Code	P12	Price
M-AC1000-M5		54.55

Micro Filter Regulator

M5 Ports



Code	P12	Price
M-AW1000-M5		32.60

Micro Regulator

M5 Ports



Code	P12	Price
M-AR1000-M5		25.35

Micro Filter Regulator + Lubricator Set

M5 Ports



Code	P12	Price
M-AC1010-M5		51.15

Micro Filter

M5 Ports



Code	P12	Price
M-AF1000-M5		14.50

Pressure Gauge

To Suit Micro FRLs, 27mm



Code	P12	Pressure Range bar	Price
PG-27-10-R1		0 to 10	9.00

Micro Lubricator

M5 Ports



Code	P12	Price
M-AL1000-M5		15.10

FRL Units

Technical Specifications

- Maximum pressure: 15 bar
- Adjustment range: 0.5 to 8 bar
- Filtration: 40µm



Filter, 2000 Series

Semi-auto, BSPP

Code	S14	Thread BSPP	Flow Rate m³/min	Max Capacity cm³	Price
AF2000-02-ESG		G1/4"	0.65	12	17.35

Filter, 3000 Series

Semi-auto, BSPP

Code	S14	Thread BSPP	Flow Rate m³/min	Max Capacity cm³	Price
AF3000-02-ESG		G1/4"	1.1	45	21.25
AF3000-03-ESG		G3/8"	1.5	45	21.25

Filter, 4000 Series

Semi-auto, BSPP

Code	S14	Thread BSPP	Flow Rate m³/min	Max Capacity cm³	Price
AF4000-04-ESG		G1/2"	2.7	80	38.20

Filter, 3000 Series

Fully Auto, BSPP

Code	S14	Thread BSPP	Flow Rate m³/min	Max Capacity cm³	Price
AF3000-02-ASG		G1/4"	1.1	45	31.90
AF3000-03-ASG		G3/8"	1.5	45	31.90

Filter, 4000 Series

Fully Auto, BSPP

Code	S14	Thread BSPP	Flow Rate m³/min	Max Capacity cm³	Price
AF4000-04-ASG		G1/2"	2.7	80	38.85



Pressure Regulator, 2000 Series

BSPP

Code	S14	Thread BSPP	Flow Rate m³/min	Price
AR2000-02-G		G1/4"	1	27.95

Pressure Regulator, 3000 Series

BSPP

Code	S14	Thread BSPP	Flow Rate m³/min	Price
AR3000-02-G		G1/4"	2.1	35.10
AR3000-03-G		G3/8"	2.8	44.30

Pressure Regulator, 4000 Series

BSPP

Code	S14	Thread BSPP	Flow Rate m³/min	Price
AR4000-04-G		G1/2"	5	44.30

For Fittings



See pages 356-378

FRL Units

Technical Specifications

- Maximum pressure: 15 bar
- Adjustment range: 0.5 to 8 bar
- Filtration: 40µm



Filter Regulator, 2000 Series

Semi-auto, BSPP

Code	S14	Thread BSPP	Flow Rate m³/min	Max Capacity cm³	Price
AW2000-02-ESG		G1/4"	1.2	12	32.60

Filter Regulator, 3000 Series

Semi-auto, BSPP

Code	S14	Thread BSPP	Flow Rate m³/min	Max Capacity cm³	Price
AW3000-02-ESG		G1/4"	2.2	45	51.40
AW3000-03-ESG		G3/8"	2.5	45	51.40

Filter Regulator, 4000 Series

Semi-auto, BSPP

Code	S14	Thread BSPP	Flow Rate m³/min	Max Capacity cm³	Price
AW4000-04-ESG		G1/2"	4.5	80	67.30

Filter Regulator, 3000 Series

Fully Auto, BSPP

Code	S14	Thread BSPP	Flow Rate m³/min	Max Capacity cm³	Price
AW3000-02-ASG		G1/4"	2.2	45	62.00
AW3000-03-ASG		G3/8"	2.5	45	62.00

Filter Regulator, 4000 Series

Fully Auto, BSPP

Code	S14	Thread BSPP	Flow Rate m³/min	Max Capacity cm³	Price
AW4000-04-ASG		G1/2"	4.5	80	77.95



Lubricator, 2000 Series

BSPP

Code	S14	Thread BSPP	Flow Rate m³/min	Price
AL2000-02-G		G1/4"	0.6	20.25

Lubricator, 3000 Series

BSPP

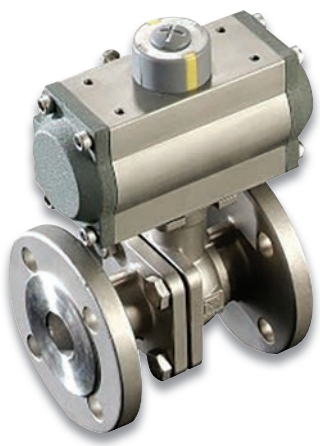
Code	S14	Thread BSPP	Flow Rate m³/min	Price
AL3000-02-G		G1/4"	1.2	33.10
AL3000-03-G		G3/8"	1.8	33.10

Lubricator, 4000 Series

BSPP

Code	S14	Thread BSPP	Flow Rate m³/min	Price
AL4000-04-G		G1/2"	2.6	37.55

For Valves



See pages 255-267

FRL Units

Technical Specifications

- Maximum pressure: 15 bar
- Adjustment range: 0.5 to 8 bar
- Filtration: 40µm



Filter + Regulator + Lubricator, 2000 Series

Semi-auto, BSPP

Code	S14	Thread BSPP	Flow Rate m³/min	Max Capacity cm³	Price
AC2000-02-ESG		G1/4"	1.2	12	59.85



Filter Regulator + Lubricator, 2000 Series

Semi-auto, BSPP

Code	S14	Thread BSPP	Flow Rate m³/min	Max Capacity cm³	Price
AC2010-02-ESG		G1/4"	1.2	12	52.75

Filter + Regulator + Lubricator, 3000 Series

Semi-auto, BSPP

Code	S14	Thread BSPP	Flow Rate m³/min	Max Capacity cm³	Price
AC3000-02-ESG		G1/4"	2.2	45	91.05
AC3000-03-ESG		G3/8"	2.5	45	91.05

Filter Regulator + Lubricator, 3000 Series

Semi-auto, BSPP

Code	S14	Thread BSPP	Flow Rate m³/min	Max Capacity cm³	Price
AC3010-02-ESG		G1/4"	2.2	45	82.20
AC3010-03-ESG		G3/8"	2.5	45	82.20

Filter + Regulator + Lubricator, 4000 Series

Semi-auto, BSPP

Code	S14	Thread BSPP	Flow Rate m³/min	Max Capacity cm³	Price
AC4000-04-ESG		G1/2"	4.5	80	112.60

Filter Regulator + Lubricator, 4000 Series

Semi-auto, BSPP

Code	S14	Thread BSPP	Flow Rate m³/min	Max Capacity cm³	Price
AC4010-04-ESG		G1/2"	4.5	80	104.45

Filter + Regulator + Lubricator, 3000 Series

Fully Auto, BSPP

Code	S14	Thread BSPP	Flow Rate m³/min	Max Capacity cm³	Price
AC3000-02-ASG		G1/4"	2.2	45	101.70
AC3000-03-ASG		G3/8"	2.5	45	101.70

Filter Regulator + Lubricator, 3000 Series

Fully Auto, BSPP

Code	S14	Thread BSPP	Flow Rate m³/min	Max Capacity cm³	Price
AC3010-02-ASG		G1/4"	2.2	45	92.80
AC3010-03-ASG		G3/8"	2.5	45	92.80

Filter + Regulator + Lubricator, 4000 Series

Fully Auto, BSPP

Code	S14	Thread BSPP	Flow Rate m³/min	Max Capacity cm³	Price
AC4000-04-ASG		G1/2"	4.5	80	123.20

Filter Regulator + Lubricator, 4000 Series

Fully Auto, BSPP

Code	S14	Thread BSPP	Flow Rate m³/min	Max Capacity cm³	Price
AC4010-04-ASG		G1/2"	4.5	80	115.10

FRL Units

Technical Specifications

- Heavy Duty
- Metal Construction
- 20 micron filtration as standard
- Modular Compact Design
- Semi-auto drain as standard
- Metal guard bowl protection
- Comes fully assembled

Applications

- Construction
- Agriculture
- Mining
- OEM machine building
- Automotive
- Rail
- Industrial

Working Pressure:

- 1.5 bar to 8.5 bar

Working Temperature:

- -10°C to +60°C



Filter, 5000 Series

BSPP

Code S14	Thread BSPP	Flow Rate LPM	Price
AF5000-06-ASG	3/4"	5000	35.40
AF5000-10-ASG	1"	5000	35.40



Lubricator, 5000 Series

BSPP

Code S14	Thread BSPP	Flow Rate LPM	Price
AL5000-06-G	3/4"	5000	41.30
AL5000-10-G	1"	5000	41.30



Regulator, 5000 Series

Supplied with Mounting Bracket & Gauge, BSPP

Code S14	Thread BSPP	Flow Rate LPM	Price
AR5000-06-G	3/4"	5000	37.40
AR5000-10-G	1"	5000	37.40



Filter + Regulator + Lubricator, 5000 Series

Supplied with Mounting Bracket & Gauge, BSPP

Code S14	Thread BSPP	Flow Rate LPM	Price
AC5000-06-ASG	3/4"	5000	129.20
AC5000-10-ASG	1"	5000	129.20



Filter Regulator, 5000 Series

Supplied with Mounting Bracket & Gauge, BSPP

Code S14	Thread BSPP	Flow Rate LPM	Price
AW5000-06-ASG	3/4"	5000	58.40
AW5000-10-ASG	1"	5000	58.40



Filter Regulator + Lubricator, 5000 Series

Supplied with Mounting Bracket & Gauge, BSPP

Code S14	Thread BSPP	Flow Rate LPM	Price
AC5010-06-ASG	3/4"	5000	106.25
AC5010-10-ASG	1"	5000	106.25

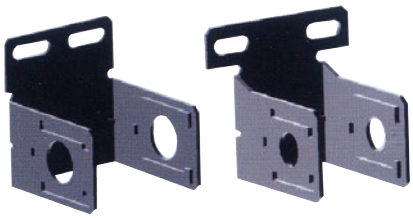
FRL Unit Accessories



Accessories

L Bracket

Code	S14	To Suit Series	Price
B3100		2000	1.80
B3300		3000	1.80
B3400		4000	1.80
B3500		5000	1.85



Accessories

C Bracket

Code	S14	To Suit Series	Price
B100		2000	2.15
B300		3000	2.15
B400		4000	2.15



Accessories

T Bracket

Code	S14	To Suit Series	Price
B1000		2000	0.75
B3000		3000	8.20
B4000		4000	7.40
B5000		5000	5.70



Accessories

Gauge, 27mm

Code	S14	Pressure Range bar	Price
GS-27-G		0 to 10	6.35



Accessories

Float Drain

Code	S14	To Suit Series	Price
AD3000		3000 & 4000	25.35

Standard Series Pressure Regulators

Technical Specifications

- Pressure regulator for inlet pressure up to 50 bar (725 psi)
- Outlet pressure is controlled by a rubber diaphragm
- Balanced main valve
- For use in potentially explosive atmosphere zones: 1, 21, 2, 22 (not applicable in mines and zone 0)
- EAC-EX TP TC 012/2011 versions for the Russian market are available on request
- Complies with 2014/68/EU PED directive
- Gauge for outlet pressure (accuracy class 1.6)



Pressure Regulator, Brass

Maximum Inlet Pressure 50 bar

Code	P18	Thread BSP	Price
R114-BR		G1/4"	191.10
R138-BR		G3/8"	191.10
R112-BR		G1/2"	191.10
R121-BR		G1/2" - High Flow	261.00

Technical Specifications

- Pressure regulator for inlet pressure up to 30 bar (435 psi)
- Connection ports
- Outlet pressure is controlled by a rubber diaphragm
- Balanced main valve
- EAC-EX TP TC 012/2011 versions for the Russian market are available on request
- Complies with 2014/68/EU PED directive
- Gauge for outlet pressure (accuracy class 1.6)



Pressure Regulator, Aluminium

Maximum Inlet Pressure 30 bar

Code	P18	Thread BSP	Price
R123-34-AL		G3/4"	273.20
R123-1-AL		G1"	276.20

Technical Specifications

- Pressure regulator for inlet pressure up to 50 bar (725 psi) in the standard version
- Outlet pressure, up to 15 bar (217 psi), is controlled by a rubber diaphragm; greater outlet pressures are controlled by a piston
- Balanced main valve
- ATEX 2014/34/EU version also available
- For use in potentially explosive atmospheres zones: 1, 21, 2, 22 (not applicable in mines and zone 0)
- EAC-EX TP TC 012/2011 versions for the Russian market are available on request
- Complies with 2014/68/EU PED directive
- Gauge for outlet pressure (accuracy class 1.6)



Pressure Regulator, Brass

Maximum Inlet Pressure 50 bar/Piston Controlled

Code	P18	Thread BSP	Price
R123-1-BR		G1"	726.85
R123-34-BR		G3/4"	760.75
R130-12-BR		G1.1/2"	1788.00
R130-2-BR		G2"	1788.00

Technical Specifications

- Pressure regulator for inlet pressure up to 30 bar (435 psi)
- Connections by flanges screwed to the body
- Outlet pressure is controlled by an aluminium piston
- EAC-EX TP TC 012/2011 versions for the Russian market are available on request
- Complies with 2014/68/EU PED directive
- Gauge for outlet pressure (accuracy class 1.6)



Pressure Regulator, Aluminium

Maximum Inlet Pressure 30 bar/Piston Controlled

Code	P18	Thread BSP	Price
R130-12-AL		G1.1/2"	781.75
R130-2-AL		G2"	781.75

Filter Regulators, Modular Series

Technical Specifications

- Filter-regulator for inlet pressure up to 30 bar (435 psi)
- Inlet and outlet connections by flanges screwed to the body
- Modular design to couple with same series lubricator
- Outlet pressure is controlled by an aluminium piston
- The main valve is balanced
- Aluminium body and bowl machined from solid bar
- Filtration rate: 5 or 50 µm
- Overpressure relieving function
- Automatic condensate drain SAI or semi-automatic SS for pressure up to 16 bar, manual drain or cap for pressure up to 30 bar
- The product complies with the directive 2014/68/EU PED
- Available the EAC-EX TP TC 012/2011 version for the Russian market
- Available units composed of Filter-Regulator + Lubricator





Filter Regulator, Zinc Alloy

Maximum Inlet Pressure 30 bar/20 Micron Filtration

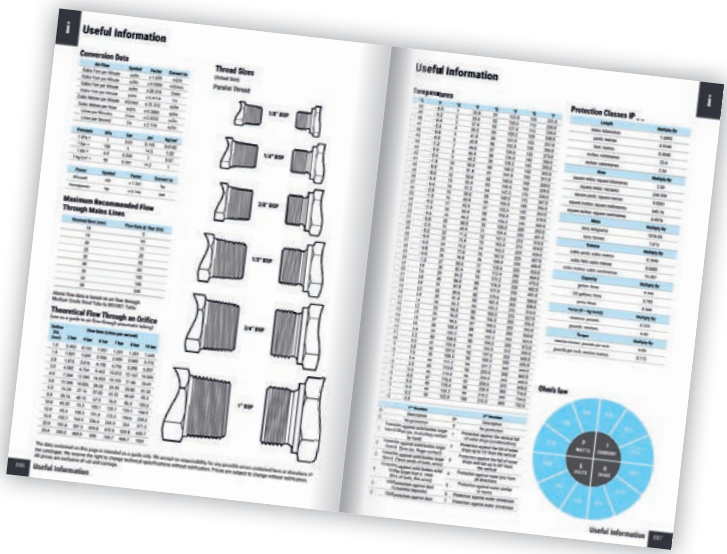
Code	P18	Thread BSP	Price
FR18MD		G1/8"	45.40
FR14MD		G1/4"	45.40

Filter Regulator, Zinc Alloy

Maximum Inlet Pressure 30 bar/50 Micron Filtration

Code	P18	Thread BSP	Price
FR38MD		G3/8"	89.10
FR12MD		G1/2"	89.75

For Useful Information



See pages 886-887

Technical Specifications

- Group filter-regulator + oil fog lubricator, for inlet pressure up to 16 bar (232 psi)
- Inlet and outlet connections 1.1/2" F and 2"F by flanges screwed to the body
- Cast aluminium body and bowl
- ID Insert Deal modular line 15/20 MD
- Piston operation filter-regulator with balanced valve and relieving overpressure function
- 50 µm bronze cartridge and semi-automatic condensate drain
- Different filtration rate and manual or automatic drain available on request
- Lubricator has drip rate adjustment and transparent dome to show oil supply
- ATEX version available
- Brand CE ExII2GDcIICX
- For use in potentially explosive atmosphere zones: 1, 21, 2, 22 (not for mines and zone 0)
- The product complies with the 97/23/CE PED directive



Filter-Regulator + Oil Fog Lubricator

Maximum Inlet Pressure 16 bar/20 Micron Filtration

Code	P18	Thread BSP	Price
FR+L18MD		G1/8"	102.70
FR+L14MD		G1/4"	102.70



Filter-Regulator + Oil Fog Lubricator

Maximum Inlet Pressure 16 bar/50 Micron Filtration

Code	P18	Thread BSP	Price
FR+L38MD		G3/8"	158.10
FR+L12MD		G1/2"	158.10

Technical Specifications

- Filter-regulator combined with a lubricator, for inlet pressure up to 16 bar (232 psi)
- Inlet and outlet connections
- Zinc alloy body, plastic bonnet
- ID Insert Deal modular line 14/18 MD with holes for wall mounting
- The filter has 20 µm cartridge and semi-automatic condensate drain
- Diaphragm pressure-regulator with relieving overpressure function
- Lubricator has drip-rate adjustment and transparent dome to show oil supply
- The product complies with the 97/23/CE PED directive



Filter + Regulator + Oil Fog Lubricator

Maximum Inlet Pressure 16 bar/ 20 Micron Filtration

Code	P18	Thread BSP	Price
FRL18MD		G1/8"	110.55
FRL14MD		G1/4"	110.55

Technical Specifications

- Group filter + regulator + oil fog lubricator, for inlet pressure up to 16 bar (232 psi)
- Inlet and outlet connections 1/2" F and 3/8" F in the body
- Aluminium cast body and bowl
- ID Insert Deal modular line 12/38 MD with holes for wall mounting
- Filter with bronze 50 µm cartridge
- Condensate semi-automatic drain
- Available on request different filtration rate and manual or automatic drain
- Diaphragm operation pressure regulator with balanced valve and relieving overpressure function
- Lubricator has drip rate adjustment and transparent dome to show oil supply
- ATEX version available
- Brand CE ExII2GDcIICX
- For use in potentially explosive atmosphere zones: 1, 21, 2, 22 (not applicable in mines and zone 0)
- The product complies with the 97/23/CE PED directive



Filter + Regulator + Oil Fog Lubricator

Maximum Inlet Pressure 16 bar/50 Micron Filtration

Code	P18	Thread BSP	Price
FRL38MD		G3/8"	174.35
FRL12MD		G1/2"	174.35

Pressure Regulators, Modular Series

Technical Specifications

- Modular pressure regulator for inlet pressure up to 20 bar (290 psi)
- Inlet and outlet connections 1/4" F and 1/8" F in the body
- Outlet pressure is controlled by a rubber diaphragm
- Adjusting knob for pressure regulation with lock system
- Overpressure relieving function
- Modular design to couple with same series: filter and lubricator
- Holes for wall mounting
- The product complies with the directive 97/23/CE PED
- Available units composed of Filter + Regulator + Lubricator with wall mounting possibility



Pressure Regulator, Zinc Alloy

Maximum Inlet Pressure 20 bar

Code	P18	Thread BSP	Price
R18MD		G1/8"	28.45
R14MD		G1/4	29.90
R38MD		G3/8"	74.25
R12MD		G1/2"	76.75

Filters, Modular Series

Technical Specifications

- Filter for inlet pressure up to 30 bar (435 psi)
- Inlet and outlet connections G 1/4 – F and G 1/8 – F
- Zinc alloy body, zinc alloy or transparent plastic bowl
- Modular design to couple with same series: regulator and lubricator
- Holes for wall mounting
- Standard filtration rate 20 µm, 5 µm or coalescing (0.01 µm/99.99%) available on request
- Manual or semi-automatic condensate drain available
- ATEX version available
- Brand CE ExII2GDcIICX
- For use in potentially explosive atmospheres, zones: 1, 21, 2, 22 (not for mines and zone 0)
- The product complies with the directive 97/23/CE PED
- Available the EAC-EX TP TC 012/2011 versions for the Russian market
- Available units composed of Filter+Regulator + Lubricator



Technical Specifications

- Filter for inlet pressure up to 30 bar (435 psi)
- Inlet and outlet connections 1/2" F and 3/8" F
- ID Insert Deal modular design 12 MD, holes for wall mounting
- Available units composed of Filter+Regulator + Lubricator
- Cast aluminium body and bowl
- Standard filtration rate 50 µm, 5 µm or coalescing (0.01 µm/99.99%) cartridges available on request
- Condensation drain: automatic SAI, semi-automatic SS or manual drain SM
- EAC-EX TP TC 012/2011 versions for the Russian market also available
- The product complies with the directive 2014/68/EU PED



Filter, Zinc Alloy

Maximum Inlet Pressure 30 bar/20 Micron Filtration

Code	P18	Thread BSP	Price
F18MD		G1/8"	31.60
F14MD		G1/4	31.60

Filter, Aluminium

Maximum Inlet Pressure 30 bar/50 Micron Filtration

Code	P18	Thread BSP	Price
F38MD		G3/8"	50.55
F12MD		G1/2"	51.70

Modular Oil Fog Lubricators

Technical Specifications

- Oil fog lubricator for inlet pressure up to 16 bar (232 psi)
- Inlet and outlet connections 1/4" F and 1/8" F
- Modular design to couple with same series: filter, regulator or filter-regulator
- Holes for wall mounting
- The lubricator adds oil fog to the air stream that flows inside, is installed upstream of air operated tools and equipment
- The oil flow is proportional to the air flow, by increasing the air flow the oil flow also increases, maintaining the right proportion between air and oil
- The product complies with the directive 97/23/CE PED
- Available units composed of Filter-Regulator + Lubricator or Filter + Regulator + Lubricator



Oil Fog Lubricator, Zinc Alloy

Maximum Inlet Pressure 16 bar

Code	P18	Thread BSP	Price
L18MD		G1/8"	47.40
L14MD		G1/4"	47.40

Technical Specifications

- Oil fog lubricator for inlet pressure up to 30 bar (435 psi)
- Inlet and outlet ports 1/2" and 3/8" in the body
- Modular design, holes for wall mounting
- The lubricator adds oil fog to the air stream that flows inside, is installed upstream of air operated tools and equipment
- The oil flow is proportional to the air flow, by increasing the air flow the oil flow also increases, maintaining the right proportion between air and oil
- Available units composed of Filter + Regulator + Lubricator or Filter-regulator + Lubricator
- EAC-EX TP TC 012/2011 versions for the Russian market also available
- The product complies with the directive 2014/68/EU PED



Oil Fog Lubricator, Zinc Alloy

Maximum Inlet Pressure 30 bar

Code	P18	Thread BSP	Price
L38MD		G3/8"	64.75
L12MD		G1/2"	64.75

TECHMATIC™

new

Handykit

New range of Fittings Kits
NOW available



See pages 375-378

Precision Regulators

Technical Specifications

- Precision pressure regulator for inlet pressure up to 12 bar (174 psi)
- Inlet and outlet connections 1/4" F
- High pressure stability, regulated pressure is held constant over substantial changes in flow and inlet pressure
- High exhaust capacity by an integral relief valve
- Suitable for pneumatic servo system requiring a constant supply pressure
- Double diaphragm and double chamber regulator, continuous outlet pressure drain
- The product complies with the directive 97/23/CE PED



Precision Regulator, Aluminium

Maximum Inlet Pressure 12 bar

Code	P18	Thread BSP	Outlet Pressure bar	Price
R214M		G1/4"	0.5-8	207.55

Technical Specifications

- Precision pressure regulator for inlet pressure up to 20 bar (290 psi)
- Inlet and outlet connections G 1/8 F, G 3/8 F and G 1/2 F
- High pressure stability, regulated pressure is held constant over substantial changes in flow and inlet pressure
- High exhaust capacity by an integral relief valve
- Suitable for pneumatic servo system requiring an constant supply
- Double diaphragm and double chamber regulator, continuous outlet pressure drain
- The product complies with the directive 97/23/CE PED

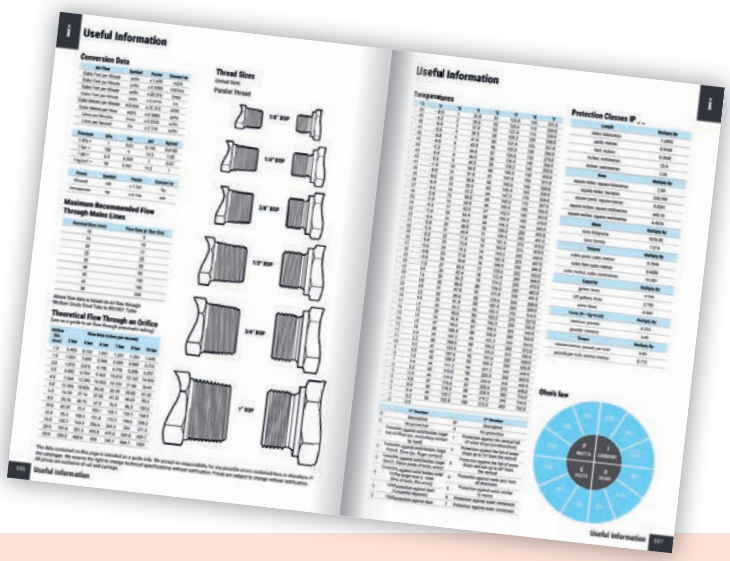


Precision Regulator, Aluminium

Maximum Inlet Pressure 20 bar

Code	P18	Thread BSP	Outlet Pressure bar	Price
R214ST		G1/4"	0.8-8	358.50
R238ST		G3/8"	0.8-8	394.10
R212ST		G1/2"	0.8-8	437.75

For Useful Information



See pages 886-887

WALKER FILTRATION

The ultimate filtration & drying technology

Walker Filtration

ALPHA SERIES FILTERS

DUPLEX FILTERS

PRO DRY DESICCANT DRYERS



Filtration

WALKER FILTRATION
The ultimate filtration & drying technology

Technical Notes

- Threaded and duplex filter housings are suitable for temperatures up to +120°C (+248°F)
- Threaded and duplex filters are manufactured from cast aluminium alloy and are PED 97/23/EC compliant for group 2 gases and carry the CE mark where applicable
- Flanged filters are fabricated from carbon steel and carry the CE mark where applicable
- Threaded connections are RP (BSP parallel to ISO 7/1 or NPT to ANSI B2.1) if supplied within North America, with the following exceptions: 50HP25 and 50HP37 are RC (BSP taper); 100HP24, 100Hp49, 350HP24 and 350HP26 are NPT
- Flanged connections are complete with mating flanges to BS4504, PN16
- For NPT connections, add the suffix NPT, e.g. A018 XA-NPT
- Flanged vessels are designed and manufactured in accordance with BS EN286 Part 1 and meet the Simple Pressure Vessels Directive
- Cross port dimensions on flanged vessels are subject to a manufacturing tolerance of +/-3mm and a squareness tolerance of 1 degree
- Filter elements should be changed every 12 months or 8,000 hours (whichever comes first)
- Activated carbon filter elements should be changed every 6 months or 1,000 hours (whichever comes first)
- Filters and water separators are suitable for use with mineral and synthetic oils, plus oil-free compressed air applications
- Dimension 'D' in general arrangement drawings refers to bowl clearance required for element change
- All ppm references are ppm by mass

Correction Factors

Pressure

For maximum flow rate, multiply model flow rate by the correction factor corresponding to the pressure.

Operating Pressure barg (psig)		0.3 (4)	0.6 (9)	1 (14.5)	2 (29)	3 (44)	4 (58)	5 (72)	6 (87)	7 (100)	8 (115)	10 (145)	12 (174)	14 (203)	16 (232)
7 barg	Correction Factor	0.21	0.29	0.38	0.53	0.65	0.76	0.84	0.92	1.00	1.07	1.19	1.31	1.41	1.51

Operating Pressure barg (psig)		4 (58)	6 (87)	8 (116)	10 (145)	12 (174)	14 (203)	16 (232)	18 (261)	20 (290)
20 barg	Correction Factor	0.45	0.55	0.63	0.71	0.77	0.84	0.90	0.95	1.00

Operating Pressure barg (psig)		4 (58)	6 (87)	8 (116)	10 (145)	15 (220)	20 (290)	30 (435)	40 (580)	50 (725)
50 barg	Correction Factor	0.14	0.22	0.28	0.34	0.47	0.56	0.70	0.85	1.00

Operating Pressure barg (psig)		20 (290)	30 (435)	40 (580)	50 (725)	60 (870)	70 (1015)	80 (1160)	90 (1300)	100 (1450)
100 barg	Correction Factor	0.45	0.57	0.68	0.80	0.84	0.88	0.92	0.96	1.00

Operating Pressure barg (psig)		50 (725)	100 (1450)	150 (2175)	200 (2900)	250 (3625)	300 (4350)	350 (5000)
350 barg	Correction Factor	0.73	0.78	0.82	0.87	0.91	0.96	1.00

Vacuum

For maximum flow rate, multiply model flow rate by the correction factor corresponding to the working vacuum.

Operating Vacuum	mbar abs	Atmospheric	900	800	700	600	500	400	300	200
	torr	760	675	600	525	450	375	300	225	150
	psia	14.7	13.0	11.6	10.2	8.7	7.3	5.8	3.3	2.9
Correction Factor		1.00	0.93	0.86	0.79	0.71	0.64	0.57	0.50	0.43

Dryers

Operating Pressure barg (psig)		4 (58)	5 (72)	6 (87)	7 (100)	8 (115)	10 (145)	12 (174)	14 (203)	16 (232)
7 barg	Correction Factor	0.62	0.75	0.87	1.00	1.12	1.37	1.62	1.87	2.12

Operating Temperature °C (°F)	20 (68)	25 (77)	30 (86)	35 (95)	40 (104)	45 (113)	50 (122)
Correction Factor	0.62	0.75	0.87	1.00	1.12	1.37	1.62

Dew Point °C (°F)	-40 (-40)	-70 (-94)
Correction Factor	1.00	0.70

BS 4575 Maximum Recommended Air Flow Rates at 7 barg (100 psig)

This standard gives guidance and recommendations to designers, manufacturers and users for what are considered to be minimum essential features of the design and construction of fluid power systems and components. BS ISO 4414: 1998 (not equivalent) closely follows the recommendations of ISO 4414 and the table below is based on that standard.

Note: Walker Filtration provide these conversion charts as a guide only.

Pressure Conversion

		Convert to:									
	Multiplying Factors	psi (lbf/in^2)	inH20	mmHg (torr)	atmos	mbar	bar	kgf/cm^2 (Kp/cm^2)	Pascal (N/m^2)	kPa (kN/m^2)	MPa MN/m^2 (N/mm^2)
Convert from:	fpsi (lbf/in^2)	1	27.6799	51.7149	0.068046	68.9476	0.06895	0.070307	6894.76	6.89476	0.0068948
	inH20	0.036127	1	1.86832	0.0024583	2.49089	0.00249	0.00254	249.089	0.24901	0.000249
	mmHg (torr)	0.019337	0.53524	1	0.0013158	1.33322	0.00133	0.0013591	133.322	0.1332	0.00133
	atmos	14.6959	406.781	760	1	1013.25	1.01325	1.03323	101.325	101.325	0.101325
	mbar	0.014504	0.401463	0.750062	0.0009869	1	0.001	0.0010197	100	0.1	0.0001
	bar	14.504	401.463	750.062	0.9869	1000	1	1.0197	1000.000	100	0.1
	$kgf (Kp/cm^2)$	14.2233	393.7	735.556	0.967841	980.665	0.980665	1	98066.5	98.0665	0.09806
	Pascal (N/m^2)	0.000145	0.004015	0.007501	0.0000099	0.01	0.00001	0.0000102	1	0.001	0.00001
	kPa 1	0.14504	4.015	7.501	0.0099	10	0.01	0.0102	1000	1	0.001
	MPa	145.4	4015	7501	9.9	10000	10	1.02	1,000,000	1000	1

Flow Rate Conversion

		Convert to:						
	Multiplying Factors	litre/sec	dm^3/sec	litre/mm	m^3/sec	m^3/min	Nm^3/hr	SCFM
Convert from:	litre/sec	1	1	60	0.001	0.06	3.6	2.118882
	dm^3/sec	1	1	60	0.001	0.06	3.6	2.11882
	litre/mm	0.016667	0.0166667	1	0.00001667	0.001	0.06	0.035315
	m^3/sec	1000	1000	60,000	1	60	3600	2118.88
	m^3/min	16.66667	16.6667	1000	0.0166667	1	60	35.315
	Nm^3/hr	0.277778	0.277778	16.6667	0.000278	0.0166667	1	0.588578
	SCFM	0.471947	0.471947	28.31682	0.000472	0.0283168	1.699	1

Recommended Air Flow Rate

Nominal Bore…		at branch line velocity of 15m/s		at branch line velocity of 15m/s	
mm	inch	dm^3/s (l/s)	SCFM	dm^3/s (l/s)	SCFM
6	1/8	1	2	3	6
8	1/4	3	6	8	17
10	3/8	5	11	12	25
15	1/2	10	21	25	53
20	3/4	17	36	40	85
32	1.1/4	50	106	125	265
40	1.1/2	65	138	160	339
50	2	100	212	250	530
80	3	240	509	600	1272
100	4	410	869	–	–
125	5	610	1293	–	–
150	6	900	1908	–	–
200	8	1600	3392	–	–
250	10	250	5300	–	–
300	12	3600	7632	–	–

WALKER FILTRATION

The ultimate filtration & drying technology

Alpha Series Filters and Elements

Filter Element Features

Double o-ring secures against contaminant by-pass.

Perforated stainless steel cylinders provide strength, rigidity and corrosion resistance.

Spiral wound inner spring on larger size elements for extra strength.

Deep bed filter media provides low operating differential pressure, resulting in improved energy efficiency.

Hydrophobic and oleophobic borosilicate customised glass fibre media for improved coalescing.

Unique anti re-entrainment layer minimises pressure losses and improves liquid removal.

Bespoke chemically treated outer drainage layer prevents oil carry-over.

New improved ultrasonic seam weld process provides greater strength.

Air distribution duct gives uniform air flow for improved filtration and low operating differential pressure.

Drop-fit self locating element with no tie rods for ease of installation, servicing and maintenance.

Corrosion resistant colour-coded end caps for easy and accurate filtration grade indication.

Lower annular location ring prevents element vibration, improves stability in reverse flow dust removal applications and improves drainage.

Certificate of Conformity supplied with every filter element.







WALKER FILTRATION

The ultimate filtration & drying technology



Filter Housing Features

Extensive range – 1/4" to 3" (BSP and NPT) and flow capacities up to 2550 Nm^3/hr.

Compact design allowing installation in confined spaces.

Modular design enables easy and simple close coupling assembly.

Aluminium pressure die-cast housing gives enhanced strength and robustness.

Advanced E-coat protection with a polyester coasting gives exceptional corrosion resistance.

Secure thread to bowl connection with full three turns to ensure safety.

Unique seal configuration ensures security of the pressure envelope.

Large reservoir to provide quiet zone for bulk oil collection.

Automatic drain with manual override fitted as standard.

Hexagon spanner locator for simple bowl removal.

Minimal clearance required for filter change and no specialist tools.

Suitable for both **mineral and synthetic oils**.







Compressed Air Quality

WALKER FILTRATION
The ultimate filtration & drying technology

Compressed Air Purity Classes ISO 8573-1

The ISO 8573 group of International Standards is used for the classification of compressed air.

It also provides the test methods and analytical techniques for each type of contaminant.

The table below summaries the maximum contaminant levels specified in ISO 8573 Part 1 (2010) for the various compressed air quality classes.

Each compressed air classification can be achieved by installing a specific filter grade or a combination of filter grades, depending upon required performance.

Purity Classification

solid particles
water
Class: 1, 2, 1
oil

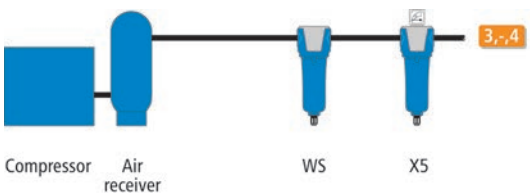
	Particles				Water		Oil
	Maximum number of particles per cubic metre as a function of particle size, d*				Vapour	Liquid*	Total Oil*
Purity Class	0.1µm < d ≤ 0.5µm	0.5µm < d ≤ 1.0µm	1.0µm < d ≤ 5.0µm Cp	Mass Concentration °C	Pressure Dew Point Cw g/m³	Concentration Liquid Water mg/m³	Liquid, Aerosol, Vapour
0	As specified by the equipment user or supplier and more stringent than Class 1						
1	≤ 20,000	≤ 400	≤ 10	–	≤ -70	–	≤ 0.01
2	≤ 400,000	≤ 6,000	≤ 100	–	≤ -40	–	≤ 0.1
3	–	≤ 90,000	≤ 1,000	–	≤ -20	–	≤ 1
4	–	–	≤ 10,000	–	≤ +3	–	≤ 5
5	–	–	≤ 100,000	–	≤ +7	–	–
6	–	–	–	0 < Cp ≤ 5	≤ +10	–	–
7	–	–	–	5 < Cp ≤ 10	–	Cw ≤ 0.5	–
8	–	–	–	–	–	0.5 < Cw ≤ 5	–
9	–	–	–	–	–	5 < Cw ≤ 10	–
X	–	–	–	Cp ≤ 10	–	Cw ≤ 10	> 5

*At reference conditions, 100kPA (1 bar [a]), 20ºC, 0 relative water vapour pressure (0% relative humidity).

Filter Grade	Grade X25	Grade X5	Grade X1	Grade XA	Grade AC
Maximum particles size class to ISO 8573-1:2010	–	Class 3	Class 2	Class 1	Class 1
Maximum oil content class to ISO 8573-1:2010		Class 4			

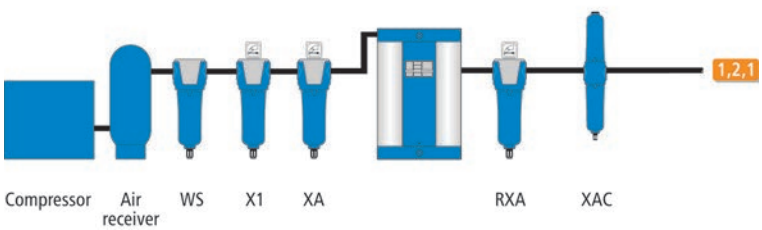
Medium Filtration

Bulk liquid and medium filtration especially designed for the removal of high concentrations of oil which contain burnt by-products such as lacquers.



High Efficiency Filtration

High efficiency sub-micron filtration to provide oil/particulate-free compressed air. This filter package offers protection to absorption dryer and provides the user with the best possible compressed air quality.



Compressed Air Standards

Walker Filtration filters and dryers are designed to meet the needs of a wide range of industries. The range aims to address the compressed air purity requirements of almost any application. Product performance is tested and validated in accordance with the latest international standards, of which the main ones are outlined below.

ISO 8573 – Compressed Air Purity Standard

ISO 8573 group of international standards comprises of nine parts, which provide classifications for the main contaminants in compressed air, and the test methods and qualitative analysis used in the determination process.

- ISO 8573-1
  Contaminants and Purity classes
- ISO 8573-2
  Test Methods for Oil Aerosol Content
- ISO 8573-3
  Test Methods for the Measurement of Humidity
- ISO 8573-4
  Test Methods for the Solid Particle Content
- ISO 8573-5
  Test Methods for Oil Vapour and Organic Solvent Content
- ISO 8573-6
  Test Methods for Gaseous Contaminant Content
- ISO 8573-7
  Test Methods for Viable Microbiological Contaminant Content
- ISO 8573-8
  Test Methods for Solid Particle Content by Mass Concentration
- ISO 8573-9
  Test Methods for Liquid Water Content

ISO 12500 – introducing a new series of International Standards for Compressed Air Filter Testing

ISO 12500 is a new group of standards for compressed air filter testing and has been introduced to complement the existing ISO 8573 series.

- ISO 12500-1 – Oil Aerosols
- ISO 12500-2 – Oil Vapours
- ISO 12500-3 – Particles
- ISO 12500-4 – Water

Other Applicable Standards

- ISO 7183
  Compressed Air Dryers – Specifications and Testing

This standard identifies the required test methods for measuring dryer performance parameters for different types of compressed air dryers which include:

- Pressure dew point
- Flow rate
- Pressure drop
- Compressed air loss
- Power consumption
- Noise emission methods

Filtration

WALKER FILTRATION
The ultimate filtration & drying technology

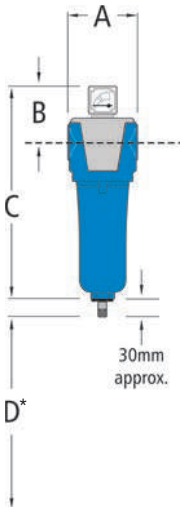
For heavy duty applications, the alpha series grade X25 micron threaded filter range removes high concentrations of dirt and liquid from compressed air.

Technical Notes

- Direction of air flow is inside to out through the filter element
- Pop-up indicators (65DPUG) are fitted to models A028 X25 to A058 X25 as standard
- Differential pressure indicators (65DPIG) are fitted to models A059 X25 to A390 X25 as standard
- Threaded filters are fitted with float operated automatic drain valves DVAS16C on models A0818 X25 to A058 X25 and DVAS16 on models A059 X25 to A39 X25

Specification

Grade	X25	
Particle Removal	25 micron	
Maximum Oil Carry-over at +20°C (+68°F)	10mg/m³	8.2ppm
Maximum Temperature	up to +120°C	up to +248°F
Maximum Working Pressure	16 barg	232 psig
Element End Cap Colour	Black	



A018 X25 to A390 X25
A391 X25 to A12824 X25
*D = height required to unscrew bowl

Dimensions mm

Filter	A	B	C	D
A028 X 5	70	65	231	70
A038 X25	70	65	231	70
A058 X25	70	65	272	70
A059 X25	100	105	346	80
A078 X25	100	105	346	80
A079 X25	100	105	466	80
A108 X25	100	105	466	80
A109 X25	100	105	466	80
A128 X25	122	112	530	80
A158 X25	122	112	530	80
A159 X25	146	122	552	100
A208 X25	146	122	552	100
A209 X25	146	122	855	100
A254 X25	210	137	665	100
A340 X25	210	137	665	100
A360 X25	210	137	885	100
A390 X25	210	137	1045	100



Coarse Filtration, X25

Filter, BSPP

Code	M08	Thread BSPP	Flow Rate Nm³/h	Flow Rate SCFM	Weight Kg	Price
A028X25		G1/4"	42.5	25	0.6	189.70
A038X25		G3/8"	59.5	35	0.6	214.65
A058X25		G1/2"	85.0	50	0.7	259.60
A059X25		G1/2"	119	70	1.6	328.25
A078X25		G3/4"	144	85	1.6	376.90
A079X25		G3/4"	212	125	2.0	446.80
A108X25		G1"	229	135	2.0	423.10
A109X25		G1"	297	175	2.0	536.65
A128X25		G1.1/4"	476	280	2.8	634.00
A158X25		G1.1/2"	545	320	2.8	761.30
A159X25		G1.1/2"	680	400	4.2	761.30
A208X25		G2"	765	450	4.2	1048.35
A209X25		G2"	1190	700	6.3	1285.45
A254X25		G2.1/2"	1445	850	8.5	1522.60
A340X25		G3"	1530	900	8.5	1643.60
A360X25		G3"	2125	1250	10.5	1934.40
A390X25		G3"	2550	1500	12.0	2250.20

Replacement Elements, X25

Spares

Code	M14	To Suit Filter	Price
E0406X25		A028 X25	54.45
E0407X25		A038 X25	61.95
E0413X25		A058 X25	75.80
E0613X25		A059 X25 & A078 X25	100.90
E0620X25		A079 X25 & A108 X25	108.85
E0625X25		A109 X25	131.30
E0730X25		A128 X25 & A158 X25	155.80
E0830X25		A159 X25 & A208 X25	179.30
E0860X25		A209 X25	231.55
E1140X25		A254 X25 & A340 X25	283.90
E1160X25		A360 X25	373.50
E1175X25		A390 X25	419.35

Filtration

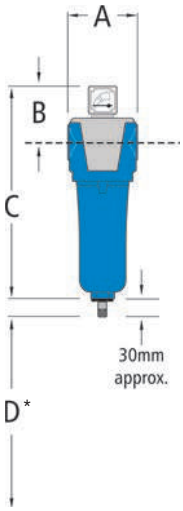
The range of alpha series grade X5 micron coalescing filters are used for removing high concentrations of oil from compressed air.

Technical Notes

- Direction of air flow is inside to out through the filter element
- Pop up indicators (65DPUG) are fitted to models A028 X5 to A058 X5 as standard
- Differential pressure indicators (65DPIG) are fitted to models A059 X5 to A390 X5 as standard
- Threaded filters are fitted with float operated automatic drain valves DVAS16C on models A0818 X5 to A058 X5 and DVAS16 on models A059 X5 to A390 X5

Specification

Grade	X5	
Particle Removal	5 micron	
Maximum Oil Carry-over at +20°C (+68°F)	5mg/m³	4.1ppm
Maximum Temperature	up to +120°C	up to +248°F
Maximum Working Pressure	16 barg	232 psig
Element End Cap Colour	Green	



A018 X5 to A390 X5
A391 X5 to A12824 X5
*D = height required to unscrew bowl

Dimensions mm

Filter	A	B	C	D
A028 X5	70	65	231	70
A038 X5	70	65	231	70
A058 X5	70	65	272	70
A059 X5	100	105	346	80
A078 X5	100	105	346	80
A079 X5	100	105	466	80
A108 X5	100	105	466	80
A109 X5	100	105	466	80
A128 X5	122	112	530	80
A158 X5	122	112	530	80
A159 X5	146	122	552	100
A208 X5	146	122	552	100
A209 X5	146	122	855	100
A254 X5	210	137	665	100
A340 X5	210	137	665	100
A360 X5	210	137	885	100
A390 X5	210	137	1045	100



Medium Filtration, X5

Filter, BSPP

Code M08	Thread BSPP	Flow Rate Nm³/h	Flow Rate SCFM	Weight Kg	Price
A028X5	G1/4"	42.5	25	0.6	189.70
A038X5	G3/8"	59.5	35	0.6	214.65
A058X5	G1/2"	85.0	50	0.7	259.60
A059X5	G1/2"	119	70	1.6	328.25
A078X5	G3/4"	144	85	1.6	376.90
A079X5	G3/4"	212	125	2.0	446.80
A108X5	G1"	229	135	2.0	423.10
A109X5	G1"	297	175	2.0	536.65
A128X5	G1.1/4"	476	280	2.8	634.00
A158X5	G1.1/2"	545	320	2.8	761.30
A159X5	G1.1/2"	680	400	4.2	761.30
A208X5	G2"	765	450	4.2	1048.35
A209X5	G2"	1190	700	6.3	1285.45
A254X5	G2.1/2"	1445	850	8.5	1522.60
A340X5	G3"	1530	900	8.5	1643.60
A360X5	G3"	2125	1250	10.5	1934.40
A390X5	G3"	2550	1500	12.0	2250.20

Replacement Elements, X5

Spares

Code M14	To Suit Filter	Price
E0406X5	A028 X5	64.10
E0407X5	A038 X5	61.95
E0413X5	A058 X5	90.05
E0613X5	A059 X5 & A078 X5	84.35
E0620X5	A079 X5 & A108 X5	108.85
E0625X5	A109 X5	131.30
E0730X5	A128 X5 & A158 X5	155.80
E0830X5	A159 X5 & A208 X5	179.30
E0860X5	A209 X5	231.55
E1140X5	A254 X5 & A340 X5	283.90
E1160X5	A360 X5	373.50
E1175X5	A390 X5	419.35

Filtration

WALKER FILTRATION
The ultimate filtration & drying technology

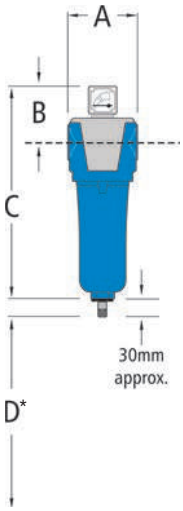
Alpha series grade X1 micron removes liquids, particles and coalesced oil aerosols down to 0.1mg/m³.

Technical Notes

- Direction of air flow is inside to out through the filter element
- Pop up indicators (65DPUG) are fitted to models A028 X1 to A058 X1 as standard
- Differential pressure indicators (65DPIG) are fitted to models A059 X1 to A390 X1 as standard
- Threaded filters are fitted with float operated automatic drain valves DVAS16C on models A0818 X1 to A058 X1 and DVAS16 on models A059 X1 to A39 X1

Specification

Grade	X1	
Particle Removal	1 micron	
Maximum Oil Carry-over at +20°C (+68°F)	0.1mg/m³	0.08ppm
Maximum Temperature	up to +120°C	up to +248°F
Maximum Working Pressure	16 barg	232 psig
Element End Cap Colour	Red	



A018 X1 to A390 X1
A391 X1 to A12824 X1
*D = height required to unscrew bowl

Dimensions mm

Filter	A	B	C	D
A028 X1	70	65	231	70
A038 X1	70	65	231	70
A058 X1	70	65	272	70
A059 X1	100	105	346	80
A078 X1	100	105	346	80
A079 X1	100	105	466	80
A108 X1	100	105	466	80
A109 X1	100	105	466	80
A128 X1	122	112	530	80
A158 X1	122	112	530	80
A159 X1	146	122	552	100
A208 X1	146	122	552	100
A209 X1	146	122	855	100
A254 X1	210	137	665	100
A340 X1	210	137	665	100
A360 X1	210	137	885	100
A390 X1	210	137	1045	100



Fine Filtration, X1

Filter, BSPP

Code M08	Thread BSPP	Flow Rate Nm³/h	Flow Rate SCFM	Weight Kg	Price
A028X1	G1/4"	42.5	25	0.6	189.70
A038X1	G3/8"	59.5	35	0.6	214.65
A058X1	G1/2"	85.0	50	0.7	259.60
A059X1	G1/2"	119	70	1.6	328.25
A078X1	G3/4"	144	85	1.6	376.90
A079X1	G3/4"	212	125	2.0	446.80
A108X1	G1"	229	135	2.0	259.60
A109X1	G1"	297	175	2.0	536.65
A128X1	G1.1/4"	476	280	2.8	634.00
A158X1	G1.1/2"	545	320	2.8	761.30
A159X1	G1.1/2"	680	400	4.2	761.30
A208X1	G2"	765	450	4.2	1048.35
A209X1	G2"	1190	700	6.3	1285.45
A254X1	G2.1/2"	1445	850	8.5	1522.60
A340X1	G3"	1530	900	8.5	1643.60
A360X1	G3"	2125	1250	10.5	1934.40
A390X1	G3"	2550	1500	12.0	2250.20

Replacement Elements, X1

Spares

Code M14	To Suit Filter	Price
E0406X1	A028 X1	54.45
E0407X1	A038 X1	61.95
E0413X1	A058 X1	75.80
E0613X1	A059 X1 & A078 X1	84.35
E0620X1	A079 X1 & A108 X1	108.85
E0625X1	A109 X1	131.30
E0730X1	A128 X1 & A158 X1	155.80
E0830X1	A159 X1 & A208 X1	179.30
E0860X1	A209 X1	231.55
E1140X1	A254 X1 & A340 X1	283.90
E1160X1	A360 X1	373.50
E1175X1	A390 X1	419.35

Filtration

WALKER FILTRATION
The ultimate filtration & drying technology

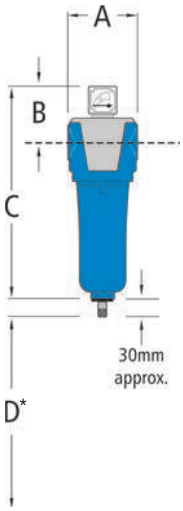
Alpha series grade XA filtration removes liquids, sub-micron particles and oil aerosols down to 0.01mg/m³. It is most often used at point of use applications to provide the highest level of filtration.

Technical Notes

- Direction of air flow is inside to out through the filter element
- Pop up indicators (65DPUG) are fitted to models A028 X5 to A058 XA as standard
- Differential pressure indicators (65DPIG) are fitted to models A059 XA to A390 XA as standard
- Threaded filters are fitted with float operated automatic drain valves DVAS16C on models A0818 XA to A058 XA and DVAS16 on models A059 XA to A390 XA

Specification

Grade	XA	
Particle Removal	0.01 micron	
Maximum Oil Carry-over at +20°C (+68°F)	5mg/m³	4.1ppm
Maximum Temperature	up to +120°C	up to +248°F
Maximum Working Pressure	16 barg	232 psig
Element End Cap Colour	Blue	



Dimensions mm

Filter	A	B	C	D
A028 XA	70	65	231	70
A038 XA	70	65	231	70
A058 XA	70	65	272	70
A059 XA	100	105	346	80
A078 XA	100	105	346	80
A079 XA	100	105	466	80
A108 XA	100	105	466	80
A109 XA	100	105	466	80
A128 XA	122	112	530	80
A158 XA	122	112	530	80
A159 XA	146	122	552	100
A208 XA	146	122	552	100
A209 XA	146	122	855	100
A254 XA	210	137	665	100
A340 XA	210	137	665	100
A360 XA	210	137	885	100
A390 XA	210	137	1045	100

A018 XA to A390 XA
A391 XA to A12824 XA
*D = height required to unscrew bowl



High Efficiency Filtration, XA

Filter, BSPP

Code	M08	Thread BSPP	Flow Rate Nm³/h	Flow Rate SCFM	Weight Kg	Price
A028XA		G1/4"	42.5	25	0.6	189.70
A038XA		G3/8"	59.5	35	0.6	214.65
A058XA		G1/2"	85.0	50	0.7	259.60
A059XA		G1/2"	119	70	1.6	328.25
A078XA		G3/4"	144	85	1.6	376.90
A079XA		G3/4"	212	125	2.0	446.80
A108XA		G1"	229	135	2.0	423.10
A109XA		G1"	297	175	2.0	536.65
A128XA		G1.1/4"	476	280	2.8	634.00
A158XA		G1.1/2"	545	320	2.8	761.30
A159XA		G1.1/2"	680	400	4.2	761.30
A208XA		G2"	765	450	4.2	1048.35
A209XA		G2"	1190	700	6.3	1285.45
A254XA		G2.1/2"	1445	850	8.5	1522.60
A340XA		G3"	1530	900	8.5	1643.60
A360XA		G3"	2125	1250	10.5	1934.40
A390XA		G3"	2550	1500	12.0	2250.20

Replacement Elements, XA

Spares

Code	M14	To Suit Filter	Price
E0406XA		A028 XA	54.45
E0407XA		A038 XA	61.95
E0413XA		A058 XA	75.80
E0613XA		A059 XA & A078 XA	84.35
E0620XA		A079 XA & A108 XA	108.85
E0625XA		A109 XA	131.30
E0730XA		A128 XA & A158 XA	155.80
E0830XA		A159 XA & A208 XA	179.30
E0860XA		A209 XA	231.55
E1140XA		A254 XA & A340 XA	283.90
E1160XA		A360 XA	373.50
E1175XA		A390 XA	419.35

Filtration

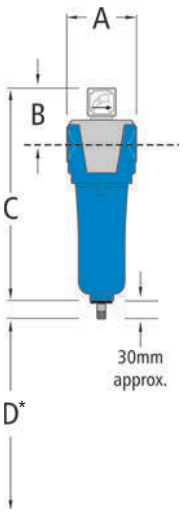
Alpha series grade AC removes odours and tastes from the compressed air supply and provides further oil removal including vapour down to 0.003mg/m³.

Technical Notes

- Direction of air flow is inside to out through the filter element
- Activated carbon filters do not include differential pressure equipment
- Semi-automatic drain valves SDV25 are fitted to models A018 AC to A390 AC. On models A391 AC to A8810 AC, 1/2" manual drain valves are fitted, 3/4" on models A10816 AC and A12824 AC
- Models A059 AC to A390 AC can be adapted to use 1/4" drains with a reducer
- Activated carbon filters must not operate in saturated conditions and will not remove certain types of gases including carbon monoxide (CO) and carbon dioxide (CO_2)

Specification

Grade	AC	
Particle Removal	0.01 micron	
Maximum Oil Carry-over at +20°C (+68°F)	0.003mg/m³	0.003ppm
Maximum Temperature	+50°C	+122°F
Recommended Operating Temperature	+25°C (+77°F)	
Maximum Working Pressure	16 barg	232 psig
Element End Cap Colour	Black	



A018 AC to A390 AC
A391 AC to A12824 AC

Dimensions mm

Filter	A	B	C	D
A028 AC	70	65	231	70
A038 AC	70	65	231	70
A058 AC	70	65	272	70
A059 AC	100	105	346	80
A078 AC	100	105	346	80
A079 AC	100	105	466	80
A108 AC	100	105	466	80
A109 AC	100	105	466	80
A128 AC	122	112	530	80
A158 AC	122	112	530	80
A159 AC	146	122	552	100
A208 AC	146	122	552	100
A209 AC	146	122	855	100
A254 AC	210	137	665	100
A340 AC	210	137	665	100
A360 AC	210	137	885	100
A390 AC	210	137	1045	100

*D = height required to unscrew bowl



Activated Carbon Filtration, AC

Filter, BSPP

Code	M08	Thread BSPP	Flow Rate Nm³/h	Flow Rate SCFM	Weight Kg	Price
A028AC		G1/4"	42.5	25	0.6	189.70
A038AC		G3/8"	59.5	35	0.6	214.65
A058AC		G1/2"	85.0	50	0.7	259.60
A059AC		G1/2"	119	70	1.6	328.25
A078AC		G3/4"	144	85	1.6	376.90
A079AC		G3/4"	212	125	2.0	446.80
A108AC		G1"	229	135	2.0	423.10
A109AC		G1"	297	175	2.0	536.65
A128AC		G1.1/4"	476	280	2.8	634.00
A158AC		G1.1/2"	545	320	2.8	761.30
A159AC		G1.1/2"	680	400	4.2	761.30
A208AC		G2"	765	450	4.2	1048.35
A209AC		G2"	1190	700	6.3	1285.45
A254AC		G2.1/2"	1445	850	8.5	1522.60
A340AC		G3"	1530	900	8.5	1643.60
A360AC		G3"	2125	1250	10.5	1934.40
A390AC		G3"	2550	1500	12.0	2250.20

Replacement Elements, AC

Spares

Code	M14	To Suit Filter	Price
E0406AC		A028 AC	54.45
E0407AC		A038 AC	61.95
E0413AC		A058 AC	75.80
E0613AC		A059 AC & A078 AC	84.35
E0620AC		A079 AC & A108 AC	108.85
E0625AC		A109 AC	131.30
E0730AC		A128 AC & A158 AC	155.80
E0830AC		A159 AC & A208 AC	179.30
E0860AC		A209 AC	231.55
E1140AC		A254 AC & A340 AC	283.90
E1160AC		A360 AC	373.50
E1175AC		A390 AC	419.35

Filtration

WALKER FILTRATION
The ultimate filtration & drying technology

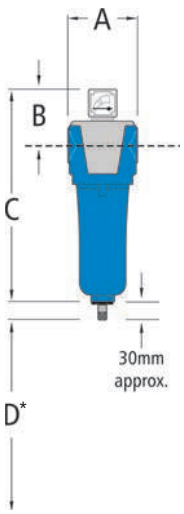
Our range of alpha series medical sterile filters has been specifically designed for medical compressed air plants, as used in hospitals throughout the world. This range meets all requirements of the UK Health Technical Memorandum 02-01 guidance on medical gas pipeline systems.

Technical Notes

- Filter element end caps are stainless steel
- Direction of air flow is outside to in through the filter elements
- Pop up indicators (65DPUG) are fitted to models A028 MS to A058 MS as standard. Differential pressure indicators (65DPIG) are fitted to models A059 MS to A390 MS as standard
- Manual drain valves are fitted to all models. Models A059 MS to A390MS can be adapted to use 1/4" drains with a reducer
- Medical sterile filter elements must not operate in water or oil saturated conditions
- Maximum steam sterilising temperature refers to the filter element ONLY. Grade SR filter elements can be steam sterilised 100 times. Each element must be autoclaved before commencement of duty
- Pre-filtration should be used in conjunction with 0.01 micron sterile filters

Specification

Grade	SR	
Particle Removal	0.01 micron	
Maximum Oil Carry-over at +20°C (+68°F)	5mg/m³	4.1ppm
Maximum Temperature	up to +120°C	up to +248°F
Recommended Operating Temperature	+50°C (+122°F)	
Maximum Working Pressure	16 barg	232 psig
Element End Cap	Stainless Steel	



A019 MS to A390 MS

Dimensions mm

Filter	A	B	C	D
A028 MS	70	65	231	70
A038 MS	70	65	231	70
A058 MS	70	65	272	70
A059 MS	100	105	346	80
A078 MS	100	105	346	80
A109 MS	100	105	466	80
A128 MS	122	112	530	80
A158 MS	122	112	530	80
A159 MS	146	122	552	100
A208 MS	146	122	552	100
A209 MS	146	122	855	100
A254 MS	210	137	665	100
A340 MS	210	137	665	100
A360 MS	210	137	885	100
A390 MS	210	137	1045	100

*D = height required to unscrew bowl



Medical Sterile Filtration, MS

Filter, BSPP

Code	M20	Thread BSPP	Flow Rate Nm³/h	Flow Rate SCFM	Weight Kg	Price
A028MS		G1/4"	42.5	25	0.8	237.15
A038MS		G3/8"	59.5	35	0.8	273.20
A058MS		G1/2"	85.0	50	0.9	334.20
A059MS		G1/2"	119	70	2.0	424.35
A078MS		G3/4"	144	85	2.0	482.60
A109MS		G1"	297	175	2.4	703.05
A128MS		G1.1/4"	476	280	3.3	819.55
A158MS		G1.1/2"	545	320	3.3	1056.65
A159MS		G1.1/2"	680	400	4.9	1056.65
A208MS		G2"	765	450	4.9	1149.55
A209MS		G2"	1190	700	7.0	1627.95
A254MS		G2.1/2"	1445	850	9.6	1927.50
A340MS		G3"	1530	900	9.6	2139.65
A360MS		G3"	2125	1250	11.6	2462.75
A390MS		G3"	2550	1500	13.1	2903.70

Replacement Elements, MS

Spares

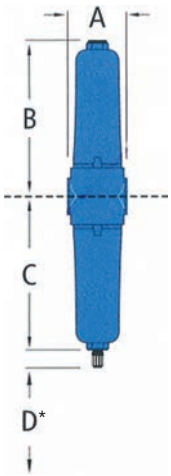
Code	M21	To Suit Filter	Price
E0407SR		A028 MS & A038 MS	138.70
E0413SR		A058 MS	142.85
E0613SR		A059 MS & A078 MS	72.90
E0625SR		A109 MS	61.45
E0730SR		A128 MS & A158 MS	111.35
E0830SR		A159 MS & A208 MS	360.55
E0860SR		A209 MS	520.00
E1140SR		A254 MS & A340 MS	682.25
E1160SR		A360 MS	794.60
E1175SR		A390 MS	990.10

Filtration

The alpha series XAC duplex range of filters offers a space saving, economical filtration solution. Duplex filters combine an XA 0.01 micron coalescing filter element which reduces oil concentrations and a DAC secondary activated carbon filter element which removes vapours, odours and tastes.

Technical Notes

- Duplex filters offer two stage filtration within one filter unit. Each filtration package provides an XA grade element in the lower section for oil removal, while the DAC grade element in the upper section is for odour removal
- Direction of air flow is inside to out through XA grade and outside to in through DAC grade filter element
- DVAS16C drains are fitted to models D028 XAC to D058 XAC, DVAS16 drains are fitted to D059 XAC to D109 XAC
- Models D059 XAC to D109 XAC can be adapted to use 1/4" drains with a reducer
- Activated carbon filters must not operate in oil saturated conditions and will not remove certain types of gases including carbon monoxide (CO) and carbon dioxide (CO_2)



D028 XAC to D109 XAC

*D = height required to unscrew bowl

Dimensions mm

Filter	A	B	C	D
D028 XAC	70	163	159	70
D038 XAC	70	163	159	70
D058 XAC	70	204	200	70
D059 XAC	100	240	236	80
D078 XAC	100	240	236	80
D079 XAC	100	360	356	80
D108 XAC	100	360	356	80
D109 XAC	100	360	356	80

Specification

Grade	XA	AC
Maximum Particle Size Class to ISO 8573-1:2010	1	
Maximum Oil Content Class to ISO 8573-1:2010		
Maximum Temperature	+50°C (+122°F)	
Recommended Operating Temperature	+25°C (+77°F)	
Maximum Working Pressure	16 barg (232 psig)	
Element End Cap Colour	Blue (Bottom Element)	Black (Top Element)



2 Stage Duplex Filtration, XAC

Filter, BSPP

Code	M08	Thread BSPP	Flow Rate Nm³/h	Flow Rate SCFM	Weight Kg	Price
D028XAC		G1/4"	42.5	25	0.9	262.10
D038XAC		G3/8"	59.5	35	0.9	314.50
D058XAC		G1/2"	85.0	50	1.0	384.40
D059XAC		G1/2"	119	70	2.3	519.20
D078XAC		G3/4"	144	85	2.3	600.30
D079XAC		G3/4"	212	125	3.1	698.90
D108XAC		G1"	229	135	3.1	529.15
D109XAC		G1"	297	175	3.2	952.25

Replacement Elements, XA

Spares

Code	M14	To Suit Filter	Price
E0406XA		D028 XAC	54.45
E0407XA		D038 XAC	61.95
E0413XA		D058 XAC	75.80
E0613XA		D059 XAC & D078 XAC	84.35
E0620XA		D079 XAC & D108 XAC	108.85
E0625XA		D109 XAC	131.30

Replacement Elements, DAC

Spares

Code	M14	To Suit Filter	Price
E0406DAC		D028 XAC	51.25
E0407DAC		D038 XAC	61.95
E0413DAC		D058 XAC	75.80
E0613DAC		D059 XAC & D078 XAC	84.35
E0620DAC		D079 XAC & D108 XAC	108.85
E0625DAC		D109 XAC	131.30

Filtration Accessories

Connecting kit for joining two filter housings together.
For every additional housing connection, one connection kit is required.
For example: three connection kits are required to join four filter housings.

Connecting Kits

For Modular Units

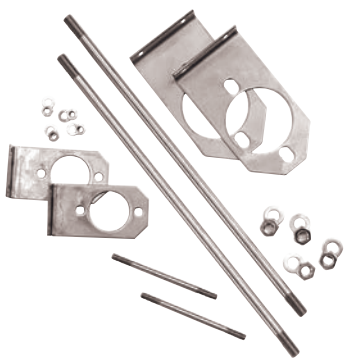
Code	M23	To Suit	Price
CNK018		A018, A019	26.00
CNK028		A028, A038, A058	33.80
CNK059		A059, A078, A079, A108, A109	40.60
CNK128		A128, A158	45.10
CNK159		A159, A208, A209	45.10
CNK254		A254, A340, A360, A390	108.20
CNKD028		D028, D038, D058	33.80
CNKD059		D059, D078, D079, D108, D109	40.60



Bracket Kits

Wall Mounting

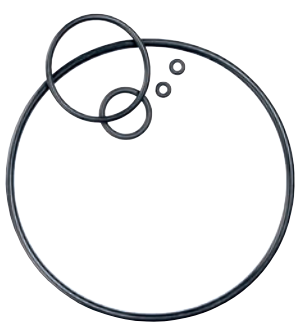
Code	M23	To Suit	Price
MBK018		A018, A019	38.15
MBK028		A028, A038, A058	49.60
MBK059		A059, A078, A079, A108, A109	46.80
MBK128		A128, A158	72.10
MBK159		A159, A208, A209	72.10
MBK254		A254, A340, A360, A390	96.90
MBKD028		D028, D038, D058	39.90
MBKD059		D059, D078, D079, D108, D109	65.35



Sealing Kits

O-Rings

Code	M23	To Suit	Price
OSK018		A018, A019	22.55
OSK028		A028, A038, A058	24.80
OSK059		A059, A078, A079, A108, A109	27.05
OSK128		A128, A158	54.10
OSK159		A159, A208, A209	54.10
OSK254		A254, A340, A360, A390	108.20
OSKD028		D028, D038, D058	24.80
OSKD059		D059, D078, D079, D108, D109	29.30



Dryers

Moisture in a compressed air line has the potential to cause downtime, machine damage and product spoilage. The Pro Dry range is recommended as an integral part of a sophisticated compressed air system, providing significant cost benefits.

Energy saving features link to a compressor control system and reduce air consumption during periods of low demand. Compact size ensures installation is simple and versatile. Units can be installed in small spaces in a vertical or horizontal position.

Use with Walker Filtration coalescing filters to reduce moisture levels to -40ºC (-40ºF) and -70ºC (-94ºF) pressure dew point.

Technical Notes

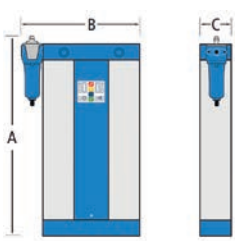
- Easily removable desiccant cartridges with integral 1 micron dust filter
- For additional security fit an RX1 dust filter to the outlet
- All models are supplied with an XA pre-filter
- Additional filtration, including a water separator, is recommended for high loaded inlet conditions
- Standard models operate at 7 barg, specify other pressures at time of order
- D215, PD275 and PD365 are duplex systems

Specification

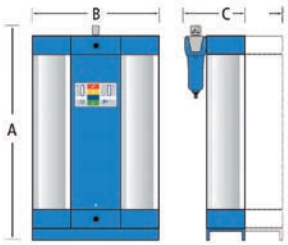
- Pressure dew point:
  standard -40ºC (-40ºF)
  optional -70ºC (-94ºF)
- Working pressure:
  minimum 4 barg (58 psig)
  maximum 16 barg (232 psig)
- Electronic control:
  12V DC to 24V DC or
  100V AC to 240V AC
- Inlet temperature:
  minimum +1.5ºC (+35ºF)
  maximum +50ºC (+122ºF)
- Minimum ambient temperature: +5ºC (+41ºF)

Dimensions mm

Air Dryer	A	B	C
PD004	493	351	92
PD006	552	351	92
PD008	613	351	92
PD010	682	351	92
PD015	862	351	92
PD025	1253	351	92
PD035	1644	351	92
PD045	837	520	264
PD055	937	520	264
PD065	1037	520	264
PD085	1237	520	264
PD105	1547	520	264
PD135	1747	520	264
PD175	2147	520	264
PD215	1555	520	448
PD275	1755	520	448
PD365	2165	520	474



PD004 to PD035



PD045 to PD365

Compressed Air Dryers

BSPP

Code	M20	Thread BSPP	Flow Rate Nm³/h	Flow Rate SCFM	Weight Kg	Filter Model	Price
PD004		G3/8"	7	4	13	A038 x A	1325.70
PD006		G3/8"	10	6	14	A038 x A	1387.80
PD008		G3/8"	14	8	15	A038 x A	1448.80
PD010		G3/8"	17	10	17	A038 x A	1577.50
PD015		G3/8"	25	15	20	A038 x A	1702.85
PD025		G3/8"	42	25	24	A038 x A	2060.05
PD035		G3/8"	59	35	31	A038 x A	2459.40
PD045		G3/4"	76	45	54	A078 x A	3802.25
PD055		G3/4"	93	55	60	A078 x A	4118.40
PD065		G3/4"	110	65	65	A078 x A	4975.40
PD085		G1"	144	85	77	A108 x A	5890.60
PD105		G1"	178	105	93	A108 x A	6672.65
PD135		G1.1/4"	229	135	104	A128 x A	7687.70
PD175		G1.1/4"	297	175	126	A128 x A	8652.80
PD215		G1.1/2"	365	215	176	A158 x A	10932.50
PD275		G1.1/2"	467	275	197	A158 x A	12663.05
PD365		G1.1/2"	620	365	239	A159 x A	14959.40



Condensate Drains

Automatic Self-calibrating Condensate Drain

AutoDrain is an automatic drain able to discharge condensation cyclically. It has a built-in timed electronic circuit, a condensation sensor and an assisted-drive solenoid valve which opens at pre-established intervals. The opening time varies according to the actual quantity of condensation at the installation point. This keeps compressed air waste to a minimum.

AutoDrain does not require the setting of waiting and discharge times as the product is totally self-calibrating. The front control panel contains two LEDs displaying power supply and drain state.
A button permits control of the drain manually.

AutoDrain is extremely small and can be installed in any position and anywhere in a compressed air installation. To make its installation easier, AutoDrain comes complete with a DIN 43650 connector for power supply and with an easy lock three-part fitting for pneumatic connection.

- Compact design
- Auto adjust time setting
- Excellent price to performance ratio
- Integrated filter to collect contaminate condensate
- FKM (fluoroelastomer) diaphragm
- Working pressure range: 0.2 to 16 bar



AutoDrain

Self-calibrating

Code	E07	Capacity m³/h			Voltage V	Weight g	Price
		Compressor	Drier	Filter			
AD950T		3600	7200	36000	230	175	**158.80**

Timed Condensate Drain with Digital Control

TimeDrain is an automatic drain system capable of removing cyclically condensate water. It integrates a digital timer and a servo-controlled solenoid valve, which is periodically opened according to T-on and T-off times planned through its control panel.

With TimeDrain, time regulation is extremely precise thanks to its selector with eight different sectors, allowing the choice among eight different pause times (T-off) and a button for setting three drainage levels (T-on). The same button has a double testing function, useful to check if the drainage system is works correctly.

TimeDrain is small and can be installed in any position and anywhere in a compressed air plant. In order to make the installation much easier, TimeDrain is equipped with a DIN 43650 plug for connecting to the power supply and an easy lock inlet for connecting to the pneumatic system.

- Compact design
- Easy and accurate time setting
- Excellent price to performance ratio
- Integrated filter to collect contaminate condensate
- FKM (fluoroelastomer) diaphragm
- Working pressure range: 0.2 to 16 bar



TimeDrain

With Integral Filter

Code	E07	Capacity m³/h			Voltage V	Weight g	Price
		Compressor	Drier	Filter			
TD1-IQ		3600	7200	36000	230	175	**93.65**

Other voltages available on request

Condensate Drains

Electronic Condensate Drains with Digital Level Control

The new series of LogiDrain level drains has been designed to solve the problem of condensation water drainage from production plants and compressed air distribution systems. The specific technology applied permits a controlled drainage of condensation water without any compressed air leaks.

LogiDrain is equipped with an integrated storage tank with a level sensor, controlled by an intelligent electronic circuit based on 8-bit microprocessor logic. All drain functions are displayed on a control panel. A test push button is available on the control panel for manual drainage.

LogiDrain starts working as soon as the sensor detects water at the maximum level and controls the solenoid valve opening to take the water level back down to a minimum value, leaving a small residual quantity to prevent the system from discharging compressed air. In case of trouble, the control circuit unlocks the drain pipes by carrying out a series of forced opening and closing cycles of the solenoid valve. Problems are reported outside by an alarm with potential-free contact that can be used to draw the attention of maintenance staff in order to instruct the plant control logic.

LogiDrain is produced in several models with different flow rates. All versions are suitable for working with any type of condensation water, even the most aggressive one or water containing a high percentage of oil. A built-in cup filter, easy to clean, prevents the solenoid valve from clogging.

- Zero loss drain system
- Intelligent logic based on an 8-bit microprocessor recording events in integral flash memory
- Revolving easy lock connection
- Integrated filter to collect contaminated condensate
- FKM (fluoroelastomer) diaphragm
- Remote alarm connection
- Hard-coated aluminium storage tank (200 series)
- Working pressure range: 0.2 to 16 bar
- Working temperature range: +1°C to +60°C



LogiDrain

With Digital Level Control

Code E07	Capacity m³/h			Voltage V	Weight g	Price
	After Cooler	Cyclone Sep.	Filter			
LD100	180	180	180	230	420	**114.05**
LD101	450	900	4500	230	600	**216.90**
LD200	900	1800	9000	230	700	**271.65**
LD202	1800	3600	18000	230	1200	**324.20**
LD203	9500	19000	95000	230	2800	**615.35**

Other voltages available on request

Pressure & Vacuum Gauges



Pressure Gauge

Back Entry, Steel Case

Code	S15	Ø mm	Pressure Range bar	Thread BSPP	Price 1-9	Price 10+
PGR040118		40	0 to 1	1/8"	6.45	6.15
PGR040318		40	0 to 2	1/8"	6.45	6.15
PGR040418		40	0 to 4	1/8"	6.45	6.15
PGR040618		40	0 to 6	1/8"	6.45	6.15
PGR041018		40	0 to 10	1/8"	6.45	6.15
PGR041218		40	0 to 12	1/8"	6.45	6.15
PGR042018		40	0 to 20	1/8"	6.45	6.15
PGR050118		50	0 to 1	1/8"	7.55	7.20
PGR050318		50	0 to 2	1/8"	7.55	7.20
PGR050418		50	0 to 4	1/8"	7.55	7.20
PGR050618		50	0 to 6	1/8"	7.55	7.20
PGR051018		50	0 to 10	1/8"	7.55	7.20
PGR051218		50	0 to 12	1/8"	7.55	7.20
PGR052018		50	0 to 20	1/8"	7.55	7.20
PGR050114		50	0 to 1	1/4"	9.00	8.55
PGR050314		50	0 to 2	1/4"	9.00	8.55
PGR050414		50	0 to 4	1/4"	9.00	8.55
PGR050614		50	0 to 6	1/4"	9.00	8.55
PGR051014		50	0 to 10	1/4"	9.00	8.55
PGR051214		50	0 to 12	1/4"	9.00	8.55
PGR052014		50	0 to 20	1/4"	9.00	8.55
PGR060114		63	0 to 1	1/4"	13.55	12.90
PGR061014		63	0 to 10	1/4"	13.55	12.90
PGR061214		63	0 to 12	1/4"	13.55	12.90
PGR062014		63	0 to 20	1/4"	13.55	12.90



Pressure Gauge

Bottom Entry, Steel Case

Code	S15	Ø mm	Pressure Range bar	Thread BSP	Price 1-9	Price 10+
PGB050318		50	0 to 2	1/8"	9.90	9.45
PGB050418		50	0 to 4	1/8"	9.90	9.45
PGB050618		50	0 to 6	1/8"	9.90	9.45
PGB051018		50	0 to 10	1/8"	9.90	9.45
PGB050114		50	0 to 1	1/4"	9.90	9.45
PGB050314		50	0 to 2	1/4"	9.90	9.45
PGB050414		50	0 to 4	1/4"	9.90	9.45
PGB050614		50	0 to 6	1/4"	9.90	9.45
PGB051014		50	0 to 10	1/4"	9.90	9.45
PGB051214		50	0 to 12	1/4"	9.90	9.45
PGB052014		50	0 to 20	1/4"	9.90	9.45
PGB060114		63	0 to 1	1/4"	13.55	12.90
PGB060314		63	0 to 2	1/4"	13.55	12.90
PGB060414		63	0 to 4	1/4"	13.55	12.90
PGB061014		63	0 to 10	1/4"	13.55	12.90
PGB061214		63	0 to 12	1/4"	13.55	12.90
PGB062014		63	0 to 20	1/4"	13.55	12.90
PGB100138		100	0 to 1	3/8"	41.15	39.10
PGB100338		100	0 to 2	3/8"	41.15	39.10
PGB100438		100	0 to 4	3/8"	41.15	39.10
PGB100638		100	0 to 6	3/8"	41.15	39.10
PGB101038		100	0 to 10	3/8"	41.15	39.10
PGB101238		100	0 to 12	3/8"	41.15	39.10
PGB102038		100	0 to 20	3/8"	41.15	39.10



Vacuum Gauge

Back Entry, Steel Case

Code	S15	Ø mm	Pressure Range bar	Thread BSPP	Price
VGR040118		40	-1 to 0	1/8"	6.45
VGR050118		50	-1 to 0	1/8"	7.55
VGR050114		50	-1 to 0	1/4"	7.55
VGR060114		63	-1 to 0	1/4"	8.20



Vacuum Gauge

Bottom Entry, Steel Case

Code	S15	Ø mm	Pressure Range bar	Thread BSPP	Price
VGB050118		50	-1 to 0	1/8"	7.25
VGB050114		50	-1 to 0	1/4"	7.25
VGB060114		63	-1 to 0	1/4"	7.75
VGB100138		100	-1 to 0	3/8"	18.20

Pressure & Vacuum Gauges



Pressure Gauge

Back Entry, ABS Case

Code	S15	Ø mm	Pressure Range bar	Thread BSP	Price 1-9	Price 10+
EVGR040118		40	-1 to 0	1/8"	9.50	9.05
EPGR040118		40	0 to 1	1/8"	8.95	8.55
EPGR040318		40	0 to 2.5	1/8"	8.95	8.55
EPGR040418		40	0 to 4	1/8"	8.95	8.55
EPGR040618		40	0 to 6	1/8"	8.95	8.55
EPGR041018		40	0 to 10	1/8"	8.95	8.55
EPGR041218		40	0 to 12	1/8"	8.95	8.55
EPGR041618		40	0 to 16	1/8"	8.95	8.55
EPGR042018		40	0 to 20	1/8"	8.95	8.55
EPGR050118		50	0 to 1	1/8"	9.50	9.05
EPGR050418		50	0 to 4	1/8"	9.50	9.05
EPGR050618		50	0 to 6	1/8"	9.50	9.05
EPGR051018		50	0 to 10	1/8"	9.50	9.05
EPGR051218		50	0 to 12	1/8"	9.50	9.05
EPGR051618		50	0 to 16	1/8"	9.50	9.05
EPGR052018		50	0 to 20	1/8"	9.50	9.05
EPGR050314		50	0 to 2.5	1/4"	9.50	9.05
EPGR050414		50	0 to 4	1/4"	9.50	9.05
EPGR050614		50	0 to 6	1/4"	9.50	9.05
EPGR051014		50	0 to 10	1/4"	9.50	9.05
EPGR051214		50	0 to 12	1/4"	9.50	9.05
EPGR051614		50	0 to 16	1/4"	9.50	9.05
EPGR052014		50	0 to 20	1/4"	9.50	9.05
EPGR061014		63	0 to 10	1/4"	10.40	9.90
EPGR061214		63	0 to 12	1/4"	10.40	9.90
EPGR061614		63	0 to 16	1/4"	10.40	9.90



Pressure Gauge

Bottom Entry, ABS Case

Code	S15	Ø mm	Pressure Range bar	Thread BSP	Price 1-9	Price 10+
EPGB050114		50	0 to 1	1/4"	12.35	11.75
EPGB050314		50	0 to 2.5	1/4"	12.35	11.75
EPGB050414		50	0 to 4	1/4"	9.80	9.35
EPGB050614		50	0 to 6	1/4"	9.80	9.35
EPGB051014		50	0 to 10	1/4"	9.80	9.35
EPGB051214		50	0 to 12	1/4"	9.80	9.35
EPGB051614		50	0 to 16	1/4"	9.80	9.35
EPGB060114		63	0 to 1	1/4"	11.15	10.60
EPGB060414		63	0 to 4	1/4"	11.15	10.60

For PTFE Thread Sealing Tape



See page 829

Pressure & Vacuum Gauges



Glycerine Filled Gauge

Back Entry, Stainless Steel Case

Code S15	Ø mm	Pressure Range bar	Thread BSP	Price
PGRG060114	63	0 to 1	1/4"	22.60
PGRG060314	63	0 to 2	1/4"	22.60
PGRG060414	63	0 to 4	1/4"	22.60
PGRG060614	63	0 to 6	1/4"	22.60
PGRG061014	63	0 to 10	1/4"	22.60
PGRG061214	63	0 to 12	1/4"	22.60
PGRG061414	63	0 to 14	1/4"	22.60
PGRG062014	63	0 to 20	1/4"	22.60
PGRG062514	63	0 to 25	1/4"	22.60
PGRG064014	63	0 to 40	1/4"	22.60
PGRG066014	63	0 to 60	1/4"	22.60
PGRG0612014	63	0 to 120	1/4"	22.60
PGRG0625014	63	0 to 250	1/4"	22.60
PGRG0640014	63	0 to 400	1/4"	22.60
PGRG101212	100	0 to 12	1/2"	124.90



Glycerine Filled Gauge

Bottom Entry, Stainless Steel Case

Code S15	Ø mm	Pressure Range bar	Thread BSP	Price
VGBG060114	63	-1 to 0	1/4"	21.00
PGBG060314	63	0 to 2	1/4"	23.45
PGBG060414	63	0 to 4	1/4"	23.45
PGBG060614	63	0 to 6	1/4"	23.45
PGBG061014	63	0 to 10	1/4"	23.45
PGBG061214	63	0 to 12	1/4"	23.45
PGBG061414	63	0 to 14	1/4"	23.45
PGBG062014	63	0 to 20	1/4"	23.45
PGBG062514	63	0 to 25	1/4"	23.45
PGBG064014	63	0 to 40	1/4"	23.45
PGBG066014	63	0 to 60	1/4"	23.45
PGBG0612014	63	0 to 120	1/4"	23.45
PGBG0620014	63	0 to 200	1/4"	23.45
PGBG0625014	63	0 to 250	1/4"	23.45
PGBG0640014	63	0 to 400	1/4"	23.45
VGBG100112	100	-1 to 0	1/2"	50.75
PGBG100312	100	0 to 2.5	1/2"	83.65
PGBG100412	100	0 to 4	1/2"	83.65
PGBG100612	100	0 to 6	1/2"	83.65
PGBG101012	100	0 to 10	1/2"	83.65
PGBG101212	100	0 to 12	1/2"	83.65
PGBG101612	100	0 to 16	1/2"	83.65
PGBG102012	100	0 to 20	1/2"	83.65
PGBG102512	100	0 to 25	1/2"	83.65
PGBG104012	100	0 to 40	1/2"	83.65
PGBG106012	100	0 to 60	1/2"	83.65
PGBG1025012	100	0 to 250	1/2"	83.65
PGBG1040012	100	0 to 400	1/2"	83.65

Other ranges available



Please contact Sales Office

Pressure & Vacuum Gauges

Bezel and thread fitting.



All Stainless Steel Pressure Gauge

Bottom Entry, Stainless Steel Case

Code S15	Ø mm	Pressure Range bar	Thread BSP	Price
SSPGB060114	63	0 to 1	1/4"	49.30
SSPGB060414	63	0 to 4	1/4"	49.30
SSPGB060614	63	0 to 6	1/4"	49.30
SSPGB061014	63	0 to 10	1/4"	49.30
SSPGB061214	63	0 to 12	1/4"	49.30



Panel Mounted Gauge, U Clamp

Back Entry

Code S15	Ø mm	Pressure Range bar	Thread BSP	Price
VGBU040118	40	-1 to 0	1/8"	23.15
PGBU040418	40	0 to 4	1/8"	20.25
VGBU060114	63	-1 to 0	1/4"	26.05
PGBU061014	63	0 to 10	1/4"	21.40



Panel Mounted Gauge

Back Entry

Code S15	Ø mm	Pressure Range bar	Thread BSP	Price
VGBP040118	40	-1 to 0	1/8"	26.05
PGBP040318	40	0 to 2	1/8"	18.60
PGBP040418	40	0 to 4	1/8"	18.60
PGBP040618	40	0 to 6	1/8"	18.60
PGBP041018	40	0 to 10	1/8"	18.60
PGBP041218	40	0 to 12	1/8"	18.60
VGBP060114	63	-1 to 0	1/4"	27.75
PGBP060314	63	0 to 2	1/4"	19.50
PGBP060414	63	0 to 4	1/4"	19.50
PGBP060614	63	0 to 6	1/4"	19.50
PGBP061014	63	0 to 10	1/4"	19.50
PGBP061214	63	0 to 12	1/4"	19.50

Bezel and thread fitting.



Glycerine-filled All Stainless Steel Pressure Gauge

Bottom Entry, Stainless Steel Case

Code S15	Ø mm	Pressure Range bar	Thread BSP	Price
SSPGBG060114	63	0 to 1	1/4"	39.05
SSPGBG060414	63	0 to 4	1/4"	39.05
SSPGBG060614	63	0 to 6	1/4"	39.05
SSPGBG061014	63	0 to 10	1/4"	39.05
SSPGBG061214	63	0 to 12	1/4"	39.05
SSPGBG061614	63	0 to 16	1/4"	39.05
SSPGBG062514	63	0 to 25	1/4"	39.05
SSPGBG066014	63	0 to 60	1/4"	39.05
SSPGBG0620014	63	0 to 200	1/4"	39.05
SSPGBG0625014	63	0 to 250	1/4"	39.05
SSPGBG0640014	63	0 to 400	1/4"	39.05

Interchange Filter Elements

Don't See Your Element?
Send your Element Code for immediate quote





Mann + Hummel Interchange

Replacement Filter Elements

Code	P13	Manufacturer's Code	Price
SA6106		C1049	9.65
SA6120		C1112	8.50
SA6118		C1112/2	10.95
SA6097		C1132	12.65
SA6122		C1337	15.25
SA6096		C15124/1	30.75
SA6116		C1574	28.35
SA6095		C21138/1	32.40
SA6094		C31/1	6.70
SA6098		C32	7.10
SA6121		C411	10.60
SA6099		C42/1	6.15
SA6090		C42/2	6.70
SA6105		C43	6.70
SA6103		C610/2	8.90
SA6111		C64/1	6.90
SA6089		C66	7.05
SA6126		C66/1	6.50
SA6117		C69/1	8.50
SA6123		C711/1	8.00
SA6093		C713	14.30
SA6102		C718	18.40
SA6108		C74	9.85
SA6091		C75	6.90
SA6112		C75/2	8.35
SA6125		C79/1	8.00
SA6104		C912	9.25
SA6043		CF1300	64.05

Mann + Hummel Interchange

Replacement Filter Elements

Code	P13	Manufacturer's Code	Price
SH8108		W11102	32.80
SH8148		W11102/4	30.00
SH8149		W1170	26.15
SH8118		W712/4	12.80
SH8113		W719/5	12.25
SH8112		W940	14.40
SH8119		W940/18 & W940/5	16.55
SH8146		W950	16.30
SH8147		W96217	20.75
SH8107		W962/14	23.35
SH8109		WD13145	99.40
SH8114		WD1374	79.95
SH8152		WD724/3	39.85
SH8153		WD920	35.00
SH8154		WD940	39.85
SH8155		WD950 & WD950/2	42.80
SH8110		WD962	43.70
SH8150		WD962/12	76.10

Interchange Filter Elements

Don't See Your Element?
Send your Element Code for immediate quote



Ultrafilter Interchange

Replacement Filter Elements

Code	P13	Manufacturer's Code	Price
SM9129		AK02/5	40.75
SM9133		AK02/10	42.80
SM9137		AK03/5	45.55
SM9141		AK03/10	48.00
SM9145		AK04/10	53.90
SM9149		AK04/20	62.20
SM9153		AK05/20	72.05
SM9157		AK05/25	84.05
SM9161		AK07/25	86.10
SM9165		AK07/30	109.95
SM9169		AK10/30	132.15
SM9173		AK15/30	136.05
SM9177		AK20/30	146.05
SM9181		AK30/30	212.10
SM9185		AK30/50	286.15
SM9126		FF02/05	40.75
SM9130		FF02/10	42.80
SM9134		FF03/05	45.55
SM9138		FF03/10	48.00
SM9142		FF04/10	53.90

Code	P13	Manufacturer's Code	Price
SM9146		FF04/20	62.20
SM9150		FF05/20	72.05
SM9154		FF05/25	84.05
SM9158		FF07/25	86.10
SM9162		FF07/30	109.95
SM9166		FF10/30	132.15
SM9170		FF15/30	136.05
SM9174		FF20/30	146.05
SM9178		FF30/30	212.10
SM9127		MF02/05	40.75
SM9131		MF02/10	42.80
SM9135		MF03/05	44.50
SM9139		MF03/10	48.00
SM9143		MF04/10	53.90
SM9147		MF04/20	62.20
SM9151		MF05/20	72.05
SM9155		MF05/25	84.05
SM9159		MF07/25	86.10
SM9163		MF07/30	109.95
SM9167		MF10/30	132.15

Code	P13	Manufacturer's Code	Price
SM9171		MF15/30	136.05
SM9175		MF20/30	146.05
SM9179		MF30/30	212.10
SM9183		MF30/50	286.15
SM9128		SMF02/05	40.75
SM9132		SMF02/10	42.80
SM9136		SMF03/05	45.55
SM9140		SMF03/10	48.00
SM9144		SMF04/10	53.90
SM9148		SMF04/20	62.20
SM9152		SMF05/20	72.05
SM9156		SMF05/25	84.05
SM9160		SMF07/25	86.10
SM9164		SMF07/30	109.95
SM9168		SMF10/30	132.15
SM9172		SMF15/30	136.05
SM9176		SMF20/30	146.05
SM9180		SMF30/30	212.10
SM9184		SMF30/50	286.15

Interchange Filter Elements

Don't See Your Element?
Send your Element Code for immediate quote



Zander Interchange

Replacement Filter Elements

Code	P13	Manufacturer's Code	Price
SM9020		1050A	30.20
SM9017		1050V	30.20
SM9019		1050X	30.20
SM9018		1050Z	30.20
SM9024		1070A	40.35
SM9021		1070V	40.35
SM9023		1070X	40.35
SM9022		1070Z	40.35
SM9028		1140A	63.50
SM9025		1040V	63.50
SM9027		1040X	63.50
SM9026		1040Z	63.50
SM9032		2010A	84.25
SM9029		2010V	84.25
SM9031		2010X	84.25

Code	P13	Manufacturer's Code	Price
SM9030		2010Z	84.25
SM9036		2020A	111.65
SM9033		2020V	111.65
SM9035		2020X	111.65
SM9034		2020Z	111.65
SM9040		2030A	147.35
SM9037		2030V	147.35
SM9039		2030X	147.35
SM9038		2030Z	147.35
SM9044		2050A	172.00
SM9041		2050V	172.00
SM9043		2050X	172.00
SM9042		2050Z	172.00
SM9048		3050A	244.30
SM9045		3050V	244.30

Code	P13	Manufacturer's Code	Price
SM9047		3050X	244.30
SM9046		3050Z	244.30
SM9052		3075A	298.70
SM9049		3075V	298.70
SM9051		3075X	298.70
SM9050		3075Z	298.70
SM9351		5060A	481.20
SM9349		5060V	481.20
SM9350		5060X	481.20
SM9352		5060Z	481.20
SM9056		5075A	456.60
SM9053		5075V	456.60
SM9055		5075X	456.60
SM9054		5075Z	456.60

Domnick Hunter Interchange

Replacement Filter Elements

Code	P13	Manufacturer's Code	Price
SM9058		E006AA, K009AA	42.00
SM9059		E006AC, K009ACS	45.10
SM9057		E006AO, K009A0	43.00
SM9061		E013AA, K017AA	49.95
SM9085		K017AANS	50.00
SM9062		E013AC, K017ACS	57.40
SM9060		E013AO, K017AO	48.90
SM9064		E025AA, K030AA	55.75
SM9063		E025AO, K030AO	55.75
SM9086		K030AANS	55.75

Code	P13	Manufacturer's Code	Price
SM9065		K030ACS	60.75
SM9067		E040AA, K058AA	89.40
SM9087		K058AANS	89.40
SM9068		E040AC, K058ACS	100.50
SM9066		E040AO, K058AO	89.40
SM9070		E085AA, K145AA	92.75
SM9072		E085AC, K145ACS	118.30
SM9069		E085AO, K145AO	89.15
SM9074		E195AA, K220AA	123.65
SM9075		E195AC, K220ACS	145.50

Code	P13	Manufacturer's Code	Price
SM9073		E195AO, K220AO	120.90
SM9077		E295AA, K330AA	175.00
SM9078		E295AC, K330ACS	195.65
SM9076		E295AO, K330AO	175.00
SM9080		E400AA, K430AA	185.90
SM9081		E400AC, K430ACS	197.50
SM9079		E400AO, K430AO	185.90
SM9083		E500AA, K620AA	242.05
SM9084		E500AC, K620ACS	303.90
SM9082		E500AO, K620AO	228.65

Interchange Filter Elements

Don't See Your Element?
Send your Element Code for immediate quote



Ingersoll Rand Interchange

Replacement Filter Elements

Code	P13	Manufacturer's Code	Price
SM9057		91108126	43.00
SM9060		91108134	48.90
SM9063		91108142	55.75
SM9066		91109159	89.40
SM9069		91108167	89.15
SM9076		91108183	175.00
SM9079		91108191	185.90
SM9082		91108209	228.65
SM9058		91108217	42.00

Code	P13	Manufacturer's Code	Price
SM9061		91108225	49.95
SM9064		91108233	55.75
SM9067		91108241	89.40
SM9070		91108258	92.75
SM9074		91108266	123.65
SM9077		91108274	175.00
SM9080		91108282	185.90
SM9083		91108290	242.05
SM9059		91108308	45.10

Code	P13	Manufacturer's Code	Price
SM9065		91108324	60.75
SM9068		91108332	100.50
SM9072		91108357	118.30
SM9075		91108365	145.50
SM9078		91108373	195.65
SM9081		91108384	197.50
SM9084		91108399	303.90
SM9073		91188482	120.90
SM9062		91189001	57.40

Atlas Copco Interchange

Replacement Filter Elements

Code	P13	Manufacturer's Code	Price
SM9058		2901019500	42.00
SM9057		2901019000	43.00
SM9061		2901019600	49.95
SM9060		2901019100	48.90
SM9064		2901023300	55.75
SM9063		2901023400	55.75
SM9067		2901019700	89.40
SM9066		2901019200	89.40
SM9070		2901019800	92.75

Code	P13	Manufacturer's Code	Price
SM9069		2901019300	89.15
SM9074		2901019900	123.65
SM9073		2901019400	120.90
SM9077		1202626203	175.00
SM9076		1202626204	175.00
SM9075		2901020600	145.50
SM9078		1202626302	195.65
SM9059		2901020100	45.10
SM9065		2901020300	60.75

Code	P13	Manufacturer's Code	Price
SM9072		2901020500	118.30
SM9083		2901021500	242.05
SM9082		2901021300	228.65
SM9084		2901021700	303.90
SM9062		2901020200	57.40
SM9068		2901020400	100.50
SM9081		2901021600	197.50
SM9080		2901021400	185.90
SM9079		2901021200	185.90

Interchange Filter Elements

Don't See Your Element?
Send your Element Code for immediate quote



Air Filter Engineering (AFE)

Replacement Filter Elements

Code	P13	Manufacturer's Code	Price
AE010X5		EA10P	60.20
AE015X5		EA15P	72.45
AE020X5		EA20P	84.70
AE030X5		EA30P	102.50
AE055X5		EA55P	134.85
AE095X5		EA95P	177.20
AE150X5		EA150P	218.40
AE220X5		EA220P	277.50
AE290X5		EA290P	337.65
AE430X5		EA430P	390.00
AE625X5		EA625P	556.05
AE775X5		EA775P	651.90
AE010X1		EA10U	52.30
AE015X1		EA15U	72.45
AE020X1		EA20U	84.70
AE030X1		EA30U	102.50

Code	P13	Manufacturer's Code	Price
AE055X1		EA55U	134.85
AE095X1		EA95U	177.20
AE150X1		EA150U	218.40
AE220X1		EA220U	277.50
AE290X1		EA290U	337.65
AE430X1		EA430U	390.00
AE625X1		EA625U	556.05
AE775X1		EA775U	651.90
AE010XA		EA10H	60.20
AE015XA		EA15H	72.45
AE020XA		EA20H	84.70
AE030XA		EA30H	102.50
AE055XA		EA55H	134.85
AE095XA		EA95H	177.20
AE150XA		EA150H	218.40
AE220XA		EA220H	277.50

Code	P13	Manufacturer's Code	Price
AE290XA		EA290H	337.65
AE430XA		EA430H	390.00
AE625XA		EA625H	556.05
AE775XA		EA775H	651.90
AE010AC		EA10C	60.20
AE015AC		EA15C	72.45
AE020AC		EA20C	84.70
AE030AC		EA30C	102.50
AE055AC		EA55C	134.85
AE095AC		EA95C	177.20
AE150AC		EA150C	218.40
AE220AC		EA220C	277.50
AE290AC		EA290C	337.65
AE430AC		EA430C	390.00
AE625AC		EA625C	556.05
AE775AC		EA775C	651.90

For Compressed Air Filter Units



See page 319-334

Interchange Filter Elements

Don't See Your Element?
Send your Element Code for immediate quote



Rietschle Interchange

Replacement Filter Elements

Code	P13	Manufacturer's Code	Price
SA6111		730506	6.90
SA6089		730507	7.05
SA6890		730508	8.00
SA6112		730509	8.35
SA6123		730511	8.00
SA6106		730512	9.65
SA6095		730513	32.40
SA6120		730514	8.50
SA6116		730515	28.35
SA6075		730516	58.35
SA6096		730517	30.75
SA6655		730518	8.50
SA6122		730519	15.25
SA6019		730520	58.35
SA6086		730521	54.45
SA6037		730522	102.90

Code	P13	Manufacturer's Code	Price
SA6126		730524	6.50
DA1120		730526	50.00
DA1137		730527	100.80
SA6130		730528	12.65
SA6104		730533	9.25
SA6108		730534	9.85
SA6110		730535	8.00
SA6091		730542	6.90
SA6058		730550	51.75
SA6131		730554	82.60
SA6003		730599	83.50
SA6002		730600	70.00
SA6060		730670	158.65
SA6652		730671	773.45
DA1124		730918	40.00
DA1051		730936	34.05

Code	P13	Manufacturer's Code	Price
DA1022		730937	39.50
DA1050		730946	27.80
DA1067		731023	29.25
SA6837		731137	8.15
SA6691		731142	10.00
SA6693		731143	17.75
SA6838		731145	8.15
SA6692		731148	19.65
SA6789		731158	25.90
SA6793		731159	23.00
SA6832		731171	17.25
SA6790		731172	20.75
SA6853		731190	9.15
SA6852		731191	15.95
SA6833		731235	8.00

For Compressed Air Dryers



See page 334

Interchange Filter Elements

Don't See Your Element?
Send your Element Code for immediate quote



Rietschle Interchange

Replacement Filter Elements

Code	P13	Manufacturer's Code	Price
SA6815		317856	7.25
SA6712		317896	27.25
SA6713		317900	15.95
SA6839		317901	36.90
SA6831		317932	10.25
SA6694		317957	15.75
SA6695		317960	34.95
SA6840		317984	13.30
SA6114		513457	9.65
SA6100		513458	9.65
SA6708		513458/B	17.05
SA6103		515310	8.90
SA6113		515339	7.40
SA6121		515340	10.60
SA6117		515411	8.50

Code	P13	Manufacturer's Code	Price
DA1125		518358	42.40
DA1124		519861	40.00
SA6792		523464	10.75
SA6791		523465	26.15
SA6097		730080	12.65
SA6058		730090	51.75
SA6808		730091	48.50
SA6806		730092	62.20
SA6807		730093	132.15
SA6810		730095	93.30
SA6811		730096	128.30
SA6813		730097	216.20
SA6814		730098	432.35
SA6059		730099	53.20
SA6809		730099	84.05

Code	P13	Manufacturer's Code	Price
SA6799		730101	89.40
SA6803		730102	83.50
SA6804		730103	31.50
SA6802		730104	25.55
SA6800		730105	13.35
SA6801		730106	18.00
SA6812		730109	174.95
SA6649		730130	160.15
SA6061		730302	96.85
SA6119		730500	5.40
SA6094		730501	6.70
SA6098		730502	7.10
SA6090		730503	6.70
SA6099		730504	6.15
SA6105		730505	6.70

Interchange Filter Elements

Don't See Your Element?
Send your Element Code for immediate quote



Busch Interchange

Replacement Filter Elements

Code	P13	Manufacturer's Code	Price
SA6058		530000001	51.75
SA6059		530000002	53.20
SA6061		530000003	96.85
SA6652		530000004	773.45
SA6060		530000005	158.65
SA6649		530000023	160.15
SA6654		530945108	41.90
SH8112		531001	14.40
SH8147		531005	20.75
SA6120		532002	8.50
SA6122		532003	15.25
SA6096		532004	30.75
SA6091		532005	6.90

Code	P13	Manufacturer's Code	Price
SA6075		532006	58.35
SA6042		532007	99.05
SA6651		532013	24.10
SA6112		532015	8.35
SA6115		532032	6.90
SA6715		532033	7.60
DA1085		532157	58.70
DA1123		532208	37.95
DA1130		532216	43.35
DA1060		532221	44.25
DA1094		532300	39.05
DA1177		532301	91.10
DA1047		532302	49.45

Code	P13	Manufacturer's Code	Price
DA1048		532303	58.85
DA1049		532304	74.00
SA6827		532500008	29.10
SA6829		532500045	35.40
SA6828		532500046	31.50
SA6830		532500047	21.90
DA1054		532507	92.55
DA1053		532508	77.40
DA1052		532509	67.60
DA1061		532510	62.40
DA1091		532512	64.40
SA6062		700060114	8.40

Interchange Filter Elements

Don't See Your Element?
Send your Element Code for immediate quote



Becker Interchange

Replacement Filter Elements

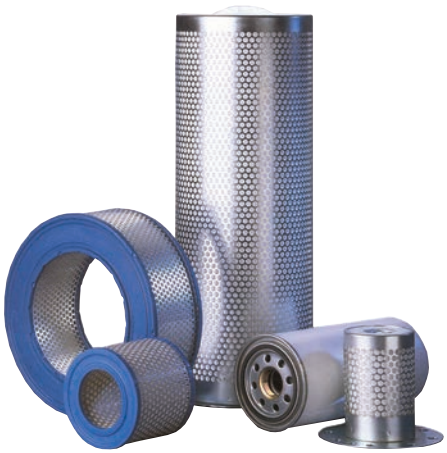
Code	P13	Manufacturer's Code	Price
SA6654		74000010	41.90
SA6058		74000105	51.75
SA6059		74000107	53.20
SA6060		74000110	158.65
SA6061		74000207	96.85
SA6107		84040104	8.40
SA6091		84040105	6.90
SA6120		84040107	8.50
SA6096		84040110	30.75
SA6095		84040112	32.40
SA6026		84040113	116.65
SA6122		84040207	15.25
SA6097		84040209	12.65
SA6131		84040312	82.60
SA6019		84040315	58.35
SA6038		84040507	25.00
SA6149		84040610	54.45
SA6116		84040910	28.35
SA6114		909506	9.65
SA6118		909507	10.95

Code	P13	Manufacturer's Code	Price
SA6108		909508	9.85
SA6110		909509	8.00
SA6093		909510	14.30
SA6102		909514	18.40
SA6109		909515	52.60
SA6094		909516	6.70
SA6115		909518	6.90
SA6062		909519	8.40
SA6037		909520	102.90
SA6127		909521	7.05
SA6719		909526	11.70
SA6720		909527	17.05
SA6128		909529	8.75
SA6098		909531	7.10
SA6125		909532	8.00
SA6112		909505	8.35
SA6117		909533	8.50
SA6710		909534	77.75
SA6089		909535	7.05
SA6111		909536	6.90

Code	P13	Manufacturer's Code	Price
SA6105		909537	6.70
SA6090		909538	6.70
SA6099		909539	6.15
SA6836		909540	53.90
SA6834		909546	30.20
SA6826		909548	42.80
SA6121		909549	10.60
SA6958		909568	30.95
DA1020		965402	59.65
DA1030		965403	67.00
DA1103		965404	37.95
DA1123		965406	37.95
DA1110		965407	54.05
DA1111		965408	50.95
DA1093		965409	67.20
DA1115		965410	117.00
DA1116		965411	133.65
DA1092		965412	72.75
DA1253		965415	70.40
DA1254		965416	99.80

Interchange Filter Elements

Don't See Your Element?
Send your Element Code for immediate quote



Compair Demag Interchange

Replacement Filter Elements

Code	P13	Manufacturer's Code	Price
SH8109		044-252-72	99.40
SH8112		048-199-74	14.40
DF5004		105-252-74	164.80
SH8153		106-540-74	35.00
SA6696		112-245-74	33.70
SA6665		113-233-74	58.00
SH8114		113-819-74	79.95

Code	P13	Manufacturer's Code	Price
DF5022		130-100-74	101.10
DF5006		130-101-74	114.00
SA6097		295-040-36	12.65
SA6025		295-043-56	79.80
SA6005		295-043-76	52.40
SA6033		295-044-76	37.40

For Galvanised Tubes & Fittings

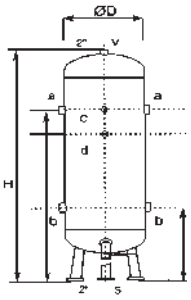


See page 666

Air Receivers

PED Compliant

More Sizes Available
Up to 10,000 litre capacity



a+b = outlets
c-d = service connectors
v = safety valve
s = discharge



Vertical

BSPP

Code	Q05	Capacity Litres	Pressure bar	Ø mm	Total Height mm	Thread a+b	Price
ARV100		100	11	300	1166	G3/4"	**250.90**
ARV150		150	11	400	1363	G1"	**372.10**
ARV200		200	11	430	1605	G3/4"	**414.40**
ARV200G*		200	11	430	1605	G3/4"	**695.40**
ARV270		270	11	500	1695	G3/4"	**476.30**
ARV270G*		270	11	500	1695	G3/4"	**768.60**
ARV500		500	11	600	2095	G1.1/2'	**744.55**
ARV500G*		500	11	600	2095	G1.1/2"	**1171.20**
ARV725		725	10.8	790	1860	G1.1/2"	**1152.75**
ARV725G*		725	10.8	790	1860	G1.1/2"	**1691.45**
ARV900		900	11	790	2210	G2"	**1331.60**
ARV900G*		900	11	790	2210	G2"	**1913.70**
ARV1000		1000	11	790	2345	G2"	**1370.45**
ARV1000G*		1000	11	790	2345	G2"	**1997.35**
ARV1500		1500	11	950	2410	G2"	**2071.75**
ARV1500G*		1500	11	950	2410	G2"	**3550.20**
ARV2000		2000	11	1000	2800	G2"	**2700.10**
ARV2000G*		2000	11	1000	2800	G2"	**4002.50**

*Galvanised.



*Galvanised.

Dimensions

A	C	D	E	F	G	H	M
240	556	1/2"	3/8"	3/8"	–	–	–
280	868	1/2"	3/8"	3/8"	3/4"	–	–
350	1092	1/2"	3/8"	3/8"	3/4"	1/2"	60
490	1458	1/2"	3/8"	3/8"	1"	1/2"	0

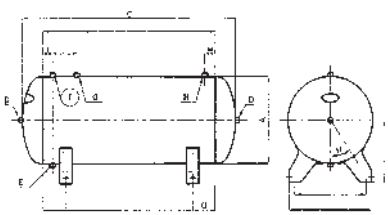
Note: Air receivers not supplied with fittings kit.

Please contact sales office.

Horizontal

BSPP

Code	Q05	Capacity Litres	Price
ARH25		24	**108.90**
ARH50		50	**156.50**
ARH100		100	**293.60**
ARH270		270	**531.50**





Air Receivers



Mini Air Receivers

PED Compliant, 4 Ports

Code	N19	Capacity Litres	Ø mm	Length mm	Thread BSPP	Price
2SBCV4		2.5	160	175	1/2"	69.15
5SBCV4		5	210	195	1/2"	114.50
7SBCV4		7	210	260	1/2"	89.60
12SBCV4		12	229	365	1/2"	131.00



Mini Air Receivers, Stainless Steel

PED Compliant, 4 Ports

Code	N19	Capacity Litres	Ports on End	Ports on Body	Price
5SBCX4		5	3/8"	3/8"	318.00
10SBCX4		10	1"	3/8"	417.15
24SBCX4		24	1"	3/8"	598.35

Note: Standard version is unpolished. Polished versions available on request.



Mini Air Receivers, Accessories

Brackets & Adaptors

Code	S23	Description	Price
STAFFA		Steel Bracket	22.20
STAFFA-X		Stainless Steel Bracket	57.55
MFAP1212		G1/2" Male/Female Bracket Adaptor	7.70

- CE Compliance Fully Automatic Multi-voltage IP65 ABS enclosure
- Interval Time: 0.5-45 minutes
- Discharge Time: 0.5-10 seconds
- Valve Body: Brass
- 0.01 Micron, filter for removing liquids, sub-micron particles and aerosols down to 0.01mg/m^3 from compressed air.

Maximum Working Pressure:

- 16 bar



Timed Drain Valve

Timer Valve

Code	S18	Thread BSPP	Voltage	Price 1-9	Price 10+
PU220i-03ST-230V		G3/8"	230V	69.65	66.20

For Pressure Relief Valves



See page 238

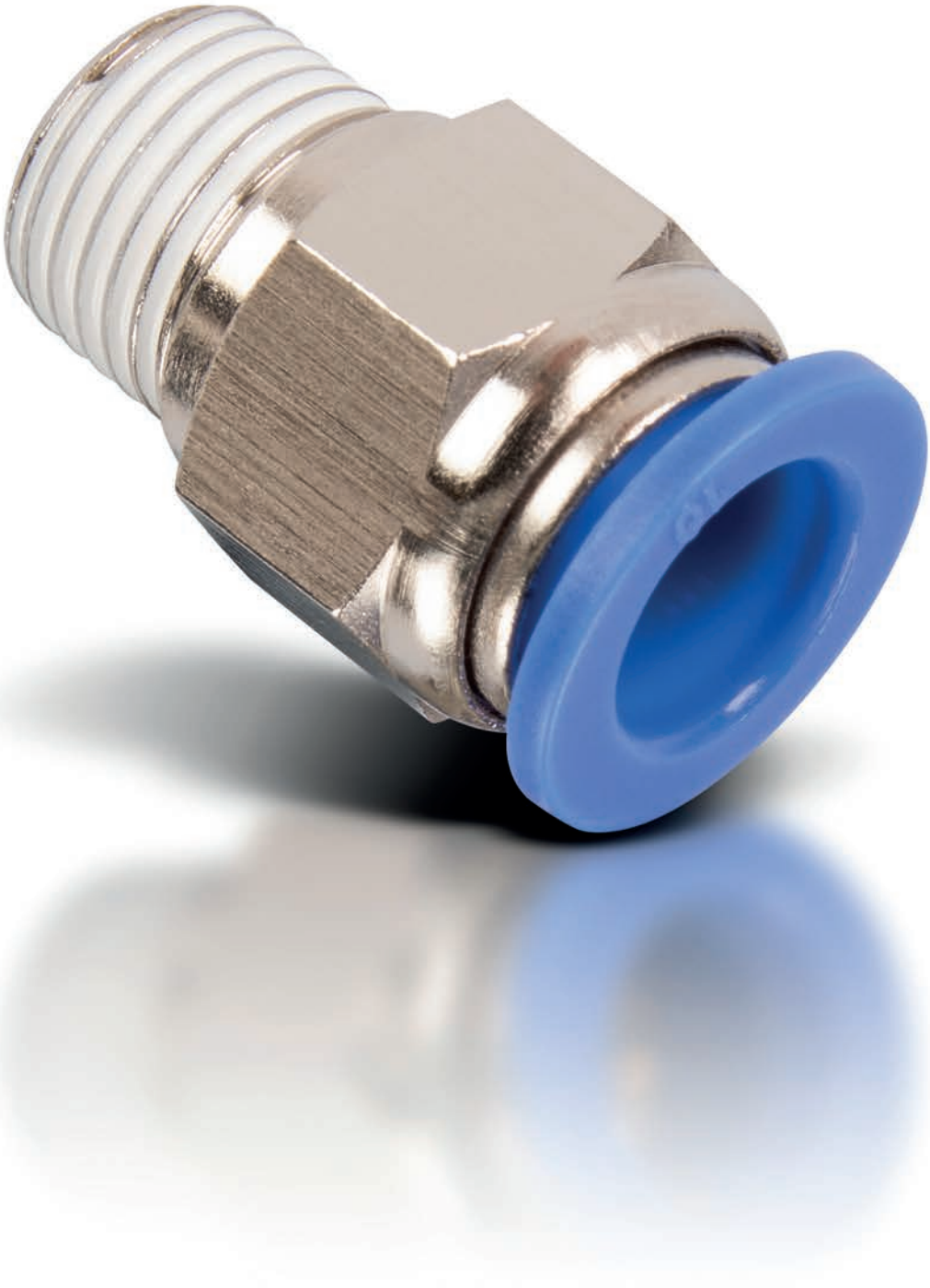
PEAK INDUSTRIAL



i-Flow: **Cost effective** on-site **nitrogen gas** generation

- Economical, on-demand N2 solution that saves you money
- Highly efficient & reliable technology, for maximum productivity
- Future-proof, expandable design to meet your growing demands
- Expert consultation & system design, backed by world-class support

Contact us today to discover more!





356-360 Grey Push-in Fittings



361-366 Blue Push-in Fittings



367 Check & Stop Valves



368-370 Metric NPT Push-in Fittings



371-372 Imperial NPT Push-in Fittings



373-374 All Stainless Steel Push-in Fittings



376-378 Fitting Kits



380-381 Metal Work Metric Push-in Fittings, Nickel-plated Brass



382-383 Metal Work Metric Push-in Fittings, Technopolymer



384 Metal Work Fittings Kit



385-386 Food Grade Fittings



387-388 Finger-tight Fittings



389 Metal Work Metric Compression Fittings



390-393 C.matic Metric Push-in Fittings



394-395 C.matic Stainless Steel Push-in Fittings



396-398 Push-in Fittings, Plastic



399 Wade Metric Compression Fittings



400-401 Wade Imperial Compression Fittings

Grey Push-in Fittings

- One of the highest pressure rated polymer push-in fittings available on the market
- Elliptical release ring facilitates pneumatic installation in confined spaces
- Light manual pressure on the elliptical release ring is all that is required to instantly disconnect each tube; no special tools required
- Nickel plated brass ensures anti-corrosion and anti-contamination
- All taper threaded fittings are pre-coated with PTFE sealant and require no additional sealing

Construction:

- Resin Body: technopolymer resin
- Metal Body: nickel plated brass
- Packing: nitrile
- Back O-Ring: POM
- O-Ring: nitrile
- Collar: nickel plated zinc
- Collet: technopolymer resin
- Sleeve: POM
- Collet Ring: nickel plated brass

Working Temperature:

- 0°C to +60°C

Maximum Working Pressure:

- 16 bar

Negative Pressure:

- 750mm Hg (10 torr)



Male Stud

BSP Tapered x Tube

Code S11	Thread BSPT	Tube OD mm	Price 1-9	Price 10+
APC4-M5	M5	4	1.15	1.10
APC4-01	R1/8"	4	1.25	1.20
APC4-02	R1/4"	4	1.15	1.10
APC6-M5	M5	6	1.25	1.20
APC6-01	R1/8"	6	1.25	1.20
APC6-02	R1/4"	6	1.15	1.10
APC6-03	R3/8"	6	1.75	1.70
APC6-04	R1/2"	6	2.45	2.35
APC8-01	R1/8"	8	1.25	1.20
APC8-02	R1/4"	8	1.25	1.20
APC8-03	R3/8"	8	1.75	1.70
APC8-04	R1/2"	8	2.50	2.40
APC10-01	R1/8"	10	1.75	1.70
APC10-02	R1/4"	10	1.80	1.75
APC10-03	R3/8"	10	2.65	2.55
APC10-04	R1/2"	10	2.65	2.55
APC12-02	R1/4"	12	2.65	2.55
APC12-03	R3/8"	12	2.65	2.55
APC12-04	R1/2"	12	2.65	2.55
APC16-03	R3/8"	16	6.75	6.45
APC16-04	R1/2"	16	6.75	6.45



Male Stud

BSPP Parallel x Tube

Code S11	Thread BSPP	Tube OD mm	Price 1-9	Price 10+
APC4-G01	G1/8"	4	1.30	1.25
APC4-G02	G1/4"	4	1.30	1.25
APC6-G01	G1/8"	6	1.30	1.25
APC6-G02	G1/4"	6	1.30	1.25
APC6-G03	G3/8"	6	1.95	1.90
APC6-G04	G1/2"	6	3.15	3.00
APC8-G01	G1/8"	8	1.30	1.25
APC8-G02	G1/4"	8	1.30	1.25
APC8-G03	G3/8"	8	1.95	1.90
APC8-G04	G1/2"	8	2.75	2.65
APC10-G01	G1/8"	10	2.15	2.05
APC10-G02	G1/4"	10	2.10	2.00
APC10-G03	G3/8"	10	2.15	2.05
APC10-G04	G1/2"	10	2.95	2.85
APC12-G02	G1/4"	12	2.90	2.80
APC12-G03	G3/8"	12	2.95	2.85
APC12-G04	G1/2"	12	2.95	2.85
APC16-G03	G3/8"	16	7.15	6.80
APC16-G04	G1/2"	16	7.30	6.95



Male Stud Swivel Elbow

BSP Tapered x Tube

Code S11	Thread BSPT	Tube OD mm	Price 1-9	Price 10+
APL4-M5	M5	4	1.60	1.55
APL4-01	R1/8"	4	1.60	1.55
APL4-02	R1/4"	4	1.60	1.55
APL6-M5	M5	6	1.60	1.55
APL6-01	R1/8"	6	1.60	1.55
APL6-02	R1/4"	6	1.60	1.55
APL6-03	R3/8"	6	1.95	1.90
APL6-04	R1/2"	6	3.25	3.10
APL8-01	R1/8"	8	1.75	1.70
APL8-02	R1/4"	8	1.75	1.70
APL8-03	R3/8"	8	2.15	2.05
APL8-04	R1/2"	8	3.15	3.00
APL10-01	R1/8"	10	2.10	2.00
APL10-02	R1/4"	10	2.15	2.05
APL10-03	R3/8"	10	2.30	2.20
APL10-04	R1/2"	10	3.65	3.50
APL12-02	R1/4"	12	3.75	3.60
APL12-03	R3/8"	12	3.75	3.60
APL12-04	R1/2"	12	3.65	3.50
APL16-03	R3/8"	16	7.90	7.55
APL16-04	R1/2"	16	7.90	7.55

Grey Push-in Fittings

Male Stud Swivel Elbow



BSP Parallel x Tube

Code	S11	Thread BSPP	Tube OD mm	Price 1-9	Price 10+
APL4-G01		G1/8"	4	1.65	1.60
APL4-G02		G1/4"	4	1.65	1.60
APL6-G01		G1/8"	6	1.75	1.70
APL6-G02		G1/4"	6	1.75	1.70
APL6-G03		G3/8"	6	2.15	2.05
APL6-G04		G1/2"	6	3.30	3.15
APL8-G01		G1/8"	8	1.95	1.90
APL8-G02		G1/4"	8	1.95	1.90
APL8-G03		G3/8"	8	2.30	2.20
APL8-G04		G1/2"	8	3.60	3.45
APL10-G01		G1/8"	10	2.30	2.20
APL10-G02		G1/4"	10	2.30	2.20
APL10-G03		G3/8"	10	2.50	2.40
APL10-G04		G1/2"	10	4.25	4.05
APL12-G02		G1/4"	12	4.10	3.90
APL12-G03		G3/8"	12	4.00	3.80
APL12-G04		G1/2"	12	4.10	3.90
APL16-G03		G3/8"	16	8.65	8.25
APL16-G04		G1/2"	16	8.65	8.25

Male Stud Swivel Branch Tee



BSP Parallel x Tube

Code	S11	Thread BSPP	Tube OD mm	Price 1-9	Price 10+
APB4-G01		G1/8"	4	2.60	2.50
APB4-G02		G1/4"	4	2.65	2.55
APB6-G01		G1/8"	6	2.65	2.55
APB6-G02		G1/4"	6	2.90	2.80
APB6-G03		G3/8"	6	3.15	3.00
APB6-G04		G1/2"	6	3.60	3.45
APB8-G01		G1/8"	8	3.00	2.85
APB8-G02		G1/4"	8	2.95	2.85
APB8-G03		G3/8"	8	3.40	3.25
APB8-G04		G1/2"	8	4.30	4.10
APB10-G01		G1/8"	10	3.40	3.25
APB10-G02		G1/4"	10	3.45	3.30
APB10-G03		G3/8"	10	3.60	3.45
APB10-G04		G1/2"	10	4.45	4.25
APB12-G02		G1/4"	12	4.30	4.10
APB12-G03		G3/8"	12	4.30	4.10
APB12-G04		G1/2"	12	4.50	4.30

Male Stud Swivel Branch Tee



BSP Tapered x Tube

Code	S11	Thread BSPT	Tube OD mm	Price 1-9	Price 10+
APB4-M5		M5	4	1.30	1.25
APB4-01		R1/8"	4	1.25	1.20
APB4-02		R1/4"	4	1.75	1.70
APB6-M5		M5	6	1.45	1.40
APB6-01		R1/8"	6	1.45	1.40
APB6-02		R1/4"	6	1.80	1.75
APB6-03		R3/8"	6	3.25	3.10
APB6-04		R1/2"	6	4.45	4.25
APB8-01		R1/8"	8	1.80	1.75
APB8-02		R1/4"	8	1.95	1.90
APB8-03		R3/8"	8	2.40	2.30
APB8-04		R1/2"	8	3.45	3.30
APB10-01		R1/8"	10	2.65	2.55
APB10-02		R1/4"	10	2.90	2.80
APB10-03		R3/8"	10	2.90	2.80
APB10-04		R1/2"	10	4.25	4.05
APB12-02		R1/4"	12	4.00	3.80
APB12-03		R3/8"	12	4.25	4.05
APB12-04		R1/2"	12	6.50	6.20

Female Stud



BSP Parallel x Tube

Code	S11	Thread BSPP	Tube OD mm	Price 1-9	Price 10+
APCF4-G01		G1/8"	4	1.50	1.45
APCF4-G02		G1/4"	4	1.60	1.55
APCF6-G01		G1/8"	6	1.50	1.45
APCF6-G02		G1/4"	6	1.75	1.70
APCF6-G03		G3/8"	6	2.25	2.15
APCF6-G04		G1/2"	6	4.60	4.40
APCF8-G01		G1/8"	8	1.75	1.70
APCF8-G02		G1/4"	8	1.80	1.75
APCF8-G03		G3/8"	8	2.25	2.15
APCF8-G04		G1/2"	8	3.60	3.45
APCF10-G01		G1/8"	10	2.45	2.35
APCF10-G02		G1/4"	10	2.50	2.40
APCF10-G03		G3/8"	10	2.45	2.35
APCF10-G04		G1/2"	10	3.75	3.60
APCF12-G02		G1/4"	12	3.75	3.60
APCF12-G03		G3/8"	12	3.80	3.65
APCF12-G04		G1/2"	12	3.75	3.60
APCF16-G03		G3/8"	16	9.30	8.85
APCF16-G04		G1/2"	16	9.30	8.85

Male Stud Swivel Run Tee



BSP Tapered x Tube

Code	S11	Thread BSPT	Tube OD mm	Price 1-9	Price 10+
APD4-M5		M5	4	1.45	1.40
APD4-01		R1/8"	4	1.25	1.20
APD4-02		R1/4"	4	1.80	1.75
APD6-M5		M5	6	1.45	1.40
APD6-01		R1/8"	6	2.90	2.80
APD6-02		R1/4"	6	1.90	1.85
APD6-03		R3/8"	6	2.50	2.40
APD6-04		R1/2"	6	3.50	3.35
APD8-01		R1/8"	8	1.90	1.85
APD8-02		R1/4"	8	2.00	1.90
APD8-03		R3/8"	8	2.65	2.55
APD8-04		R1/2"	8	3.80	3.65
APD10-01		R1/8"	10	2.90	2.80
APD10-02		R1/4"	10	3.00	2.85
APD10-03		R3/8"	10	3.15	3.00
APD10-04		R1/2"	10	4.30	4.10
APD12-02		R1/4"	12	4.25	4.05
APD12-03		R3/8"	12	5.15	4.90
APD12-04		R1/2"	12	4.60	4.40

Grey Push-in Fittings

Threaded Y Connector



BSP Tapered x Tube

Code	S11	Thread BSPT	Tube OD mm	Price 1-9	Price 10+
APX4-M5		M5	4	2.25	2.15
APX4-01		R1/8"	4	2.25	2.15
APX4-02		R1/4"	4	2.25	2.15
APX6-M5		M5	6	2.45	2.35
APX6-01		R1/8"	6	2.45	2.35
APX6-02		R1/4"	6	2.60	2.50
APX6-03		R3/8"	6	2.90	2.80
APX6-04		R1/2"	6	3.50	3.35
APX8-01		R1/8"	8	2.75	2.65
APX8-02		R1/4"	8	2.80	2.70
APX8-03		R3/8"	8	3.00	2.85
APX8-04		R1/2"	8	3.90	3.75
APX10-01		R1/8"	10	2.95	2.85
APX10-02		R1/4"	10	3.00	2.85
APX10-03		R3/8"	10	3.15	3.00
APX10-04		R1/2"	10	4.10	3.90
APX12-02		R1/4"	12	4.00	3.80
APX12-03		R3/8"	12	3.90	3.75
APX12-04		R1/2"	12	4.15	3.95

Threaded Y Connector



BSP Parallel x Tube

Code	S11	Thread BSPP	Tube OD mm	Price 1-9	Price 10+
APX4-G01		G1/8"	4	1.50	1.45
APX4-G02		G1/4"	4	1.95	1.90
APX6-G01		G1/8"	6	1.75	1.70
APX6-G02		G1/4"	6	2.00	1.90
APX6-G03		G3/8"	6	2.65	2.55
APX6-G04		G1/2"	6	4.90	4.70
APX8-G01		G1/8"	8	3.50	3.35
APX8-G02		G1/4"	8	2.15	2.05
APX8-G03		G3/8"	8	3.00	2.85
APX8-G04		G1/2"	8	4.30	4.10
APX10-G01		G1/8"	10	3.15	3.00
APX10-G02		G1/4"	10	3.30	3.15
APX10-G03		G3/8"	10	3.40	3.25
APX10-G04		G1/2"	10	4.65	4.45
APX12-G02		G1/4"	12	4.65	4.45
APX12-G03		G3/8"	12	4.90	4.70
APX12-G04		G1/2"	12	6.10	5.80

Female Elbow



BSP Parallel x Tube

Code	S11	Thread BSPP	Tube OD mm	Price 1-9	Price 10+
APLF4-G01		G1/8"	4	2.15	2.05
APLF4-G02		G1/4"	4	1.95	1.90
APLF6-G01		G1/8"	6	1.45	1.40
APLF6-G02		G1/4"	6	2.10	2.00
APLF6-G03		G3/8"	6	3.00	2.85
APLF6-G04		G1/2"	6	3.65	3.50
APLF8-G01		G1/8"	8	1.75	1.70
APLF8-G02		G1/4"	8	2.25	2.15
APLF8-G03		G3/8"	8	3.15	3.00
APLF8-G04		G1/2"	8	3.95	3.80
APLF10-G01		G1/8"	10	2.25	2.15
APLF10-G02		G1/4"	10	2.80	2.70
APLF10-G03		G3/8"	10	3.60	3.45
APLF10-G04		G1/2"	10	4.50	4.30
APLF12-G02		G1/4"	12	4.10	3.90
APLF12-G03		G3/8"	12	4.25	4.05
APLF12-G04		G1/2"	12	4.95	4.75

Compact Male Elbow



BSP Parallel x Tube

Code	S11	Thread BSPP	Tube OD mm	Price 1-9	Price 10+
APH4-G01		G1/8"	4	1.65	1.60
APH4-G02		G1/4"	4	2.60	2.50
APH6-G01		G1/8"	6	1.80	1.75
APH6-G02		G1/4"	6	2.50	2.40
APH6-G03		G3/8"	6	3.95	3.80
APH6-G04		G1/2"	6	6.30	6.00
APH8-G01		G1/8"	8	1.80	1.75
APH8-G02		G1/4"	8	2.50	2.40
APH8-G03		G3/8"	8	4.10	3.90
APH8-G04		G1/2"	8	6.45	6.15
APH10-G01		G1/8"	10	2.00	1.90
APH10-G02		G1/4"	10	2.80	2.70
APH10-G03		G3/8"	10	4.40	4.20
APH10-G04		G1/2"	10	6.60	6.30
APH12-G02		G1/4"	12	3.00	2.85
APH12-G03		G3/8"	12	6.75	6.45
APH12-G04		G1/2"	12	6.90	6.60

Equal Elbow



Tube x Tube

Code	S11	Tube OD mm	Price 1-9	Price 10+
APV4		4	1.10	1.05
APV6		6	1.15	1.10
APV8		8	1.25	1.20
APV10		10	1.45	1.40
APV12		12	1.75	1.70
APV16		16	3.95	3.80

Straight Connector



Tube x Tube

Code	S11	Tube OD mm	Price 1-9	Price 10+
APU4		4	1.10	1.05
APU6		6	1.15	1.10
APU8		8	1.25	1.20
APU10		10	1.45	1.40
APU12		12	1.65	1.60
APU16		16	4.25	4.05

Reducing Straight Connector



Tube x Tube

Code	S11	Tube OD mm		Price 1-9	Price 10+
APG6-4		6	4	1.25	1.20
APG8-6		8	6	1.45	1.40
APG10-8		10	8	1.95	1.90
APG12-10		12	10	2.30	2.20
APG16-12		16	12	2.95	2.85

Equal Tee



Tube x Tube

Code	S11	Tube OD mm	Price 1-9	Price 10+
APE4		4	1.65	1.60
APE6		6	1.50	1.45
APE8		8	1.50	1.45
APE10		10	1.95	1.90
APE12		12	2.45	2.35
APE16		16	4.90	4.70

Grey Push-in Fittings

Tee, Reducing on Branch



Tube x Tube

Code	S11	Tube OD mm A & C	Tube OD mm B	Price 1-9	Price 10+
APEG6-4		6	4	1.10	1.05
APEG8-6		8	6	1.25	1.20
APEG10-8		10	8	1.65	1.60
APEG12-10		12	10	2.10	2.00

Plug



Tube

Code	S11	Tube OD mm	Price 1-9	Price 10+
APP4		4	0.45	0.42
APP6		6	0.50	0.47
APP8		8	0.60	0.57
APP10		10	0.75	0.70
APP12		12	0.90	0.85

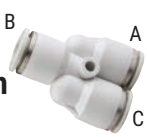
Y Connector



Tube x Tube

Code	S11	Tube OD mm	Price 1-9	Price 10+
APY4		4	1.50	1.45
APY6		6	1.50	1.45
APY8		8	1.50	1.45
APY10		10	1.80	1.75
APY12		12	2.50	2.40
APY16		16	5.25	5.00

Y Connector, Increasing on Branch



Tube x Tube

Code	S11	Tube OD mm A & C	Tube OD mm B	Price 1-9	Price 10+
APW6-4		4	6	2.15	2.05
APW8-6		6	8	1.95	1.90
APW10-8		8	10	2.65	2.55
APW12-10		10	12	3.25	3.10

Bulkhead Connector



Tube x Tube

Code	S11	Tube OD mm	Price 1-9	Price 10+
APM4		4	2.75	2.65
APM6		6	3.25	3.10
APM8		8	3.60	3.45
APM10		10	4.15	3.95
APM12		12	4.90	4.70
APM16		16	12.95	12.35

Stem Reducer



Stem x Tube

Code	S11	OD mm Stem	OD mm Tube	Price 1-9	Price 10+
APGJ6-4		6	4	1.95	1.90
APGJ8-4		8	4	2.50	2.40
APGJ8-6		8	6	2.60	2.50
APGJ10-6		10	6	4.10	3.90
APGJ10-8		10	8	3.80	3.65
APGJ12-8		12	8	2.30	2.20
APGJ12-10		12	10	4.50	4.30

Equal Cross



Tube x Tube

Code	S11	Tube OD mm	Price 1-9	Price 10+
APZA4		4	2.50	2.40
APZA6		6	2.50	2.40
APZA8		8	3.15	3.00
APZA10		10	3.65	3.50
APZA12		12	4.00	3.80

Triple Branch Manifold



BSP Parallel x Tube

Code	S11	Thread BSPP	Tube OD mm	Price 1-9	Price 10+
APKB4-G01		G1/8"	4	4.10	3.90
APKB4-G02		G1/4"	4	4.45	4.25
APKB6-G01		G1/8"	6	4.00	3.80
APKB6-G02		G1/4"	6	4.45	4.25
APKB6-G03		G3/8"	6	4.75	4.55
APKB8-G01		G1/8"	8	4.45	4.25
APKB8-G02		G1/4"	8	4.75	4.55
APKB8-G03		G3/8"	8	5.90	5.65

Triple Branch Reducing Manifold



Tube x Tube

Code	S11	Tube OD mm Inlet	Tube OD mm Outlet	Price 1-9	Price 10+
APKG8-4		8	4	3.50	3.35
APKG8-6		8	6	3.75	3.60
APKG10-6		10	6	4.90	4.70
APKG10-8		10	8	4.90	4.70

Triple Branch Equal Manifold



Tube x Tube

Code	S11	Tube OD mm	Price 1-9	Price 10+
APK4		4	1.95	1.90
APK6		6	2.25	2.15
APK8		8	2.65	2.55

Grey Push-in Fittings

Banjo Flow Control, Meter Out



BSP Taper x Tube

Code S11	Thread BSPT	Tube OD mm	Price 1-9	Price 10+
ASL4-M5	M5	4	6.00	5.70
ASL4-01	R1/8"	4	6.00	5.70
ASL4-02	R1/4"	4	6.00	5.70
ASL6-M5	M5	6	6.00	5.70
ASL6-01	R1/8"	6	6.60	6.30
ASL6-02	R1/4"	6	6.60	6.30
ASL6-03	R3/8"	6	8.30	7.90
ASL6-04	R1/2"	6	10.00	9.50
ASL8-01	R1/8"	8	6.50	6.20
ASL8-02	R1/4"	8	6.60	6.30
ASL8-03	R3/8"	8	8.25	7.85
ASL8-04	R1/2"	8	9.80	9.35
ASL10-01	R1/8"	10	4.10	3.90
ASL10-02	R1/4"	10	7.10	6.75
ASL10-03	R3/8"	10	8.15	7.75
ASL10-04	R1/2"	10	10.00	9.50
ASL12-02	R1/4"	12	7.95	7.60
ASL12-03	R3/8"	12	9.45	9.00
ASL12-04	R1/2"	12	10.00	9.50

Ball Valve



Tube x Tube

Code S11	Tube OD mm	Price 1-9	Price 10+
AHVFF-06-06B	6	7.10	6.75
AHVFF-08-08B	8	7.60	7.25
AHVFF-10-10B	10	9.65	9.20
AHVFF-12-12B	12	14.15	13.45

Ball Valve, Venting



Tube x Tube

Code S11	Tube OD mm	Price 1-9	Price 10+
AHVFF-06-06	6	8.30	7.90
AHVFF-08-08	8	9.50	9.05
AHVFF-10-10	10	12.30	11.70
AHVFF-12-12	12	11.95	11.40

In-line Speed Controls



Tube x Tube

Code S11	Tube OD mm	Price 1-9	Price 10+
ASA4	4	7.30	6.95
ASA6	6	7.95	7.60
ASA8	8	8.40	8.00
ASA10	10	9.65	9.20
ASA12	12	10.90	10.40

For Pneumatic Tube in Nylon & Polyurethane



See pages 498-507

Blue Push-in Fittings

- Elliptical release ring facilitates pneumatic installation in confined spaces
- Light manual pressure on the elliptical release ring is all that is required to instantly disconnect each tube; no special tools required
- Nickel plated brass threaded body ensures anti-corrosion and anti-contamination
- All taper threaded fittings are precoated with PTFE sealant and require no additional sealing

Construction:

- Resin Body: PBT
- Metal Body: nickel plated brass
- Packing: nitrile
- Back Ring: POM
- O-Ring: nitrile
- Collar: nickel plated zinc
- Sleeve: POM
- Locking Claw: stainless steel
- Media: air and vacuum
- Threads: BSPP, BSPT and metric
- OD: metric

Working Temperature:

- 0°C to +60°C (dependent upon tubing specification)

Maximum Working Pressure:

- 10 bar

Negative Pressure:

- 750mm Hg (10 torr), (dependent upon tubing specification)



Male Studs

Male Thread, Metric & BSPT

Code	S11	Tube OD mm	Thread BSPT	Price 1-99	Price 100+
BPC4-M5		4	M5	1.10	1.05
BPC4-01		4	R1/8"	1.10	1.05
BPC4-M6		4	M6	1.10	1.05
BPC4-02		4	R1/4"	1.10	1.05
BPC4-03		4	R3/8"	2.15	2.05
BPC6-M5		6	M5	1.10	1.05
BPC6-01		6	R1/8"	1.10	1.05
BPC6-M6		6	M6	1.10	1.05
BPC6-02		6	R1/4"	1.10	1.05
BPC6-03		6	R3/8"	1.60	1.55
BPC6-04		6	R1/2"	2.30	2.20
BPC8-01		8	R1/8"	1.10	1.05
BPC8-02		8	R1/4"	1.10	1.05
BPC8-03		8	R3/8"	1.60	1.55
BPC8-04		8	R1/2"	2.30	2.20
BPC10-01		10	R1/8"	1.65	1.60
BPC10-02		10	R1/4"	1.65	1.60
BPC10-03		10	R3/8"	2.50	2.40
BPC10-04		10	R1/2"	2.45	2.35
BPC12-02		12	R1/4"	2.50	2.40
BPC12-03		12	R3/8"	2.45	2.35
BPC12-04		12	R1/2"	2.50	2.40



Male Studs

Male Thread, BSPP

Code	S11	Tube OD mm	Thread BSPP	Price 1-99	Price 100+
BPC4-G01		4	G1/8"	1.25	1.20
BPC4-G02		4	G1/4"	1.15	1.10
BPC6-G01		6	G1/8"	1.25	1.20
BPC6-G02		6	G1/4"	1.25	1.20
BPC6-G03		6	G3/8"	1.75	1.70
BPC8-G01		8	G1/8"	1.25	1.20
BPC8-G02		8	G1/4"	1.25	1.20
BPC8-G03		8	G3/8"	1.75	1.70
BPC8-G04		8	G1/2"	2.50	2.40
BPC10-G01		10	G1/8"	1.80	1.75
BPC10-G02		10	G1/4"	1.80	1.75
BPC10-G03		10	G3/8"	1.95	1.90
BPC10-G04		10	G1/2"	2.65	2.55
BPC12-G02		12	G1/4"	2.75	2.65
BPC12-G03		12	G3/8"	2.75	2.65
BPC12-G04		12	G1/2"	2.65	2.55

Blue Push-in Fittings



Female Studs

Female Thread, BSPP

Code	S11	Tube OD mm	Thread BSPP	Price 1-99	Price 100+
BPCF4-G01		4	G1/8"	1.45	1.40
BPCF4-G02		4	G1/4"	1.45	1.40
BPCF6-G01		6	G1/8"	1.45	1.40
BPCF6-G02		6	G1/4"	1.65	1.60
BPCF6-G03		6	G3/8"	2.10	2.00
BPCF8-G01		8	G1/8"	1.60	1.55
BPCF8-G02		8	G1/4"	1.60	1.55
BPCF8-G03		8	G3/8"	2.10	2.00
BPCF8-G04		8	G1/2"	3.40	3.25
BPCF10-G01		10	G1/8"	2.30	2.20
BPCF10-G02		10	G1/4"	2.30	2.20
BPCF10-G03		10	G3/8"	2.30	2.20
BPCF10-G04		10	G1/2"	3.50	3.35
BPCF12-G02		12	G1/4"	3.50	3.35
BPCF12-G03		12	G3/8"	3.50	3.35
BPCF12-G04		12	G1/2"	3.45	3.30



Female Bulkhead Connectors

Female Thread, Metric & BSPP

Code	S11	Tube OD mm	Thread BSPP	Bulk Head	Price 1-99	Price 100+
BPCFB4-M5-M12		4	M5	M12 x 1	2.75	2.65
BPCFB4-G01-M12		4	G1/8"	M12 x 1	2.65	2.55
BPCFB4-G02-M12		4	G1/4"	M12 x 1	2.75	2.65
BPCFB6-M5-M14		6	M5	M14 x 1	3.45	3.30
BPCFB6-G01-M14		6	G1/8"	M14 x 1	3.60	3.45
BPCFB6-M6-M14		6	M6	M14 x 1	3.50	3.35
BPCFB6-G02-M14		6	G1/4"	M14 x 1	3.60	3.45
BPCFB6-G03-M14		6	G3/8"	M14 x 1	3.95	3.80
BPCFB6-G04-M14		6	G1/2"	M14 x 1	4.50	4.30
BPCFB8-G01-M16		8	G1/8"	M16 x 1	3.60	3.45
BPCFB8-G02-M16		8	G1/4"	M16 x 1	3.65	3.50
BPCFB8-G03-M16		8	G3/8"	M16 x 1	3.95	3.80
BPCFB8-G04-M16		8	G1/2"	M16 x 1	4.65	4.45
BPCFB10-G01-M20		10	G1/8"	M20 x 1	3.65	3.50
BPCFB10-G02-M20		10	G1/4"	M20 x 1	3.95	3.80
BPCFB10-G03-M20		10	G3/8"	M20 x 1	4.30	4.10
BPCFB10-G04-M20		10	G1/2"	M20 x 1	4.65	4.45
BPCFB12-G02-M22		12	G1/4"	M22 x 1	4.50	4.30
BPCFB12-G03-M22		12	G3/8"	M22 x 1	4.75	4.55
BPCFB12-G04-M22		12	G1/2"	M22 x 1	4.90	4.70



Male Stud Swivel Elbows

Male Thread, Metric & BSPT

Code	S11	Tube OD mm	Thread BSPT	Price 1-99	Price 100+
BPL4-M5		4	M5	1.45	1.40
BPL4-01		4	R1/8"	1.45	1.40
BPL4-M6		4	M6	1.45	1.40
BPL4-02		4	R1/4"	1.45	1.40
BPL6-M5		6	M5	1.45	1.40
BPL6-01		6	R1/8"	1.45	1.40
BPL6-M6		6	M6	1.45	1.40
BPL6-02		6	R1/4"	1.45	1.40
BPL6-03		6	R3/8"	1.65	1.60
BPL6-04		6	R1/2"	2.95	2.85
BPL8-01		8	R1/8"	1.60	1.55
BPL8-02		8	R1/4"	1.60	1.55
BPL8-03		8	R3/8"	1.80	1.75
BPL8-04		8	R1/2"	2.95	2.85
BPL10-01		10	R1/8"	1.80	1.75
BPL10-02		10	R1/4"	1.80	1.75
BPL10-03		10	R3/8"	2.15	2.05
BPL10-04		10	R1/2"	3.40	3.25
BPL12-02		12	R1/4"	3.45	3.30
BPL12-03		12	R3/8"	3.45	3.30
BPL12-04		12	R1/2"	3.40	3.25

Blue Push-in Fittings



Male Stud Swivel Elbows

Male Thread, BSPP

Code	S11	Tube OD mm	Thread BSPP	Price 1-99	Price 100+
BPL4-G01		4	G1/8"	1.65	1.60
BPL4-G02		4	G1/4"	1.60	1.55
BPL6-G01		6	G1/8"	1.65	1.60
BPL6-G02		6	G1/4"	1.65	1.60
BPL6-G03		6	G3/8"	1.95	1.90
BPL8-G01		8	G1/8"	1.80	1.75
BPL8-G02		8	G1/4"	1.80	1.75
BPL8-G03		8	G3/8"	2.15	2.05
BPL8-G04		8	G1/2"	3.40	3.25
BPL10-G01		10	G1/8"	2.15	2.05
BPL10-G02		10	G1/4"	2.15	2.05
BPL10-G03		10	G3/8"	2.40	2.30
BPL10-G04		10	G1/2"	4.00	3.80
BPL12-G02		12	G1/4"	3.90	3.75
BPL12-G03		12	G3/8"	3.80	3.65
BPL12-G04		12	G1/2"	3.80	3.65



Male Stud Swivel Elbows

Extended Male Thread, Metric & BSPT

Code	S11	Tube OD mm	Thread BSPT	Price 1-99	Price 100+
BPLE4-M5		4	M5	1.75	1.70
BPLE4-01		4	R1/8"	1.75	1.70
BPLE6-M5		6	M5	1.75	1.70
BPLE6-01		6	R1/8"	1.75	1.70
BPLE6-M6		6	M6	1.75	1.70
BPLE6-02		6	R1/4"	1.75	1.70
BPLE8-01		8	R1/8"	1.80	1.75
BPLE8-02		8	R1/4"	1.80	1.75
BPLE10-01		10	R1/8"	3.40	3.25
BPLE10-02		10	R1/4"	2.65	2.55
BPLE12-02		12	R1/4"	3.95	3.80
BPLE12-03		12	R3/8"	3.95	3.80



Male Stud Swivel Elbows

Extended Male Thread, BSPP

Code	S11	Tube OD mm	Thread BSPP	Price 1-99	Price 100+
BPLE4-G01		4	G1/8"	1.95	1.90
BPLE4-G02		4	G1/4"	1.95	1.90
BPLE6-G01		6	G1/8"	2.10	2.00
BPLE6-G02		6	G1/4"	1.95	1.90
BPLE6-G03		6	G3/8"	2.50	2.40
BPLE8-G01		8	G1/8"	2.15	2.05
BPLE8-G02		8	G1/4"	2.15	2.05
BPLE8-G03		8	G3/8"	2.40	2.30
BPLE10-01		10	G1/8"	3.40	3.25
BPLE10-02		10	G3/8"	2.65	2.55
BPLE12-03		12	G3/8"	3.95	3.80



Male Centre Leg, Swivel Tees

Male Thread, Metric & BSPT

Code	S11	Tube OD mm	Thread BSPT	Price 1-99	Price 100+
BPB4-M5		4	M5	1.95	1.90
BPB4-01		4	R1/8"	2.15	2.05
BPB4-02		4	R1/4"	2.30	2.20
BPB6-M5		6	M5	2.30	2.20
BPB6-01		6	R1/8"	2.30	2.20
BPB6-02		6	R1/4"	2.45	2.35
BPB6-03		6	R3/8"	2.75	2.65
BPB6-04		6	R1/2"	3.65	3.50
BPB8-01		8	R1/8"	2.50	2.40
BPB8-02		8	R1/4"	2.50	2.40
BPB8-03		8	R3/8"	2.80	2.70
BPB8-04		8	R1/2"	3.65	3.50
BPB10-01		10	R1/8"	2.80	2.70
BPB10-02		10	R1/4"	2.90	2.80
BPB10-03		10	R3/8"	3.00	2.85
BPB10-04		10	R1/2"	3.90	3.75
BPB12-02		12	R1/4"	3.75	3.60
BPB12-03		12	R3/8"	3.75	3.60
BPB12-04		12	R1/2"	3.90	3.75



Male Centre Leg, Swivel Tees

Male Thread, BSPP

Code	S11	Tube OD mm	Thread BSPP	Price 1-99	Price 100+
BPB4-G01		4	G1/8"	2.45	2.35
BPB4-G02		4	G1/4"	2.50	2.40
BPB6-G01		6	G1/8"	2.50	2.40
BPB6-G02		6	G1/4"	2.75	2.65
BPB6-G03		6	G3/8"	3.00	2.85
BPB8-G01		8	G1/8"	2.90	2.80
BPB8-G02		8	G1/4"	2.80	2.70
BPB8-G03		8	G3/8"	3.10	2.95
BPB8-G04		8	G1/2"	4.00	3.80
BPB10-G01		10	G1/8"	3.15	3.00
BPB10-G02		10	G1/4"	3.15	3.00
BPB10-G03		10	G3/8"	3.40	3.25
BPB12-G02		12	G1/4"	4.15	3.95
BPB12-G03		12	G3/8"	4.15	3.95
BPB12-G04		12	G1/2"	4.40	4.20



Male Run Leg, Swivel Tees

Male Thread, Metric & BSPT

Code	S11	Tube OD mm	Thread BSPT	Price 1-99	Price 100+
BPD4-M5		4	M5	2.10	2.00
BPD4-01		4	R1/8"	2.10	2.00
BPD6-01		6	R1/8"	2.60	2.50
BPD6-02		6	R1/4"	2.90	2.80
BPD6-03		6	R3/8"	3.45	3.30
BPD8-01		8	R1/8"	2.65	2.55
BPD8-02		8	R1/4"	2.90	2.80
BPD8-03		8	R3/8"	3.15	3.00
BPD10-01		10	R1/8"	3.15	3.00
BPD10-02		10	R1/4"	3.15	3.00
BPD10-03		10	R3/8"	3.45	3.30
BPD12-03		12	R3/8"	3.80	3.65
BPD12-04		12	R1/2"	4.00	3.80

Blue Push-in Fittings



Male Run Leg, Swivel Tees

Male Thread, BSPP

Code S11	Tube OD mm	Thread BSPP	Price 1-99	Price 100+
BPD6-G01	6	G1/8"	2.90	2.80
BPD6-G02	6	G1/4"	3.40	3.25
BPD8-G02	8	G1/4"	3.40	3.25



Male Stud Swivel Ys

Male Thread, Metric & BSPT

Code S11	Tube OD mm	Thread BSPT	Price 1-99	Price 100+
BPX4-01	4	R1/8"	1.95	1.90
BPX6-01	6	R1/8"	2.25	2.15
BPX6-02	6	R1/4"	2.40	2.30
BPX6-03	6	R3/8"	2.65	2.55
BPX8-01	8	R1/8"	2.50	2.40
BPX8-02	8	R1/4"	2.60	2.50
BPX8-03	8	R3/8"	2.80	2.70
BPX8-04	8	R1/2"	3.65	3.50
BPX10-01	10	R1/8"	2.75	2.65
BPX10-02	10	R1/4"	2.80	2.70
BPX10-03	10	R3/8"	2.95	2.85
BPX10-04	10	R1/2"	3.80	3.65
BPX12-02	12	R1/4"	3.65	3.50
BPX12-03	12	R3/8"	3.60	3.45
BPX12-04	12	R1/2"	3.90	3.75



Single Banjos

Male Thread, Metric & BSPT

Code S11	Tube OD mm	Thread BSPT	Price 1-99	Price 100+
BPH4-M5	4	M5	2.25	2.15
BPH4-01	4	R1/8"	2.30	2.20
BPH4-M6	4	M6	2.25	2.15
BPH6-M5	6	M5	2.65	2.55
BPH6-01	6	R1/8"	2.75	2.65
BPH6-M6	6	M6	2.75	2.65
BPH6-02	6	R1/4"	3.00	2.85
BPH6-03	6	R3/8"	3.45	3.30
BPH8-01	8	R1/8"	2.80	2.70
BPH8-02	8	R1/4"	3.00	2.85
BPH8-03	8	R3/8"	3.40	3.25
BPH10-02	10	R1/4"	3.45	3.30
BPH10-03	10	R3/8"	3.60	3.45
BPH10-04	10	R1/2"	3.90	3.75
BPH12-02	12	R1/4"	3.65	3.50
BPH12-03	12	R3/8"	3.95	3.80
BPH12-04	12	R1/2"	4.10	3.90



Manual Flow Controller, Uni-directional

Elbow, Male Thread, Metric & BSPT

Code S11	Tube OD mm	Thread BSPT	Price 1-99	Price 100+
BSL4-M5	4	M5	5.50	5.25
BSL4-01	4	R1/8"	5.50	5.25
BSL4-02	4	R1/4"	5.45	5.20
BSL6-M5	6	M5	5.50	5.25
BSL6-01	6	R1/8"	6.00	5.70
BSL6-M6	6	M6	5.50	5.25
BSL6-02	6	R1/4"	6.10	5.80
BSL6-03	6	R3/8"	7.50	7.15
BSL8-01	8	R1/8"	6.10	5.80
BSL8-02	8	R1/4"	6.10	5.80
BSL8-03	8	R3/8"	7.65	7.30
BSL8-04	8	R1/2"	9.00	8.55
BSL10-02	10	R1/4"	6.50	6.20
BSL10-03	10	R3/8"	7.50	7.15
BSL10-04	10	R1/2"	9.00	8.55
BSL12-02	12	R1/4"	7.45	7.10
BSL12-03	12	R3/8"	8.75	8.35
BSL12-04	12	R1/2"	9.10	8.65



Reducing Manifolds

Male Thread, BSPT

Code S11	Tube OD mm		Thread BSPT	Price 1-99	Price 100+
BPK6-4-01	6	4	R1/8"	3.95	3.80
BPK8-6-02	8	6	R1/4"	4.80	4.60
BPK10-8-03	10	8	R3/8"	4.95	4.75

Blue Push-in Fittings

Working Pressure:
- 7 bar (100 psi)



Manual Shut-off Valves

BSPT x BSPT

Code	S11	Thread BSPT	Price
BHVMM-02-02		R1/4"	10.40
BHVMM-03-03		R3/8"	11.50
BHVMM-04-04		R1/2"	12.60



Manual Shut-off Valves

Tube x BSPT

Code	S11	Tube OD mm	Thread BSPT	Price
BHVMF-6-01		6	R1/8"	9.15
BHVMF-6-02		6	R1/4"	9.95
BHVMF-8-03		8	R3/8"	10.30



Tube x Tube Connectors

Equal Straights

Code	S11	Tube OD mm	Price 1-99	Price 100+
BPU4		4	1.10	1.05
BPU6		6	1.10	1.05
BPU8		8	1.15	1.10
BPU10		10	1.30	1.25
BPU12		12	1.50	1.45



Tube x Tube Connectors

Unequal Straights

Code	S11	Tube OD mm		Price 1-99	Price 100+
BPG6-4		4	6	1.10	1.05
BPG8-6		6	8	1.25	1.20
BPG10-8		8	10	1.45	1.40
BPG12-10		10	12	2.15	2.05



Tube x Tube Connectors

Equal Elbows

Code	S11	Tube OD mm	Price 1-99	Price 100+
BPV4		4	1.00	0.95
BPV6		6	1.10	1.05
BPV8		8	1.15	1.10
BPV10		10	1.30	1.25
BPV12		12	1.50	1.45



Tube x Tube Connectors

Equal Tees

Code	S11	Tube OD mm	Price 1-99	Price 100+
BPE4		4	1.50	1.45
BPE6		6	1.40	1.35
BPE8		8	1.45	1.40
BPE10		10	1.75	1.70
BPE12		12	2.30	2.20



Tube x Tube Connectors

Equal Ys

Code	S11	Tube OD mm	Price 1-99	Price 100+
BPY4		4	1.45	1.40
BPY6		6	1.40	1.35
BPY8		8	1.45	1.40
BPY10		10	1.65	1.60
BPY12		12	2.40	2.30



Tube x Tube Connectors

Unequal Ys

Code	S11	Tube OD mm		Price 1-99	Price 100+
BPW6-4		6	4	1.75	1.70
BPW8-6		8	6	1.75	1.70
BPW10-8		10	8	2.45	2.35
BPW12-10		12	10	2.50	2.40



Tube x Tube Connectors

Equal Crosses

Code	S11	Tube OD mm	Price 1-99	Price 100+
BPZA4		4	2.60	2.50
BPZA6		6	2.30	2.20
BPZA8		8	2.60	2.50
BPZA10		10	2.95	2.85
BPZA12		12	3.40	3.25



Tube x Tube Connectors

Equal Bulkheads

Code	S11	Tube OD mm	Bulk head	Price 1-99	Price 100+
BPM4		4	M12 x 1	2.50	2.40
BPM6		6	M14 x 1	3.00	2.85
BPM8		8	M16 x 1	3.25	3.10
BPM10		10	M20 x 1	3.90	3.75
BPM12		12	M22 x 1	4.45	4.25



Tube x Tube Connectors

Reducing Manifolds

Code	S11	Tube OD mm		Price 1-99	Price 100+
BPKG6-1		6	4	3.15	3.00
BPKG8-4		8	4	2.95	2.85
BPKG8-6		8	6	3.45	3.30
BPKG10-6		10	6	4.00	3.80
BPKG10-8		10	8	4.45	4.25

Blue Push-in Fittings



Tube x Stem Connectors

Straights, Tube x Stem

Code	S11	OD mm Tube		Price	
		Tube	Stem	1-99	100+
BPGJ6-4		4	6	1.60	1.55
BPGJ8-4		4	8	2.15	2.05
BPGJ8-6		6	8	2.25	2.15
BPGJ10-6		6	10	3.50	3.35
BPGJ10-8		8	10	3.50	3.35
BPGJ12-8		8	12	3.75	3.60
BPGJ12-10		10	12	3.90	3.75



Tube x Stem Connectors

Elbows, Tube x Stem

Code	S11	OD mm Tube		Price	
		Tube	Stem	1-99	100+
BETS4-4		4	4	1.65	1.60
BETS6-6		6	6	1.75	1.70
BETS8-8		8	8	2.30	2.20
BETS10-10		10	10	3.75	3.60
BETS12-12		12	12	4.00	3.80



Tube x Stem Connectors

Ys, Tube x Stem

Code	S11	OD mm Tube		Price	
		Tube	Stem	1-99	100+
BYTS4-4		4	4	2.40	2.30
BYTS6-6		6	6	2.60	2.50
BYTS8-8		8	8	3.15	3.00
BYTS10-10		10	10	5.25	5.00
BYTS12-12		12	12	5.50	5.25



Tube x Stem Connectors

Reducing Ys, Tube x Stem

Code	S11	OD mm Tube		Price	
		Tube	Stem	1-99	100+
BYRTS4-6		4	6	2.65	2.55
BYRTS6-8		6	8	5.65	5.40
BYRTS8-10		8	10	5.65	5.40



Equal Double Joint Adaptor

Tube x Tube

Code	S11	Stem OD mm	Price	
			1-99	100+
BEJA4		4	5.40	5.15
BEJA6		6	2.45	2.35
BEJA8		8	7.25	6.90
BEJA10		10	3.10	2.95
BEJA12		12	3.45	3.30



Reducer

Tube x Tube

Code	S11	Stem OD mm		Price	
				1-99	100+
BTR6-4		6	4	2.75	2.65
BTR8-4		8	4	3.10	2.95
BTR8-6		8	6	3.30	3.15
BTR10-6		10	6	3.15	3.00
BTR10-8		10	8	3.30	3.15
BTR12-8		12	8	9.25	8.80
BTR12-10		12	10	9.25	8.80



Plug

Tube

Code	S11	Stem OD mm	Price	
			1-99	100+
BPP4		4	0.45	0.42
BPP6		6	0.50	0.47
BPP8		8	0.60	0.57
BPP10		10	0.60	0.57
BPP12		12	0.90	0.85



Tube Plug

Tube

Code	S11	Tube OD mm	Price	
			1-99	100+
BTP4		4	2.65	2.55
BTP6		6	3.00	2.85
BTP8		8	3.25	3.10
BTP10		10	3.80	3.65
BTP12		12	10.60	10.10

Working Pressure:

- 7 bar (100 psi)



Manual Shut-off Valves

Tube x Tube, Venting

Code	S11	Tube OD mm		Price
BHVFF-06-06		6	6	8.75
BHVFF-08-06		8	6	8.60
BHVFF-08-08		8	8	8.75
BHVFF-10-10		10	10	10.25
BHVFF-12-10		12	10	10.25
BHVFF-12-12		12	12	10.25



Manual Flow Controller, Uni-directional

Straight, Tube x Tube

Code	S11	Tube OD mm	Price
BSA4		4	6.75
BSA6		6	7.45
BSA8		8	7.75
BSA10		10	8.90
BSA12		12	10.00

Check & Stop Valves

Working Temperature:
- Brass: 0°C to +60°C
- Acetal: 0°C to +60°C

Maximum Working Pressure:
- 10 bar (150 psi)

Media:
- Air and vacuum only

Negative Pressure:
- -750mm Hg (10Torr)

Cracking Pressure:
- 0.3 bar to 0.5 bar (5 psi to 7.5 psi)







- Free flow thread to tube

Check Valves

Tube x BSPT

Code S11	Tube OD mm	Thread BSPT	Price
BPCVC4-01	4	R1/8"	6.30
BPCVC4-02	4	R1/4"	6.30
BPCVC6-01	6	R1/8"	7.65
BPCVC6-02	6	R1/4"	8.80
BPCVC8-01	8	R1/8"	7.60
BPCVC8-02	8	R1/4"	8.80
BPCVC10-02	10	R1/4"	8.80
BPCVC10-03	10	R3/8"	10.10
BPCVC12-02	12	R1/4"	10.10
BPCVC12-03	12	R3/8"	10.10



Check Valves

Tube x Tube

Code S11	Tube OD mm	Price
BPCVU4	4	6.25
BPCVU6	6	6.40
BPCVU8	8	6.25
BPCVU10	10	8.90

Check Valves

Female x Female, BSPT

Code S11	Thread BSPT	Price
BPCFF01-01	R1/8"	7.65
BPCFF02-02	R1/4"	8.95
BPCFF03-03	R3/8"	10.10
BPCFF04-04	R1/2"	11.30



- Free flow female to male

Check Valves

Male x Female, BSPP

Code S11	Thread BSPP	Price
BPCVF01-01	G1/8"	8.25
BPCVF02-02	G1/4"	9.65
BPCVF03-03	G3/8"	12.40
BPCVF04-04	G1/2"	14.00

Stop Valves, Self Sealing

Tube x BSPT

Code S11	Tube OD mm	Thread BSPT	Price
BSPC6-02	6	R1/4"	7.65
BSPC8-02	8	R1/4"	7.60
BSPC8-03	8	R3/8"	8.80
BSPC10-02	10	R1/4"	8.80
BSPC10-03	10	R3/8"	10.10
BSPC10-04	10	R1/2"	11.50
BSPC12-03	12	R3/8"	11.30
BSPC12-04	12	R1/2"	12.75



Stop Valves, Self Sealing

Tube x Tube

Code S11	Tube OD mm	Price
BSPU6	6	7.50
BSPU8	8	8.75
BSPU10	10	9.80
BSPU12	12	11.00

NPT Push-in Fittings, Metric

Temperature Range:
- Brass: 0°C to +60°C
- Acetal: 0°C to +60°C

Working Pressure:
- 10 bar (150 psi)

Media:
- Air and vacuum only

Negative Pressure:
- -750mm Hg (10 Torr)

Male Studs



Male Thread, NPT

Code S31	Tube OD mm	Thread NPT	Price
NMPL4-18	4	1/8"	1.30
NMPL4-14	4	1/4"	1.30
NMPL4-38	4	3/8"	2.35
NMPL6-18	6	1/8"	1.30
NMPL6-14	6	1/4"	1.30
NMPL6-38	6	3/8"	1.80
NMPL8-18	8	1/8"	1.30
NMPL8-14	8	1/4"	1.30
NMPL8-38	8	3/8"	1.80
NMPL8-12	8	1/2"	2.65
NMPL10-18	10	1/8"	1.90
NMPL10-14	10	1/4"	1.80
NMPL10-38	10	3/8"	2.80
NMPL10-12	10	1/2"	2.85
NMPL12-14	12	1/4"	2.85
NMPL12-38	12	3/8"	2.80
NMPL12-12	12	1/2"	2.85

Male Stud Swivel Elbows



Male Thread, NPT

Code S31	Tube OD mm	Thread NPT	Price
NMPLE4-18	4	1/8"	1.65
NMPLE4-14	4	1/4"	1.65
NMPLE6-18	6	1/8"	1.65
NMPLE6-14	6	1/4"	1.65
NMPLE6-38	6	3/8"	2.05
NMPLE6-12	6	1/2"	3.35
NMPLE8-18	8	1/8"	1.80
NMPLE8-14	8	1/4"	1.80
NMPLE8-38	8	3/8"	2.20
NMPLE8-12	8	1/2"	3.30
NMPLE10-18	10	1/8"	2.20
NMPLE10-14	10	1/4"	2.20
NMPLE10-38	10	3/8"	2.40
NMPLE10-12	10	1/2"	3.90
NMPLE12-14	12	1/4"	3.90
NMPLE12-38	12	3/8"	3.90
NMPLE12-12	12	1/2"	3.95

Female Swivel Elbows



Female Thread, NPT

Code S31	Tube OD mm	Thread NPT	Price
NMPLF4-18	4	1/8"	1.90
NMPLF4-14	4	1/4"	1.90
NMPLF6-18	6	1/8"	2.20
NMPLF6-14	6	1/4"	1.90
NMPLF6-38	6	3/8"	2.55
NMPLF8-18	8	1/8"	2.05
NMPLF8-14	8	1/4"	2.05
NMPLF8-38	8	3/8"	2.50
NMPLF8-12	8	1/2"	4.05
NMPLF10-18	10	1/8"	2.90
NMPLF10-14	10	1/4"	2.90
NMPLF10-38	10	3/8"	3.00
NMPLF10-12	10	1/2"	4.35
NMPLF12-14	12	1/4"	4.35
NMPLF12-38	12	3/8"	4.35
NMPLF12-12	12	1/2"	4.35

Female Studs



Female Thread, NPT

Code S31	Tube OD mm	Thread NPT	Price
NMPCF4-18	4	1/8"	1.50
NMPCF4-14	4	1/4"	1.50
NMPCF6-18	6	1/8"	1.50
NMPCF6-14	6	1/4"	1.65
NMPCF6-38	6	3/8"	2.05
NMPCF8-18	8	1/8"	1.65
NMPCF8-14	8	1/4"	1.65
NMPCF8-38	8	3/8"	2.05
NMPCF8-12	8	1/2"	3.30
NMPCF10-18	10	1/8"	2.35
NMPCF10-14	10	1/4"	2.35
NMPCF10-38	10	3/8"	2.35
NMPCF10-12	10	1/2"	3.50
NMPCF12-14	12	1/4"	3.50
NMPCF12-38	12	3/8"	3.60
NMPCF12-12	12	1/2"	3.50

Male Stud Swivel Elbows



Extended Male Thread, NPT

Code S31	Tube OD mm	Thread NPT	Price
NMPLEE4-18	4	1/8"	1.90
NMPLEE4-14	4	1/4"	1.90
NMPLEE6-18	6	1/8"	2.05
NMPLEE6-14	6	1/4"	1.90
NMPLEE6-38	6	3/8"	2.50
NMPLEE8-18	8	1/8"	2.05
NMPLEE8-14	8	1/4"	2.05
NMPLEE8-38	8	3/8"	2.40
NMPLEE8-12	8	1/2"	3.95
NMPLEE10-18	10	1/8"	2.85
NMPLEE10-14	10	1/4"	3.00
NMPLEE10-38	10	3/8"	2.90
NMPLEE10-12	10	1/2"	4.35
NMPLEE12-14	12	1/4"	4.35
NMPLEE12-38	12	3/8"	4.35
NMPLEE12-12	12	1/2"	4.40

Male Centre Leg Swivel Tees



Male Thread, NPT

Code S31	Tube OD mm	Thread NPT	Price
NMPB4-18	4	1/8"	2.40
NMPB4-14	4	1/4"	2.50
NMPB6-18	6	1/8"	2.50
NMPB6-14	6	1/4"	2.70
NMPB6-38	6	3/8"	3.00
NMPB8-18	8	1/8"	2.85
NMPB8-14	8	1/4"	2.85
NMPB8-38	8	3/8"	3.15
NMPB8-12	8	1/2"	3.95
NMPB10-18	10	1/8"	3.15
NMPB10-14	10	1/4"	3.15
NMPB10-38	10	3/8"	3.30
NMPB10-12	10	1/2"	4.35
NMPB12-14	12	1/4"	4.20
NMPB22-38	12	3/8"	4.10
NMPB12-12	12	1/2"	4.35

NPT Push-in Fittings, Metric

Male Run Leg, Swivel Tees



Male Thread, NPT

Code S31	Tube OD mm	Thread NPT	Price
NMPD4-18	4	1/8"	2.25
NMPD4-14	4	1/4"	2.50
NMPD6-18	6	1/8"	2.90
NMPD6-14	6	1/4"	3.20
NMPD6-38	6	3/8"	1.80
NMPD8-18	8	1/8"	3.00
NMPD8-14	8	1/4"	3.20
NMPD8-38	8	3/8"	3.60
NMPD8-12	8	1/2"	4.20
NMPD10-14	10	1/4"	3.60
NMPD10-38	10	3/8"	3.80
NMPD10-12	10	1/2"	4.35
NMPD12-14	12	1/4"	3.95
NMPD12-38	12	3/8"	4.20
NMPD12-12	12	1/2"	4.40

Female Bulkhead Connectors



Female Thread, NPT

Code S31	Tube OD mm	Thread NPT	Price
NMBHF4-18	4	1/8"	2.85
NMBHF4-14	4	1/4"	2.65
NMBHF6-18	6	1/8"	3.90
NMBHF6-14	6	1/4"	3.90
NMBHF6-38	6	3/8"	4.20
NMBHF6-12	6	1/2"	5.10
NMBHF8-18	8	1/8"	3.90
NMBHF8-14	8	1/4"	3.90
NMBHF8-38	8	3/8"	2.85
NMBHF8-12	8	1/2"	5.00
NMBHF10-14	10	1/4"	4.20
NMBHF10-38	10	3/8"	4.50
NMBHF10-12	10	1/2"	5.00
NMBHF12-14	12	1/4"	4.95
NMBHF12-38	12	3/8"	5.00
NMBHF12-12	12	1/2"	5.60

Banjos



Female Thread, NPT

Code S31	Tube OD mm	Thread NPT	Price
NMPHF4-18	4	1/8"	1.90
NMPHF4-14	4	1/4"	1.90
NMPHF6-18	6	1/8"	2.20
NMPHF6-14	6	1/4"	1.90
NMPHF6-38	6	3/8"	2.55
NMPHF8-14	8	1/4"	2.05
NMPHF8-38	8	3/8"	2.50
NMPHF8-12	8	1/2"	4.05
NMPHF10-14	10	1/4"	2.90
NMPHF10-38	10	3/8"	3.00
NMPHF10-12	10	1/2"	4.35
NMPHF12-14	12	1/4"	4.35
NMPHF12-38	12	3/8"	4.35
NMPHF12-12	12	1/2"	4.35

Male Stud Swivel Ys



Male Thread, NPT

Code S31	Tube OD mm	Thread NPT	Price
NMPX4-18	4	1/8"	2.25
NMPX6-18	6	1/8"	2.55
NMPX6-14	6	1/4"	2.70
NMPX6-38	6	3/8"	3.00
NMPX8-18	8	1/8"	2.85
NMPX8-14	8	1/4"	2.85
NMPX8-38	8	3/8"	3.15
NMPX8-12	8	1/2"	4.05
NMPX10-14	10	1/4"	3.05
NMPX10-38	10	3/8"	3.30
NMPX10-12	10	1/2"	4.35
NMPX12-14	12	1/4"	3.95
NMPX12-38	12	3/8"	4.05
NMPX12-12	12	1/2"	4.35

Banjos



Male Thread, NPT

Code S31	Tube OD mm	Thread NPT	Price
NMPH4-18	4	1/8"	2.50
NMPH6-18	6	1/8"	3.05
NMPH6-14	6	1/4"	3.35
NMPH8-18	8	1/8"	3.15
NMPH8-14	8	1/4"	3.35
NMPH8-38	8	3/8"	3.80
NMPH10-38	10	3/8"	3.95
NMPH10-12	10	1/2"	2.25
NMPH12-14	12	1/4"	4.10
NMPH12-38	12	3/8"	3.30
NMPH12-12	12	1/2"	4.65

Reducing Manifolds



Male Thread, NPT, 3 Outlets

Code S31	Tube OD mm		Thread NPT	Price
NMPKB6-4-G01	6	4	1/8"	4.50
NMPKB8-4-G02	8	4	1/4"	4.55
NMPKB8-6-G02	8	6	1/4"	5.55
NMPKB10-8-G03	10	8	3/8"	5.65

NPT Push-in Fittings, Metric



Manual Flow Control Elbows

Male Thread, NPT

Code S31	Tube OD mm	Thread NPT	Price
NMSL4-G01	4	1/8"	6.10
NMSL4-G02	4	1/4"	6.10
NMSL6-G01	6	1/8"	6.80
NMSL6-G02	6	1/4"	6.65
NMSL6-G03	6	3/8"	8.40
NMSL8-G01	8	1/8"	6.65
NMSL8-G02	8	1/4"	6.65
NMSL8-G03	8	3/8"	8.40
NMSL8-G04	8	1/2"	10.15
NMSL10-G02	10	1/4"	7.25
NMSL10-G03	10	3/8"	8.50
NMSL10-G04	10	1/2"	10.20
NMSL12-G02	12	1/4"	8.05
NMSL12-G03	12	3/8"	9.60
NMSL12-G04	12	1/2"	10.15



Manual Flow Control Valves

Male Thread, NPT x Tube

Code S31	Tube OD mm	Thread NPT	Price
NMHVMF6-G01	6	1/8"	9.75
NMHVMF6-G02	6	1/4"	11.45
NMHVMF6-G03	6	3/8"	12.15
NMHVMF8-G01	8	1/8"	11.05
NMHVMF8-G02	8	1/4"	11.45
NMHVMF8-G03	8	3/8"	12.15

For Techmatic Blow Guns



See page 716

NPT Push-in Fittings, Imperial

Temperature Range:
- Brass: 0ºC to +60ºC
- Acetal: 0ºC to +60ºC

Working Pressure:
- 10 bar (150 psi)

Media:
- Air and vacuum only

Negative Pressure:
- -750mm Hg (10 Torr)



Male Studs

Male Thread (Hex Body), NPT

Code S31	Tube OD	Thread NPT	Price
NIPC18-18	1/8"	1/8"	1.30
NIPC18-14	1/8"	1/4"	1.30
NIPC532-18	5/32"	1/8"	1.30
NIPC532-14	5/32"	1/4"	1.30
NIPC316-18	3/16"	1/8"	1.30
NIPC316-14	3/16"	1/4"	1.30
NIPC316-38	3/16"	3/8"	1.80
NIPC14-18	1/4"	1/8"	1.30
NIPC14-14	1/4"	1/4"	1.30
NIPC14-38	1/4"	3/8"	1.80
NIPC516-18	5/16"	1/8"	1.30
NIPC516-14	5/16"	1/4"	1.30
NIPC516-38	5/16"	3/8"	1.80
NIPC38-18	3/8"	1/8"	1.90
NIPC38-14	3/8"	1/4"	1.90
NIPC38-12	3/8"	1/2"	2.80
NIPC38-34	3/8"	3/4"	2.35
NIPC12-14	1/2"	1/4"	2.80
NIPC12-38	1/2"	3/8"	2.80
NIPC12-12	1/2"	1/2"	2.80



Male Studs

Male Thread (Round), NPT

Code S31	Tube OD	Thread NPT	Price
NIPCR18-18	1/8"	1/8"	1.30
NIPCR18-14	1/8"	1/4"	1.30
NIPCR532-18	5/32"	1/8"	1.35
NIPCR532-14	5/32"	1/4"	1.30
NIPCR316-18	3/16"	1/8"	1.35
NIPCR316-14	3/16"	1/4"	1.30
NIPCR316-38	3/16"	3/8"	0.85
NIPCR14-18	1/4"	1/8"	1.30
NIPCR14-14	1/4"	1/4"	1.30
NIPCR14-38	1/4"	3/8"	1.90
NIPCR516-18	5/16"	1/8"	1.30
NIPCR516-14	5/16"	1/4"	1.30
NIPCR516-38	5/16"	3/8"	1.20
NIPCR38-18	3/8"	1/8"	1.90
NIPCR38-14	3/8"	1/4"	1.90
NIPCR38-38	3/8"	3/8"	2.85
NIPCR38-12	3/8"	1/2"	2.90
NIPCR12-14	1/2"	1/4"	2.90
NIPCR12-38	1/2"	3/8"	2.90
NIPCR12-12	1/2"	1/2"	3.00



Female Studs

Female Thread, NPT

Code S31	Tube OD	Thread NPT	Price
NIPCF18-18	1/8"	1/8"	1.50
NIPCF18-14	1/8"	1/4"	1.50
NIPCF532-18	5/32"	1/8"	1.50
NIPCF532-14	5/32"	1/4"	1.50
NIPCF316-18	3/16"	1/8"	1.50
NIPCF316-14	3/16"	1/4"	1.75
NIPCF14-18	1/4"	1/8"	1.50
NIPCF14-14	1/4"	1/4"	1.75
NIPCF14-38	1/4"	3/8"	2.20
NIPCF516-18	5/16"	1/8"	1.75
NIPCF516-14	5/16"	1/4"	1.75
NIPCF516-38	5/16"	3/8"	2.20
NIPCF516-12	5/16"	1/2"	1.50
NIPCF38-18	3/8"	1/8"	2.50
NIPCF38-14	3/8"	1/4"	2.50
NIPCF38-38	3/8"	3/8"	2.50
NIPCF38-12	3/8"	1/2"	3.75
NIPCF12-14	1/2"	1/4"	3.75
NIPCF12-38	1/2"	3/8"	3.75
NIPCF12-12	1/2"	1/2"	3.80

For Polyurethane Tubing



See pages 505-507

NPT Push-in Fittings, Imperial



Male Stud Swivel Elbows

Male Thread, NPT

Code S31	Tube OD	Thread NPT	Price
NIPL18-18	1/8"	1/8"	1.65
NIPL18-14	1/8"	1/4"	1.65
NIPL532-18	5/32"	1/8"	1.65
NIPL532-14	5/32"	1/4"	1.65
NIPL316-18	3/16"	1/8"	1.65
NIPL316-14	3/16"	1/4"	1.65
NIPL316-38	3/16"	3/8"	2.05
NIPL14-18	1/4"	1/8"	1.65
NIPL14-14	1/4"	1/4"	1.65
NIPL14-38	1/4"	3/8"	2.05
NIPL516-18	5/16"	1/8"	1.80
NIPL516-14	5/16"	1/4"	1.80
NIPL516-38	5/16"	3/8"	2.25
NIPL38-18	3/8"	1/8"	2.25
NIPL38-14	3/8"	1/4"	2.20
NIPL38-38	3/8"	3/8"	2.40
NIPL38-12	1/2"	1/4"	3.90
NIPL12-14	1/2"	3/8"	3.95
NIPL12-12	1/2"	1/2"	3.95



Male Stud Swivel Elbows

Extended Male Thread, NPT

Code S31	Tube OD	Thread NPT	Price
NIPLE18-18	1/8"	1/8"	1.90
NIPLE18-14	1/8"	1/4"	1.90
NIPLE532-18	5/32"	1/8"	1.00
NIPLE532-14	5/32"	1/4"	1.90
NIPLE316-18	3/16"	1/8"	2.05
NIPLE316-14	3/16"	1/4"	1.90
NIPLE316-38	3/16"	3/8"	2.50
NIPLE14-18	1/4"	1/8"	2.05
NIPLE14-14	1/4"	1/4"	1.90
NIPLE14-38	1/4"	3/8"	2.50
NIPLE516-18	5/16"	1/8"	2.05
NIPLE516-14	5/16"	1/4"	2.20
NIPLE516-38	5/16"	3/8"	1.15
NIPLE38-18	3/8"	1/8"	2.90
NIPLE38-14	3/8"	1/4"	2.90
NIPLE38-38	3/8"	3/8"	2.90
NIPLE38-12	3/8"	1/2"	4.40
NIPLE12-14	1/2"	1/4"	4.35
NIPLE12-38	1/2"	3/8"	3.65
NIPLE12-12	1/2"	1/2"	4.40



Female Swivel Elbows

Female Thread, NPT

Code S31	Tube OD	Thread NPT	Price
NIPLF18-18	1/8"	1/8"	1.90
NIPLF18-14	1/8"	1/4"	1.00
NIPLF532-18	5/32"	1/8"	1.90
NIPLF532-14	5/32"	1/4"	1.90
NIPLF316-18	3/16"	1/8"	1.90
NIPLF316-14	3/16"	1/4"	1.90
NIPLF14-18	1/4"	1/8"	1.90
NIPLF14-14	1/4"	1/4"	1.90
NIPLF14-38	1/4"	3/8"	2.50
NIPLF516-18	5/16"	1/8"	2.05
NIPLF516-14	5/16"	1/4"	2.20
NIPLF516-38	5/16"	3/8"	2.50
NIPLF516-12	5/16"	1/2"	3.90
NIPLF38-18	3/8"	1/8"	2.90
NIPLF38-14	3/8"	1/4"	2.90
NIPLF38-38	3/8"	3/8"	2.90
NIPLF38-12	3/8"	1/2"	4.35
NIPLF12-14	1/2"	1/4"	4.35
NIPLF12-38	1/2"	3/8"	4.35
NIPLF12-12	1/2"	1/2"	4.35

For FRLs, Drains & Gauges



See section 5

All Stainless Steel Push-in Fittings

- Light manual pressure on the collet ring is all that is required to instantly disconnect each tube; no special tool is required
- Full stainless steel construction prevents corrosion and increases compatibility with more aggressive medias and environments

Construction:

- Body and Collet: 316 stainless steel
- O-Ring: viton (FDA certified)
- Tube to Connect: PU, nylon and PTFE
- Media: compressed air, steam, water and other compatible liquids

Working Temperature:

- 20°C to +200°C (dependent upon tubing specification)

Maximum Working Pressure:

- 10 bar

Negative Pressure:

- 750mm Hg (10 torr), (dependent upon tubing specification)

Male Studs

BSPT



Code S31	Tube OD mm	Thread BSPT	Price
TMPC4-01SS	4	R1/8"	17.10
TMPC6-01SS	6	R1/8"	18.10
TMPC6-02SS	6	R1/4"	17.70
TMPC8-01SS	8	R1/8"	17.70
TMPC8-02SS	8	R1/4"	24.80
TMPC10-02SS	10	R1/4"	20.10
TMPC10-03SS	10	R3/8"	20.75
TMPC12-04SS	12	R1/2"	23.65

Male Studs

BSPP



Code S31	Tube OD mm	Thread BSPP	Price
TMPC4-G01SS	4	G1/8"	18.60
TMPC6-G01SS	6	G1/8"	18.85
TMPC6-G02SS	6	G1/4"	19.85
TMPC8-G01SS	8	G1/8"	19.20
TMPC8-G02SS	8	G1/4"	20.15
TMPC10-G02SS	10	G1/4"	22.40
TMPC10-G03SS	10	G3/8"	22.75
TMPC12-G04SS	12	G1/2"	26.05

Female Studs

BSPP



Code S31	Tube OD mm	Thread BSPP	Price
TMPCF4-G01SS	4	G1/8"	20.45
TMPCF6-G01SS	6	G1/8"	20.75
TMPCF6-G02SS	6	G1/4"	23.45
TMPCF8-G01SS	8	G1/8"	21.00
TMPCF8-G02SS	8	G1/4"	23.15
TMPCF10-G02SS	10	G1/4"	23.45
TMPCF10-G03SS	10	G3/8"	25.00
TMPCF12-G03SS	12	G3/8"	25.65
TMPCF12-G04SS	12	G1/2"	29.40

Male Stud Swivel Elbows

BSPT



Code S31	Tube OD mm	Thread BSPT	Price
TMPL4-01SS	4	R1/8"	28.35
TMPL6-01SS	6	R1/8"	28.95
TMPL6-02SS	6	R1/4"	32.05
TMPL8-01SS	8	R1/8"	31.30
TMPL8-02SS	8	R1/4"	31.90
TMPL10-02SS	10	R1/4"	36.00
TMPL10-03SS	10	R3/8"	36.60
TMPL12-04SS	12	R1/2"	44.35

Male Stud Swivel Elbows

BSPP



Code S31	Tube OD mm	Thread BSPP	Price
TMPL4-G01SS	4	G1/8"	31.25
TMPL6-G01SS	6	G1/8"	31.30
TMPL6-G02SS	6	G1/4"	31.90
TMPL8-G01SS	8	G1/8"	34.45
TMPL8-G02SS	8	G1/4"	34.60
TMPL10-G02SS	10	G1/4"	39.05
TMPL10-G03SS	10	G3/8"	39.70
TMPL12-G04SS	12	G1/2"	48.80

Female Stud Elbows

BSPP



Code S31	Tube OD mm	Thread BSPP	Price
TMPLF4-G01SS	4	G1/8"	32.05
TMPLF6-G01SS	6	G1/8"	32.65
TMPLF6-G02SS	6	G1/4"	32.65
TMPLF8-G01SS	8	G1/8"	35.85
TMPLF8-G02SS	8	G1/4"	37.05
TMPLF10-G02SS	10	G1/4"	40.40
TMPLF10-G03SS	10	G3/8"	41.60
TMPLF12-G03SS	12	G3/8"	48.80
TMPLF12-G04SS	12	G1/2"	51.30

All seals have FDA Certification

All Stainless Steel Push-in Fittings

Male Stud Centre Leg Tees



BSPP

Code S31	Tube OD mm	Thread BSPP	Price
TMPB4-G01SS	4	G1/8"	36.80
TMPB6-G01SS	6	G1/8"	44.25
TMPB6-G02SS	6	G1/4"	45.60
TMPB8-G01SS	8	G1/8"	49.30
TMPB8-G02SS	8	G1/4"	50.05
TMPB10-G02SS	10	G1/4"	62.00
TMPB10-G03SS	10	G3/8"	61.50
TMPB10-G04SS	12	G3/8"	71.55
TMPB12-G04SS	12	G1/2"	73.25

Speed Control Valves



BSPP

Code S31	Tube OD mm	Thread BSPP	Price
TMNSE4-G01SS	4	G1/8"	130.40
TMNSE6-G01SS	6	G1/8"	160.00
TMNSE6-G02SS	6	G1/4"	174.10
TMNSE8-G01SS	8	G1/8"	160.15
TMNSE8-G02SS	8	G1/4"	147.20
TMNSE8-G03SS	8	G3/8"	172.85
TMNSE10-G02SS	10	G1/4"	145.25
TMNSE10-G03SS	10	G3/8"	149.95
TMNSE10-G04SS	10	G1/2"	159.90
TMNSE12-G04SS	12	G1/2"	169.95

Tube x Tube Connectors



Equal Straights

Code S31	Tube OD mm	Price
TMPUC-4SS	4	22.90
TMPUC-6SS	6	22.70
TMPUC-8SS	8	26.65
TMPUC-10SS	10	29.45
TMPUC-12SS	12	35.50

Tube x Tube Connectors



Unequal Straights

Code S31	Tube OD mm	Tube OD mm	Price
TMPG6-4SS	6	4	24.25
TMPG8-4SS	8	4	27.90
TMPG8-6SS	8	6	27.90
TMPG10-6SS	10	6	33.35
TMPG10-8SS	10	8	30.95
TMPG12-8SS	12	8	39.10
TMPG12-10SS	12	10	40.30

Tube x Tube Connectors



Equal Elbows

Code S31	Tube OD mm	Price
TMPUL-4SS	4	28.65
TMPUL-6SS	6	29.75
TMPUL-8SS	8	31.90
TMPUL-10SS	10	36.00
TMPUL-12SS	12	41.95

Tube x Tube Connectors



Equal Tees

Code S31	Tube OD mm	Price
TMPUT-4SS	4	39.65
TMPUT-6SS	6	43.75
TMPUT-8SS	8	46.05
TMPUT-10SS	10	54.35
TMPUT-12SS	12	64.90

Tube x Tube Connectors



Equal Bulkheads

Code S31	Tube OD mm	Price
TMPM-4SS	4	34.90
TMPM-6SS	6	36.60
TMPM-8SS	8	42.00
TMPM-10SS	10	43.75
TMPM-12SS	12	51.85

Tube x Tube Connectors



Equal Ys

Code S31	Tube OD mm	Price
TMPY-4SS	4	46.10
TMPY-6SS	6	49.00
TMPY-8SS	8	52.00
TMPY-10SS	10	63.50
TMPY-12SS	12	69.90

Stem Connectors



Tube x Stem Reducers

Code S31	Tube OD mm		Price
TMPGJ6-4SS	6	4	17.10
TMPGJ8-4SS	8	4	17.80
TMPGJ8-6SS	8	6	17.10
TMPGJ10-6SS	10	6	20.10
TMPGJ10-8SS	10	8	20.10
TMPGJ12-8SS	12	8	20.90
TMPGJ12-10SS	12	10	21.95

Plug



Tube

Code S31	Tube OD mm	Price
TMPP-4SS	4	7.55
TMPP-6SS	6	7.60
TMPP-8SS	8	7.75
TMPP-10SS	10	9.25
TMPP12SS	12	10.00

All seals have FDA Certification

TECHMATIC™

Handykit

New range of Fittings Kits **NOW** available

new



Box colour may vary
Spec. available on request

- **Grey Push-in Fittings & Tube Cutter Kit**
- **Blue Push-in Fittings & Tube Cutter Kit**
- **BSPP & BSPT Adaptors Kits**

Fitting Kits

new

TECHMATIC™

A range of our most popular Techmatic push-in fittings, supplied in a robust compact kit box for convenience.

Each kit supplied with contents label.

Push-in Fittings:

- Grey kits in sizes 4mm, 6mm, 6/8mm, 8mm and 10mm

Maximum Working Pressure:

- 16 bar (220 psi)

Working Temperature:

- 0°C to +60°C

Negative Pressure:

- -750mm Hg (10 Torr)

Media:

- Air and vacuum only



Grey Push-in Fittings & Tube Cutter Kit

Ranging from 4-10mm Outside Diameter

Code P10	Description	Price
HANDYKIT-4	Assorted 4mm Grey	120.00
HANDYKIT-6	Assorted 6mm Grey	120.00
HANDYKIT-6/8	Assorted 6mm & 8mm Grey	120.00
HANDYKIT-8	Assorted 8mm Grey	120.00
HANDYKIT-10	Assorted 10mm Grey	120.00

4mm

Grey Push-in Fittings & Tube Cutter Kit

CONTENTS:

Tube Cutter TCS14 QTY: 1	4mm Equal Tee APE4 QTY: 10	4mm x 1/8" BSPT Flow Controller ASL401 QTY:2	4mm Equal Connector APU4 QTY: 10	4mm Equal Bulkhead APM4 QTY: 2
4mm Equal Elbow APV4 QTY: 8	4mm x 1/8" BSPT Male Stud Elbow APL4-01 QTY: 5		4mm x 1/4" BSPT Male Stud Elbow APL4-02 QTY: 5	
4mm x 1/8" BSPP Male Stud APC4-G01 QTY: 10	4mm x 1/4" BSPP Male Stud APC4-G02 QTY: 10		4mm x 4mm Flow Controller ASA4 QTY: 2	
4mm x M5 Metric Male Stud Elbow APL4-M5 QTY: 5	4mm x 1/4" BSPT Flow Controller ASL4-02 QTY: 2		4mm x M5 Metric Flow Controller ASL4-M5 QTY: 2	
4mm x 1/8" BSPT Male Stud APC4-01 QTY: 10	4mm x 1/4" BSPT Male Stud APC4-02 QTY: 10		4mm x M5 Metric Male Stud APC4-M5 QTY: 10	

6mm

Grey Push-in Fittings & Tube Cutter Kit

CONTENTS:

Tube Cutter TCS14 QTY: 1	6mm Equal Tee APE6 QTY: 10	6mm Equal Connector APU6 QTY: 10	6mm Equal Bulkhead APM6 QTY: 2
6mm Equal Elbow APV6 QTY: 8	6mm x 1/8" BSPT Male Stud Elbow APL6-01 QTY: 8	6mm x 1/4" BSPT Male Stud Elbow APL6-02 QTY: 5	
6mm x 1/4" BSPP Female Bulkhead APBF6-G02 QTY: 5	6mm Equal Ys APY6 QTY: 4	6mm Shut-Off Valve AHVFF-06-06 QTY: 2	
6mm x 1/8" BSPP Male Stud APC6-G01 QTY: 10	6mm x 1/4" BSPP Male Stud APC6-G02 QTY: 10	6mm x 1/8" BSPT Single Banjo APH6-01 QTY: 2	
6mm x M5 Male Stud APC6-M5 QTY: 5	6mm x 1/8" BSPT Male Stud APC6-01 QTY: 10	6mm x 1/4" BSPT Male Stud APC6-02 QTY: 10	

6/8mm

Grey Push-in Fittings & Tube Cutter Kit

CONTENTS:

Tube Cutter TCS14 QTY: 1	8mm Equal Tee APE8 QTY: 5	8mm x 1/4" BSPP Male Stud APC8-G02 QTY: 5	6mm Equal Tee APE6 QTY: 5	8mm x 1/4" BSPP Male Stud Elbow APL8-G02 QTY: 3
8mm x 1/8" BSPT Male Stud APC8-01 QTY: 5	6mm x 1/8" BSPP Male Stud Elbow APL6-G01 QTY: 3	6mm x 1/4" BSPT Male Stud APC6-02 QTY: 5	8mm x 1/8" BSPP Male Stud APC8-G01 QTY: 5	6mm x 1/4" BSPP Male Stud APC6-G02 QTY: 5	6mm Equal Connector APU6 QTY: 5
8mm Equal Elbow APV8 QTY: 4		8mm Equal Connector APU8 QTY: 5	6mm x 1/8" BSPT Male Stud APC6-01 QTY: 5	8mm x 8mm Flow Controller ASA8 QTY: 1	6mm x 1/8" BSPP Male Stud APC6-G01 QTY: 5
6mm Equal Elbow APV6 QTY: 4	6mm Equal Bulkhead APM6 QTY: 1	6mm x 6mm Flow Controller ASA6 QTY: 1	6mm x 1/4" BSPT Flow Controller ASL6-02 QTY: 2	8mm x 1/4" BSPT Flow Controller ASL8-02 QTY: 2	
6mm x 1/4" BSPP Male Stud Elbow APL6-G02 QTY: 3		8mm x 1/8" BSPP Male Stud Elbow APL8-G01 QTY: 3	8mm Equal Bulkhead APM8 QTY: 1	8mm x 1/4" BSPT Male Stud APC8-02 QTY: 5	

8mm

Grey Push-in Fittings & Tube Cutter Kit

CONTENTS:

Tube Cutter TCS14 QTY: 1	8mm Equal Tee APE8 QTY: 8	8mm Equal Connector APU8 QTY: 10	8mm Equal Bulkhead APM8 QTY: 2
8mm Equal Elbow APV8 QTY: 5	8mm x 1/8" BSPT Male Stud Elbow APL8-01 QTY: 6	8mm x 1/4" BSPT Male Stud Elbow APL8-02 QTY: 5	
8mm x 1/4" BSPP Female Bulkhead APBF8-G02 QTY: 2	8mm Equal Ys APY8 QTY: 4	8mm Shut-off Valve AHVFF-08-08 QTY: 2	
8mm x 1/8" BSPT Male Stud APC8-01 QTY: 10	8mm x 1/4" BSPT Male Stud APC8-02 QTY: 10	8mm x 1/8" BSPT Single Banjo APH8-01 QTY: 4	
8mm x 1/8" BSPP Male Stud APC8-G01 QTY: 10	8mm x 1/4" BSPP Male Stud APC8-G02 QTY: 10	8mm x 3/8" BSPP Male Stud APC8-G03 QTY: 6	

10mm

Grey Push-in Fittings & Tube Cutter Kit

CONTENTS:

Tube Cutter TCS14 QTY: 1	10mm Equal Tee APE10 QTY: 5	10mm Equal Connector APU10 QTY: 6	10mm Equal Bulkhead APM10 QTY: 2
10mm Equal Elbow APV10 QTY: 3	10mm x 1/8" BSPT Male Stud Elbow APL10-01 QTY: 2	10mm x 1/4" BSPT Male Stud Elbow APL10-02 QTY: 2	
10mm x 1/4" BSPP Female Bulkhead APBF10-G02 QTY: 3	10mm Equal Ys APY10 QTY: 2	10mm Speed Control Valve ASA10 QTY: 1	
10mm x 1/8" BSPP Male Stud APC10-G01 QTY: 8	10mm x 1/4" BSPP Male Stud APC10-G02 QTY: 6	10mm x 3/8" BSPT Single Banjo APH10-03 QTY: 2	
10mm x 1/8" BSPT Male Stud APC10-01 QTY: 7	10mm x 1/4" BSPT Male Stud APC10-02 QTY: 7	10mm x 3/8" BSPT Male Stud APC10-03 QTY: 2	

Fitting Kits

A range of our most popular Techmatic push-in fittings, supplied in a robust compact kit box for convenience.

Each kit supplied with contents label.

Push-in Fittings:

- Blue kits in sizes 4mm, 6mm, 6/8mm, 8mm and 10mm

Maximum Working Pressure:

- 10 bar (150 psi)

Working Temperature:

- 0°C to +60°C

Negative Pressure:

- -750mm Hg (10 Torr)

Media:

- Air and vacuum only



Blue Push-in Fittings & Tube Cutter Kit

Ranging from 4-10mm Outside Diameter

Code P10	Description	Price
HANDYKIT-B-4	Assorted 4mm Blue	120.00
HANDYKIT-B-6	Assorted 6mm Blue	120.00
HANDYKIT-B-6/8	Assorted 6mm & 8mm Blue	120.00
HANDYKIT-B-8	Assorted 8mm Blue	120.00
HANDYKIT-B-10	Assorted 10mm Blue	120.00

4mm

Blue Push-in Fittings & Tube Cutter Kit

CONTENTS:

Tube Cutter TCS14 QTY: 1	4mm Equal Tee BPE4 QTY: 10	4mm x 1/8" BSPT Flow Controller BSL4-01 QTY: 2	4mm Equal Connector BPU4 QTY: 10	4mm Equal Bulkhead BPM4 QTY: 2
4mm Equal Elbow BPV4 QTY: 8	4mm x 1/8" BSPP Male Stud Elbow BPL4-01 QTY: 5		4mm x 1/4" BSPT Male Stud Elbow BPL4-02 QTY: 5	
4mm x 1/8" BSPP Male Stud BPC4-G01 QTY: 10	4mm x 1/4" BSPP Male Stud BPC4-G02 QTY: 10		4mm x 4mm Flow Controller BSA4 QTY: 2	
4mm x M5 METRIC Male Stud Elbow BPL4-M5 QTY: 5	4mm x 1/4" BSPT Flow Controller BSL4-02 QTY: 2		4mm x M5 Metric Flow Controller BSL4-M5 QTY: 2	
4mm x 1/8" BSPT Male Stud BPC4-01 QTY: 10	4mm x 1/4" BSPT Male Stud BPC4-02 QTY: 10		4mm x M5 Metric Male Stud BPC4-M5 QTY: 10	

6mm

Blue Push-in Fittings & Tube Cutter Kit

CONTENTS:

Tube Cutter TCS14 QTY: 1	6mm Equal Tee BPE6 QTY: 10	6mm Equal Connector BPU6 QTY: 10	6mm Equal Bulkhead BPM6 QTY: 2
6mm Equal Elbow BPV6 QTY: 8	6mm x 1/8" BSPP Male Stud Elbow BPL6-G01 QTY: 8	6mm x 1/4" BSPP Male Stud Elbow BPL6-G02 QTY: 5	
6mm x 1/8" BSPT Flow Controller BSL6-01 QTY: 2	6mm x 1/4" BSPT Flow Controller BSL6-02 QTY: 2	6mm x 6mm Flow Controller (Unidirectional) BSA6 QTY: 2	
6mm x 1/8" BSPT Male Stud BPC6-01 QTY: 10	6mm x 1/4" BSPT Male Stud BPC6-02 QTY: 10	6mm x 6mm Shut-off Valve (Tube x Tube) BHVFF-06-06 QTY: 2	
6mm x M5 Male Stud BPC6-M5 QTY: 5	6mm x 1/8" BSPP Male Stud BPC6-G01 QTY: 10	6mm x 1/4" BSPP Male Stud BPC6-G02 QTY: 10	

6/8mm

Blue Push-in Fittings & Tube Cutter Kit

CONTENTS:

Tube Cutter TCS14 QTY: 1		8mm Equal Tee BPE8 QTY: 5	8mm x 1/4" BSPP Male Stud BPC8-G02 QTY: 5	6mm Equal Tee BPE6 QTY: 5	8mm x 1/4" BSPP Male Stud Elbow BPL8-G02 QTY: 3
8mm x 1/8" BSPT Male Stud BPC8-01 QTY: 5	6mm x 1/8" BSPP Male Stud Elbow BPL6-G01 QTY: 3	6mm x 1/4" BSPT Male Stud BPC6-02 QTY: 5	8mm x 1/8" BSPP Male Stud BPC8-G01 QTY: 5	6mm x 1/4" BSPP Male Stud BPC6-G02 QTY: 5	6mm Equal Connector BPU6 QTY: 5
8mm Equal Elbow BPV8 QTY: 4		8mm Equal Connector BPU8 QTY: 5	6mm x 1/8" BSPT Male Stud BPC6-01 QTY: 5	8mm x 8mm Flow Controller BSA8 QTY: 1	6mm x 1/8" BSPP Male Stud BPC6-G01 QTY: 5
6mm Equal Elbow BPV6 QTY: 4	6mm Equal Bulkhead BPM6 QTY: 1	6mm x 6mm Flow Controller BSA6 QTY: 1	6mm x 1/4" BSPT Flow Controller BSL6-02 QTY: 2	8mm x 1/4" BSPT Flow Controller BSL8-02 QTY: 2	
6mm x 1/4" BSPP Male Stud Elbow BPL6-G02 QTY: 3		8mm x 1/8" BSPP Male Stud Elbow BPL8-G01 QTY: 3		8mm Equal Bulkhead BPM8 QTY: 1	8mm x 1/4" BSPT Male Stud BPC8-02 QTY: 5

8mm

Blue Push-in Fittings & Tube Cutter Kit

CONTENTS:

Tube Cutter TCS14 QTY: 1	8mm Equal Tee BPE8 QTY: 8	8mm Equal Connector BPU8 QTY: 10	8mm Equal Bulkhead BPM8 QTY: 2
8mm Equal Elbow BPV8 QTY: 6	8mm x 1/8" BSPP Male Stud Elbow BPL8-G01 QTY: 6	8mm x 1/4" BSPP Male Stud Elbow BPL8-G02 QTY: 5	
8mm x 1/8" BSPT Flow Controller BSL8-01 QTY: 2	8mm x 1/4" BSPT Flow Controller BSL8-02 QTY: 2	8mm x 8mm Flow Controller (Unidirectional) BSA8 QTY: 2	
8mm x 1/8" BSPT Male Stud BPC8-01 QTY: 10	8mm x 1/4" BSPT Male Stud BPC8-02 QTY: 10	8mm x 8mm Shut-Off Valve (Tube x Tube) BHVFF-08-08 QTY: 2	
8mm x 3/8" BSPT Male Stud BPC8-03 QTY: 5	8mm x 1/8" BSPP Male Stud BPC8-G01 QTY: 10	8mm x 1/4" BSPP Male Stud BPC8-G02 QTY: 10	

10mm

Blue Push-in Fittings & Tube Cutter Kit

CONTENTS:

Tube Cutter TCS14 QTY: 1	10mm x 10mm Flow Controller (Unidirectional) BSA10 QTY: 2	10mm Equal Connector BPU10 QTY: 8
10mm Equal Elbow BPV10 QTY: 3	10mm x 1/8" BSPP Male Stud Elbow BPL10-G01 QTY: 3	10mm x 1/4" BSPP Male Stud Elbow BPL10-G02 QTY: 3
10mm x 1/4" BSPT Flow Controller BSL10-02 QTY: 2	10mm x 3/8" BSPT Flow Controller BSL10-03 QTY: 1	10mm Equal Tee BPE10 QTY: 2
10mm x 1/8" BSPT Male Stud BPC10-01 QTY: 7	10mm x 1/4" BSPT Male Stud BPC10-02 QTY: 7	10mm Equal Bulkhead BPM10 QTY: 2
10mm x 3/8" BSPT Male Stud BPC10-03 QTY: 5	10mm x 1/8" BSPP Male Stud BPC10-G01 QTY: 8	10mm x 1/4" BSPP Male Stud BPC10-G02 QTY: 6

Fitting Kits

A range of our most popular Techmatic adaptors, supplied in a robust compact kit box for convenience.

Each kit supplied with contents label.

Adaptors:

- BSPP and BSPT kits, comprising various adaptors in sizes 1/8", 1/4", 3/8" and 1/2"





BSPP Adaptors Kit

Nickel-plated Brass

Code	P10	Description	Price
HANDYKIT-BSPP		Assorted Parallel Adaptors	120.00

BSPT Adaptors Kit

Nickel-plated Brass

Code	P10	Description	Price
HANDYKIT-BSPT		Assorted Tapered Adaptors	120.00

BSPP Adaptors Kit

CONTENTS:

1/2" BSPP Equal Nipple PN12 QTY: 5	1/2" BSPP Washer AW12 QTY: 5	3/8" BSPP x 1/2" BSPP Unequal Nipple PN3812 QTY: 5	3/8" BSPP Washer AW38 QTY: 5	1/2" BSPP x 3/8" BSPP Reducing Bush PRB1238 QTY: 5	1/4" BSPP Washer AW14 QTY: 5
1/2" BSPP Blanking Plug RPP12 QTY: 5		3/8" BSPP Blanking Plug RPP38 QTY: 5		1/4" BSPP Blanking Plug RPP14 QTY: 5	1/8" BSPP Equal Socket EFS18 QTY: 3
1/8" BSPP Blanking Plug RPP18 QTY: 5	3/8" BSPP Equal Socket EFS38 QTY: 2	3/8" BSPP Equal Nipple PN38 QTY: 5		1/4" BSPP Equal Nipple PN14 QTY: 5	
1/8" BSPP Equal Nipple PN18 QTY: 5	1/4" BSPP Equal Socket EFS14 QTY: 2	1/8" BSPP x 1/4" BSPP Unequal Nipple PN1814 QTY: 5		1/4" BSPP x 3/8" BSPP Unequal Nipple PN1438 QTY: 5	
1/4" BSPP x 1/8" BSPP Reducing Brush PRB1418 QTY: 5		3/8" BSPP x 1/4" BSPP Reducing Brush PRB3814 QTY: 5		1/8" BSPP Washer AW18 QTY: 5	1/2" BSPP Equal Socket EFS12 QTY: 2

BSPT Adaptors Kit

CONTENTS:

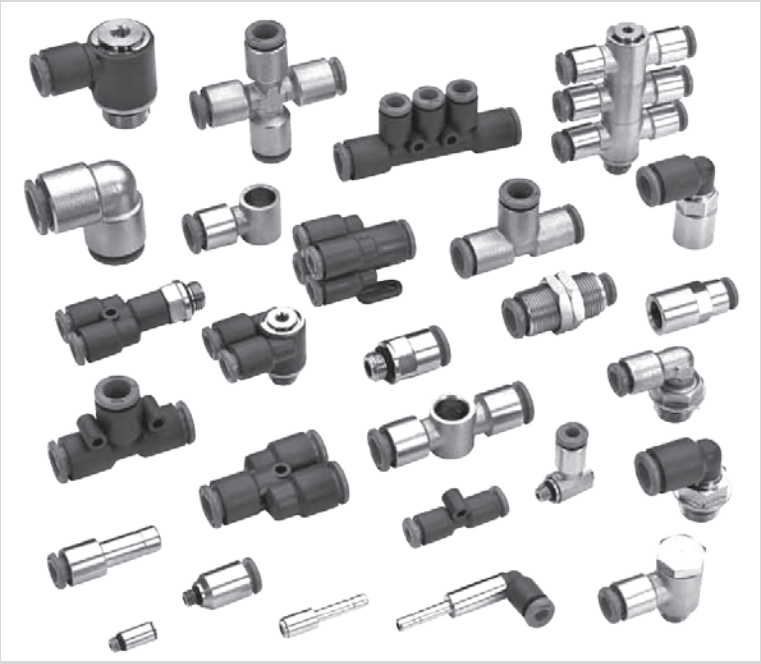
1/2" BSPT Equal Nipple TN12 QTY: 5	1/2" BSPP Equal Socket EFS12 QTY: 3	1/8" BSPP Equal Socket EFS18 QTY: 3	3/8" BSPT x 1/2" BSPT Unequal Nipple TN3812 QTY: 5	1/4" BSPP Equal Socket EFS14 QTY: 3
1/2" BSPT x 3/8" BSPP Reducing Bush TRB1238 QTY: 4	3/8" BSPT Equal Nipple TN38 QTY: 5		1/4" BSPT Equal Nipple TN14 QTY: 5	
1/8" BSPT Equal Nipple TN18 QTY: 5	1/8" BSPT x 1/4" BSPT Unequal Nipple TN1814 QTY: 5		1/4" BSPT x 3/8" BSPT Unequal Nipple TN1438 QTY: 5	
3/8" BSPP Equal Socket EFS38 QTY: 3	3/8" BSPT x 1/2" BSPP Male/Female Adaptor MFAT3812 QTY: 3		1/4" BSPT x 1/8" BSPP Reducing Bush TRB1418 QTY: 5	
3/8" BSPT x 1/4" BSPP Reducing Bush TRB3814 QTY: 5	1/8" BSPT x 1/4" BSPP Male/Female Adaptor MFAT1814 QTY: 5		1/4" BSPT x 3/8" BSPP Male/Female Adaptor MFAT1438 QTY: 4	

Nickel-plated Brass and Technopolymer

Push-in fittings by Metal Work are the best elements for connecting pipes and actuators.

Quick and easy to use, the Metal Work push-in fitting can be re-used thousands of times without affecting the pneumatic and mechanical seal in any way. It comes in various configurations and guarantees a virtually unlimited, highly flexible use. The clamping spring with its special shape grips the pipe without scratching or deforming it, which facilitates release.

In the fittings, the release bushing has patented screwdriver slots to facilitate release in applications not accessible to the fingers.

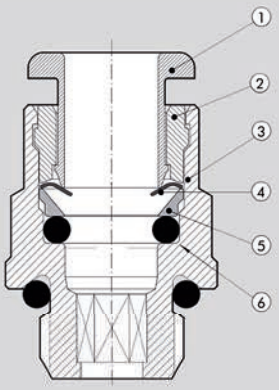


Technical Data

Threaded coupling	M3 - M5 - M7 - 1/8" - 1/4" - 3/8" - 1/2"
Diameter	Ø 3mm - Ø 3.17mm - Ø 4mm - Ø 5mm - Ø 6mm - Ø 8mm - Ø 10mm - Ø 12mm - Ø 14mm
Temperature range for brass fittings	– 20 °C to + 80 °C
	– 4 °F to 176 °F
Temperature range for technopolymer fittings	– 20 °C to + 60 °C
	– 4 °F to 140 °F
Pressure range for brass fittings	– 0.99 bar ... 16 bar / – 0.099 MPa ... 1.6 MPa
Pressure range for technopolymer fittings	– 0.99 bar ... 12 bar / – 0.099 MPa ... 1.2 MPa
Recommended pipe	Rilsan PA 11 - Nylon 6 - Polyamide 12 - Polypropylene
Fluid	Vacuum - Compressed air

Components

1. Ring or release bushing: technopolymer
2. Locking bushing: brass or technopolymer
3. Body: brass or technopolymer
4. Clamping spring: stainless steel (for pipes Ø 3 and Ø 3.17 and R31 Ø 5 and R32 Ø 5: brass gripper)
5. Spring supporting ring: technopolymer
6. Seal: NBR



METAL WORK PNEUMATIC

Metric Push-in Fittings, Nickel-plated Brass

Male Stud

BSP Parallel x Tube



Code P07	Thread BSPP	Tube OD mm	Price 1-9	Price 10+
2L01001	M5	4	1.75	1.70
2L01002	G1/8"	4	1.75	1.70
2L01003	G1/4"	4	1.90	1.85
2001005	G1/8"	5	2.05	1.95
2001006	G1/4"	5	2.90	2.80
2L01000	M5	6	1.90	1.85
2L01007	G1/8"	6	1.65	1.60
2L01008	G1/4"	6	1.75	1.70
2L01009	G1/8"	8	1.75	1.70
2L01010	G1/4"	8	1.75	1.70
2L01011	G3/8"	8	2.25	2.15
2L01012	G1/4"	10	2.20	2.10
2L01013	G3/8"	10	2.45	2.35
2001019	G1/4"	12	4.60	4.40
2001014	G3/8"	12	5.25	5.00
2001015	G1/2"	12	6.55	6.25
2001016	G3/8"	14	7.30	6.95
2001017	G1/2"	14	7.95	7.60
2L01018	G1/2"	10	2.95	2.85

Female Stud

BSP Parallel x Tube



Code P07	Thread BSPP	Tube OD mm	Price 1-9	Price 10+
2L02001	G1/8"	4	2.55	2.45
2L02002	G1/4"	4	2.75	2.65
2002003	G1/8"	5	4.35	4.15
2002004	G1/4"	5	4.60	4.40
2L02005	G1/8"	6	2.30	2.20
2L02006	G1/4"	6	2.35	2.25
2L02007	G1/8"	8	2.40	2.30
2L02008	G1/4"	8	2.55	2.45
2L02009	G1/4"	10	3.35	3.20
2L02010	G3/8"	10	3.65	3.50
2L02011	G3/8"	12	4.15	3.95
2L02012	G1/2"	12	4.45	4.25

Male Stud

BSP Tapered x Tube



Code P07	Thread BSPT	Tube OD mm	Price 1-9	Price 10+
2L01C02	R1/8"	4	1.65	1.60
2L01C07	R1/8"	6	1.50	1.45
2L01C08	R1/4"	6	1.60	1.55
2L01C09	R1/8"	8	1.75	1.70
2L01C10	R1/4"	8	1.75	1.70
2L01C11	R3/8"	8	2.15	2.05

Straight Connector

Tube x Tube



Code P07	Tube OD mm	Price 1-9	Price 10+
2L03001	4	2.95	2.85
2003002	5	4.35	4.15
2L03003	6	2.95	2.85
2L03004	8	3.30	3.15
2L03005	10	4.05	3.85
2003006	12	7.60	7.25
2003007	14	10.20	9.70

Straight Connector, Reducing

Tube x Tube



Code P07	Tube OD mm		Price 1-9	Price 10+
2L03301	4	6	2.70	2.60
2L03302	4	8	3.00	2.85
2L03303	6	8	3.00	2.85
2L03304	6	10	4.05	3.85
2L03305	8	10	4.05	3.85
2L03306	6	12	5.20	4.95
2L03307	8	12	5.60	5.35
2L03308	10	12	5.60	5.35

Bulkhead Connector

Tube x Tube



Code P07	Bulkhead Thread	Tube OD mm	Price 1-9	Price 10+
2L11001	M11	4	4.15	3.95
2011002	M14	5	5.85	5.60
2L11003	M13	6	4.15	3.95
2L11004	M15	8	4.35	4.15
2L11005	M17	10	5.75	5.50
2011006	M20	12	11.55	11.00
2011007	M24	14	14.50	13.80

Unequal Bulkhead Connector

Tube x Tube



Code P07	Tube OD mm		Price 1-9	Price 10+
2L11301	4	6	3.80	3.65
2L11302	4	8	3.95	3.80
2L11303	6	8	3.95	3.80
2L11304	6	10	5.75	5.50
2L11305	8	10	5.75	5.50
2L11306	6	12	6.55	6.25
2L11307	8	12	7.10	6.75
2L11308	10	12	6.55	6.25

Equal Elbow

Tube x Tube



Code P07	Tube OD mm	Price 1-9	Price 10+
2L04001	4	2.30	2.20
2004002	5	2.75	2.65
2L04003	6	2.55	2.45
2L04004	8	2.75	2.65
2L04005	10	3.85	3.70
2004006	12	6.55	6.25
2004007	14	8.95	8.55

Equal Tee

Tube x Tube



Code P07	Tube OD mm	Price 1-9	Price 10+
2L05001	4	3.40	3.25
2005002	5	3.85	3.70
2L05003	6	3.45	3.30
2L05004	8	3.80	3.65
2L05005	10	5.60	5.35
2005006	12	8.30	7.90
2005007	14	12.15	11.55

Equal Cross

Tube x Tube



Code P07	Tube OD mm	Price 1-9	Price 10+
2L40003	6	7.65	7.30
2L40004	8	8.65	8.25

Metric Push-in Fittings, Nickel-plated Brass

Male Stud Swivel Elbow

BSP Parallel x Tube



Code P07	Thread BSPP	Tube OD mm	Price 1-9	Price 10+
2L31001	M5	4	3.05	2.90
2L31002	G1/8"	4	2.55	2.45
2L31003	G1/4"	4	2.95	2.85
2031004	M5	5	3.05	2.90
2031005	G1/8"	5	2.80	2.70
2031006	G1/4"	5	3.20	3.05
2L31007	M5	6	2.90	2.80
2L31008	G1/8"	6	2.55	2.45
2L31009	G1/4"	6	2.85	2.75
2L31010	G1/8"	8	2.95	2.85
2L31011	G1/4"	8	3.15	3.00
2L31012	G3/8"	8	3.45	3.30
2L31013	G1/4"	10	3.90	3.75
2L31014	G3/8"	10	4.35	4.15
2031016	G1/4"	12	5.25	5.00
2031017	G3/8"	12	5.25	5.00
2031018	G1/2"	12	6.10	5.80
2031019	G1/2"	14	7.25	6.90

Male Rotary Elbow

BSP Tapered x Tube



Code P07	Thread BSPT	Tube OD mm	Price 1-9	Price 10+
2L31C02	R1/8"	4	2.70	2.60
2L31C03	R1/4"	4	2.75	2.65
2L31C08	R1/8"	6	2.75	2.65
2L31C09	R1/4"	6	3.05	2.90
2L31C10	R1/8"	8	3.25	3.10
2L31C11	R1/4"	8	3.40	3.25
2L31C12	R3/8"	8	3.55	3.40
2L31C13	R1/4"	10	3.70	3.55
2L31C14	R3/8"	10	4.15	3.95
2031C15	R3/8"	12	4.80	4.60
2031C16	R1/2"	12	5.70	5.45

Male Stud Elbow

BSP Tapered x Tube



Code P07	Thread BSPT	Tube OD mm	Price 1-9	Price 10+
2L39C02	R1/8"	4	2.25	2.15
2L39C08	R1/8"	6	2.25	2.15
2L39C09	R1/4"	6	2.50	2.40
2L39C10	R1/8"	8	2.65	2.55
2L39C11	R1/4"	8	2.75	2.65
2L39C13	R1/4"	10	3.00	2.85

Male Stud Swivel Tee

BSP Parallel & Tube



Code P07	Thread BSPP	Tube OD mm	Price 1-9	Price 10+
2L32002	G1/8"	4	3.80	3.65
2L32003	G1/4"	4	3.90	3.75
2032005	G1/8"	5	3.95	3.80
2L32008	G1/8"	6	3.60	3.45
2L32009	G1/4"	6	4.20	4.00
2L32010	G1/8"	8	4.70	4.50
2L32011	G1/4"	8	4.85	4.65
2L32012	G3/8"	8	5.40	5.15
2L32013	G1/4"	10	6.15	5.85
2L32014	G3/8"	10	6.55	6.25
2032017	G3/8"	12	7.50	7.15
2032018	G1/2"	12	8.00	7.60
2032019	G1/2"	14	9.70	9.25

Extension Stem

Stem x Stem



Code P07	Stem OD mm	Price 1-9	Price 10+
2007001	4	1.00	0.95
2007002	5	1.75	1.70
2007003	6	1.00	0.95
2L07004	8	0.90	0.85
2007005	10	1.45	1.40
2007006	12	1.85	1.80
2007007	14	2.40	2.30

Stem Reducer

Stem x Tube



Code P07	Stem OD mm	Tube OD mm	Price 1-9	Price 10+
2008001	5	4	2.40	2.30
2L08002	6	4	1.75	1.70
2008003	6	5	2.80	2.70
2L08004	8	4	1.75	1.70
2008005	8	5	2.90	2.80
2L08006	8	6	1.75	1.70
2L08007	10	6	1.60	1.55
2L08008	10	8	1.75	1.70
2008009	12	4	2.50	2.40
2008010	12	6	2.50	2.40
2008011	12	8	2.65	2.55
2008015	12	10	2.60	2.50
2008014	14	8	4.35	4.15
2008017	14	10	4.05	3.85
2008018	14	12	4.35	4.15

Male Stem Adaptor

BSP Parallel x Tube



Code P07	Thread BSPP	Stem OD mm	Price 1-9	Price 10+
2006001	M5	4	0.85	0.80
2006002	G1/8"	4	0.80	0.75
2006003	G1/4"	4	1.20	1.15
2006004	M5	5	1.10	1.05
2006005	G1/8"	5	1.00	0.95
2006006	G1/4"	5	1.45	1.40
2006000	M5	6	1.10	1.05
2006007	G1/8"	6	0.80	0.75
2006008	G1/4"	6	0.80	0.75
2006009	G1/8"	8	0.80	0.75
2006010	G1/4"	8	0.80	0.75
2006011	G3/8"	8	1.30	1.25
2006012	G1/4"	10	1.10	1.05
2006013	G3/8"	10	1.40	1.35
2006019	G1/4"	12	1.45	1.40
2006014	G3/8"	12	1.60	1.55
2006015	G1/2"	12	1.75	1.70
2006016	G3/8"	14	2.65	2.55
2006017	G1/2"	14	2.75	2.65

Metric Push-in Fittings, Technopolymer

Straight Connector

Tube x Tube



Code P08	Tube OD mm	Price 1-9	Price 10+
2019001	4	2.75	2.65
2019002	5	3.00	2.85
2019003	6	2.75	2.65
2019004	8	3.10	2.95
2019005	10	2.95	2.85
2019006	12	5.25	5.00

Equal Elbow

Tube x Tube



Code P08	Tube OD mm	Price 1-9	Price 10+
2L21001	4	2.00	1.90
2021002	5	2.55	2.45
2L21003	6	2.15	2.05
2L21004	8	2.55	2.45
2021005	10	4.70	4.50
2021006	12	6.10	5.80

Equal Tee

Tube x Tube



Code P08	Tube OD mm	Price 1-9	Price 10+
2L22001	4	2.75	2.65
2022002	5	3.60	3.45
2L22003	6	2.95	2.85
2L22004	8	3.20	3.05
2022005	10	5.75	5.50
2022006	12	7.70	7.35

Male Stud Swivel Elbow

BSP Parallel x Tube



Code P08	Thread BSPP	Tube OD mm	Price 1-9	Price 10+
2L34001	M5	4	2.60	2.50
2L34002	G1/8"	4	2.35	2.25
2L34003	G1/4"	4	2.70	2.60
2L34006	M5	6	2.70	2.60
2L34007	G1/8"	6	2.35	2.25
2L34008	G1/4"	6	2.60	2.50
2L34009	G1/8"	8	2.75	2.65
2L34010	G1/4"	8	2.95	2.85
2L34011	G3/8"	8	3.20	3.05
2L34013	G1/4"	10	3.20	3.05
2L34014	G3/8"	10	3.70	3.55
2L34016	G3/8"	12	4.35	4.15
2L34017	G1/2"	12	5.00	4.75

Female Stud Swivel Elbow

BSP Parallel x Tube



Code P08	Thread BSPP	Tube OD mm	Price 1-9	Price 10+
2L34F01	M5	4	3.20	3.05
2L34F06	M5	6	3.40	3.25
2L34F05	G1/8"	4	3.40	3.25
2L34F07	G1/8"	6	3.30	3.15
2L34F08	G1/4"	6	3.40	3.25
2L34F09	G1/8"	8	3.60	3.45
2L34F10	G1/4"	8	3.60	3.45

Plug

Stem



Code P08	Tube OD mm	Price 1-9	Price 10+
2L10001	4	0.35	0.32
2010002	5	1.25	1.20
2L10003	6	0.35	0.32
2L10004	8	0.80	0.75
2L10005	10	0.80	0.75
2L10006	12	0.80	0.75
2010007	14	2.15	2.05

Male Stud Swivel Tee

BSP Parallel x Tube



Code P08	Thread BSPP	Tube OD mm	Price 1-9	Price 10+
2L35001	M5	4	3.55	3.40
2L35002	G1/8"	4	3.35	3.20
2L35003	G1/4"	4	3.40	3.25
2L35006	M5	6	3.60	3.45
2L35007	G1/8"	6	3.15	3.00
2L35008	G1/4"	6	3.60	3.45
2L35009	G1/8"	8	4.10	3.90
2L35010	G1/4"	8	4.15	3.95
2L35011	G3/8"	8	4.45	4.25
2L35013	G1/4"	10	3.70	3.55
2L35014	G3/8"	10	4.15	3.95
2L35016	G3/8"	12	5.30	5.05
2L35017	G1/2"	12	6.40	6.10

Equal Y

Tube x Tube



Code P08	Tube OD mm	Price 1-9	Price 10+
2023001	4	4.05	3.85
2023002	5	4.15	3.95
2023003	6	4.15	3.95
2023004	8	4.35	4.15
2L23005	10	5.30	5.05
2L23006	12	6.95	6.65

Male Stud Y

BSP Parallel x Tube



Code P08	Thread BSPP	Tube OD mm	Price 1-9	Price 10+
2L23402	G1/8"	4	5.00	4.75
2L23403	G1/4"	4	5.30	5.05
2L23406	G1/8"	6	5.05	4.80
2L23407	G1/4"	6	5.30	5.05
2L23409	G1/8"	8	5.45	5.20
2L23410	G1/4"	8	5.75	5.50
2L23412	G3/8"	8	6.55	6.25

Metric Push-in Fittings, Technopolymer

Y Stem

Stem x Tube



Code P08	OD mm Stem	OD mm Tube	Price 1-9	Price 10+
2024001	4	4	3.30	3.15
2024003	6	6	3.60	3.45
2L24004	8	8	5.00	4.75
2L24005	10	10	6.60	6.30
2L24006	12	12	7.90	7.55

Y Elbow

BSP Parallel x Tube



Code P08	Thread BSPP	Tube OD mm	Price 1-9	Price 10+
2L25003	G1/8"	4	5.05	4.80
2L25004	G1/8"	6	5.75	5.50
2L25005	G1/4"	6	6.20	5.90
2L25008	G1/4"	8	6.25	5.95
2L25009	G3/8"	8	6.95	6.65

Plug-in Elbow

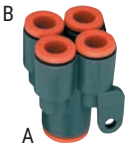
Stem x Tube



Code P08	OD mm Stem	OD mm Tube	Price 1-9	Price 10+
2L46001	4	4	2.65	2.55
2L46002	6	6	2.95	2.85
2L46003	8	8	3.00	2.85
2L46004	10	10	4.70	4.50

Distribution Fitting

Tube x Tube



Code P08	Tube OD mm A	Tube OD mm B	Price 1-9	Price 10+
2L42001	4	4	5.75	5.50
2L42002	6	4	5.75	5.50
2L42004	6	6	6.05	5.75
2L42005	8	6	6.05	5.75

Distribution Fitting

BSP Parallel x Tube



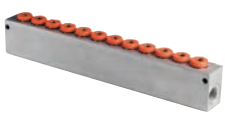
Code P08	Thread BSPP	Tube OD mm	Price 1-9	Price 10+
2L43001	M5	4	5.85	5.60
2L43002	G1/8"	4	7.05	6.70
2L43003	G1/4"	4	7.35	7.00
2L43008	G1/8"	6	7.75	7.40
2L43009	G1/4"	6	7.90	7.55

Tube Removal Tool

For use with Push-in Fittings



Code P07	To Suit Tube mm	Price 1-9	Price 10+
2017001	4-14	1.20	1.15

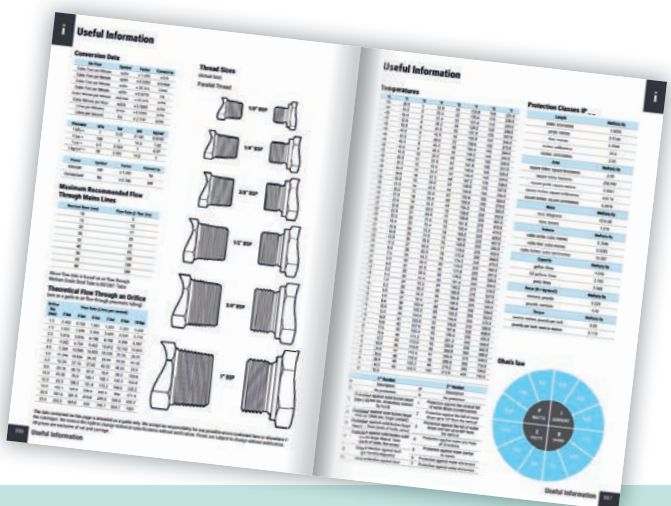


Aluminium Distribution Manifold

BSP Parallel x Tube Inlet Ports

Code P44	BSPP Inlet Thread	Tube OD mm	Outlets	Price 1-9	Price 10+
7304106	G1/8"	4	6	33.15	31.50
7304112	G1/8"	4	12	49.80	47.35
7306206	G1/4"	6	6	38.50	36.60
7306212	G1/4"	6	12	55.40	52.65
7308306	G3/8"	8	6	42.20	40.10
7308312	G3/8"	8	12	63.45	60.30

For Useful Information

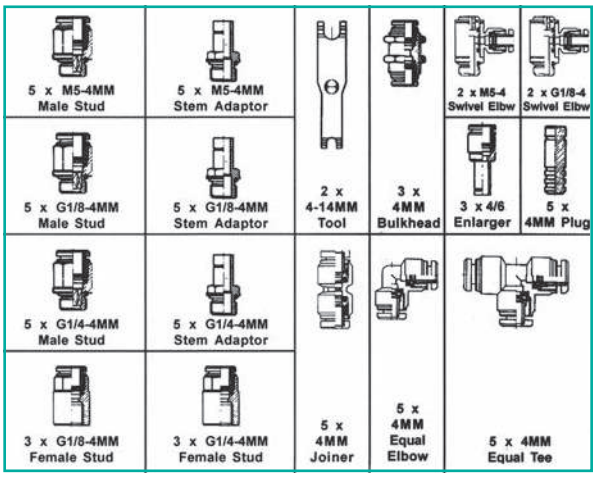


See pages 886-887

Push-in Fittings Kits

A convenient range of Metal Work push-in fittings in a kit. Comprising of seventeen removable compartments. These are contained in a hand carry case measuring 57mm deep x 340mm long x 265mm wide, made from tough polypropylene, with a clear view plastic hinged lid, sliding locks and carry handle. There are four pneumatic push-in fittings kits available: 4mm, 6mm 8mm and a 6/8mm combination.

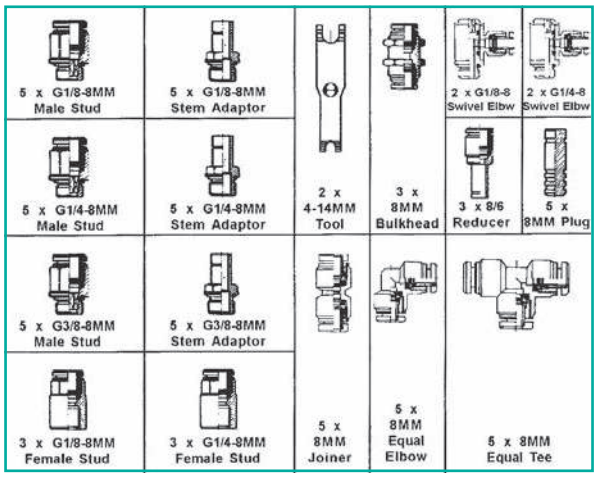




Push-in Fittings Kit

4mm Outside Diameter

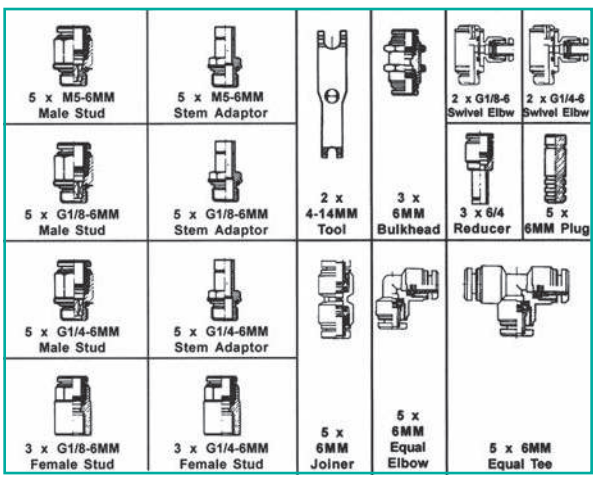
Code P10	Description	Price
HANDYFIT-4	Assorted	180.00



Push-In Fittings Kit

8mm Outside Diameter

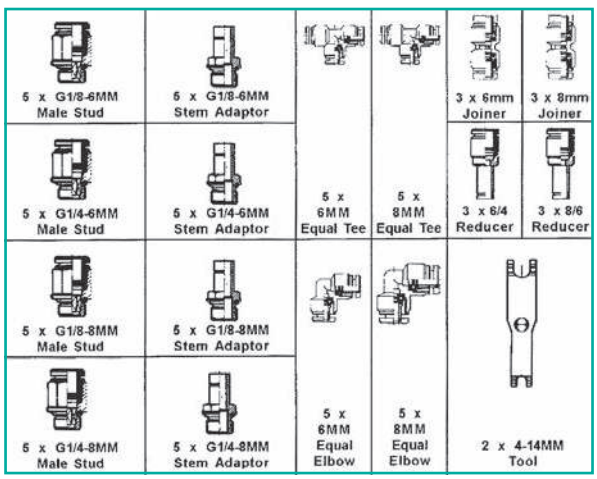
Code P10	Description	Price
HANDYFIT-8	Assorted	180.00



Push-in Fittings Kit

6mm Outside Diameter

Code P10	Description	Price
HANDYFIT-6	Assorted	180.00



Push-in Fittings Kit

6mm & 8mm Outside Diameter

Code P10	Description	Price
HANDYFIT-6/8	Assorted	180.00

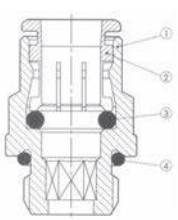
Food Grade Fittings

Series F Push-in Fittings, Safe for Use in the Food Industry

Brass parts are chemically treated with phosphorus nickel-plating according to the NSF®/ANSI 51 standard of the food programme. The seals are made of FDA-approved FKM/FPM. Fittings contain no technopolymer, solving the problem of incompatibility with detergents and other chemicals.

The fittings can be used up to +150°C, making them suitable for high temperature applications other industries. The threads are cylindrical and under-head o-rings provide a pneumatic seal. This avoids the need for sealants (e.g. Teflon®) which could release solid fragments during screwing and unscrewing that would contaminate the environment or the fluid. Our fittings can be screwed and unscrewed any number of times and still remain clean and pneumatically sealed.

This choice of materials and treatments make these fittings suitable for use in the chemical, pharmaceutical, medical and electronics industry.



1. Body: chemically nickel-plated brass to NSF®/ANSI 51 standards
2. Gripper: chemically nickel-plated brass to NSF®/ANSI 51 standards
3. Fitting seal: FKM/FPM
4. Port seal: FKM/FPM

Temperature Range:

- -20°C to +150°C (-4°F to 302°F)

Pressure Range:

- -0.99 to 16 bar (-0.099 to 1.6 MPa)



Technical Features

- Threaded ports: M5, G1/8", G1/4", G3/8", G1/2"
- Pipe diameter: 4, 6, 8 and 10mm
- Recommended pipe: Rilsan PA 11, nylon 6, polyamide 12, polypropylene
- Under-head O-ring can be screwed and unscrewed any number of times; no fragments of Teflon® or sealant will contaminate the fluid
- Corrosion proof: chemical nickel-plating + FKM/FPM, compatible with numerous substances
- No plastic parts, so no risk of incompatibility

Male Stud

BSP Parallel x Tube



Code P45	Tube OD mm	Thread BSPP	Price 1-9	Price 10+
2F01001	4	M5	2.00	1.90
2F01002	4	G1/8"	2.10	2.00
2F01003	4	G1/4"	2.90	2.80
2F01000	6	M5	2.50	2.40
2F01007	6	G1/8"	2.70	2.60
2F01008	6	G1/4"	2.50	2.40
2F01009	8	G1/8"	2.50	2.40
2F01010	8	G1/4"	2.55	2.45
2F01011	8	G3/8"	2.90	2.80
2F01012	10	G1/4"	2.90	2.80
2F01013	10	G3/8"	2.60	2.50
2F01022	10	G1/2"	5.10	4.85

Male Stud

BSP Tapered x Tube



Code P45	Tube OD mm	Thread BSPT	Price 1-9	Price 10+
2F01C02	4	R1/8"	2.10	2.00
2F01C07	6	R1/8"	2.15	2.05
2F01C08	6	R1/4"	2.50	2.40
2F01C09	8	R1/8"	2.60	2.50
2F01C10	8	R1/4"	2.60	2.50
2F01C11	8	R3/8"	3.10	2.95
2F01C13	10	R1/4"	3.00	2.85
2F01C14	10	R3/8"	4.00	3.80

Straight Connector

Tube x Tube



Code P45	Tube OD mm	Bulkhead Thread	Price 1-9	Price 10+
2F03001	4	M13 x 1	3.60	3.45
2F03003	6	M15 x 1	3.90	3.75
2F03004	8	M17 x 1	4.10	3.90
2F03005	10	M20 x 1	4.60	4.40

Equal Tee

Tube x Tube



Code P45	Tube OD mm	Price 1-9	Price 10+
2F05001	4	3.80	3.65
2F05003	6	4.35	4.15
2F05004	8	4.95	4.75
2F05005	10	6.55	6.25

Food Grade Fittings



Male Stud Swivel Elbow

BSP Parallel x Tube

Code P45	Thread BSPP	Tube OD mm	Price 1-9	Price 10+
2F31001	M5	4	3.00	2.85
2F31002	G1/8"	4	3.50	3.35
2F31003	G1/4"	4	4.10	3.90
2F31007	M5	6	5.55	5.30
2F31008	G1/8"	6	3.30	3.15
2F31009	G1/4"	6	4.65	4.45
2F31010	G1/8"	8	3.90	3.75
2F31011	G1/4"	8	4.80	4.60
2F31012	G3/8"	8	6.45	6.15
2F31013	G1/4"	10	5.60	5.35
2F31014	G3/8"	10	5.60	5.35
2F31015	G1/2"	10	6.00	5.70



Bulkhead Connector

Tube x Tube

Code P45	Tube OD mm	Bulkhead Thread	Price 1-9	Price 10+
2F11001	4	M13 x 1	4.30	4.10
2F11003	6	M15 x 1	4.80	4.60
2F11004	8	M17 x 1	5.00	4.75
2F11005	10	M20 x 1	5.60	5.35



Equal Elbow

Tube x Tube

Code P45	Tube OD mm	Price 1-9	Price 10+
2F04001	4	2.85	2.75
2F04003	6	3.10	2.95
2F04004	8	3.65	3.50
2F04005	10	4.80	4.60



Male Stud Swivel Elbow

BSP Tapered x Tube

Code P45	Thread BSPT	Tube OD mm	Price 1-9	Price 10+
2F31C02	R1/8"	4	3.30	3.15
2F31C03	R1/4"	4	4.60	4.40
2F31C08	R1/8"	6	3.90	3.75
2F31C09	R1/4"	6	4.10	3.90
2F31C10	R1/8"	8	4.80	4.60
2F31C11	R1/4"	8	4.40	4.20
2F31C12	R3/8"	8	7.05	6.70
2F31C13	R1/4"	10	6.35	6.05
2F31C14	R3/8"	10	7.50	7.15



Male Stem Adaptor

BSP Parallel x Tube

Code P45	Thread BSPP	Tube OD mm	Price 1-9	Price 10+
2F06001	M5	4	2.00	1.90
2F06002	G1/8"	4	2.10	2.00
2F06003	G1/4"	4	2.50	2.40
2F06000	M5	6	1.80	1.75
2F06007	G1/8"	6	1.75	1.70
2F06008	G1/4"	6	2.00	1.90
2F06009	G1/8"	8	1.90	1.85
2F06010	G1/4"	8	2.10	2.00
2F06011	G3/8"	8	3.10	2.95
2F06012	G1/4"	10	2.15	2.05
2F06013	G1/4"	10	2.50	2.40



Male Stud Elbow

BSP Tapered x Tube

Code P45	Thread BSPT	Tube OD mm	Price 1-9	Price 10+
2F39C02	R1/8"	4	2.95	2.85
2F39C08	R1/8"	6	3.15	3.00
2F39C09	R1/4"	6	3.20	3.05
2F39C10	R1/8"	8	3.55	3.40
2F39C11	R1/4"	8	3.60	3.45
2F39C12	R3/8"	8	4.45	4.25
2F39C13	R1/4"	10	4.50	4.30



Male Swivel Branch Tee

BSP Parallel x Tube

Code P45	Thread BSPP	Tube OD mm	Price 1-9	Price 10+
2F32002	G1/8"	4	5.05	4.80
2F32008	G1/8"	6	4.65	4.45
2F32009	G1/4"	6	5.85	5.60
2F32010	G1/8"	8	5.85	5.60
2F32011	G1/4"	8	6.70	6.40
2F32012	G3/8"	8	9.65	9.20
2F32013	G1/4"	10	7.65	7.30
2F32014	G3/8"	10	8.80	8.40



Female Stud

BSP Parallel x Tube

Code P45	Thread BSPP	Tube OD mm	Price 1-9	Price 10+
2F02001	G1/8"	4	2.80	2.70
2F02005	G1/8"	6	3.15	3.00
2F02006	G1/4"	6	3.10	2.95
2F02007	G1/8"	8	3.20	3.05
2F02008	G1/4"	8	3.00	2.85
2F02011	G1/4"	10	5.35	5.10

Finger-tight Fittings

Body:
- OT 58 brass

Maximum Pressure:
- 18 bar

Temperature range:
- -45ºC to 80ºC

Male Stud

BSP Tapered x Tube



Code P09	Thread BSPT	Tube mm OD	Tube mm ID	Price 1-9	Price 10+
2301017	R1/8"	5	3	1.05	1.00
2301001	R1/8"	6	4	1.20	1.15
2301002	R1/4"	6	4	1.35	1.30
2301003	R1/8"	8	6	1.35	1.30
2301004	R1/4"	8	6	1.35	1.30
2301005	R3/8"	8	6	2.20	2.10
2301006	R1/4"	10	8	1.70	1.65
2301007	R3/8"	10	8	2.20	2.10
2301008	R1/2"	10	8	3.20	3.05
2301009	R3/8"	12	10	2.45	2.35
2301010	R1/2"	12	10	3.65	3.50

Male Stud

BSP Parallel x Tube



Code P09	Thread BSPP	Tube mm OD	Tube mm ID	Price 1-9	Price 10+
2351001	M5	4	2	2.15	2.05
2356001	M5	5	3	0.75	0.70
2351002	M5	6	4	0.90	0.85
2351003	G1/8"	6	4	1.30	1.25
2351004	G1/4"	6	4	1.55	1.50
2351005	G1/8"	8	6	1.30	1.25
2351006	G1/4"	8	6	1.55	1.50
2351007	G3/8"	8	6	2.15	2.05
2351008	G1/4"	10	8	1.90	1.85
2351009	G3/8"	10	8	2.20	2.10
2351010	G1/2"	10	8	4.60	4.40
2351011	G3/8"	12	10	2.55	2.45
2351012	G1/2"	12	10	4.70	4.50

Female Stud

BSP Parallel x Tube



Code P09	Thread BSPP	Tube mm OD	Tube mm ID	Price 1-9	Price 10+
2302001	G1/8"	6	4	1.55	1.50
2302002	G1/4"	6	4	1.90	1.85
2302003	G1/8"	8	6	1.75	1.70
2302004	G1/4"	8	6	1.90	1.85
2302005	G3/8"	8	6	3.05	2.90
2302006	G1/4"	10	8	2.25	2.15
2302007	G3/8"	10	8	3.50	3.35
2302008	G1/2"	10	8	3.65	3.50

Equal Elbow

Tube x Tube



Code P09	Tube mm OD	Tube mm ID	Price 1-9	Price 10+
2306001	6	4	3.20	3.05
2306002	8	6	3.05	2.90
2306003	10	8	3.50	3.35
2306004	12	10	5.85	5.60

Male Stud Elbow

BSP Tapered x Tube



Code P09	Thread BSPT	Tube mm OD	Tube mm ID	Price 1-9	Price 10+
2305016	G1/8"	5	3	1.30	1.25
2305001	G1/8"	6	4	1.65	1.60
2305002	G1/4"	6	4	2.05	1.95
2305003	G1/8"	8	6	2.05	1.95
2305004	G1/4"	8	6	2.00	1.90
2305005	G3/8"	8	6	3.05	2.90
2305006	G1/4"	10	8	2.65	2.55
2305007	G3/8"	10	8	3.45	3.30
2305008	G1/2"	10	8	5.55	5.30
2305009	G3/8"	12	10	4.60	4.40
2305010	G1/2"	12	10	5.85	5.60

Straight Connector

Tube x Tube



Code P09	Tube mm OD	Tube mm ID	Price 1-9	Price 10+
2303001	6	4	2.15	2.05
2303002	8	6	2.45	2.35
2303003	10	8	3.45	3.30
2303004	12	10	4.70	4.50

Equal Tee

Tube x Tube



Code P09	Tube mm OD	Tube mm ID	Price 1-9	Price 10+
2309001	6	4	3.45	3.30
2309002	8	6	3.75	3.60
2309003	10	8	5.05	4.80
2309004	12	10	7.90	7.55

Female Stud Elbow

BSP Parallel x Tube



Code P09	Thread BSPP	Tube mm OD	Tube mm ID	Price 1-9	Price 10+
2352001	G1/8"	6	4	2.40	2.30
2352002	G1/4"	8	6	3.45	3.30

Bulkhead Connector

Tube x Tube



Code P09	Tube mm OD	Tube mm ID	Price 1-9	Price 10+
2304001	6	4	3.65	3.50
2304002	8	6	4.00	3.80
2304003	10	8	4.70	4.50
2304004	12	10	5.75	5.50

Male Stud Branch Tee

BSP Parallel x Tube



Code P09	Thread BSPP	Tube mm OD	Tube mm ID	Price 1-9	Price 10+
2307015	G1/8"	5	3	2.15	2.05
2307001	G1/8"	6	4	2.85	2.75
2307002	G1/4"	6	4	3.05	2.90
2307003	G1/8"	8	6	3.20	3.05
2307004	G1/4"	8	6	3.45	3.30
2307005	G3/8"	8	6	4.70	4.50
2307006	G1/4"	10	8	4.60	4.40
2307007	G3/8"	10	8	5.15	4.90
2307008	G1/2"	10	8	7.55	7.20
2307009	G3/8"	12	10	7.70	7.35
2307010	G1/2"	12	10	7.90	7.55

Finger-tight Fittings



Male Stud Run Tee

BSP Parallel x Tube

Code	P09	Thread BSPP	Tube mm OD	Tube mm ID	Price 1-9	Price 10+
2308012		G1/8"	5	3	2.15	2.05
2308001		G1/8"	6	4	2.85	2.75
2308002		G1/4"	6	4	3.05	2.90
2308003		G1/8"	8	6	3.20	3.05
2308004		G1/4"	8	6	3.45	3.30
2308005		G3/8"	8	6	4.70	4.50
2308006		G1/4"	10	8	4.60	4.40
2308007		G3/8"	10	8	5.15	4.90
2308008		G1/2"	10	8	7.55	7.20
2308009		G3/8"	12	10	7.70	7.35
2308010		G1/2"	12	10	7.90	7.55



Swivel Tube Fitting with Spring Guard

BSP Parallel x Tube

Code	P09	Thread BSPP	Tube mm OD	Tube mm ID	Price 1-9	Price 10+
2501010		G1/4"	6	4	7.45	7.10
2501011		G1/4"	8	6	7.45	7.10
2501012		G3/8"	10	8	8.55	8.15
2501013		G3/8"	12	10	11.15	10.60



Equal Cross

Tube x Tube

Code	P09	Tube mm OD	Tube mm ID	Price 1-9	Price 10+
2311001		6	4	5.40	5.15
2311002		8	6	6.50	6.20
2311003		10	8	8.25	7.85

Plastic Finger-tight Fittings



Male Stud

BSP Parallel x Tube

Code	D01	Thread BSPP	Tube mm OD	Tube mm ID	Price 1-9	Price 10+
1823391037		G1/8"	6	4	1.30	1.25
1823391039		G1/4"	6	4	1.35	1.30
1823391038		G1/8"	8	6	1.35	1.30
1823391044		G1/4"	8	6	1.30	1.25
1823391263		G3/8"	8	6	1.65	1.60
1823391267		G1/4"	12	9	1.45	1.40
1823391268		G3/8"	12	9	2.00	1.90



Male Stud Elbow

BSP Tapered x Tube

Code	D01	Thread BSPT	Tube mm OD	Tube mm ID	Price 1-9	Price 10+
1823391269		R1/8"	6	4	2.10	2.00
1823391270		R1/8"	8	6	2.25	2.15
1823391271		R1/4"	6	4	2.25	2.15
1823391272		R1/4"	8	6	2.45	2.35
1823391273		R1/4"	12	9	2.90	2.80



Equal Tee

Tube x Tube

Code	D01	Tube mm OD	Tube mm ID	Price 1-9	Price 10+
1823391118		6	4	2.90	2.80
1823391119		8	6	3.15	3.00
1823391275		12	9	4.50	4.30



Bulkhead Joiner

Tube x Tube

Code	D01	Tube mm OD	Tube mm ID	Price 1-9	Price 10+
1823391277		6	4	3.25	3.10
1823391278		8	6	3.85	3.70
1823391279		12	9	4.65	4.45



Male Swivel Elbow

BSP Parallel x Tube

Code	D01	Thread BSPP	Tube mm OD	Tube mm ID	Price 1-9	Price 10+
1823391102		G1/8"	6	4	2.75	2.65
1823391103		G1/8"	8	6	2.85	2.75
1823391104		G1/4"	6	4	2.95	2.85
1823391105		G1/4"	8	6	3.30	3.15



Male Swivel Tee

Polyamide Body

Code	D01	Thread BSPP	Tube mm OD	Tube mm ID	Price 1-9	Price 10+
1823391106		G1/8"	4	4	3.40	3.25
1823391107		G1/8"	6	6	3.45	3.30
1823391108		G1/4"	4	4	4.10	3.90
1823391109		G1/4"	6	6	4.10	3.90

Metric Compression Fittings

Male Stud



BSP Tapered x Tube, Nickel-plated Brass

Code P09	Thread BSPT	Tube mm OD	Tube mm ID	Price 1-9	Price 10+
2201001	R1/8"	4	2	1.45	1.40
2201002	R1/8"	6	4	1.45	1.40
2201003	R1/4"	6	4	1.70	1.65
2201004	R1/8"	8	6	2.00	1.90
2201005	R1/4"	8	6	2.00	1.90

Male Stud Elbow



BSP Tapered x Tube, Nickel-plated Brass

Code P09	Thread BSPT	Tube mm OD	Tube mm ID	Price 1-9	Price 10+
2205001	R1/8"	4	2	2.35	2.25
2205002	R1/8"	6	4	2.35	2.25
2205003	R1/4"	6	4	2.60	2.50
2205004	R1/8"	8	6	2.80	2.70
2205005	R1/4"	8	6	2.80	2.70
2205006	R3/8"	8	6	3.85	3.70
2205007	R1/4"	10	8	4.30	4.10
2205008	R3/8"	10	8	4.85	4.65
2205009	R1/2"	10	8	5.85	5.60
2205010	R3/8"	12	10	6.90	6.60
2205011	R1/2"	12	10	7.05	6.70
2205012	R1/2"	15	12	9.05	8.60

Female Stud



BSP Parallel x Tube, Nickel-plated Brass

Code P09	Thread BSPP	Tube mm OD	Tube mm ID	Price 1-9	Price 10+
2202001	G1/8"	6	4	2.25	2.15
2202002	G1/4"	6	4	2.60	2.50
2202003	G1/8"	8	6	2.55	2.45
2202004	G1/4"	8	6	2.55	2.45
2202005	G3/8"	8	6	3.65	3.50
2202006	G1/4"	10	8	4.60	4.40
2202007	G3/8"	10	8	5.40	5.15

Equal Elbow



Tube x Tube, Nickel-plated Brass

Code P09	Tube mm OD	Tube mm ID	Price 1-9	Price 10+
2206001	4	2	3.25	3.10
2206002	6	4	3.25	3.10
2206003	8	6	4.50	4.30
2206004	10	8	6.45	6.15
2206005	12	10	10.10	9.60
2206006	15	12	14.05	13.35

Body:
- OT 58 brass

Maximum Pressure:
- 60 bar (dependant upon tubing specification)

Equal Tee



Tube x Tube, Nickel-plated Brass

Code P09	Tube mm OD	Tube mm ID	Price 1-9	Price 10+
2209001	4	2	4.15	3.95
2209002	6	4	4.15	3.95
2209003	8	6	5.65	5.40
2209004	10	8	8.40	8.00
2209005	12	10	13.35	12.70
2209006	15	12	20.50	19.50

Male Stud Branch Tee



BSP Tapered x Tube

Code P09	Thread BSPT	Tube mm OD	Tube mm ID	Price 1-9	Price 10+
2207001	R1/8"	4	2	3.80	3.65
2207002	R1/8"	6	4	3.45	3.30
2207003	R1/4"	6	4	4.15	3.95
2207004	R1/8"	8	6	4.55	4.35
2207005	R1/4"	8	6	4.55	4.35
2207006	R3/8"	8	6	5.90	5.65
2207007	R1/4"	10	8	7.05	6.70
2207008	R3/8"	10	8	7.30	6.95
2207010	R3/8"	12	10	11.15	10.60
2207011	R1/2"	12	10	11.15	10.60
2207012	R1/2"	15	12	15.80	15.05

Male Run Tee



BSP Tapered x Tube

Code P09	Thread BSPT	Tube mm OD	Tube mm ID	Price 1-9	Price 10+
2208001	R1/8"	6	4	3.45	3.30
2208002	R1/4"	6	4	4.05	3.85
2208003	R1/8"	8	6	4.55	4.35
2208004	R1/4"	8	6	4.55	4.35
2208005	R3/8"	8	6	6.15	5.85
2208006	R1/4"	10	8	7.05	6.70
2208007	R3/8"	10	8	7.30	6.95
2208009	R3/8"	12	10	11.15	10.60
2208010	R1/2"	12	10	11.15	10.60
2208011	R1/2"	15	12	15.80	15.05

Temperature range:
- -45ºC to 80ºC

- For use with copper tube

Straight Connector



Tube x Tube

Code P09	Tube mm OD	Tube mm ID	Price 1-9	Price 10+
2203001	4	2	2.80	2.70
2203002	6	4	2.55	2.45
2203003	8	6	3.25	3.10
2203004	10	8	5.50	5.25
2203005	12	10	7.55	7.20
2203006	15	12	11.15	10.60

Bulkhead Connector



Tube x Tube

Code P09	Tube mm OD	Tube mm ID	Price 1-24	Price 25+
2204001	6	4	3.65	3.50
2204002	8	6	4.50	4.30
2204003	10	8	7.90	7.55
2204004	12	10	12.75	12.15

Spare Compression Olive



Brass

Code P09	Tube mm OD	Tube mm ID	Price 1-24	Price 25+
2211001	4	2	0.35	0.32
2211002	6	4	0.35	0.32
2211003	8	6	0.45	0.42
2211004	10	8	0.45	0.42
2211005	12	10	0.65	0.61
2211006	15	12	0.85	0.80

Tube Inserts



Brass

Code P09	To Suit Tube mm OD	To Suit Tube mm ID	Price 1-24	Price 25+
2212001	6	4	0.45	0.42
2212002	8	6	0.65	0.61
2212003	10	8	0.70	0.66
2212004	12	10	0.80	0.75
2212005	15	12	1.10	1.05

Metric Push-in Fittings

The MA range is our "Automatic push-in fitting" line. It enables quick connections with calibrated plastic hoses at any time, at any stage of the pneumatic circuit and by a simple hand movement. The connection and the fitting tightness are made possible by the presence of the stainless steel grip and of an O-ring inside the fitting so that once the tube is inserted to the bottom of the fitting, the stainless collet grips onto it and prevents it from being released. The tube disconnection is then possible by pushing onto the outer metal ring, called release ring. All MA fittings are brass nickel-plated.

Technical Specification

- Working Temperature: -20°C to 70°C
- Working Pressure: pressure varies depending on the kind of tubing used and in any case it never has to exceed 18 bar
- Vacuum: up to 750 mmHg

The push-in fittings of the MA line are completely made of brass and they are suitable for quick connections in different industrial applications; they are robust, compact and guarantee high performances in time.

Male Stud

BSP Parallel x Tube



Code	Q01	Thread BSPP	Tube OD mm	Price 1-9	Price 10+
MA1204M5		M5	4	1.75	1.70
MA120418		G1/8"	4	1.85	1.80
MA120414		G1/4"	4	2.00	1.90
MA1206M5		M5	6	1.80	1.75
MA120618		G1/8"	6	1.85	1.80
MA120614		G1/4"	6	2.00	1.90
MA120818		G1/8"	8	2.05	1.95
MA120814		G1/4"	8	2.20	2.10
MA120838		G3/8"	8	3.00	2.85
MA121014		G1/4"	10	2.80	2.70
MA121038		G3/8"	10	3.00	2.85
MA121012		G1/2"	10	4.20	4.00
MA121214		G1/4"	12	3.85	3.70
MA121238		G3/8"	12	3.85	3.70
MA121212		G1/2"	12	4.20	4.00

With PTFE thread sealant.

Male Stud

BSP Tapered x Tube



Code	Q01	Thread BSPT	Tube OD mm	Price 1-9	Price 10+
MA110418		R1/8"	4	1.55	1.50
MA110414		R1/4"	4	1.75	1.70
MA110618		R1/8"	6	1.55	1.50
MA110614		R1/4"	6	1.70	1.65
MA110818		R1/8"	8	1.70	1.65
MA110814		R1/4"	8	1.75	1.70
MA110838		R3/8"	8	2.55	2.45
MA111014		R1/4"	10	2.50	2.40
MA111038		R3/8"	10	2.55	2.45
MA111012		R1/2"	10	3.80	3.65
MA111214		R1/4"	12	3.60	3.45
MA111238		R3/8"	12	3.60	3.45
MA111212		R1/2"	12	3.95	3.80

Female Stud

BSP Parallel x Tube



Code	Q01	Thread BSPP	Tube OD mm	Price 1-9	Price 10+
MA130418		G1/8"	4	2.70	2.60
MA130618		G1/8"	6	2.70	2.60
MA130614		G1/4"	6	2.70	2.60
MA130818		G1/8"	8	2.85	2.75
MA130814		G1/4"	8	2.90	2.80
MA131014		G1/4"	10	3.40	3.25
MA131038		G3/8"	10	4.15	3.95

Male Stud Swivel Elbow

BSP Parallel x Tube



Code	Q01	Thread BSPP	Tube OD mm	Price 1-9	Price 10+
MA1604M5		M5	4	3.00	2.85
MA160418		G1/8"	4	3.35	3.20
MA160414		G1/4"	4	3.55	3.40
MA1606M5		M5	6	3.35	3.20
MA160618		G1/8"	6	3.35	3.20
MA160614		G1/4"	6	3.55	3.40
MA160818		G1/8"	8	3.95	3.80
MA160814		G1/4"	8	4.25	4.05
MA160838		G3/8"	8	6.10	5.80
MA161014		G1/4"	10	5.75	5.50
MA161038		G3/8"	10	6.00	5.70
MA161214		G1/4"	12	7.30	6.95
MA161238		G3/8"	12	7.30	6.95
MA161212		G1/2"	12	7.85	7.50

Male Stud Swivel Elbow

BSP Tapered x Tube



Code	Q01	Thread BSPP	Tube OD mm	Price 1-9	Price 10+
MA150418		R1/8"	4	2.85	2.75
MA150414		R1/4"	4	3.20	3.05
MA150618		R1/8"	6	2.85	2.75
MA150614		R1/4"	6	3.15	3.00
MA150818		R1/8"	8	3.45	3.30
MA150814		R1/4"	8	3.60	3.45
MA150838		R1/8"	8	4.15	3.95
MA151014		R1/4"	10	5.25	5.00
MA151038		R3/8"	10	5.50	5.25
MA151238		R3/8"	12	6.60	6.30
MA151212		R1/2"	12	7.25	6.90

With PTFE thread sealant.

Male Stud Elbow

BSP Tapered x Tube



Code	Q01	Thread BSPT	Tube OD mm	Price 1-9	Price 10+
MA140418		R1/8"	4	2.40	2.30
MA140414		R1/4"	4	2.60	2.50
MA140618		R1/8"	6	2.50	2.40
MA140614		R1/4"	6	2.60	2.50
MA140818		R1/8"	8	2.90	2.80
MA140814		R1/4"	8	2.90	2.80
MA141014		R1/4"	10	4.35	4.15
MA141038		R3/8"	10	4.50	4.30

Metric Push-in Fittings

Male Stud Swivel Branch Tee

BSP Parallel x Tube



Code	Q01	Thread BSPP	Tube OD mm	Price 1-9	Price 10+
MA210418		G1/8"	4	4.85	4.65
MA210414		G1/4"	4	5.20	4.95
MA210618		G1/8"	6	4.85	4.65
MA210614		G1/4"	6	5.20	4.95
MA210818		G1/8"	8	5.50	5.25
MA210814		G1/4"	8	5.85	5.60
MA210838		G3/8"	8	8.45	8.05
MA211014		G1/4"	10	8.05	7.65
MA211038		G3/8"	10	8.45	8.05
MA211238		G3/8"	12	10.35	9.85
MA211212		G1/2"	12	11.55	11.00

Male Stud Swivel Branch Tee

BSP Tapered x Tube



Code	Q01	Thread BSPT	Tube OD mm	Price 1-9	Price 10+
MA200418		R1/8"	4	4.40	4.20
MA200414		R1/4"	4	4.70	4.50
MA200618		R1/8"	6	4.45	4.25
MA200614		R1/4"	6	4.70	4.50
MA200818		R1/8"	8	5.00	4.75
MA200814		R1/4"	8	5.30	5.05
MA200838		R3/8"	8	7.70	7.35
MA201014		R1/4"	10	7.35	7.00
MA201038		R3/8"	10	7.70	7.35
MA201238		R3/8"	12	9.35	8.90
MA201212		R1/2"	12	10.50	10.00

Stem Adaptor

BSP Parallel x Stem



Code	Q01	Thread BSPP	Tube OD mm	Price 1-9	Price 10+
MA3804M5		M5	4	1.05	1.00
MA380418		G1/8"	4	1.15	1.10
MA380414		G1/4"	4	1.40	1.35
MA3806M5		M5	6	1.15	1.10
MA380618		G1/8"	6	1.20	1.15
MA380614		G1/4"	6	1.45	1.40
MA380818		G1/8"	8	1.20	1.15
MA380814		G1/4"	8	1.45	1.40
MA381014		G1/4"	10	1.50	1.45
MA381038		G3/8"	10	2.10	2.00
MA381238		G3/8"	12	2.20	2.10
MA381212		G1/2"	12	3.25	3.10

Stem Reducer

Stem x Tube



Code	Q01	OD mm Stem	OD mm Tube	Price 1-9	Price 10+
MA250406		6	4	2.10	2.00
MA250408		8	4	2.15	2.05
MA250410		10	4	2.10	2.00
MA250412		12	4	2.30	2.20
MA250608		8	6	2.20	2.10
MA250610		10	6	2.15	2.05
MA250612		12	6	2.25	2.15
MA250810		10	8	2.30	2.20
MA250812		12	8	2.30	2.20
MA251012		12	10	2.35	2.25

Stem Increaser

Stem x Tube



Code	Q01	OD mm Stem	OD mm Tube	Price 1-9	Price 10+
MA250604		4	6	2.45	2.35
MA250806		6	8	2.55	2.45

Straight Connector

Tube x Tube



Code	Q01	Tube OD mm	Price 1-9	Price 10+
MA260404		4	2.90	2.80
MA260606		6	3.20	3.05
MA260808		8	3.60	3.45
MA261010		10	3.85	3.70
MA261212		12	5.70	5.45

Straight Connector, Reducing

Tube x Tube



Code	Q01	Tube OD mm	Tube OD mm	Price 1-9	Price 10+
MA260604		6	4	3.85	3.70
MA260806		8	6	4.20	4.00
MA261008		10	8	4.70	4.50

Equal Elbow

Tube x Tube



Code	Q01	Tube OD mm	Price 1-9	Price 10+
MA280404		4	3.05	2.90
MA280606		6	3.20	3.05
MA280808		8	3.55	3.40
MA281010		10	5.10	4.85
MA281212		12	5.85	5.60

Metric Push-in Fittings

Equal Tee

Tube x Tube



Code Q01	Tube OD mm	Price 1-9	Price 10+
MA290404	4	4.00	3.80
MA290606	6	4.20	4.00
MA290808	8	5.00	4.75
MA291010	10	6.45	6.15
MA291212	12	8.60	8.20

Equal Y Connector

Tube x Tube



Code Q01	Tube OD mm	Price 1-9	Price 10+
MA370404	4	6.55	6.25
MA370606	6	6.85	6.55
MA370808	8	8.00	7.60

Bulkhead

Tube x Tube



Code Q01	Tube OD mm	Price 1-9	Price 10+
MA270404	4	4.85	4.65
MA270606	6	5.25	5.00
MA270808	8	5.50	5.25
MA271010	10	7.25	6.90
MA271212	12	8.50	8.10

Plug

Stem



Code Q01	Stem OD mm	Price 1-9	Price 10+
MA400004	4	0.65	0.61
MA400006	6	0.70	0.66
MA400008	8	0.90	0.85
MA400010	10	1.20	1.15
MA400012	12	1.50	1.45

Stop Fitting

This fitting is provided with a check valve that opens when inserting the tubing into the fitting. Only then the air flow is allowed. Should the tube accidentally get released, the valve would immediately close again and the air flow would stop.

Working temperature range:

- -20°C to +70°C

Maximum working pressure:

- 10 bar
- Flow rate: MV 55 1/8: 590 Nl/min
- 6 bar: MV 55 1/4: 665 Nl/min



Stop Valve, Male Stud

BSP Parallel x Tube

Code Q04	Thread BSPP	Tube OD mm	Price
MV550618	G1/8"	6	5.40
MV550614	G1/4"	6	5.80
MV550818	G1/8"	8	6.30
MV550814	G1/4"	8	6.20

Check Fitting

The flow is allowed only in one way (the arrow direction engraved on the body and stopped in the reverse way).

Working temperature range:

- -10°C to +70°C

Opening pressure:

- 0.2 bar
- Working pressure:
- 2-10 bar



Check Valve, Male Stud

BSP Parallel x Tube

Code Q04	Thread BSPP	Tube OD mm	Price
MV3304M5	M5	4	6.80
MV330418	G1/8"	4	6.70
MV330618	G1/8"	6	6.65
MV330614	G1/4"	6	6.85
MV330818	G1/8"	8	7.00
MV330814	G1/4"	8	7.20



Elbow Flow Control, Knurled Adjustment

BSP Parallel x Tube

Code Q04	Thread BSPP	Tube OD mm	Price
MV3704M5C	M5	4	13.90
MV3706M5C	M5	6	14.05
MV370418C	G1/8"	4	13.20
MV370618C	G1/8"	6	13.45
MV370614C	G1/4"	6	14.95
MV370818C	G1/8"	8	13.50
MV370814C	G1/4"	8	15.30
MV370838C	G3/8"	8	21.50
MV371014C	G1/4"	10	15.60
MV371038C	G3/8"	10	21.65



Elbow Flow Control, Screwdriver Adjustment

BSP Parallel x Tube

Code Q04	Thread BSPP	Tube OD mm	Price
MV3904M5C	M5	4	10.85
MV3906M5C	M5	6	11.15
MV390418C	G1/8"	4	10.00
MV390618C	G1/8"	6	10.20
MV390614C	G1/4"	6	11.90
MV390818C	G1/8"	8	10.40
MV390814C	G1/4"	8	12.10
MV390838C	G3/8"	8	18.35
MV391014C	G1/4"	10	12.85
MV391038C	G3/8"	10	18.50

Metric Push-in Fittings, Lubrication

High Pressure Push-in Fittings

These fittings have been created and developed to be used in lubrication systems. Thanks to the innovative gripping system of the collet, our high pressure push-in fittings can stand up to a maximum of 250 bar pressure.

Technical Specifications

- Recommended hose: nylon 6-6
- Acceptable hose tolerance: +/-0.05mm up to 6mm
- Maximum pressure: 250 bar (The maximum pressure rate achievable can vary depending on the tubing used and on the room temperature. These two factors may in fact lower the tube bursting pressure.)
- Temperature range: -20°C to +70°C (depending on the tubing used and relevant diameter)
- Recommended sizes: 4mm fitting = 4 x 1.5, 6mm fitting = 6 x 3
- Application: lubrication installations

Male Stud

BSP Tapered x Tube



Code	Q03	Thread BSPT	Tube OD mm	Price 1-9	Price 10+
HP110418		R1/8"	4	2.65	2.55
HP110618		R1/8"	6	2.70	2.60

Male Stud Elbow

BSP Tapered x Tube



Code	Q03	Thread BSPT	Tube OD mm	Price 1-9	Price 10+
HP140418		R1/8"	4	3.25	3.10
HP140618		R1/8"	6	3.25	3.10

Male Stud

Metric x Tube

Code	Q03	Thread BSPT	Tube OD mm	Price 1-9	Price 10+
HP1104M6X1		M6	4	2.55	2.45
HP1104M8X1		M8	4	2.55	2.45
HP1106M6X1		M6	6	2.70	2.60
HP1106M8X1		M8	6	2.70	2.60
HP1106M10X1		M10	6	2.80	2.70

Male Stud Elbow

Metric x Tube

Code	Q03	Thread BSPT	Tube OD mm	Price 1-9	Price 10+
HP1404M6X1		M6	4	3.25	3.10
HP1404M8X1		M8	4	3.20	3.05
HP1406M6X1		M6	6	3.30	3.15
HP1406M8X1		M8	6	3.25	3.10
HP1406M10X1		M10	6	3.25	3.10

For Polyurethane Tubing



See pages 505-507

Stainless Steel Push-in Fittings

The MX range are our stainless steel fittings line. Suitable for all those applications where brass nickel-plated and acetal fittings are banned. The new AISI 316L fittings are made to withstand corrosive environments (substances), to channel aggressive fluids and to be used in the food and chemical industries. MX is standard equipped with FPM seals that will assure endurance at the highest temperatures.

Technical Specification

- Acceptable working temperature range: – 20 °C to 150°C depending on the materials and the tube diameters used.
- Allowed pressure range: Pressure varies depending on the kind of tubing used and in any case it never has to exceed 15 bar. In case of application with fluids, please follow instructions below:
- Constant Pressure: Max Pressure: 15 bar
- Pulse Pressure: Max Pressure: 10 bar
- Vacuum: up to 750 mmHg
- Applications: Pneumatics, Food Industry, Chemical, Medical and Pharmaceutical Industry.

Male Stud

BSP Tapered x Tube



Code Q02	Thread BSPT	Tube OD mm	Price
MX110418	R1/8"	4	15.90
MX110414	R1/4"	4	17.40
MX110618	R1/8"	6	16.35
MX110614	R1/4"	6	17.60
MX110818	R1/8"	8	19.20
MX110814	R1/4"	8	20.10
MX111014	R1/4"	10	28.50
MX111038	R3/8"	10	27.40
MX111238	R3/8"	12	35.15
MX111212	R1/2"	12	44.05

Male Stud

BSP Parallel x Tube



Code Q02	Thread BSPP	Tube OD mm	Price
MX1204M5	M5	4	18.15
MX120418	G1/8"	4	18.85
MX120618	G1/8"	6	20.40
MX120614	G1/4"	6	22.45
MX120818	G1/8"	8	24.35
MX120814	G1/4"	8	24.80

Equal Elbow

Tube x Tube



Code Q02	Tube OD mm	Price
MX280404	4	28.50
MX280606	6	29.55
MX280808	8	34.50
MX281010	10	47.70
MX281212	12	65.45



Straight Connector

Tube x Tube

Code Q02	Tube OD mm	Price
MX260404	4	21.15
MX260606	6	21.45
MX260808	8	23.95
MX261010	10	34.25
MX261212	12	58.85



Bulkhead Connector

Tube x Tube

Code Q02	Tube OD mm	Price
MX270404	4	36.25
MX270606	6	39.70
MX270808	8	47.70
MX271010	10	57.15
MX271212	12	70.95

Equal Tee

Tube x Tube



Code Q02	Tube OD mm	Price
MX290404	4	37.05
MX290606	6	38.35
MX290808	8	45.35
MX291010	10	67.80
MX291212	12	100.05

Male Stud Elbow

Tube x Tube



Code Q02	Thread BSPT	Tube OD mm	Price
MX140418	R1/8"	4	26.20
MX140618	R1/8"	6	26.65
MX140614	R1/4"	6	27.15
MX140818	R1/8"	8	32.20
MX140814	R1/4"	8	33.85

Male Stud Swivel Elbow

BSP Tapered x Tube



Code Q02	Thread BSPT	Tube OD mm	Price
MX150418	R1/8"	4	37.45
MX150618	R1/8"	6	37.95
MX150614	R1/4"	6	44.35
MX150818	R1/8"	8	44.90
MX150814	R1/4"	8	46.80
MX151014	R1/4"	10	56.05
MX151038	R3/8"	10	61.65
MX151238	R3/8"	12	83.60
MX151212	R1/2"	12	86.55



Male Stud Swivel Elbow

BSP Parallel x Tube

Code Q02	Thread BSPP	Tube OD mm	Price
MX1604M5	M5	4	34.45
MX160418	G1/8"	4	39.25
MX160618	G1/8"	6	39.00
MX160614	G1/4"	6	47.70
MX160818	G1/8"	8	48.10
MX160814	G1/4"	8	48.65

Stainless Steel Push-in Fittings

Flow control bolts can adjust the flow in a pneumatic circuit. Depending on the flow control used, the setting can be made both ways (Bidirectional Flow Control), or just one way (Unidirectional Flow Control). The Unidirectional Flow Control is particularly used to adjust the speed of pneumatic cylinders.

Technical Specification

- Working temperature: 0°C to 150°C
- Working pressure: 0 to 10 bar
- Application field: pneumatic installations fed with filtered, lubricated air



Stem Reducer

Stem x Tube

Code Q02	Stem OD mm	Tube OD mm	Price
MX250406	6	4	21.55
MX250608	8	6	27.05
MX250810	10	8	28.55



Banjo Fitting

Body

Code Q02	To Suit Thread Size	Tube OD mm	Price
MX350418	1/8"	4	29.20
MX350618	1/8"	6	28.70
MX350614	1/4"	6	30.35
MX350818	1/8"	8	35.90
MX350814	1/4"	8	36.80

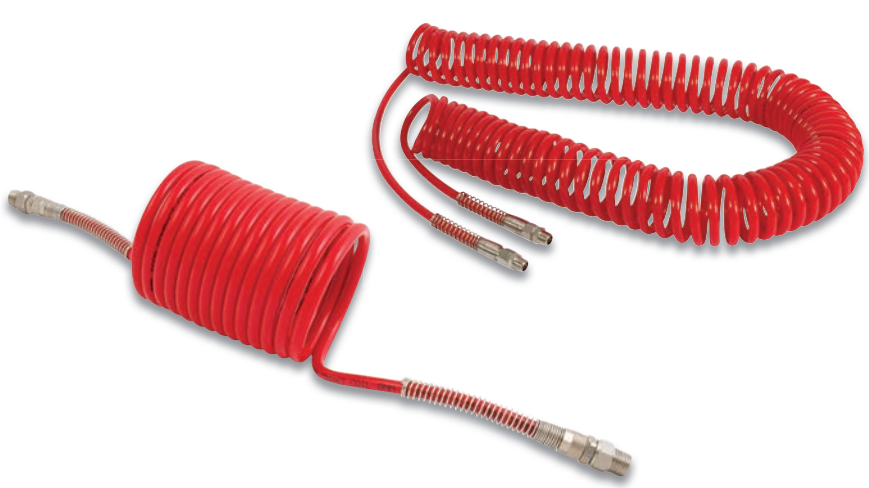


Flow Control Bolt

BSP Parallel

Code Q02	Thread BSPP	Price
VX150018C	G1/8"	50.25
VX150014C	G1/4"	55.40

For Recoil Hoses



See pages 511-512

Metric Push-in Fittings, Plastic



Male Stud

BSP Tapered x Tube

Code C01	Thread BSPT	Tube OD mm	Price 1-9	Price 10+
PM010401E	R1/8"	4	1.00	0.95
PM010402E	R1/4"	4	1.55	1.50
PM010601E	R1/8"	6	1.30	1.25
PM010602E	R1/4"	6	1.40	1.35
PM010801E	R1/8"	8	1.40	1.35
PM010802E	R1/4"	8	1.40	1.35
PM010803E	R3/8"	8	1.80	1.75
PM011002E	R1/4"	10	2.25	2.15
PM011003E	R3/8"	10	2.40	2.30
PM011004E	R1/2"	10	3.10	2.95
PM011203E	R3/8"	12	3.10	2.95
PM011204E	R1/2"	12	3.40	3.25



Male Stud

BSP Parallel x Tube

Code C01	Thread BSPP	Tube OD mm	Price 1-9	Price 10+
PM010411E	G1/8"	4	1.40	1.35
PM010412E	G1/4"	4	1.40	1.35
PM010611E	G1/8"	6	1.35	1.30
PM010612E	G1/4"	6	1.50	1.45
PM010811E	G1/8"	8	1.40	1.35
PM010812E	G1/4"	8	1.50	1.45
PM010813E	G3/8"	8	2.15	2.05
PM011012E	G1/4"	10	2.35	2.25
PM011013E	G3/8"	10	2.60	2.50
PM011014E	G1/2"	10	3.30	3.15
PM011213E	G3/8"	12	3.25	3.10
PM011214E	G1/2"	12	3.55	3.40



Equal Tee

Tube x Tube

Code C01	Tube OD mm	Price 1-9	Price 10+
PM0204E	4	2.80	2.70
PM0206E	6	2.55	2.45
PM0208E	8	2.70	2.60
PM0210E	10	3.25	3.10
PM0212E	12	3.90	3.75



Equal Elbow

Tube x Tube

Code C01	Tube OD mm	Price 1-9	Price 10+
PM0304E	4	2.05	1.95
PM0306E	6	1.90	1.85
PM0308E	8	2.20	2.10
PM0310E	10	3.10	2.95
PM0312E	12	3.70	3.55



Stem Elbow

Stem x Tube

Code C01	Tube OD mm	Tube OD mm	Price 1-9	Price 10+
PM220404E	4	4	1.65	1.60
PM220606E	6	6	1.80	1.75
PM220808E	8	8	2.20	2.10
PM221010E	10	10	3.00	2.85
PM221212E	12	12	3.70	3.55



Straight Connector

Tube x Tube

Code C01	Tube OD mm	Price 1-9	Price 10+
PM0404E	4	1.60	1.55
PM0406E	6	1.70	1.65
PM0408E	8	1.80	1.75
PM0410E	10	3.00	2.85
PM0412E	12	2.80	2.70



Straight Connector, Reducing

Tube x Tube

Code C01	Tube OD mm	Tube OD mm	Price 1-9	Price 10+
PM200604E	6	4	1.85	1.80
PM200804E	8	4	1.85	1.80
PM200806E	8	6	1.95	1.90
PM201004E	10	4	2.75	2.65
PM201006E	10	6	2.25	2.15
PM201008E	10	8	2.10	2.00
PM201208E	12	8	2.80	2.70
PM201210E	12	10	3.25	3.10

Metric & Imperial Push-in Fittings, Plastic



Male Stud Swivel Elbow

BSP Tapered x Tube

Code C01	Thread BSPT	Tube OD mm	Price 1-9	Price 10+
PM090401E	R1/8"	4	2.80	2.70
PM090402E	R1/4"	4	2.75	2.65
PM090601E	R1/8"	6	2.65	2.55
PM090602E	R1/4"	6	2.60	2.50
PM090801E	R1/8"	8	2.85	2.75
PM090802E	R1/4"	8	4.15	3.95
PM090803E	R3/8"	8	3.70	3.55
PM091002E	R1/4"	10	3.90	3.75
PM091003E	R3/8"	10	4.05	3.85
PM091004E	R1/2"	10	6.95	6.65
PM091203E	R3/8"	12	7.00	6.65
PM091204E	R1/2"	12	5.35	5.10



Male Stem Adaptor

BSP Tapered x Stem

Code C01	Thread BSPT	Tube OD mm	Price 1-9	Price 10+
PM050401E	R1/8"	4	0.60	0.57
PM050402E	R1/4"	4	0.70	0.66
PM050601E	R1/8"	6	0.70	0.66
PM050602E	R1/4"	6	0.65	0.61
PM050801E	R1/8"	8	0.60	0.57
PM050802E	R1/4"	8	0.65	0.61
PM050803E	R3/8"	8	1.25	1.20
PM051002E	R1/4"	10	0.80	0.75
PM051003E	R3/8"	10	0.95	0.90
PM051004E	R1/2"	10	1.60	1.55
PM051203E	R3/8"	12	1.25	1.20
PM051204E	R1/2"	12	1.60	1.55



Male Stud Swivel Elbow

BSP Parallel x Tube

Code C01	Thread BSPP	Tube OD mm	Price 1-9	Price 10+
PM090411E	G1/8"	4	2.90	2.80
PM090412E	G1/4"	4	2.85	2.75
PM090611E	G1/8"	6	2.55	2.45
PM090612E	G1/4"	6	2.65	2.55
PM090811E	G1/8"	8	2.90	2.80
PM090812E	G1/4"	8	4.20	4.00
PM090813E	G3/8"	8	3.35	3.20
PM091012E	G1/4"	10	3.95	3.80
PM091013E	G3/8"	10	4.40	4.20
PM091014E	G1/2"	10	4.95	4.75
PM091213E	G3/8"	12	5.55	5.30
PM091214E	G1/2"	12	5.75	5.50



Male Stem Adaptor

BSP Parallel x Stem

Code C01	Thread BSPP	Tube OD mm	Price 1-9	Price 10+
PM050411E	G1/8"	4	0.85	0.80
PM050412E	G1/4"	4	0.80	0.75
PM050611E	G1/8"	6	0.60	0.57
PM050612E	G1/4"	6	0.70	0.66
PM050811E	G1/8"	8	0.65	0.61
PM050812E	G1/4"	8	0.70	0.66
PM050813E	G3/8"	8	1.20	1.15
PM051012E	G1/4"	10	0.90	0.85
PM051013E	G3/8"	10	1.30	1.25
PM051014E	G1/2"	10	1.80	1.75
PM051213E	G3/8"	12	1.80	1.75
PM051214E	G1/2"	12	1.95	1.90



Reducing Elbow

Tube x Tube

Code C01	Tube OD mm	Tube OD mm	Price 1-9	Price 10+
PM210604E	6	4	2.35	2.25
PM210804E	8	4	2.60	2.50
PM210806E	8	6	2.40	2.30
PM211004E	10	4	3.25	3.10
PM211006E	10	6	3.80	3.65
PM211008E	10	8	3.25	3.10
PM211208E	12	8	3.55	3.40
PM211210E	12	10	3.20	3.05



Bulkhead Connector

Tube x Tube

Code C01	Tube OD mm	Price 1-9	Price 10+
PM1204E	4	3.00	2.85
PM1206E	6	3.10	2.95
PM1208E	8	3.25	3.10
PM1210E	10	4.90	4.70
PM1212E	12	6.85	6.55



Equal Y

Tube x Tube

Code C01	Tube OD mm	Price 1-9	Price 10+
PM2304E	4	2.75	2.65
RM2306E	6	3.15	3.00
RM2308E	8	3.15	3.00
PM2310E	10	3.60	3.45
RM2312E	12	5.70	5.45



Stem Reducer

Stem x Tube

Code C01	Stem OD mm	Tube OD mm	Price 1-9	Price 10+
PM060604E	6	4	1.10	1.05
PM060804E	8	4	1.35	1.30
PM060806E	8	6	1.40	1.35
PM061006E	10	6	1.45	1.40
PM061008E	10	8	1.70	1.65
PM061208E	12	8	1.80	1.75
PM061210E	12	10	3.25	3.10



Plug

Stem

Code C01	Stem OD mm	Price 1-9	Price 10+
PM0804R	4	0.45	0.42
PM0806R	6	0.45	0.42
PM0808R	8	0.55	0.52
PM0810R	10	1.00	0.95
PM0812R	12	1.25	1.20

Imperial Push-in Fittings, Plastic



Male Stud

BSP Tapered x Tube

Code C01	Thread BSPT	Tube OD	Price 1-9	Price 10+
PI010601S	R1/8"	3/16"	1.50	1.45
PI010602S	R1/4"	3/16"	1.35	1.30
PI010801S	R1/8"	1/4"	1.25	1.20
PI010802S	R1/4"	1/4"	1.35	1.30
PM010801S	R1/8"	5/16"	1.45	1.40
PM010802S	R1/4"	5/16"	1.95	1.90
PI011202S	R1/4"	3/8"	2.20	2.10
PI011203S	R3/8"	3/8"	2.35	2.25
PI011603S	R3/8"	1/2"	3.30	3.15
PI011604S	R1/2"	1/2"	3.45	3.30



Stem Adaptor

BSP Tapered x Tube

Code C01	Thread BSPT	Stem OD	Price 1-9	Price 10+
PI050601S	R1/8"	3/16"	1.10	1.05
PI050801S	R1/8"	1/4"	1.50	1.45
PI050802S	R1/4"	1/4"	1.35	1.30
PM050801S	R1/8"	5/16"	1.85	1.80
PM050802S	R1/4"	5/16"	1.30	1.25
PM050803S	R3/8"	5/16"	1.45	1.40
PI051202S	R1/4"	3/8"	1.90	1.85
PI051203S	R3/8"	3/8"	2.10	2.00
PI051603S	R3/8"	1/2"	2.30	2.20
PI051604S	R1/2"	1/2"	1.70	1.65



Straight Connector

Tube x Tube

Code C01	Tube OD	Price 1-9	Price 10+
PI0406S	3/16"	1.65	1.60
PI0408S	1/4"	1.75	1.70
PM0408S	5/16"	1.95	1.90
PI0412S	3/8"	2.35	2.25
PI0416S	1/2"	3.10	2.95



Plug

Stem

Code C01	Stem OD	Price 1-9	Price 10+
PI0806S	3/16"	0.55	0.52
PI0808S	1/4"	0.50	0.47
PM0808S	5/16"	0.60	0.57
PI0812S	3/8"	0.85	0.80
PI0816S	1/2"	1.35	1.30



Equal Elbow

Tube x Tube

Code C01	Tube OD	Price 1-9	Price 10+
PI0306S	3/16"	2.20	2.10
PI0308S	1/4"	2.05	1.95
PM0308S	5/16"	2.90	2.80
PI0312S	3/8"	3.10	2.95
PI0316S	1/2"	3.70	3.55



Equal Tee

Tube x Tube

Code C01	Tube OD	Price 1-9	Price 10+
PI0206S	3/16"	2.90	2.80
PI0208S	1/4"	2.85	2.75
PM0208S	5/16"	3.75	3.60
PI0212S	3/8"	3.25	3.10
PI0216S	1/2"	3.90	3.75



Bulkhead Connector

Tube x Tube

Code C01	Tube OD	Price 1-9	Price 10+
PI1206S	3/16"	4.30	4.10
PI1208S	1/4"	3.20	3.05
PM1208S	5/16"	6.80	6.50
PI1212S	3/8"	4.80	4.60
PI1216S	1/2"	8.70	8.30



Straight Connector, Reducing

Tube x Tube

Code C01	Tube OD	Tube OD	Price 1-9	Price 10+
PI201006S	5/16"	3/16"	2.45	2.35
PI201008S	5/16"	1/4"	2.10	2.00
PI201206S	3/8"	3/16"	2.45	2.35
PI201208S	3/8"	1/4"	2.50	2.40
PI201210S	3/8"	5/16"	3.15	3.00
PI201610S	1/2"	5/16"	2.70	2.60
PI201612S	1/2"	3/8"	3.10	2.95



Reducing Stem

Stem x Tube

Code C01	Stem OD	Tube OD	Price 1-9	Price 10+
PI061006S	5/16"	3/16"	1.75	1.70
PI061008S	5/16"	1/4"	1.85	1.80
PI061206S	3/8"	3/16"	1.80	1.75
PI061208S	3/8"	1/4"	1.70	1.65
PI061210S	3/8"	5/16"	1.70	1.65
PI061610S	1/2"	5/16"	1.80	1.75
PI061612S	1/2"	3/8"	4.40	4.20

Metric Compression Fittings

Straight Connector

Tube x Tube



Code	E05	Tube OD mm	Price 1-9	Price 10+
MC104		4	8.40	8.00
MC106		6	3.60	3.45
MC108		8	4.30	4.10
MC110		10	5.60	5.35
MC112		12	7.70	7.35
MC115		15	15.10	14.35

Straight Connector, Reducing

Tube x Tube



Code	E05	Tube OD mm	Tube OD mm	Price 1-9	Price 10+
MC106/104		6	4	7.95	7.60
MC108/106		8	6	7.20	6.85
MC110/106		10	6	7.40	7.05
MC110/108		10	8	5.90	5.65
MC112/108		12	8	12.50	11.90
MC115/108		15	8	12.10	11.50
MC115/110		15	10	13.35	12.70

Equal Bulkhead

Tube x Tube



Code	E05	Tube OD mm	Price 1-9	Price 10+
MB106/L10		6	5.40	5.15
MB108/L10		8	5.90	5.65
MB110L10		10	8.80	8.40
MB112L10		12	17.95	17.10

Equal Tee

Tube x Tube



Code	E05	Tube OD mm	Price 1-9	Price 10+
MT104		4	11.10	10.55
MT106		6	7.75	7.40
MT108		8	7.80	7.45
MT110		10	13.35	12.70
MT112		12	18.95	18.05
MT115		15	29.35	27.90

Male Stud Elbow BSP Tapered x Tube

Male Stud Elbow BSP Tapered x Tube



Code	E05	Tube OD mm	Thread BSPT	Price 1-9	Price 10+
ME104/083		4	R1/8"	5.65	5.40
ME106/083		6	R1/8"	5.50	5.25
ME106/163		6	R1/4"	5.50	5.25
ME108/083		8	R1/8"	6.10	5.80
ME108/163		8	R1/4"	6.10	5.80
ME108/243		8	R3/8"	6.75	6.45
ME110/163		10	R1/4"	8.00	7.60
ME110/243		10	R3/8"	8.35	7.95
ME110/323		10	R1/2"	10.40	9.90
ME112/163		12	R1/4"	11.60	11.05
ME112/243		12	R3/8"	12.45	11.85
ME112/323		12	R1/2"	13.55	12.90
ME115/243		15	R3/8"	23.10	21.95
ME115/323		15	R1/2"	17.60	16.75



Male Stud BSP Tapered x Tube

Male Stud BSP Tapered x Tube

Code	E05	Tube OD mm	Thread BSPT	Price 1-9	Price 10+
MC104/083		4	R1/8"	5.75	5.50
MC104/163		4	R1/4"	7.20	6.85
MC106/083		6	R1/8"	1.95	1.90
MC106/163		6	R1/4"	2.85	2.75
MC106/243		6	R3/8"	6.25	5.95
MC108/083		8	R1/8"	3.20	3.05
MC108/163		8	R1/4"	2.85	2.75
MC108/243		8	R3/8"	4.40	4.20
MC110/163		10	R1/4"	4.10	3.90
MC110/243		10	R3/8"	4.35	4.15
MC110/323		10	R1/2"	5.85	5.60
MC112/163		12	R1/4"	7.15	6.80
MC112/243		12	R3/8"	6.75	6.45
MC112/323		12	R1/2"	7.90	7.55
MC115/243		15	R3/8"	11.35	10.80
MC115/323		15	R1/2"	12.35	11.75

Compression Nut

Tube



Code	E05	Tube OD mm	Price 1-9	Price 10+
WMUN104		4	0.65	0.61
WMUN106		6	0.60	0.57
WMUN108		8	0.90	0.85
WMUN110		10	1.85	1.80
WMUN112		12	2.25	2.15
MN115		15	3.20	3.05

Equal Elbow

Tube x Tube



Code	E05	Tube OD mm	Price 1-9	Price 10+
ME104		4	4.20	4.00
ME106		6	7.25	6.90
ME108		8	5.60	5.35
ME110		10	8.20	7.80
ME112		12	11.80	11.25
ME115		15	19.05	18.10

"N" Ferrule Metric

Tube



Code	E05	Tube OD mm	Tube ID mm	Price 1-9	Price 10+
MNF806		6	4	0.60	0.57
MNF708		8	6	1.50	1.45
MNF808		8	5.5	0.75	0.70
MNF810		10	7	0.90	0.85
MNF812		12	8.5	1.55	1.50

Brass Compression Ring

Tube



Code	E05	Tube OD mm	Price 1-9	Price 10+
MUR104		4	0.25	0.22
MUR106		6	0.20	0.18
MUR108		8	0.35	0.32
MUR110		10	0.35	0.32
MUR112		12	0.55	0.52
MUR115		15	0.75	0.70

Imperial Compression Fittings

Wade

Male Stud

BSP Tapered x Tube



Code	E05	Thread BSPT	Tube OD	Price 1-9	Price 10+
7060		R1/8"	1/8"	4.60	4.40
7060/3		R1/4"	1/8"	6.70	6.40
7061		R1/8"	3/16"	3.20	3.05
7061/3		R1/4"	3/16"	8.50	8.10
7063/1		R1/8"	1/4"	3.30	3.15
7063		R1/4"	1/4"	2.90	2.80
7063/8		R3/8"	1/4"	5.20	4.95
7065/1		R1/8"	5/16"	4.30	4.10
7065		R1/4"	5/16"	6.55	6.25
7065/8		R3/8"	5/16"	7.65	7.30
7065/11		R1/2"	5/16"	9.05	8.60
7068/1		R1/8"	3/8"	5.90	5.65
7068/3		R1/4"	3/8"	5.15	4.90
7068		R3/8"	3/8"	5.50	5.25
7071/3		R1/4"	1/2"	10.25	9.75
7071/8		R3/8"	1/2"	10.25	9.75
7071		R1/2"	1/2"	8.70	8.30
7073/11		R1/2"	5/8"	23.80	22.65
7074/11		R1/2"	3/4"	33.45	31.80
7074		R3/4"	3/4"	25.70	24.45

Male Stud Elbow

BSP Tapered x Tube



Code	E05	Thread BSPT	Tube OD	Price 1-9	Price 10+
8020		R1/8"	1/8"	13.00	12.35
8020/3		R1/4"	1/8"	6.10	5.80
8021		R1/8"	3/16"	5.65	5.40
8023/1		R1/8"	1/4"	7.10	6.75
8023		R1/4"	1/4"	7.40	7.05
8023/8		R3/8"	1/4"	10.00	9.50
8025/1		R1/8"	5/16"	6.70	6.40
8025		R1/4"	5/16"	7.05	6.70
8025/8		R3/8"	5/16"	10.75	10.25
8028/1		R1/8"	3/8"	11.75	11.20
8028/3		R1/4"	3/8"	11.10	10.55
8028		R3/8"	3/8"	11.10	10.55
8028/11		R1/2"	3/8"	14.85	14.15
8031/8		R3/8"	1/2"	14.45	13.75
8031		R1/2"	1/2"	14.85	14.15

Female Stud

BSP Parallel x Tube



Code	E05	Thread BSPP	Tube OD	Price 1-9	Price 10+
7083		G1/4"	1/4"	8.10	7.70
7085		G1/4"	5/16"	8.70	8.30
7088/3		G1/4"	3/8"	8.70	8.30
7088		G3/8"	3/8"	11.80	11.25
7091		G1/2"	1/2"	13.25	12.60

Bulkhead Connector

Tube x Tube



Code	E05	Tube OD	Price 1-9	Price 10+
1040/L4		1/8"	9.90	9.45
1041/L6		3/16"	12.50	11.90
1043/L6		1/4"	7.35	7.00
1045/L6		5/16"	8.60	8.20
1048/L6		3/8"	11.90	11.35

Straight Connector

BSP Parallel x Tube



Code	E05	Tube OD	Price 1-9	Price 10+
1040		1/8"	7.45	7.10
1041		3/16"	4.50	4.30
1043		1/4"	4.00	3.80
1045		5/16"	4.40	4.20
1048		3/8"	7.50	7.15
1051		1/2"	10.55	10.05
1053		5/8"	43.75	41.60
1054		3/4"	40.80	38.80

Imperial to Metric Connection

Tube x Tube



Code	E05	Tube OD	Tube OD mm	Price 1-9	Price 10+
MC106/3		1/4"	6	7.05	6.70
MC110/8		3/8"	10	14.70	14.00



Straight Connector, Reducing

Tube x Tube

Code	E05	Tube OD	Tube OD	Price 1-9	Price 10+
4043/0		1/4"	1/8"	12.80	12.20
4043/1		1/4"	3/16"	7.30	6.95
4045/1		5/16"	3/16"	8.35	7.95
4045/3		5/16"	1/4"	5.60	5.35
4048/3		3/8"	1/4"	6.80	6.50
4048/5		3/8"	5/16"	7.05	6.70
4051/3		1/2"	1/4"	12.70	12.10
4051/5		1/2"	5/16"	14.45	13.75
4051/8		1/2"	3/8"	11.25	10.70

Equal Tee

Tube x Tube



Code	E05	Tube OD	Price 1-9	Price 10+
2040		1/8"	11.05	10.50
2041		3/16"	9.40	8.95
2043		1/4"	8.10	7.70
2045		5/16"	8.65	8.25
2048		3/8"	14.35	13.65
2051		1/2"	20.20	19.20
2054		5/8"	57.95	55.10

Equal Elbow

Tube x Tube



Code	E05	Tube OD	Price 1-9	Price 10+
2000		1/8"	9.90	9.45
2001		3/16"	15.45	14.70
2003		1/4"	7.85	7.50
2005		5/16"	7.75	7.40
2008		3/8"	10.75	10.25
2011		1/2"	15.35	14.60

Imperial Compression Fittings







Ferrule

For Nylon Tubing

Code E05	Tube OD	Price 1-9	Price 10+
N1020B/A	1/8"	3.45	3.30
N1021B/C	3/16"	1.60	1.55
N1023B/C	1/4"	1.00	0.95
N1025B/C	5/16"	1.80	1.75
N1028B/D	3/8"	1.85	1.80

Copper Compression Ring

Tube

Code E05	Tube OD	Price 1-9	Price 10+
1020	1/8"	0.35	0.32
1021	3/16"	0.55	0.52
1023	1/4"	0.35	0.32
1026	5/16"	0.35	0.32
1028	3/8"	0.45	0.42
1031	1/2"	0.70	0.66
1033	5/8"	3.45	3.30
1034	3/4"	3.35	3.20

Brass Compression Ring

Tube

Code E05	Tube OD	Price 1-9	Price 10+
499/0	1/8"	1.35	1.30
499/1	3/16"	0.60	0.57
499/3	1/4"	0.35	0.32
499/5	5/16"	0.35	0.32
499/8	3/8"	0.95	0.90
499/11	1/2"	3.90	3.75
499/13	5/8"	5.35	5.10
499/14	3/4"	5.35	5.10

For Copper Tubing



See page 548

Hose Tails & Adaptors





404-407 Hose Tails



408 Hose Connectors



409 Plastic Hose Tails



410-411 Nylon Hose Tails



412 Nylon Threaded Adaptors



413 Polypropylene Threaded Adaptors



414-418 Threaded Adaptors & Blanking Plugs



419 Fitting Kits



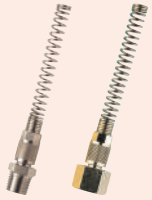
420-421 Distribution Manifolds



422-423 Brass Adaptors



424 Rotary Unions



425 Recoil Hose Quick-fit Spring Guards



426-427 UPVC Threaded PVC Fittings



428 Washers



429-431 Alwitco Mufflers



432-433 Silencers, Mufflers & Plastic Caps

Hose Tails

This technical data is applicable to the full range of hose tail fittings and air line fittings including tees, elbows, reducers and silencers, etc.

Threads
Tapered in conformity with ISO 7.1, BS 21, DIN 2999.
Parallel in conformity with ISO 228 class A.
Metric in conformity with ISO R/262.

Media
Compressed air, water, oils and fluids in general for the hydraulic and pneumatic fields.

NB
Safe pressures and temperatures depend entirely on the tubes being used, for this reason the values must be determined in accordance with the tube features.



Male Tapered x Hose Tail

Brass

Code	T01	Thread BSPT	Hose ID Inches	Hose ID mm	Price 1-24	Price 25+
HT1818		R1/8"	1/8"	3	0.65	0.61
HT18316		R1/8"	3/16"	5	0.75	0.70
HT1814		R1/8"	1/4"	6	0.80	0.75
HT18516		R1/8"	5/16"	8	1.00	0.95
HT1838		R1/8"	3/8"	10	1.15	1.10
HT1418		R1/4"	1/8"	3	2.40	2.30
HT14316		R1/4"	3/16"	5	1.15	1.10
HT1414		R1/4"	1/4"	6	1.30	1.25
HT14516		R1/4"	5/16"	8	1.30	1.25
HT1438		R1/4"	3/8"	10	1.55	1.50
HT1412		R1/4"	1/2"	12	2.35	2.25
HT3814		R3/8"	1/4"	6	2.00	1.90
HT38516		R3/8"	5/16"	8	2.20	2.10
HT3838		R3/8"	3/8"	10	2.60	2.50
HT3812		R3/8"	1/2"	12	3.15	3.00
HT3858		R3/8"	5/8"	16	3.95	3.80
HT3834		R3/8"	3/4"	19	4.80	4.60
HT1214		R1/2"	1/4"	6	2.75	2.65
HT12516		R1/2"	5/16"	8	3.30	3.15
HT1238		R1/2"	3/8"	10	3.45	3.30
HT1212		R1/2"	1/2"	12	4.10	3.90
HT1258		R1/2"	5/8"	16	4.25	4.05
HT1234		R1/2"	3/4"	19	4.90	4.70
HT121		R1/2"	1"	25	8.80	8.40

Code	T01	Thread BSPT	Hose ID Inches	Hose ID mm	Price 1-24	Price 25+
HT34516		R3/4"	5/16"	8	8.65	8.25
HT3438		R3/4"	3/8"	10	4.75	4.55
HT3412		R3/4"	1/2"	12	5.55	5.30
HT3458		R3/4"	5/8"	16	5.70	5.45
HT3434		R3/4"	3/4"	19	6.20	5.90
HT341		R3/4"	1"	25	8.35	7.95
HT34114		R3/4"	1.1/4"	32	16.80	16.00
HT112		R1"	1/2"	12	8.20	7.80
HT158		R1"	5/8"	16	17.15	16.30
HT134		R1"	3/4"	19	9.95	9.50
HT11		R1"	1"	25	10.10	9.60
HT1114		R1"	1.1/4"	32	11.00	10.45
HT1112		R1"	1.1/2"	38	29.00	27.55
HT1141		R1.1/4"	1"	25	16.35	15.55
HT114114		R1.1/4"	1.1/4"	32	18.60	17.70
HT114112		R1.1/4"	1.1/2"	38	27.70	26.35
HT112114		R1.1/2"	1.1/4"	32	41.80	39.75
HT112112		R1.1/2"	1.1/2"	38	32.00	30.40
HT1122		R1.1/2"	2"	50	45.85	43.60
HT2112		R2"	1.1/2"	38	83.20	79.05
HT22		R2"	2"	50	44.75	42.55

Hose Tails

Male Parallel x Hose Tail

Brass



Code T01	Thread BSPP	Hose ID		Price	
		Inches	mm	1-24	25+
HTP1814	G1/8”	1/4”	6	1.95	1.90
HTP18516	G1/8”	5/16”	8	1.60	1.55
HTP1838	G1/8”	3/8”	10	1.80	1.75
HTP14316	G1/4”	3/16”	5	4.00	3.80
HTP1414	G1/4”	1/4”	6	0.80	0.75
HTP14516	G1/4”	5/16”	8	2.75	2.65
HTP1438	G1/4”	3/8”	10	3.15	3.00
HTP1412	G1/4”	1/2”	12	7.55	7.20
HTP3814	G3/8”	1/4”	6	4.00	3.80
HTP38516	G3/8”	5/16”	8	1.95	1.90
HTP3838	G3/8”	3/8”	10	4.35	4.15
HTP3812	G3/8”	1/2”	10	2.40	2.30
HTP3858	G3/8”	5/8”	10	7.20	6.85
HTP3834	G3/8”	3/4”	10	8.10	7.70
HTP1214	G1/2”	1/4”	6	3.55	3.40
HTP12516	G1/2”	5/16”	8	7.80	7.45
HTP1238	G1/2”	3/8”	10	3.20	3.05
HTP1212	G1/2”	1/2”	12	4.20	4.00
HTP1258	G1/2”	5/8”	16	9.85	9.40
HTP1234	G1/2”	3/4”	19	10.20	9.70
HTP121	G1/2”	1”	25	11.85	11.30
HTP3414	G3/4”	1/4”	6	16.40	15.60
HTP34516	G3/4”	5/16”	8	15.00	14.25
HTP3438	G3/4”	3/8”	10	15.00	14.25
HTP3412	G3/4”	1/2”	12	13.45	12.80
HTP3458	G3/4”	5/8”	16	6.10	5.80
HTP3434	G3/4”	3/4”	19	10.50	10.00
HTP341	G3/4”	1”	25	12.80	12.20
HTP112	G1”	1/2”	12	25.05	23.80
HTP158	G1”	5/8”	16	24.65	23.45
HTP134	G1”	3/4”	19	26.60	25.30
HTP11	G1”	1”	25	8.65	8.25
HTP1114	G1”	1.1/4”	32	29.80	28.35

Male Parallel x Hose Tail

Nickel-plated Brass



Code S13	Thread BSPP	Hose ID		Price	
		Inches	mm	1-24	25+
HTP187M	G1/8”	1/4”	7	1.60	1.55
HTP188M	G1/8”	5/16”	8	1.60	1.55
HTP189M	G1/8”	3/8”	9	1.60	1.55
HTP147M	G1/4”	1/4”	7	2.35	2.25
HTP148M	G1/4”	5/16”	8	2.00	1.90
HTP149M	G1/4”	3/8”	9	2.30	2.20
HTP1412M	G1/4”	-	12	2.50	2.40
HTP389M	G3/8”	3/8”	9	2.75	2.65
HTP3812M	G3/8”	-	12	2.95	2.85
HTP3817M	G3/8”	5/8”	17	3.60	3.45
HTP1212M	G1/2”	-	12	5.80	5.55
HTP1217M	G1/2”	5/8”	17	5.80	5.55

Hose Tails



Male x Hose Tail, Nickel-plated Brass

Male Thread, BSPT

Code T08	Thread	To Suit Hose ID	Price
HT1818NP	R1/8"	1/8"	0.50
HT18316NP	R1/8"	3/16"	0.60
HT1814NP	R1/8"	1/4"	0.65
HT18516NP	R1/8"	5/16"	0.75
HT1838NP	R1/8"	3/8"	0.90
HT1418NP	R1/4"	1/8"	0.90
HT14316NP	R1/4"	3/16"	0.90
HT1414NP	R1/4"	1/4"	1.00
HT14516NP	R1/4"	5/16"	1.00
HT1438NP	R1/4"	3/8"	1.15
HT1412NP	R1/4"	1/2"	1.80
HT3814NP	R3/8"	1/4"	1.55
HT38516NP	R3/8"	5/16"	1.70
HT3838NP	R3/8"	3/8"	1.95
HT3812NP	R3/8"	1/2"	2.35
HT3858NP	R3/8"	5/8"	3.00
HT3834NP	R3/8"	3/4"	3.75
HT1214NP	R1/2"	1/4"	2.15
HT12516NP	R1/2"	5/16"	4.50

Code T08	Thread	To Suit Hose ID	Price
HT1238NP	R1/2"	3/8"	3.20
HT1212NP	R1/2"	1/2"	3.05
HT1258NP	R1/2"	5/8"	3.30
HT1234NP	R1/2"	3/4"	3.85
HT121NP	R1/2"	1"	6.65
HT3438NP	R3/4"	3/8"	3.50
HT3412NP	R3/4"	1/2"	4.20
HT3458NP	R3/4"	5/8"	4.30
HT3434NP	R3/4"	3/4"	4.80
HT341NP	R3/4"	1"	6.25
HT112NP	R1"	1/2"	6.25
HT134NP	R1"	3/4"	7.50
HT11NP	R1"	1"	7.55
HT1114NP	R1"	1.1/4"	8.55
HT1141NP	R1.1/4"	1"	13.50
HT114114NP	R1.1/4"	1.1/4"	14.25
HT112112NP	R1.1/2"	1.1/2"	24.15
HT22NP	R2"	2"	34.25

For Hi-Vis Air & Water RPVC Hose



See page 497

Hose Tails

Female Hose Tail with Swivel Nut & 60° Cone Seat



Brass

Code	S17	Thread BSPP	Hose ID Inches	Hose ID mm	Price 1-24	Price 25+
FHTC1818		G1/8"	1/8"	3	1.35	1.30
FHTC18316		G1/8"	3/16"	5	4.05	3.85
FHTC1814		G1/8"	1/4"	6	4.55	4.35
FHTC14316		G1/4"	3/16"	5	3.90	3.75
FHTC1414		G1/4"	1/4"	6	1.90	1.85
FHTC14516		G1/4"	5/16"	8	2.20	2.10
FHTC1438		G1/4"	3/8"	10	2.20	2.10
FHTC3814		G3/8"	1/4"	6	4.40	4.20
FHTC38516		G3/8"	5/16"	8	3.20	3.05
FHTC3838		G3/8"	3/8"	10	4.25	4.05
FHTC3812		G3/8"	1/2"	12	3.90	3.75
FHTC1214		G1/2"	1/4"	6	8.35	7.95
FHTC12516		G1/2"	5/16"	8	13.35	12.70
FHTC1238		G1/2"	3/8"	10	5.45	5.20
FHTC1212		G1/2"	1/2"	12	5.30	5.05
FHTC1258		G1/2"	5/8"	16	5.30	5.05
FHTC3438		G3/4"	3/8"	10	20.40	19.40
FHTC3412		G3/4"	1/2"	12	7.70	7.35
FHTC3458		G3/4"	5/8"	16	12.05	11.45
FHTC3434		G3/4"	3/4"	19	9.70	9.25
FHTC112		G1"	1/2"	12	35.35	33.60
FHTC158		G1"	5/8"	16	27.60	26.25
FHTC134		G1"	3/4"	19	20.75	19.75
FHTC11		G1"	1"	25	13.55	12.90
FHTC1141		G1.1/4"	1"	25	60.10	57.10
FHTC114114		G1.1/4"	1.1/4"	32	47.90	45.55
FHTC112114		G1.1/2"	1.1/4"	32	92.55	87.95
FHTC112112		G1.1/2"	1.1/2"	38	58.15	55.25
FHTC2112		G2"	1.1/2"	-	192.40	182.80
FHTC22		G2"	2"	50	81.85	77.80

Female Hose Tail with Swivel Nut, Washer & Flat Seat



Brass

Code	S17	Thread BSPP	Hose ID Inches	Hose ID mm	Price 1-24	Price 25+
FHTW1818		G1/8"	1/8"	3	9.60	9.15
FHTW18316		G1/8"	3/16"	5	1.50	1.45
FHTW1814		G1/8"	1/4"	6	1.60	1.55
FHTW14316		G1/4"	3/16"	5	2.20	2.10
FHTW1414		G1/4"	1/4"	6	3.50	3.35
FHTW14516		G1/4"	5/16"	8	2.20	2.10
FHTW1438		G1/4"	3/8"	10	2.25	2.15
FHTW3814		G3/8"	1/4"	6	3.65	3.50
FHTW38516		G3/8"	5/16"	8	3.90	3.75
FHTW3838		G3/8"	3/8"	10	4.10	3.90
FHTW3812		G3/8"	1/2"	12	3.95	3.80
FHTW1214		G1/2"	1/4"	6	13.50	12.85
FHTW12516		G1/2"	5/16"	8	4.25	4.05
FHTW1238		G1/2"	3/8"	10	4.55	4.35
FHTW1212		G1/2"	1/2"	12	5.10	4.85
FHTW1258		G1/2"	5/8"	16	5.10	4.85
FHTW3438		G3/4"	3/8"	10	24.85	23.65
FHTW3412		G3/4"	1/2"	12	10.30	9.80
FHTW3458		G3/4"	5/8"	16	10.30	9.80
FHTW3434		G3/4"	3/4"	19	9.40	8.95
FHTW112		G1"	1/2"	12	40.40	38.40
FHTW158		G1"	5/8"	16	40.40	38.40
FHTW134		G1"	3/4"	19	46.70	44.40
FHTW11		G1"	1"	25	14.35	13.65

Female Fixed x Hose Tail



Brass

Code	S17	Thread BSPP	Hose ID Inches	Hose ID mm	Price 1-24	Price 25+
FHTF18316		G1/8"	3/16"	5	5.95	5.70
FHTF1814		G1/8"	1/4"	6	5.60	5.35
FHTF1414		G1/4"	1/4"	6	6.65	6.35
FHTF1438		G1/4"	3/8"	1	7.85	7.50
FHTF1412		G1/4"	1/2"	12	8.00	7.60
FHTF3814		G3/8"	1/4"	6	9.15	8.70
FHTF38516		G3/8"	5/16"	8	7.15	6.80
FHTF3838		G3/8"	3/8"	10	7.15	6.80
FHTF3812		G3/8"	1/2"	12	7.75	7.40
FHTF1238		G1/2"	3/8"	10	13.35	12.70
FHTF1212		G1/2"	1/2"	12	6.50	6.20
FHTF1258		G1/2"	5/8"	16	19.15	18.20
FHTF1234		G1/2"	3/4"	19	16.60	15.80

Hose Connectors

Hose Tail Tee

Brass



Code T01	Hose ID	Price 1-24	Price 25+
BHTT14	1/4"	5.95	5.70
BHTT516	5/16"	4.90	4.70
BHTT38	3/8"	6.00	5.70
BHTT12	1/2"	9.55	9.10

Connector Parallel with 60° Cone Set to Tapered

Brass





Code S17	Thread BSP	Thread BSPT	Price 1-9	Price 10+
PTEC18	G1/8"	R1/8"	1.45	1.40
PTEC14	G1/4"	R1/4"	2.35	2.25
PTEC38	G3/8"	R3/8"	3.90	3.75
PTEC12	G1/2"	R1/2"	6.10	5.80
PTEC34	G3/4"	R3/4"	24.50	23.30
PTEC1	G1"	R1"	32.90	31.30

For Hose Clips



See pages 549-573

Hose Repairer (Joiner)

Brass



Code T01	Hose ID Inches	Hose ID mm	Price 1-24	Price 25+
BHJ316	3/16"	5	1.30	1.25
BHJ14	1/4"	6	1.40	1.35
BHJ516	5/16"	8	1.80	1.75
BHJ38	3/8"	10	2.35	2.25
BHJ12	1/2"	12	3.05	2.90
BHJ58	5/8"	16	3.85	3.70
BHJ34	3/4"	19	5.05	4.80
BHJ1	1"	25	11.70	11.15
BHJ114	1.1/4"	32	17.60	16.75
BHJ112	1.1/2"	38	23.55	22.40
BHJ2	2"	50	38.20	36.30

Combination Nipple

BSPT Stainless Steel



Code E08	Thread BSPT	Hoses ID	Price
CN-SS12	R1/2"	1/2"	12.50
CN-SS34	R3/4"	3/4"	13.55
CN-SS1	R1"	1"	16.65
CN-SS114	R1.1/4"	1.1/4"	20.65
CN-SS112	R1.1/2"	1.1/2"	23.85
CN-SS2	R2"	2"	27.25
CN-SS3	R3"	3"	79.70

Combination Nipple

BSPT Plated Steel



Code E08	Thread BSPT	Hoses ID	Price
CN-ST12	R1/2"	1/2"	1.85
CN-ST34	R3/4"	3/4"	1.85
CN-ST1	R1"	1"	2.75
CN-ST114	R1.1/4"	1.1/4"	3.65
CN-ST112	R1.1/2"	1.1/2"	4.80
CN-ST2	R2"	2"	5.60
CN-ST212	R2.1/2"	2.1/2"	7.95
CN-ST3	R3"	3"	10.00
CN-ST4	R4"	4"	16.60
CN-ST5	R5"	5"	32.90
CN-ST6	R6"	6"	45.10

Hose Joiner

Plated Steel



Code E08	Hose ID	Price
HJ-ST38	3/8"	2.00
HJ-ST12	1/2"	1.70
HJ-ST34	3/4"	2.10
HJ-ST1	1"	2.20
HJ-ST114	1.1/4"	3.05
HJ-ST112	1.1/2"	3.60
HJ-ST2	2"	5.20
HJ-ST212	2.1/2"	6.70
HJ-ST3	3"	12.30
HJ-ST4	4"	22.25
HJ-ST5	5"	34.20
HJ-ST6	6"	112.15
HJ-ST8	8"	114.50
HJ-ST10	10"	209.35

Hose Joiner

Alloy



Code E08	Hose ID	Price
HJ-AL114	1.1/4"	6.10
HJ-AL112	1.1/2"	7.25
HJ-AL2	2"	10.45
HJ-AL212	2.1/2"	14.40
HJ-AL3	3"	18.65
HJ-AL4	4"	63.15

Hose Joiner

Stainless Steel



Code E08	Hose ID	Price
HJ-SS34	3/4"	26.00
HJ-SS1	1"	38.95
HJ-SS114	1.1/4"	36.95
HJ-SS112	1.1/2"	28.95
HJ-SS2	2"	20.55
HJ-SS3	3"	70.65
HJ-SS4	4"	93.85

Plastic Hose Tails

Male Hose Tail Tee



Polyamide

Code P16	NORMA Ref	Thread BSPT	Hose ID mm	Price 1-24	Price 25+
PTHT-1/8-4	TES 4/R1/8	R1/8"	4	2.10	2.00
PTHT-1/8-6	TES 6/R1/8	R1/8"	6	2.05	1.95
PTHT-1/4-6	TES 6/R1/4	R1/4"	6	2.55	2.45
PTHT-1/4-8	TES 8/R1/4	R1/4"	8	2.70	2.60

Male Hose Tail



Polyamide

Code P16	NORMA Ref	Thread BSPT	Hose ID mm	Price 1-24	Price 25+
PHT-1/8-4	GES 4/R1/8	R1/8"	4	1.40	1.35
PHT-1/8-6	GES 6/R1/8	R1/8"	6	1.90	1.85
PHT-1/4-6	GES 6/R1/4	R1/4"	6	2.05	1.95
PHT-1/4-8	GES 8/R1/4	R1/4"	8	2.40	2.30
PHT-1/4-10	GES 10/R1/4	R1/4"	10	2.45	2.35
PHT-3/8-6	GES 6/R3/8	R3/8"	6	2.45	2.35
PHT-3/8-8	GES 8/R3/8	R3/8"	8	2.65	2.55
PHT-3/8-10	GES 10/R3/8	R3/8"	10	2.60	2.50
PHT-3/8-13	GES 12/R3/8	R3/8"	13	2.80	2.70
PHT-1/2-8	GES 8/R1/2	R1/2"	8	3.85	3.70
PHT-1/2-13	GES 12/R1/2	R1/2"	13	3.85	3.70

Male Hose Tail Elbow



Polyamide

Code P16	NORMA Ref	Thread BSPT	Hose ID mm	Price 1-24	Price 25+
PEHT-1/8-4	WES 4/R1/8	R1/8"	4	1.65	1.60
PEHT-1/8-6	WES 6/R1/8	R1/8"	6	2.05	1.95
PEHT-1/4-6	WES 6/R1/4	R1/4"	6	2.25	2.15
PEHT-1/4-8	WES 8/R1/8	R1/4"	8	2.70	2.60
PEHT-1/4-10	WES 10/R1/4	R1/4"	10	3.30	3.15
PEHT-3/8-6	WES 6/R3/8	R3/8"	6	2.65	2.55
PEHT-3/8-8	WES 8/R3/8	R3/8"	8	3.10	2.95
PEHT-3/8-10	WES 10/R3/8	R3/8"	10	3.70	3.55
PEHT-3/8-13	WES 12/R3/8	R3/8"	13	3.95	3.80
PEHT-1/2-8	WES 8/R1/2	R1/2"	8	4.80	4.60
PEHT-1/2-13	WES 12/R1/2	R1/2"	13	4.90	4.70

Hose Tail Joiner



Polyamide

Code P16	NORMA Ref	Hose ID mm		Price 1-24	Price 25+
PHTJ-3-3	GS 3	3	3	0.60	0.57
PHTJ-4-3	GRS 4-3	4	3	1.45	1.40
PHTJ-4-4	GS 4	4	4	0.60	0.57
PHTJ-6-4	GRS 6-4	6	4	1.50	1.45
PHTJ-6-6	GS 6	6	6	1.25	1.20
PHTJ-8-4	GRS 8-4	8	4	2.05	1.95
PHTJ-8-6	GRS 8-6	8	6	2.40	2.30
PHTJ-8-8	GS 8	8	8	1.80	1.75
PHTJ-10-6	GRS 10-6	10	6	2.70	2.60
PHTJ-10-8	GRS 10-8	10	8	2.95	2.85
PHTJ-10-10	GS 10	10	10	2.25	2.15
PHTJ-13-8	GRS 12-8	13	8	3.30	3.15
PHTJ-13-13	GS 13	13	13	2.85	2.75
PHTJ-19-19	GS 19	19	19	5.20	4.95

Hose Tail Cross Piece



Polyamide

Code P16	NORMA Ref	Hose ID mm	Price 1-24	Price 25+
PHTC-4	KS 4	4	2.45	2.35
PHTC-6	KS 6	6	3.10	2.95

Hose Tail Tee



Polyamide

Code P16	NORMA Ref	Hose ID mm		Price 1-24	Price 25+
PHTT-3-3	TS 3	3	3	1.20	1.15
PHTT-4-4	TS 4	4	4	1.40	1.35
PHTT-4-6	TRS 4-6-4	4	6	2.05	1.95
PHTT-6-4	TRS 6-4-6	6	4	2.65	2.55
PHTT-6-6	TS 6	6	6	2.10	2.00
PHTT-8-4	TRS 8-4-8	8	4	2.65	2.55
PHTT-8-6	TRS 8-6-8	8	6	2.50	2.40
PHTT-8-8	TS 8	8	8	2.65	2.55
PHTT-8-13	TRS 8-12-8	8	13	3.30	3.15
PHTT-10-6	TRS 10-6-10	10	6	3.30	3.15
PHTT-10-8	TRS 10-8-10	10	8	3.05	2.90
PHTT-10-10	TS 10	10	10	3.30	3.15
PHTT-13-8	TRS 12-8-12	13	8	3.70	3.55
PHTT-13-10	TRS 12-10-12	13	10	3.75	3.60
PHTT-13-13	TS 13	13	13	4.15	3.95
PHTT-19-19	TS 19	19	19	7.65	7.30

Hose Tail Y Piece



Polyamide

Code P16	NORMA Ref	Hose ID mm		Price 1-24	Price 25+
PHTY-3-3	YS 3	3	3	1.45	1.40
PHTY-4-4	YS 4	4	4	1.45	1.40
PHTY-4-6	YRS 4-6-4	4	6	2.00	1.90
PHTY-6-6	YS 6	6	6	2.15	2.05
PHTY-6-8	YRS 6-8-6	6	8	2.50	2.40
PHTY-8-8	YS 8	8	8	2.80	2.70
PHTY-13-13	YS 13	13	13	4.60	4.40
PHTY-19-19	YS 19	19	19	7.85	7.50

Nylon Hose Tails

TEFEN
FLOW & DOSING TECHNOLOGIES

Y Hose Connector

Nylon 66



Code	S16	Hose ID mm	Price 1-49	Price 50+
12446344448		4	1.40	1.35
12446346468		6	1.45	1.40
12446348488		8	1.60	1.55

Equal Elbow Hose Connector

Nylon 66



Code	S16	Hose ID mm	Price 1-49	Price 50+
12446544008		4	0.75	0.70
12446545008		5	0.90	0.85
12446546008		6	0.95	0.90
12446548008		8	0.95	0.90
12446550008		10	1.15	1.10
12446552008		12	1.20	1.15
12446556008		16	1.50	1.45
12446559008		19	1.60	1.55

Reducing Elbow Hose Connector

Nylon 66



Code	S16	Hose ID mm		Price 1-49	Price 50+
12446645448		5	4	0.85	0.80
12446646458		6	5	0.95	0.90
12446648468		8	6	0.95	0.90
12446650488		10	8	1.10	1.05
12446652508		12	10	0.85	0.80
12446659568		19	16	1.50	1.45

Male Threaded Straight Hose Connector

Nylon 66



Code	S16	Hose ID mm	Thread BSPT	Price 1-49	Price 50+
12446844028		4	R1/8"	0.75	0.70
12446844048		4	R1/4"	0.85	0.80
12446845028		5	R1/8"	0.75	0.70
12446845048		5	R1/4"	0.85	0.80
12446846028		6	R1/8"	0.85	0.80
12446846048		6	R1/4"	0.90	0.85
12446846068		6	R3/8"	0.95	0.90
12446846088		6	R1/2"	1.10	1.05
12446848028		8	R1/8"	0.95	0.90
12446848048		8	R1/4"	1.10	1.05
12446848068		8	R3/8"	1.10	1.05
12446848088		8	R1/2"	1.15	1.10
12446850048		10	R1/4"	1.15	1.10
12446850068		10	R3/8"	1.15	1.10
12446850088		10	R1/2"	1.15	1.10
12446850128		10	R3/4"	1.20	1.15
12446852048		12	R1/4"	1.15	1.10
12446852068		12	R3/8"	1.15	1.10
12446852088		12	R1/2"	1.25	1.20
12446852128		12	R3/4"	1.45	1.40
12446856088		16	R1/2"	1.40	1.35
12446856128		16	R3/4"	1.45	1.40
12446859088		19	R1/2"	1.45	1.40
12446859128		19	R3/4"	1.45	1.40
12446859168		19	R1"	1.70	1.65

Male Threaded Elbow Hose Connector

Nylon 66



Code	S16	Hose ID mm	Thread BSPT	Price 1-49	Price 50+
12446944028		4	R1/8"	0.95	0.90
12446944048		4	R1/4"	0.90	0.85
12446945028		5	R1/8"	0.95	0.90
12446945048		5	R1/4"	1.10	1.05
12446946028		6	R1/8"	0.95	0.90
12446946048		6	R1/4"	1.15	1.10
12446946068		6	R3/8"	1.15	1.10
12446946088		6	R1/2"	1.15	1.10
12446948028		8	R1/8"	1.10	1.05
12446948048		8	R1/4"	1.15	1.10
12446948068		8	R3/8"	1.20	1.15
12446948088		8	R1/2"	1.20	1.15
12446950048		10	R1/4"	1.20	1.15
12446950068		10	R3/8"	1.25	1.20
12446950088		10	R1/2"	1.25	1.20
12446950128		10	R3/4"	1.35	1.30
12446952048		12	R1/4"	1.25	1.20
12446952068		12	R3/8"	1.25	1.20
12446952088		12	R1/2"	1.45	1.40
12446952128		12	R3/4"	1.45	1.40
12446956088		16	R1/2"	1.50	1.45
12446956128		16	R3/4"	1.75	1.70
12446959088		19	R1/2"	1.60	1.55
12446959128		19	R3/4"	1.65	1.60

Nylon Hose Tails

Male Branch Tee Hose Connector



Nylon 66

Code	S16	Hose ID mm	Thread BSPT	Price 1-49	Price 50+
12447144028		4	R1/8"	0.90	0.85
12447144048		4	R1/4"	0.95	0.90
12447145028		5	R1/8"	0.85	0.80
12447145048		5	R1/4"	0.90	0.85
12447146028		6	R1/8"	0.90	0.85
12447146048		6	R1/4"	0.95	0.90
12447146068		6	R3/8"	0.75	0.70
12447146088		6	R1/2"	0.95	0.90
12447148028		8	R1/8"	1.15	1.10
12447148048		8	R1/4"	1.20	1.15
12447148068		8	R3/8"	1.25	1.20
12447148088		8	R1/2"	1.45	1.40
12447150048		10	R1/4"	1.25	1.20
12447150068		10	R3/8"	1.35	1.30
12447150088		10	R1/2"	1.35	1.30
12447150128		10	R3/4"	1.45	1.40
12447152048		12	R1/4"	1.35	1.30
12447152068		12	R3/8"	1.35	1.30
12447152088		12	R1/2"	1.45	1.40
12447152128		12	R3/4"	1.60	1.55
12447156088		16	R1/2"	1.70	1.65
12447156128		16	R3/4"	1.90	1.85
12447159088		19	R1/2"	1.90	1.85
12447159128		19	R3/4"	1.90	1.85

Reducing Hose Connector



Nylon 66

Code	S16	Hose ID mm		Price 1-49	Price 50+
12445645448		5	4	0.70	0.66
12445646458		6	5	0.85	0.80
12445648468		8	6	0.90	0.85
12445650488		10	8	0.95	0.90
12445652508		12	10	1.10	1.05
12445656528		16	12	1.15	1.10
12445659568		19	16	1.20	1.15

Equal Hose Connector



Nylon 66

Code	S16	Hose ID mm	Price 1-49	Price 50+
12446244008		4	0.70	0.66
12446245008		5	0.75	0.70
12446246008		6	0.85	0.80
12446248008		8	0.85	0.80
12446250008		10	0.90	0.85
12446252008		12	0.95	0.90
12446256008		16	1.15	1.10
12446259008		19	1.15	1.10

Equal Tee Hose Connector



Nylon 66

Code	S16	Hose ID mm	Price 1-49	Price 50+
12446444448		4	0.90	0.85
12446445458		5	0.95	0.90
12446446468		6	1.10	1.05
12446448488		8	1.15	1.10
12446450508		10	1.20	1.15
12446452528		12	1.25	1.20
12446456568		16	1.60	1.55
12446459598		19	1.65	1.60

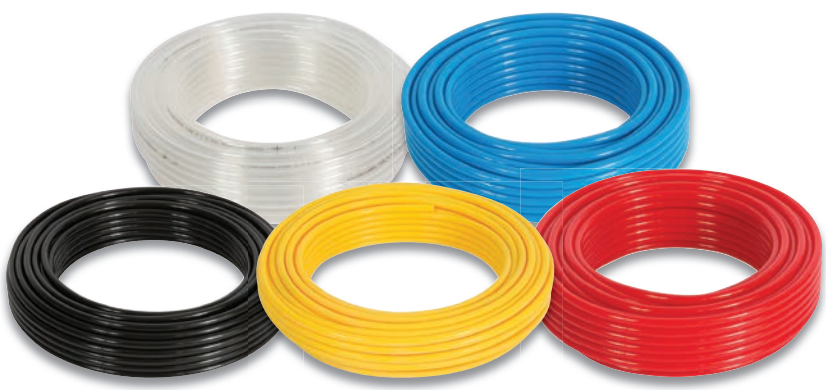
Reducing Tee Hose Connector



Nylon 66

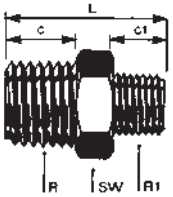
Code	S16	Hose ID mm		Price 1-49	Price 50+
12447245448		5	4	0.85	0.80
12447246458		6	5	0.95	0.90
12447248468		8	6	1.15	1.10
12447250488		10	8	1.25	1.20
12447252508		12	10	1.25	1.20
12447259568		19	16	1.70	1.65

For Pneumatic Tube in Nylon & Polyurethane



See pages 498-507

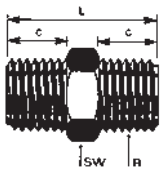
Nylon Threaded Adaptors





Reducing Nipple
Nylon

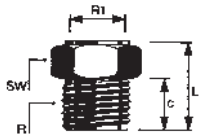
Code	S16	Thread BSPT		SW mm	L mm	c mm	c1 mm	Price 1-24	Price 25+
NRN14-18		R1/4"	R1/8"	17	25	10	8	1.20	1.15
NRN38-18		R3/8"	R1/8"	19	26	10	8	1.45	1.40
NRN38-14		R3/8"	R1/4"	19	28	10	10	1.45	1.40
NRN12-14		R1/2"	R1/4"	22	31.5	12.5	10	1.65	1.60
NRN12-38		R1/2"	R3/8"	22	31.5	12.5	10	1.70	1.65





Equal Nipple
Nylon

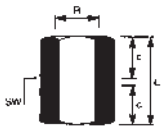
Code	S16	Thread BSPT	SW mm	L mm	c mm	Price 1-24	Price 25+
NEN18		R1/8"	14	23	8	1.15	1.10
NEN14		R1/4"	17	27	10	1.25	1.20
NEN38		R3/8"	19	28	10	1.45	1.40
NEN12		R1/2"	22	34	12.5	1.75	1.70





Reducing Brush
Nylon

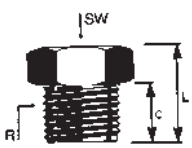
Code	S16	Thread BSPT		SW mm	L mm	c mm	Price 1-24	Price 25+
NRB14-18		R1/4"	R1/8"	14	17.5	10	1.45	1.40
NRB38-18		R3/8"	R1/8"	17	17.5	10.5	1.45	1.40
NRB38-14		R3/8"	R1/4"	17	17.5	10.5	1.60	1.55
NRB12-18		R1/2"	R1/8"	22	20.5	12.5	2.35	2.25
NRB12-14		R1/2"	R1/4"	22	20.5	12.5	2.45	2.35
NRB12-38		R1/2"	R3/8"	22	20.5	12.5	2.45	2.35
NRB34-14		R3/4"	R1/4"	27	22.5	13.5	2.95	2.85
NRB34-38		R3/4"	R3/8"	27	22.5	13.5	3.25	3.10
NRB34-12		R3/4"	R1/2"	27	22.5	13.5	3.25	3.10





Female Socket
Nylon

Code	S16	Thread BSPT	SW mm	L mm	c mm	Price 1-24	Price 25+
NSC18		R1/8"	14	19.5	9	1.40	1.35
NSC14		R1/4"	17	23	11	1.45	1.40
NSC38		R3/8"	21	24	11	1.60	1.55
NSC12		R1/2"	26	29	13.5	2.65	2.55





Hexagonal Plug
Nylon

Code	S16	Thread BSPT	SW mm	L mm	c mm	Price 1-24	Price 25+
NHP18		R1/8"	12	14	9	0.75	0.70
NHP14		R1/4"	15	16	10.5	0.85	0.80
NHP38		R3/8"	17	16	10.5	0.90	0.85
NHP12		R1/2"	22	20	12.5	1.15	1.10

Threaded Polypropylene Adaptors



Reducing Bush

BSPP Male x BSPP Female

Code	S35	Male Thread	Female Thread	Price
PPRB-3412		G3/4"	G1/2"	1.30
PPRB-112		G1"	G1/2"	1.35
PPRB-134		G1"	G3/4"	0.65
PPRB-11412		G1.1/4"	G1/2"	2.30
PPRB-11434		G1.1/4"	G3/4"	2.30
PPRB-1141		G1.1/4"	G1"	2.15
PPRB-11234		G1.1/2"	G3/4"	0.85
PPRB-1121		G1.1/2"	G1"	2.35
PPRB-112114		G1.1/2"	G1.1/4"	2.35
PPRB-234		G2"	G3/4"	5.65
PPRB-21		G2"	G1"	5.65
PPRB-2114		G2"	G1.1/4"	5.65
PPRB-2112		G2"	G1.1/2"	6.75
PPRB-2122		G2.1/2"	G2"	11.30
PPRB-32		G3"	G2"	16.90
PPRB-3212		G3"	G2.1/2"	17.35



Male x Female Reducer

BSPP Male x BSPP Female

Code	S35	Male Thread	Female Thread	Price
PPMFR-1238		G1/2"	G3/8"	1.70
PPMFR-3412		G3/4"	G1/2"	1.85
PPMFR-112		G1"	G1/2"	1.60
PPMFR-134		G1"	G3/4"	1.60
PPMFR-1141		G1.1/4"	G1"	2.85
PPMFR-112114		G1.1/2"	G1.1/4"	3.35
PPMFR-2112		G2"	G1.1/2"	5.15



Reducing Nipple

BSPP Male x BSPP Male

Code	S35	Thread	Thread	Price
PPRN-3412		G3/4"	G1/2"	0.60
PPRN-134		G1"	G3/4"	0.90
PPRN-1141		G1.1/4"	G1"	1.60
PPRN-112114		G1.1/2"	G1.1/4"	2.05
PPRN-2112		G2"	G1.1/2"	3.45
PPRN-2122		G2.1/2"	G2"	10.80



Nipple

BSPP Male x BSPP Male

Code	S35	Thread	Thread	Price
PPEN-1212		G1/2"	G1/2"	0.55
PPEN-3434		G3/4"	G3/4"	0.60
PPEN-11		G1"	G1"	1.10
PPEN-114114		G1.1/4"	G1.1/4"	1.75
PPEN-112112		G1.1/2"	G1.1/2"	0.90
PPEN-22		G2"	G2"	3.60
PPEN-33		G3"	G3"	9.00



Plug

BSPP Male

Code	S35	Thread	Price
PPMP-12		G1/2"	0.80
PPMP-34		G3/4"	0.85
PPMP-1		G1"	1.10
PPMP-114		G1.1/4"	0.55
PPMP-112		G1.1/2"	2.10
PPMP-2		G2"	3.10
PPMP-212		G2.1/2"	6.15
PPMP-3		G3"	10.35



Reducing Socket

BSPP Female x BSPP Female

Code	S35	Thread	Thread	Price
PPRS-3412		G3/4"	G1/2"	1.30
PPRS-134		G1"	G3/4"	1.60
PPRS-1141		G1.1/4"	G1"	3.60
PPRS-112114		G1.1/2"	G1.1/4"	6.15
PPRS-2112		G2"	G1.1/2"	8.30



Socket

BSPP Female x BSPP Female

Code	S35	Thread	Thread	Price
PPES-1212		G1/2"	G1/2"	1.30
PPES-3434		G3/4"	G3/4"	1.35
PPES-11		G1"	G1"	1.75
PPES-114114		G1.1/4"	G1.1/4"	3.55
PPES-112112		G1.1/2"	G1.1/2"	7.00
PPES-22		G2"	G2"	8.60
PPES-212212		G2.1/2"	G2.1/2"	30.80
PPES-33		G3"	G3"	34.70



Cap

BSPP Female

Code	S35	Thread	Price
PPFC-12		G1/2"	0.55
PPFC-34		G3/4"	0.60
PPFC-1		G1"	0.80
PPFC-114		G1.1/4"	1.25
PPFC-112		G1.1/2"	2.50
PPFC-2		G2"	2.75

Threaded Adaptors

Tapered Equal Nipple



Nickel Plated Brass

Code	S13	Thread BSPT	Price 1-24	Price 25+
TN18		R1/8"	0.95	0.90
TN14		R1/4"	1.40	1.35
TN38		R3/8"	2.00	1.90
TN12		R1/2"	3.40	3.25
TN34		R3/4"	5.95	5.70
TN1		R1"	12.60	12.00
TN114		R1.1/4"	29.10	27.65
TN112		R1.1/2"	28.80	27.40
TN2		R2"	47.90	45.55

Tapered Reducing Nipple



Nickel Plated Brass

Code	S13	Thread BSPT		Price 1-24	Price 25+
TN1814		R1/8"	R1/4"	1.30	1.25
TN1838		R1/8"	R3/8"	1.75	1.70
TN1438		R1/4"	R3/8"	1.90	1.85
TN1412		R1/4"	R1/2"	3.00	2.85
TN3812		R3/8"	R1/2"	2.70	2.60
TN1234		R1/2"	R3/4"	5.70	5.45
TN341		R3/4"	R1"	11.95	11.40
TN1114		R1"	R1.1/4"	23.10	21.95
TN114112		R1.1/4"	R1.1/2"	35.75	34.00
TN1122		R1.1/2"	R2"	49.15	46.70

Parallel Equal Nipple



Nickel Plated Brass

Code	S13	Thread BSPP	Price 1-24	Price 25+
PNM5		M5	0.95	0.90
PN18		G1/8"	1.15	1.10
PN14		G1/4"	1.70	1.65
PN38		G3/8"	2.20	2.10
PN12		G1/2"	3.75	3.60
PN34		G3/4"	6.80	6.50
PN1		G1"	12.15	11.55
PN114		G1.1/4"	22.50	21.40
PN112		G1.1/2"	46.20	43.90
PN2		G2"	63.00	59.85

Parallel Reducing Nipple



Nickel Plated Brass

Code	S13	Thread BSPP		Price 1-24	Price 25+
PNM518		M5	G1/8"	1.35	1.30
PN1814		G1/8"	G1/4"	1.60	1.55
PN1838		G1/8"	G3/8"	1.75	1.70
PN1438		G1/4"	G3/8"	1.90	1.85
PN1412		G1/4"	G1/2"	3.20	3.05
PN3812		G3/8"	G1/2"	3.35	3.20
PN1234		G1/2"	G3/4"	6.10	5.80
PN341		G3/4"	G1"	9.90	9.45
PN1114		G1.1/4"	G1/4"	23.10	21.95
PN114112		G1.1/4"	G1.1/2"	35.75	34.00
PN1122		G1.1/2"	G2"	44.40	42.20

Tapered Reducing Bush



Nickel Plated Brass

Code	S13	Male Thread BSPT	Female Thread BSPP	Price 1-24	Price 25+
TRB1418		R1/4"	G1/8"	1.15	1.10
TRB3818		R3/8"	G1/8"	1.50	1.45
TRB3814		R3/8"	G1/4"	1.50	1.45
TRB1218		R1/2"	G1/8"	2.60	2.50
TRB1214		R1/2"	G1/4"	2.75	2.60
TRB1238		R1/2"	G3/8"	2.10	2.00
TRB3414		R3/4"	G1/4"	10.60	10.10
TRB3438		R3/4"	G3/8"	5.30	5.05
TRB3412		R3/4"	G1/2"	4.10	3.90
TRB138		R1"	G3/8"	12.75	12.15
TRB112		R1"	G1/2"	8.90	8.50
TRB134		R1"	G3/4"	8.90	8.50
TRB1141		R1.1/4"	G1"	22.20	21.10
TRB1121		R1.1/2"	G1"	21.95	20.90
TRB112114		R1.1/2"	G1.1/4"	27.35	26.00
TRB2114		R2"	G1.1/4"	51.10	48.55
TRB2112		R2"	G1.1/2"	44.40	42.20

Equal Female Socket



Nickel Plated Brass

Code	S13	Thread BSPP	Price 1-9	Price 10+
EFSM5		M5	1.30	1.25
EFS18		G1/8"	1.35	1.30
EFS14		G1/4"	1.55	1.50
EFS38		G3/8"	2.80	2.70
EFS12		G1/2"	4.70	4.50
EFS34		G3/4"	8.20	7.80
EFS1		G1"	17.80	16.95

Parallel Reducing Bush



Nickel Plated Brass

Code	S13	Male Thread BSPP	Female Thread BSPP	Price 1-24	Price 25+
PRB18M5		G1/8"	M5	1.15	1.10
PRB1418		G1/4"	G1/8"	1.50	1.45
PRB3818		G3/8"	G1/8"	1.70	1.65
PRB3814		G3/8"	G1/4"	1.60	1.55
PRB1218		G1/2"	G1/8"	2.80	2.70
PRB1214		G1/2"	G1/4"	2.55	2.45
PRB1238		G1/2"	G3/8"	2.50	2.40
PRB3414		G3/4"	G1/4"	6.55	6.25
PRB3438		G3/4"	G3/8"	5.60	5.35
PRB3412		G3/4"	G1/2"	5.35	5.10
PRB138		G1"	G3/8"	10.55	10.05
PRB112		G1"	G1/2"	10.90	10.40
PRB134		G1"	G3/4"	12.75	12.15
PRB1141		G1.1/4"	G1"	31.40	29.85
PRB112114		G1.1/2"	G1.1/4"	31.90	30.35
PRB2114		G2"	G1.1/4"	61.35	58.30
PRB2112		G2"	G1.1/2"	54.20	51.50

For Techmatic Handykit Threaded Adaptors



See pages 375-378

Threaded Adaptors

Reducing Female Socket



Nickel Plated Brass

Code	S13	Thread BSPP	Thread BSPP	Price 1-9	Price 10+
RFSM518		M5	G1/8"	1.55	1.50
RFS1814		G1/8"	G1/4"	1.80	1.75
RFS1838		G1/8"	G3/8"	2.55	2.45
RFS1438		G1/4"	G3/8"	2.95	2.85
RFS1412		G1/4"	G1/2"	3.50	3.35
RFS3812		G3/8"	G1/2"	4.20	4.00
RFS1234		G1/2"	G3/4"	10.80	10.30
RFS341		G3/4"	G1"	15.30	14.55

Parallel Reducing Bush



Nickel Plated Brass

Code	S13	Male BSPP	Female BSPP	Price 1-9	Price 10+
FRBP18M5		G1/8"	M5	1.15	1.10
FRBP1418		G1/4"	G1/8"	0.60	0.57
FRBP3818		G3/8"	G1/8"	1.75	1.70
FRBP3814		G3/8"	G1/4"	1.30	1.25
FRBP1214		G1/2"	G1/4"	2.30	2.20
FRBP1238*		G1/2"	G3/8"	1.50	1.45
FRBP3412*		G3/4"	G1/2"	3.20	3.05
FRBP134*		G1"	G3/4"	4.75	4.55

*Un-plated

Male x Female Extended Parallel Adaptor



Nickel Plated Brass

Code	S13	Thread BSPP	Length mm	Price 1-9	Price 10+
EMFA18B		G1/8"	22	1.55	1.50
EMFA18C		G1/8"	42	2.75	2.65
EMFA18D		G1/8"	51	2.70	2.60
EMFA14B		G1/4"	35	2.70	2.60
EMFA14D		G1/4"	51	3.95	3.80
EMFA38		G3/8"	41	6.80	6.50
EMFA12		G1/2"	36	12.35	11.75
EMFA18B		G1/8"	22	1.55	1.50
EMFA34		G3/4"	50	12.50	11.90
EMFA1		G1"	50	19.10	18.15
EMFA34		G3/4"	50	12.50	11.90

Lock Nut



Nickel Plated Brass

Code	S13	Thread BSPP	Price 1-49	Price 50+
LN18		G1/8"	0.55	0.52
LN14		G1/4"	0.90	0.85
LN38		G3/8"	0.70	0.66
LN12		G1/2"	1.40	1.35
LN34		G3/4"	3.70	3.55
LN1		G1"	3.90	3.75

Male x Female Parallel Adaptor



Nickel Plated Brass

Code	S13	Thread BSPP Male	Thread BSPP Female	Price 1-9	Price 10+
MFAPM518		M5	G1/8"	1.15	1.10
MFAP1818		G1/8"	G1/8"	1.15	1.10
MFAP1814		G1/8"	G1/4"	1.60	1.55
MFAP1838		G1/8"	G3/8	3.35	3.20
MFAP1414		G1/4"	G1/4"	1.75	1.70
MFAP1438		G1/4"	G3/8"	2.40	2.30
MFAP1412		G1/4"	G1/2"	3.95	3.80
MFAP3838		G3/8"	G3/8"	2.75	2.65
MFAP3812		G3/8"	G1/2"	4.30	4.10
MFAP3834		G3/8"	G3/4"	6.60	6.30
MFAP1212		G1/2"	G1/2"	7.70	7.35
MFAP1234		G1/2"	G3/4"	7.55	7.20
MFAP121		G1/2"	G1"	11.35	10.80
MFAP3434		G3/4"	G3/4"	8.20	7.80
MFAP341		G3/4"	G1"	10.10	9.60
MFAP11		G1"	G1"	12.20	11.60

Male x Female Tapered Adaptor



Nickel Plated Brass

Code	S13	Male Thread BSPT	Female Thread BSPP	Price 1-9	Price 10+
MFAT1818		R1/8"	G1/8"	1.20	1.15
MFAT1814		R1/8"	G1/4"	1.60	1.55
MFAT1838		R1/8"	G3/8"	2.80	2.70
MFAT1414		R1/4"	G1/4"	1.80	1.75
MFAT1438		R1/4"	G3/8"	2.70	2.60
MFAT1412		R1/4"	G1/2"	4.40	4.20
MFAT3838		R3/8"	G3/8"	3.10	2.95
MFAT3812		R3/8"	G1/2"	4.50	4.30
MFAT1212		R1/2"	G1/2"	5.00	4.75
MFAT3834		R3/8"	G3/4"	8.10	7.70
MFAT1234		R1/2"	G3/4"	7.55	7.20
MFAT3434		R3/4"	G3/4"	8.80	8.40
MFAT121		R1/2"	G1"	10.55	10.05
MFAT341		R3/4"	G1"	13.15	12.50
MFAT11		R1"	G1"	13.10	12.45

Threaded Adaptors



Equal Female Cross

Nickel Plated Cross

Code	S13	Thread BSPP	CH mm	Price 1-9	Price 10+
EFC18F		G1/8"	10	5.20	4.95
EFC14F		G1/4"	12	6.80	6.50
EFC38F		G3/8"	16	10.15	9.65
EFC12F		G1/2"	20	15.95	15.20



Equal Female Cross with One Male Branch

Nickel Plated Cross

Code	S13	Thread BSPP	Price 1-9	Price 10+
EFC18MF		G1/8"	4.95	4.75
EFC14MF		G1/4"	6.80	6.50
EFC38MF		G3/8"	9.40	8.95
EFC12MF		G1/2"	15.50	14.75



Equal Tee Female

Nickel Plated Brass

Code	S13	Thread BSPP	Price 1-9	Price 10+
ETF18		G1/8"	2.95	2.85
ETF14		G1/4"	4.30	4.10
ETF38		G3/8"	6.80	6.50
ETF12		G1/2"	11.10	10.55



Equal Tee Female x Male x Female

Nickel Plated Brass

Code	S13	Thread BSPP	Price 1-9	Price 10+
ETFMF18		G1/8"	3.15	3.00
ETFMF14		G1/4"	4.30	4.10
ETFMF38		G3/8"	6.55	6.25
ETFMF12		G1/2"	10.70	10.20



Equal Tee Female x Female x Male

Nickel Plated Brass

Code	S13	Thread BSPP	Price 1-9	Price 10+
ETFFM18		G1/8"	3.00	2.85
ETFFM14		G1/4"	4.15	3.95
ETFFM38		G3/8"	6.75	6.45
ETFFM12		G1/2"	11.10	10.55



Equal Tee Male x Male x Female

Nickel Plated Brass

Code	S13	Thread BSPP	Price 1-9	Price 10+
ETMMF18		G1/8"	3.15	3.00
ETMMF14		G1/4"	4.35	4.15
ETMMF38		G3/8"	6.55	6.25
ETMMF12		G1/2"	11.10	10.55

For Stainless Steel Adaptors



See pages 702-709

Threaded Adaptors

Equal Tee Male x Female x Male

Nickel Plated Brass



Code	S13	Thread BSPP	Price 1-9	Price 10+
ETMFM18		G1/8"	3.10	2.95
ETMFM14		G1/4"	4.55	4.35
ETMFM38		G3/8"	6.80	6.50
ETMFM12		G1/2"	10.60	10.10

Equal Male Tee

Nickel Plated Brass



Code	S13	Thread BSPP	Price 1-9	Price 10+
ETM18		G1/8"	2.95	2.85
ETM14		G1/4"	4.30	4.10
ETM38		G3/8"	6.60	6.30
ETM12		G1/2"	10.70	10.20

'Y' Connector Male Inlet

Nickel Plated Brass



Code	S13	Thread BSPP	Price 1-9	Price 10+
YMF18		G1/8"	3.75	3.60
YMF14		G1/4"	4.50	4.30
YMF38		G3/8"	8.15	7.75
YMF12		G1/2"	12.60	12.00

'Y' Connector Female Inlet

Nickel Plated Brass



Code	S13	Thread BSPP	Price 1-9	Price 10+
YFF18		G1/8"	3.70	3.55
YFF14		G1/4"	4.50	4.30
YFF38		G3/8"	8.15	7.75
YFF12		G1/2"	12.60	12.00

Equal Elbow Male

Nickel Plated Brass



Code	S13	Thread BSPP	Price 1-9	Price 10+
EMME18		G1/8"	2.50	2.40
EMME14		G1/4"	2.35	2.25
EMME38		G3/8"	4.95	4.75
EMME12		G1/2"	8.00	7.60

Equal Elbow Male x Female

Nickel Plated Brass



Code	S13	Thread BSPP	Price 1-9	Price 10+
EMFE18		G1/8"	2.35	2.25
EMFE14		G1/4"	2.90	2.80
EMFE38		G3/8"	3.95	3.80
EMFE12		G1/2"	6.35	6.05

Equal Elbow Female

Nickel Plated Brass



Code	S13	Thread BSPP	Price 1-9	Price 10+
EFFE18		G1/8"	2.55	2.45
EFFE14		G1/4"	3.60	3.45
EFFE38		G3/8"	4.95	4.75
EFFE12		G1/2"	8.00	7.60

Bulkhead Connectors

Nickel Plated Brass

Code	S30	Female Thread BSPP	Male Bulk-head Thread	CH1	CH2	L max	Price 1-9	Price 10+
BBHCM5M10		M5	M10 x 1	14	14	6	2.45	2.35
BBHC18M16		G1/8	M16 x 1.5	22	19	10	3.40	3.25
BBHC14M20		G1/4	M20 x 1.5	27	24	14	6.10	5.80
BBHC38M26		G3/8	M26 x 1.5	32	30	16	9.80	9.35
BBHC12M28		G1/2	M28 x 1.5	36	32	21	12.00	11.40



Blanking Plugs

Hex Parallel Plug

Nickel Plated Brass



Code	S13	Thread BSPP	Price 1-24	Price 25+
HPPM5		M5	0.90	0.85
HPP18		G1/8"	0.90	0.85
HPP14		G1/4"	1.30	1.25
HPP38		G3/8"	1.70	1.65
HPP12		G1/2"	2.80	2.70
HPP34		G3/4"	4.40	4.20
HPP1		G1"	8.30	7.90

Round Head Parallel Plug

Nickel Plated Brass



Code	S13	Thread BSPP	Price 1-24	Price 25+
RPP18		G1/8"	1.00	0.95
RPP14		G1/4"	1.30	1.25
RPP38		G3/8"	1.70	1.65
RPP12		G1/2"	3.00	2.85
RPPM5		M5	0.90	0.85

Blanking Cap

Nickel Plated Brass



Code	S13	Thread BSPP	Price 1-24	Price 25+
NPBC18		G1/8"	0.80	0.75
NPBC14		G1/4"	1.50	1.45
NPBC38		G3/8"	2.10	2.00
NPBC12		G1/2"	3.35	3.20
NPBC34		G3/4"	5.20	4.95
NPBC1		G1"	8.60	8.20

Hex Tapered Plug

Nickel Plated Brass



Code	S13	Thread BSPT	Price 1-24	Price 25+
HPT18		R1/8"	1.30	1.25
HPT14		R1/4"	1.40	1.35
HPT38		R3/8"	2.30	2.20
HPT12		R1/2"	3.75	3.60

Flush Tapered Plug

Nickel Plated Brass



Code	S13	Thread BSPT	Price 1-24	Price 25+
FPT18		R1/8"	0.90	0.85
FPT14		R1/4"	1.00	0.95
FPT38		R3/8"	1.30	1.25
FPT12		R1/2"	2.10	2.00

Flush Parallel Plug

Nickel Plated Brass



Code	S13	Thread BSPP	Price 1-24	Price 25+
FPP18		G1/8"	0.75	0.70
FPP14		G1/4"	1.00	0.95
FPP38		G3/8"	1.30	1.25
FPP12		G1/2"	2.10	2.00

For Galvanised Fittings



See pages 668-672

Fitting Kits

A range of our most popular Techmatic adaptors, supplied in a robust compact kit box for convenience.

Each kit supplied with contents label.

Adaptors:

- BSPP and BSPT kits, comprising various adaptors in sizes 1/8", 1/4", 3/8" and 1/2"





BSPP Adaptors Kit

Nickel-plated Brass

Code	P10	Description	Price
HANDYKIT-BSPP		Assorted Parallel Adaptors	120.00

BSPT Adaptors Kit

Nickel-plated Brass

Code	P10	Description	Price
HANDYKIT-BSPT		Assorted Tapered Adaptors	120.00

BSPP Adaptors Kit

CONTENTS:

1/2" BSPP Equal Nipple PN12 QTY: 5	1/2" BSPP Washer AW12 QTY: 5	3/8" BSPP x 1/2" BSPP Unequal Nipple PN3812 QTY: 5	3/8" BSPP Washer AW38 QTY: 5	1/2" BSPP x 3/8" BSPP Reducing Bush PRB1238 QTY: 5	1/4" BSPP Washer AW14 QTY: 5
1/2" BSPP Blanking Plug RPP12 QTY: 5		3/8" BSPP Blanking Plug RPP38 QTY: 5		1/4" BSPP Blanking Plug RPP14 QTY: 5	1/8" BSPP Equal Socket EFS18 QTY: 3
1/8" BSPP Blanking Plug RPP18 QTY: 5	3/8" BSPP Equal Socket EFS38 QTY: 2	3/8" BSPP Equal Nipple PN38 QTY: 5		1/4" BSPP Equal Nipple PN14 QTY: 5	
1/8" BSPP Equal Nipple PN18 QTY: 5	1/4" BSPP Equal Socket EFS14 QTY: 2	1/8" BSPP x 1/4" BSPP Unequal Nipple PN1814 QTY: 5		1/4" BSPP x 3/8" BSPP Unequal Nipple PN1438 QTY: 5	
1/4" BSPP x 1/8" BSPP Reducing Brush PRB1418 QTY: 5		3/8" BSPP x 1/4" BSPP Reducing Brush PRB3814 QTY: 5		1/8" BSPP Washer AW18 QTY: 5	1/2" BSPP Equal Socket EFS12 QTY: 2

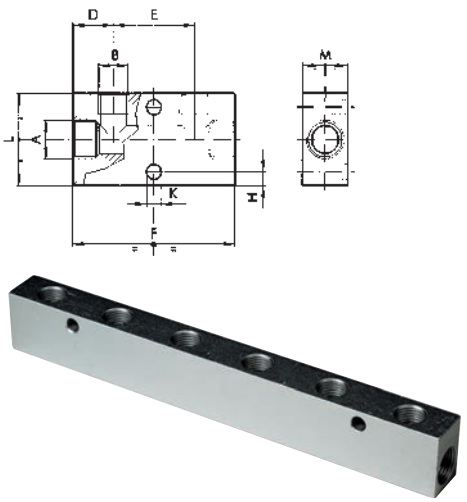
BSPT Adaptors Kit

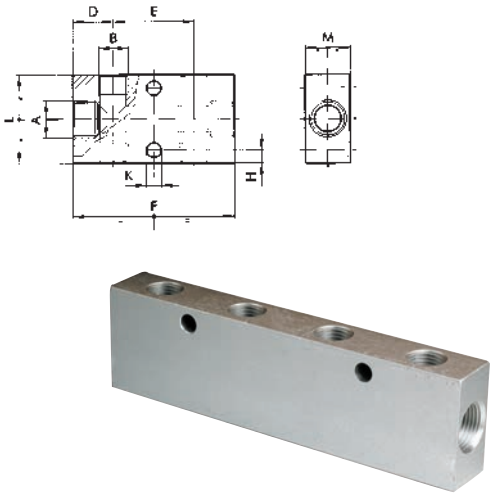
CONTENTS:

1/2" BSPT Equal Nipple TN12 QTY: 5	1/2" BSPP Equal Socket EFS12 QTY: 3	1/8" BSPP Equal Socket EFS18 QTY: 3	3/8" BSPT x 1/2" BSPT Unequal Nipple TN3812 QTY: 5	1/4" BSPP Equal Socket EFS14 QTY: 3
1/2" BSPT x 3/8" BSPP Reducing Bush TRB1238 QTY: 4	3/8" BSPT Equal Nipple TN38 QTY: 5		1/4" BSPT Equal Nipple TN14 QTY: 5	
1/8" BSPT Equal Nipple TN18 QTY: 5	1/8" BSPT x 1/4" BSPT Unequal Nipple TN1814 QTY: 5		1/4" BSPT x 3/8" BSPT Unequal Nipple TN1438 QTY: 5	
3/8" BSPP Equal Socket EFS38 QTY: 3	3/8" BSPT x 1/2" BSPP Male/Female Adaptor MFAT3812 QTY: 3		1/4" BSPT x 1/8" BSPP Reducing Bush TRB1418 QTY: 5	
3/8" BSPT x 1/4" BSPP Reducing Bush TRB3814 QTY: 5	1/8" BSPT x 1/4" BSPP Male/Female Adaptor MFAT1814 QTY: 5		1/4" BSPT x 3/8" BSPP Male/Female Adaptor MFAT1438 QTY: 4	

Distribution Manifolds

- Maximum working pressure: 12 bar





Distribution Manifold, Ports One Side

Aluminium

Code	N20	BSPP Inlet	BSPP Outlet	Outlet N°	Dimensions mm F	M	L	Price
DM182M5		G1/8"	M5	2	45	15	20	15.00
DM183M5		G1/8"	M5	3	60	15	20	24.10
DM184M5		G1/8"	M5	4	75	15	20	25.30
DM185M5		G1/8"	M5	5	90	15	20	24.10
DM186M5		G1/8"	M5	6	105	15	20	5.15
DM14218		G1/4"	G1/8"	2	60	-	30	4.90
DM14318		G1/4"	G1/8"	3	90	20	30	6.80
DM14418		G1/4"	G1/8"	4	120	20	30	9.40
DM14518		G1/4"	G1/8"	5	150	20	30	11.45
DM14618		G1/4"	G1/8"	6	180	20	30	14.10
DM38214		G3/8"	G1/4"	2	72	-	40	6.55
DM38314		G3/8"	G1/4"	3	108	20	30	7.30
DM38414		G3/8"	G1/4"	4	144	20	30	10.05
DM38514		G3/8"	G1/4"	5	180	20	30	12.65
DM38614		G3/8"	G1/4"	6	216	20	30	14.85
DM12214		G1/2"	G1/4"	2	80	-	30	10.40
DM12314		G1/2"	G1/4"	3	116	30	20	14.10
DM12414		G1/2"	G1/4"	4	152	30	20	18.00
DM12514		G1/2"	G1/4"	5	188	30	20	22.55
DM12614		G1/2"	G1/4"	6	224	30	20	26.30
DM12212		G1/2"	G1/2"	2	100	28	40	11.20
DM12312		G1/2"	G1/2"	3	140	28	40	16.35
DM12412		G1/2"	G1/2"	4	180	-	28	20.90
DM12512		G1/2"	G1/2"	5	220	28	40	25.70
DM12612		G1/2"	G1/2"	6	260	-	28	29.80

Distributor Manifold, Ports Two Sides

Aluminium

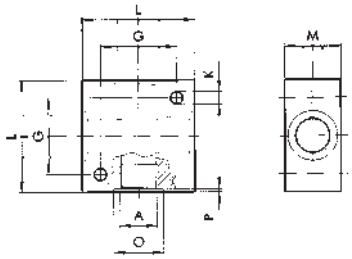
Code	N20	BSPP Inlet	BSPP Outlet	Outlet N°	Dimensions mm F	M	L	Price
DMD184M5		G1/8"	M5	2+2	45	15	20	19.15
DMD186M5		G1/8"	G1/8	3+3	160	15	20	14.00
DMD188M5		G1/8"	M5	4+4	75	15	20	16.50
DMD1810M5		G1/8"	M5	5+5	90	15	20	18.25
DMD1812M5		G1/8"	M5	6+6	105	15	20	20.35
DMD14418		G1/4"	G1/8"	2+2	60	20	30	4.50
DMD14618		G1/4"	G1/8"	3+3	90	20	30	6.80
DMD14818		G1/4"	G1/8"	4+4	120	20	30	9.25
DMD141018		G1/4"	G1/8"	5+5	150	20	30	11.70
DMD141218		G1/4"	G1/8"	6+6	180	20	30	24.00
DMD38414		G3/8"	G1/4"	2+2	72	20	40	6.55
DMD38614		G3/8"	G1/4"	3+3	108	20	40	10.05
DMD38814		G3/8"	G1/4"	4+4	144	20	40	12.65
DMD381014		G3/8"	G1/4"	5+5	180	20	40	16.35
DMD381214		G3/8"	G1/4"	6+6	216	20	40	29.70
DMD12414		G1/2"	G1/4"	2+2	80	28	40	10.40
DMD12614		G1/2"	G1/4"	3+3	110	28	40	14.85
DMD12814		G1/2"	G1/4"	4+4	152	28	40	19.45
DMD121014		G1/2"	G1/4"	5+5	188	28	40	24.00
DMD12412		G1/2"	G1/2"	2+2	100	28	40	11.70
DMD12612		G1/2"	G1/2"	3+3	140	28	40	60.95
DMD12812		G1/2"	G1/2"	4+4	180	28	40	21.15
DMD121012		G1/2"	G1/2"	5+5	220	28	40	99.20
DMD121212		G1/2"	G1/2"	6+6	260	28	40	46.15

Distribution Manifolds

4 Way Distribution Block

Aluminium



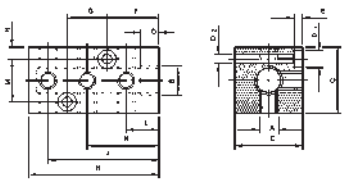


Code	N20	Thread BSPP	G mm	K mm	L mm	M mm	O mm	Price
DMX18		G1/8"	17	4.5	25	16	15	**2.80**
DMX14		G1/4"	26	5.5	40	20	19	**4.45**
DMX38		G3/8"	34	5.5	50	25	23	**7.50**
DMX12		G1/2"	34	5.5	50	30	27	**6.80**

Distribution Block

Aluminium





Code	N50	BSPP Inlet	BSPP Outlet	C mm	D1 mm	D2 mm	E mm	F mm	G mm	H mm	J mm	K mm	L mm	M mm	N mm	O mm	kg	Price
1823390045		G1/8"	M5	20	7.5	4.5	4	18	18	50	42	27	12	12	4	8	0.046	**15.65**
1823390046		G3/8"	G1/8"	30	9	5.5	5	30	28	80	68	44	20	19.5	5.2	12	0.15	**30.90**
1823390047		G1/2"	G1/4"	36	10.5	6.5	6	36	34	100	83	53	23	24	6	14	0.265	**37.00**

For Push-in Manifolds



TECHMATIC™

See pages, 359, 364-365 and 369

Brass Adaptors

Male Adaptors, Equal



Male Thread, BSPT

Code	T09	Thread	Price
TNUP18		R1/8"	1.15
TNUP14		R1/4"	2.15
TNUP38		R3/8"	2.75
TNUP12		R1/2"	4.60
TNUP34		R3/4"	7.50
TNUP1		R1"	13.80
TNUP114		R1.1/4"	22.70
TNUP112		R1.1/2"	28.20
TNUP2		R2"	49.35
TNUP212		R2.1/2"	89.80
TNUP3		R3"	118.45

Reducing Bush



Male Thread, BSPT x Female Thread

Code	T09	Thread		Price
		Male	Female	
TRBUP1814		R1/4"	G1/8"	1.45
TRBUP1838		R3/8"	G1/8"	2.15
TRBUP1812		R1/2"	G1/8"	3.40
TRBUP1438		R3/8"	G1/4"	1.80
TRBUP1412		R1/2"	G1/4"	3.35
TRBUP3812		R1/2"	G3/8"	2.85

Female Equal Socket



Female Thread, BSPT

Code	T09	Thread	Price
EFSUP18		R1/8"	1.40
EFSUP14		R1/4"	2.70
EFSUP38		R3/8"	3.75
EFSUP12		R1/2"	5.80
EFSUP34		R3/4"	10.45
EFSUP1		R1"	14.85
EFSUP114		R1.1/4"	21.75
EFSUP112		R1.1/2"	25.45
EFSUP2		R2"	58.95
EFSUP212		R2.1/2"	27.15
EFSUP4		R4"	50.70

Male Adaptors, Unequal



Male Thread, BSPT x BSPT

Code	T09	Thread		Price
TNUP1814		R1/8"	R1/4"	1.85
TNUP1838		R1/8"	R3/8"	2.55
TNUP1438		R1/4"	R3/8"	2.65
TNUP1412		R1/4"	R1/2"	4.00
TNUP3812		R3/8"	R1/2"	4.15

Male Adaptors, Unequal



Male Thread, NPT x NPT

Code	T09	Thread		Price
TNUPNPT1818		R1/8"	R1/8"	1.60
TNUPNPT1814		R1/8"	R1/4"	2.20
TNUPNPT1414		R1/4"	R1/4"	2.95
TNUPNPT3814		R3/8"	R1/4"	5.40
TNUPNPT3838		R3/8"	R3/8"	3.40
TNUPNPT1412		R1/4"	R1/2"	11.65
TNUPNPT1238		R1/2"	R3/8"	5.20
TNUPNPT1212		R1/2"	R1/2"	5.70
TNUPNPT1434		R1/4"	R3/4"	9.35
TNUPNPT3834		R3/8"	R3/4"	11.10
TNUPNPT1234		R1/2"	R3/4"	11.10
TNUPNPT3434		R3/4"	R3/4"	11.10
TNUPNPT121		R1/2"	R1"	13.20
TNUPNPT341		R3/4"	R1"	13.20
TNUPNPT11		R1"	R1"	13.20

Bulkhead Connector



Male Thread, BSPP

Code	T09	Thread	Price
BHUP18		G1/8"	4.05
BHUP14		G1/4"	2.85
BHUP38		G3/8"	4.20
BHUP12		G1/2"	6.20
BHUP34		G3/4"	22.20
BHUP1		G1"	27.65



Connector Parallel Both Ends with 60° Cone Seat

Brass

Code	S17	Thread BSPP	Male BSPP	Price 1-9	Price 10+
PPCC1818		G1/8"	G1/8"	2.25	2.15
PPCC1418		G1/4"	G1/8"	3.90	3.75
PPCC1414		G1/4"	G1/4"	1.45	1.40
PPCC3818		G3/8"	G1/8"	5.90	5.65
PPCC3814		G3/8"	G1/4"	3.35	3.20
PPCC3838		G3/8"	G3/8"	2.65	2.55
PPCC1214		G1/2"	G1/4"	5.40	5.15
PPCC1238		G1/2"	G3/8"	5.80	5.55
PPCC1212		G1/2"	G1/2"	3.50	3.35
PPCC3438		G3/4"	G3/8"	22.55	21.45
PPCC3412		G3/4"	G1/2"	8.35	7.95
PPCC3434		G3/4"	G3/4"	9.00	8.55
PPCC112		G1"	G1/2"	20.75	19.75
PPCC134		G1"	G3/4"	32.15	30.55
PPCC11		G1"	G1"	34.45	32.75
PPCC114114		G1.1/4"	G1.1/4"	117.15	111.30
PPCC112112		G1.1/2"	G1.1/2"	105.90	100.65
PPCC22		G2"	G2"	119.50	113.55

Equal Elbows



Male Thread, BSPT

Code	T09	Thread	Price
EEMMUP18		R1/8"	2.75
EEMMUP14		R1/4"	4.65
EEMMUP38		R3/8"	6.35
EEMMUP12		R1/2"	9.60

Brass Adaptors

Equal Elbows

Female Thread, BSPT



Code	T09	Thread	Price
EEFFUP18		R1/8"	3.90
EEFFUP14		R1/4"	5.60
EEFFUP38		R3/8"	7.50
EEFFUP12		R1/2"	12.00
EEFFUP34		R3/4"	12.55
EEFFUP1		R1"	19.80
EEFFUP114		R1.1/4"	31.85
EEFFUP112		R1.1/2"	34.55
EEFFUP2		R2"	46.90

Equal Tees

Female Thread, BSPT



Code	T09	Thread	Price
EFFFTUP18		R1/8"	4.95
EFFFTUP14		R1/4"	7.00
EFFFTUP38		R3/8"	9.75
EFFFTUP12		R1/2"	16.90
EFFFTUP34		R3/4"	14.25
EFFFTUP1		R1"	25.75
EFFFTUP114		R1.1/4"	22.95
EFFFTUP112		R1.1/2"	51.85
EFFFTUP212		R2.1/2"	56.25
EFFFTUP3		R3"	101.15

Triple Outlet

Female Thread, BSPP



Code	T09	Thread	Price
EFFFYUP38		G3/8"	21.50
EFFFYUP12		G1/2"	37.30

Equal Elbows

Male Thread x Female Thread, BSPT



Code	T09	Thread	Price
EEMFUP18		R1/8"	3.75
EEMFUP14		R1/4"	4.75
EEMFUP38		R3/8"	7.15
EEMFUP12		R1/2"	10.45

Equal Tees

Male Thread, BSPT



Code	T09	Thread	Price
EMMMTUP18		R1/8"	3.60
EMMMTUP14		R1/4"	5.90
EMMMTUP38		R3/8"	8.85
EMMMTUP12		R1/2"	13.60

Equal Swivel Union

Brass



Code	N21	Thread BSPP	Price 1-9	Price 10+
ESU18		G1/8"	3.20	3.05
ESU14		G1/4"	4.15	3.95
ESU38		G3/8"	5.15	4.90
ESU12		G1/2"	16.05	15.25
ESU34		G3/4"	19.40	18.45
ESU1		G1"	30.20	28.70

Female Block Equal Tee

Female Thread, BSPT



Code	T09	Thread	Price
EFFFBTUP18		R1/8"	3.85
EFFFBTUP14		R1/4"	5.65
EFFFBTUP38		R3/8"	8.65

Male x Female 45° Equal Elbow

Male Thread x Female Thread, BSPT



Code	T09	Thread	Price
EMF45UP18		R1/8"	3.20
EMF45UP14		R1/4"	5.35

Equal Adaptor, Male NPT x Male BSPT

Brass



Code	N21	Thread BSPT	Thread NPT	Price 1-9	Price 10+
MMNB18		R1/8"	1/8"	1.10	1.05
MMNB14		R1/4"	1/4"	1.75	1.70
MMNB38		R3/8"	3/8"	5.95	5.70
MMNB12		R1/2"	1/2"	6.30	6.00

'Y' Connector

Brass



Code	N49	Thread BSPP	Price 1-9	Price 10+
121/35		G3/8"	11.75	11.20
121/50		G1/2"	13.85	13.20

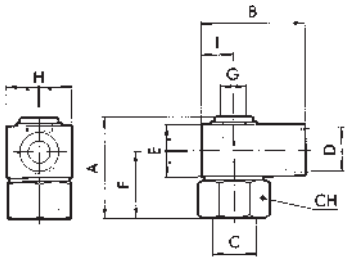
Triple Connector

Brass



Code	N49	Thread BSPP	Price 1-9	Price 10+
121/34		G3/8"	16.95	16.15
121/54		G1/2"	18.90	18.00

Rotary Unions

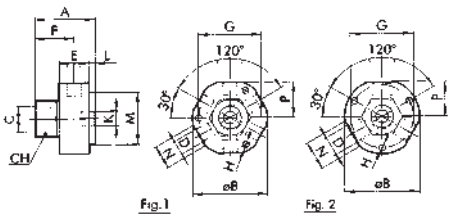




Single Rotary Joint

Nickel Plated Brass

Code	P15	A mm	B mm	C Thread BSPP	D Thread BSPP	B mm	F mm	G Thread BSPP	H mm	I mm	CH mm	rpm	Price
SRJ18		32	30	G1/8"	G1/8"	16	22	-	16	8	16	550	**78.30**
SRJ14		32	30	G1/4"	G1/4"	16	22	-	16	8	16	550	**78.30**
SRJ38		39	40	G3/8"	G3/8"	20	26	G1/8"	25	12.5	24	300	**92.75**
SRJ12		55	65	G1/2"	G1/2"	30	35	G3/8"	40	20	30	200	**230.10**
SRJ34		70	65	G3/4"	G3/4"	40	45	G1/2"	40	20	36	160	**295.10**
SRJ1		80	80	G1"	G1"	45	52.5	G3/4"	50	26	45	140	**469.85**





Multiple Rotary Joint

Nickel Plated Brass

Code	P15	Figure	A mm	B mm	Inlet (C) BSPP	Outlet (D) BSPP	E mm	F mm	G mm	H mm	K BSPP	L mm	M mm	N mm	P mm	CH mm	rpm	Price
MRJ618		1	4	50	1 x G3/8"	6 x G1/8"	20	26	42	4.2	G1/8"	4	35	16	23.7	24	300	**129.40**
MRJ314		2	4	50	1 x G3/8"	3 x G1/4"	20	26	42	4.2	G1/8"	4	35	19	23	24	300	**135.80**

For Stainless Steel Adaptors



See pages 702-709

Recoil Hose Quick-fit Spring Guards



Male Studs, Spring Guard

BSPT

Code S33	To Fit Tube mm	Thread	Price
MSSGT6/4-1/8	6/4	R1/8"	2.65
MSSGT6/4-1/4	6/4	R1/4"	3.10
MSSGT8/6-1/4	8/6	R1/4"	3.15
MSSGT8/6-3/8	8/6	R3/8"	3.35
MSSGT8/6-1/2	8/6	R1/2"	3.80
MSSGT10/8-1/8	10/8	R1/8"	3.30
MSSGT10/8-1/4	10/8	R1/4"	3.50
MSSGT10/8-3/8	10/8	R3/8"	3.65
MSSGT10/8-1/2	10/8	R1/2"	4.85



Locking Nut & Spring

Metric Thread

Code S33	To Fit Tube mm	Thread	Price
LNSG6/4	6/4	M10 x 1	1.90
LNSG8/6	8/6	M12 x 1	2.15
LNSG10/8	10/8	M14 x 1	2.30
LNSG12/10	12/10	M16 x 1	2.90



Swivel Male Studs, Spring Guard

BSPT

Code S33	To Fit Tube mm	Thread	Price
SMSSGT6/4-1/8	6/4	R1/8"	3.40
SMSSGT6/4-1/4	6/4	R1/4"	4.20
SMSSGT8/6-1/4	8/6	R1/4"	4.40
SMSSGT10/6.5-1/4	10/6.5	R1/4"	5.15
SMSSGT10/8-1/4	10/8	R1/4"	5.00
SMSSGT12/8-3/8	12/8	R3/8"	6.60



Male Studs, Spring Guard

BSPP

Code S33	To Fit Tube mm	Thread	Price
MSSGP6/4-1/8	6/4	G1/8"	2.80
MSSGP6/4-1/4	6/4	G1/4"	3.30
MSSGP6/4-1/2	6/4	G1/2"	4.65
MSSGP8/6-1/4	8/6	G1/4"	3.30
MSSGP8/6-1/2	8/6	G1/2"	3.60
MSSGP10/8-3/8	10/8	G3/8"	3.90
MSSGP12/10-3/8	12/10	G3/8"	5.00



Straight Female Adaptor

BSPP

Code S33	To Fit Tube mm	Thread	Price
FSSG6/4-1/4	6/4	G1/4"	2.85
FSSG6/4-3/8	6/4	G3/8"	4.00
FSSG8/6-1/4	8/6	G1/4"	3.45
FSSG8/6-3/8	8/6	G3/8"	4.35
FSSG10/8-12/8	10/8	G1/2"	5.20



Swivel Male Studs, Spring Guard

BSPP

Code S33	To Fit Tube mm	Thread	Price
SMSSGP6/4-1/8	6/4	G1/8"	4.00
SMSSGP6/4-1/4	6/4	G1/4"	4.45
SMSSGP8/6-1/8	8/6	G1/8"	4.15
SMSSGP8/6-1/4	8/6	G1/4"	4.70
SMSSGP10/6.5-1/4	10/6.5	G1/4"	4.80

For Recoil Hose



See pages 511-512

UPVC Threaded PVC Fittings

WRAS APPROVED PRODUCT



Double Socket

Female BSPP

Code S35	Thread	Price
PVCS-12	G1/2"	2.70
PVCS-34	G3/4"	3.10
PVCS-1	G1"	3.80
PVCS-114	G1.1/4"	4.80
PVCS-112	G1.1/2"	6.60
PVCS-2	G2"	8.90



Reducing Socket

Female BSPP

Code S35	Thread	Thread	Price
PVCRS-1238	G1/2"	G3/8"	3.20
PVCRS-3412	G3/4"	G1/2"	15.45
PVCRS-134	G1"	G3/4"	4.95
PVCRS-1141	G1.1/4"	G1"	6.85
PVCRS-112114	G1.1/2"	G1.1/4"	7.90
PVCRS-2112	G2"	G1.1/2"	32.95
PVCRS-2122	G2.1/2"	G2"	20.80
PVCRS-3212	G3"	G2.1/2"	26.60
PVCRS-43	G4"	G3"	40.10



Enlarging Piece

Male BSPP x Female BSPP

Code S35	Male Thread	Female Thread	Price
PVCEN-3812	G3/8"	G1/2"	3.20
PVCEN-1234	G1/2"	G3/4"	2.75
PVCEN-341	G3/4"	G1"	3.25
PVCEN-1114	G1"	G1.1/4"	3.95
PVCEN-114112	G1.1/4"	G1.1/2"	5.65
PVCEN-1122	G1.1/2"	G2"	8.90
PVCEN-2212	G2"	G2.1/2"	15.15
PVCEN-2123	G2.1/2"	G3"	26.60
PVCEN-34	G3"	G4"	44.05



Reducing Male x Female

Male BSPP x Female BSPP

Code S35	Male Thread	Female Thread	Price
PVCR-1238	G1/2"	G3/8"	2.00
PVCR-3438	G3/4"	G3/8"	2.80
PVCR-3412	G3/4"	G1/2"	2.75
PVCR-138	G1"	G3/8"	3.75
PVCR-112	G1"	G1/2"	3.50
PVCR-134	G1"	G3/4"	3.50
PVCR-11412	G1.1/4"	G1/2"	5.25
PVCR-11434	G1.1/4"	G3/4"	3.80
PVCR-1141	G1.1/4"	G1"	5.25
PVCR-11234	G1.1/2"	G3/4"	6.10
PVCR-1121	G1.1/2"	G1"	6.10
PVCR-21	G2"	G1"	9.20
PVCR-2114	G2"	G1.1/4"	9.20
PVCR-2112	G2"	G1.1/2"	6.50
PVCR-212112	G2.1/2"	G1.1/2"	11.45
PVCR-2122	G2.1/2"	G2"	11.45
PVCR-3112	G3"	G1.1/2"	10.40
PVCR-32	G3"	G2"	14.25
PVCR-3212	G3"	G2.1/2"	19.80
PVCR-42	G4"	G2"	27.95
PVCR-4212	G4"	G2.1/2"	27.95
PVCR-43	G4"	G3"	27.95



Reducing Bush Male x Female

Male BSPP x Female BSPP

Code S35	Male Thread	Female Thread	Price
PVCRB-3412	G3/4"	G1/2"	2.35
PVCRB-134	G1"	G3/4"	3.30
PVCRB-1141	G1.1/4"	G1"	4.50
PVCRB-112114	G1.1/2"	G1.1/4"	4.05
PVCRB-2112	G2"	G1.1/2"	7.75
PVCRB-2122	G2.1/2"	G2"	10.50
PVCRB-3212	G3"	G2.1/2"	17.90
PVCRB-43	G4"	G3"	33.35



Nipple

Male BSPP

Code S35	Thread	Price
PVCN-38	G3/8"	1.80
PVCN-12	G1/2"	1.80
PVCN-34	G3/4"	2.15
PVCN-1	G1"	2.65
PVCN-114	G1.1/4"	4.05
PVCN-112	G1.1/2"	4.25
PVCN-2	G2"	5.45
PVCN-212	G2.1/2"	8.80
PVCN-4	G4"	27.35



Reducing Nipple

Male BSPP

Code S35	Thread	Thread	Price
PVCRN-3412	G3/4"	G1/2"	2.10
PVCRN-134	G1"	G3/4"	2.80
PVCRN-1141	G1.1/4"	G1"	3.45
PVCRN-112114	G1.1/2"	G1.1/4"	4.95
PVCRN-2122	G2.1/2"	G2"	11.45
PVCRN-3212	G3"	G2.1/2"	18.50
PVCRN-43	G4"	G3"	32.30

UPVC Threaded PVC Fittings

WRAS APPROVED PRODUCT

Elbow 90°

Female BSPP



Code	S35	Thread	Price
PVCE-12		G1/2"	2.65
PVCE-34		G3/4"	3.10
PVCE-1		G1"	4.20
PVCE-114		G1.1/4"	5.90
PVCE-112		G1.1/2"	8.35
PVCE-2		G2"	11.45
PVCE-212		G2.1/2"	26.15
PVCE-3		G3"	44.10

Union

Female BSPP



Code	S35	Thread	Price
PVCU-38		G3/8"	7.60
PVCU-12		G1/2"	5.75
PVCU-34		G3/4"	6.75
PVCU-1		G1"	9.05
PVCU-114		G1.1/4"	11.25
PVCU-112		G1.1/2"	13.25
PVCU-2		G2"	17.55
PVCU-212		G2.1/2"	46.75
PVCU-3		G3"	75.40
PVCU-4		G4"	102.70

Plug

Male BSPP



Code	S35	Thread	Price
PVCP-38		G3/8"	1.80
PVCP-12		G1/2"	1.55
PVCP-34		G3/4"	1.80
PVCP-1		G1"	2.65
PVCP-112		G1.1/2"	4.50
PVCP-2		G2"	1.45
PVCP-212		G2.1/2"	12.00
PVCP-3		G3"	19.55
PVCP-4		G4"	34.15

Elbow 45°

Female BSPP



Code	S35	Thread	Price
PVCE45-38		G3/8"	3.25
PVCE45-12		G1/2"	3.60
PVCE45-34		G3/4"	3.85
PVCE45-1		G1"	5.15
PVCE45-114		G1.1/4"	9.05
PVCE45-112		G1.1/2"	10.40
PVCE45-2		G2"	15.45
PVCE45-212		G2.1/2"	25.50
PVCE45-3		G3"	37.65
PVCE45-4		G4"	41.60

Cap

Female BSPP



Code	S35	Thread	Price
PVCC-38		G3/8"	3.10
PVCC-12		G1/2"	2.15
PVCC-34		G3/4"	2.35
PVCC-1		G1"	2.90
PVCC-114		G1.1/4"	4.05
PVCC-112		G1.1/2"	5.25
PVCC-2		G2"	6.95
PVCC-212		G2.1/2"	21.45
PVCC-3		G3"	28.45
PVCC-4		G4"	32.40

Locknuts

BSPP



Code	S35	Thread	Price
PVCLN-38		G3/8"	1.35
PVCLN-12		G1/2"	1.90
PVCLN-34		G3/4"	1.70
PVCLN-1		G1"	3.00
PVCLN-114		G1.1/4"	7.15
PVCLN-112		G1.1/2"	7.10
PVCLN-2		G2"	7.65
PVCLN-212		G2.1/2"	11.25
PVCLN-3		G3"	17.70
PVCLN-4		G4"	15.85

Tee 90°

Female BSPP



Code	S35	Thread	Price
PVCT-38		G3/8"	2.80
PVCT-12		G1/2"	3.80
PVCT-34		G3/4"	4.45
PVCT-1		G1"	5.60
PVCT-114		G1.1/4"	8.70
PVCT-112		G1.1/2"	12.00
PVCT-2		G2"	19.05
PVCT-3		G3"	51.95
PVCT-4		G4"	89.50

For PVC Hose



See pages 494-496

Washers



Washers
Aluminium

Code	S13	BSPP Size	Price 1-99	Price 100+
AWM5		M5	0.15	0.14
AW18		1/8"	0.15	0.14
AW14		1/4"	0.15	0.14
AW38		3/8"	0.20	0.18
AW12		1/2"	0.20	0.18
AW34		3/4"	0.30	0.28
AW1		1"	0.30	0.28
AW114		1.1/4"	0.50	0.47
AW112		1.1/2"	0.60	0.57
AW2		2"	1.35	1.30



Washers
Copper

Code	S13	BSPP Size	Price 1-99	Price 100+
CW18		1/8"	0.20	0.18
CW14		1/4"	0.40	0.37
CW38		3/8"	0.50	0.47
CW12		1/2"	0.60	0.57
CW34		3/4"	0.90	0.85
CW1		1"	1.30	1.25
CW114		1.1/4"	1.95	1.90
CW112		1.1/2"	2.15	2.05
CW2		2"	10.90	10.40



Washers
Nylon

Code	S13	BSPP Size	Price 1-99	Price 100+
NWM5		M5	0.20	0.18
NW18		1/8"	0.20	0.18
NW14		1/4"	0.30	0.28
NW38		3/8"	0.30	0.28
NW12		1/2"	0.30	0.28
NW34		3/4"	0.40	0.37
NW1		1"	0.60	0.57
NW114		1.1/4"	1.00	0.95
NW112		1.1/2"	1.20	1.15
NW2		2"	2.35	2.25



Washers
Notched Nylon

Code	S13	BSPP Size	Price 1-99	Price 100+
NOW18		1/8"	0.30	0.28
NOW14		1/4"	0.30	0.28
NOW38		3/8"	0.30	0.28
NOW12		1/2"	0.30	0.28



Washers
Fibre

Code	S13	BSPP Size	Price 1-99	Price 100+
FW18		1/8"	0.15	0.14
FW14		1/4"	0.35	0.32
FW38		3/8"	0.20	0.18
FW12		1/2"	0.30	0.28
FW34		3/4"	0.50	0.47
FW1		1"	0.55	0.52
FW114		1.1/4"	1.90	1.85
FW112		1.1/2"	2.50	2.40

For Bonded Seals



See page 749

Alwitco Mufflers

Ideal for use where space is limited.

Tough and compact, the Bantam™ Muffler is durably constructed of corrosion-resistant metals to withstand shock and continuous heavy duty use under all types of conditions.

The Bantam™ Muffler is designed with a precise distribution of peripheral openings in a zinc-plated steel and brass acoustical element, which softly disperses exhaust air uniformly over a 360˚ pattern. All stainless steel construction is also available for very corrosive or sensitive situations.

Supplied with a standard pipe thread fitting, the Bantam™ Muffler can be attached directly to the exhaust ports of air-operated equipment.

Bantam™ Muffler

Steel



Code	S20	Thread BSPT	Model	Dimensions Hex	Dimensions Length	Item Weight lbs	Flow SCFM	Price 1-9	Price 10+
0554018		R1/8"	B18	.43"	1.37"	.02	44	12.55	11.95
0554028		R1/4"	B28	.56"	1.75"	.05	96	13.60	12.95
0554038		R3/8"	B38	.69"	2.20"	.08	200	18.30	17.40
0554048		R1/2"	B48	.87"	2.75"	.15	304	21.60	20.55
0554068		R3/4"	B68	1.06"	3.15"	.27	560	30.80	29.30
0554088		R1"	B88	1.31"	3.87"	.46	800	38.40	36.50
0554108		R1.1/4"	B108	1.68"	4.50"	.82	1120	59.50	56.55
0554128		R1.1/2"	B128	2.00"	5.00"	1.04	1440	67.50	64.15
0554168		R2"	B168	2.37"	5.00"	1.72	2240	82.65	78.55

Working Temperature

- 10°C to 48°C

Maximum Working Pressure

- 12 bar

Bantam™ Muffler

Steel



Code	S20	Thread NPT	Model	Dimensions Hex	Dimensions Length	Item Weight lbs	Flow SCFM	Price 1-9	Price 10+
0503018		1/8"	B18	.43	1.37	.02	44	61.15	58.10
0503028		1/4"	B28	.56	1.75	.05	96	70.10	66.60
0503038		3/8"	B38	.69	2.20	.08	200	79.95	76.00
0503048		1/2"	B48	.87	2.75	.15	304	107.20	101.85
0503068		3/4"	B68	1.06	3.15	.38	560	183.30	174.15
0503088		1"	B88	1.31	3.87	.46	800	312.15	296.55

Alwitco Mufflers

- Featuring collimator inserts for concentrated air flow.
- Quickly and easily connected to any compressed air source. Concentrates the air stream in a narrow beam over a longer distance, delivering maximum force at a required point.
- Supplied as a complete unit with a cylindrical housing which can be directly attached to compressed air lines properly positioned for parts ejection or packaging requirements. Can be supplied with a standard plastic collimator insert or a special heat-resistant metal collimator insert (for use in locations with extremely high ambient temperatures)
- Separate collimator inserts also are available as a low-cost solution for applications where it is necessary to bore holes directly into a die and insert the collimator to provide exact air thrust.

Working Temperature:

- +10°C to +48°C

Maximum Working Pressure:

- 8.6 bar

Air Ejector Mufflers

NPT



Code	S20	Thread NPT	Model	Dimensions Hex	Dimensions Length	Item Weight lbs	Flow SCFM	Price 1-9	Price 10+
0152018		1/8"	A18	.43	1.37	.02	22	**14.40**	**13.70**
0152028		1/4"	A28	.56	1.75	.04	34	**16.10**	**15.30**
0152038		3/8"	A38	.69	2.20	.06	45	**17.00**	**16.15**
0152048		1/2"	A48	.87	2.75	.11	68	**20.45**	**19.45**
0152068		3/4"	A68	1.06	3.15	.21	75	**29.20**	**27.75**
0152088		1"	A88	1.31	3.87	.36	101	**36.35**	**34.55**

- Directional flow in a compact design.
- Specifically designed for directing the flow of exhaust air in a single direction.
- Discharges exhaust air axially through a unique honey-combed end cap that disperses the air blast and dampens exhaust noise.
- Lightweight and small, standard model is constructed of zinc-plated steel. All stainless steel construction available for very corrosive or sensitive situations. Ideal for use in most locations facing any direction.

Working Temperature:

- +10°C to +48°C

Maximum Working Pressure:

- 8.6 bar

End Flow Mufflers

NPT



Code	S20	Thread NPT	Model	Dimensions Hex	Dimensions Length	Item Weight lbs	Flow SCFM	Price 1-9	Price 10+
0153018		1/8"	D18	.43	1.37	.02	44	**10.55**	**10.05**
0153028		1/4"	D28	.56	1.75	.04	72	**11.75**	**11.20**
0153038		3/8"	D38	.69	2.20	.07	136	**14.95**	**14.25**
0153048		1/2"	D48	.87	2.75	.11	216	**16.10**	**15.30**
0153068		3/4"	D68	1.06	3.15	.22	400	**23.45**	**22.30**
0153088		1"	D88	1.31	3.87	.36	560	**30.05**	**28.55**
0153108		1.1/4"	D108	1.68	4.50	.62	800	**40.40**	**38.40**
0153128		1.1/2"	D128	2.00	5.00	.78	880	**50.10**	**47.60**
0153168		2"	D168	2.37	5.50	1.29	1760	**57.20**	**54.35**

Alwitco Mufflers

"The Original"... provides up to 85% noise reduction and 94% flow factor.

Thoroughly proven on thousands of installations, the world-class Atomuffer® Air Exhaust Muffler expertly reduces Exponentially Perceived Noise (EPNdB) without impeding equipment performance. Its design takes explosive air exhaust noise discharged from valve exhaust ports and muffles it with optimized Constant Velocity (CV) flow factor. Exhaust air flows softly to atmosphere free of noise, oil fog, and contaminates, providing a clean, comfortable and productive work environment.

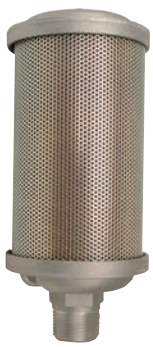
The Air Exhaust Muffler features a unique obstruction-free expansion chamber. Standard Air Exhaust Muffler construction includes aluminium end covers, zinc-plated steel components and a cellulose fibre element.

This design is recommended for general purpose air exhaust application for pressures up to 125 psi.

Air Exhaust Muffler

BSPT

Code	S20	Thread BSPT	Model	Diameter Inches	Item Weight lbs	Flow SCFM	Price 1-9	Price 10+
0121001		R1/8"	B01	1.84"	.19	44	**25.00**	**23.75**
0121002		R1/4"	B02	1.84"	.24	84	**27.35**	**26.00**
0121000		R3/8"	B00	2.59"	.49	192	**31.90**	**30.35**
0121005		R1/2"	B05	3.15"	.79	256	**35.35**	**33.60**
0121007		R3/4"	B07	3.40"	1.04	544	**46.15**	**43.85**
0121010		R1"	B10	3.90"	1.02	800	**53.80**	**51.15**
0121012		R1.1/4"	B12	3.90"	1.45	1360	**52.30**	**49.70**
0121015		R1.1/2"	B15	5.25"	3.27	2080	**84.05**	**79.85**
0121020		R2"	B20	5.25"	4.22	3200	**112.30**	**106.70**
0121030*		R3"	B30	7.00"	13.43	7200	**399.25**	**379.30**
0121040*		R4"	B40	8.00"	14.69	14000	**446.65**	**424.35**
0121060*		R6"	B60	11.00"	29.83	36000	**776.40**	**737.60**



*Multi-chamber muffler

For Pneumatic Valves



See pages 43-65

Silencers & Mufflers



Silencer

Sintered Bronze

Code	S10	Thread BSPP	Price 1-24	Price 25+
7SE		M5	0.75	0.70
1SE		G1/8"	1.35	1.30
2SE		G1/4"	1.75	1.70
3SE		G3/8"	4.20	4.00
4SE		G1/2"	6.20	5.90
5SE		G3/4"	13.35	12.70
6SE		G1"	14.95	14.25



Flat Head Silencer

Sintered Bronze

Code	S10	Thread BSPP	Price 1-24	Price 25+
7SEP		M5	1.35	1.30
1SEP		G1/8"	0.75	0.70
2SEP		G1/4"	1.35	1.30
3SEP		G3/8"	2.25	2.15
4SEP		G1/2"	3.25	3.10
5SEP		G3/4"	5.85	5.60
6SEP		G1"	6.35	6.05



Sintered Silencer

Stainless Steel

Code	S10	Thread BSPP	Price 1-24	Price 25+
1SSE		G1/8"	5.90	5.65
2SSE		G1/4"	8.90	8.50
3SSE		G3/8"	14.75	14.05
4SSE		G1/2"	23.15	22.00
5SSE		G3/4"	34.85	33.15
6SSE		G1"	54.70	52.00



Flush Sintered Silencer

Stainless Steel

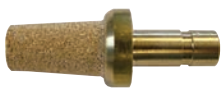
Code	S24	Thread BSPP	Price 1-24	Price 25+
1SPX		G1/8"	11.25	10.70
2SPX		G1/4"	11.90	11.35
3SPX		G3/8"	23.25	22.10
4SPX		G1/2"	34.00	32.30



Flush Sintered Silencer

Bronze

Code	S10	Thread BSPP	Price 1-24	Price 25+
1SP		G1/8"	0.95	0.90
2SP		G1/4"	1.40	1.35
3SP		G3/8"	2.25	2.15
4SP		G1/2"	2.90	2.80
5SP		G3/4"	5.90	5.65
6SP		G1"	9.90	9.45



Push-in Sintered Silencer

Bronze

Code	S19	Stem OD mm	Price 1-24	Price 25+
PSS4		4	2.60	2.50
PSS6		6	3.75	3.60
PSS8		8	5.25	5.00

- Body material: POM
- Inside material: PE

Temperature Range:

- 0°C to +75°C

Working Pressure:

- 10 bar



Plastic Silencers

Metric Push-in

Code	S26	Stem OD mm	Price
PSS-6		6	1.75
PSS-8		8	3.25
PSS-10		10	5.15
PSS-12		12	7.00

Technical Data

- Body: polyethylene
- Filter: polyethylene



Plastic Exhaust Silencer

Polyethylene

Code	S19	Thread BSPP	Price 1-24	Price 25+
1PES		G1/8"	1.70	1.65
2PES		G1/4"	2.10	2.00
3PES		G3/8"	2.85	2.75
4PES		G1/2"	3.75	3.60



Adjustable Exhaust Silencer

Brass

Code	S19	Thread BSPP	Price 1-24	Price 25+
ASR18		G1/8"	1.85	1.80
ASR14		G1/4"	2.70	2.60
ASR38		G3/8"	4.40	4.20
ASR12		G1/2"	6.50	6.20



Exhaust Silencer Restrictor

Brass

Code	S10	Thread BSPP	Price 1-49	Price 50+
ESR18		G1/8"	3.75	3.60
ESR14		G1/4"	4.15	3.95
ESR38		G3/8"	6.35	6.05
ESR12		G1/2"	10.10	9.60



Screwdriver Adjustable Restricting Silencer

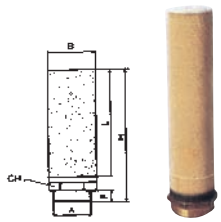
Brass

Code	S10	Thread BSPP	Price
SASM5		M5	3.95
SAS18		G1/8"	6.65
SAS14		G1/4"	7.20
SAS38		G3/8"	16.65
SAS12		G1/2"	15.25
SAS34		G3/4"	34.35
SAS1		G1"	68.15

Silencers & Mufflers

High Volume Exhaust Silencer

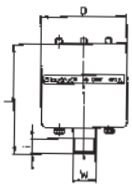
Sintered Bronze



Code	S28	Thread BSPT	B mm	CH mm	F mm	L mm	H mm	Price 1-2	Price 3+
1SL		R1/8"	16	16	6	60	70	5.05	4.80
2SL		R1/4"	16	16	6	60	70	5.20	4.95
3SL		R3/8"	24	24	11	90	105	14.75	14.05
4SL		R1/2"	24	24	11	90	105	14.80	14.10
5SL		R3/4"	48	50	12	190	225	187.00	177.65
6SL		R1"	48	50	12	190	225	186.85	177.55
11SL		R1.1/4"	48	50	15	190	228	187.00	177.65
12SL		R1.1/2"	48	50	15	190	228	182.85	173.75
13SL		R2"	48	65	17	190	230	209.75	199.30

High Volume Exhaust Muffler

Multiple Chamber Type





Code	P14	Thread W BSPP	L mm	I mm	D mm	Flow/Sound Rating m³/h	Flow/Sound Rating db (A)	Price 1-2	Price 3+
391.106		G1/2"	103	14	80	800	88	58.85	55.95
391.108		G3/4"	106	16	80	1000	88	65.25	62.00
391.109		G1"	134	18	110	1400	88	95.15	90.40
391.110		G1.1/4"	140	20	110	1900	89	97.15	92.30
391.111		G1.1/2"	172	24	150	3200	91	163.75	155.60
391.112		G2"	172	24	150	3400	92	165.65	157.40

Muffler

Plastic



Code	S26	Thread BSPP	Price 1-49	Price 50+
1SPL-F		G1/8"	0.60	0.56
2SPL-F		G1/4"	0.95	0.90
3SPL-F		G3/8"	1.10	1.05
4SPL-F		G1/2"	1.30	1.25
5SPL-F		G3/4"	6.80	6.50
6SPL-F		G1"	6.95	6.65

Exhaust Silencer Flow Control

Stainless Steel



Code	S29	Thread BSPP	Price 1-4	Price 5+
1SVEX		G1/8"	22.20	21.10
2SVEX		G1/4"	25.15	23.90

Plastic Thread Cap

Female



Code	S25	Thread BSPP	Price 1-49	Price 50+
1TPF		G1/8"	0.60	0.57
2TPF		G1/4"	1.10	1.05
3TPF		G3/8"	0.60	0.57
4TPF		G1/2"	0.40	0.37
5TPF		G3/4"	1.00	0.95
6TPF		G1"	1.20	1.15

Technical Data

- Body: zinc-plated steel
- Filter: stainless steel



Heavy Duty Muffler

Steel

Code	S19	Thread BSPP	A	CH	Price 1-9	Price 10+
2HDM		G1/4"	33	14	15.15	14.40
3HDM		G3/8"	43.5	18	20.85	19.85
4HDM		G1/2"	52	22	23.95	22.80
5HDM		G3/4"	65	27	46.50	44.20
6HDM		G1"	76.5	33	44.15	41.95

Vyon Silencer

Plastic



Code	S27	Thread BSPP	Price 1-49	Price 50+
7SPL-P		M5	1.15	1.10
1SPL-P		G1/8"	1.40	1.35
2SPL-P		G1/4"	2.15	2.05
3SPL-P		G3/8"	4.40	4.20
4SPL-P		G1/2"	4.65	4.45
5SPL-P		G3/4"	14.90	14.20
6SPL-P		G1"	25.65	24.40

Plastic Thread Cap

Male



Code	S25	Thread BSPP	Price 1-49	Price 50+
1TP		G1/8"	0.40	0.37
2TP		G1/4"	0.25	0.22
3TP		G3/8"	0.25	0.22
4TP		G1/2"	0.40	0.37
5TP		G3/4"	1.00	0.95
6TP		G1"	0.75	0.70

Quick Connect Couplings





436-437 Selection Chart



439-461 Interchange Couplings



462-465 Mould Couplings



466-467 PCL Standard, 60 & 100 Series Couplings



468-469 PCL XF & PF Couplings



470-472 PCL Specialised & Safety Couplings



473-474 Welding Couplings



475 Air Break Components



476-477 1/2" & 3/4" Water System



478-480 Claw Couplings



481 Sandblast Couplings & Nozzle Holders



482-485 Cam & Groove Couplings



486 Cam & Groove Seals



487 IBC Off Load System



488 Lug Type Couplings



489-490 Lever Lock Water Couplings

Selection Chart







Series	13	14	17	19	PCL Standard
Thread Size	1/4"-1/2"	1/4"-1/2"	1/4"-1/2"	1/4"-1/2"	1/4"-1/2"
Hose	6-13mm	6-13mm	6-13mm	6-13mm	5-13mm
Media	Air	Air	Air	Air	Air
Max. Pressure	35 bar	35 bar	15 bar	35 bar	14 bar
Flow Diameter	7.8mm	5mm	5mm	5.5mm	4.8mm
Body Material	Nickel Brass	Brass	Nickel Brass	Nickel Brass	Steel
Seal Material	NBR	NBR	NBR	NBR	NBR
Interchanges with	Rectus 13, Cejn 314, Nitto-Kohki 200	Rectus 14 & 22, Parker 50, Cejn 300, Orion 44150	Rectus 17, Schrader Nw5	Rectus 19, PCL Standard	Rectus 19, PCL Vertex, PCL Airflow
Page	439	440	441	442	446







Series	20	21	21B	21K	22
Thread Size	M5-1/8"	1/8"-3/8"	1/8"-3/8"	1/8"-1/4"	1/4"-1/2"
Hose	3-5mm	4-10mm	4-10mm	4-10mm	6-13mm
Media	Air	Air	Air	Air	Air
Max. Pressure	35 bar	35 bar	35 bar	30 bar	16 bar
Flow Diameter	2.7mm	5mm	5mm	7.8mm	5.5mm
Body Material	Nickel Brass	Nickel Brass	Brass	Brass	Nickel Brass
Seal Material	NBR	NBR	NBR	NBR	NBR
Interchanges with	Rectus 20 & 91, Walther 06-003	Rectus 21 & 90, Camozzi	Rectus 21B	Rectus 21K	Rectus 12 & 22, Cejn 300, Hansen 100, Aro 210, Proquix 1280
Page	443	444	445	446	447







Series	23	24	25	25B	25 Stainless
Thread Size	1/4"-1/2"	1/4"-1/2"	1/4"-1/2"	1/4"-1/2"	1/4"-1/2"
Hose	6-13mm	6-13mm	6-13mm	6-13mm	6-13mm
Media	Air	Air	Air	Air	Air
Max. Pressure	16 bar	35 bar	16 bar	15 bar	35 bar
Flow Diameter	5.5mm	5mm	7.8mm	7.8mm	7.8mm
Body Material	Nickel Brass	Brass	Nickel Brass	Nickel Brass	Stainless
Seal Material	NBR	NBR	NBR	NBR	Stainless
Interchanges with	Rectus 23 & 24, Cejn 310, Atlas Copco, Hansen, US Mil C4109	Rectus 24, Parker PB, Cejn 310, Forster, Hansen 3000	Rectus 25 & 26, Proquix, Cejn 320, Tema 1600, Prevost	Rectus 25 & 26	Rectus 25 & 26, Cejn 320, JWL 540, Tema 1600, Prevost E07, Oetiker C
Page	448	449	450	451	452







Series	26	27	32	33	34
Thread Size	1/4"-1/2"	1/4"-3/4"	1/4"-3/4"	1/4"-1/2"	1/4"-3/4"
Hose	6-13mm	6-19mm	8-19mm	6-13mm	8-19mm
Media	Air	Air	Air	Air	Air
Max. Pressure	35 bar	35 bar	16 bar	16 bar	16 bar
Flow Diameter	7.2mm	10mm	11mm	8mm	11mm
Body Material	Brass	Nickel Brass	Nickel Brass	Nickel Brass	Nickel Brass
Seal Material	NBR	NBR	NBR	NBR	NBR
Interchanges with	Rectus 25 & 26, Parker PE, Cejn 320	Rectus 27, Cejn 410	Rectus 32, Tema 1800	Rectus 33, Atlas Copco, QIC 10	Rectus 34, QIC 15, Atlas Copco
Page	454	457	458	459	460

Selection Chart



Series	PCL 60	PCL 100	PCL XF	PCL PF	PCL Instant Air	65, 66, 67	68
Thread Size	1/4"-1/2"	3/8"-1/2"	1/4"-1/2"	1/4"-1/2"	1/4"-1/2"	1/4"-3/8"	3/8"-3/4"
Hose	6-13mm	9.5-13mm	6-13mm	6-13mm	6-10mm	6-9mm	10-19mm
Media	Air	Air	Air	Air	Air	Oxygen, Acetylene, Propane	Air
Max. Pressure	14 bar	14 bar	35 bar	35 bar	17 bar	35 bar	30 bar
Flow Diameter	7.1mm	10.3mm	7.4mm	5mm	5.6mm	7.4mm	8.5mm
Body Material	Steel	Steel	Steel	Steel	Steel	Brass	Brass
Seal Material	NBR	NBR	NBR	NBR	NBR	NBR	NBR
Interchanges with	N/A	N/A	Cejn 320, Legris 25/26, Norgren 234/238, Rectus 25/26, Schrader InterCheck 35	Cejn 317, Rectus 17, Schrader Standard	N/A	Rectus 65, 66 & 67	Rectus 68, Schrader Heavy Duty
Page	467	467	468	469	470	473	461



Series	86	87	DN8	DN12	1/2" Water Couplings
Thread Size	1/8"-3/8"	1/4"-1/2"	G1/8"-G3/8"	G3/8"-G1/2"	G1/2"-M22
Hose	6-9mm	6-9mm	8, 10 & 12mm	13 & 16mm	1/2"-3/4"
Media	Water	Water	Water	Water	Water
Max. Pressure	10 bar	15 bar	15 bar	15 bar	–
Flow Diameter	6mm	9mm	8mm	12mm	1/2"
Body Material	Brass	Brass	Brass	Brass	Brass
Seal Material	Viton	Viton	FKM	FKM	NBR
Interchanges with	Rectus 86 & 87, Parker Mouldmate, DME, Foster Fjt	Rectus 87, Parker Mouldmate	Staubli RPL8	Staubli RPL12	Dyros, with TST
Page	462	462	464	465	476



Series	3/4" Water Couplings	PCL Safety	25S	Camlock	Claw Couplings
Thread Size	G1/2"-G3/4"	R1/4"-R1/2"	1/4"-1/2"	1/2"-6"	3/8"-1/4"
Hose	1/2"-3/4"	1/4"-3/8"	6-13mm	1/2"-6"	3/8"-1/4"
Media	Water	Air	Air	Fluid	Air/Water
Max. Pressure	–	14 bar	16 bar	–	–
Flow Diameter	3/4"	4.8mm	7.8mm	–	–
Body Material	Brass	Steel	Steel	PP, AL, BR, SS	–
Seal Material	NBR	NBR	NBR	–	NBR
Interchanges with	Dyros, TST, DME, Foster Fjt	Rectus 19, PCL Standard	Rectus 25 & 26, Cejn 320	–	–
Page	477	472	453	482	478



Series	Stainless Claw	Geka Couplings	Water Couplings	Trench Couplings	Sandblast Couplings
Thread Size	3/8"-1/4"	G1/4"-G1/2"	G2"-G6"	G1.1/2"-G4"	1/4"-1.1/2"
Hose	3/8"-1/4"	10-38mm	2"-8"	1.1/2"-4"	6-10mm
Media	Air/Water	Water	Water	Water/Liquids	Blasting Media
Max. Pressure	–	50 bar	–	–	12 bar
Flow Diameter	–	7.5-34mm	50-194mm	–	–
Body Material	–	Brass	Galvanised Steel	Malleable Iron, Alloys	Malleable Iron
Seal Material	NBR	NBR	NBR	Brass or PP	Perbunan
Interchanges with	–	–	Dallai	–	–
Page	480	480	490	489	481



Quality-Line

Quick Connect Coupling Systems for compressed air applications



OptiFlow-Line

Energy efficient Quick Connect Coupling Systems for compressed air and fluid applications



SafeConnect-Line

Quick Connect Coupling Systems for compressed air applications with safety function

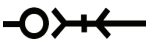


TempTec by LÜDECKE

Quick Connect Coupling Systems for temperature control applications

Interchange Couplings, Series 13

Single Shut-off



DN 7.5

Interchangeability
- Rectus 13
- Cejn 314
- Nitto-Kohki 200

Material
- Body: nickel-plated brass
- Sleeve: nickel-plated
- Seals: nitrile rubber
- Springs/pin: stainless steel
- Plug: nickel-plated steel

Temperature Range:
- -20°C to +80°C

Working Pressure:
- 15 bar (0-230 psi)



Coupling Body
Male Thread



Code N08	Thread BSP	Price
QRC1314M	G1/4"	10.75
QRC1338M	G3/8"	9.20
QRC1312M	G1/2"	10.35

Coupling Plug
Male Thread



Code N08	Thread BSP	Price
QRP1314M	G1/4"	4.15
QRP1338M	G3/8"	4.05
QRP1312M	G1/2"	5.60

Coupling Body
Female Thread



Code N08	Thread BSP	Price
QRC1314F	G1/4"	10.35
QRC1338F	G3/8"	9.25
QRC1312F	G1/2"	11.55

Coupling Plug
Female Thread



Code N08	Thread BSP	Price
QRP1314F	G1/4"	4.00
QRP1338F	G3/8"	3.90
QRP1312F	G1/2"	5.60

Coupling Body
Integral Hose Tail



Code N08	Hose ID	Price
QRC136H	1/4"	9.65
QRC138H	5/16"	11.40
QRC1310H	3/8"	9.80

Coupling Plug
Integral Hose Tail



Code N08	Hose ID	Price
QRP136H	1/4"	2.70
QRP138H	5/16"	3.30
QRP1310H	3/8"	3.30

Interchange Couplings, Series 14

Single Shut-off

DN 5

Interchangeability

- Rectus 14
- Rectus 22
- Cejn 300
- Parker 50
- Orion 44150

Material

- Body: brass
- Sleeve: brass
- Seals: brass
- Springs/pin: stainless steel
- Plug: MS 58

Temperature Range:

- -20°C to +100°C

Working Pressure:

- 0-35 bar (0-500 psi)



Actual Size



Coupling Body

Male Thread

Code N03	Thread BSP	Hex mm	Length mm	Ø mm	Price
QRC1418M	G1/8"	19	44	25	10.55
QRC1414M	G1/4"	19	44	25	9.00
QRC1438M	G3/8"	19	44	25	7.85
QRC1412M	G1/2"	22	47	25	8.45



Coupling Plug

Male Thread

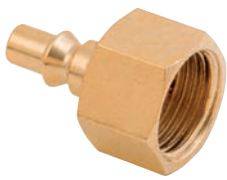
Code N03	Thread BSP	Hex mm	Length mm	Price
QRP1418M	G1/8"	13	33	2.80
QRP1414M	G1/4"	14	37	1.85
QRP1438M	G3/8"	17	37	3.15
QRP1412M	G1/2"	22	43	4.50



Coupling Body

Female Thread

Code N03	Thread BSP	Hex mm	Length mm	Ø mm	Price
QRC1414F	G1/4"	19	42	25	9.10
QRC1438F	G3/8"	19	42	25	9.10
QRC1412F	G1/2"	24	45	25	9.10



Coupling Plug

Female Thread

Code N03	Thread BSP	Hex mm	Length mm	Price
QRP1418F	G1/8"	14	32	2.85
QRP1414F	G1/4"	19	35	2.85
QRP1438F	G3/8"	19	35	3.55
QRP1412F	G1/2"	24	39	4.50



Coupling Body

Integral Hose Tail

Code N03	Hose ID mm	Hose ID	Hex mm	Length mm	Ø mm	Price
QRC146H	6	1/4"	19	55	25	6.45
QRC148H	8	5/16"	19	55	25	6.40
QRC1410H	10	3/8"	19	55	25	6.30
QRC1413H	13	1/2"	19	55	25	12.20



Coupling Plug

Integral Hose Tail

Code N03	Hose ID mm	Hose ID	Length mm	Price
QRP146H	6	1/4"	46	1.80
QRP148H	8	5/16"	46	2.95
QRP1410H	10	3/8"	46	3.20
QRP1413H	13	1/2"	46	4.50

Interchange Couplings, Series 17

Single Shut-off

DN 5

Interchangeability
- Rectus 17
- Schrader NW5

Material
- Body: nickel brass
- Sleeve: steel
- Seals: Buna-N
- Springs/pin: stainless steel
- Plug: steel

Temperature Range:
- -20°C to +100°C

Working Pressure:
- 0-15 bar (0-230 psi)



Actual Size



Coupling Body
Male Thread

Code N03	Thread BSP	Hex mm	Length mm	Ø mm	Price
QRCSC14M	G1/4"	19	58	23	19.25
QRCSC38M	G3/8"	19	58	23	18.50
QRCSC12M	G1/2"	22	58	23	20.60



Coupling Plug
Male Thread

Code N03	Thread BSP	Hex mm	Length mm	Price
QRPSC14M	G1/4"	12	41	4.05
QRPSC38M	G3/8"	14	41	3.65
QRPSC12M	G1/2"	22	46	3.70



Coupling Body
Female Thread

Code N03	Thread BSP	Hex mm	Length mm	Ø mm	Price
QRCSC14F	G1/4"	19	53	23	19.40
QRCSC38F	G3/8"	19	53	23	19.40
QRCSC12F	G1/2"	24	53	23	17.80



Coupling Plug
Female Thread

Code N03	Thread BSP	Hex mm	Length mm	Price
QRPSC14F	G1/4"	17	41	4.30
QRPSC38F	G3/8"	17	41	4.30
QRPSC12F	G1/2"	22	46	3.15



Coupling Body
Integral Hose Tail

Code N03	Hose ID mm	Hose ID inches	Hex mm	Length mm	Ø mm	Price
QRCSC6H	6	1/4"	19	69	23	18.15
QRCSC8H	8	5/16"	19	69	23	18.15
QRCSC10H	10	3/8"	19	69	23	18.15
QRCSC13H	13	1/2"	19	69	23	21.15



Coupling Plug
Integral Hose Tail

Code N03	Hose ID mm	Hose ID inches	Length mm	Price
QRPSC6H	6	1/4"	51	3.95
QRPSC8H	8	5/16"	51	3.85
QRPSC10H	10	3/8"	51	4.55
QRPSC13H	13	1/2"	51	3.15

Interchange Couplings, Series 19

Single Shut-off

DN 5.5

Interchangeability
- Rectus 19
- PCL standard series

Material
- Body: brass nickel-plated
- Sleeve: steel
- Seals: Buna-N
- Springs/pin: stainless steel
- Plug: steel

Temperature Range:
- -20°C to +100°C

Working Pressure:
- 0-35 bar (0-500 psi)



Actual Size



Coupling Body
Male Thread

Code N03	Thread BSP	Hex mm	Length mm	Ø mm	Price
QRC1914M	G1/4"	19	63	23	11.50
QRC1938M	G3/8"	19	63	23	11.50
QRC1912M	G1/2"	22	68	23	11.90



Coupling Plug
Male Thread

Code N03	Thread BSP	Hex mm	Length mm	Price
QRP1914M	G1/4"	17	50	2.55
QRP1938M	G3/8"	19	50	2.55



Coupling Body
Female Thread

Code N03	Thread BSP	Hex mm	Length mm	Ø mm	Price
QRC1914F	G1/4"	19	58	23	11.50
QRC1938F	G3/8"	19	58	23	11.50
QRC1912F	G1/2"	24	60	23	11.50



Coupling Plug
Female Thread

Code N03	Thread BSP	Hex mm	Length mm	Price
QRP1914F	G1/4"	17	47	2.55
QRP1938F	G3/8"	19	47	2.55



Coupling Body
Integral Hose Tail

Code N03	Hose ID mm	Hex mm	Length mm	Ø mm	Price
QRC196H	6	19	74	23	11.50
QRC198H	8	19	74	23	11.50
QRC1910H	10	19	74	23	11.50
QRC1913H	13	19	74	23	11.50

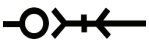


Coupling Plug
Integral Hose Tail

Code N03	Hose ID mm	Length mm	Price
QRP196H	6	58	2.55
QRP198H	8	58	2.55
QRP1910H	10	58	2.55

Interchange Couplings, Series 20

Single Shut-off



DN 2.7

Interchangeability
- Rectus 20 & 91
- Walther 06-003

Material
- Body: brass
- Sleeve: steel
- Seals: Buna-N
- Springs/pin: stainless steel
- Plug: brass

Temperature Range:
- -20°C to +100°C

Working Pressure:
- 0-15 bar (0-230 psi)



Actual Size

Coupling Body
Male Thread



Code N03	Thread BSP	Hex mm	Length mm	Ø mm	Price
QRC20M5M	M5	9	26	10	8.70
QRC2018M	G1/8"	11	28	10	10.50

Coupling Plug
Male Thread



Code N03	Thread BSP	Hex mm	Length mm	Price
QRP20M5M	M5	7	18	2.45
QRP2018M	G1/8"	11	20	3.20

Coupling Body
Female Thread



Code N03	Thread BSP	Hex mm	Length mm	Ø mm	Price
QRC20M5F	M5	9	26	10	10.35
QRC2018F	G1/8"	12	28	10	9.55

Coupling Plug
Female Thread



Code N03	Thread BSP	Hex mm	Length mm	Price
QRP20M5F	M5	7	17	2.95
QRP2018F	G1/8"	12	19	3.25

Coupling Body
Integral Hose Tail



Code N03	Hose ID mm	Hex mm	Length mm	Price
QRC203H	3	35	10	9.70
QRC204H	4	35	10	10.60
QRC205H	5	35	10	11.55

Coupling Plug
Integral Hose Tail



Code N03	Hose ID mm	Length mm	Price
QRP203H	3	24	1.85
QRP204H	4	24	2.10
QRP205H	5	24	1.90

Coupling Body
Integral Tube Fitting



Code N03	Tube Size mm	Length mm	Ø mm	Price
QRC203P	5 x 3	34	10	11.90
QRC204P	6 x 4	34	10	13.05

Coupling Plug
Integral Tube Fitting



Code N03	Tube Size mm	Hex mm	Length mm	Price
QRP203P	3 x 5	8	25	4.60
QRP204P	4 x 6	8	25	5.00

Interchange Couplings, Series 21

Single Shut-off

DN 5

Interchangeability
- Rectus 21 & 90
- Camozzi

Material
- Body: nickel-plated brass
- Sleeve: nickel-plated brass
- Seals: Buna-N
- Springs/pin: stainless steel
- Plug: nickel-plated brass

Temperature Range:
- -20°C to +100°C

Working Pressure:
- 0-35 bar (0-500 psi)



Actual Size

Coupling Body

Male Thread, Nickel-plated



Code N03	Thread BSP	Hex mm	Length mm	Ø mm	Price
QRC2118MN	G1/8"	14	36	16	8.55
QRC2114MN	G1/4"	17	38	16	8.90
QRC2138MN	G3/8"	19	38	16	9.00

Coupling Plug

Male Thread, Nickel-plated



Code N03	Thread BSP	Hex mm	Length mm	Price
QRP2118MN	G1/8"	12	28	2.35
QRP2114MN	G1/4"	15	28	2.75
QRP2138MN	G3/8"	17	28	2.95

Coupling Body

Female Thread, Nickel-plated



Code N03	Thread BSP	Hex mm	Length mm	Ø mm	Price
QRC2118FN	G1/8"	14	37	16	9.10
QRC2114FN	G1/4"	17	38	16	11.25
QRC2138FN	G3/8"	19	38	16	9.80

Coupling Plug

Female Thread, Nickel-plated



Code N03	Thread BSP	Hex mm	Length mm	Price
QRP2118FN	G1/8"	14	25	2.15
QRP2114FN	G1/4"	17	26	2.95
QRP2138FN	G3/8"	19	27	2.75

Coupling Body

Integral Hose Tail, Nickel-plated



Code N03	Hose ID mm	Hose ID	Hex mm	Length mm	Ø mm	Price
QRC214HN	4	1/6"	14	46	16	7.95
QRC216HN	6	1/4"	14	46	16	8.40
QRC218HN	8	5/16"	14	46	16	7.95

Coupling Plug

Integral Hose Tail, Nickel-plated



Code N03	Hose ID mm	Hose ID	Hex mm	Length mm	Price
QRP214HN	4	5/32"	32	9	2.75
QRP215HN	5	3/16"	32	9	2.60
QRP216HN	6	1/4"	32	9	2.85
QRP218HN	8	5/16"	32	9	2.60

Coupling Body

Integral Tube Fitting, Nickel-plated



Code N03	Tube mm	Hex mm	Length mm	Ø mm	Price
QRC214PN	4 x 6	14	41	16	10.80
QRC216PN	6 x 8	14	41	16	13.40

Coupling Plug

Integral Tube Fitting, Nickel-plated



Code N03	Tube mm	Hex mm	Length mm	Price
QRP214PN	4 x 6	32	10	5.50
QRP216PN	6 x 8	32	12	6.20

Interchange Couplings, Series 21B

Double Shut-off



DN 5

Interchangeability
- Rectus 21B

Material
- Body: brass
- Sleeve: brass
- Seals: Buna-N
- Springs/pin: stainless steel
- Plug: brass

Temperature Range:
- -20°C to +100°C

Working Pressure:
- 0-15 bar (0-230 psi)



Actual Size



Coupling Body
Male Thread

Code N03	Thread BSP	Hex mm	Length mm	Ø mm	Price
QRC21B18M	G1/8"	14	36	16	9.05
QRC21B14M	G1/4"	17	38	16	9.45
QRC21B38M	G3/8"	19	38	16	9.10



Coupling Plug
Male Thread

Code N03	Thread BSP	Hex mm	Length mm	Price
QRP21B18M	G1/8"	14	40	9.05
QRP21B14M	G1/4"	17	42	9.05
QRP21B38M	G3/8"	19	42	8.55



Coupling Body
Female Thread

Code N03	Thread BSP	Hex mm	Length mm	Ø mm	Price
QRC21B18F	G1/8"	14	36	16	11.10
QRC21B14F	G1/4"	17	38	16	9.90
QRC21B38F	G3/8"	19	38	16	11.60



Coupling Plug
Female Thread

Code N03	Thread BSP	Hex mm	Length mm	Price
QRP21B18F	G1/8"	14	40	9.05
QRP21B14F	G1/4"	17	42	8.10
QRP21B38F	G3/8"	19	42	9.30



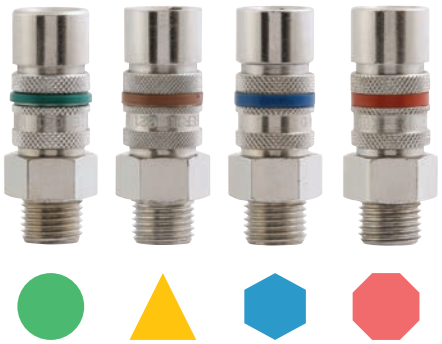
Coupling Plug
Integral Hose Tail

Code N03	Hose ID mm	Hose ID	Hex mm	Length mm	Price
QRP21B4H	4	5/32"	14	50	8.55
QRP21B6H	6	1/4"	14	50	8.45
QRP21B8H	8	5/16"	14	50	8.55
QRP21B10H	10	3/8"	14	50	8.30

Interchange Couplings, Series 21K

Single Shut-off

DN 5



Material

- Body: brass
- Sleeve: aluminium (coloured)
- Seals: Perbunan (N)
- Springs/pin: stainless steel
- Plug: brass MS 58

Temperature Range

- -20°C to +100°C

Working Pressure

- 0-35 bar (0-500 psi)



Coupling Plug

Male Thread

Code N03	Thread BSP	Colour	Hex mm	Length mm	Price
QRP2118MGN	G1/8"		17	40	12.40
QRP2114MGN	G1/4"		17	42	12.40
QRP2118MBN	G1/8"		17	40	12.40
QRP2114MBN	G1/4"		17	42	12.40
QRP2118MBL	G1/8"		17	40	12.40
QRP2114MBL	G1/4"		17	42	12.40
QRP2118MRD	G1/8"		17	40	12.40
QRP2114MRD	G1/4"		17	42	12.90



Coupling Body

Male Thread

Code N03	Thread BSP	Colour	Hex mm	Length mm	Ø mm	Price
QRC2118MGN	G1/8"		14	47	16	21.45
QRC2114MGN	G1/4"		17	47	16	21.45
QRC2118MBN	G1/8"		14	47	16	21.45
QRC2114MBN	G1/4"		17	47	16	21.45
QRC2118MBL	G1/8"		14	47	16	21.45
QRC2114MBL	G1/4"		17	47	16	21.45
QRC2118MRD	G1/8"		14	47	16	21.45
QRC2114MRD	G1/4"		17	47	16	21.45



Coupling Plug

Female Thread

Code N03	Thread BSP	Colour	Hex mm	Length mm	Price
QRP2118FGN	G1/8"		17	39	12.40
QRP2114FGN	G1/4"		17	39	12.40
QRP2118FBN	G1/8"		17	39	12.40
QRP2114FBN	G1/4"		17	39	12.40
QRP2118FBL	G1/8"		17	39	12.40
QRP2114FBL	G1/4"		17	15	12.40
QRP2118FRD	G1/8"		17	39	12.40
QRP2114FRD	G1/4"		17	39	12.40



Coupling Body

Female Thread

Code N03	Thread BSP	Colour	Hex mm	Length mm	Ø mm	Price
QRC2118FGN	G1/8"		14	47	16	21.45
QRC2114FGN	G1/4"		17	47	16	21.45
QRC2118FBN	G1/8"		14	47	16	21.45
QRC2114FBN	G1/4"		17	47	16	21.45
QRC2118FBL	G1/8"		14	47	16	21.45
QRC2114FBL	G1/4"		17	47	16	21.45
QRC2118FRD	G1/8"		14	47	16	21.45
QRC2114FRD	G1/4"		17	47	16	21.45



Coupling Plug

Integral Hose Tail

Code N03	Hose ID mm	Colour	Length mm	Ø mm	Price
QRP214HGN	4		49	15	11.75
QRP216HGN	6		49	15	11.75
QRP214HBN	4		49	15	11.75
QRP216HBN	6		49	15	11.75
QRP214HBL	4		49	15	11.75
QRP216HBL	6		49	15	11.75
QRP214HRD	4		49	15	11.75
QRP216HRD	6		49	15	11.75

Interchange Couplings, Series 22

Single Shut-off

DN 5.5

Interchangeability

- Rectus 14 & 22
- Cejn 300
- JWL 512
- Hansen 100
- Aro 210
- Proquix 1280 & 1281
- Orion 44150 & 44515

Material

- Body: nickel-plated steel
- Sleeve: nickel-plated steel
- Seals: nitrile rubber
- Springs/pin: stainless spring wire
- Plug: nickel-plated steel

Temperature Range:

- -20°C to +60°C

Working Pressure:

- 0-35 bar (0-500 psi)





Coupling Body

Male Thread

Code N02	Thread BSP	Price
QRC2214BM	G1/4"	17.40
QRC2238BM	G3/8"	17.50
QRC2212BM	G1/2"	17.80



Coupling Plug

Male Thread

Code N02	Thread BSP	Price
QRP2214M	G1/4"	3.40
QRP2238M	G3/8"	3.40
QRP2212M	G1/2"	4.35



Coupling Body

Female Thread

Code N02	Thread BSP	Price
QRC2214BF	G1/4"	17.80
QRC2238BF	G3/8"	18.25
QRC2212BF	G1/2"	18.75



Coupling Plug

Female Thread

Code N02	Thread BSP	Price
QRP2214F	G1/4"	3.30
QRP2238F	G3/8"	3.35
QRP2212F	G1/2"	4.55



Coupling Body

Integral Hose Tail

Code N02	Hose ID mm	Hose ID	Price
QRC226BH	6	1/4"	21.00
QRC228BH	8	5/16"	17.95
QRC2210BH	10	3/8"	18.45
QRC2213BH	13	1/2"	18.35



Coupling Plug

Integral Hose Tail

Code N02	Hose ID mm	Hose ID	Price
QRP226H	6	1/4"	3.05
QRP228H	8	5/16"	3.15
QRP2210H	10	3/8"	4.35
QRP2213H	13	1/2"	4.50

Interchange Couplings, Series 23

Single Shut-off

DN 7.8

Interchangeability

- Rectus 23 & 24
- Cejn 300
- JWL 511
- Atlas Copco 18
- Hansen 1000
- US Mil C4109
- ISO-6150B-1/4”

Material

- Body: nickel-plated steel
- Sleeve: nickel-plated steel
- Seals: nitrile rubber
- Springs/pin: stainless steel
- Plug: stainless steel

Temperature Range:

- -20°C to +60°C

Working Pressure:

- 0-16 bar (0-230 psi)





Coupling Body

Male Thread

Code N02	Thread BSP	Price
QRC2314BM	G1/4”	19.05
QRC2338BM	G3/8”	19.90
QRC2312BM	G1/2”	17.95



Coupling Plug

Male Thread

Code N02	Thread BSP	Price
QRP2314M	G1/4”	3.45
QRP2338M	G3/8”	3.45
QRP2312M	G1/2”	4.20



Coupling Body

Female Thread

Code N02	Thread BSP	Price
QRC2314BF	G1/4”	17.80
QRC2338BF	G3/8”	18.20
QRC2312BF	G1/2”	17.90



Coupling Plug

Female Thread

Code N02	Thread BSP	Price
QRP2314F	G1/4”	3.55
QRP2338F	G3/8”	3.10
QRP2312F	G1/2”	4.55



Coupling Body

Integral Hose Tail

Code N02	Hose ID mm	Hose ID	Price
QRC236BH	6	1/4”	20.25
QRC238BH	8	5/16”	21.00
QRC2310BH	10	3/8”	20.25
QRC2313BH	13	1/2”	20.65



Coupling Plug

Integral Hose Tail

Code N02	Hose ID mm	Hose ID	Price
QRP236H	6	1/4”	3.20
QRP238H	8	5/16”	3.05
QRP2310H	10	3/8”	4.20
QRP2313H	13	1/2”	4.65

Interchange Couplings, Series 24

Single Shut-off

DN 5.5

Interchangeability

- Rectus 24
- Cejn 310
- Aro 210
- Parker PB
- Foster
- Hansen 3000

Material

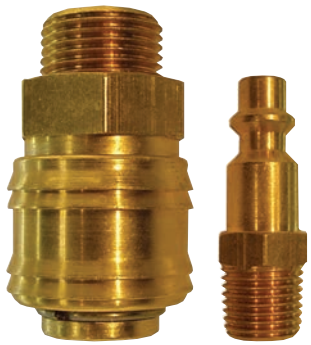
- Body: brass
- Sleeve: brass
- Seals: Buna-N
- Springs/pin: stainless steel
- Plug: stainless steel

Temperature Range:

- -20°C to +100°C

Working Pressure:

- 0-35 bar (0-500 psi)





Coupling Body

Male Thread

Code N03	Thread BSP	Hex mm	Length mm	Ø mm	Price
QRC2418M	G1/8"	21	41	25	11.05
QRC2414M	G1/4"	21	41	25	8.30
QRC2438M	G3/8"	21	41	25	8.30
QRC2412M	G1/2"	24	44	25	8.10



Coupling Plug

Male Thread

Code N03	Thread BSP	Hex mm	Length mm	Price
QRP2418M	G1/8"	14	36	2.90
QRP2414M	G1/4"	14	36	2.65
QRP2438M	G3/8"	17	36	3.35
QRP2412M	G1/2"	22	36	4.80



Coupling Body

Female Thread

Code N03	Thread BSP	Hex mm	Length mm	Ø mm	Price
QRC2414F	G1/4"	21	41	25	7.95
QRC2438F	G3/8"	21	41	25	8.90
QRC2412F	G1/2"	24	44	25	8.30



Coupling Plug

Female Thread

Code N03	Thread BSP	Hex mm	Length mm	Price
QRP2418F	G1/8"	14	34	2.50
QRP2414F	G1/4"	17	36	2.60
QRP2438F	G3/8"	19	36	3.35
QRP2412F	G1/2"	24	40	4.80



Coupling Body

Integral Hose Tail

Code N03	Hose ID mm	Hose ID	Hex mm	Length mm	Ø mm	Price
QRC246H	6	1/4"	21	55	25	7.65
QRC248H	8	5/16"	21	55	25	8.65
QRC2410H	10	3/8"	21	55	25	9.00
QRC2413H	13	1/2"	21	55	25	9.00



Coupling Plug

Integral Hose Tail

Code N03	Hose ID mm	Hose ID	Length mm	Price
QRP246H	6	1/4"	50	1.80
QRP248H	8	5/16"	50	2.55
QRP249H	9	3/8"	50	1.85
QRP2413H	13	1/2"	50	3.30

Interchange Couplings, Series 25

Single Shut-off

DN 7.8

Interchangeability

- Rectus 25 & 26
- Cejn 320
- JWL 510
- Proquix 1420 & 1421
- Tema 1600
- Prevost E07
- Oetiker C

Material

- Body: nickel-plated steel
- Sleeve: nickel-plated steel
- Seals: stainless steel
- Springs/pin: stainless steel
- Plug: nickel-plated steel

Temperature Range:

- -20°C to +60°C

Working Pressure:

- 0-16 bar (0-230 psi)





Coupling Body

Male Thread

Code N02	Thread BSP	Price
QRC2514BM	G1/4"	18.00
QRC2538BM	G3/8"	18.00
QRC2512BM	G1/2"	18.00



Coupling Plug

Male Thread

Code N02	Thread BSP	Price
QRP2518M	G1/8"	3.45
QRP2514M	G1/4"	3.45
QRP2538M	G3/8"	3.45
QRP2512M	G1/2"	3.45



Coupling Body

Female Thread

Code N02	Thread BSP	Price
QRC2514BF	G1/4"	18.80
QRC2538BF	G3/8"	18.80
QRC2512BF	G1/2"	18.80



Coupling Plug

Female Thread

Code N02	Thread BSP	Price
QRP2518F	G1/8"	3.30
QRP2514F	G1/4"	3.30
QRP2538F	G3/8"	3.30
QRP2512F	G1/2"	3.65



Coupling Body

Integral Hose Tail

Code N02	Hose ID mm	Hose ID	Price
QRC256BH	6	1/4 "	19.40
QRC258BH	8	5/16"	19.40
QRC2510BH	10	3/8"	19.40
QRC2513BH	13	1/2"	19.40



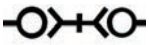
Coupling Plug

Integral Hose Tail

Code N02	Hose ID mm	Hose ID	Price
QRP256H	6	1/4"	3.00
QRP258H	8	5/16"	3.00
QRP2510H	10	3/8"	4.00
QRP2513H	13	1/2"	4.60

Interchange Couplings, Series 25B

Double Shut-off



DN 7.8

Interchangeability
- Rectus 25 & 26B

Material
- Body: nickel-brass
- Sleeve: nickel-brass
- Seals: Buna-N
- Springs/pin: stainless steel
- Plug: brass

Temperature Range:
- -20°C to +100°C

Working Pressure:
- 0-15 bar (0-230 psi)



Coupling Body
Male Thread



Code N03	Thread BSP	Hex mm	Length mm	Ø mm	Price
QRC25B14M	G1/4"	19	58	23	25.00
QRC25B38M	G3/8"	19	58	23	25.00
QRC25B12M	G1/2"	22	59	23	25.00

Coupling Plug
Male Thread



Code N03	Thread BSP	Hex mm	Length mm	Price
QRP25B14M	G1/4"	22	43	8.35
QRP25B38M	G3/8"	22	43	8.35
QRP25B12M	G1/2"	22	46	8.95

Coupling Body
Female Thread



Code N03	Thread BSP	Hex mm	Length mm	Ø mm	Price
QRC25B14F	G1/4"	19	55	23	25.00
QRC25B38F	G3/8"	19	55	23	25.00
QRC25B12F	G1/2"	24	57	23	25.00

Coupling Plug
Female Thread



Code N03	Thread BSP	Hex mm	Length mm	Price
QRP25B14F	G1/4"	22	43	8.35
QRP25B38F	G3/8"	22	43	8.35
QRP25B12F	G1/2"	24	46	8.95

For Rubber Compressed Air Hose



See page 517

Coupling Plug
Integral Hose Tail



Code N02	Hose ID mm	Hose ID	Hex mm	Length mm	Price
QRP25B6H	6	1/4"	21	60	9.40
QRP25B8H	8	5/16"	21	60	9.40
QRP25B10H	10	3/8"	21	60	10.35
QRP25B13H	13	1/2"	21	60	10.35

Interchange Couplings, Stainless Steel Series 25

Single Shut-off

DN 7.8

Interchangeability

- Rectus 25 & 26
- Cejn 320
- JWL 540
- Tema 1600
- Prevost E07
- Oetiker C

Material

- Body: stainless steel
- Sleeve: stainless steel
- Seals: nitrile rubber
- Springs/pin: stainless steel
- Plug: stainless steel

Temperature Range:

- -20°C to +160°C

Working Pressure:

- 35 bar (0-500 psi)





Coupling Body

Male Thread

Code N02	Thread BSP	Price
QRC25SS14M	G1/4"	77.10
QRC25SS38M	G3/8"	67.05
QRC25SS12M	G1/2"	81.15



Coupling Plug

Male Thread

Code N02	Thread BSP	Price
QRP25SS14M	G1/4"	15.15
QRP25SS38M	G3/8"	15.60
QRP25SS12M	G1/2"	17.55



Coupling Body

Female Thread

Code N02	Thread BSP	Price
QRC25SS14F	G1/4"	75.75
QRC25SS38F	G3/8"	78.90
QRC25SS12F	G1/2"	79.10

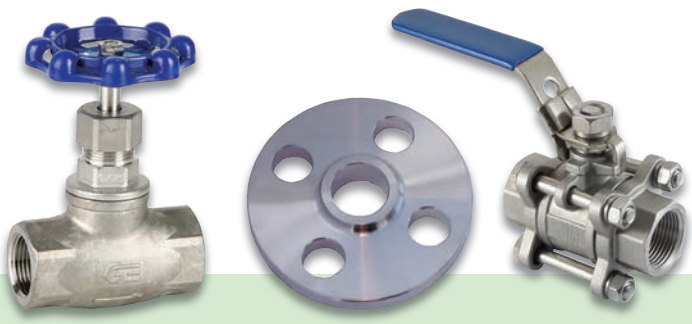


Coupling Plug

Female Thread

Code N02	Thread BSP	Price
QRP25SS14F	G1/4"	17.35
QRP25SS38F	G3/8"	17.75
QRP25SS12F	G1/2"	18.45

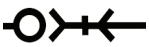
For Stainless Steel Products



See section 13

Interchange Couplings, Euro Safety Couplings Series 25S

Single Shut-off



DN 7.8

Interchangeability
- Rectus 25 & 26
- Cejn 320
- JWL 570

Material
- Body: brass nickel-plated
- Sleeve: plastic
- Seals: nitrile
- Springs/pin: stainless steel
- Plug: steel nickel-plated

Working Temperature:
- +60°C

Working Pressure:
- 16 bar (0-232 psi)





Euro Safety Coupling
Male Thread

Code N02	Thread BSP	Price
QRC2514MS	G1/4"	20.50
QRC2538MS	G3/8"	20.50
QRC2512MS	G1/2"	20.50



Euro Safety Coupling
Integral Hose Tail

Code N02	Hose ID mm	Hose ID	Price
QRC256HS	6	1/4"	20.50
QRC258HS	8	5/16"	20.50
QRC2510HS	10	3/8"	20.50
QRC2513HS	12	1/2"	20.50



Euro Safety Coupling
Female Thread

Code N02	Thread BSP	Price
QRC2514FS	G1/4"	20.50
QRC2538FS	G3/8"	20.50
QRC2512FS	G1/2"	20.50

HSE guide 39, paragraph 101 states

Coupling a portable tool to the outlet point is usually achieved by use of a quick-acting connector. The connector should be designed so that when disconnected it automatically seals the air pressure on the upstream side and slowly vents the air pressure on the downstream side. For all hoses above 10 mm bore, more than 10 m long or subject to a pressure exceeding 7 bar, the connector should have a self-venting socket which releases the downstream pressure before diconnection is possible. Alternatively, a plug with a controlled venting action should be used. These safety features prevent inadvertent tool operation and uncontrolled whipping of the hose when its inlet end is uncoupled from the socket. Another way of reducing 'whipping' or 'snaking' is to fit emergency shut-off valves, hose rupture valves or air fuses as close as practicle to the connector. The valves will close or reduce flow to a very low level in the event of excessive air-flow conditions caused by a failure of the hose (see also paragraph 83 about fitting of isolation valves). The same requirement could be necessary when using plastic tubing.

Use standard Series 25 plugs (see page 450).

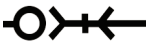
For Safety Excess Valves
(Air Fuses)



See page 241

Interchangeable Couplings, Series 26

Single Shut-off



DN 7.2

Interchangeability
- Rectus 25 & 26
- Cejn 320
- Parker PE

Material
- Body: brass
- Sleeve: brass
- Seals: Buna-N
- Springs/pin: stainless steel
- Plug: steel nickel-plated

Temperature Range:
- -20°C to +100°C

Working Pressure:
- 0-35 bar (0-500 psi)





Brass Euro Coupling
Male Thread

Code N03	Thread BSP	Hex mm	Length mm	Ø mm	Price
QRC2614M	G1/4"	21	41	25	7.35
QRC2638M	G3/8"	21	43	25	7.25
QRC2612M	G1/2"	24	44	25	6.95



Brass Euro Coupling
Female Thread

Code N03	Thread BSP	Hex mm	Length mm	Ø mm	Price
QRC2614F	G1/4"	21	41	25	7.85
QRC2638F	G3/8"	21	41	25	7.55
QRC2612F	G1/2"	24	41	25	6.95



Brass Euro Coupling
Hose Tail

Code N03	Hose ID mm	Hose ID	Hex mm	Length mm	Ø mm	Price
QRC266H	6	1/4"	21	55	25	6.50
QRC268H	8	5/16"	21	55	25	7.45
QRC2610H	10	3/8"	21	55	25	7.85
QRC2613H	13	1/2"	24	55	25	8.45



Brass Euro Coupling
Tube Fitting

Code N03	Tube ID mm	Tube OD mm	Hex mm	Lenght mm	Ø mm	Price
QRC266P	6	8	21	50	25	10.75
QRC268P	8	10	21	54	25	9.65
QRC269P	9	12	21	63	25	9.80

For Reinforced PVC Hose



See pages 494-495

Interchange Couplings, Series 26



Brass Euro Coupling Plug

Male Thread

Code N03	Thread BSP	Hex mm	Length mm	Price
QRP2618M	G1/8"	13	33	1.65
QRP2614M	G1/4"	14	37	1.90
QRP2638M	G3/8"	17	37	2.05
QRP2612M	G1/2"	22	43	3.35



Brass Euro Coupling Plug

Female Thread

Code N03	Thread BSP	Hex mm	Length mm	Price
QRP2618F	G1/8"	13	33	1.65
QRP2614F	G1/4"	14	37	1.90
QRP2638F	G3/8"	17	37	2.25
QRP2612F	G1/2"	22	43	3.35



Brass Euro Coupling Plug

Hose Tail

Code N03	Hose ID mm	Hose ID	Length mm	Price
QRP266H	6	1/4"	46	1.25
QRP268H	8	5/16"	46	1.40
QRP2610H	10	3/8"	46	1.45
QRP2613H	13	1/2"	46	1.80



Brass Euro Coupling Plug

Tube Fitting

Code N03	Tube ID mm	Tube OD mm	Length mm	Price
QRP264P	4	6	34	3.75
QRP266P	6	8	34	3.75
QRP268P	8	10	42	4.95
QRP269P	9	12	42	5.15



Brass Euro Twin Coupling

Female Thread

Code N03	Thread BSP	Price
QRYC2638F	G3/8"	20.05
QRYC2612F	G1/2"	25.20



Brass Euro Triple Coupling

Female Thread

Code N03	Thread BSP	Price
QRTC2638F	G3/8"	30.85
QRTC2612F	G1/2"	39.65

For Air Tools



See section 15

Rely on Reelcraft



Most complete line of spring driven hose reels

NEW!



Heavy duty hose reels
Series HD70000
Holds up to 30m of hose



Value series hose reels
Series LC
Available in stainless steel

Planned Stock Reels
Reel models listed with an icon in our catalog or website are planned stock and should be able to ship same day or next day for orders of 5 or less.

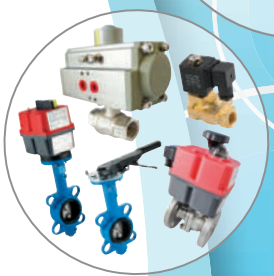
REELCRAFT®

www.reelcraft.com +44 (0) 1536 406999

TECHMATIC™







Quality is our No.1 Responsibility

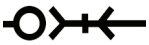
The Techmatic™ range has been developed based on our extensive industry knowledge and experience.

Each product has been carefully selected with these three fundamentals:

Quality, Price and Availability

Interchange Couplings, Series 27

Single Shut-off



DN 10

Interchangeability
- Rectus 27
- Cejn 410

Material
- Body: brass nickel-plated
- Sleeve: steel nickel-plated
- Seals: Buna-N
- Springs/pin: stainless steel
- Plug: steel nickel-plated

Temperature Range:
- -20°C to +100°C

Working Pressure:
- 0-35 bar (0-500 psi)





Coupling Body
Male Thread

Code N46	Thread BSP	Hex mm	Length mm	Ø mm	Price
QRC2714M	G1/4"	24	63	28	29.20
QRC2738M	G3/8"	24	63	28	29.20
QRC2712M	G1/2"	24	65	28	29.20
QRC2734M	G3/4"	27	65	28	29.20



Coupling Plug
Male Thread

Code N46	Thread BSP	Hex mm	Length mm	Price
QRP2714M	G1/4"	17	43	5.50
QRP2738M	G3/8"	17	43	5.50
QRP2712M	G1/2"	22	48	5.50
QRP2734M	G3/4"	27	50	7.60



Coupling Body
Female Thread

Code N46	Thread BSP	Hex mm	Length mm	Ø mm	Price
QRC2714F	G1/4"	24	57	28	29.20
QRC2738F	G3/8"	24	57	28	29.20
QRC2712F	G1/2"	24	57	28	29.20
QRC2734F	G3/4"	30	58	28	29.20



Coupling Plug
Female Thread

Code N46	Thread BSP	Hex mm	Length mm	Price
QRP2714F	G1/4"	17	40	5.50
QRP2738F	G3/8"	19	40	5.50
QRP2712F	G1/2"	24	46	5.50
QRP2734F	G3/4"	32	46	5.50



Coupling Body
Integral Hose Tail

Code N46	Hose ID mm	Hose ID	Hex mm	Length mm	Ø mm	Price
QRC279H	9	-	24	75	28	29.20
QRC2710H	10	3/8"	24	75	28	29.20
QRC2713H	13	1/2"	24	75	28	29.20
QRC2716H	16	5/8"	24	75	28	29.20
QRC2719H	19	3/4"	24	75	28	29.20



Coupling Plug
Integral Hose Tail

Code N46	Hose ID mm	Hose ID	Length mm	Price
QRP279H	9	-	48	5.50
QRP2710H	10	3/8"	48	5.50
QRP2713H	13	1/2"	48	5.50
QRP2716H	16	5/8"	48	5.50
QRP2719H	19	3/4"	48	5.50

Interchange Couplings, Series 32

Single Shut-off

DN 10

Interchangeability

- Rectus 32
- Cejn 408
- JWL 604
- Tema 1800

Material

- Body: brass nickel-plated
- Sleeve: brass nickel-plated
- Seals: nitrile
- Springs/pin: stainless steel
- Plug: steel nickel-plated

Temperature Range:

- -20°C to +60°C

Working Pressure:

- 16 bar (0-232 psi)





Coupling Body

Male Thread

Code N02	Thread BSP	Price
QRC3214M	G1/4"	17.80
QRC3238M	G3/8"	17.80
QRC3212M	G1/2"	17.80
QRC3234M	G3/4"	17.80



Coupling Body

Female Thread

Code N02	Thread BSP	Price
QRC3214F	G1/4"	17.80
QRC3238F	G3/8"	17.80
QRC3212F	G1/2"	17.80



Coupling Body

Integral Hose Tail

Code N02	Hose ID mm	Hose ID	Price
QRC3210H	10	3/8"	17.80
QRC3213H	13	1/2"	17.80
QRC3216H	16	5/8"	17.80
QRC3219H	19	3/4"	17.80



Coupling Plug

Male Thread

Code N02	Thread BSP	Price
QRP3214M	G1/4"	3.15
QRP3238M	G3/8"	3.15
QRP3212M	G1/2"	3.15
QRP3234M	G3/4"	3.15



Coupling Plug

Female Thread

Code N02	Thread BSP	Price
QRP3214F	G1/4"	3.15
QRP3238F	G3/8"	3.15
QRP3212F	G1/2"	3.15



Coupling Plug

Integral Hose Tail

Code N02	Hose ID mm	Hose ID	Price
QRP3210H	10	3/8"	3.15
QRP3213H	13	1/2"	3.15
QRP3216H	16	5/8"	3.15
QRP3219H	19	3/4"	3.15



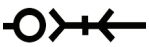
Anti-whip Coupling Plug

Integral Hose Tail

Code N02	Hose ID mm	Hose ID	Price
674323	8	5/16"	20.75
674324	10	3/8"	20.75
674325	13	1/2"	20.75
674326	16	5/8"	20.75
674327	19	3/4"	20.75

Interchange Couplings, Series 33

Single Shut-off



DN 8

Interchangeability
- Rectus 33
- JWL 515
- Atlas Copco QIC 10

Material
- Body: brass nickel-plated
- Sleeve: brass nickel-plated
- Seals: brass nickel-plated
- Springs/pin: stainless steel
- Plug: steel zinc plated

Temperature Range:
- -20°C to +60°C

Working Pressure:
- 16 bar (0-232 psi)





Coupling Body
Male Thread

Code N26	Thread BSP	Price
QRC3314BM	G1/4"	17.30
QRC3338BM	G3/8"	17.30
QRC3312BM	G1/2"	18.20



Coupling Plug
Male Thread

Code N26	Thread BSP	Price
QRP3314BM	G1/4"	3.35
QRP3338BM	G3/8"	3.35
QRP3312BM	G1/2"	4.20



Coupling Body
Female Thread

Code N26	Thread BSP	Price
QRC3314BF	G1/4"	17.80
QRC3338BF	G3/8"	17.80
QRC3312BF	G1/2"	18.30



Coupling Plug
Female Thread

Code N26	Thread BSP	Price
QRP3314BF	G1/4"	3.25
QRP3338BF	G3/8"	3.35
QRP3312BF	G1/2"	4.40



Coupling Body
Integral Hose Tail

Code N26	Hose ID mm	Hose ID	Price
QRC336BH	6	1/4"	17.30
QRC338BH	8	5/16"	17.30
QRC3310BH	10	3/8"	17.80
QRC3313BH	13	1/2"	17.80

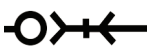


Coupling Plug
Integral Hose Tail

Code N26	Hose ID mm	Hose ID	Price
QRP336BH	6	1/4"	3.70
QRP338BH	8	5/16"	3.15
QRP3310BH	10	3/8"	4.00
QRP3313BH	13	1/2"	4.55

Interchange Couplings, Series 34

Single Shut-off



DN 11

Interchangeability
- Rectus 34
- Atlas Copco
- QIC 15

Material
- Body: brass nickel-plated
- Sleeve: brass nickel-plated
- Seals: nitrile rubber
- Springs/pin: stainless spring wire
- Plug: steel

Temperature Range:
- -20°C to +60°C

Working Pressure:
- 16 bar (0-232 psi)





Coupling Body
Male Thread

Code N26	Thread BSP	Price
QRC3414BM	G1/4"	28.80
QRC3438BM	G3/8"	28.80
QRC3412BM	G1/2"	28.80
QRC3434BM	G3/4"	28.80



Coupling Plug
Male Thread

Code N26	Thread BSP	Price
QRP3438BM	G3/8"	5.20
QRP3412BM	G1/2"	5.20



Coupling Body
Female Thread

Code N26	Thread BSP	Price
QRC3414BF	G1/4"	28.80
QRC3438BF	G3/8"	28.80
QRC3412BF	G1/2"	28.80
QRC3434BF	G3/4"	28.80



Coupling Plug
Female Thread

Code N26	Thread BSP	Price
QRP3438BF	G3/8"	5.20
QRP3412BF	G1/2"	5.20



Coupling Body
Integral Hose Tail

Code N26	Hose ID mm	Hose ID	Price
QRC348BH	8	5/16"	28.80
QRC3410BH	10	3/8"	28.80
QRC3413BH	13	1/2"	28.80
QRC3416BH	16	5/8"	28.80
QRC3419BH	19	3/4"	28.80

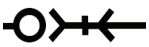


Coupling Plug
Integral Hose Tail

Code N26	Hose ID mm	Hose ID	Price
QRP3410BH	10	3/8"	5.20
QRP3413BH	13	1/2"	5.20
QRP3416BH	16	5/8"	5.20

Interchange Couplings, Series 68

Single Shut-Off



DN 5

Interchangeability
- Rectus 68
- Schrader Heavy Duty

Material
- Body: brass nickel-plated
- Sleeve: brass
- Seals: brass
- Springs/pin: stainless steel
- Plug: steel

Temperature Range:
- -20°C to +100°C

Working Pressure:
- 0-35 bar (0-500 psi)



Coupling Body
Male Thread



Code N03	Thread BSP	SW mm	Length mm	Ø mm	Price
QRC6838M	G3/8"	30	68	33	42.15
QRC6812M	G1/2"	30	68	33	42.15
QRC6834M	G3/4"	30	68	33	45.90

Coupling Plug
Male Thread



Code N03	Thread BSP	SW mm	Length mm	Price
QRP6814M	G1/4"	17	48	7.00
QRP6838M	G3/8"	19	50	7.00
QRP6812M	G1/2"	22	52	7.00
QRP6834M	G3/4"	27	53	7.00

Coupling Body
Female Thread



Code N03	Thread BSP	SW mm	Length mm	Ø mm	Price
QRC6814F	G1/4"	30	74	33	42.15
QRC6838F	G3/8"	30	74	33	42.15
QRC6812F	G1/2"	30	68	33	42.15
QRC6834F	G3/4"	30	68	33	45.90

Coupling Plug
Female Thread



Code N03	Thread BSP	SW mm	Length mm	Price
QRP6814F	G1/4"	18	34	7.00
QRP6838F	G3/8"	22	34	7.00

Coupling Body
Integral Hose Tail



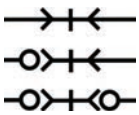
Code N03	Hose ID mm	Hose ID	SW mm	Length mm	Ø mm	Price
QRC6810H	10	3/8"	30	74	33	42.15
QRC6813H	13	1/2"	30	74	33	42.15
QRC6819H	19	3/4"	30	68	33	45.90

Coupling Plug
Integral Hose Tail



Code N02	Hose ID mm	Hose ID	Length mm	Price
QRP6810H	10	3/8"	71	7.00
QRP6813H	13	1/2"	71	7.00

Mould Couplings, Series 86 & 87



Interchangeability
- Rectus 86 & 87
- DME
- Foster FJT
- Parker Moldmate

Material
- Body: brass
- Sleeve: brass
- Seals: brass
- Springs/pin: stainless steel
- Plug: brass



Valved



Unvalved





Valved Coupling Body

Integral Hose Tail

Code N03	NW mm	Hose mm	Price
QRC86SV6H	6	6	17.35
QRC86SV8H	6	8	17.35
QRC86SV9H	6	10	17.45
QRC87SV10H	9	10	23.95
QRC87SV13H	9	13	23.95



Valved Coupling Body

45º Integral Hose Tail

Code N03	NW mm	Hose mm	Price
QRC8645V6H	6	6	22.15
QRC8645V8H	6	8	22.15
QRC8645V9H	6	10	22.15
QRC8745V10H	9	10	32.75
QRC8745V13H	9	13	32.75



Valved Coupling Body

90º Integral Hose Tail

Code N03	NW mm	Hose mm	Price
QRC8690V6H	6	6	21.00
QRC8690V8H	6	8	21.00
QRC8690V9H	6	10	21.85
QRC8790V10H	9	10	28.60
QRC8790V13H	9	13	28.60



Valved Coupling Body

Female Thread

Code N03	NW mm	Hose	Price
QRC86SV18F	6	G1/8"	18.45
QRC86SV14F	6	G1/4"	18.45



Valved Coupling Body

Male Thread

Code N03	NW mm	Hose	Price
QRC86SV14M	6	G1/4"	18.00



Valved Coupling Plug

Male Thread

Code N03	NW mm	Thread BSP	Price
QRP86V14M	6	G1/4"	6.50
QRP87V14M	9	G1/4"	6.60
QRP87V38M	9	G3/8"	6.60
QRP87V12M	9	G1/2"	7.50

For Coloured Reinforced PVC Hose



See page 495

Mould Couplings, Series 86 & 87



Unvalved Coupling Body

90º Integral Hose Tail

Code	N03	NW mm	Hose mm	Price
QRC86906H		6	6	15.15
QRC86908H		6	8	15.15
QRC86909H		6	10	15.15
QRC879010H		9	10	24.60
QRC879013H		9	13	24.60



Unvalved Coupling Body

Integral Hose Tail

Code	N03	NW mm	Hose mm	Price
QRC86S6H		6	6	11.30
QRC86S8H		6	8	11.30
QRC86S9H		6	10	11.55
QRC87S10H		9	10	16.45
QRC87S13H		9	13	16.45



Unvalved Coupling Body

45º Integral Hose Tail

Code	N03	NW mm	Hose mm	Price
QRC86456H		6	6	17.70
QRC86458H		6	8	17.70
QRC86459H		6	10	17.70
QRC874510H		9	10	27.40
QRC874513H		9	13	27.40



Unvalved Coupling Body

Female Thread

Code	N03	NW mm	Hose	Price
QRC86S18F		6	G1/8"	12.55
QRC86S14F		6	G1/4"	12.55



Unvalved Coupling Body

Male Thread

Code	N03	NW mm	Hose	Price
QRC86S14M		6	G1/4"	12.25



Coupling Plug

Female Thread

Code	N03	NW mm	Thread BSP	Price
QRP8618F		6	G1/8"	1.80
QRP8614F		6	G1/4"	1.90
QRP8714F		9	G1/4"	2.10
QRP8738F		9	G3/8"	2.10
QRP8712F		9	G1/2"	2.85



Coupling Plug

Male Thread

Code	N03	NW mm	Thread BSP	Price
QRP8618M		6	G1/8"	1.65
QRP8614M		6	G1/4"	1.70
QRP8638M		6	G3/8"	1.90
QRP8714M		9	G1/4"	1.95
QRP8738M		9	G3/8"	1.95
QRP8712M		9	G1/2"	2.85



Extension Plug

Stem

Code	N03	NW mm	Length mm	Price
QRP86EL63		6	63	4.65
QRP86EL100		6	100	5.20
QRP86EL120		6	120	6.65
QRP86EL240		6	240	9.80
QRP87EL150		9	150	7.05
QRP87EL300		9	300	12.40



Extension Plug

Male Thread

Code	N03	NW mm	Thread BSP	Length mm	Price
QRP86EL100G18		6	G1/8"	100	8.70
QRP86EL150G18		6	G1/8"	150	9.60
QRP86EL250G18		6	G1/8"	250	12.30
QRP87EL150G14		9	G1/4"	150	8.80
QRP87EL250G14		9	G1/4"	250	12.30



Spare Seal

NBR +100˚C

Code	N03	Series	Temperature	Price
QRC86SEALNBR		86	-10°C to +100°C	0.85
QRC87SEALNBR		87	-4°C to +212°C	1.10



Spare Seal

Viton +200ºC

Code	N03	Series	Temperature	Price
QRC86SEALVITON		86	-20°C to +200°C	2.65
QRC87SEALVITON		87	-20°C to +200°C	3.10

Mould Couplings, Series DN8

Staubli RPL8 Interchange

Max Temperature

- +110ºC with identification ring
- +200ºC without identification ring

Maximum Pressure

- 15 bar (0-230 psi)

Material

- Body: nickel brass
- Balls & sprints: stainless steel
- Seals: FKM



DN8 Straight Coupling

Female Thread

Code N04	DN mm	Thread BSP	Price
8PL412-1	8	G1/4"	8.45



DN8 Straight Coupling

Integral Hose Tail

Code N04	DN mm	Hose ID mm	Price
8PL415-1	8	8	8.70
8PL415-2	8	10	9.85
8PL415-3	8	12	9.70



DN8 45º Coupling

Integral Hose Tail

Code N04	DN mm	Hose ID mm	Price
8PL416-1	8	8	11.60
8PL416-2	8	10	10.25
8PL416-3	8	12	11.60



DN8 90º Coupling

Integral Hose Tail

Code N04	DN mm	Hose ID mm	Price
8PL418-1	8	8	9.95
8PL418-2	8	10	10.55
8PL418-3	8	12	12.55



DN8 Connector Nipple

Tapered Male Thread

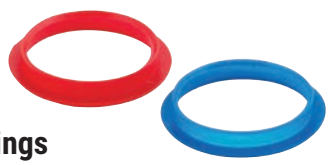
Code N04	DN mm	Thread BSP	Price
8PL514-1	8	G1/8"	2.00
8PL514-2	8	G1/4"	2.35
8PL514-3	8	G3/8"	2.30



DN8 Extended Connector Nipple

Male Thread

Code N04	DN mm	Thread BSP	Length mm	Price
8PL512-1NU	8	G1/8"	50	8.55
8PL512-1NV	8	G1/8"	100	14.25
8PL512-1NW	8	G1/8"	150	18.20
8PL512-1NY	8	G1/4"	50	8.55
8PL512-1NZ	8	G1/4"	100	14.85
8PL512-1PA	8	G1/4"	150	18.20
8PL512-1PB	8	G1/4"	200	23.30



DN8 Identification Rings

Mould Coupling Identification Ring

Code N04	DN mm	Colour	Price
8PL513RO	8	Red	0.50
8PL513BL	8	Blue	0.50

Mould Couplings, Series DN12

Staubli RPL8 Interchange

Max Temperature

- +110ºC with identification ring
- +200ºC without identification ring

Maximum Pressure

- 15 bar (0-230 psi)

Material

- Body: nickel brass
- Balls & sprints: stainless steel
- Seals: FKM



DN12 Straight Coupling

Female Thread

Code N04	DN mm	Thread BSP	Price
12PL422-1	12	G1/2"	13.20



DN12 Connector Nipple

Male Tapered Thread

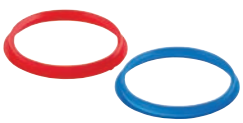
Code N04	DN mm	Thread BSP	Price
12PL522-1	12	G3/8"	4.60
12PL522-2	12	G1/2"	4.55



DN12 Straight Coupling

Integral Hose Tail

Code N04	DN mm	Thread BSP	Price
12PL425-1	12	13	15.20
12PL425-2	12	16	13.80



DN12 Identification Rings

Mold Coupling Identification Ring

Code N04	DN mm	Colour	Price
12PL523RO	12	Red	0.35
12PL523BL	12	Blue	0.55

For Coloured Reinforced PVC Hose



See page 495

Standard Series

Airflow Couplings & Standard Adaptors

Technical Specifications

- Nominal bore: 4.8mm
- Maximum flow rate: 43cfm at 100 psi
- Maximum working pressure: 200 psi (14 bar)
- Temperature range: -40°C to +100°C
- Type: single range



Coupling Plug

Male Thread



Code P01	Thread BSPT	Price
ACA2593	R1/4"	1.20
ACA6909	R3/8"	1.40
ACA6584	R1/2"	4.15

Coupling Body

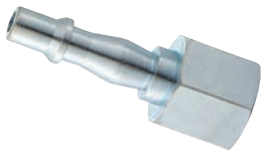
Female Thread



Code P01	Thread BSP	Price
AC21CF02	G1/4"	9.30
AC21EF02	G3/8"	12.05
AC21JF02	G1/2"	12.05

Coupling Plug

Female Thread



Code P01	Thread BSP	Price
ACA2746	G1/4"	1.40
ACA6582	G3/8"	4.15
ACA6583	G1/2"	5.10

Coupling Body

Male Thread



Code P01	Thread BSPT	Price
AC21CM02	R1/4"	9.30
AC21EM02	R3/8"	12.05
AC21JM02	R1/2"	12.05

Coupling Plug

Hose Tail Fitting



Code P01	Hose ID mm	Hose ID	Price
ACA2486	4.75	3/16"	2.20
ACA1793	6.35	1/4"	1.15
ACA2487	7.9	5/16"	1.30
ACA2488	9.5	3/8"	1.15
ACA9438	13	1/2"	2.30

Coupling Body

Integral Hose Tail



Code P01	Hose ID mm	Hose ID	Price
AC21R02	7	1/4"	12.05
AC21S02	8	5/16"	12.05
AC21T02	10	3/8"	12.05

Twin Coupling

Female x Female x Male, Y Piece



Code P01	Description	Price
AC6103	Twin Standard	36.45

60 & 100 Series Couplings

Technical Specifications 60 Series



- Temperature range: -40°C to +100°C
- Nominal bore: 7.1mm
- Maximum flow rate: 60cfm at 100 psi
- Maximum working pressure: 14 bar (200 psi)

Technical Specifications 100 Series



- Temperature range: -40°C to +100°C
- Nominal bore: 10.3mm
- Maximum flow rate: 117cfm at 100 psi
- Maximum working pressure: 14 bar (200 psi)

60 Series Coupling Body

Female Thread



Code P01	Thread BSPT	Price
AC4CF02	R1/4"	32.20
AC4EF02	R3/8"	32.20
AC4JF02	R1/2"	32.20

100 Series Coupling Body

Female Thread



Code P01	Thread BSPT	Price
AC5EF02	R3/8"	38.15
AC5JF02	R1/2"	38.15

60 Series Coupling Body

Male Thread



Code P01	Thread BSPT	Price
AC4CM02	R1/4"	32.20
AC4EM02	R3/8"	29.05
AC4JM02	R1/2"	32.20

100 Series Coupling Body

Male Thread



Code P01	Thread BSPT	Price
AC5EM02	R3/8"	34.40
AC5JM02	R1/2"	38.15

60 Series Coupling Plug

Female Thread



Code P01	Thread BSPT	Price
ACA2653	R1/4"	7.20
ACA2660	R3/8"	7.20

100 Series Coupling Plug

Female Thread



Code P01	Thread BSPT	Price
ACA2994	R3/8"	7.20

60 Series Coupling Plug

Male Thread



Code P01	Thread BSPT	Price
ACA2657	R1/4"	7.20
ACA2661	R3/8"	7.20

100 Series Coupling Plug

Male Thread



Code P01	Thread BSPT	Price
ACA2999	R3/8"	7.20
ACA3035	R1/2"	7.20

60 Series Coupling Plug

Integral Hose Tail



Code P01	Hose ID mm	Hose ID	Price
ACA2654	7.9	5/16"	7.85
ACA2658	9.5	3/8"	7.20
ACA2659	12.7	1/2"	7.20

100 Series Coupling Plug

Integral Hose Tail



Code P01	Hose ID mm	Hose ID	Price
ACA3037	9.5	3/8"	7.20
ACA3036	12.7	1/2"	7.20

XF Couplings

- Nominal bore: 7.4mm
- Flow rate at 6 bar: (0.5 bar P.D.) 2200 l/min

Interchangeability

- Cejn 320
- Legris 25/26
- Norgren 234/238
- Rectus 25/26
- Schrader InterCheck 35

Working Temperature:

- -40°C to +100°C

Maximum Working Pressure:

- 35 bar (508 psi)



XF Coupling Body

Male Thread, BSPT

Code	P01	Thread	Price
AC71CM		R1/4"	11.85
AC71EM		R3/8"	11.85
AC71JM		R1/2"	11.85



XF Coupling Body

Female Thread, BSPP

Code	P01	Thread	Price
AC71CF		G1/4"	11.85
AC71EF		G3/8"	11.85
AC71JF		G1/2"	11.85



XF Coupling Body

Hose Tail

Code	P01	Hose ID	Price
AC7106		6mm (1/4")	11.85
AC7108		8mm (5/16")	11.85
AC7109		9mm	15.15
AC7110		10mm (3/8")	11.85
AC7113		13mm (1/2")	11.85



XF Coupling Plug

Male Thread, BSPT

Code	P01	Thread	Price
AA7101		R1/8"	1.55
AA7102		R1/4"	1.30
AA7103		R3/8"	1.25
AA7104		R1/2"	1.95



XF Coupling Plug

Female Thread, BSPP

Code	P01	Thread	Price
AA7105		G1/8"	1.30
AA7106		G1/4"	1.30
AA7107		G3/8"	1.35
AA7108		G1/2"	5.75



XF Coupling Plug

Hose Tail

Code	P01	Hose ID	Price
AA7109		4mm	1.25
AA7110		6mm (1/4")	1.25
AA7111		8mm (5/16")	1.25
AA7114		9mm	3.45
AA7112		10mm (3/8")	1.25
AA7113		13mm (1/2")	1.30



XF Safety Coupling Body

Male Thread, BSPT

Code	P01	Thread	Price
AS71CM		R1/4"	40.45
AS71EM		R3/8"	40.45
AS71JM		R1/2"	40.45



XF Safety Coupling Body

Female Thread, BSPP

Code	P01	Thread	Price
AS71CF		G1/4"	40.45
AS71EF		G3/8"	40.45
AS71JF		G1/2"	40.45

PF Couplings

- Nominal bore: 5.0mm
- Flow rate at 6 bar: (0.5 bar P.D.) 2200 l/min

Interchangeability

- Cejn 317
- Rectus 17
- Schrader Standard

Working Temperature:

- -40°C to +100°C

Maximum Working Pressure:

- 35 bar (508 psi)



PF Coupling Body

Male Thread, BSPT

Code	P01	Thread	Price
AC77CM		R1/4"	16.30
AC77EM		R3/8"	16.30
AC77JM		R1/2"	16.30



PF Coupling Plug

Male Thread, BSPT

Code	P01	Thread	Price
AA7702		R1/4"	1.30
AA7703		R3/8"	1.35



PF Coupling Body

Female Thread, BSPP

Code	P01	Thread	Price
AC77CF		G1/4"	16.30
AC77EF		G3/8"	16.30
AC77JF		G1/2"	16.30



PF Coupling Plug

Female Thread, BSPP

Code	P01	Thread	Price
AA7706		G1/4"	1.35
AA7707		G3/8"	1.75



PF Coupling Body

Hose Tail

Code	P01	Hose ID	Price
AC7706		6mm (1/4")	16.30
AC7708		8mm (5/16")	16.30
AC7710		10mm (3/8")	16.30
AC7713		13mm (1/2")	16.30



PF Coupling Plug

Hose Tail

Code	P01	Hose ID	Price
AA7710		6mm (1/4")	1.20
AA7711		8mm (5/16")	1.20
AA7712		10mm (3/8")	1.20

Specialised & Safety Couplings



Instantair Couplings

Male Thread, BSP

Code	P01	Broomwade Ref.	Material	Thread Type	Thread Size	Price
AC51CM		PT8825	Steel	Male	G1/4"	14.10
AC51EM		PT8827	Steel	Male	G3/8"	14.10
AC51JM		PT9095	Steel	Male	R1/2"	19.80



Instantair Couplings

Female, BSP

Code	P01	Broomwade Ref.	Material	Thread Type	Thread Size	Price
AC51CF		PT8823	Steel	Female	G1/4"	14.10
AC51EF		PT8800	Steel	Female	G3/8"	14.10
AC51JF		PT9096	Steel	Female	G1/2"	19.80



Instantair Couplings

Hose Tail

Code	P01	Broomwade Ref.	Material	Connector Type	Size	Price
AC51R		PT8800/SU4	Steel	Hose Tail	1/4"	14.10
AC51S		PT8800/SU5	Steel	Hose Tail	5/16"	15.15
AC51T		PT8800/SU6	Steel	Hose Tail	3/8"	15.15



Instantair Couplings

Plug, Male Thread, BSP

Code	P01	Broomwade Ref.	Material	Thread Type	Thread SIze	Price
AA5102		PT8808	Steel	Male	G1/4"	9.60
AA5103		PT8817	Steel	Male	G3/8"	9.60



Instantair Couplings

Plug, Female Thread, BSP

Code	P01	Broomwade Ref.	Material	Thread Type	Thread Size	Price
AA5106		PT8806	Steel	Female	G1/4"	9.60
AA5107		PT8802	Steel	Female	G3/8"	9.60



Instantair Couplings

Plug, Integral Hose Tail

Code	P01	Broomwade Ref.	Material	Connector Type	Size	Price
AA5110		PT8802/SU4	Steel	Hose Tail	1/4"	9.60
AA5111		PT8802/SU5	Steel	Hose Tail	5/16"	9.60
AA5112		PT8802/SU6	Steel	Hose Tail	3/8"	9.60

new



Instantair Swivel Adaptors

Male, BSPP

Code	P01	Broomwade Ref.	Material	Thread Type	Thread Size	Price
AA5302		PT8836	Steel	Male	G1/4"	14.45
AA5303		PT8838	Steel	Male	G3/8"	14.45

new



Instantair Swivel Adaptors

Female, BSPP

Code	P01	Broomwade Ref.	Material	Thread Type	Thread Size	Price
AA5306		PT8834	Steel	Female	G1/4"	14.45
AA5307		PT8804	Steel	Female	G3/8"	14.45

new



Instantair Swivel Adaptors

Hose Tail

Code	P01	Broomwade Ref.	Material	Connector Type	Size	Price
AA5310		PT8804/SU4	Steel	Hose Tail	1/4"	14.45
AA5311		PT8804/SU5	Steel	Hose Tail	5/16"	14.45
AA5312		PT8804/SU6	Steel	Hose Tail	3/8"	14.45

Specialised & Safety Couplings

Schrader Twistlok Range

- Nominal bore: 8.5mm
- Flow rate at 6 bar: (0.5 bar pd) 600 l/min

Maximum working pressure:

- 17 bar (250 psi)

Temperature Range:

- -10°C to +80°C



Schrader Couplings

Male Thread, BSP

Code	P01	Schrader Ref.	Type	Thread Type	Thread Size	Price
ACS102		9793D-12	Standard	Male	R1/4"	44.45
ACS103		9792D-12	Standard	Male	R3/8"	46.20



Schrader Adaptors

Female, BSP

Code	P01	Schrader Ref.	Type	Thread Type	Thread Size	Price
ACAS105		8278L-11	Standard	Female	G1/4"	8.70



Schrader Couplings

Female Thread

Code	P01	Schrader Ref.	Type	Thread Type	Thread SIze	Price
ACS101		8952DL-12	Standard	Female	G1/4"	44.45
ACS201		1461EL-12	Heavy Duty	Female	G1/2"	81.25



Schrader Adaptors

Hose Tail

Code	P01	Schrader Ref.	Type	Connection Type	Size	Price
ACAS101		8787-11	Standard	Hose Tail	1/4"	7.05
ACAS103		9750-11	Standard	Hose Tail	5/16"	7.05
ACAS102		8788-11	Standard	Hose Tail	3/8"	7.05
ACAS201		1097-11	Heavy Duty	Hose Tail	3/8"	14.70
ACAS202		1098-11	Heavy Duty	Hose Tail	1/2"	17.50



Schrader Adaptors

Male Thread, BSP

Code	P01	Schrader Ref.	Type	Thread Type	Thread SIze	Price
ACAS104		8050B-11	Standard	Male	R1/4"	8.40
ACAS204		8624B-11	Heavy Duty	Male	R1/4"	15.30
ACAS205		9739-11	Heavy Duty	Male	R3/8"	14.70
ACAS203		8807-11	Heavy Duty	Male	R1/2"	17.45

Specialised & Safety Couplings

Features & Benefits

- Two stage self-venting release
- Compatible with genuine PCL standard adaptors
- Hard wearing steel construction
- Safe and simple to use
- Enhances workshop safety; prevents hose whip
- Creates a safe compressed air environment
- Conforms to ISO 4414:1998 and EN 983: 1996





Coupling Body

Male Thread

Code	P01	Thread BSPT	Price
SC21CM		R1/4"	16.60
SC21EM		R3/8"	19.70
SC21JM		R1/2"	19.70



Coupling Body

Integral Hose Tail

Code	P01	Hose ID mm	Hose ID	Price
SC21R		1/4"	7	22.80
SC21S		5/16"	8	22.45
SC21T		3/8"	10	19.80



Coupling Body

Female Thread

Code	P01	Thread BSP	Price
SC21CF		G1/4"	16.60
SC21EF		G3/8"	22.45
SC21JF		G1/2"	19.70

HSE guide 39, paragraph 101 states

Coupling a portable tool to the outlet point is usually achieved by use of a quick-acting connector. The connector should be designed so that when disconnected it automatically seals the air pressure on the upstream side and slowly vents the air pressure on the downstream side. For all hoses above 10 mm bore, more than 10 m long or subject to a pressure exceeding 7 bar, the connector should have a self-venting socket which releases the downstream pressure before diconnection is possible. Alternatively, a plug with a controlled venting action should be used. These safety features prevent inadvertent tool operation and uncontrolled whipping of the hose when its inlet end is uncoupled from the socket. Another way of reducing 'whipping' or 'snaking' is to fit emergency shut-off valves, hose rupture valves or air fuses as close as practicle to the connector. The valves will close or reduce flow to a very low level in the event of excessive air-flow conditions caused by a failure of the hose (see also paragraph 83 about fitting of isolation valves). The same requirement could be necessary when using plastic tubing.

For Tyre Inflators



See pages 593-594

Welding Couplings, DN5

LOCK QUICK couplings are used for the connection of three different fluids without mixing each other with key system.
Also safety locking system will protect unlocking position of the couplings after locking.



Series 065K

Coupling for oxygen connection.



Series 066K

Coupling for gaseous fuel connections.
Not to be mistaken with oxygen connections.



Series 067K

Coupling for other media. The round connection prevents wrong connections.

065k



Oxygen Coupling Body

Right Hand Female Thread

Code N03	Thread BSP	SW mm	Length mm	Ø mm	Price
QRC6514F	G1/4"	19	70	22	37.50
QRC6538F	G3/8"	19	70	22	37.50

065k



Oxygen Coupling Body

Integral Hose Tail

Code N03	Hose ID mm	SW mm	Length mm	Ø mm	Price
QRC6506H	6	19	90	22	37.50
QRC6509H	9	19	90	22	37.50

066k



Acetylene Coupling Body

Left Hand Female Thread

Code N03	Thread BSP	SW mm	Length mm	Ø mm	Price
QRC6614F	G1/4"	19	70	22	37.50
QRC6638F	G3/8"	19	70	22	37.50

066k



Acetylene Coupling Body

Integral Hose Tail

Code N03	Hose ID mm	SW mm	Length mm	Ø mm	Price
QRC6606H	6	19	90	22	37.50
QRC6609H	9	19	90	22	37.50

067k



Propane Coupling Body

Left Hand Female Thread

Code N03	Thread BSP	SW mm	Length mm	Ø mm	Price
QRC6714F	G1/4"	19	90	22	37.50
QRC6738F	G3/8"	19	90	22	37.50

067k



Propane Coupling Body

Integral Hose Tail

Code N03	Hose ID mm	SW mm	Length mm	Ø mm	Price
QRC6706H	6	19	90	22	37.50
QRC6709H	9	19	90	22	37.50

Welding Couplings, DN5

DN 5

Interchangeability
- Rectus 65
- Rectus 66
- Rectus 67

Material
- Body: brass
- Sleeve: brass
- Seals: brass
- Springs/pin: stainless steel
- Plug: brass

Temperature Range:
- -20°C to +100°C

Working Pressure:
- 0-35 bar (0-500 psi)

065k



Oxygen Coupling Plug

Right Hand Female Thread

Code	N03	Thread BSP	SW mm	Length mm	Price
QRP6514F		G1/4"	17	46	**9.40**
QRP6538F		G3/8"	19	46	**9.40**

065k



Oxygen Coupling Plug

Integral Hose Tail

Code	N03	Hose ID mm	Length mm	Price
QRP6506H		6	60	**8.25**
QRP6509H		9	60	**8.25**

066k



Acetylene Coupling Plug

Left Hand Female Thread

Code	N03	Thread BSP	SW mm	Length mm	Price
QRP6614F		G1/4"	17	46	**9.40**
QRP6638F		G3/8"	19	46	**9.40**

066k



Acetylene Coupling Plug

Integral Hose Tail

Code	N03	Hose ID mm	Length mm	Price
QRP6606H		6	60	**8.25**
QRP6609H		9	60	**8.25**

067k



Propane Coupling Plug

Left Hand Female Thread

Code	N03	Thread BSP	SW mm	Length mm	Price
QRP6714F		G1/4"	17	46	**9.40**
QRP6738F		G3/8"	19	46	**9.40**

067k

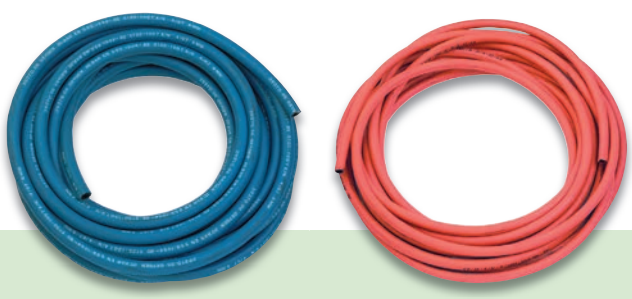


Propane Coupling Plug

Integral Hose Tail

Code	N03	Hose ID mm	Length mm	Price
QRP6706H		6	60	**8.25**
QRP6709H		9	60	**8.25**

For Welding Hose



See page 533

Air Brake Components



British Standard BS AU138B 2000, Air Line Couplings

Male, Emergency

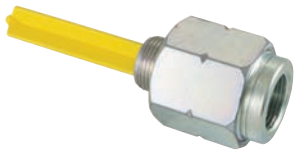
Code N71	Thread	Price
TBPE-M22F	M22	10.35



British Standard BS AU138B 2000, Air Line Couplings

Combined Male with Self Sealing Valve, Service

Code N71	Thread	Price
TBPSV-M16F	M16	57.65
TBPSV-M22F	M22	54.85



Quality Assured, Air Line Couplings

Self Sealing Valve

Code N71	Thread	Price
TBF-M22-QA	M22 x 1.5	27.00



British Standard BS AU138B 2000, Air Line Couplings

Combined Female with Self Sealing Valve, Emergency

Code N71	Thread	Price
TBCEF-M16F	M16	87.30
TBCEF-M22F	M22	89.00



British Standard BS AU138B 2000, Air Line Couplings

Female with Lift Valve, Service

Code N71	Thread	Price
TBCF-M22F	M22	40.75



Quality Assured, Air Line Couplings

Operating Plug

Code N71	Thread	Price
TB-PLUG-M22	M22 x 1.5	5.95

For Nylon 12 Airbrake Coils



See section 9 page 520

1/2” Water System



Coupling

Female Thread

Code	E01	Thread BSP	Price
53500A3		G1/2”	9.20
53520A3		G3/4”	10.45
5352GA3		G1/2”, G3/4” & M22 x 1	19.85



Coupling

Female Thread & Stop Valve

Code	E01	Thread BSP	Price
53530A3		G3/4”	19.15



Hose Nipple Connector

Equal

Code	E01	Price
53650A3		7.50



Hose Nipple

Dual Size Version

Code	E01	Hose Tail	Price
5360AA3		1/2” & 3/4”	5.40



Nipple

Male Thread

Code	E01	Thread BSP	Price
53640A3		G1/2”	3.50
5364AA3		G3/4”	4.50



Coupling

Integral Hose Tail

Code	E01	Hose Tail	Price
5350SA3		1/2”	9.10
5351SA3		3/4”	10.40



Coupling

Integral Hose Tail & Stop Valve

Code	E01	Hose Tail	Price
5353SA3		1/2”	17.50



Hose Nipple

Integral Hose Tail

Code	E01	Hose Tail	Price
53600A3		1/2”	3.75



Nipple

Female Thread

Code	E01	Thread BSP	Price
53610A3		G1/2”	4.10
5361AA3		G3/4”	5.15
5361GA3		G1/2”, G3/4” & M22 x 1	11.70



Nipple

Male Thread with Non-return Valve

Code	E01	Thread BSP	Price
5364TA3		G3/4”	11.10



3 Way Nipple

Equal ‘Y’

Code	E01	Price
53760A3		36.50

3/4” Water System



Coupling
Female Thread

Code E01	Thread BSP	Price
63500A3	G3/4”	10.20



Coupling
Female Thread & Stop Valve

Code E01	Thread BSP	Price
63530A3	G3/4”	34.10



Coupling
Integral Hose Tail

Code E01	Hose Tail	Price
6350SA3	3/4”	13.50



Hose Nipple
Integral Hose Tail

Code E01	Hose Tail	Price
6360BA3	1/2”	5.15
63600A3	3/4”	4.60



Coupling
Integral Hose Tail & Stop Valve

Code E01	Hose Tail	Price
6353SA3	3/4”	34.80



Nipple
Male Thread

Code E01	Thread BSP	Price
6364AA3	G1/2”	5.70
63640A3	G3/4”	5.95



Nipple
Female Thread

Code E01	Thread BSP	Price
6361AA3	G1/2”	5.60
63610A3	G3/4”	6.90



Safety Pressure Lock Coupling
Male Thread

Code E01	Thread BSP	Price
61640A8	G1/2”	7.60
61650A3	G3/4”	7.30



Safety Pressure Lock Nipple
Integral Hose Tail

Code E01	Hose Tail	Price
6151SA8	1/2”	28.70
6150SA8	3/4”	28.00



Tap Union
Male Thread

Code E01	Size	Price
57078A5	14-20mm	17.95
57079A5	22-30mm	14.95



Adjustable Spray Nozzle
Brass

Code E01	Hose Tail	Price
20000A4	1/2”- 3/4”	16.85



Adjustable Spray Nozzle
Female Thread

Code E01	Thread BSP	Price
20300A9	G3/4” Hose	40.10

Claw Couplings

LÜDECKE



Claw Coupling

Hose Tail, Malleable Iron

Code N07	Hose ID mm	Hose ID	Price
CLW10H	10	3/8"	7.05
CLW13H	13	1/2"	5.80
CLW15H	15	5/8"	6.10
CLW19H	19	3/4"	5.55
CLW25H	25	1"	6.70
CLW32H	32	1.1/4"	9.80



Claw Coupling

Female Thread, Malleable Iron

Code N07	Thread BSP	Price
CLW10F	G3/8"	7.60
CLW13F	G1/2"	7.90
CLW19F	G3/4"	6.05
CLW25F	G1"	7.45
CLW32F	G1.1/4"	13.70



Claw Coupling

Male Thread, Malleable Iron

Code N07	Thread BSP	Price
CLW10M	G3/8"	8.30
CLW13M	G1/2"	7.75
CLW19M	G3/4"	7.70
CLW25M	G1"	8.50
CLW32M	G1.1/4"	16.00



Claw Coupling

Safety Collar

Code N07	Hose ID mm	Hose ID	Price
CLW13HS	13	1/2"	7.45
CLW15HS	15	5/8"	8.80
CLW19HS	19	3/4"	6.00
CLW25HS	25	1"	8.80



Claw Coupling

Blank End

Code N07	Description	Price
CLW-VKO	Without chain	5.60
CLW-VKM	With chain	7.65
CLW-VKM-K	Spare chain	2.00



3 Way Connection

Equal 'Y'

Code N07	Description	Price
CLW-DWS34	3/4" Threads	18.80
CLW-DWSG34	3/4" Claw Couplings	44.60
CLW-DWS10	1" Threads	32.20
CLW-DWSG10	1" Claw Couplings	58.20

Claw Couplings



Swivelling Claw Coupling

Hose Tail

Code N07	Hose ID mm	Hose ID	DN	Weight g	Price
SCLW13H	13	1/2"	10	221	17.35
SCLW19H	19	3/4"	15	230	18.95
SCLW25H	25	1"	19	260	18.25



Swivelling Claw Coupling

Hose Tail, Safety Type

Code N07	Hose ID mm	Hose ID	DN	Weight g	Price
SCLW13HS	13	1/2"	10	236	23.05
SCLW19HS	19	3/4"	15	250	25.20
SCLW25HS	25	1"	19	290	17.90



Swivelling Claw Coupling

Female Thread

Code N07	Thread BSP	DN	Weight g	Price
SCLW13F	G1/2"	17	240	17.10
SCLW19F	G3/4"	17	330	24.85
SCLW25F	G1"	17	430	24.40



Swivelling Claw Coupling

Male Thread

Code N07	Thread BSP	DN	Weight g	Price
SCLW13M	G1/2"	13	240	17.60
SCLW19M	G3/4"	17	336	17.80
SCLW25M	G1"	19	315	24.20



Pipe Clamp

Malleable Iron

Code M04	Size mm	Price 1-24	Price 25+
MIPC17-22	17-22	2.70	2.60
MIPC20-29	20-29	3.40	3.25
MIPC28-35	28-35	3.50	3.35
MIPC32-40	32-40	4.50	4.30
MIPC39-49	39-49	5.60	5.35
MIPC48-60	48-60	7.05	6.70
MIPC60-76	60-76	9.35	8.90
MIPC77-94	77-94	13.10	12.45
MIPC89-101	89-101	19.90	18.95
MIPC94-115	94-115	16.00	15.20
MIPC113-127	113-127	24.70	23.50
MIPC115-145	115-145	29.20	27.75
MIPC127-140	127-140	30.45	28.95
MIPC135-155	135-155	30.45	28.95
MIPC155-175	155-175	30.05	28.55
MIPC175-195	175-195	40.75	38.75
MIPC210-225	210-225	62.95	59.85
MIPC227-250	227-250	75.05	71.30



Pipe Clamp

Malleable Iron with Safety Claw

Code M04	Size mm	Price 1-24	Price 25+
MIPC22-29S	22-29	4.95	4.75
MIPC28-32S	28-32	4.85	4.65
MIPC35-42S	35-42	6.55	6.25
MIPC42-45S	42-45	8.20	7.80
MIPC45-53S	45-53	8.65	8.25
MIPC55-60S	55-60	12.15	11.55
MIPC60-73S	60-73	15.65	14.90
MIPC86-102S	86-102	26.55	25.25

For Yellow Compressed Air Hose Assembly



See page 519

Claw Couplings

LÜDECKE



Stainless Steel Claw Coupling

Hose Tail

Code N07	Hose ID mm	Hose ID	DN	Weight g	Price
SSCLW10H	10	3/8"	16.5	125	58.85
SSCLW13H	13	1/2"	9	129	60.20
SSCLW19H	19	3/4"	15	142	60.20
SSCLW25H	25	1"	20	165	58.85



Stainless Steel Claw Coupling

Female Thread

Code N07	Hose ID mm	DN	Weight g	Price
SSCLW10F	G3/8"	15	190	59.40
SSCLW13F	G1/2"	19	180	58.00
SSCLW19F	G3/4"	20	158	59.20
SSCLW25F	G1"	20	160	62.70



Stainless Steel Claw Coupling

Male Thread

Code N07	Hose ID mm	DN	Weight g	Price
SSCLW13M	G1/2"	14	125	58.00
SSCLW19M	G3/4"	19	155	60.15
SSCLW25M	G1"	20	180	62.70



Stainless Steel Hose Clamp

Double Bolt

Code M04	To Suit Hose ID mm	Price
SSMIPC18-26	18-26	28.20
SSMIPC26-33	26-33	28.20
SSMIPC32-40	32-40	34.55



Claw Coupling, Geka Plus

Hose Tail

Code N07	Hose ID mm	Hose ID	Weight g	Price
GSK10	10	3/8"	93	6.15
GSK13	13	1/2"	94	6.00
GSK16	16	5/8"	102	6.20
GSK19	19	3/4"	102	5.80
GSK25	25	1"	123	7.00
GSK32	32	1.1/4"	176	9.00
GSK38	38	1.1/2"	183	11.60



Claw Coupling, Geka Plus

Female Thread
Sealing Ring

Code N07	Thread BSP	Weight g	Price
GKI14	G1/4"	76	6.00
GKI38	G3/8"	80	5.10
GKI12	G1/2"	94	5.00
GKI34	G3/4"	96	5.40
GKI10	G1"	100	6.05
GKI54	G1.1/4"	114	6.80
GKI15	G1.1/2"	135	8.60



Claw Coupling, Geka Plus

Male

Code N07	Thread BSP	Weight g	Price
GKA14	G1/4"	89	5.50
GKA38	G3/8"	83	5.10
GKA12	G1/2"	88	5.80
GKA34	G3/4"	90	5.60
GKA10	G1"	92	5.70
GKA54	G1.1/4"	101	6.65
GKA15	G1.1/2"	135	8.45



Whip Check Hose Safety Device

Galvanised Steel

Code P02	Description	Price
WHPCK-1	1/2" to 1.1/4" Hose	3.25
WHPCK-2	1.1/2" to 3" Hose	10.25



Rubber Ring for Claw Coupling

CLWRP: Black (Perbunan), CLWRO: Natural (Ohasil)

Code N07	Resistance	Temperature °C	Application	Price
CLWRP	Oil	-40 to +95	Compressed Air	0.60
CLWRO	Steam	-40 to +200	Steam	11.20

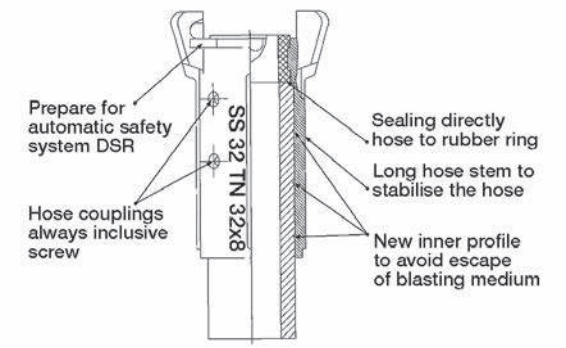
Sandblast Couplings & Nozzles Holders

LÜDECKE

- Couplings of malleable iron, zinc-plated and yellow passivated (Chrome VI free) or nylon Nozzle holders aluminium or nylon
- Coupling types 'TN' with direct sealing hose to gasket and extended stem with new inner profile to avoid escape of blasting media

Material

- Couplings: Malleable iron zinc plated and yellow passivated (Chrome VI free) or nylon
- Nozzle Holders: Aluminium or nylon
- O-rings: Buna N



Sandblast Hose Coupling

Malleable Iron



Code N07	Hose OD mm	Hose ID mm	Weight g	Price
SS25-T	39	25	481	15.05
SS32-TN	48	32	827	18.85
SS32-T	48	32	570	15.50
SS38-T	56	38	784	28.55
SS40-T	60	40	893	33.25

Sandblast Hose Coupling

Female Thread, Malleable Iron



Code N07	Thread BSPP	Weight g	Price
SK38-TN	G1.1/4"	509	20.00
SK38-T	G1.1/4"	392	17.75
SK38/15-TN	G1.1/2"	464	19.75
SK38/15-T	G1.1/2"	340	18.20
SK50-TN	Coarse Thread, 50mm	448	20.60
SK50-T	Coarse Thread, 50mm	324	20.30

Spare Rubber Ring for Sandblast Couplings

Seal



Code N07	To Suit Coupling Type	Weight g	Price
SKD	T	11	1.80
SKD-1	TN	20	4.20

Sandblast Hose Coupling

Nylon



Code N07	Hose OD mm	Hose ID mm	Weight g	Price
CQP-3/4	33	19	193	46.80
CQP-1	39	25	165	48.80
CQP-2	48	32	222	45.80
CQP-3	56	38	244	58.25
CQP-4	60	42	215	64.30

Spare Rubber Ring for Nylon Coupling

Seal



Code N07	To Suit	Weight g	Price
SDR-1	CQP-3/4	20	8.45
SDR-2	CQP-1	17	6.10
SDR-3	All other types	18	5.65

Nozzle Holder

Female Thread, Aluminium



Code N07	Thread BSPP	Weight g	Price
SD32-32A	G1.1/4"	248	19.10
SD50-32A	Coarse Thread, 50mm	231	31.65

Sandblast Coupling

Female Thread, Nylon



Code N07	Thread BSPP	Weight g	Price
CFP	G1.1/4"	126	49.85
CPF-50	Coarse Thread, 50mm	107	52.80

Nozzle Holder

Female Thread, Nylon



Code N07	Hose OD mm	Hose ID mm	Weight g	Price
NHP-34*	33	19	193	33.20
NHP-1*	39	25	165	34.00
NHP-2*	48	32	222	32.60
NHP-3*	56	38	244	33.05
HEP-34**	33	19	215	35.05
HEP-1**	39	25	215	34.20
HEP-2**	48	32	215	33.15
HEP-3**	56	38	215	34.55

*Coarse Thread 50mm
**G1.1/4"

Cam & Groove Couplings

Aluminium
Part A



Code S01	Thread BSP	Price
CAM-A-12A	G1/2"	2.20
CAM-A-34A	G3/4"	2.30
CAM-A-1A	G1"	3.30
CAM-A-114A	G1.1/4"	4.55
CAM-A-112A	G1.1/2"	5.35
CAM-A-2A	G2"	6.50
CAM-A-212A	G2.1/2"	12.20
CAM-A-3A	G3"	13.35
CAM-A-4A	G4"	21.75
CAM-A-6A	G6"	61.55

Aluminium
Part B



Code S01	Thread BSP	Price
CAM-B-12A	G1/2"	7.30
CAM-B-34A	G3/4"	7.75
CAM-B-1A	G1"	8.50
CAM-B-114A	G1.1/4"	10.80
CAM-B-112A	G1.1/2"	12.50
CAM-B-2A	G2"	13.50
CAM-B-212A	G2.1/2"	19.20
CAM-B-3A	G3"	24.15
CAM-B-4A	G4"	31.80

Aluminium
Part C



Code S01	Size	Price
CAM-C-12A	1/2"	7.10
CAM-C-34A	3/4"	7.10
CAM-C-1A	1"	8.50
CAM-C-114A	1.1/4"	11.00
CAM-C-112A	1.1/2"	13.35
CAM-C-2A	2"	15.80
CAM-C-212A	2.1/2"	21.40
CAM-C-3A	3"	27.70
CAM-C-4A	4"	29.40
CAM-C-6A	6"	140.75

Aluminium
Part D



Code S01	Thread BSP	Price
CAM-D-12A	G1/2"	7.50
CAM-D-34A	G3/4"	6.90
CAM-D-1A	G1"	8.20
CAM-D-114A	G1.1/4"	8.90
CAM-D-112A	G1.1/2"	11.90
CAM-D-2A	G2"	13.40
CAM-D-212A	G2.1/2"	20.35
CAM-D-3A	G3"	23.40
CAM-D-4A	G4"	35.55
CAM-D-6A	G6"	98.40

Aluminium
Part E



Code S01	Size	Price
CAM-E-12A	1/2"	4.35
CAM-E-34A	3/4"	2.70
CAM-E-1A	1"	3.75
CAM-E-114A	1.1/4"	6.15
CAM-E-112A	1.1/2"	8.50
CAM-E-2A	2"	11.15
CAM-E-212A	2.1/2"	16.80
CAM-E-3A	3"	19.40
CAM-E-4A	4"	30.50
CAM-E-6A	6"	99.50

Aluminium
Part F



Code S01	Thread BSP	Price
CAM-F-12A	G1/2"	4.50
CAM-F-34A	G3/4"	2.90
CAM-F-1A	G1"	4.20
CAM-F-114A	G1.1/4"	3.75
CAM-F-112A	G1.1/2"	5.20
CAM-F-2A	G2"	6.00
CAM-F-212A	G2.1/2"	9.95
CAM-F-3A	G3"	12.35
CAM-F-4A	G4"	18.95
CAM-F-6A	G6"	50.60

Aluminium
Dust Plug



Code S01	Size	Price
CAM-DP-12A	1/2"	3.15
CAM-DP-34A	3/4"	1.50
CAM-DP-1A	1"	2.40
CAM-DP-114A	1.1/4"	3.75
CAM-DP-112A	1.1/2"	5.30
CAM-DP-2A	2"	6.20
CAM-DP-212A	2.1/2"	9.80
CAM-DP-3A	3"	11.20
CAM-DP-4A	4"	18.40
CAM-DP-6A	6"	54.95

Aluminium
Dust Cap



Code S01	Size	Price
CAM-DC-12A	1/2"	6.75
CAM-DC-34A	3/4"	6.30
CAM-DC-1A	1"	7.70
CAM-DC-114A	1.1/4"	8.95
CAM-DC-112A	1.1/2"	10.20
CAM-DC-2A	2"	13.20
CAM-DC-212A	2.1/2"	14.60
CAM-DC-3A	3"	19.75
CAM-DC-4A	4"	30.15
CAM-DC-6A	6"	101.75

For Green Suction & Delivery Hose



See page 528

Cam & Groove Couplings

Polypopylene
Part A



Code S01	Thread BSP	Price
CAM-A-12PP	G1/2"	1.50
CAM-A-34PP	G3/4"	1.10
CAM-A-1PP	G1"	1.15
CAM-A-114PP	G1.1/4"	1.90
CAM-A-112PP	G1.1/2"	1.90
CAM-A-2PP	G2"	2.30
CAM-A-3PP	G3"	4.50
CAM-A-4PP	G4"	8.75

Polypopylene
Part B



Code S01	Thread BSP	Price
CAM-B-12PP	G1/2"	6.00
CAM-B-34PP	G3/4"	5.30
CAM-B-1PP	G1"	6.80
CAM-B-114PP	G1.1/4"	11.15
CAM-B-112PP	G1.1/2"	10.90
CAM-B-2PP	G2"	11.15
CAM-B-3PP	G3"	17.15

Polypopylene
Part C



Code S01	Size	Price
CAM-C-12PP	1/2"	6.35
CAM-C-34PP	3/4"	5.90
CAM-C-1PP	1"	6.55
CAM-C-114PP	1.1/4"	11.20
CAM-C-112PP	1.1/2"	10.50
CAM-C-2PP	2"	11.95
CAM-C-3PP	3"	16.55
CAM-C-4PP	4"	31.40

Polypopylene
Part D



Code S01	Thread BSP	Price
CAM-D-12PP	G1/2"	6.20
CAM-D-34PP	G3/4"	5.35
CAM-D-1PP	G1"	6.60
CAM-D-114PP	G1.1/4"	11.30
CAM-D-112PP	G1.1/2"	10.55
CAM-D-2PP	G2"	10.75
CAM-D-3PP	G3"	16.55
CAM-D-4PP	G4"	29.40

Polypopylene
Part E



Code S01	Size	Price
CAM-E-12PP	1/2"	1.30
CAM-E-34PP	3/4"	1.00
CAM-E-1PP	1"	1.20
CAM-E-114PP	1.1/4"	1.60
CAM-E-112PP	1.1/2"	1.95
CAM-E-2PP	2"	3.60
CAM-E-3PP	3"	7.20
CAM-E-4PP	4"	13.10

Polypopylene
Part F



Code S01	Thread BSP	Price
CAM-F-12PP	G1/2"	1.35
CAM-F-34PP	G3/4"	1.10
CAM-F-1PP	G1"	1.00
CAM-F-114PP	G1.1/4"	1.90
CAM-F-112PP	G1.1/2"	1.90
CAM-F-2PP	G2"	3.50
CAM-F-3PP	G3"	4.50
CAM-F-4PP	G4"	11.40

Polypopylene
Dust Plug



Code S01	Size	Price
CAM-DP-34PP	3/4"	0.75
CAM-DP-1PP	1"	0.95
CAM-DP-114PP	1.1/4"	3.10
CAM-DP-112PP	1.1/2"	1.55
CAM-DP-2PP	2"	1.90
CAM-DP-3PP	3"	4.50

Polypopylene
Dust Cap



Code S01	Size	Price
CAM-DC-34PP	3/4"	4.75
CAM-DC-1PP	1"	7.00
CAM-DC-114PP	1.1/4"	14.40
CAM-DC-112PP	1.1/2"	10.75
CAM-DC-2PP	2"	10.75
CAM-DC-3PP	3"	15.50

Cam & Groove Couplings

Brass
Part A



Code S01	Thread BSP	Price
CAM-A-12B	G1/2"	8.30
CAM-A-34B	G3/4"	10.55
CAM-A-1B	G1"	10.15
CAM-A-114B	G1.1/4"	13.55
CAM-A-112B	G1.1/2"	19.60
CAM-A-2B	G2"	25.00
CAM-A-3B	G3"	41.75
CAM-A-4B	G4"	74.90

Brass
Part D



Code S01	Thread BSP	Price
CAM-D-12B	G1/2"	16.10
CAM-D-34B	G3/4"	16.20
CAM-D-1B	G1"	24.35
CAM-D-114B	G1.1/4"	33.55
CAM-D-112B	G1.1/2"	37.80
CAM-D-2B	G2"	42.35
CAM-D-212B	G2.1/2"	50.90
CAM-D-3B	G3"	78.50
CAM-D-4B	G4"	116.80

Brass
Dust Plug



Code S01	Size	Price
CAM-DP-12B	1/2"	6.75
CAM-DP-1B	1"	9.35
CAM-DP-114B	1.1/4"	15.80
CAM-DP-112B	1.1/2"	17.40
CAM-DP-2B	2"	25.75
CAM-DP-212B	2.1/2"	35.90
CAM-DP-3B	3"	54.35
CAM-DP-4B	4"	74.75

Brass
Part B



Code S01	Thread BSP	Price
CAM-B-12B	G1/2"	15.55
CAM-B-34B	G3/4"	14.90
CAM-B-1B	G1"	9.55
CAM-B-114B	G1.1/4"	30.20
CAM-B-112B	G1.1/2"	35.15
CAM-B-2B	G2"	38.70
CAM-B-212B	G2.1/2"	51.15
CAM-B-3B	G3"	71.10
CAM-B-4B	G4"	105.55

Brass
Part E



Code S01	Size	Price
CAM-E-12B	1/2"	12.80
CAM-E-34B	3/4"	13.00
CAM-E-1B	1"	20.35
CAM-E-114B	1.1/4"	26.95
CAM-E-112B	1.1/2"	32.75
CAM-E-2B	2"	46.10
CAM-E-212B	2.1/2"	66.20
CAM-E-3B	3"	99.70
CAM-E-4B	4"	166.60

Brass
Dust Cap



Code S01	Size	Price
CAM-DC-12B	1/2"	15.20
CAM-DC-1B	1"	22.00
CAM-DC-112B	1.1/2"	35.30
CAM-DC-2B	2"	44.55
CAM-DC-212B	2.1/2"	52.70
CAM-DC-3B	3"	64.60

Brass
Part C



Code S01	Size	Price
CAM-C-12B	1/2"	19.10
CAM-C-34B	3/4"	18.30
CAM-C-1B	1"	26.15
CAM-C-114B	1.1/4"	42.00
CAM-C-112B	1.1/2"	47.30
CAM-C-2B	2"	58.00
CAM-C-212B	2.1/2"	70.70
CAM-C-3B	3"	98.40
CAM-C-4B	4"	169.50

Brass
Part F



Code S01	Thread BSP	Price
CAM-F-12B	G1/2"	12.60
CAM-F-34B	G3/4"	13.20
CAM-F-1B	G1"	16.55
CAM-F-114B	G1.1/4"	21.90
CAM-F-112B	G1.1/2"	24.35
CAM-F-2B	G2"	36.95
CAM-F-212B	G2.1/2"	48.00
CAM-F-3B	G3"	67.90
CAM-F-4B	G4"	101.40

Cam & Groove Couplings

Stainless Steel
Part A



Code S01	Thread BSP	Price
CAM-A-12SS	G1/2"	8.55
CAM-A-34SS	G3/4"	8.60
CAM-A-1SS	G1"	12.20
CAM-A-114SS	G1.1/4"	18.80
CAM-A-112SS	G1.1/2"	23.95
CAM-A-2SS	G2"	32.00
CAM-A-212SS	G2.1/2"	54.95
CAM-A-3SS	G3"	60.30
CAM-A-4SS	G4"	90.20
CAM-A-6SS	G6"	253.80

Stainless Steel
Part B



Code S01	Thread BSP	Price
CAM-B-12SS	G1/2"	16.75
CAM-B-34SS	G3/4"	17.40
CAM-B-1SS	G1"	22.15
CAM-B-114SS	G1.1/4"	31.60
CAM-B-112SS	G1.1/2"	35.95
CAM-B-2SS	G2"	46.20
CAM-B-212SS	G2.1/2"	57.95
CAM-B-3SS	G3"	97.60
CAM-B-4SS	G4"	135.55

Stainless Steel
Part C



Code S01	Size	Price
CAM-C-12SS	1/2"	16.75
CAM-C-34SS	3/4"	16.75
CAM-C-1SS	1"	21.80
CAM-C-114SS	1.1/4"	33.10
CAM-C-112SS	1.1/2"	37.40
CAM-C-2SS	2"	55.80
CAM-C-212SS	2.1/2"	69.80
CAM-C-3SS	3"	100.35

Stainless Steel
Part D



Code S01	Thread BSP	Price
CAM-D-12SS	G1/2"	18.15
CAM-D-34SS	G3/4"	18.15
CAM-D-1SS	G1"	22.55
CAM-D-114SS	G1.1/4"	32.40
CAM-D-112SS	G1.1/2"	35.95
CAM-D-2SS	G2"	45.60
CAM-D-212SS	G2.1/2"	66.75
CAM-D-3SS	G3"	96.95
CAM-D-4SS	G4"	158.55

Stainless Steel
Part E



Code S01	Size	Price
CAM-E-12SS	1/2"	9.75
CAM-E-34SS	3/4"	9.75
CAM-E-1SS	1"	14.90
CAM-E-114SS	1.1/4"	23.90
CAM-E-112SS	1.1/2"	28.30
CAM-E-2SS	2"	42.10
CAM-E-212SS	2.1/2"	63.90
CAM-E-3SS	3"	79.80
CAM-E-4SS	4"	137.00

Stainless Steel
Part F



Code S01	Thread BSP	Price
CAM-F-12SS	G1/2"	10.80
CAM-F-34SS	G3/4"	11.30
CAM-F-1SS	G1"	16.80
CAM-F-114SS	G1.1/4"	22.95
CAM-F-112SS	G1.1/2"	35.40
CAM-F-2SS	G2"	41.20
CAM-F-212SS	G2.1/2"	62.70
CAM-F-3SS	G3"	78.75
CAM-F-4SS	G4"	131.70

Stainless Steel
Dust Plug



Code S01	Size	Price
CAM-DP-12SS	1/2"	7.50
CAM-DP-34SS	3/4"	6.80
CAM-DP-1SS	1"	10.75
CAM-DP-112SS	1.1/2"	17.75
CAM-DP-2SS	2"	27.15
CAM-DP-212SS	2.1/2"	38.75
CAM-DP-3SS	3"	48.75

Stainless Steel
Dust Cap



Code S01	Size	Price
CAM-DC-34SS	3/4"	15.70
CAM-DC-1SS	1"	17.15
CAM-DC-114SS	1.1/4"	47.70
CAM-DC-112SS	1.1/2"	36.15
CAM-DC-2SS	2"	47.95
CAM-DC-3SS	3"	72.50
CAM-DC-4SS	4"	116.15

Cam & Groove Seals



Viton Seals

Code S01	To Suit Coupling SIze	Price
CAM-S-12-VITON	1/2"	4.40
CAM-S-34-VITON	3/4"	4.40
CAM-S-1-VITON	1"	5.10
CAM-S-114-VITON	1.1/4"	7.00
CAM-S-112-VITON	1.1/2"	9.30
CAM-S-2-VITON	2"	11.00
CAM-S-212-VITON	2.1/2"	14.35
CAM-S-3-VITON	3"	22.80



PTFE Seals

Code S01	To Suit Coupling Size	Price
CAM-S-12-PTFE	1/2"	17.30
CAM-S-34-PTFE	3/4"	17.30
CAM-S-1-PTFE	1"	18.20
CAM-S-114-PTFE	1.1/4"	22.90
CAM-S-112-PTFE	1.1/2"	21.95
CAM-S-2-PTFE	2"	24.75
CAM-S-212-PTFE	2.1/2"	33.40
CAM-S-3-PTFE	3"	37.00

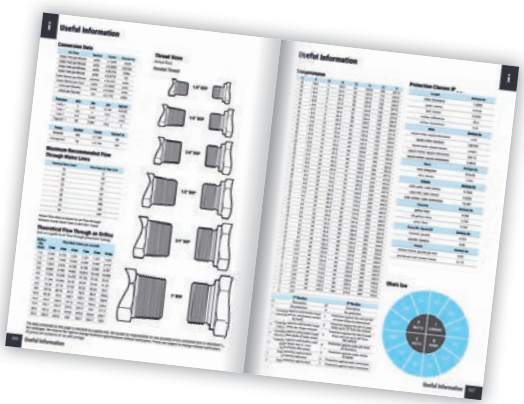
EPDM Seals

Code S01	To Suit Coupling Size	Price
CAM-S-12-EPDM	1/2"	1.00
CAM-S-34-EPDM	3/4"	1.00
CAM-S-1-EPDM	1"	1.00
CAM-S-114-EPDM	1.1/4"	1.15
CAM-S-112-EPDM	1.1/2"	1.30
CAM-S-2-EPDM	2"	1.70
CAM-S-212-EPDM	2.1/2"	1.95
CAM-S-3-EPDM	3"	2.30
CAM-S-4-EPDM	4"	2.90

Buna Seals

Code S01	To Suit Coupling Size	Price
CAM-S-12-BUNA	1/2"	0.70
CAM-S-34-BUNA	3/4"	0.55
CAM-S-1-BUNA	1"	0.70
CAM-S-114-BUNA	1.1/4"	1.15
CAM-S-112-BUNA	1.1/2"	0.75
CAM-S-2-BUNA	2"	1.10
CAM-S-212-BUNA	2.1/2"	1.30
CAM-S-3-BUNA	3"	1.55
CAM-S-4-BUNA	4"	1.50
CAM-S-6-BUNA	6"	3.15

For Useful Information



See pages 886-887

IBC Off Load System

new

Cam Male Adaptor x Female Thread



Part A

Code S01	Size	Thread	Price
IBC-A-1-S606	1"	S60 x 6	14.00
IBC-A-112-S606	1.1/2"	S60 x 6	14.00
IBC-A-2-S606	2"	S60 x 6	14.00
IBC-A-2-NPSM	2"	NPSM	14.00
IBC-A-3-S1008	3"	S100 x 8	27.70

Swivel Hose Tail x Female Thread



Part HC

Code S01	Hose ID	Thread	Price
IBC-HC-1-S606	1" (25mm)	S60 x 6	23.80
IBC-HC-114-S606	1.1/4" (32mm)	S60 x 6	23.80
IBC-HC-112-S606	1.1/2" (38mm)	S60 x 6	23.80
IBC-HC-2-S606	2" (50mm)	S60 x 6	23.80

Fixed Male Thread x Female Thread



Part HA

Code S01	Female Thread	Male Thread	Price
IBC-HA-34-S606	3/4" BSPP	S60 x 6	14.00
IBC-HA-1-S606	1" BSPP	S60 x 6	14.00
IBC-HA-112-S606	1.1/2" BSPP	S60 x 6	14.00
IBC-HA-2-S606	2" BSPP	S60 x 6	14.00
IBC-HA-3-S1008	3" BSPP	S100 x 8	32.60
IBC-HA-2NPS-S606	2" NPSM	S60 x 6	13.35
IBC-HA-S606-2BSP	S60 x 6	2" BSPP with Seal	14.00
IBC-HA-S606-2NPS	S60 x 6	2" NPSM	39.60
IBC-HA-S606-1008	S60 x 6	S100 x 8	90.80

Female Thread x Female Thread



Part HD

Code S01	Size	Price
IBC-HD-112-S606	1.1/2" BSPP x S60 x 6	18.35
IBC-HD-2-S606	2" BSPP x S60 x 6	18.35
IBC-HD-2NPS-S606	2" NPSM x S60 x 6	18.35

Dust Plug



Code S01	Size	Price
IBC-DP-112	1.1/2"	5.40
IBC-DP-2	2"	6.70

Cam Female Coupler x Hose Tail



Part C

Code S01	Size	Hose ID	Price
IBC-C-2-1	2"	1" (25mm)	28.95
IBC-C-2-114	2"	1.1/4" (32mm)	28.95
IBC-C-2-112	2"	1.1/2" (38mm)	28.95
IBC-C-2-2	2"	2" (50mm)	22.35
IBC-C-3-3	3"	3" (75mm)	39.60

Dust Cap



Code S01	Size	Price
IBC-DC-112	1.1/2"	20.30
IBC-DC-2	2"	22.35
IBC-DC-3	3"	38.55

Female Coupler x Female Thread



Part D

Code S01	Size	Thread	Price
IBC-D-112-112BSP	1.1/2"	1.1/2" BSPP	20.30
IBC-D-2-2BSP	2"	2" BSPP	22.35
IBC-D-2-S606	2"	S60 x 6	28.90

EPDM Seal



To Suit S60 x 6 Thread

Code S01	Price
IBC-EPDM-SEAL	1.55

Lug Type Couplings

Male BSP
Malleable Iron



Code	S06	Thread BSP	Hose ID	Price
TPHC-MI-112M		G1.1/2"	1.1/2"	7.70
TPHC-MI-2M		G2"	2"	12.40
TPHC-MI-212M		G2.1/2"	2.1/2"	18.10
TPHC-MI-3M		G3"	3"	27.25
TPHC-MI-4M		G4"	4"	36.15

Female BSP
Malleable Iron, with Seal



Code	S06	Thread BSP	Hose ID	Price
TPHC-MI-112F		G1.1/2"	1.1/2"	10.25
TPHC-MI-2F		G2"	2"	18.10
TPHC-MI-212F		G2.1/2"	2.1/2"	22.60
TPHC-MI-3F		G3"	3"	31.85
TPHC-MI-4F		G4"	4"	47.25

Male BSP
Brass



Code	S06	Thread BSP	Hose ID	Price
TPHC-BR-12M		G1/2"	1/2"	2.25
TPHC-BR-34M		G3/4"	3/4"	3.00
TPHC-BR-1M		G1"	1"	6.90
TPHC-BR-114M		G1.1/4"	1.1/4"	13.65
TPHC-BR-112M		G1.1/2"	1.1/2"	24.35
TPHC-BR-2M		G2"	2"	39.35
TPHC-BR-3M		G3"	3"	87.75
TPHC-BR-4M		G4"	4"	168.75

Female BSP
Brass with Seal



Code	S06	Thread BSP	Hose ID	Price
TPHC-BR-12F		G1/2"	1/2"	3.75
TPHC-BR-34F		G3/4"	3/4"	5.95
TPHC-BR-1F		G1"	1"	8.20
TPHC-BR-114F		G1.1/4"	1.1/4"	17.35
TPHC-BR-112F		G1.1/2"	1.1/2"	24.90
TPHC-BR-2F		G2"	2"	34.75
TPHC-BR-3F		G3"	3"	79.15
TPHC-BR-4F		G4"	4"	186.90

Male BSP
Alloy



Code	S06	Thread BSP	Hose ID	Price
TPHC-AL-112M		G1.1/2"	1.1/2"	18.15
TPHC-AL-2M		G2"	2"	39.35
TPHC-AL-212M		G2.1/2"	2.1/2"	41.90
TPHC-AL-3M		G3"	3"	43.15
TPHC-AL-4M		G4"	4"	45.00

Female BSP
Alloy with Seal



Code	S06	Thread BSP	Hose ID	Price
TPHC-AL-112F		G1.1/2"	1.1/2"	21.70
TPHC-AL-2F		G2"	2"	23.15
TPHC-AL-212F		G2.1/2"	2.1/2"	28.20
TPHC-AL-3F		G3"	3"	39.70
TPHC-AL-4F		G4"	4"	60.70

Male BSP
Polypropylene



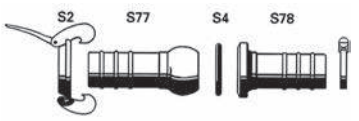
Code	S22	Thread BSP	Hose ID	Price
TPHC-PP-112M		G1.1/2"	1.1/2"	4.50
TPHC-PP-2M		G2"	2"	5.85
TPHC-PP-212M		G2.1/2"	2.1/2"	7.05
TPHC-PP-3M		G3"	3"	9.00
TPHC-PP-4M		G4"	4"	11.60

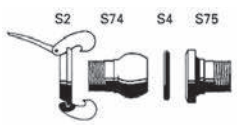
Female BSP
Polypropylene with Seal



Code	S22	Thread BSP	Hose ID	Price
TPHC-PP-112F		G1.1/2"	1.1/2"	10.25
TPHC-PP-2F		G2"	2"	13.80
TPHC-PP-212F		G2.1/2"	2.1/2"	14.75
TPHC-PP-3F		G3"	3"	21.00
TPHC-PP-4F		G4"	4"	27.80

Lever Lock Water Couplings





Maximum Working Pressure:

- 2" to 3.1/2" – 20 bar
- 4" to 8" – 12 bar



S77 Male x Hose Connector

Galvanised Steel

Code N09	Coupling Size	Hose ID	Price
WC-S77-2	50	2"	7.25
WC-S77-3	76	3" Tall x 3"	11.40
WC-S77-312	89	3" Tall x 3.1/2"	13.85
WC-S77-4	108	4"	22.00
WC-S77-5	133	5"	28.10
WC-S77-6	159	6"	32.45
WC-S77-8	194	8"	65.50



S78 Female x Hose Connector

Galvanised Steel

Code N09	Coupling Size	Hose ID	Price
WC-S78-2	50	2"	7.20
WC-S78-3	76	3" Tall x 3"	10.30
WC-S78-312	89	3" Tall x 3.1/2"	12.65
WC-S78-4	108	4"	19.85
WC-S78-5	133	5"	29.35
WC-S78-6	159	6"	33.00
WC-S78-8	194	8"	64.60



S74 Male x Male BSPP Pipe Thread

With Lever Closure Ring, Galvanised Steel

Code N09	Coupling Size	Thread BSPT	Price
WC-S74-112	50	1.1/2"	20.20
WC-S74-2	50	2"	24.90
WC-S74-212	76	2.1/2"	35.65
WC-S74-3	76	3" BSPP x 3"	36.30
WC-S74-312	89	3" BSPP x 3.1/2"	42.55
WC-S74-4	108	4"	60.95
WC-S74-5	133	5"	85.90
WC-S74-6	159	6"	99.15
WC-S74-8	194	8"	180.50

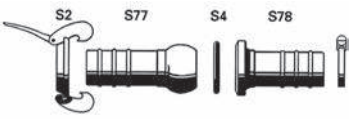


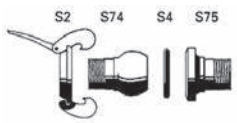
S2 Lever Closure Ring

Galvanised Steel

Code N09	Coupling Size	Hose ID	Price
WC-S2-2	50	2"	8.15
WC-S2-3	76	3" Tall x 3"	16.50
WC-S2-312	89	3" Tall x 3.1/2"	23.75
WC-S2-4	108	4"	27.60
WC-S2-5	133	5"	41.15
WC-S2-6	159	6"	55.40
WC-S2-8	194	8"	101.80

Lever Lock Water Couplings





Maximum Working Pressure:

- 2" to 3.1/2" – 20 bar
- 4" to 8" – 12 bar





S75 Female x Male BSPP Pipe Thread

Galvanised Steel

Code N09	Coupling Size	Thread BSPT	Price
WC-S75-112	50	1.1/2"	11.15
WC-S75-2	50	2"	11.95
WC-S75-212	76	2.1/2"	14.20
WC-S75-3	76	3" BSPP x 3"	15.40
WC-S75-312	89	3" BSPP x 3.1/2"	18.25
WC-S75-4	108	4"	25.50
WC-S75-5	133	5"	37.70
WC-S75-6	159	6"	50.65
WC-S75-8	194	8"	100.85

S4 Sealing Ring

Natural Rubber

Code N09	Coupling Size	Price
WC-S4-2	50	0.50
WC-S4-3	76	0.85
WC-S4-312	89	1.95
WC-S4-4	108	2.05
WC-S4-5	133	3.80
WC-S4-6	159	3.65
WC-S4-8	194	9.45



Complete Connection Set

Galvanised Steel with Natural Rubber Sealing Ring

Code N09	Coupling Size	Hose ID	Price
WC-SET-2	50	2"	19.60
WC-SET-3	76	3" Tall x 3"	32.85
WC-SET-312	89	3" Tall x 3.1/2"	44.65
WC-SET-4	108	4"	60.75
WC-SET-5	133	5"	86.50
WC-SET-6	159	6"	105.60
WC-SET-8	194	8"	187.80



Tomorrow's Vacuum Technology Today



Suction Cups



Vacuum Pumps



Vacuum Grippers



Vacuum Filters

See section 3 Vacuum





494-497 Reinforced Braided & Unreinforced PVC Hose



498-504 Nylon Tubing



505-507 Polyurethane Tubing



508 Boxed Tubing



509 PTFE, PVDF & Silicone Tubing



510 Multi-core Nylon Tubing



511-513 Recoil & Air Tool Hoses



514-519 PVC & Rubber/ Alloy Hose & Layflat Hose



520-522 Automotive Tubing & Hose



523-530 Suction & Discharge Hose



531-533 Specialist Hose & Tubing



533-535 Welding/Gas Hose & Couplings



536-547 Industrial & Ducting Hose



548 Copper Tubing



549-573 Hose Clips



574-576 Accessories, Crimpers & Ferrules

Reinforced PVC Hose

Reinforced PVC Braided Hose, to BS6066

Manufactured from top quality crystal clear 'virgin' PVC compound, and ideal for factory airlines, fluid systems and many industrial applications. Reinforced with a high tensile quality polyester yarn, it offers high working pressures and extreme flexibility.

The hose is resistant to a wide range of chemicals (please consult our Sales Team for further details).

Applications:

- Water supply and draining
- Transfer of various fluids and powder
- Supplying water, gas, oil, etc. in agriculture and industry
- Compressed air
- Other special purposes
- Manufactured in accordance with ISO 5774 & BS 6066
- 3:1 safety factor @ 23°C

Characteristics:

- Excellent abrasion resistance
- High resistance to alkalis and acids
- Silicone free
- Cadmium free
- Low toxicity
- Excellent transparency
- Produced from FDA approved materials

Working Temperature:

- -20°C to +65°C

- Durable, anti-cold proof, non-inflated
- Highly flexible, lightweight and easy to handle
- No fissure phenomenon by ultraviolet rays and direct rays of the sun
- Little expansion or contraction



Clear Reinforced PVC Hose

Heavy Duty, 30 Metre Coils

Code R05	Tube ID	Tube ID mm	Tube OD mm	Pressure bar Max. Working	Pressure bar Burst	Bend Radius mm	Coil Weight kg	Price 1-9	Price 10+
BPVC1/8-30M	1/8"	3.0	8.0	32	128	20	1.68	**49.95**	**47.50**
BPVC3/16-30M	3/16"	5.0	10.0	27	108	20	2.22	**55.95**	**53.20**
BPVC1/4-30M	1/4"	6.5	11.5	16	65	30	2.50	**35.90**	**34.15**
BPVC5/16-30M	5/16"	8.0	13.5	16	58	35	3.30	**44.30**	**42.10**
BPVC3/8-30M	3/8"	10.0	16.0	15	45	45	3.50	**44.65**	**42.45**
BPVC1/2-30M	1/2"	12.5	18.5	12	40	52	5.00	**54.60**	**51.90**
BPVC5/8-30M	5/8"	16.0	23.0	10	35	74	7.80	**99.05**	**94.10**
BPVC3/4-30M	3/4"	20.0	26.0	10	32	80	9.30	**87.65**	**83.30**
BPVC1-30M	1"	25.0	33.0	10	28	110	12.80	**128.00**	**121.60**
BPVC11/4-30M	1.1/4"	32.0	41.0	6	26	130	18.90	**218.60**	**207.70**
BPVC11/2-30M	1.1/2"	40.0	49.0	6	20	165	23.00	**265.40**	**252.15**
BPVC2-30M	2"	50.0	62.0	3	17	220	38.00	**487.00**	**462.65**

- Manufactured in accordance with ISO 5774 & BS 6066
- 3:1 safety factor @ 23°C

Working Temperature:

- -20°C to +65°C



Clear Reinforced PVC Hose

Medium Duty, 100 Metre Coils

Code R05	Tube ID	Tube ID mm	Tube OD mm	Pressure bar Max. Working	Pressure bar Burst	Bend Radius mm	Coil Weight kg	Price 1-9	Price 10+
BPVC1/4-100M	1/4"	6.0	11.0	15	65	25	9.3	**107.90**	**102.55**
BPVC5/16-100M	5/16"	8.0	13.0	15	58	33	12.3	**104.60**	**99.40**
BPVC3/8-100M	3/8"	10.0	15.0	12	45	40	16.3	**124.00**	**117.80**
BPVC1/2-100M	1/2"	13.0	18.0	12	40	52	18.7	**149.55**	**142.10**
BPVC3/4-100M	3/4"	19.0	25.0	10	32	76	31.0	**304.60**	**289.40**
BPVC1-100M	1"	25.0	31.0	9	28	100	43.2	**324.00**	**307.80**

Reinforced PVC Hose

- Manufactured in accordance with ISO 5774 & BS 6066
- 3:1 safety factor @ +23ºC

Working Temperature:

- -20ºC to +65ºC



Clear Reinforced PVC Hose

Medium Duty, 30 Metre Coils

Code R05	Tube ID	Tube ID mm	Tube OD mm	Pressure bar Max. Working	Pressure bar Burst	Bend Radius mm	Coil Weight kg	Price 1-9	Price 10+
BPVCL1/4-30M	1/4"	6.0	11.0	15	65	25	2.30	**33.80**	**32.15**
BPVCL5/16-30M	5/16"	8.0	13.0	15	58	33	2.70	**37.05**	**35.20**
BPVCL3/8-30M	3/8"	10.0	15.0	12	45	40	3.20	**43.80**	**41.65**
BPVCL1/2-30M	1/2"	13.0	18.0	12	40	52	4.00	**46.55**	**44.25**
BPVCL3/4-30M	3/4"	19.0	25.0	10	32	76	7.10	**76.95**	**73.15**
BPVCL1-30M	1"	25.0	31.0	9	28	100	8.90	**96.20**	**91.40**

- Manufactured in accordance with ISO 5774 & BS 6066
- 3:1 safety factor @ +23ºC

Working Temperature:

- -20ºC to +65ºC







Coloured Reinforced PVC Hose

Medium Duty, 30 Metre Coils

Code N35	Tube ID	Colour	Price 1-9	Price 10+
BPVC1/4BK-30M	1/4"	Black	**32.30**	**30.70**
BPVC1/4RD-30M	1/4"	Red	**27.30**	**25.95**
BPVC1/4BL-30M	1/4"	Blue	**27.30**	**25.95**
BPVC5/16BK-30M	5/16"	Black	**31.50**	**29.95**
BPVC5/16RD-30M	5/16"	Red	**37.40**	**35.55**
BPVC5/16BL-30M	5/16"	Blue	**39.10**	**37.15**
BPVC3/8BK-30M	3/8"	Black	**43.45**	**41.30**
BPVC3/8RD-30M	3/8"	Red	**36.90**	**35.10**
BPVC3/8BL-30M	3/8"	Blue	**43.45**	**41.30**

Code N35	Tube ID	Colour	Price 1-9	Price 10+
BPVC1/2BK-30M	1/2"	Black	**52.35**	**49.75**
BPVC1/2RD-30M	1/2"	Red	**52.35**	**49.75**
BPVC1/2BL-30M	1/2"	Blue	**52.85**	**50.25**
BPVC3/4BK-30M	3/4"	Black	**91.60**	**87.05**
BPVC3/4BL-30M	3/4"	Blue	**91.60**	**87.05**
BPVC1BK-30M	1"	Black	**111.25**	**105.70**

Unreinforced PVC Hose

- Manufactured from top quality crystal clear "virgin" PVC compound, this hose is ideal for conveying fluids, gases, powders and granules at low pressure.
- Full chemical resistance information is available from our Sales Team.
- All the hoses are made from USF and DA approved material, suitable for food and drink.
- All materials used have FDA & BGA, UK S.I. No.1523 & EEC Directive 78/142/EEC Approval for use in food contact applications.
- Please note: No recommended burst pressures/ working pressures due to hose being unreinforced.

Working Temperature:

- -15ºC to +60ºC

Standard Coil Length:

- 30 Metres





Clear Unreinforced PVC Hose

Light Wall, 30 Metre Coils

Code N34	Tube mm OD	Tube mm ID	Price 1-9	Price 10+
PVC3/15-30M	5	3	3.85	3.70
PVC5/15-30M	8	5	13.85	13.20
PVC6/15-30M	8	6	5.50	5.25
PVC8/15-30M	11	8	13.65	13.00
PVC10/15-30M	12	9	13.90	13.25
PVC12/15-30M	15	12	15.65	14.90
PVC16/15-30M	18	16	57.45	54.60
PVC19/15-30M	22	19	40.60	38.60

Clear Unreinforced PVC Hose

Heavy Wall, 30 Metre Coils

Code N34	Tube mm OD	Tube mm ID	Coil Weight kg	Price 1-9	Price 10+
PVC5/3-30M	11	5	2.8	20.05	19.05
PVC6/3-30M	12	6	3.1	21.35	20.30
PVC8/3-30M	14	8	3.7	27.55	26.20
PVC10/3-30M	16	10	4.6	33.50	31.85
PVC12/3-30M	18	12	5.2	37.70	35.85
PVC16/3-30M	22	16	6.5	42.95	40.85
PVC19/3-30M	25	19	7.6	52.75	50.15
PVC25/3-30M	31	25	9.6	63.50	60.35
PVC32/5-30M	42	32	21.6	236.95	225.15
PVC38/5-30M	48	38	26.9	298.90	284.00
PVC50/6-30M	62	50	39.3	409.95	389.50

For Hose Tails





See section 7

Hi-Vis Air & Water Hose

Hi-Vis is a key Health & Safety high visibility product which raises the profile and creates a greater awareness of the hose, whilst enhancing safety in the working environment.
The hose has been tested for chromaticity to EN471:2003.

Features:

- 20 bar rated
- -20°C to +80°C
- Suitable for potable drinking water
- Self-extinguishing
- High visibility
- Flexible PVC
- UV stable
- Multi-use
- White inner, yellow fluorescent outer
- Material softness BSS50/BSS65

Applications:

- Industrial
- Food
- Wash down
- Garage forecourt
- Workshops
- Vending
- Window cleaning/high rise
- Festivals and outdoor public events



Hi-Vis Hose

30 Metre Coils

Code N70	Hose ID	Hose ID mm	Hose OD mm	Pressure bar Max. Working	Pressure bar Burst	Bend Radius mm	Coil Weight kg	Price 1-9	Price 10+
HVPVC1/4-30M	1/4"	6.3	11.5	20	60	28	2.79	**41.70**	**39.65**
HVPVC5/16-30M	5/16"	8.0	13.5	20	60	29	3.69	**42.95**	**40.85**
HVPVC3/8-30M	3/8"	10.0	16.0	20	60	40	4.89	**56.65**	**53.85**
HVPVC1/2-30M	1/2"	12.5	18.5	20	60	55	5.61	**73.60**	**69.95**

Metric Nylon Tubing

Key Features

- Manufactured to BS5409 from quality-grade nylon granules
- Suitable for use in various pneumatic applications
- Ideal for use with push-in fittings
- Abrasion resistant
- UV stable
- Silicone free
- Working Temperature: -10°C to +80°C
- Not suitable for water or high humidity applications
- 4:1 Safety Factor



Metric Flexible Nylon 6 Tubing

30 Metre Coils

Code R01	Tube mm OD	Tube mm ID	Colour	Working Pressure	Price
ECONM4/3NA30	4	3	Natural	20.7	8.55
ECONM4/25NA30	4	2.5	Natural	27.6	10.90
ECONM4/25BK30	4	2.5	Black	27.6	10.90
ECONM4/25BL30	4	2.5	Blue	27.6	10.90
ECONM4/25GN30	4	2.5	Green	27.6	10.90
ECONM4/25RD30	4	2.5	Red	27.6	10.90
ECONM4/25YW30	4	2.5	Yellow	27.6	10.90
ECONM5/3NA30	5	3	Natural	27.6	15.60
ECONM5/3BK30	5	3	Black	27.6	15.60
ECONM5/3BL30	5	3	Blue	27.6	15.80
ECONM5/3GN30	5	3	Green	27.6	15.60
ECONM5/3RD30	5	3	Red	27.6	15.60
ECONM5/3YW30	5	3	Yellow	27.6	31.05
ECONM5/33NA30	5	3.3	Natural	20.7	14.10
ECONM6/4NA30	6	4	Natural	24.1	20.00
ECONM6/4BK30	6	4	Black	24.1	19.70
ECONM6/4BL30	6	4	Blue	24.1	18.00
ECONM6/4GN30	6	4	Green	24.1	19.70
ECONM6/4RD30	6	4	Red	24.1	19.70
ECONM6/4YW30	6	4	Yellow	24.1	18.00
ECONM6/45NA30	6	4.5	Natural	20.7	17.40
ECONM8/6NA30	8	6	Natural	24.1	27.25
ECONM8/6BK30	8	6	Black	24.1	26.80
ECONM8/6BL30	8	6	Blue	24.1	27.25
ECONM8/6GN30	8	6	Green	24.1	26.80
ECONM8/6RD30	8	6	Red	24.1	27.25
ECONM8/6YW30	8	6	Yellow	24.1	27.25
ECONM8/55NA30	8	5.5	Natural	24.1	31.95

Code R01	Tube mm OD	Tube mm ID	Colour	Working Pressure	Price
ECONM8/55BK30	8	5.5	Black	24.1	31.95
ECONM10/7NA30	10	7	Natural	20.7	42.95
ECONM10/7BK30	10	7	Black	20.7	43.00
ECONM10/7BL30	10	7	Blue	20.7	47.00
ECONM10/7GN30	10	7	Green	20.7	47.00
ECONM10/7RD30	10	7	Red	20.7	36.55
ECONM10/7YW30	10	7	Yellow	20.7	47.00
ECONM10/8NA30	10	8	Natural	15.2	35.90
ECONM10/8BK30	10	8	Black	15.2	35.90
ECONM10/8BL30	10	8	Blue	15.2	35.30
ECONM10/8GN30	10	8	Green	15.2	35.30
ECONM10/8RD30	10	8	Red	15.2	35.30
ECONM10/8YW30	10	8	Yellow	15.2	35.85
ECONM12/9NA30	12	9	Natural	17.2	58.20
ECONM12/9BK30	12	9	Black	17.2	57.45
ECONM12/9BL30	12	9	Blue	17.2	58.25
ECONM12/9GN30	12	9	Green	17.2	58.25
ECONM12/9RD30	12	9	Red	17.2	57.45
ECONM12/9YW30	12	9	Yellow	17.2	58.20
ECONM12/10NA30	12	10	Natural	13.8	42.00
ECONM12/10BK30	12	10	Black	13.8	42.00
ECONM12/10RD30	12	10	Red	13.8	42.60
ECONM14/11NA30	14	11	Natural	17.2	69.50
ECONM14/11BK30	14	11	Black	17.2	69.50
ECONM15/12NA30	15	12	Natural	13.8	76.50
ECONM16/13NA30	16	13	Natural	13.8	81.70
ECONM18/14NA30	18	14	Natural	13.8	106.20
ECONM22/17NA30	22	17	Natural	12.4	208.25

Metric Nylon Tubing

Key Features

- Manufactured to BS5409 from quality grade nylon granules
- Suitable for use in various pneumatic applications
- Ideal for use with push-in fittings
- Abrasion resistant
- UV stable
- Silicone free
- Working Temperature: -10°C to +80°C
- Not suitable for water or high humidity applications
- 4:1 Safety Factor



Metric Flexible Nylon 6 Tubing

100 Metre Coils

Code R01	Tube mm OD	Tube mm ID	Colour	Working Pressure	Price
ECONM4/25NA100	4	2.5	Natural	27.6	31.60
ECONM5/3NA100	5	3	Natural	27.6	48.85
ECONM6/4NA100	6	4	Natural	24.1	60.55
ECONM6/4BK100	6	4	Black	24.1	60.55
ECONM6/4BL100	6	4	Blue	24.1	61.55
ECONM6/4GN100	6	4	Green	24.1	60.55
ECONM6/4RD100	6	4	Red	24.1	61.45
ECONM6/4YW100	6	4	Yellow	24.1	60.55
ECONM8/6NA100	8	6	Natural	24.1	84.60
ECONM8/6BK100	8	6	Black	24.1	84.60
ECONM8/6BL100	8	6	Blue	24.1	84.60
ECONM10/8NA100	10	8	Natural	15.2	109.35
ECONM10/8BK100	10	8	Black	15.2	109.35
ECONM10/8BL100	10	8	Blue	15.2	111.05

Metric Flexible Nylon 6 Tubing

500 Metre Coils

Code R01	Tube mm OD	Tube mm ID	Colour	Working Pressure	Price
ECONM6/4NA500	6	4	Natural	24.1	291.50
ECONM6/4BL500	6	4	Blue	24.1	307.95
ECONM8/6NA500	8	6	Natural	24.1	406.05

For Air Receivers



See page 351

Metric Nylon Tubing

Key Features

- Flexible, lightweight and durable over a wide temperature range
- Mirror-smooth inner for improved flow
- Manufactured from heat and light stabilised type 12 nylon to precise tolerances
- Resistant to a wide range of chemicals
- Manufactured in accordance with BS 5409 and DIN 73378
- Silicone free
- Working Temperature: -40°C to +80°C
- High resistance to moisture absorption
- 4:1 safety factor

Flexible Nylon 12 Tubing

30 Metre Coils



Code R01	Tube mm OD	Tube mm ID	Colour	Working Pressure bar at -40°C to +20°C	Bend Radius mm at +20°C	Price 1-9	Price 10+
NM4/25NA30	4	2.5	Natural	27	8	15.20	14.45
NM4/25BK30	4	2.5	Black	27	8	15.20	14.45
NM4/25BL30	4	2.5	Blue	27	8	15.20	14.45
NM4/25GN30	4	2.5	Green	27	8	15.20	14.45
NM4/25RD30	4	2.5	Red	27	8	15.20	14.45
NM4/25YW30	4	2.5	Yellow	27	8	19.50	18.55
NM5/33NA30	5	3	Natural	27	10	23.90	22.75
NM5/33BK30	5	3	Black	27	10	24.85	23.65
NM5/33BL30	5	3	Blue	27	10	23.90	22.75
NM5/33GN30	5	3	Green	27	10	27.80	26.45
NM5/33RD30	5	3	Red	27	10	23.90	22.75
NM5/33YW30	5	3	Yellow	27	10	27.00	25.65
NM6/4NA30	6	4	Natural	24	13	31.10	29.55
NM6/4BK30	6	4	Black	24	13	31.10	29.55
NM6/4BL30	6	4	Blue	24	13	31.10	29.55
NM6/4GN30	6	4	Green	24	13	30.65	29.15
NM6/4RD30	6	4	Red	24	13	31.10	29.55
NM6/4YW30	6	4	Yellow	24	13	31.10	29.55
NM8/6NA30	8	6	Natural	24	32	42.90	40.80
NM8/6BK30	8	6	Black	24	32	43.55	41.40
NM8/6BL30	8	6	Blue	24	32	43.55	41.40
NM8/6GN30	8	6	Green	24	32	42.90	40.80
NM8/6RD30	8	6	Red	24	32	43.55	41.40
NM8/6YW30	8	6	Yellow	24	32	42.90	40.80
NM8/55NA30	8	5.5	Natural	22	32	43.65	41.50
NM8/55BK30	8	5.5	Black	22	32	49.35	46.90
NM10/8NA30	10	8	Natural	15	50	56.10	53.30
NM10/8BK30	10	8	Black	15	50	55.25	52.50
NM10/8BL30	10	8	Blue	15	50	56.10	53.30
NM10/8RD30	10	8	Red	15	50	56.10	53.30
NM10/7NA30	10	7	Natural	20	26	78.05	74.15
NM10/7BK30	10	7	Black	20	26	79.30	75.35
NM12/10NA30	12	10	Natural	13	60	67.40	64.05
NM12/10BK30	12	10	Black	13	60	67.40	64.05
NM12/10BL30	12	10	Blue	13	60	67.20	63.85
NM12/10RD30	12	10	Red	13	60	69.10	65.65
NM12/9NA30	12	9	Natural	17	45	128.90	122.50
NM12/9BK30	12	9	Black	17	45	98.00	93.10
NM14/11NA30	14	11	Natural	17	60	115.00	109.25
NM14/11BK30	14	11	Black	17	60	115.00	109.25
NM16/13NA30	16	13	Natural	13	85	133.35	126.70
NM18/14NA30	18	14	Natural	11	135	174.40	165.70
NM22/17NA30	22	17	Natural	11	225	324.25	308.05

Metric Nylon Tubing



Flexible Nylon 12 Tubing

100 Metre Coils

Code R01	Tube mm OD	Tube mm ID	Colour	Working Pressure bar at +20°C	Bend Radius mm at +20°C	Price 1-4	Price 5+
NM4/25NA100	4	2.5	Natural	27	8	50.65	48.15
NM5/33NA100	5	3	Natural	27	10	81.75	77.70
NM6/4NA100	6	4	Natural	24	13	102.00	96.90
NM6/4BK100	6	4	Black	24	13	102.00	96.90
NM6/4BL100	6	4	Blue	24	13	102.00	96.90
NM6/4RD100	6	4	Red	24	13	103.60	98.45
NM8/6NA100	8	6	Natural	24	32	142.90	135.80
NM8/6BK100	8	6	Black	24	32	145.15	137.90
NM8/6BL100	8	6	Blue	24	32	145.15	137.90
NM8/6RD100	8	6	Red	24	32	145.15	137.90



Flexible Nylon 12 Tubing

500 Metre Drums

Code R04	Tube mm OD	Tube mm ID	Colour	Working Pressure bar at +20°C	Bend Radius mm at +20°C	Price
NM6/4NA500	6	4	Natural	24	13	499.45
NM6/4BK500	6	4	Black	24	13	529.50
NM8/6NA500	8	6	Natural	24	32	635.15
NM8/6BK500	8	6	Black	24	32	614.20
NM10/8NA500	10	8	Natural	15	50	691.70
NM10/8BK500	10	8	Black	15	50	758.85
NM12/10NA500	12	10	Natural	13	60	899.45
NM12/10BK500	12	10	Black	13	60	899.45

Metric Nylon Tubing

- High pressure applications
- Colour: natural
- Temperature range: 0°C to +100°C



Flexible Nylon 6.6 Tubing

100 Metre Coils

Code R02	Tube mm OD	Tube mm ID	Bend/Radius	Pressure bar Working	Pressure bar Burst	Price 1-4	Price 5+
66NM4/15NA100	4	1.5	35	136	409	**54.60**	**51.90**
66NM4/2NA100	4	2	25	100	300	**47.55**	**45.20**
66NM4/25NA100	4	2.5	30	69	208	**34.30**	**32.60**
66NM6/36NA100	6	3.6	25	75	225	**63.20**	**60.05**
66NM6/4NA100	6	4	40	60	180	**54.80**	**52.10**
66NM8/5NA100	8	5	50	69	208	**107.05**	**101.70**
66NM8/6NA100	8	6	60	43	129	**84.35**	**80.15**

"Super-flexible", nylon tubing has been specially developed to meet demands for a nylon tubing which gives superior flexibility over existing materials. "Super-Flexible" remains flexible even when exposed to very low temperatures and has extremely high impact resistance. The combination of these qualities with the advantages of superior abrasive resistance allied with high durability to oil and petrol, provides many interesting applications, including: Instrumentation lines, fuel and oil pipes, flexible paint and solvent spray hose.

Working Temperature:

- -30°C to +70°C
- Occasional use up to 120°C
- Brittle point: -70°C
- 4:1 Safety Factor

Key Features

- Lower density, lower moisture absorption, better zinc chloride resistance and better glycol resistance that PA6 and PA66
- Better thermal resistance & higher tensile strength at break than PA11 and PA12
- Designed for demanding applications
- UV Stabilised



Super Flexible Nylon Tubing

30 Metre Coils

Code R13	Tube mm OD	Tube mm ID	Colour	Working Pressure bar at -40°C to +20°C	Bend Radius mm at +20°C	Coil Weight kg	Price 1-9	Price 10+
NMS4/25NA30	4	2.5	Natural	15.5	25	0.27	**15.95**	**15.20**
NMS4/25BK30	4	2.5	Black	15.5	25	0.27	**40.65**	**38.65**
NMS6/4NA30	6	4	Black	14.0	35	0.52	**33.00**	**31.35**
NMS8/55NA30	8	5.5	Natural	13.7	45	0.81	**44.85**	**42.65**
NMS8/55BK30	8	5.5	Black	13.7	45	0.81	**44.85**	**42.65**
NMS10/7NA30	10	7	Natural	13.2	60	1.26	**80.70**	**76.70**
NMS10/7BK30	10	7	Black	13.2	60	1.26	**136.15**	**129.35**
NMS12/85NA30	12	8.5	Natural	12.7	70	1.8	**192.00**	**182.40**
NMS12/85BK30	12	8.5	Black	12.7	70	1.8	**181.45**	**172.40**

Imperial Nylon Tubing

- U.V. Stable
- Silicone free
- Working Temperature: -40°C to +80°C
- 3:1 Safety factor
- Not suitable for water or high humidity applications



Flexible Nylon 6 Tubing

30 Metre Coils

Code R11	Tube OD	Tube ID	Colour	Working Pressure bar	Price
NI4/075NA30	1/8"	.075"	Natural	20	8.40
NI4/075BK30	1/8"	.075"	Black	20	14.40
NI5/117NA30	3/16"	.117"	Natural	20	14.30
NI5/117BK30	3/16"	.117"	Black	20	14.45
NI6/17NA30	1/4"	.170"	Natural	20	22.15
NI6/17BK30	1/4"	.170"	Black	20	22.45
NI6/17BL30	1/4"	.170"	Blue	20	22.15
NI6/17GN30	1/4"	.170"	Green	20	22.45
NI6/17RD30	1/4"	.170"	Red	20	20.60
NI6/17YW30	1/4"	.170"	Yellow	20	40.00
NI8/21NA30	5/16"	.212"	Natural	17	33.30
NI8/21BK30	5/16"	.212"	Black	17	32.80
NI8/21BL30	5/16"	.212"	Blue	17	32.80

Code R11	Tube OD	Tube ID	Colour	Working Pressure bar	Price
NI10/25NA30	3/8"	.250"	Natural	17	48.00
NI10/25BK30	3/8"	.250"	Black	17	48.70
NI10/25BL30	3/8"	.250"	Blue	17	48.00
NI10/25GN30	3/8"	.250"	Green	17	48.00
NI10/25RD30	3/8"	.250"	Red	17	48.35
NI10/25YW30	3/8"	.250"	Yellow	17	48.65
NI12/37NA30	1/2"	.375"	Natural	17	66.25
NI12/37BK30	1/2"	.375"	Black	17	66.25
NI12/37BL30	1/2"	.375"	Blue	17	66.25
NI16/5NA30	5/8"	.500"	Natural	13	88.00
NI19/59NA30	3/4"	.594"	Natural	13	129.90
NI25/81NA30	1"	.813"	Natural	12	464.60

Flexible Nylon 6 Tubing

500 Metre Drums

Code R12	Tube OD	Tube ID	Colour	Working Pressure bar	Price
NI6/17NA500	1/4"	.170"	Natural	20	504.85
NI6/17BK500	1/4"	.170"	Black	20	504.85
NI8/21NA500	5/16"	.212"	Natural	17	582.30
NI8/21BK500	5/16"	.212"	Black	17	582.30
NI10/25NA500	3/8"	.250"	Natural	17	1178.20
NI10/25BK500	3/8"	.250"	Black	17	1040.65
NI12/37NA500	1/2"	.375"	Natural	17	1410.30
NI12/37BK500	1/2"	.375"	Black	17	1410.30



High Pressure Nylon Tubing

new

Semi-rigid, high pressure nylon 12 tubing, suitable for numerous applications including misting systems, vacuum equipment, industrial automation, machine tool and lubrication.

Key Features

- Hydrolysis resistant
- Suitable for high pressure applications
- Resistant to a wide range of chemicals
- Manufactured in accordance with DIN 73378 and DIN 74324
- Temperature range: -40°C to +80°C
- Melting point: +175°C
- UV stable

Imperial High Pressure Nylon 12 Tubing

25 Metre Coils

Code R14	Tube OD	Tube OD mm	Tube ID mm	Colour	Wall Thickness mm	Bend Radius mm at 20°C	Working Pressure	Burst Pressure	Price
NI-HP14/3.6BK25	1/4"	6.35	3.6	Black	1.375	30	77	232	**38.40**
NI-HP38/5BK25	3/8"	9.52	5	Black	2.26	35	87	261	**92.00**
NI-HP12/7BK25	1/2"	12.7	7	Black	2.85	50	81	240	**185.40**



Imperial High Pressure Nylon 12 Tubing

100 Metre Coils

Code R14	Tube OD	Tube OD mm	Tube ID mm	Colour	Wall Thickness mm	Bend Radius mm at 20°C	Working Pressure	Burst Pressure	Price
NI-HP14/3.6BK100	1/4"	6.35	3.6	Black	1.375	30	77	232	**153.45**
NI-HP38/5BK100	3/8"	9.52	5	Black	2.26	35	87	261	**368.10**
NI-HP12/7BK100	1/2"	12.7	7	Black	2.85	50	81	240	**741.50**



Metric High Pressure Nylon 12 Tubing

25 Metre Coils

Code R14	Tube OD mm	Tube ID mm	Colour	Wall Thickness mm	Bend Radius mm at 20°C	Working Pressure	Burst Pressure	Price
NI-HP4/2.5BK25	4	2.5	Black	0.75	20	64	193	**13.00**
NI-HP6/3BK25	6	3	Black	1.5	20	93	280	**38.45**
NI-HP8/5BK25	8	5	Black	1.5	40	64	193	**57.30**
NI-HP10/6BK25	10	6	Black	2	45	70	210	**92.60**
NI-HP12/10BK25	12	10	Black	1	150	25	76	**59.85**



Metric High Pressure Nylon 12 Tubing

100 Metre Coils

Code R14	Tube OD mm	Tube ID mm	Colour	Wall Thickness mm	Bend Radius mm at 20°C	Working Pressure	Burst Pressure	Price
NI-HP4/2.5BK100	4	2.5	Black	0.75	20	64	193	**52.00**
NI-HP6/3BK100	6	3	Black	1.5	20	93	280	**153.80**
NI-HP8/5BK100	8	5	Black	1.5	40	64	193	**229.10**
NI-HP10/6BK100	10	6	Black	2	45	70	210	**370.50**
NI-HP12/10BK100	12	10	Black	1	150	25	76	**239.40**



Polyurethane Tubing

Technical Data

- Temperature Range: -40°C to 70°C
- Diameter Tolerances:
- 3-8mm OD ±0.1mm,
  10-12mm = OD/±0.5mm
- 3:1 safety factor
- Ester based tube is not suitable for use with water or in high humidity environments.

Ester based Polyurethane tubing has outstanding characteristics compared with other pneumatic tubing. This tube is extremely flexible and offers excellent bend capabilities making it ideal for pneumatic control or robotic systems. It is also resistant to many chemicals, gases and oils as well as having excellent abrasion resistance. Ideal for use with Push-in fittings, Compression fittings, Quick-Fit fittings & Hose Tail fittings.



Metric Polyurethane Ester Tubing

25 Metre Coils

Code R03	Tube mm OD	Tube mm ID	Colour	Wall Thickness mm	Working Pressure bar at +20°C	Bend Radius mm	Price 1-9	Price 10+
PU4/2NA25	4.0	2.0	Natural	1.0	20	10	**13.10**	**12.45**
PU4/2BK25	4.0	2.0	Black	1.0	20	10	**13.10**	**12.45**
PU4/2BL25	4.0	2.0	Blue	1.0	20	10	**13.15**	**12.50**
PU4/25NA25	4.0	2.5	Natural	0.75	13	10	**10.70**	**10.20**
PU4/25BK25	4.0	2.5	Black	0.75	13	10	**10.75**	**10.25**
PU4/25BL25	4.0	2.5	Blue	0.75	13	10	**11.70**	**11.15**
PU4/25RD25	4.0	2.5	Red	0.75	13	10	**10.60**	**10.10**
PU5/3NA25	5.0	3.0	Natural	1.0	11	15	**16.00**	**15.20**
PU5/3BK25	5.0	3.0	Black	1.0	11	15	**16.80**	**16.00**
PU5/3BL25	5.0	3.0	Blue	1.0	11	15	**15.25**	**14.50**
PU6/4NA25	6.0	4.0	Natural	1.0	10	20	**17.75**	**16.90**
PU6/4BK25	6.0	4.0	Black	1.0	10	20	**17.75**	**16.90**
PU6/4BL25	6.0	4.0	Blue	1.0	10	20	**17.75**	**16.90**
PU6/4RD25	6.0	4.0	Red	1.0	10	20	**17.75**	**16.90**
PU8/55NA25	8.0	5.5	Natural	1.25	10	30	**27.65**	**26.30**
PU8/55BK25	8.0	5.5	Black	1.25	10	30	**27.65**	**26.30**
PU8/55BL25	8.0	5.5	Blue	1.25	10	30	**27.25**	**25.90**
PU8/55RD25	8.0	5.5	Red	1.25	10	30	**27.25**	**25.90**
PU8/6NA25	8.0	6.0	Natural	1.0	8	35	**24.90**	**23.70**
PU8/6BK25	8.0	6.0	Black	1.0	8	35	**26.85**	**25.55**
PU8/6BL25	8.0	6.0	Blue	1.0	8	35	**24.55**	**23.35**
PU10/65NA25	10.0	6.5	Natural	1.5	8	35	**53.25**	**50.60**
PU10/65BK25	10.0	6.5	Black	1.5	8	35	**45.20**	**42.95**
PU10/65BL25	10.0	6.5	Blue	1.5	8	35	**45.30**	**43.05**
PU10/8NA25	10.0	8.0	Natural	1.0	8	40	**31.60**	**30.05**
PU10/8BK25	10.0	8.0	Black	1.0	8	40	**31.60**	**30.05**
PU10/8BL25	10.0	8.0	Blue	1.0	8	40	**31.60**	**30.05**
PU12/8NA25	12.0	8.0	Natural	2.0	8	40	**61.15**	**58.10**
PU12/8BK25	12.0	8.0	Black	2.0	8	40	**61.15**	**58.10**
PU12/8BL25	12.0	8.0	Blue	2.0	8	40	**61.15**	**58.10**
PU12/9NA25	12.0	9.0	Natural	1.5	7	35	**68.75**	**65.35**
PU12/9BK25	12.0	9.0	Black	1.5	7	35	**67.50**	**64.15**
PU12/9BL25	12.0	9.0	Blue	1.5	7	35	**67.50**	**64.15**

Polyurethane Tubing



Metric Polyurethane Ester Tubing

100 Metre Coils

Code R03	Tube mm OD	Tube mm ID	Colour	Wall Thickness mm	Working Pressure bar at +20°C	Bend Radius mm	Price
PU4/25NA100	4.0	2.5	Natural	0.75	13	10	35.15
PU4/25BK100	4.0	2.5	Black	0.75	13	10	33.65
PU4/25BL100	4.0	2.5	Blue	0.75	13	10	33.65
PU4/25RD100	4.0	2.5	Red	0.75	13	10	33.65
PU6/4NA100	6.0	4.0	Natural	0.75	10	10	61.30
PU6/4BK100	6.0	4.0	Black	1.0	10	20	61.15
PU6/4BL100	6.0	4.0	Blue	1.0	10	20	61.25
PU6/4RD100	6.0	4.0	Red	1.0	10	20	61.15
PU8/5NA100	8.0	5.5	Natural	1.25	10	30	100.65
PU8/5BK100	8.0	5.5	Black	1.25	10	30	113.35
PU8/5BL100	8.0	5.5	Blue	1.25	10	30	100.75
PU8/5RD100	8.0	5.5	Red	1.25	10	30	100.65
PU8/6NA100	8.0	6.0	Natural	1.0	8	35	84.35
PU8/6BK100	8.0	6.0	Black	1.0	8	35	90.40
PU8/6BL100	8.0	6.0	Blue	1.0	8	35	83.15

FRE-THANE 85A tubing is designed to work with mini barb fittings. No clamps are needed to grip barb fittings at pressures up to 100 psi. FRE-THANE handles pneumatic line pressures with the flexibility to make tight bends without kinking. UV stabilised.

Technical Specifications

- Temperature range: -40ºF to +165ºF
- Vacuum rating: to 28” Hg
- Diameter tolerances: all sizes +.005”
- Tube markings: none
- Working pressure: 3 to 1 safety factor
- Compliance: NSF61, meets UL94HB

FRE-THANE Ultra-flexible Polyurethane Tubing

50 Foot Coils

Code N31	Tube OD	Tube ID	Colour	Price
1J-013-10	1/8”	.030”	Clear	12.10
1J-013-01	1/8”	.030”	Black	12.40
1J-013-26	1/8”	.030”	Green	12.40
1J-013-27	1/8”	.030”	Blue	12.10
1J-013-28	1/8”	.030”	Yellow	12.40
1J-025-10	1/4”	.125”	Clear	33.30
1J-025-01	1/4”	.125”	Black	33.30
1J-025-26	1/4”	.125”	Green	33.30
1J-025-27	1/4”	.125”	Blue	33.05
1J-025-28	1/4”	.125”	Yellow	33.05



Polyethylene Tubing

Low Density Imperial Polyethylene Tube

25 Metre Coils



Code R13	Tube OD	Tube ID	Colour	Maximum Pressure bar at +20°C	Bend Radius mm	Price
PE17/14BK25	1/4"	.170"	Black	11	45	8.00
PE17/14NA25	1/4"	.170"	Natural	11	45	8.00
PE14/38BK25	3/8"	1/4"	Black	12	60	17.75
PE14/38NA25	3/8"	1/4"	Natural	12	60	17.75
PE38/12BK25	1/2"	3/8"	Black	9	115	21.65
PE38/12NA25	1/2"	3/8"	Natural	9	115	21.65

Low Density Imperial Polyethylene Tube

100 Metre Coils



Code R13	Tube OD	Tube ID	Colour	Maximum Pressure bar at +20°C	Bend Radius mm	Price
PE17/14BK100	1/4"	.170"	Black	11	45	32.00
PE17/14NA100	1/4"	.170"	Natural	11	45	32.00
PE14/38BK100	3/8"	1/4"	Black	12	60	70.75
PE14/38NA100	3/8"	1/4"	Natural	12	60	70.75
PE38/12BK100	1/2"	3/8"	Black	9	115	86.60
PE38/12NA100	1/2"	3/8"	Natural	9	115	86.60

Low Density Metric Polyethylene Tube

50 Metre Coils



Code R13	Tube mm OD	Tube mm ID	Colour	Maximum Pressure bar at +20°C	Bend Radius mm	Price 1-9	Price 10+
PE4/6BL50	6	4	Blue	12	30	13.00	12.35
PE4/6NA50	6	4	Natural	12	30	13.00	12.35
PE6/8BL50	8	6	Blue	8	40	17.30	16.45
PE6/8NA50	8	6	Natural	8	40	17.40	16.55
PE9/12BL50	12	9	Blue	9	60	44.80	42.60
PE9/12NA50	12	9	Natural	9	60	43.80	41.65

Low Density Metric Polyethylene Tube

500 Metre Drums



Code R13	Tube mm OD	Tube mm ID	Colour	Maximum Pressure bar at +20°C	Bend Radius mm	Price
PE4/6BL500	6	4	Blue	12	30	133.35
PE4/6NA500	6	4	Natural	12	30	150.00
PE4/6BK500	6	4	Black	12	30	146.05
PE6/8BL500	8	6	Blue	8	40	188.35
PE6/8NA500	8	6	Natural	8	40	172.90
PE6/8BK500	8	6	Black	8	40	193.60

Boxed Tubing

- DIN 73378/7432 compliance
- 3:1 Safety factor

Working Temperature:

- -40°C to +80°C



- Flexible ester-based polyurethane
- 3:1 Safety factor

Working Temperature:

- -40°C to +60°C



Tube-in-a-Box, Metric Nylon 12 Tubing

25 Metre Boxed Coils

Code R15	Tube mm OD	Tube mm ID	Colour	Working Pressure bar	Bend Radius mm	Price 1-9	Price 10+
NM4/2NA25BOX	4	2	Natural	44	15	16.05	15.25
NM4/2BK25BOX	4	2	Black	44	15	16.05	15.25
NM4/2BL25BOX	4	2	Blue	44	15	16.05	15.25
NM4/2RD25BOX	4	2	Red	44	15	16.05	15.25
NM6/4NA25BOX	6	4	Natural	26	30	23.15	22.00
NM6/4BK25BOX	6	4	Black	26	30	23.15	22.00
NM6/4BL25BOX	6	4	Blue	26	30	23.15	22.00
NM6/4RD25BOX	6	4	Red	26	30	23.15	22.00
NM8/6NA25BOX	8	6	Natural	19	50	32.25	30.65
NM8/6BK25BOX	8	6	Black	19	50	32.25	30.65
NM8/6BL25BOX	8	6	Blue	19	50	32.25	30.65
NM8/6RD25BOX	8	6	Red	19	50	32.25	30.65
NM10/8NA25BOX	10	8	Natural	14	80	41.65	39.60
NM10/8BK25BOX	10	8	Black	14	80	41.65	39.60
NM10/8BL25BOX	10	8	Blue	14	80	41.65	39.60
NM12/10NA25BOX	12	10	Natural	12	115	51.30	48.75
NM12/10BK25BOX	12	10	Black	12	115	51.30	48.75
NM12/10BL25BOX	12	10	Blue	12	115	51.30	48.75

Tube-in-a-Box, Metric Polyurethane

25 Metre Boxed Coils

Code R15	Tube mm OD	Tube mm ID	Colour	Working Pressure bar	Bend Radius mm	Price 1-9	Price 10+
PU4/2NA25BOX	4	2	Natural	22	10	16.35	15.55
PU4/2BK25BOX	4	2	Black	22	10	16.35	15.55
PU4/2BL25BOX	4	2	Blue	22	10	16.35	15.55
PU4/2RD25BOX	4	2	Red	22	10	16.35	15.55
PU6/4NA25BOX	6	3.8	Natural	14	25	24.80	23.60
PU6/4BK25BOX	6	3.8	Black	14	25	24.80	23.60
PU6/4BL25BOX	6	3.8	Blue	14	25	24.80	23.60
PU6/4RD25BOX	6	3.8	Red	14	25	24.80	23.60
PU8/6NA25BOX	8	5.7	Natural	11	40	34.55	32.85
PU8/6BK25BOX	8	5.7	Black	11	40	34.55	32.85
PU8/6BL25BOX	8	5.7	Blue	11	40	34.55	32.85
PU8/6RD25BOX	8	5.7	Red	11	40	34.55	32.85
PU10/8NA25BOX	10	7.7	Natural	8	65	46.20	43.90
PU10/8BK25BOX	10	7.7	Black	8	65	46.20	43.90
PU10/8BL25BOX	10	7.7	Blue	8	65	46.20	43.90

PTFE, PVDF & Silicone Tubing

More Sizes Available
Imperial Sizes & Longer Lengths

- Rated for use up to +250ºC



PTFE Tubing, Metric

50 Metre Coils

Code N29	Tube mm OD	Tube mm ID	Maximum Pressure at +20°C	Bend Radius mm	Price
PTFE42-50M	4	2	25	20	159.10
PTFE64-50M	6	4	18	40	245.05
PTFE86-50M	8	6	14	60	353.80
PTFE108-50M	10	8	35	100	422.85
PTFE1210-50M	12	10	10	120	534.90

PTFE Tubing, Metric

100 Metre Coils

Code N29	Tube mm OD	Tube mm ID	Maximum Pressure at +20°C	Bend Radius mm	Price
PTFE42-100M	4	2	25	20	291.50
PTFE64-100M	6	4	18	40	452.05
PTFE86-100M	8	6	14	60	590.35
PTFE108-100M	10	8	35	100	756.35
PTFE1210-100M	12	10	10	120	940.80

- Rated for use up to +110ºC



Kynarflex (PVDF) Tubing, Metric

50 Metre Coils

Code N30	Tube mm OD	Tube mm ID	Maximum Pressure at +20°C	Bend Radius mm	Price
K42000-50M	4	2	65	20	111.30
K64000-50M	6	4	37	30	170.35
K86000-50M	8	6	26	38	241.30
K10800-50M	10	8	16	57	312.00
K12100-50M	12	10	15	83	374.55

Kynarflex (PVDF) Tubing, Metric

100 Metre Coils

Code N30	Tube mm OD	Tube mm ID	Maximum Pressure at +20°C	Bend Radius mm	Price
K42000-100M	4	2	65	20	222.60
K64000-100M	6	4	37	30	342.65
K86000-100M	8	6	26	38	482.60
K10800-100M	10	8	16	57	624.00
K12100-100M	12	10	15	83	766.15

- Rated for use up to +175ºC



Silicone Tubing, Translucent

25 Metre Coils

Code P29	Tube mm OD	Tube mm ID	Price
SRTT-2-1.0-25M	4	2	45.70
SRTT-4-1.0-25M	6	4	43.80
SRTT-5-1.5-25M	8	5	64.75
SRTT-6-1.0-25M	8	6	72.35
SRTT-6-1.5-25M	9	6	103.95
SRTT-8-1.0-25M	10	8	64.75
SRTT-8-2.0-25M	12	8	94.25

Multi-core Nylon Tubing

More Sizes Available
Special Diameters & Lengths

Prices shown are per metre. Minimum quantity is 50 metres and must be ordered in multiples of 50 metres. Other sizes and combinations available on request.

FACTORY DISPATCH

- PU anti-abrasion outer sheath



Multi-core Nylon Tubing

Two Tube Configuration, per Metre



Code	P39	Tube mm OD	Tube mm ID	Tube Quantity	Outer Size mm	Price
MTR4X6X2		6	4	2	13 x 7	3.85
MTR6X8X2		8	6	2	18 x 10	7.40

Multi-core Nylon Tubing

Three Tube Configuration, per Metre



Code	P39	Tube mm OD	Tube mm ID	Tube Quantity	Outer Size mm	Price
MTR4X6X3		6	4	3	14 x 14	7.00
MTR6X8X3		8	6	3	26 x 10	10.05

Multi-core Nylon Tubing

Four Tube Configuration, per Metre



Code	P39	Tube mm OD	Tube mm ID	Tube Quantity	Outer Size mm	Price
MTR4X6X4		6	4	4	14 x 14	4.25
MTR6X8X4		8	6	4	18 x 18	12.85

Multi-core Nylon Tubing

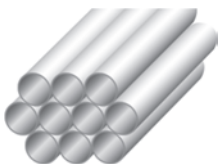
Seven Tube Configuration, per Metre



Code	P39	Tube mm OD	Tube mm ID	Tube Quantity	Outer Size mm	Price
MTR4X6X7		6	4	7	20 x 20	16.85
MTR6X8X7		8	6	7	26 x 26	22.50

Multi-core Nylon Tubing

Ten Tube Configuration, per Metre



Code	P39	Tube mm OD	Tube mm ID	Tube Quantity	Outer Size mm	Price
MTR4X6X10		6	4	10	26 x 20	23.55
MTR6X8X10		8	6	10	36 x 36	28.05







Recoil Hoses

Polyurethane Recoil Hose

Brass Nickel-plated, BSPT with Spring Guard, Red

Code P36	Hose mm OD	Hose mm ID	Working Length Metre	Thread BSPT	Working Pressure bar	Price 1-9	Price 10+
PUC08/2RD	8	5.0	2	R1/4"	12	13.40	12.75
PUC08/4RD	8	5.0	4	R1/4"	12	17.65	16.80
PUC08/6RD	8	5.0	6	R1/4"	12	20.10	19.10
PUC10/2RD	10	6.5	2	R1/4"	11	18.35	17.45
PUC10/4RD	10	6.5	4	R1/4"	11	20.95	19.95
PUC10/6RD	10	6.5	6	R1/4"	11	26.85	25.55
PUC12/2RD	12	8.0	2	R3/8"	10	29.90	28.45
PUC12/4RD	12	8.0	4	R3/8"	10	27.35	26.00
PUC12/6RD	12	8.0	6	R3/8"	10	36.10	34.30

- 3:1 Safety factor

Working Temperature:

- -20°C to +60°C



Polyurethane Recoil Hose

Brass Nickel-plated, BSPT with Spring Guards, Blue

Code P36	Hose mm OD	Hose mm ID	Working Length Metre	Thread BSPT	Working Pressure bar	Price 1-9	Price 10+
PUC08/2BL	8	5.0	2	R1/4"	12	19.80	18.85
PUC08/4BL	8	5.0	4	R1/4"	12	15.00	14.25
PUC08/6BL	8	5.0	6	R1/4"	12	18.00	17.10
PUC10/2BL	10	6.5	2	R1/4"	11	18.35	17.45
PUC10/4BL	10	6.5	4	R1/4"	11	21.20	20.15
PUC10/6BL	10	6.5	6	R1/4"	11	26.80	25.50
PUC12/2BL	12	8.0	2	R3/8"	10	27.05	25.70
PUC12/4BL	12	8.0	4	R3/8"	10	26.95	25.65
PUC12/6BL	12	8.0	6	R3/8"	10	35.50	33.75



Compact Nylon 12 Recoil Hose

Brass Nickel-plated, BSPT with Spring Guards, Red

Code P36	Hose mm OD	Hose mm ID	Working Length Metre	Thread BSPT	Working Pressure bar	Price 1-9	Price 10+
EC8/WF/2.5RD	8	6	2.5	R1/4"	23	17.15	16.30
EC8/WF/5RD	8	6	5	R1/4"	23	21.80	20.75
EC8/WF/10RD	8	6	10	R1/4"	23	33.80	32.15
EC8/WF/15RD	8	6	15	R1/4"	23	40.35	38.35
EC10/WF/2.5RD	10	8	2.5	R1/4"	21	22.50	21.40
EC10/WF/5RD	10	8	5	R1/4"	21	25.65	24.40
EC10/WF/10RD	10	8	10	R1/4"	21	41.10	39.05
EC12/WF/2.5RD	12	9	2.5	R3/8"	23	32.05	30.45
EC12/WF/5RD	12	9	5	R3/8"	23	46.30	44.00
EC12/WF/10RD	12	9	10	R3/8"	23	75.10	71.35

- 3:1 Safety factor

Working Temperature: -

- -40°C to +80°C



Recoil Hoses

COILHOSE PNEUMATICS



Nylon Recoil Hose, No Tails

Nickel-plated with Spring Guards, Yellow

Code P36	Hose OD	Hose ID	Working Length ft	Thread BSP	Coil OD	Working Pressure bar	Price
N14-12BRBSP	5/16"	1/4"	12	G1/4"	3.1/2"	17	**38.50**
N14-25BRBSP	5/16"	1/4"	25	G1/4"	3.1/2"	17	**51.90**
N14-50BRBSP	5/16"	1/4"	50	G1/4"	3.1/2"	17	**90.25**
N516-12BRBSP	3/8"	5/16"	2	G1/4"	4.5/8"	17	**50.10**
N516-25BRBSP	3/8"	5/16"	25	G1/4"	4.5/8"	17	**71.80**
N516-50BRBSP	3/8"	5/16"	50	G1/4"	4.5/8"	17	**126.85**
N38-12BRBSP	1/2"	3/8"	12	G3/8"	5.5/8"	17	**67.20**
N38-25BRBSP	1/2"	3/8"	25	G3/8"	5.3/8"	17	**84.25**
N38-50BRBSP	1/2"	3/8"	50	G3/8"	5.3/8"	17	**141.40**
N12-12BRBSP	5/8"	1/2"	12	G1/2"	9"	21	**108.85**
N12-25BRBSP	5/8"	1/2"	25	G1/2"	9"	21	**155.30**
N12-50BRBSP	5/8"	1/2"	50	G1/2"	9"	21	**237.60**

For Air Tools



AEROPRO
ENGINEERED FOR PROFESSIONALS

See pages 734-739

PVC Air Tool Hose

Key Features

- Exceptional flexibility and memory for maximum air flow
- Ultra-lightweight for ease of use
- Effective oil resistance
- Superior kink resistance
- Cadmium free
- Silicone free
- RoHS compliant
- EC compliant for food contact applications
- Distinctive metallic blue finish
- Service temperature: -15ºC to +60ºC
- Conforms to ISO 5774
- 4:1 safety factor at +23ºC

Application Examples

- Specifically designed for air tools and air applications
- Also suitable for general industrial use for water, chemicals and gas



Air-Cord Ultra-flexible Hose for use with Air Tools

30 Metre Coils

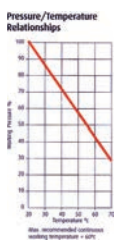
Code N36	Hose ID	Hose ID mm	Hose OD mm	Pressure bar Max. Working	Pressure bar Burst	Bend Radius mm	Coil Weight kg	Price 1-9	Price 10+
CXL06-30M	1/4"	6	9	14	42	28	1.40	**33.75**	**32.10**
CXL08-30M	5/16"	8	11	14	42	29	2.00	**60.15**	**57.15**
CXL10-30M	3/8"	10	13	12	36	40	2.25	**74.20**	**70.50**
CXL12-30M	1/2"	12	16	11	33	55	3.34	**77.50**	**73.65**

Key Features

- Extremely flexible, lightweight and user-friendly
- Excellent kink-resistance
- RoHS compliant, conforms to ISO 5774
- EC compliant for food contact
- High resistance to acids and alkalis
- Good abrasion resistance
- Silicone-free
- Service temperature: -15ºC to +60ºC
- 4:1 safety factor at +20ºC

Application Examples

- Busy, high volume production lines
- Used for air but also for water
- Air applications such as pneumatic tools
- Transfer of food substances and liquids



Multipurpose Reinforced PVC Hose

30 Metre Coils

Code N65	Hose ID	Hose ID mm	Hose OD mm	Pressure bar Max. Working	Pressure bar Min. Burst	Bend Radius mm	Coil Weight kg	Price
CX6-30M	1/4"	6	10.5	18	72	28	2.23	**38.20**
CX8-30M	5/16"	8	12.5	15	60	29	3.15	**52.50**
CX10-30M	3/8"	10	14.0	13	52	40	3.16	**54.00**
CX12-30M	1/2"	12	17.0	11	44	55	5.00	**65.80**



PVC & Rubber/Alloy Hose

Looks and feels like rubber, without the associated negative aspects. Each end fitting in mechanically swaged onto the hose using a brass ferrule to ensure a positive leak-free connection.

Working Temperature:

- -20°C to +60°C



Hose Assemblies, Rubber/PVC Alloy Air Hose, 18 bar

Female Threads, 15 Metre Coils fitted with Female Swivel Adaptors

	Hose			Price	
Code N62	ID	ID mm	Thread BSPP	1-9	10+
GPA06-15M-F1/4	1/4"	6.3	G1/4"	21.95	20.90
GPA08-15M-F1/4	5/16"	8	G1/4"	32.35	30.75
GPA10-15M-F3/8	3/8"	10	G3/8"	44.60	42.40
GPA13-15M-F1/2	1/2"	13	G1/2"	52.45	49.85

The choice of agriculture professionals, this PVC heavy duty water hose is an all-year-round trusted favourite that retains its flexibility whatever the weather. It is compatible with all leading brands of water hose fittings.

Working Temperature:

- -15°C to +60°C

Key Features

- Durable PVC Cover
- Polyester high tensile fibre reinforcement
- Good abrasion resistance
- Effective kink resistance

Application Examples

- Agricultural irrigation
- Heavy duty industrial use

PVC Water Hose

10 bar, 25 Metre Coils



	Hose			Maximum Working Pressure bar	Coil Weight kg	Price	
Code N36	ID	ID mm	OD mm			1-9	10+
GH12Y-25M	1/2"	12.5	17.5	11	3.6	50.95	48.45
GH19Y-25M	3/4"	19	25.5	7.5	7	67.90	64.55
GH25Y-25M	1"	25	32.5	6	10.5	141.15	134.10

PVC Water Hose

10, bar, 50 Metre Coils

	Hose			Maximum Working Pressure bar	Coil Weight kg	Price	
Code N36	ID	ID mm	OD mm			1-9	10+
GH12Y-50M	1/2"	12.5	17.5	11	7.2	86.15	81.85
GH19Y-50M	3/4"	19	25.5	7.5	14	111.00	105.45
GH25Y-50M	1"	25	32.5	6	21	257.55	244.70



new

Compressed Air Hose Assemblies

Now Available

- Made from Rubber-Tech hose, which feels and looks like rubber, without the associated negative aspects.
- Available with various coupling profiles and fittings.
- Each end fitting is mechanically swaged onto the hose using a brass ferrule to ensure a positive leak-free connection.
- Multiple sizes and lengths available on request.

Working Temperature:
-20°C to +60°

Maximum working pressure:
18 bar



PVC & Rubber/Alloy Hose

A cost-effective, high-performance alternative to rubber hosing. While looking and feeling like rubber, it has many advantages including a longer lifespan. Manufactured from a hard-wearing PVC nitrile blend, this ergonomically-friendly super-flexible product is a real winner in many industrial environments.

Key Features

- Suitable for conveying oil, fuels, greases, compressed air and water
- PVC nitrile blend gives good abrasion and ageing resistance superior to rubber
- Clean, flexible and user-friendly
- Excellent resistance to UV and ozone
- Safety factor: 3:1

Application Examples:

- General workshop environments for compressed air tools (medium to heavy duty) and spray guns
- Construction industry use such as road breakers
- General industrial uses – oil, grease solvents, air and water applications

Maximum Working Pressure:

- 20 bar

Working Temperature:

- -20°C to +60°C



Rubber/PVC Alloy Air Hose, 20 bar

15 Metre Coils

		Hose			Price	
Code	N36	ID	ID mm	OD mm	1-9	10+
GPA19-15M		3/4"	19	30	**79.55**	**75.60**

Rubber/PVC Alloy Air Hose, 20 bar

30 Metre Coils

		Hose			Price	
Code	N36	ID	ID mm	OD mm	1-9	10+
GPA06-30M		1/4"	6.3	14	**37.10**	**35.25**
GPA08-30M		5/16"	8	17	**63.85**	**60.70**
GPA10-30M		3/8"	10	19	**73.65**	**70.00**
GPA13-30M		1/2"	12.5	23	**88.35**	**83.95**
GPA19-30M		3/4"	19	30	**149.85**	**142.40**
GPA25-30M		1"	25	37	**218.00**	**207.10**

Rubber/PVC Alloy Air Hose, 20 bar

100 Metre Coils

		Hose			Price	
Code	N36	ID	ID mm	OD mm	1-9	10+
GPA06-100M		1/4"	6.3	14	**144.25**	**137.05**
GPA08-100M		5/16"	8	17	**208.20**	**197.80**
GPA10-100M		3/8"	10	19	**258.40**	**245.50**
GPA13-100M		1/2"	12.5	23	**331.35**	**314.80**

PVC & Rubber/Alloy Hose

Construction

- Tubes: black synthetic low-diffusion rubber
- Reinforcement: high strength synthetic textile yarn
- Cover: fluted or smooth synthetic rubber

Technical Specification

- Abrasion and weather resistant
- 3:1 Safety factor
- Burst Pressure: 60 bar

Working Temperature:

- -20°C to +70°C

Working Pressure:

- 20 bar



Rubber Compressed Air Hose, 20 bar

25 Metre Coils

Code R06	Hose ID	Hose OD mm	Price
RCAH20-6-25	1/4"	13	48.20
RCAH20-8-25	5/16"	15	56.25
RCAH20-10-25	3/8"	17	60.25
RCAH20-12-25	1/2"	22	77.30
RCAH20-15-25	5/8"	25	116.30
RCAH20-19-25	3/4"	29	137.50
RCAH20-25-25	1"	35	180.65

Rubber Compressed Air Hose, 20 bar

50 Metre Coils

Code R06	Hose ID	Hose OD mm	Price
RCAH20-25-50	1"	35	312.65

Rubber Compressed Air Hose, 20 bar

100 Metre Coils

Code R06	Hose ID	Hose OD mm	Price
RCAH20-6-100	1/4"	13	166.75
RCAH20-8-100	5/16"	15	194.55
RCAH20-10-100	3/8"	17	208.45
RCAH20-12-100	1/2"	22	267.50
RCAH20-15-100	5/8"	25	372.80
RCAH20-19-100	3/4"	29	534.40

- SBR blended black internal tube, smooth and resistant to oil mist
- Textile braided reinforcement, high tensile synthetic yarn
- 3:1 Safety factor
- Burst pressure: 60 bar

Working Temperature:

- -20°C to +70°C

Working pressure:

- 20 bar



Yellow Air Hose, 20 bar

25 Metre Coils

Code R06	Hose ID	Hose ID mm	Price
YCAH20-13-25	1/2"	13	104.40
YCAH20-19-25	3/4"	19	160.60
YCAH20-25-25	1"	25	194.80

Yellow Air Hose, 20 bar

50 Metre Coils

Code R06	Hose ID	Hose ID mm	Price
YCAH20-25-50	1"	25	354.20

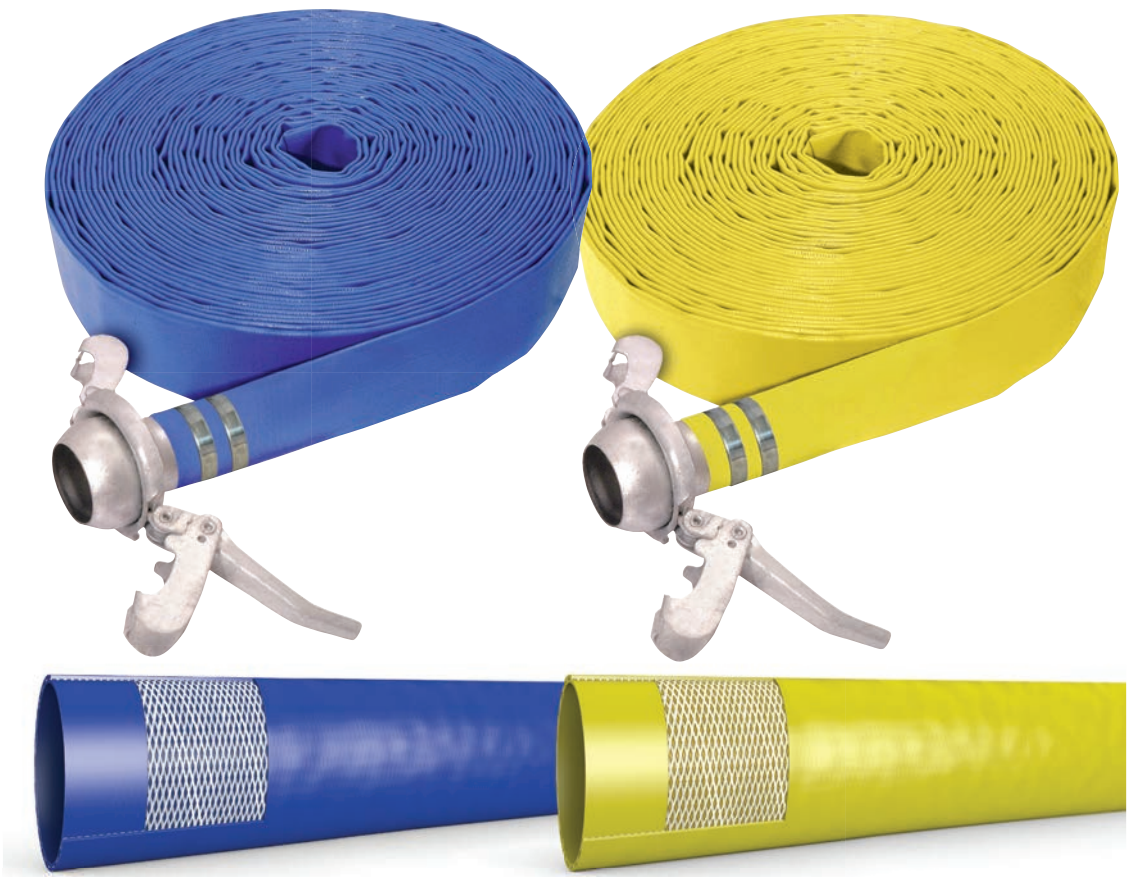
Yellow Air Hose, 20 bar

100 Metre Coils

Code R06	Hose ID	Hose ID mm	Price
YCAH20-13-100	1/2"	13	374.25
YCAH20-19-100	3/4"	19	553.60

Blue & Yellow PVC Layflat Hose Assemblies now available...

new



Maximum Working Pressure:
2" - 4 bar, 3" -3 bar, 4" - 3 bar
6" - 2.5 bar, 8" - 3 bar
Bursting Pressure: 3:1

Maximum Working Pressure: 6 bar
Bursting Pressure: 18 bar

- **All sizes and lengths available on request.**
- **Pressure ratings are based upon discharge pressure from the pump unit.**
- **This product is ONLY suitable for open ended discharge applications.**

Air & Water Hose

Assembled using safety clamps which connect with the claw coupling to prevent any possible disconnection of the hose and couplings.

- Textile braided reinforcement, high tensile synthetic yarn
- High quality mandrel built rubber hose

Working Pressure:

- 20 bar

Working Temperature:

- -20°C to +90°C
- 3:1 Safety Factor



Rubber Compressed Air Hose Assembly with Safety Couplings & Clamps

15 Metre Coil

Code R07	Hose ID	Hose ID mm	Price
YCAH20-19-15AS	3/4"	19	78.95

Assembled using safety clamps which connect with the claw coupling to prevent any possible disconnection of the hose and couplings.

Working pressure:

- 20 bar



PVC Compressor Air Hose Assembly with Safety Couplings & Clamps

15 Metre Coil

Code N63	Hose ID	Hose ID mm	Price
GPA19-15M-AS	3/4"	19	72.45

- Flat plasticised PVC hose with interlaced polyester reinforcement. Light and easy to handle. Resistant to weather, light abrasion and chemicals.
- Conveyance and discharge of water, etc.

Working Temperature:

- -15°C to +55°C

- Colour: blue



Blue PVC Layflat Hose, Medium Duty

10 Metre Coils

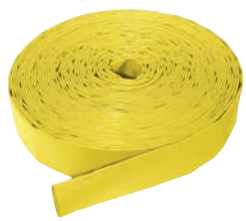
Code R18	ID	Working Pressure bar	Price
LFHM11/2-10M	1.1/2"	4.5	22.75
LFHM2-10M	2"	4.5	27.10
LFHM21/2-10M	2.1/2"	4.5	35.40
LFHM3-10M	3"	4.5	39.55
LFHM4-10M	4"	4.5	53.40
LFHM6-10M	6"	4.5	100.30

Blue PVC Layflat Hose, Medium Duty

100 Metre Coils

Code R18	ID	Working Pressure bar	Price
LFHM11/2-100M	1.1/2"	4.5	206.50
LFHM2-100M	2"	4.5	230.40
LFHM21/2-100M	2.1/2"	4.5	324.00
LFHM3-100M	3"	4.5	369.95
LFHM4-100M	4"	4.5	531.00
LFHM6-100M	6"	4.5	1050.65

- Colour: yellow



Yellow PVC Layflat Hose, Heavy Duty

10 Metre Coils

Code R18	ID	Working Pressure bar	Price
LFHH1-10M	1"	6	23.60
LFHH11/4-10M	1.1/4"	6	26.55
LFHH11/2-10M	1.1/2"	6	31.30
LFHH2-10M	2"	6	36.60
LFHH3-10M	3"	6	56.05
LFHH4-10M	4"	6	85.05
LFHH6-10M	6"	6	116.25

Yellow PVC Layflat Hose, Heavy Duty

100 Metre Coils

Code R18	ID	Working Pressure bar	Price
LFHH1-100M	1"	6	206.50
LFHH11/4-100M	1.1/4"	6	221.55
LFHH11/2-100M	1.1/2"	6	259.60
LFHH2-100M	2"	6	289.10
LFHH3-100M	3"	6	460.20
LFHH4-100M	4"	6	624.85
LFHH6-100M	6"	6	1103.20

Automotive Tubing & Hose

- Manufactured from heat and light stabilised polyamide. This tube has excellent low density, low water absorption, physical properties and dimensions relatively constant even during humidity changes
- Other colours available on request, minimum order of 20 x 30 metre coils

Temperature Range:

- -20°C to +70°C



Airbrake Tubing DIN 74324

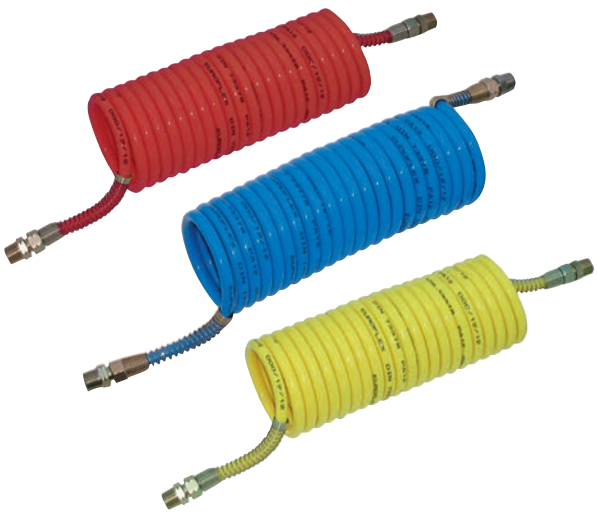
30 Metre Coils

Code W02	OD mm	ID mm	Colour	Max Pressure bar	Price
ABT4-2-30M	4	2	Black	45	17.95
ABT6-4-30M	6	4	Black	27	27.20
ABT8-6-30M	8	6	Black	19	41.75
ABT10-8-30M	10	8	Black	15	59.50
ABT10-7-30M	10	7	Black	19	75.30
ABT12-9-30M	12	9	Black	19	90.90
ABT16-12-30M	16	12	Black	19	167.25
ABT18-14-30M	18	14	Black	17	201.90

- Low moisture absorption
- Excellent resistance to a wide range of chemicals

Temperature Range:

- -40°C to +80°C



Nylon 12 Airbrake Coils, DIN 73378, SAE J 844 Type B

Red, Emergency Line, 1/2" BSPT

Code W02	OD mm	ID mm	Length Metre	Max Pressure bar	Price
NAB-R-12/9-3.5M	12	9	3.5	16	33.70
NAB-R-12/9-5M	12	9	5	22	40.40

Nylon 12 Airbrake Coils, DIN 73378, SAE J 844 Type B

Blue, Auxiliary Line, 1/2" BSPT

Code W02	OD mm	ID mm	Length Metre	Max Pressure bar	Price
NAB-B-12/9-3.5M	12	9	3.5	16	33.70
NAB-B-12/9-5M	12	9	5	22	41.00

Nylon 12 Airbrake Coils, DIN 73378, SAE J 844 Type B

Yellow, Service Line, 1/2" BSPT

Code W02	OD mm	ID mm	Length Metre	Max Pressure bar	Price
NAB-Y-12/9-3.5M	12	9	3.5	16	39.50
NAB-Y-12/9-5M	12	9	5	22	48.00

Automotive Tubing & Hose

- Manufactured from heat and light stabilised polyamide. This tube has excellent low density, low water absorption, physical properties and dimensions relatively constant even during humidity changes
- Other colours available on request, minimum order of 20 x 30 metre coils

Temperature Range:

- -20°C to +70°C



Airbrake Tubing DIN 74324

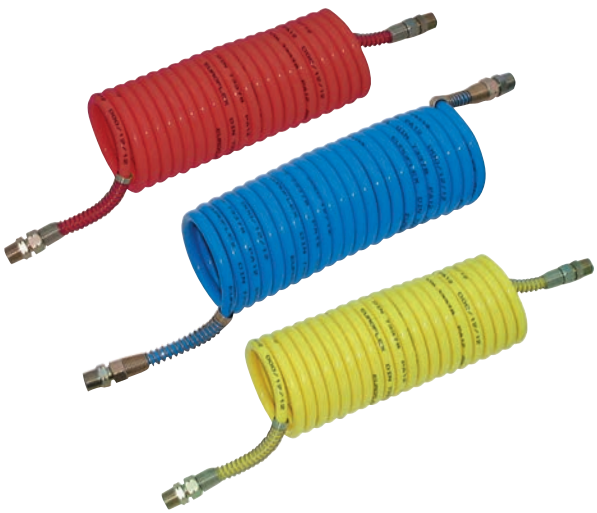
30 Metre Coils

Code W02	OD mm	ID mm	Colour	Max Pressure bar	Price
ABT4-2-30M	4	2	Black	45	17.95
ABT6-4-30M	6	4	Black	27	27.20
ABT8-6-30M	8	6	Black	19	41.75
ABT10-8-30M	10	8	Black	15	59.50
ABT10-7-30M	10	7	Black	19	75.30
ABT12-9-30M	12	9	Black	19	90.90
ABT16-12-30M	16	12	Black	19	167.25
ABT18-14-30M	18	14	Black	17	201.90

- Low moisture absorption
- Excellent resistance to a wide range of chemicals

Temperature Range:

- -40°C to +80°C



Nylon 12 Airbrake Coils, DIN 73378, SAE J 844 Type B

Red, Emergency Line, 1/2" BSPT

Code W02	OD mm	ID mm	Length Metre	Max Pressure bar	Price
NAB-R-12/9-3.5M	12	9	3.5	16	33.70
NAB-R-12/9-5M	12	9	5	22	40.40

Nylon 12 Airbrake Coils, DIN 73378, SAE J 844 Type B

Blue, Auxiliary Line, 1/2" BSPT

Code W02	OD mm	ID mm	Length Metre	Max Pressure bar	Price
NAB-B-12/9-3.5M	12	9	3.5	16	33.70
NAB-B-12/9-5M	12	9	5	22	41.00

Nylon 12 Airbrake Coils, DIN 73378, SAE J 844 Type B

Yellow, Service Line, 1/2" BSPT

Code W02	OD mm	ID mm	Length Metre	Max Pressure bar	Price
NAB-Y-12/9-3.5M	12	9	3.5	16	39.50
NAB-Y-12/9-5M	12	9	5	22	48.00

Automotive Tubing & Hose

- Tube: Black SBR (Anti-Freeze) Resistant Rubber
- Reinforcement: Polyester Type Cord 2 Ply
- Cover: Black SBR Heat Abrasion and Weather Resistant

Application

- Vehicle Radiator Hose Ethylene Glycol (Anti-Freeze) Resistant

Safety Factor

- 3:1 minimum

Temperature Range:

- -30°C to +100°C



Radiator Hose

1 Metre Lengths

Code S38	ID	ID mm	OD mm	Pressure Rating at +20°C	Price
RH78-1M	7/8"	22	30	45	9.85
RH1-1M	1"	25	34	45	10.25
RH118-1M	1.1/8"	28	36	45	10.75
RH1316-1M	1.3/16"	30	38	45	12.50
RH114-1M	1.1/4"	32	41	45	11.90
RH138-1M	1.3/8"	35	45	45	14.00
RH112-1M	1.1/2"	38	47	45	14.30
RH1916-1M	1.9/16"	40	49	45	14.50
RH158-1M	1.5/8"	42	52	45	16.15
RH134-1M	1.3/4"	45	55	45	15.35
RH178-1M	1.7/8"	48	58	45	16.20
RH2-1M	2"	51	61	45	18.10
RH214-1M	2.1/4"	57	67	45	21.05
RH238-1M	2.3/8"	60	70	45	24.65
RH212-1M	2.1/2"	63	73	45	25.05
RH3-1M	3"	76	86	45	36.40
RH4-1M	4"	102	112	45	48.35

- Tube: Black Fuel and Oil Resistant Rubber
- Cover: Cotton

Application

- Fuel Hose for Automotive use (including Unleaded)

Safety Factor

- 3:1 minimum

Temperature Range:

- -40°C to +85°C Max Peak

Maximum Working Pressure:

- 145 psi (10 bar)



Cotton Overbraid Fuel Hose DIN 73379 Type B 1983

20 Metre Coils

Code S38	ID mm	OD mm	Price
COFH32-20M	3.2	7	55.80
COFH35-20M	3.5	7.5	64.90
COFH40-20M	4	9	63.25
COFH45-20M	4.5	9.5	68.25
COFH50-20M	5	10	75.75
COFH55-20M	5.5	10.5	63.35
COFH60-20M	6	11	81.55
COFH70-20M	7	12	84.90
COFH75-20M	7.5	12.5	69.65
COFH80-20M	8	13	89.85
COFH90-20M	9	14	91.35
COFH10-20M	10	15	114.00
COFH12-20M	12	18	198.00

- Tube: Oil resistant rubber alloy
- Reinforcement: Synthetic textile braid
- Cover: Black weather and ozone resistant with purple stripe

Application

- Diesel, air and water delivery up to 20 bar

Safety Factor

- 3-1



Diesel Drop Hose

50 Metre Coils

Code S38	ID mm	OD mm	Price
DDH34-50M	3/4"	28	322.05
DDH2-50M	1"	34	392.45

- Tube: Fuel & Oil Resistant, Smooth NBR Rubber
- Reinforcement: High Tensile Synthetic Textile
- Cover: Abrasion, Ozone, Weather and Oil resistant special synthetic Rubber
- Burst Pressure: 30 bar
- Minimum Bend Radius: 8mm-50mm and 10mm-65mm
- Weight: 8mm-145 g/m and 10mm 170 g/m
- Cut to Length: Max Length 50 Metres
- Price per Metre

Application

- Delivery of fuels in internal combustion engines for lubrication and greasing services

Working Temperature:

- -35°C to +70°C

Maximum Working Pressure:

- 10 bar



Bio Diesel Hose ISO 1307

Cut to Length, Per Metre

Code S38	ID mm	OD mm	Price
BDH8-1M	8	14	2.35
BDH10-1M	10	16	2.70

Automotive Tubing & Hose

- Lining: Black heat resistant EPDM rubber
- Reinforcement: Synthetic textile fabric, with steel wire helix, embedded between the layers
- Cover: Black, heat, weather, ozone resistant EPDM rubber

Temperature Range:

- -40°C to +120°C



Corrugated Radiator Hose

1 Metre Lengths

Code S38	ID	ID mm	OD mm	Pressure Rating at +20°C	Price
CRH78-1M	7/8"	22	30	30	31.65
CRH1-1M	1"	25	34	30	34.20
CRH118-1M	1.1/8"	28	36	30	34.80
CRH114-1M	1.1/4"	32	41	30	38.65
CRH138-1M	1.3/8"	35	45	30	41.40
CRH112-1M	1.1/2"	38	47	30	43.00
CRH134-1M	1.3/4"	44.5	55	30	50.70
CRH2-1M	2"	51	61	30	46.70

- Tube: Black Coolant and Heat Resistant Rubber
- Reinforcement: High Strength Polyester yarn 2 Ply
- Cover: Abrasion Ozone and Heat Resistant Rubber

Application

- Automotive O.E.M. and Replacement Market for under bonnet use

Temperature Range:

- -35°C to +100°C



Car Heater Hose, SAEJ20R3

20 Metre Coils

Code S38	ID	ID mm	OD mm	Pressure Rating at +20°C	Price
CHH38-20M	3/8"	9.53	19	132	52.75
CHH12-20M	1/2"	12.5	21	132	62.35
CHH58-20M	5/8"	16	23	132	70.25
CHH34-20M	3/4"	19	27	132	98.95
CHH1-20M	1"	25	36	132	139.35

- Tube: Black Fuel and Oil Resistant Rubber
- Reinforcement: Polyester yarn 2 Ply
- Cover: Black Abrasion Oil and Ozone Weather Resistant

Application

- Delivery of Petrol/Diesel and Petroleum based product
- For the replacement automotive market

Safety Factor

- 3:1 minimum



Petrol Hose, SAEJ30R6

10 Metre Coils

Code S38	ID	ID mm	OD mm	Pressure Rating at +20°C	Price
PH316-10M	3/16"	5	11	290	30.00
PH14-10M	1/4"	6	12	290	32.05
PH516-10M	5/16"	8	14	290	36.20
PH38-10M	3/8"	10	18	290	44.10
PH12-10M	1/2"	13	23	290	56.60

Wire Reinforced PVC Suction Hose

Key Features

- Plasticised PVC hose reinforced with incorporated steel spiral
- Smooth inside and outside
- Very flexible
- Resistant to atmospheric agents and most chemicals
- Hose complies fully to EU No. 10/201 on plastic materials and articles intended to come into contact with food
- Pressures: Values given are based on the short term burst pressure of the hose at 20°C based on a 3:1 safety factor
- Vacuum: 711mm Hg = 94% at 20°C

Colour

- Transparent

Working Temperature

- -5ºC to +65º

Application

- Particularly indicated for suction and delivery of liquids
- Suitable for suction and delivery of alimentary liquids, approved for foodstuffs



Wire Reinforced PVC Hose for Vacuum/Suction

10 Metre Coils

Code R09	Hose ID mm	Hose ID	Wall Thickness mm	Maximum Working Pressure bar	Bend Radius mm	Price
WPVC11/4-10M	32	1.1/4"	4.8	5	130	**73.55**
WPVC11/2-10M	38	1.1/2"	5.5	5	155	**75.15**
WPVC2-10M	50	2"	7	5	200	**131.50**
WPVC21/2-10M	64	2.1/2"	7	4	260	**199.00**
WPVC3-10M	76	3"	8	4	320	**248.15**
WPVC4-10M	102	4"	8	4	430	**307.20**

Wire Reinforced PVC Hose for Vacuum/Suction

30 Metre Coils

Code R09	Hose ID mm	Hose ID	Wall Thickness mm	Maximum Working Pressure bar	Bend Radius mm	Price
WPVC1/2-30M	12	1/2"	3	6	50	**70.90**
WPVC3/4-30M	20	3/4"	3.4	6	80	**131.15**
WPVC1-30M	25	1"	4	6	100	**151.20**
WPVC11/4-30M	32	1.1/4"	4.8	5	130	**222.10**
WPVC11/2-30M	38	1.1/2"	5.5	5	155	**268.10**
WPVC2-30M	50	2"	7	5	200	**403.70**
WPVC21/2-30M	64	2.1/2"	7	4	260	**696.75**
WPVC3-30M	76	3"	8	4	320	**733.75**
WPVC4-30M	102	4"	8	4	430	**1135.45**

Suction & Discharge Hose

A lightweight, clear, non-toxic PVC delivery hose, manufactured from EC compliant materials, suitable for food delivery applications. It has outstanding resistance to the effects of weather and minimum frictional loss is achieved by the smooth bore. This highly flexible hose is designed for low pressure suction and delivery of liquids and light powders.

Key Features

- EC compliant for food contact applications
- Lightweight for easy handling
- Transparent for easy visibility
- Remains flexible, even in colder conditions
- Excellent chemical and abrasion resistance

Colour

- Transparent, white helix

DEHP FREE DEHP <0.1%

Application

- Transfer of liquids and light powders, for example, baking powder used in the food industry

Construction

- Manufactured with a white rigid crush and kink resistant anti-shock PVC spiral helix encapsulated in a transparent flexible FDA approved PVC cover, with a smooth inside wall

Working Temperature:

- -10°C to +55°C



Food Grade Delivery Hose

10 Metre Coils

Code R17	Hose ID mm	Hose ID	External Diameter mm	Wall Thickness mm	Maximum Working Pressure bar	Weight per Metre kg	Bend Radius mm	Vacuum H20 Metre	Price
SDHF21/2-10M	63.5	2.1/2"	71.9	4.2	5.0	1.04	284	7	**95.90**
SDHF3-10M	76.0	3"	86.4	5.2	4.0	1.38	342	7	**127.15**
SDHF4-10M	102.0	4"	114.6	6.3	4.0	2.16	459	7	**203.40**

Food Grade Delivery Hose

30 Metre Coils

Code R17	Hose ID mm	Hose ID	External Diameter mm	Wall Thickness mm	Maximum Working Pressure bar	Weight per Metre kg	Bend Radius mm	Vacuum H20 Metre	Price
SDHF1-30M	25.4	1"	32.0	3.3	8.0	0.33	114	7	**82.55**
SDHF11/4-30M	32.0	1.1/4"	39.2	3.6	7.0	0.46	143	7	**156.10**
SDHF11/2-30M	38.0	1.1/2"	45.4	3.7	6.5	0.55	171	7	**194.85**
SDHF2-30M	51.6	2"	59.8	4.1	6.0	0.81	230	7	**216.35**
SDHF21/2-30M	63.5	2.1/2"	71.9	4.2	5.0	1.04	284	7	**258.70**
SDHF3-30M	76.0	3"	86.4	5.2	4.0	1.38	342	7	**343.45**
SDHF4-30M	102.0	4"	114.6	6.3	4.0	2.16	459	7	**553.05**

Suction & Discharge Hose

A lightweight delivery hose reinforced with a rigid, internal, crush and kink resistant, white PVC helix. It is tough, flexible and extremely durable. It has outstanding resistance to the effects of weather.

Key Features

- Lightweight construction for easy handling
- Optimum flow is maintained by the smooth bore
- Remains flexible, even in cold weather applications
- Excellent chemical and abrasion resistance

Colour

- Transparent green, white helix

Application

- Designed for the light pressure transfer of liquids, slurries and powders
- This product is particularly popular in the agricultural, horticultural, marine and construction industries
- Within the agricultural industry, the hose is specially used for conveying liquid fertilisers, dilute chemicals and insecticides

Construction

- Manufactured with a white, rigid, crush resistant, anti-shock, PVC spiral helix encapsulated in a flexible, translucent green PVC cover with a smooth inside wall

WorkingTemperature:

- -10°C to +65°C

Pressures:

- Values given are based on the short-term burst pressure of the hose at +20°C based on a 3:1 safety factor
- Vacuum: 570mm Hg = 75% at +20°C



Delivery Hose

10 Metre Coils

Code R08	Hose ID mm	Hose ID	Wall Thickness mm	Maximum Working Pressure bar	Bend Radius mm	Price
SDHM1-10M	25.4	1"	2.4	8	140	**25.60**
SDHM11/4-10M	32.0	1.1/4"	2.6	8.0	180	**34.50**
SDHM11/2-10M	38.0	1.1/2"	3.0	8.0	210	**54.70**
SDHM2-10M	51.6	2"	3.6	7.0	270	**76.25**
SDHM21/2-10M	63.5	2.1/2"	3.7	6.0	350	**98.35**
SDHM3-10M	76.0	3"	4.1	5.0	500	**122.85**

Delivery Hose

30 Metre Coils

Code R08	Hose ID mm	Hose ID	Wall Thickness mm	Maximum Working Pressure bar	Bend Radius mm	Price
SDHM1-30M	25.4	1"	2.4	8	140	**91.65**
SDHM11/4-30M	32.0	1.1/4"	2.6	8	180	**111.35**
SDHM11/2-30M	38.0	1.1/2"	3	8	210	**165.25**
SDHM2-30M	51.6	2"	3.6	7	270	**228.65**
SDHM21/2-30M	63.5	2.1/2"	3.7	6	350	**304.15**
SDHM3-30M	76.0	3"	4.1	5	500	**368.30**

Suction & Discharge Hose

Superflexible medium duty suction hose is a robust general purpose hose. It has excellent weathering and crush resistance and is extremely easy to handle due to its extra flexibility. It has a white helix spiral encased in a superflexible green PVC.

Industries:

- Suitable for general pumping and suction applications within the agricultural, construction and water treatment industries.

Applications:

- Conveyance of water, sludge, slurry and other waste matter. Can also be used to convey small particles like animal feed and plastic pellets.

Working Temperature:

- -15°C to +60°C
- Vacuum: 680mm Hg = 90% at +20°C

Pressure:

- Values given are based on the short term burst pressure of the hose at +20°C based on a 3:1 safety factor.

Chemical Resistance:

- Resistant to most oxidising and reducing agents and diluted acids and alkalis. For more details please contact the sales office.

Note:

- Any increase in temperature above +20°C will result in a decline in working pressure values.



Superflexible Delivery Hose

10 Metre Coils

Code R08	Hose ID mm	Hose ID	Wall Thickness mm	Maximum Working Pressure bar	Bend Radius	Price
SDHMS11/4-10M	32.0	1.1/4"	3.7	7.0	135	**40.95**
SDHMS11/2-10M	38.0	1.1/2"	4.0	7.0	150	**59.95**
SDHMS2-10M	51.6	2"	4.3	6.5	200	**83.60**
SDHMS21/2-10M	63.5	2.1/2"	5.2	7.0	250	**115.00**
SDHMS3-10M	76.0	3"	5.0	4.5	300	**134.05**
SDHMS4-10M	102.0	4"	6.0	5.0	400	**224.95**

Superflexible Delivery Hose

30 Metre Coils

Code R08	Hose ID mm	Hose ID	Wall Thickness mm	Maximum Working Pressure bar	Bend Radius	Price
SDHMS1-30M	25.4	1"	3.5	8.0	110	**102.85**
SDHMS11/4-30M	32.0	1.1/4"	3.7	7.0	135	**122.80**
SDHMS11/2-30M	38.0	1.1/2"	4.0	7.0	150	**179.65**
SDHMS2-30M	51.6	2"	4.3	6.5	200	**247.70**
SDHMS21/2-30M	63.5	2.1/2"	5.2	7.0	250	**333.50**
SDHMS3-30M	76.0	3"	5.0	4.5	300	**348.25**
SDHMS4-30M	102.0	4"	6.0	5.0	400	**677.65**



new

Green Suction Hose Assemblies NOW AVAILABLE!

All assemblies are fitted with male/female lever lock couplings, attached with Band-it clamps*.

A range of general pumping and suction hose, including: medium duty, super flexible, medium duty oil resistant, water delivery.

- **Wire reinforced**
- **Bespoke lengths available on request**

Technical data:

- Working Temperature: -10ºC to +60ºC
- Cold bend: -45ºC
- Vacuum: 680mm Hg= 90% at 20ºC
- Maximum Working Pressure:
  2”, 3”, 4” - 3 bar
  6” & 8” - 2 bar
- Bursting pressure: 3:1

For more information please contact the sales team

Typical applications for pipe:
Agriculture, construction, water treatment, water and sewage treatment, horticulture and marine.







Additional carriage charges may be applied based on the weight, dimensions and delivery location.

Suction & Discharge Hose

- Cold Bend: -45ºC
- Vacuum: 680mm Hg = 90% at +20ºC
- Approximately 15% lighter than heavy duty suction hose.

Applications:

- General pumping and suction applications in agricultural and construction industries. Conveyance of water, sludge, slurry, chemicals and other waste matter.

Pressures:

- Values given are based on the short term burst pressure of the hose at +20ºC based on a 3:1 safety factor.

Note:

- Any increase in temperature above +20ºC will result in a decline in working pressure values.

Chemical Resistance:

- Resistant to most oxidising and reducing agents and diluted acids and alkalis.
- For more detailed information please contact our sales office.

Working Temperature:

- -5°C to +65°C



Medium Duty Suction & Delivery Hose

10 Metre Coils

Code R08	Hose ID mm	Hose ID	Wall Thickness mm	Maximum Working Pressure bar	Bend Radius mm	Price
SDHH11/4-10M	32.0	1.1/4"	4	7	160	**38.60**
SDHH11/2-10M	38.0	1.1/2"	4.4	6	190	**56.75**
SDHH2-10M	51.6	2"	4.8	5	250	**78.55**
SDHH21/2-10M	63.5	2.1/2"	5.2	4.5	315	**105.40**
SDHH3-10M	76.0	3"	5.2	5	300	**127.10**
SDHH4-10M	102.0	4"	6.3	4	400	**213.30**

Medium Duty Suction & Delivery Hose

30 Metre Coils

Code R08	Hose ID mm	Hose ID	Wall Thickness mm	Maximum Working Pressure bar	Bend Radius mm	Price
SDHH1-30M	25.4	1"	3.8	7	125	**80.20**
SDHH11/4-30M	32.0	1.1/4"	4	7	160	**98.30**
SDHH11/2-30M	38.0	1.1/2"	4.4	6	190	**169.55**
SDHH2-30M	51.6	2"	4.8	5	250	**200.15**
SDHH21/2-30M	63.5	2.1/2"	5.2	4.5	315	**314.55**
SDHH3-30M	76.0	3"	5.2	5	300	**381.30**
SDHH4-30M	102.0	4"	6.3	4	400	**631.15**

Suction & Discharge Hose

A lightweight, medium duty PVC suction and discharge hose, reinforced with a rigid, crush resistant, white PVC helix. This tough, flexible and extremely durable hose has outstanding resistance to the effects of weather.

Key Features

- Tough, extremely durable with excellent flexibility
- Optimum flow is maintained by the smooth bore
- Flexibility maintained even under cold weather conditions
- Excellent chemical and abrasion resistance

Colour

- Olive green, white helix

Application Examples

DEHP FREE DEHP <0.1%

- Suction and discharge of water, sewage, slurries and powders
- Industrial, agricultural and construction industry pumping purposes

Construction

- Manufactured with a white rigid, crush and kink resistant anti-shock PVC spiral helix encapsulated in the industry standard olive green flexible PVC cover and smooth inside wall to reduce friction

Working Temperature:

- -10°C to +55°C



Lightweight Medium Duty Suction & Delivery Hose

10 Metre Coils

Code R08	Hose ID mm	Hose ID	External Diameter mm	Wall Thickness mm	Maximum Working Pressure bar	Weight per Metre kg	Bend Radius mm	Vacuum H20 Metre	Price
SDHHL11/4-10M	32.0	1.1/4"	39.0	3.5	7.0	0.46	72	8	**47.65**
SDHHL11/2-10M	38.0	1.1/2"	45.8	3.9	6.3	0.57	86	8	**60.15**
SDHHL2-10M	51.6	2"	60.2	4.3	5.3	0.83	114	8	**86.00**
SDHHL21/2-10M	63.5	2.1/2"	73.1	4.8	5.0	1.05	143	8	**103.50**
SDHHL3-10M	76.0	3"	86.0	5.0	4.0	1.47	171	8	**158.45**
SDHHL4-10M	102.0	4"	113.0	5.5	4.0	2.17	284	8	**224.45**

Lightweight Medium Duty Suction & Delivery Hose

30 Metre Coils

Code R08	Hose ID mm	Hose ID	External Diameter mm	Wall Thickness mm	Maximum Working Pressure bar	Weight per Metre kg	Bend Radius mm	Vacuum H20 Metre	Price
SDHHL1-30M	25.4	1"	31.8	3.2	8.0	0.36	57	8	**101.85**
SDHHL11/4-30M	32.0	1.1/4"	39.0	3.5	7.0	0.46	72	8	**178.20**
SDHHL11/2-30M	38.0	1.1/2"	45.8	3.9	6.3	0.57	86	8	**160.85**
SDHHL2-30M	51.6	2"	60.2	4.3	5.3	0.83	114	8	**234.45**
SDHHL21/2-30M	63.5	2.1/2"	73.1	4.8	5.0	1.05	143	8	**282.30**
SDHHL3-30M	76.0	3"	86.0	5.0	4.0	1.47	171	8	**415.55**
SDHHL4-30M	102.0	4"	113.0	5.5	4.0	2.17	284	8	**612.15**

Suction & Discharge Hose

Oil resistant medium duty suction hose is a robust general purpose oil hose. It has a smooth bore for minimum flow resistance. Excellent weathering and crush resistance. It has a white helix spiral encased in an oil resistant blue pvc.

Applications:

- Designed for the use of transporting fuel/oils and is suitable for many industrial areas.
- Vacuum: 680mm Hg = 90% at +20°C

Pressure:

- Values given are based on the short term burst pressure of the hose at +20°C based on a 3:1 safety factor.

Working Temperature:

- -15ºC to +60ºC

Chemical Resistance:

Suitable for low aromatic content including oil, diesel, paraffin, hydraulic oils, mineral based oils, lubricating oils and greases. For more details please contact our Sales Office.

Note:

- Any increase in temperature above +20°C will result in a decline in working pressure values.



Oil Resistant Delivery Hose

10 Metre Coils

Code R08	Hose ID mm	Hose ID	Wall Thickness mm	Maximum Working Pressure bar	Bend Radius mm	Price
SDHR11/4-10M	32.0	1.1/4"	4	7	135	**58.50**
SDHR11/2-10M	38.0	1.1/2"	4.5	7	150	**58.50**
SDHR2-10M	51.6	2"	4.5	6.5	200	**111.55**
SDHR21/2-10M	63.5	2.1/2"	4.5	5	250	**161.35**
SDHR3-10M	76.0	3"	5	4.5	300	**206.20**

Oil Resistant Delivery Hose

30 Metre Coils

Code R08	Hose ID mm	Hose ID	Wall Thickness mm	Maximum Working Pressure bar	Bend Radius mm	Price
SDHR1-30M	25.4	1"	4	8	100	**136.90**
SDHR11/4-30M	32.0	1.1/4"	4	7	135	**204.30**
SDHR11/2-30M	38.0	1.1/2"	4.5	7	150	**236.30**
SDHR2-30M	51.6	2"	4.5	6.5	200	**333.80**
SDHR21/2-30M	63.5	2.1/2"	4.5	5	250	**478.00**
SDHR3-30M	76.0	3"	5	4.5	300	**574.55**

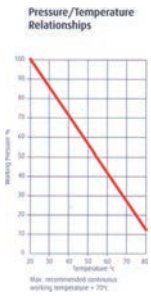
Specialist Hose & Tubing

Key Features

- Aquavend will not support microbiological growth
- WRAS approved construction
- Cadmium- and silicone-free
- High quality PVC outer, extruded with a brilliant white 'clinical' finish
- TPE mirror-smooth inner for improved flow
- Odourless and taint-free specialist materials
- Good flexibility and durability
- Excellent resistance to abrasion
- Specially selected high tensile polyester fibres used at the optimum braid angle of 54º 44' (54.73º) creates an effectively balanced pressure hose
- Good kink resistance across a wide temperature range
- Independently tested in accordance with BS 6920

Application Examples

- Vending machines
- Water softeners
- Drinking water
- Caravan and marine industry for water supply tubing





Aqua Vend - Water Vending Hose

10 Metre Coils

Code S36	ID mm	OD mm	Pressure Rating at +20°C psi	Price
PHR06-10M	6.3	12	300	35.95
PHR10-10M	10	16	221	58.00
PHR12-10M	12.5	19	216	79.35
PHR19-10M	19	26	191	123.25
PHR25-10M	25	33	147	317.40

Aqua Vend - Water Vending Hose

30 Metre Coils

Code S36	ID mm	OD mm	Pressure Rating at +20°C psi	Price
PHR06-30M	6.3	12	300	109.00
PHR10-30M	10	16	221	169.75
PHR12-30M	12.5	19	216	200.35
PHR19-30M	19	26	191	331.20

For Hose Clips





MIKALOR

See pages 549-554

Specialist Hose & Tubing

Key Features

- Good flexibility
- Effective kink resistance and good abrasion resistance
- Cadmium- and silicone-free
- Suitable for use at -15ºC to +60ºC
- High tensile polyester fibres, used at the optimum braid angle of 54º 44′ (54.73º), creates an effectively balanced hose
- Inner layer is made from a carefully controlled recycled material
- Conforms to BS 3746: 1990



Garden Hose

30 Metre Coils

Code	N65	Hose ID	Hose ID mm	Pressure bar Max. Working	Pressure bar Min. Burst	Price
LGH12-30M		1/2″	12	8	117	22.00

Working Temperature:

- -40°C to 60°C



Tiger Tail Effluent Hose

With Cuffs, 15 Metre

Code	S36	ID	ID mm	Price
TT-2		2″	51	749.45

- Reinforced PVC Hose. Ideal for the conveyance of potable cold and hot water. Mirror smooth inner layers for improved flow rates. WRC Approved material, will not support microbiological growth.
- Manufactured to BS EN ISO 9002



150psi Non Marking Wash Down Hose

50 Metre Coils

Code	S36	ID	OD mm	Price
WDH12-50M		1/2″	21	399.35

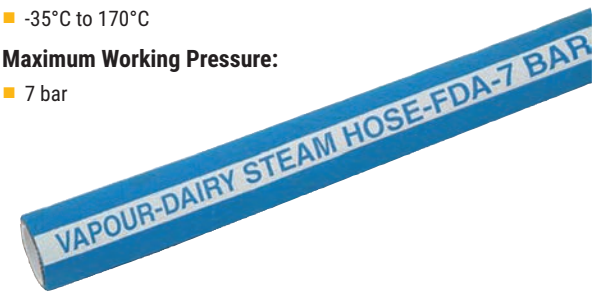
- Tube: white EPDM food quality, taste and odour free
- Reinforcement: high tensile textile cord
- Cover: EPDM blue, smooth with cloth impression
- Application: dairy washdown hose, resistant against alcohol and bacteria, FDA approved material

Working Temperature:

- -35°C to 170°C

Maximum Working Pressure:

- 7 bar



Dairy Steam Hose, FDA Approved

40 Metre

Code	S36	ID	ID mm	OD mm	Bend Radius mm	Price
DSH12-40M		1/2″	13	23	91	683.95
DSH34-40M		3/4″	19	31	133	1139.85
DSH1-40M		1″	25	37	175	1121.55

Specialist Hose & Tubing

Description & Uses

Tubes are composed of an aluminium tape, protected on both sides by a polyethylene film and coated by a polyethylene sheath. A light and highly flexible product, easy to form without equipment. It is possible to put underground or to sink in cement.

Main properties

- Working temperature: -30°C to +70°C
- Maximum temperature: +80°C
- Outer diameter is measured and allows the use of push-in fittings
- Outside exposure: advised
- Good resistance to weather conditions and corrosion

Chemical Resistance

- Good resistance to hydrocarbons, oils, solvents, etc.



Aluminium/PVC Composite Tubing

25 Metre Coils

Code N29	OD mm	Mass kg/km	Working Pressure bar	Price
MLF6-25M	6	25	17.5	50.70
MLF8-25M	8	42	17.5	63.75
MLF10-25M	10	48	17.5	99.55
MLF12-25M	12	59	15.0	150.80

Welding/Gas Hose

Single line oxy-acetylene hose with red or blue smooth rubber cover with black rubber tube. Single braid of synthetic cord reinforcement.

- Conforms to EN 559 1995

Working Temperature:

- -35°C to +90°C



Oxyacetylene Welding Hose

Blue 25 Metre Coils

Code R06	Hose ID	Hose ID mm	Hose OD mm	Working Pressure bar	Price
RWHB20-6-25	1/4"	6	14	20	20.35
RWHB20-8-25	5/16"	8	15	20	53.20
RWHB20-10-25	3/8"	10	17	20	67.25

Oxyacetylene Welding Hose

Red 25 Metre Coils

Code R06	Hose ID	Hose ID mm	Hose OD mm	Working Pressure bar	Price
RWHR10-8-25	5/16"	8	14	10	33.10
RWHR10-10-25	3/8"	10	17	10	32.70

Oxyacetylene Welding Hose

Blue 100 Metre Coils

Code R06	Hose ID	Hose ID mm	Hose OD mm	Working Pressure bar	Price
RWHB20-6-100	1/4"	6	14	20	101.65
RWHB20-8-100	3/8"	10	17	20	132.40
RWHB20-10-100	5/16"	8	16	20	155.85

Oxyacetylene Welding Hose

Red 100 Metre Coils

Code R06	Hose ID	Hose ID mm	Hose OD mm	Working Pressure bar	Price
RWHR10-8-100	5/16"	8	14	10	132.40
RWHR10-10-100	3/8"	10	17	10	153.45

Welding/Gas Hose

- Swaged hose sets conforming to EN559 Hose & BS6158 Check Valves. All hoses tested.



Oxygen Hose Sets

Acetylene

Code S37	ID	Length Metre	Check Valve	Price
WHA1/4-1/4-5MA	1/4"	5	1/4" BSPP	**43.60**
WHA1/4-1/4-10MA	1/4"	10	1/4" BSPP	**60.40**
WHA1/4-1/4-15MA	1/4"	15	1/4" BSPP	**72.40**
WHA1/4-1/4-20MA	1/4"	20	1/4" BSPP	**95.90**
WHA1/4-3/8-5MA	1/4"	5	3/8" BSPP	**37.45**
WHA1/4-3/8-10MA	1/4"	10	3/8" BSPP	**64.50**
WHA1/4-3/8-15MA	1/4"	15	3/8" BSPP	**72.40**
WHA1/4-3/8-20MA	1/4"	20	3/8" BSPP	**99.00**
WHA5/16-3/8-5MA	5/16"	5	3/8" BSPP	**46.85**
WHA5/16-3/8-10MA	5/16"	10	3/8" BSPP	**71.80**
WHA5/16-3/8-15MA	5/16"	15	3/8" BSPP	**93.90**
WHA5/16-3/8-20MA	5/16"	20	3/8" BSPP	**113.60**
WHA3/8-38-5MA	3/8"	5	3/8" BSPP	**55.60**
WHA3/8-38-10MA	3/8"	10	3/8" BSPP	**81.80**
WHA3/8-38-15MA	3/8"	15	3/8" BSPP	**108.00**
WHA3/8-38-20MA	3/8"	20	3/8" BSPP	**133.35**

- Sets consists of two lengths of hose oxygen & acetylene complete with double safety check valve, nuts & tails.



Oxygen Hose Sets

Propane

Code S37	ID	Length Metre	Check Valve	Price
WHA1/4-1/4-5MO	1/4"	5	1/4" BSPP	**46.90**
WHA1/4-1/4-10MO	1/4"	10	1/4" BSPP	**71.60**
WHA1/4-3/8-5MO	1/4"	5	3/8" BSPP	**50.20**
WHA3/8-3/8-5MO	3/8"	10	3/8" BSPP	**90.90**
WHA3/8-3/8-10MO	3/8"	20	3/8" BSPP	**176.50**

- NBR smooth black tube
- Textile braided reinforcement, high tensile synthetic yarn
- Neoprene blended cover

Working Temperature:

- -30°C to +80°C

Working pressure:

- 20 bar



LPG Hose, EN559, Orange

25 Metre Coils

Code R06	ID	ID mm	Price
RLHO20-6-25	1/4"	6	**39.35**
RLHO20-8-25	5/16"	8	**42.20**
RLHO20-10-25	3/8"	10	**54.70**

LPG Hose, EN559, Orange

100 Metre Coils

Code R06	ID	ID mm	Price
RLHO20-6-100	1/4"	6	**232.85**
RLHO20-8-100	5/16"	8	**297.10**
RLHO20-10-100	3/8"	10	**321.20**

Oxy/Acetylene Equipment



Oxy/Acetylene Couplings

Hex Nipples

Code	S13	Description	Price
OEMC14		1/4" BSPP Right Hand	2.35
AEMC14		1/4" BSPP Left Hand	2.35
OEMC38		3/8" BSPP Right Hand	3.70
AEMC38		3/8" BSPP Left Hand	3.70
OEMC3814		3/8" x 1/4" BSPP Right Hand	3.70
AEMC3814		3/8" x 1/4" BSPP Left Hand	3.50



Oxy/Acetylene Couplings

Double Check Safety Valve

Code	S13	Description	Price
ODSCV3838		3/8" Tail with 3/8" Oxy Nut Right Hand	8.95
ADSCV3838		3/8" Tail with 3/8" Acetylene Nut Left Hand	8.55
ODSCV51638		5/16" Tail with 3/8" Oxy Nut Right Hand	7.60
ADSCV51638		5/16" Tail with 3/8" Acetylene Nut Left Hand	10.95
ODSCV1438		1/4" Tail with 3/8" Oxy Nut Right Hand	10.40
ADSCV1438		1/4" Tail with 3/8" Acetylene Nut Left Hand	10.95
ODSCV1414		1/4" Tail with 1/4" Oxy Nut Right Hand	10.95
ADSCV1414		1/4" Tail with 1/4" Acetylene Nut Left Hand	5.80



Oxy/Acetylene Couplings

Tails

Code	S13	Description	Price
OT1414		1/4" Tail for 1/4" Nuts	2.20
OT1438		1/4" Tail for 3/8" Nuts	2.40
OT516		5/16" Tails	2.35
OT38		3/8" Tails	2.35



Oxy/Acetylene Couplings

Nuts, BSPP

Code	S13	Description	Price
ON14		1/4" Right Hand	1.70
AN14		1/4" Left Hand	1.90
ON38		3/8" Right Hand	2.35
AN38		3/8" Left Hand	2.35

For Techmatic Blow Gun



See page 716

Industrial Hose

Application: Wet exhaust hose for marine craft

- Lloyds Approved
- Specification: SAEJ2006R1
- Tube: Black, exhaust gas, salt water resistant EPDM rubber
- Reinforcement: Synthetic textile fabrics, steel wire helix
- Cover: Black, corrugated, resistant to heat, salt water, ozone and abrasion EPDM rubber

Safety Factor

- 3-1

Working Temperature:

- -30°C to +100°C



Applications: Suction and discharge for sanitary installation in marine and domestic use

- Strong, very flexible and smooth white plasticized PVC. Shock resistant galvanised steel spiral wire crushing, abrasion and weather resistant, smooth outside
- Reinforcement: Galvanised Steel Spiral



Marine Exhaust Hose

10 Metre Coils

Code S39	ID mm	OD mm	Price
MEH-32-10M	32	41	271.15
MEH-38-10M	38	47	288.80
MEH-45-10M	45	54	334.00

Marine Exhaust Hose

40 Metre Coils

Code S39	ID mm	OD mm	Price
MEH-51-40M	51	60	1363.45

Saniflex Premium PVC

Nitrile Sanitation, 30 Metre Coils

Code S39	ID mm	Burst Pressure bar	Bend Radius mm	Price
SPPVC34-30M	3/4"	12	50	145.20
SPPVC1-30M	1"	15	60	233.30
SPPVC1.1/2-30M	1.1/2"	15	90	361.95

TECHMATIC™

Quality is our No.1 Responsibility

The Techmatic™ range has been developed based on our extensive industry knowledge and experience.

Each product has been carefully selected with these three fundamentals:

Quality, Price and Availability



Industrial Hose

Applications: Suction and discharge applications of liquids and solids

- Cold Bend: -45ºC
- Vacuum: 570mm Hg = 75% at 20ºC
- Raw materials used have FDA approval for use with foodstuffs
- Pressures: Values given are based on the short term burst pressure of the hose at 20ºC based on a 3:1 safety factor
- Note: Any increase in temperature above 20ºC will result in a decline in working pressure values
- Chemical Resistance: Resistant to most oxidising and reducing agents and diluted acids and alkalis
- For more detailed information please contact technical sales

Working Temperature:

- -15°C to +65°C



Non Toxic Suction Discharge Hose

Clear with White Spiral, 5 Metre Coils

Code S39	ID	Wall Thickness mm	Max Gauge Pressure bar	Bend Radius mm	Price
NTSDH-1-5M	1"	2.8	5	130	**19.95**
NTSDH-114-5M	1.1/4"	3	5	155	**26.80**
NTSDH-112-5M	1.1/2"	3.4	5	182	**33.80**
NTSDH-2-5M	2"	4.1	5	235	**49.60**
NTSDH-212-5M	2.1/2"	4.2	5	290	**58.15**
NTSDH-3-5M	3"	4.7	5	340	**75.40**
NTSDH-4-5M	4"	6	4	470	**125.95**

Non Toxic Suction Discharge Hose

Clear with White Spiral, 10 Metre Coils

Code S39	ID	Wall Thickness mm	Max Gauge Pressure bar	Bend Radius mm	Price
NTSDH-1-10M	1"	2.8	5	130	**41.50**
NTSDH-114-10M	1.1/4"	3	5	155	**53.15**
NTSDH-112-10M	1.1/2"	3.4	5	182	**67.65**
NTSDH-2-10M	2"	4.1	5	235	**99.10**
NTSDH-212-10M	2.1/2"	4.2	5	290	**110.60**
NTSDH-3-10M	3"	4.7	5	340	**156.90**
NTSDH-4-10M	4"	6	4	470	**251.85**

Applications: Medium-duty suction and delivery of water, salt water, light chemicals, liquids, sewer purging, sludge, sand and gravel

- Strong, flexible and smooth, shock and crush resistant PVC spiral. Good in cold climates
- Reinforcement: Blue nylon spiral

Working Temperature:

- -20°C to +60°C



Medusa Super Elastic Hose

Medium-duty Suction & Delivery, 10 Metre Coils

Code S39	ID mm	Burst Pressure bar	Bend Radius mm	Price
MSEH-2-10M	2"	15	200	**141.45**
MSEH-212-10M	2.1/2"	14	275	**175.15**
MSEH-3-10M	3"	12	310	**192.60**
MSEH-4-10M	4"	10	410	**369.40**
MSEH-6-10M	6"	9	610	**593.20**

Medusa Super Elastic Hose

Medium-duty Suction & Delivery, 30 Metre Coils

Code S39	ID mm	Burst Pressure bar	Bend Radius mm	Price
MSEH-2-30M	2"	15	200	**405.60**
MSEH-212-30M	2.1/2"	14	275	**451.80**
MSEH-3-30M	3"	12	310	**577.85**
MSEH-4-30M	4"	10	410	**1108.25**
MSEH-6-30M	6"	9	610	**1779.65**

Ducting Hose

new

This high performance ducting range is produced in Europe and is made from premium-grade ester polyurethane compound, reinforced with a copper-coated spring steel helix.

Applications: Transport hose for abrasive solids including: dust, powder, fibres, etc. Also suitable for extracting gaseous media such as oil vapours and welding fume.

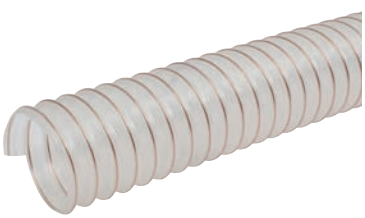
- Excellent abrasion resistance
- Wire spiral reinforcement can be earthed
- Superflexible, low weight
- Small bend radius
- Good resistance to oil, petrol and chemicals
- High tensile strength and tear resistance
- Good resistance to hydrolysis
- Anti-static wall - electrical and surface resistance, $<10^9\Omega$
- Flame retardant
- Microbe resistant

- Supplied in compressed form (4:1) to save space and cost

Wall Thickness
- 0.4mm approx.

Working Temperature:
- -40°C to +90°C

Intermittent to:
- +125°C



- Supplied in compressed form (3:1) to save space and cost

Wall Thickness
- 0.6mm approx.

Working Temperature:
- -40°C to +90°C

Intermittent to:
- +125°C



Lightweight Abrasion-resistant, Anti-static High Performance Polyurethane

0.4mm Wall, Flame Retardant, 10 Metres

Code N37	ID mm	OD mm	Max Working Pressure bar	Max Vacuum bar	Weight Kg/m	Price
PUD-L-38-10M	38	46	0.630	0.245	0.220	**83.10**
PUD-L-50-10M	50	58	0.480	0.170	0.280	**84.20**
PUD-L-60-10M	60	68	0.405	0.145	0.340	**85.70**
PUD-L-65-10M	65	73	0.370	0.130	0.360	**89.75**
PUD-L-75-10M	75	83	0.325	0.115	0.410	**98.60**
PUD-L-80-10M	80	88	0.305	0.110	0.440	**103.00**
PUD-L-90-10M	90	98	0.270	0.095	0.490	**110.00**
PUD-L-100-10M	100	108	0.245	0.055	0.510	**116.60**
PUD-L-115-10M	115	123	0.210	0.050	0.580	**129.45**
PUD-L-120-10M	120	128	0.205	0.045	0.610	**135.00**
PUD-L-125-10M	125	133	0.195	0.045	0.630	**139.00**
PUD-L-130-10M	130	138	0.185	0.040	0.660	**145.65**
PUD-L-140-10M	140	148	0.175	0.040	0.710	**155.20**
PUD-L-150-10M	150	158	0.160	0.035	0.760	**165.15**
PUD-L-160-10M	160	168	0.150	0.035	0.810	**176.15**
PUD-L-180-10M	180	188	0.135	0.030	0.900	**201.90**
PUD-L-200-10M	200	208	0.120	0.025	1.030	**221.80**
PUD-L-225-10M	225	234	0.110	0.020	1.160	**252.70**
PUD-L-250-10M	250	259	0.100	0.020	1.280	**271.40**

Medium Weight Abrasion-resistant, Anti-static High Performance Polyurethane

0.6mm Wall, Flame Retardant, 10 Metres

Code N37	ID mm	OD mm	Max Working Pressure bar	Max Vacuum bar	Weight Kg/m	Price
PUD-M-38-10M	38	45	1.075	0.355	0.220	**88.95**
PUD-M-50-10M	50	58	0.820	0.220	0.370	**96.80**
PUD-M-60-10M	60	68	0.685	0.180	0.430	**101.40**
PUD-M-65-10M	65	73	0.635	0.165	0.460	**104.65**
PUD-M-75-10M	75	83	0.550	0.145	0.530	**118.20**
PUD-M-80-10M	80	88	0.515	0.135	0.570	**126.40**
PUD-M-90-10M	90	98	0.460	0.120	0.630	**130.00**
PUD-M-100-10M	100	108	0.415	0.080	0.670	**136.40**
PUD-M-115-10M	115	123	0.360	0.070	0.760	**151.80**
PUD-M-120-10M	120	128	0.345	0.065	0.790	**158.20**
PUD-M-125-10M	125	133	0.335	0.065	0.830	**163.55**
PUD-M-130-10M	130	138	0.320	0.060	0.860	**172.15**
PUD-M-140-10M	140	148	0.295	0.055	0.920	**182.50**
PUD-M-150-10M	150	158	0.275	0.055	0.990	**194.65**
PUD-M-160-10M	160	168	0.260	0.050	1.050	**207.45**
PUD-M-180-10M	180	188	0.230	0.045	1.170	**238.90**
PUD-M-200-10M	200	208	0.210	0.030	1.330	**261.00**
PUD-M-225-10M	225	233	0.185	0.025	1.480	**296.70**
PUD-M-250-10M	250	258	0.165	0.025	1.640	**319.20**
PUD-M-300-10M	300	309	0.140	0.020	2.140	**399.20**
PUD-M-350-10M	350	359	0.120	0.020	2.490	**469.60**
PUD-M-400-10M	400	409	0.105	0.015	2.840	**518.85**

Other size & length options available

Ducting Hose

new

Made from premium-grade ester polyurethane, reinforced with a heavy-duty spring steel wire helix.

Applications: Suction and transport hose for highly abrasive materials using high flow rates, e.g. powder, granules, chippings, etc. Also suitable for fumes or gaseous media.

- Permanently anti-static wall, <$10^9\Omega$
- Excellent abrasion resistance
- Flame retardant to DIN4102-B1, UL94-V2
- Microbe resistant
- Wire spiral reinforcement can be earthed
- Good resistance to chemicals
- High tensile strength and tear resistance
- Smooth bore, optimised flow (observe direction of flow arrow)
- Good resistance to oil, petrol and chemicals
- Heavyweight, increased pressure and vacuum

Wall Thickness

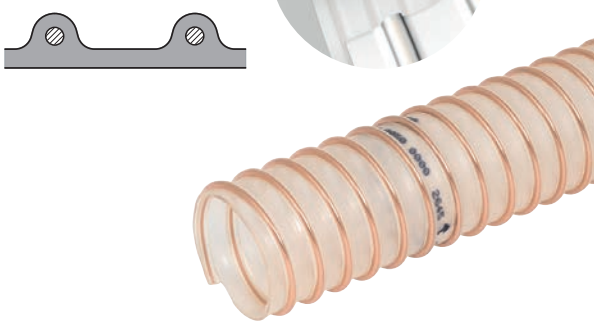
- 1.5mm approx.

Working Temperature:

- -40°C to +90°C

Intermittent to:

- +125°C



Heavy-duty Highly Abrasion-resistant, Anti-static Polyurethane

1.5mm Wall, Flame Retardant, 10 Metres

Code N37	ID mm	OD mm	Max Working Pressure bar	Max Vacuum bar	Weight Kg/m	Price
PUD-H-50-10M	50	60	2.485	0.825	0.660	**254.50**
PUD-H-65-10M	65	75	1.935	0.635	0.840	**310.30**
PUD-H-75-10M	75	86	1.685	0.505	1.050	**343.90**
PUD-H-100-10M	100	111	1.275	0.390	1.490	**539.10**
PUD-H-125-10M	125	136	1.025	0.315	1.840	**678.80**
PUD-H-150-10M	150	161	0.860	0.270	2.410	**818.85**
PUD-H-160-10M	160	171	0.805	0.255	2.560	**883.70**
PUD-H-200-10M	200	213	0.645	0.150	3.120	**1116.60**
PUD-H-250-10M	250	263	0.520	0.120	3.880	**1587.75**
PUD-H-300-10M	300	313	0.435	0.090	5.160	**1855.00**

Other size & length options available

Made from premium food grade ether polyurethane, reinforced with a spring steel wire helix.

Applications: Suction and transport hose for abrasive materials including food products, e.g. powders, granulates, seeds, grain, etc. Also suitable for liquid media.

- Food grade wall
- Permanently anti-static wall, <$10^9\Omega$
- Good resistance to microbes and hydrolysis
- Wire spiral reinforcement can be earthed
- Good resistance to oil, petrol and chemicals
- High tensile strength and tear resistance
- Smooth bore, optimised flow (observe direction of flow arrow)
- Small bend radius
- Excellent low temperature flexibility

Wall Thickness

- 0.7mm approx.

Working Temperature:

- -40°C to +90°C

Intermittent to:

- +125°C



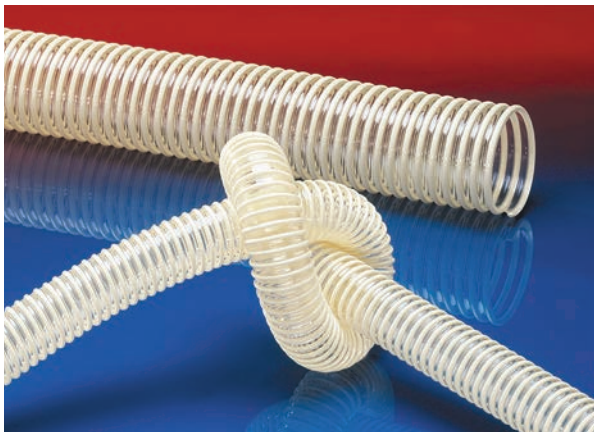
Food Grade Medium Weight Abrasion-resistant, Anti-static Polyurethane

0.7mm Wall, 10 Metres

Code N37	ID mm	OD mm	Max Working Pressure bar	Max Vacuum bar	Weight Kg/m	Price
PUD-F-38-10M	38	45	1.635	0.495	0.310	**131.40**
PUD-F-50-10M	50	57	1.250	0.380	0.400	**140.40**
PUD-F-65-10M	65	70	0.970	0.290	0.520	**160.50**
PUD-F-75-10M	75	82	0.840	0.175	0.590	**177.85**
PUD-F-100-10M	100	107	0.635	0.135	0.800	**234.00**
PUD-F-125-10M	125	132	0.510	0.110	0.980	**292.60**
PUD-F-150-10M	150	157	0.425	0.075	1.400	**342.20**
PUD-F-160-10M	160	167	0.400	0.070	1.500	**368.90**
PUD-F-175-10M	175	182	0.365	0.065	1.630	**406.30**
PUD-F-200-10M	200	207	0.320	0.055	1.860	**474.60**
PUD-F-225-10M	225	232	0.285	0.050	2.080	**535.30**
PUD-F-250-10M	250	257	0.255	0.045	2.310	**610.50**
PUD-F-300-10M	300	307	0.215	0.035	2.770	**720.05**

Ducting Hose

new



Made from premium-grade anti-static polyurethane, reinforced with a tough, flexible PVC helix.

Applications: Multipurpose suction and delivery hose. For abrasive materials, e.g. dust, powders, granules, fibres and pellets. Suitable for plastics industries, abrasive recovery, blown insulation, woodworking, etc.

- Gas and liquid tight
- Permanently anti-static wall, <$10^9\Omega$
- Phthalate free
- Lightweight, highly flexible, smooth bore
- Excellent abrasion resistance
- High tensile strength and tear resistance
- Small bend radius
- Good resistance to chemicals
- Flame retardant to DIN 4102-B1

Working Temperature:

- -20°C to +70°C approx

Intermittent to:

- +80°C

PVC Helix, Abrasion Resistant, Anti-static Polyurethane

Flame Retardant, 10 Metres

Code N37	ID mm	OD mm	Max Working Pressure bar	Max Vacuum bar	Weight Kg/m	Price
PUD-P-0025-10M	25	31	1.000	0.250	0.130	**40.90**
PUD-P-0032-10M	32	38	0.850	0.200	0.160	**45.40**
PUD-P-0038-10M	38	45	0.750	0.200	0.200	**55.50**
PUD-P-0040-10M	40	47	0.750	0.200	0.210	**56.20**
PUD-P-0050-10M	50	58	0.500	0.200	0.290	**80.80**
PUD-P-0060-10M	60	68	0.500	0.160	0.430	**118.20**
PUD-P-0063-10M	63	71	0.450	0.160	0.460	**126.20**
PUD-P-0075-10M	75	84	0.375	0.160	0.555	**147.70**
PUD-P-0080-10M	80	89	0.350	0.160	0.590	**164.00**
PUD-P-0100-10M	100	110	0.280	0.130	0.750	**212.20**
PUD-P-0125-10M	125	136	0.250	0.100	1.100	**311.30**
PUD-P-0150-10M	150	162	0.180	0.080	1.500	**426.75**

Other size & length options available

Ducting Hose

new

A premium quality neoprene-coated fabric ducting with cord reinforcement and spring steel helix.

Applications: For air movement and fume extraction where extremes of temperature are involved, e.g. plastic granulate dryers and printing machinery.

- High/low temperature range
- Lightweight and highly flexible
- Leak proof and kink proof

Working Temperature:

- -35°C to +135°C

Intermittent to:

- +150°C



NEO 1

Single Ply Neoprene-coated Glass Fabric, 4 Metres

Code N37	ID mm	OD mm	Max Working Pressure bar	Max Vacuum bar	Weight Kg/m	Price
NEO-1-38-4M	38	42	1.500	0.580	0.170	**49.25**
NEO-1-51-4M	51	55	1.500	0.500	0.250	**57.30**
NEO-1-63-4M	63	67	1.300	0.500	0.300	**63.40**
NEO-1-76-4M	76	80	1.100	0.390	0.410	**73.20**
NEO-1-102-4M	102	106	1.100	0.300	0.570	**93.90**
NEO-1-127-4M	127	132	0.900	0.210	0.810	**118.00**
NEO-1-152-4M	152	157	0.800	0.180	1.050	**139.10**
NEO-1-203-4M	203	208	0.600	0.100	1.380	**190.80**

Other size & length options available

A premium quality neoprene-coated fabric ducting with cord reinforcement and spring steel helix.

Applications: For air movement and fume extraction where extremes of temperature are involved, e.g. plastic granulate dryers and printing machinery.

- High/low temperature range
- Double ply construction to give a higher working pressure
- Lightweight and highly flexible
- Leak proof and kink proof
- Smooth bore

Working Temperature:

- -35°C to +135°C

Intermittent to:

- +150°C



NEO 2

Double Ply Neoprene-coated Glass Fabric, Smooth Bore, 4 Metres

Code N37	ID mm	OD mm	Max Working Pressure bar	Max Vacuum bar	Weight Kg/m	Price
NEO-2-38-4M	38	43	2.600	0.600	0.310	**85.70**
NEO-2-51-4M	51	56	2.600	0.520	0.360	**96.70**
NEO-2-63-4M	63	68	2.400	0.460	0.490	**110.80**
NEO-2-76-4M	76	81	2.100	0.430	0.580	**122.05**
NEO-2-102-4M	102	107	1.900	0.350	0.770	**156.30**
NEO-2-127-4M	127	133	1.400	0.230	0.930	**187.35**
NEO-2-152-4M	152	158	1.200	0.170	1.200	**210.50**
NEO-2-203-4M	203	209	0.700	0.090	1.650	**275.70**

Ducting Hose

new

A premium quality silicone-coated fabric ducting with cord reinforcement and spring steel helix.

Applications: For air movement and fume extraction where extremes of temperature are involved, e.g. plastic granulate dryers, vehicle exhaust gases and printing machinery.

- Extreme temperature range
- Lightweight and highly flexible
- Leak proof and kink proof

Working Temperature:

- -70°C to +260°C

Intermittent to:

- +280°C



SIL 1

Single Ply Silicone-coated Glass Fabric, 4 Metres

Code N37	ID mm	OD mm	Max Working Pressure bar	Max Vacuum bar	Weight Kg/m	Price
SIL-1-38-4M	38	42	1.500	0.580	0.170	**67.70**
SIL-1-51-4M	51	55	1.500	0.500	0.250	**79.05**
SIL-1-63-4M	63	67	1.300	0.500	0.300	**88.10**
SIL-1-76-4M	76	80	1.100	0.390	0.410	**102.10**
SIL-1-102-4M	102	106	1.100	0.300	0.570	**131.50**
SIL-1-127-4M	127	132	0.900	0.210	0.810	**163.65**
SIL-1-152-4M	152	157	0.800	0.180	1.050	**192.10**
SIL-1-203-4M	203	208	0.600	0.100	1.380	**261.25**

A premium quality silicone-coated fabric ducting with cord reinforcement and spring steel helix.

Applications: For air movement and fume extraction where extremes of temperature are involved, e.g. plastic granulate dryers and printing machinery.

- Extreme temperature range
- Double ply construction to give a higher working pressure
- Lightweight and highly flexible
- Leak proof and kink proof
- Smooth bore

Working Temperature:

- -70°C to +260°C

Intermittent to:

- +280°C



SIL 2

Double Ply Silicone-coated Glass Fabric, Smooth Bore, 4 Metres

Code N37	ID mm	OD mm	Max Working Pressure bar	Max Vacuum bar	Weight Kg/m	Price
SIL-2-38-4M	38	43	2.600	0.600	0.310	**103.45**
SIL-2-51-4M	51	56	2.600	0.520	0.360	**120.10**
SIL-2-63-4M	63	68	2.400	0.460	0.490	**140.60**
SIL-2-76-4M	76	81	2.100	0.430	0.580	**157.55**
SIL-2-102-4M	102	107	1.900	0.350	0.770	**203.00**
SIL-2-127-4M	127	133	1.400	0.230	0.930	**244.10**
SIL-2-152-4M	152	158	1.200	0.170	1.200	**278.90**
SIL-2-203-4M	203	209	0.700	0.090	1.650	**366.80**

Other size & length options available

Ducting Hose

Double reinforced layers of chloroprene-coated cotton and two spring steel helices. The inner helix is visible and the second one is trapped between the layers of cloth. Neoprene offers high resistance to chemical attack in both acidic and basic solutions. Cotton provides better mechanical strength than glass fibre fabric.

Applications: Air fume and particle extraction, suction, dust and exhaust gases and ventilation in general industries.

- Exceptionally robust and durable
- Excellent flexibility
- Highly resistant to ozone
- Good vacuum resistance due to its specially designed structure
- Black inner and outer, corrugated
- Smooth cuffs available on request

Maximum Working Pressure:

- 0.35 bar @ 20°C

Working Temperature:

- -20°C to +100°C



Wyrem Chloroprene Coated Ducting

Double Ply, 6 Metres

Code N37	ID mm	Bend Radius mm	Max Vacuum bar	Price
WYREM-25-6M	25	60	0.45	213.90
WYREM-32-6M	32	63	0.40	290.50
WYREM-38-6M	38	65	0.40	255.30
WYREM-45-6M	45	68	0.35	235.95
WYREM-51-6M	51	71	0.35	270.70
WYREM-60-6M	60	75	0.35	232.20
WYREM-63-6M	63	77	0.30	300.80
WYREM-76-6M	76	84	0.30	335.20
WYREM-80-6M	80	87	0.25	271.45
WYREM-82-6M	82	88	0.25	276.60
WYREM-90-6M	90	93	0.25	349.10
WYREM-102-6M	102	100	0.20	414.60
WYREM-110-6M	110	106	0.20	420.00
WYREM-127-6M	127	119	0.10	532.80
WYREM-152-6M	152	139	0.10	681.05
WYREM-165-6M	165	151	0.05	908.80
WYREM-180-6M	180	166	0.05	853.35
WYREM-203-6M	203	189	0.05	1031.20
WYREM-254-6M	254	250	0.05	1404.10
WYREM-305-6M	305	319	0.05	1468.30

Other size & length options available

A premium quality lightweight ducting made from special high temperature TPE compound, reinforced with spring steel wire helix.

Applications: For extracting hot dust, powders, fibres, etc.
Also for hot and cold air, fumes/gases including heating, cooling and ventilation applications.

- Excellent low/high temperature range
- Wire spiral reinforcement can be earthed
- Highly flexible and compressible
- Small bend radius
- Good resistance to chemicals, acids and alkalis
- Good resistance to oil and petrol

Wall Thickness

- 0.4mm approx.

Working Temperature:

- -40°C to +125°C

Intermittent to:

- +150°C



TPE Ducting

Lightweight, 0.4mm Wall, Suction & Delivery, 10 Metres

Code N37	ID mm	OD mm	Max Working Pressure bar	Max Vacuum bar	Weight Kg/m	Price
TPE-50-10M	50	58	0.235	0.105	0.230	178.55
TPE-60-10M	60	68	0.195	0.90	0.260	194.50
TPE-70-10M	70	78	0.170	0.075	0.300	223.30
TPE-75-10M	75	83	0.160	0.070	0.330	226.75
TPE-80-10M	80	88	0.150	0.065	0.360	233.30
TPE-100-10M	100	109	0.120	0.055	0.520	298.15
TPE-150-10M	150	159	0.080	0.025	0.760	436.80
TPE-180-10M	180	188	0.065	0.020	0.910	521.75
TPE-200-10M	200	210	0.060	0.020	1.010	604.25
TPE-250-10M	250	258	0.050	0.015	1.210	775.85

Ducting Hose

new

Super-lightweight ducting made from fabric reinforced flexible PVC tape with spring steel reinforcement integrated into the wall.

Applications: For air conditioning/ventilation, extraction arms and welding fume extraction.

- Flame retardant
- Wire spiral reinforcement can be earthed
- Highly flexible and lightweight
- Shipped compressed to save space
- Good resistance to chemicals, acids and alkalis

Working Temperature:

- -10°C to +80°C

Intermittent to:

- +110°C



Premium quality lightweight ducting made from high-grade flexible PVC with spring steel reinforcement integrated into the wall.

Applications: For extracting dust, powders, fumes and gases. Also for air conditioning and ventilation applications.

- Phthalate free
- Wire spiral reinforcement can be earthed
- Highly flexible and lightweight
- Small bend radius, kink proof
- Good resistance to chemicals, acids and alkalis
- UV and ozone resistant

Wall Thickness

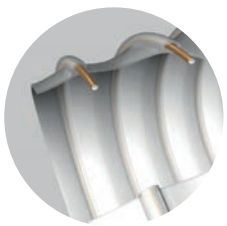
- 0.6mm approx.

Working Temperature:

- -20°C to +70°C

Intermittent to:

- +80°C







PVC Fabric Reinforced Ducting

Super Lightweight, Suction & Blower, 10 Metres

Code N37	ID mm	OD mm	Max Working Pressure bar	Max Vacuum bar	Weight Kg/m	Price
PVC-R-51-10M	51	54	0.240	0.145	0.120	**100.20**
PVC-R-60-10M	60	63	0.200	0.110	0.140	**104.35**
PVC-R-76-10M	76	79	0.160	0.080	0.180	**112.70**
PVC-R-80-10M	80	83	0.150	0.080	0.190	**114.40**
PVC-R-102-10M	102	106	0.120	0.050	0.240	**126.20**
PVC-R-127-10M	127	130	0.095	0.035	0.320	**155.30**
PVC-R-152-10M	152	155	0.080	0.035	0.370	**182.35**
PVC-R-160-10M	160	163	0.075	0.025	0.440	**193.45**
PVC-R-203-10M	203	206	0.060	0.020	0.600	**255.50**
PVC-R-254-10M	254	258	0.045	0.015	0.790	**332.50**
PVC-R-305-10M	305	309	0.040	0.010	0.950	**405.60**

PVC Ducting, Light-duty

10 Metres

Code N37	ID mm	OD mm	Max Working Pressure bar	Max Vacuum bar	Weight Kg/m	Price
PVC-L-32-10M	32	39	0.875	0.200	0.260	**90.85**
PVC-L-38-10M	38	45	0.740	0.185	0.300	**90.85**
PVC-L-50-10M	50	58	0.410	0.155	0.310	**90.85**
PVC-L-55-10M	55	63	0.370	0.140	0.330	**107.80**
PVC-L-65-10M	65	73	0.315	0.105	0.390	**117.20**
PVC-L-75-10M	75	83	0.275	0.085	0.450	**123.80**
PVC-L-80-10M	80	88	0.255	0.075	0.470	**127.95**
PVC-L-90-10M	90	98	0.230	0.065	0.530	**134.50**
PVC-L-100-10M	100	108	0.205	0.050	0.570	**142.85**
PVC-L-125-10M	125	133	0.165	0.035	0.710	**176.50**
PVC-L-150-10M	150	158	0.135	0.035	0.840	**208.70**
PVC-L-160-10M	160	168	0.130	0.030	0.870	**221.55**
PVC-L-200-10M	200	208	0.105	0.025	1.110	**285.30**

Other size & length options available

Ducting Hose

new

A premium quality medium weight ducting made from high-grade flexible PVC with spring steel reinforcement firmly embedded into the wall.

Applications: For extracting dust, powders, fumes, gases and air conditioning/ventilation.

- Phthalate free
- Wire spiral reinforcement can be earthed
- Highly flexible
- Small bend radius, kink proof
- Good resistance to chemicals, acids and alkalis
- Smooth bore, optimised flow
- UV and ozone resistant

Wall Thickness

- 0.9mm approx.

Working Temperature:

- -20°C to +70°C

Intermittent to:

- +80°C







PVC Ducting, Medium-duty

10 Metres

Code N37	ID mm	OD mm	Max Working Pressure bar	Max Vacuum bar	Weight Kg/m	Price
PVC-M-25-10M	25	32	1.125	0.400	0.230	100.55
PVC-M-32-10M	32	40	0.890	0.260	0.270	105.05
PVC-M-38-10M	38	46	0.755	0.220	0.320	105.05
PVC-M-45-10M	45	53	0.640	0.185	0.370	116.85
PVC-M-50-10M	50	58	0.575	0.165	0.410	121.70
PVC-M-55-10M	55	63	0.525	0.150	0.450	122.75
PVC-M-65-10M	65	73	0.445	0.125	0.520	135.55
PVC-M-75-10M	75	84	0.390	0.110	0.580	143.20
PVC-M-80-10M	80	89	0.365	0.105	0.610	147.70
PVC-M-90-10M	89	99	0.325	0.090	0.700	155.30
PVC-M-100-10M	100	109	0.295	0.060	0.850	165.40
PVC-M-115-10M	115	124	0.255	0.050	0.980	184.10
PVC-M-125-10M	125	134	0.235	0.045	1.060	204.20
PVC-M-150-10M	150	159	0.195	0.040	1.260	241.30

Other size & length options available

Lightweight suction and blast hose made from high-grade, yarn-reinforced PVC with PVC-coated spring steel wire helix.

Applications: Industrial/domestic vacuum cleaners, air movement, drier and weld fume extraction.

- Suitable for dust, powders, gases and liquids.
- Good resistance to chemicals, alkalis and acids
- Wire helix can be earthed
- Highly flexible

Working Temperature:

- 0°C to +85°C



PVC Vacuum Ducting

Lightweight, Yarn-reinforced PVC, Suction & Blower Hose, 15 Metres

Code N37	ID mm	OD mm	Max Working Pressure bar	Max Vacuum bar	Weight Kg/m	Price
PVC-F-25-15M	25	31	1.700	0.200	0.200	158.60
PVC-F-32-15M	32	38	1.500	0.200	0.280	174.75
PVC-F-38-15M	38	44	1.400	0.200	0.340	223.60
PVC-F-51-15M	51	57	1.300	0.150	0.460	279.80
PVC-F-63-15M	63	69	1.000	0.140	0.530	335.40
PVC-F-76-15M	76	82	0.800	0.100	0.680	444.60



PVC Vacuum Cuff

To suit PVC-F Vacuum Ducting

Code N37	To Suit Hose ID mm	Price
PVC-F-25-CUFF	25	6.95
PVC-F-38-CUFF	38	8.35
PVC-F-51-CUFF	51	9.45
PVC-F-63-CUFF	63	20.80

Ducting Hose

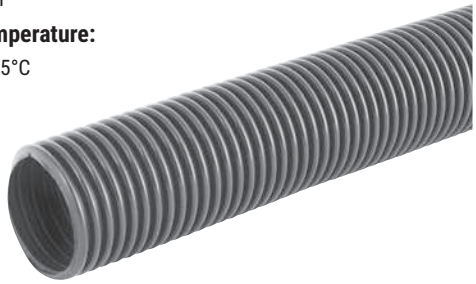
Lightweight grey suction hose made from EVA.

Applications: Industrial/domestic vacuum cleaners and swimming pool cleaning.

- Good resistance to alkalis and acids
- Floatable
- Crush-proof

Working Temperature:

- -45°C to +65°C



EVA Vacuum Ducting

Lightweight Grey EVA, Crush-proof Suction Hose, 30 Metres

Code N37	ID mm	OD mm	Max Vacuum bar	Weight Kg/m	Price
EVA-G-32-30M	32	40.4	0.500	0.240	171.60
EVA-G-38-30M	38	47.2	0.500	0.310	221.55
EVA-G-50-30M	50	60.4	0.500	0.440	268.35

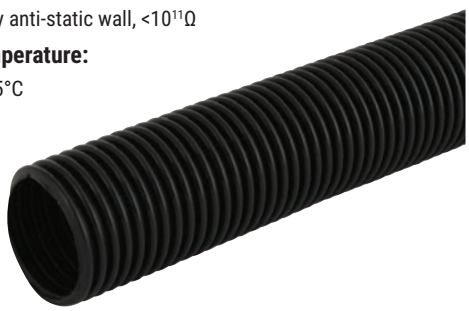
High quality, durable black suction hose made from anti-static EVA.

Applications: Industrial/domestic vacuum cleaners and blowing machines for cavity wall insulation.

- Good resistance to alkalis and acids
- Floatable
- Crush-proof
- Permanently anti-static wall, $<10^{11}\Omega$

Working Temperature:

- -45°C to +65°C



EVA Vacuum Ducting

Anti-static Black EVA, Crush-proof Suction Hose, 30 Metres

Code N37	ID mm	OD mm	Max Vacuum bar	Weight Kg/m	Price
EVA-B-32-30M	32	40.4	0.500	0.240	197.60
EVA-B-38-30M	38	47.2	0.500	0.310	255.85
EVA-B-50-30M	50	60.4	0.500	0.440	301.60

Other size & length options available

- Extremely light and flexible plasticised PVC
- Shock resistant PVC spiral
- Abrasion, crushing, chemical agents and weather resistant corrugated outside
- Industrial ventilation and airflow systems, suction of dust, air, gases, powders, liquids etc.

Working Temperature:

- -10°C to +60°C



Medium-duty Smooth Bore PVC Ducting

General Purpose, 10 Metre Coils

Code N37	ID mm	Bend Radius mm	Price
MDS-25-10M	25	30	33.70
MDS-32-10M	32	35	39.95
MDS-38-10M	38	45	52.00
MDS-51-10M	51	60	84.90
MDS-76-10M	76	100	108.20
MDS-102-10M	102	140	182.65
MDS-152-10M	152	180	345.30
MDS-203-10M	203	400	482.60



EVA Grey Vacuum Cuff

To suit EVA-G Vacuum Ducting

Code N37	To Suit Hose ID mm	Price
EVA-G-32-CUFF	32	7.20
EVA-G-38-CUFF	38	10.70
EVA-G-50-CUFF	50	26.30



EVA Black Vacuum Cuff

To suit EVA-B Vacuum Ducting

Code N37	To Suit Hose ID mm	Price
EVA-B-32-CUFF	32	11.80
EVA-B-38-CUFF	38	13.75
EVA-B-50-CUFF	50	32.90

Ducting Hose

new

Galvanised steel hose connector for use with appropriate external clamping.

Working Temperature:

- -40°C to +90°C

Intermittent to:

- +125°C



Ducting Connector

Galvanised Steel

Code N37	To Suit Hose ID mm	Price
DUC-50-CON	50	21.45
DUC-60-CON	60	19.85
DUC-75-CON	75	18.60
DUC-80-CON	80	18.60
DUC-100-CON	100	19.15
DUC-125-CON	125	20.55
DUC-150-CON	150	20.80
DUC-180-CON	180	23.20
DUC-200-CON	200	24.00
DUC-250-CON	250	25.40

Galvanised steel hose reducer for connecting two hoses of different ID sizes, with appropriate external clamping.



Ducting Reducer

Galvanised Steel

Code N37	To Suit Hose ID mm A	To Suit Hose ID mm B	Price
DUC-75-RED	75	50	65.20
DUC-100-RED	100	80	69.00
DUC-125-RED	125	100	71.90
DUC-150-RED	150	100	79.00
DUC-200-RED	200	150	93.60
DUC-250-RED	250	200	107.20

Screw pin makes secure contact with wire helix without risk of damage to hose. Supplied with copper earth wire.



Earthing Ducting Bridge Clamp

Galvanised Steel Bridge Clamp with Integral Earthing Connection

Code N37	To Suit Hose ID mm	Price
DUC-35-EARTH	38-45	9.00
DUC-45-EARTH	50-55	7.60
DUC-55-EARTH	60-65	9.85
DUC-65-EARTH	70-75	9.35
DUC-75-EARTH	80-85	10.55
DUC-85-EARTH	90-95	10.90
DUC-95-EARTH	100-105	11.00
DUC-105-EARTH	110-105	11.65
DUC-115-EARTH	120-127	12.30
DUC-125-EARTH	130-135	13.10
DUC-135-EARTH	140-145	13.10
DUC-145-EARTH	150-155	16.00
DUC-155-EARTH	160-165	16.10
DUC-165-EARTH	170-175	16.80
DUC-195-EARTH	200-205	20.15
DUC-215-EARTH	220-225	22.90
DUC-245-EARTH	250-255	29.75
DUC-295-EARTH	300-305	35.70
DUC-315-EARTH	320-325	44.40
DUC-345-EARTH	350-355	46.55
DUC-395-EARTH	400-405	40.60

Copper Tubing



Copper Tubing, Metric

10 Metre Coils

Code	P30	OD mm	Working Pressure bar	Price 1-4	Price 5+
COP06-10M		6	200	**28.50**	**27.10**
COP08-10M		8	160	**46.75**	**44.45**
COP10-10M		10	135	**70.65**	**67.15**
COP12-10M		12	85	**82.40**	**78.30**

Copper Tubing, Metric

30 Metre Coils

Code	P30	OD mm	Working Pressure bar	Price 1-4	Price 5+
COP04-30M		4	284	**76.70**	**72.90**
COP06-30M		6	200	**85.40**	**81.15**
COP08-30M		8	160	**137.90**	**131.05**
COP10-30M		10	135	**186.60**	**177.30**
COP12-30M		12	85	**225.30**	**214.05**



Copper Tubing, Imperial

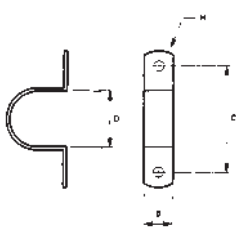
10 Metre Coils

Code	P30	OD	Coil Weight kg	Working Pressure bar	Price 1-4	Price 5+
COP1/4-10M		1/4"	1.37	200	**39.05**	**37.10**
COP5/16-10M		5/16"	1.77	145	**42.05**	**39.95**
COP3/8-10M		3/8"	2.17	120	**50.45**	**47.95**
COP1/2-10M		1/2"	2.97	95	**105.35**	**100.10**

Copper Tubing, Imperial

30 Metre Coils

Code	P30	OD	Coil Weight kg	Working Pressure bar	Price 1-4	Price 5+
COP1/8-30M		1/8"	2.37	290	**63.75**	**60.60**
COP3/16-30M		3/16"	2.97	275	**87.05**	**82.70**
COP1/4-30M		1/4"	4.11	200	**126.10**	**119.80**
COP5/16-30M		5/16"	5.31	145	**105.00**	**99.75**
COP3/8-30M		3/8"	6.51	120	**156.35**	**148.55**
COP1/2-30M		1/2"	8.91	95	**230.80**	**219.30**



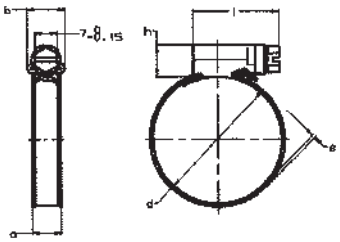


Copper Tube Clip Imperial

Code	E05	OD	H Ø	B OD	C	Price 1-49	Price 50+
3011/C		3/16"	7/64"	.375"	.562"	**0.20**	**0.18**
3013/C		1/4"	7/64"	.375"	.656"	**0.20**	**0.18**
3016/C		5/16"	5/32"	.375"	.775"	**0.35**	**0.32**
3018/B		3/8"	7/64"	.375"	.812"	**0.20**	**0.18**
3021/B		1/2"	7/32"	.375"	1.156"	**0.20**	**0.18**

Hose Clips

- Band and housing: stainless steel X6Cr 17 (DIN 1.4016) (AISI-430)
- Screw: steel Qst 36-3 (DIN 1.0214) zinc plate





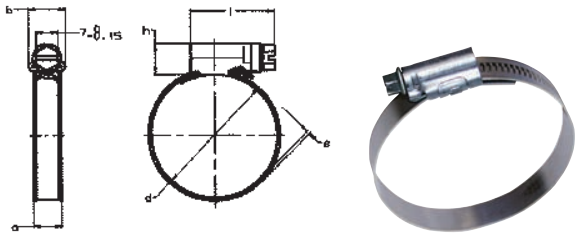
Hose Clips, Light Series

9mm Wide

Code	N40	Ø d Max	l ±0.1	S Max	h ±0.3	a Max	b Nm Max	Torque	Price 1-99	Price 100+
0301650-8		8-12	18.0	0.6	9.5	7.5	11.5	1.5	0.70	0.66
0301651-6		8-16	23.0	0.6	11.0	9	13	3.0	0.40	0.37
0301652-4		12-22	23.0	0.6	11.0	9	13	3.0	0.40	0.37
0301653-2		16-27	25.0	0.6	11.0	9	13	3.5	0.45	0.42
0301654-0		20-32	25.0	0.6	11.0	9	13	3.5	0.50	0.47
0301655-9		25-40	27.5	0.7	11.0	9	13	4.0	0.55	0.52
0301656-7		30-45	27.5	0.7	11.0	9	13	4.0	0.55	0.52
0301657-5		32-50	27.5	0.7	11.0	9	13	4.0	0.60	0.57
0301658-3		40-60	27.5	0.7	11.0	9	13	4.0	0.70	0.66
0301659-1		50-70	29.0	0.7	11.0	9	13	4.0	0.90	0.85
0301660-4		60-80	29.0	0.7	11.0	9	13	4.0	0.90	0.85
0301661-2		70-90	29.0	0.7	11.0	9	13	4.0	1.05	1.00
0301662-0		80-100	29.0	0.7	11.0	9	13	4.0	1.00	0.95
0301663-9		90-110	29.0	0.7	11.0	9	13	4.0	1.40	1.35
0301664-7		100-120	29.0	0.7	11.0	9	13	4.0	1.60	1.55
0301665-5		110-130	29.0	0.7	11.0	9	13	4.0	1.70	1.65
0301666-3		120-140	29.0	0.7	11.0	9	13	4.0	1.95	1.90
0301667-1		130-150	29.0	0.7	11.0	9	13	4.0	2.15	2.05
0301668-0		140-160	29.0	0.7	11.0	9	13	4.0	2.30	2.20

Hose Clips

- Band and housing: stainless steel X6Cr 17 (DIN 1.4016) (AISI-430)
- Screw: steel Qst 34-3 (DIN 1.0213) chrome-6 free



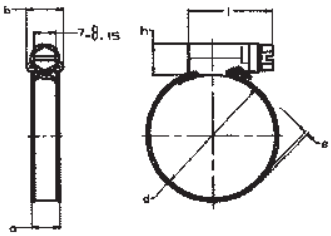
Hose Clips, Worm Drive

12mm Wide

Code N40	Ø d mm	l Max.	S ±0.1	h Max	a +1	b Max	Maximum Torque Nm	Price 1-99	Price 100+
0300900-1	16-27	31	1.0	11.5	12	17	5.0	0.60	0.57
0300900-2	20-32	31	1.0	11.5	12	17	5.0	0.60	0.57
0300900-3	25-40	31	1.0	11.5	12	17	5.0	0.70	0.66
0300900-4	30-45	31	1.0	11.5	12	17	5.0	0.75	0.70
0300900-5	32-50	31	1.0	11.5	12	17	5.0	0.70	0.66
0300900-6	40-60	31	1.0	11.5	12	17	5.0	0.75	0.70
0300900-7	50-70	31	1.0	11.5	12	17	5.5	0.85	0.80
0300900-8	60-80	34	1.0	11.5	12	17	5.5	1.00	0.95
0300900-9	70-90	34	1.0	11.5	12	17	5.5	1.05	1.00
0300901-0	80-100	34	1.0	11.5	12	17	5.5	1.20	1.15
0300901-1	90-110	34	1.0	11.5	12	17	5.5	1.20	1.15
0300901-2	100-120	34	1.0	11.5	12	17	5.5	1.30	1.25
0300901-3	110-130	34	1.0	11.5	12	17	5.5	1.35	1.30
0300901-4	120-140	34	1.0	11.5	12	17	5.5	1.45	1.40
0300901-5	130-150	34	1.0	11.5	12	17	5.5	1.45	1.40
0300901-6	140-160	34	1.0	11.5	12	17	5.5	1.50	1.45
0300901-7	150-170	34	1.0	11.5	12	17	5.5	1.80	1.75
0300901-8	160-180	34	1.0	11.5	12	17	5.5	1.80	1.75
0300901-9	170-190	34	1.0	11.5	12	17	5.5	2.05	1.95
0300902-0	180-200	34	1.0	11.5	12	17	5.5	2.15	2.05
0300902-1	190-210	34	1.0	11.5	12	17	5.5	2.20	2.10
0300902-3	210-230	34	1.0	11.5	12	17	5.5	2.30	2.20
0300902-4	220-240	34	1.0	11.5	12	17	5.5	2.40	2.30

Hose Clips

- Band and housing: stainless steel X5CrNi 1810 (DIN 1.4301) (AISI 304)
- Screw: stainless steel AISI 302 Cu



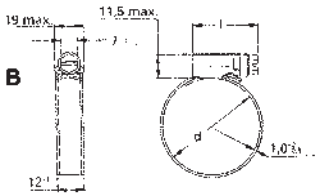


Hose Clips, 304 Stainless Steel

9mm Wide

Code	N41	Ø d mm	l Max.	S ±0.1	Max. Torque Nm	Price 1-49	Price 50+
0301401-9		8-16	23.0	0.6	3.0	1.05	1.00
0301402-7		12-22	23.0	0.6	3.0	1.20	1.15
0301403-5		16-27	25.0	0.6	3.0	1.20	1.15
0301404-3		20-32	25.0	0.6	3.0	1.20	1.15
0301405-1		25-40	27.5	0.7	4.0	1.20	1.15
0301406-0		30-45	27.5	0.7	4.0	1.30	1.25
0301407-8		32-50	27.5	0.7	4.0	1.40	1.35
0301408-6		40-60	27.5	0.7	4.0	1.40	1.35
0301409-4		50-70	27.5	0.7	4.0	1.80	1.75
0301410-7		60-80	29.0	0.7	4.0	1.90	1.85
0301411-5		70-90	29.0	0.7	4.0	2.00	1.90
0301412-3		80-100	29.0	0.7	4.0	2.05	1.95
0301414-0		90-110	29.0	0.7	4.0	2.35	2.25
0301415-8		100-120	29.0	0.7	4.0	2.40	2.30
0301416-6		110-130	29.0	0.7	4.0	2.35	2.25
0301417-4		120-140	29.0	0.7	4.0	2.55	2.45
0301418-2		130-150	29.0	0.7	4.0	2.60	2.50
0301419-0		140-160	29.0	0.7	4.0	2.70	2.60

- Band and housing: 316 stainless steel X5CrNi Mo
- Screw: AISI 316 Cu stainless Steel





Hose Clips, Worm Drive, 316 Stainless Steel

12mm Wide

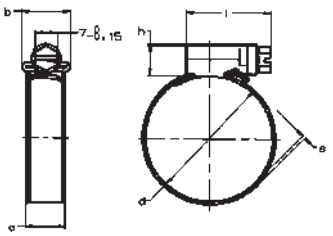
Code	N41	Ø d mm	l Max.	S ±0.1	Max. Torque Nm	Price 1-49	Price 50+
0301575-9*		8-16	23	0.6	3.0	1.25	1.20
0301576-7*		12-22	23	0.6	3.0	1.30	1.25
0301772-0		16-27	25	0.6	3.5	2.40	2.30
0301750-0		20-32	25	0.6	3.5	2.45	2.35
0301751-9		25-40	27.5	0.7	4.0	2.50	2.40
0301773-8		30-45	27.5	0.7	4.0	2.65	2.55
0301752-7		32-50	27.5	0.7	4.0	2.75	2.65
0301753-5		40-60	27.5	0.7	4.0	2.85	2.75
0301754-3		50-70	29	0.7	4.0	3.00	2.85
0301755-1		60-80	29	0.7	4.0	3.45	3.30
0301756-0		70-90	29	0.7	4.0	3.45	3.30
0301757-8		80-100	29	0.7	4.0	3.60	3.45
0301758-6		90-110	29	0.7	4.0	3.80	3.65
0301759-4		100-120	34	1.0	5.5	4.00	3.80
0301760-7		0-130	34	1.0	5.5	4.20	4.00
0301761-5		120-140	34	1.0	5.5	4.05	3.85
0301762-3		130-150	34	1.0	5.5	4.20	4.00
0301763-1		140-160	34	1.0	5.5	4.30	4.10
0301764-0		150-170	34	1.0	5.5	4.80	4.60
0301765-8		160-180	34	1.0	5.5	4.90	4.70
0301766-6		170-190	34	1.0	5.5	5.30	5.05
0301767-4		180-200	34	1.0	5.5	5.25	5.00
0301768-2		190-210	34	1.0	5.5	5.40	5.15
0301769-0		200-220	34	1.0	5.5	5.50	5.25
0301770-3		210-230	34	1.0	5.5	5.75	5.50
0301771-1		220-240	34	1.0	5.5	5.80	5.55

*9mm wide

Hose Clips

MIKALOR

- Band and housing: stainless steel X5CrNi 1810 (DIN 1.4301) (AISI 304)
- Screw: stainless steel AISI 302 Cu





Hose Clips, 304 Stainless Steel

12mm Wide

Code N41	Ø d mm	l Max.	S ±0.1	Max. Torque Nm	Price 1-49	Price 50+
0301473-0	16-27	31	1.0	5.0	1.80	1.75
0301451-0	20-32	31	1.0	5.0	1.75	1.70
0301452-9	25-40	31	1.0	5.0	1.90	1.85
0301474-8	30-45	31	1.0	5.0	2.15	2.05
0301453-7	32-50	31	1.0	5.0	2.10	2.00
0301454-5	40-60	31	1.0	5.0	2.30	2.20
0301455-3	50-70	31	1.0	5.0	2.45	2.35
0301456-1	60-80	34	1.0	5.5	2.70	2.60
0301457-0	70-90	34	1.0	5.5	2.80	2.70
0301458-8	80-100	34	1.0	5.5	2.95	2.85
0301459-6	90-110	34	1.0	5.5	3.00	2.85
0301460-9	100-120	34	1.0	5.5	3.40	3.25
0301461-7	110-130	34	1.0	5.5	3.40	3.25
0301462-5	120-140	34	1.0	5.5	3.40	3.25
0301463-3	130-150	34	1.0	5.5	3.50	3.35
0301464-1	140-160	34	1.0	5.5	3.70	3.55
0301465-0	150-170	34	1.0	5.5	3.85	3.70
0301466-8	160-180	34	1.0	5.5	4.00	3.80
0301467-6	170-190	34	1.0	5.5	4.30	4.10
0301468-4	180-200	34	1.0	5.5	4.45	4.25
0301469-2	190-210	34	1.0	5.5	4.60	4.40
0301470-5	200-220	34	1.0	5.5	4.65	4.45
0301471-3	210-230	34	1.0	5.5	4.80	4.60
0301472-1	220-240	34	1.0	5.5	4.95	4.75



Flexible Screwdriver

For Hose Clips

Code M17	Size mm	Price
0309103-6	7	8.35



O Clips, One Ear

Steel

Code	N40	Dia. mm	Price 1-49	Price 50+
0301207-2		8-10	0.15	0.14
0301201-3		9-11	0.15	0.14
0301202-1		10-12	0.15	0.14
0301203-0		11-13	0.15	0.14
0301204-8		12-14	0.20	0.18
0301205-6		14-16	0.20	0.18
0301206-4		16-18	0.20	0.18



O Clips, Two Ear

Steel

Code	N41	Dia. mm	Price 1-49	Price 50+
0301210-1		5-7	0.15	0.14
0301211-0		7-9	0.15	0.14
0301212-8		9-11	0.20	0.18
0301213-6		11-13	0.20	0.18
0301214-4		13-15	0.20	0.18
0301215-2		14-17	0.20	0.18
0301216-0		15-18	0.25	0.22
0301217-9		17-20	0.25	0.22
0301218-7		18-21	0.25	0.22
0301219-5		20-23	0.30	0.28
0301220-8		22-25	0.35	0.32
0301221-6		23-27	0.40	0.37
0301222-4		25-28	0.40	0.37
0301223-2		28-31	0.45	0.42
0301224-0		31-34	0.50	0.47
0301225-9		34-37	0.60	0.57
0301226-7		37-40	0.70	0.66
0301227-5		40-43	0.80	0.75
0301228-3		43-46	0.90	0.85



O Clips, One Ear

Stainless Steel

Code	N41	Dia. mm	Price 1-49	Price 50+
2301244-0		7-9	0.35	0.32
2301208-7		8-10	0.40	0.37
2301201-0		9-11	0.40	0.37
2301202-8		10-12	0.40	0.37
2301203-6		11-13	0.45	0.42
2301204-4		12-14	0.45	0.42
2301207-9		13-15	0.50	0.47
2301205-2		14-16	0.50	0.47
2301245-8		15-17	0.50	0.47
2301206-0		16-18	0.55	0.52
2301242-3		17-19	0.60	0.57
2301243-1		18-20	0.60	0.57



O Clips, Two Ear

Stainless Steel

Code	N41	Dia. mm	Price 1-49	Price 50+
2301210-8		5-7	0.30	0.28
2301211-6		7-9	0.40	0.37
2301212-4		9-11	0.40	0.37
2301213-2		11-13	0.40	0.37
2301214-0		13-15	0.50	0.47
2301215-9		14-17	0.55	0.52
2301216-7		15-18	0.60	0.57
2301217-5		17-20	0.60	0.57
2301218-3		18-21	0.70	0.66
2301219-1		20-23	0.75	0.70
2301220-4		22-25	0.90	0.85

Hose Clips

MIKALOR

- Used to fasten plastic and rubber hoses to connectors
- Acetal resin
- Simple manual pressure ensures a snug join
- Use pliers to tighten, release by applying lateral pressure
- Reusable



Hose Clips, Snap Clip

Acetal

Code N42	Range mm	Price 1-49	Price 50+
SNCP8-10	8-10	0.55	0.52
SNCP10-12	10-12	0.85	0.80
SNCP11-13	11-13	0.70	0.66
SNCP13-15	13-15	0.60	0.57
SNCP14-16	14-16	0.60	0.57
SNCP15-17	15-17	0.50	0.47
SNCP16-18	16-18	0.55	0.52
SNCP17-19	17-19	1.00	0.95
SNCP18-20	18-20	1.00	0.95

Code N42	Range mm	Price 1-49	Price 50+
SNCP20-22	20-22	0.95	0.90
SNCP21-23	21-23	1.10	1.05
SNCP23-25	23-25	0.60	0.57
SNCP26-28	26-28	0.75	0.70
SNCP30-32	30-32	0.95	0.90
SNCP35-37	35-37	1.00	0.95
SNCP44-46	44-46	1.15	1.10
SNCP47-49	47-49	1.15	1.10

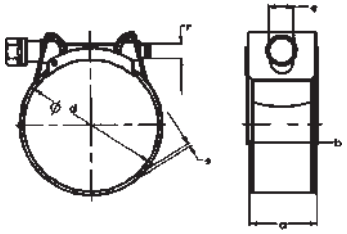
For Hosetails



See section 7

Hose Clips

- Band and band guide: stainless steel X5CrNI 1810 (DIN 1.4301) (AISI-304)
- Bolt: stainless steel AISI 302 CU





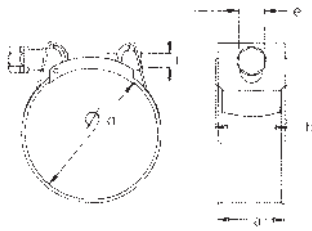
Hose Clamps, Heavy-duty

All Stainless Steel

Code	N40	Ø d mm	r	e	a	b	Max. Torque Nm	Price 1-49	Price 50+
0301301-6		17-19	M6	8	18	19.8	7	3.50	3.35
0301302-4		19-21	M6	8	18	19.8	7	3.50	3.35
0301303-2		21-23	M6	8	18	19.8	7	3.65	3.50
0301304-0		23-25	M6	8	18	19.8	7	3.60	3.45
0301305-9		25-27	M6	8	18	19.8	7	3.65	3.50
0301306-7		27-29	M6	8	18	19.8	7	3.75	3.60
0301307-5		29-31	M7	11	20	22.0	16	4.20	4.00
0301308-3		31-34	M7	11	20	22.0	16	4.20	4.00
0301309-1		34-37	M7	11	20	22.0	16	4.25	4.05
0301310-4		37-40	M7	11	20	22.0	16	4.40	4.20
0301311-2		40-43	M7	11	20	22.0	16	4.45	4.25
0301312-0		43-47	M7	11	20	22.0	16	5.55	5.30
0301313-9		47-51	M7	11	20	22.0	16	5.70	5.45
0301314-7		51-55	M7	11	20	22.0	16	5.80	5.55
0301315-5		55-59	M7	11	20	22.0	16	5.95	5.70
0301316-3		59-63	M7	11	20	22.0	16	6.00	5.70
0301317-1		63-68	M7	11	20	22.0	16	5.85	5.60
0301318-0		68-73	M8	13	25	27.5	25	8.30	7.90
0301319-8		73-79	M8	13	25	27.5	25	8.60	8.20
0301320-0		79-85	M8	13	25	27.5	25	8.75	8.35
0301321-9		85-91	M8	13	25	27.5	25	8.95	8.55
0301322-7		91-97	M8	13	25	27.5	25	9.20	8.75
0301323-5		97-104	M8	13	25	27.5	25	9.35	8.90
0301324-3		104-112	M8	13	25	27.5	25	9.75	9.30
0301325-1		112-121	M8	13	25	27.5	25	9.75	9.30
0301326-0		121-130	M8	13	25	27.5	25	9.90	9.45
0301327-8		130-140	M10	15	28	31.0	50	14.20	13.50
0301328-6		140-150	M10	15	28	31.0	50	14.55	13.85
0301329-4		150-162	M10	15	28	31.0	50	14.85	14.15
0301330-7		162-174	M10	15	28	31.0	50	15.00	14.25
0301331-5		174-187	M10	15	28	31.0	50	14.95	14.25
0301332-3		187-200	M10	15	28	31.0	50	15.25	14.50
0301333-1		200-213	M10	15	28	31.0	50	15.80	15.05
0301334-0		213-226	M10	15	28	31.0	50	16.00	15.20
0301335-8		226-239	M10	15	28	31.0	50	15.85	15.10
0301336-6		239-252	M10	15	28	31.0	50	16.05	15.25

Hose Clips

- Band and band guide: stainless steel
- Bolt: steel





Hose Clamps, Heavy-duty

Stainless Steel Band & Housing

Code	N40	Ø d mm	r	e	a	b	Max. Torque Nm	Price 1-49	Price 50+
0301901-2		17-19	M6	8	18	19.8	4.5	**1.45**	**1.40**
0301902-0		19-21	M6	8	18	19.8	4.5	**1.50**	**1.45**
0301903-9		21-23	M6	8	18	19.8	4.5	**1.50**	**1.45**
0301904-7		23-25	M6	8	18	19.8	4.5	**1.55**	**1.50**
0301905-5		25-27	M6	8	18	19.8	4.5	**1.50**	**1.45**
0301906-3		27-29	M6	8	18	19.8	4.5	**1.55**	**1.50**
0301907-1		29-31	M7	10	20	22.0	16.0	**1.75**	**1.70**
0301908-0		31-34	M7	10	20	22.0	8.0	**1.80**	**1.75**
0301909-8		34-37	M7	10	20	22.0	8.0	**1.80**	**1.75**
0301910-0		37-40	M7	10	20	22.0	16.0	**1.80**	**1.75**
0301911-9		40-43	M7	10	20	22.0	8.0	**1.90**	**1.85**
0301912-7		43-47	M7	10	20	22.0	16.0	**2.45**	**2.35**
0301913-5		47-51	M7	10	20	22.0	10.0	**2.55**	**2.45**
0301914-3		51-55	M7	10	20	22.0	16.0	**2.60**	**2.50**
0301915-1		55-59	M7	10	20	22.0	10.0	**2.65**	**2.55**
0301916-0		59-63	M7	10	20	22.0	16.0	**2.65**	**2.55**
0301917-8		63-68	M7	10	20	22.0	10.0	**2.70**	**2.60**
0301918-6		68-73	M8	13	25	27.5	25.0	**3.60**	**3.45**
0301919-4		73-79	M8	13	25	27.5	25.0	**3.65**	**3.50**
0301920-7		79-85	M8	13	25	27.5	25.0	**3.75**	**3.60**
0301921-5		85-91	M8	13	25	27.5	25.0	**3.80**	**3.65**
0301922-3		91-97	M8	13	25	27.5	25.0	**3.90**	**3.75**
0301923-1		97-104	M8	13	25	27.5	25.0	**4.05**	**3.85**
0301924-0		104-112	M8	13	25	27.5	25.0	**4.25**	**4.05**
0301925-8		112-121	M8	13	25	27.5	25.0	**4.45**	**4.25**
0301926-6		121-130	M8	13	25	27.5	25.0	**4.60**	**4.40**
0301927-4		130-140	M10	15	28	31.0	50.0	**6.40**	**6.10**
0301928-2		140-150	M10	15	28	31.0	50.0	**6.40**	**6.10**
0301929-0		150-162	M10	15	28	31.0	50.0	**6.60**	**6.30**
0301930-3		162-174	M10	15	28	31.0	50.0	**6.85**	**6.55**
0301931-1		174-187	M10	15	28	31.0	50.0	**7.05**	**6.70**
0301932-0		187-200	M10	15	28	31.0	50.0	**7.00**	**6.65**
0301933-8		200-213	M10	15	28	31.0	50.0	**7.40**	**7.05**
0301934-6		213-226	M10	15	28	31.0	50.0	**7.60**	**7.25**
0301935-4		226-239	M10	15	28	31.0	50.0	**7.60**	**7.25**
0301936-2		239-252	M10	15	28	31.0	50.0	**7.80**	**7.45**

Hose Clips

- Fire resistance: Class B2
- Insulating lining according to DIN4109
- Maximum recommended load: 200kg
- Working temperature: -40°C to +100°C



EPDM Rubber Lined

M8/M10

Code N43	Size mm	Internal Thread	Price
RPIPC14	15-19	M10	**0.95**
RPIPC20	20-25	M8	**1.00**
RPIPC26	26-30	M10	**1.10**
RPIPC32	32-36	M10	**1.20**
RPIPC40	38-43	M10	**1.25**
RPIPC48	47-51	M10	**1.40**
RPIPC54	53-58	M10	**1.55**
RPIPC58	60-64	M8	**1.70**
RPIPC68	66-70	M10	**1.80**
RPIPC72	74-79	M10	**1.85**
RPIPC82	79-85	M10	**1.95**
RPIPC88	87-92	M10	**2.40**
RPIPC108	107-113	M10	**2.45**
RPIPC112	113-118	M10	**2.70**
RPIPC137	138-143	M10	**3.30**
RPIPC159	159-165	M10	**3.55**
RPIPC164	165-175	M10	**3.60**

- Fire resistance: Class B2
- Insulating lining according to DIN4109



Rapid EPDM Rubber Lined

M8/M10

Code N43	Size mm	Internal Thread	Price
RPRC13	14-16	M8/M10	**0.95**
RPRC20	20-24	M8/M10	**1.00**
RPRC25	25-28	M8/M10	**1.05**
RPRC52	54-57	M8/M10	**1.45**

For Piping Systems

aircom PIPINGSYSTEM



See section 11

Hose Clips

- Mild steel, zinc plated to ZN3
- All clips above 44mm diameter not stamped with size



P Clips, 12mm

Mild Steel, Rubber Lined

Code	N43	Dia. mm	Price 1-49	Price 50+
PC005		5	0.35	0.32
PC006		6	0.35	0.32
PC008		8	0.35	0.32
PC010		10	0.35	0.32
PC012		12	0.45	0.42
PC013		13	0.55	0.52
PC014		14	0.70	0.66
PC015		15	0.45	0.42
PC016		16	0.45	0.42
PC017		17	0.45	0.42
PC018		18	0.45	0.42
PC019		19	0.45	0.42
PC020		20	0.45	0.42
PC021		21	0.55	0.52
PC022		22	0.60	0.57
PC023		23	0.60	0.57
PC024		24	0.55	0.52
PC025		25	0.50	0.47
PC026		26	0.60	0.57
PC027		27	0.55	0.52
PC028		28	0.55	0.52



P Clips, 15mm

Mild Steel, Rubber Lined

Code	N43	Dia. mm	Price 1-49	Price 50+
PC006/15		6	0.40	0.37
PC008/15		8	0.40	0.37
PC010/15		10	0.40	0.37
PC012/15		12	0.50	0.47
PC013/15		13	0.50	0.47
PC014/15		14	0.50	0.47
PC015/15		15	0.50	0.47
PC016/15		16	0.50	0.47
PC017/15		17	0.50	0.47
PC018/15		18	0.50	0.47
PC019/15		19	0.50	0.47
PC020/15		20	0.50	0.47
PC021/15		21	0.60	0.57
PC022/15		22	0.60	0.57
PC023/15		23	0.70	0.66
PC025/15		25	0.60	0.57
PC026/15		26	0.60	0.57
PC028/15		28	0.70	0.66
PC030/15		30	0.60	0.57
PC032/15		32	0.80	0.75
PC034/15		34	0.80	0.75
PC035/15		35	0.80	0.75
PC037/15		37	0.80	0.75
PC038/15		38	0.80	0.75
PC040/15		40	0.80	0.75

Hose Clips



Slotted Hose Clamp, 8mm

Stainless Steel

Code	L20	Size mm	Price 1-9	Price 10+
08SC006016		6-16	0.50	0.47
08SC008022		8-22	0.50	0.47
08SC010025		10-25	0.50	0.47
08SC010027		10-27	0.50	0.47
08SC014032		14-32	0.60	0.57
08SC013038		13-38	0.60	0.57
08SC019044		19-44	0.70	0.66
08SC026051		26-51	0.70	0.66
08SC032057		32-57	0.75	0.70
08SC038063		38-63	0.80	0.75
08SC045070		45-70	1.00	0.95
08SC064089		64-89	1.20	1.15



Mini Clamp

Mild Steel

Code	L20	Size mm	Price 1-19	Price 20+
MC0709		7-9	0.35	0.32
MC0810		8-10	0.35	0.32
MC9011		9-10	0.35	0.32
MC1012		10-12	0.35	0.32
MC1113		11-13	0.35	0.32
MC1214		12-14	0.35	0.32
MC1315		13-15	0.35	0.32
MC1416		14-16	0.35	0.32
MC1517		15-17	0.35	0.32
MC1618		16-18	0.35	0.32
MC1820		18-20	0.40	0.37



Slotted Hose Clamp, 13mm

Stainless Steel

Code	L20	Size mm	Price 1-9	Price 10+
13SC010022		10-22	1.00	0.95
13SC011025		11-25	1.05	1.00
13SC013027		13-27	1.05	1.00
13SC013032		13-32	1.05	1.00
13SC018038		18-38	1.05	1.00
13SC019044		19-44	1.10	1.05
13SC026051		26-51	1.30	1.25
13SC032057		32-57	1.35	1.30
13SC038063		38-63	1.35	1.30
13SC044070		44-70	1.35	1.30
13SC051076		51-76	1.35	1.30
13SC057083		57-83	1.35	1.30
13SC064089		64-89	1.60	1.55
13SC070095		70-95	1.60	1.55
13SC076101		76-101	1.80	1.75
13SC083108		83-108	1.80	1.75
13SC064114		64-114	1.85	1.80
13SC076127		76-127	2.00	1.90
13SC089140		89-140	1.95	1.90
13SC095146		95-146	2.15	2.05
13SC102152		102-152	2.15	2.05
13SC114165		114-165	2.60	2.50
13SC127178		127-178	2.95	2.85
13SC165216		165-216	2.85	2.75

Hose Clips



Quick Release Hose Clamp

Mild Steel

Code	L20	Size mm	Price 1-19	Price 20+
QC025057		25-57	2.10	2.00
QC025070		25-70	2.15	2.05
QC038089		38-89	2.60	2.50
QC025101		25-101	2.65	2.55
QC051127		51-127	2.95	2.85
QC052152		52-152	3.20	3.05
QC044177		44-177	3.60	3.45
QC044217		44-217	3.80	3.65
QC050254		50-254	4.00	3.80
QC052312		52-312	4.55	4.35
QC258355		258-355	5.00	4.75
QC044406		44-406	3.70	3.55



Bridge Clamp, Single Fixing

Mild Steel

Code	N40	Size mm	Price 1-19	Price 20+
0216520-8		6	0.10	0.09
0216501-3		8	0.10	0.09
0216502-1		10	0.10	0.09
0216503-0		12	0.15	0.14
0216504-8		14	0.15	0.14
0216505-6		15	0.15	0.14
0216506-4		16	0.15	0.14
0216507-2		18	0.15	0.14
0216508-0		20	0.15	0.14
0216509-9		22	0.15	0.14
0216510-1		25	0.20	0.18
0216511-0		26	0.20	0.18
0216512-8		28	0.20	0.18
0216513-6		30	0.20	0.18
0216514-4		32	0.20	0.18
0216515-2		37	0.20	0.18
0216519-5		40	0.20	0.18
0216516-0		42	0.20	0.18
0216517-9		47	0.25	0.22
0216518-7		50	0.25	0.22

Hose Clips

Bridge Clamp, Double Fixing

Mild Steel



Code	N40	Size mm	Price 1-99	Price 100+
0216521-6		8	0.15	0.14
0216522-4		10	0.15	0.14
0216523-2		12	0.15	0.14
0216524-0		14	0.15	0.14
0216525-9		15	0.15	0.14
0216526-7		16	0.15	0.14
0216527-5		18	0.20	0.18
0216528-3		20	0.20	0.18
0216529-1		22	0.20	0.18
0216530-4		25	0.20	0.18
0216531-2		26	0.20	0.18
0216532-0		28	0.20	0.18
0216533-9		30	0.20	0.18
0216534-7		32	0.20	0.18
0216535-5		37	0.20	0.18
0216540-0		40	0.20	0.18
0216536-3		42	0.35	0.32
0216539-8		47	0.30	0.28
0216538-0		50	0.20	0.18
0216537-1		60	0.20	0.18
0216541-9		63	0.35	0.32

Pipe Brackets, Stainless Steel

Metric



Code	A11	Pipe OD mm	Price 1-49	Price 50+
SSPC06M		6	2.70	2.60
SSPC08M		8	3.10	2.95
SSPC10M		10	3.10	2.95
SSPC12M		12	4.90	4.70
SSPC15M		15	5.40	5.15
SSPC16M		16	12.60	12.00
SSPC18M		18	5.95	5.70
SSPC20M		20	6.15	5.85
SSPC22M		22	6.40	6.10
SSPC25M		25	9.75	9.30

Pipe Brackets, Stainless Steel

Imperial

Code	A11	Pipe OD mm	Price 1-49	Price 50+
SSPC1/4		1/4"	2.70	2.60
SSPC3/8		3/8"	3.10	2.95
SSPC1/2		1/2"	4.90	4.70
SSPC3/4		3/4"	6.15	5.85
SSPC1		1"	9.75	9.30

For Hydraulic Stainless Steel Tube



See pages 790-794

Hose Clips

new

JCS
HIGH PERFORMANCE HOSE CLIPS

These new counter dispensers are an ideal point-of-sale unit for the automotive, food, pharmaceutical and industrial markets.

Contents
- 100 x clips (10 x 12-50mm)
- 1 x flexible driver



Hi-Grip, Zinc-plated Mild Steel, Counter Dispenser

100 Clips

Code	L32	Price
DISPKZ1		146.60

Contents
- 100 x clips (10 x 12-50mm)
- 1 x flexible driver



Hi-Grip, BS304 Stainless Steel, Counter Dispenser

100 Clips

Code	L32	Price
DISPKS1		288.30

Contents
- 160 x clips (10 x 12-100mm)
- 1 x flexible driver



Hi-Grip, Zinc-plated Mild Steel, Counter Dispenser

160 Clips

Code	L32	Price
DISPKZ2		193.35

Contents
- 160 x clips (10 x 12-100mm)
- 1 x flexible driver



Hi-Grip, BS304 Stainless Steel, Counter Dispenser

160 Clips

Code	L32	Price
DISPKS2		478.60

Hose Clips

new

JCS
HIGH PERFORMANCE HOSE CLIPS

Contents
- 135 x clips (12-50mm)

Diameters
5, 6, 8, 10, 13, 16, 19, 21, 25, 29 and 35mm

Standard Liner
TPE -30°C to +60°C

Diameter Ranges
7-9mm, 8-10mm, 9-11mm, 10-12mm, 11-13mm, 12-14mm, 13-15mm, 14-16mm, 15-17mm, 16-18mm







Hi-Grip, Zinc-plated Mild Steel, Assorted Pack

135 Clips

Code	L32	Price
HGZAB1		104.10

P-Clips, Zinc-plated Mild Steel, Assorted Pack

104 Clips

Code	L32	Price
PCZRAB1		96.10

Mini Clips, Zinc-plated Mild Steel, Assorted Pack

157 Clips, 9mm Band

Code	L32	Price
MCZAB1		90.25

Contents
- 135 x clips (12-50mm)

Diameters
5, 6, 8, 10, 13, 16, 19, 21, 25, 29 and 35mm

Standard Liner
TPE -30°C to +60°C





Hi-Grip, BS304 Stainless Steel, 18/8 Marine Quality Assorted Pack

135 Clips

Code	L32	Price
HGSAB1		296.25

P-Clips, BS304 Stainless Steel, 18/8 Marine Quality Assorted Pack

104 Clips

Code	L32	Price
PCSRAB1		153.50

Purpose made for all Hi-Grip hose clips, with stainless steel shaft and socket.



Clip Accessories

Flexible Driver

Code	L32	Price
DHG2BG		15.05

Suitable for all Hi-Torque fittings.



Clip Accessories

T-bar Driver

Code	L32	Price
DHT3BG		27.95

Hose Clips

new

JCS
HIGH PERFORMANCE HOSE CLIPS

Material

- Band and housing: BS304
- Screw: hardened to BS410
- Hi-Torque 18/8 Marine available upon request



Hi-Torque, Heavy Duty, WDHC

Stainless Steel, 16mm Band

Code	L32	Size mm	Price
HT27		20-27	4.80
HT30		20-30	4.80
HT35		20-35	4.80
HT40		25-40	4.80
HT45		25-45	4.80
HT50		30-50	4.90
HT60		40-60	5.05
HT65		45-65	5.15
HT70		50-70	5.65
HT80		60-80	5.35
HT90		70-90	5.45
HT95		75-95	5.55
HT100		80-100	5.60
HT120		90-120	5.90
HT140		110-140	6.20
HT160		130-160	6.50
HT180		150-180	6.80
HT200		170-200	7.05
HT220		190-220	7.35
HT240		210-240	7.60
HT260		230-260	7.90
HT280		250-280	8.20
HT320		290-320	8.80
HT340		310-340	9.05
HT360		330-360	10.20
HT380		350-380	9.80
HT400		370-400	9.90
HT420		390-420	10.20
HT440		410-440	10.50
HT460		430-460	10.80
HT480		450-480	12.10
HT500		470-500	11.35



Hi-Grip, WDHC

Zinc-plated Mild Steel

Code	L32	Size mm	Band mm	Price
WDHC000		9.5-12	9	0.50
WDHCM00		11-16	9	0.50
WDHC00		13-20	9	0.50
WDHC0		14-22	13	0.60
WDHC0X		17-25	13	0.60
WDHC1A		22-30	13	0.60
WDHC1		25-35	13	0.65
WDHC1X		30-40	13	0.65
WDHC2A		35-50	13	0.75
WDHC2		40-55	13	0.80
WDHC2X		45-60	13	0.80
WDHC3		50-70	13	0.95
WDHC3X		60-80	13	1.00
WDHC4		70-90	13	1.05
WDHC4X		80-100	13	1.15
WDHC5		90-120	13	1.40



Hi-Grip, WDHC

BS304 Stainless Steel

Code	L32	Size mm	Band mm	Price
WDHC000-SS		9.5-12	9	1.75
WDHCM00-SS		11-16	9	1.75
WDHC00-SS		13-20	9	1.75
WDHC0-SS		14-22	13	2.00
WDHC0X-SS		17-25	13	2.00
WDHC1A-SS		22-30	13	2.10
WDHC1-SS		25-35	13	2.20
WDHC1X-SS		30-40	13	2.25
WDHC2A-SS		35-50	13	2.55
WDHC2-SS		40-55	13	2.60
WDHC2X-SS		45-60	13	2.75
WDHC3-SS		50-70	13	3.00
WDHC3X-SS		60-80	13	3.15
WDHC4-SS		70-90	13	3.35
WDHC4X-SS		80-100	13	3.55
WDHC5-SS		90-120	13	4.00
WDHC6-SS		110-140	13	4.80
WDHC7-SS		130-160	13	4.80



Hi-Grip, Wing Screw, WDHC

Zinc-plated Mild Steel

Code	L32	Size mm	Band mm	Price
510-12		9.5-12	9	1.10
510-16		11-16	9	0.95
510-20		13-20	9	0.95
510-22		14-22	13	1.00
510-25		17-25	13	1.20
510-30		22-30	13	1.00
510-35		25-35	13	1.05
510-40		30-40	13	1.10
510-45		35-45	13	1.10
510-50		35-50	13	1.15
510-55		40-55	13	1.20
510-60		45-60	13	1.20

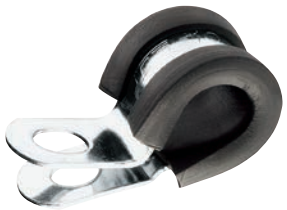
Hose Clips

new

JCS HIGH PERFORMANCE HOSE CLIPS

Material
Zinc-plated mild steel

Standard Liner
TPE -30ºC to +60ºC



M6 P-Clips, TPE Liner (Black)

Zinc-plated Mild Steel,
12.6mm Band

Code	L32	Size mm	Price
500-05		5	0.55
500-06		6	0.55
500-08		8	0.60
500-09		9	0.60
500-10		10	0.60
500-12		12	0.60
500-13		13	0.60
500-16		16	0.70
500-19		19	0.75
500-21		21	0.75
500-22		22	0.80
500-25		25	0.85
500-28		28	0.90
500-29		29	0.90
500-32		32	0.95
500-35		35	1.00
500-40		40	1.05
500-44		44	1.15
500-48		48	1.20
500-52		52	1.35
500-56		56	1.40
500-60		60	1.55

Material
304 (A2) stainless steel

Standard Liner:
TPE -30°C to +60°C



M6 P-Clips, TPE Liner (Black)

BS304 Stainless Steel,
12.6mm Band

Code	L32	Size mm	Price
500-5SS		5	1.05
500-6SS		6	1.00
500-8SS		8	1.05
500-10SS		10	1.05
500-13SS		13	1.10
500-16SS		16	1.20
500-19SS		19	1.20
500-21SS		21	1.30
500-22SS		22	1.30
500-25SS		25	1.35
500-28SS		28	1.40
500-29SS		29	1.55
500-32SS		32	1.50
500-35SS		35	1.60
500-40SS		40	1.70
500-44SS		44	1.80
500-48SS		48	1.95
500-52SS		52	2.00
500-56SS		56	2.15
500-60SS		60	2.25

Material:
Zinc-plated mild steel

High Temperature Liner
TPE 160 -50°C to +160°C



M6 P-Clips, High Temperature TPE Liner (Grey)

Zinc-plated Mild Steel,
12.6mm Band

Code	L32	Size mm	Price
501-5		5	0.45
501-6		6	0.65
501-8		8	0.50
501-9		9	0.50
501-10		10	0.65
501-12		12	0.75
501-13		13	0.80
501-16		16	0.80
501-19		19	0.80
501-21		21	0.90
501-22		22	0.90
501-25		25	1.00
501-28		28	0.95
501-29		29	1.00
501-32		32	1.10
501-35		35	1.15
501-40		40	0.95
501-44		44	1.30
501-48		48	1.40
501-52		52	1.45
501-56		56	1.60
501-60		60	1.70

Hose Clips

new

JCS HIGH PERFORMANCE HOSE CLIPS

Material
304 (A2) stainless steel
High Temperature Liner
TPE 160 -50°C to +160°C



M6 P-Clips, High Temperature TPE Liner (Grey)

BS304 Stainless Steel, 12.6mm Band

Code	L32	Size mm	Price
501-5SS		5	1.00
501-6SS		6	1.10
501-8SS		8	1.15
501-9SS		9	1.15
501-10SS		10	1.00
501-12SS		12	1.20
501-13SS		13	1.25
501-16SS		16	1.30
501-19SS		19	1.40
501-21SS		21	1.20
501-22SS		22	1.25
501-25SS		25	1.45
501-28SS		28	1.30
501-29SS		29	1.35
501-32SS		32	1.85
501-35SS		35	1.50
501-40SS		40	1.95
501-44SS		44	1.70
501-48SS		48	1.80
501-52SS		52	1.90
501-56SS		56	2.00
501-60SS		60	2.15

Material
Zinc-plated mild steel
High Temperature Liner:
TPE 160 -50°C to +160°C



M10 P-Clips, High Temperature TPE Liner (Grey)

Zinc-plated Mild Steel, 20mm Band

Code	L32	Size mm	Price
601-6		6	0.60
601-8		8	0.65
601-10		10	0.75
601-13		13	0.80
601-16		16	0.85
601-19		19	1.00
601-22		22	1.00
601-25		25	1.00
601-28		28	1.20
601-32		32	1.20
601-36		36	1.15
601-40		40	1.40
601-44		44	1.55
601-48		48	1.55
601-52		52	1.80

Material
Stainless steel (BS304).
High Temperature Liner
TPE 160 -50°C to +160°C



M10 P-Clips, High Temperature TPE Liner (Grey)

BS304 Stainless Steel, 20mm Band

Code	L32	Size mm	Price
601-6SS		6	1.20
601-8SS		8	1.20
601-10SS		10	1.35
601-13SS		13	1.50
601-16SS		16	1.25
601-19SS		19	1.65
601-22SS		22	1.55
601-25SS		25	1.70
601-28SS		28	1.65
601-32SS		32	1.80
601-36SS		36	2.15
601-40SS		40	1.95
601-44SS		44	2.05
601-48SS		48	2.20
601-52SS		52	2.50

Hose Clips



Superclamps

Zinc-plated Mild Steel

Code	P31	Size mm	Band mm	Price 1-49	Price 50+
JSC019MS		17-19	18	0.90	0.85
JSC022MS		20-22	18	0.90	0.85
JSC025MS		23-25	18	0.95	0.90
JSC028MS		26-28	18	1.00	0.95
JSC031MS		29-31	18	1.00	0.95
JSC035MS		32-35	20	1.25	1.20
JSC039MS		36-39	20	1.35	1.30
JSC043MS		40-43	20	1.40	1.35
JSC047MS		44-47	20	1.40	1.35
JSC051MS		48-51	20	1.40	1.35
JSC055MS		52-55	20	1.40	1.35
JSC059MS		56-59	20	1.50	1.45
JSC063MS		60-63	20	1.55	1.50
JSC067MS		64-67	25	2.50	2.40
JSC073MS		68-73	25	2.50	2.40
JSC079MS		74-79	25	2.80	2.70
JSC085MS		80-85	25	2.85	2.75
JSC091MS		86-91	25	3.00	2.85
JSC097MS		92-97	25	3.00	2.85
JSC103MS		98-103	25	3.05	2.90
JSC112MS		104-112	25	3.10	2.95
JSC121MS		113-121	25	3.20	3.05
JSC130MS		122-130	25	5.55	5.30
JSC139MS		131-139	25	3.55	3.40
JSC148MS		140-148	25	3.60	3.45
JSC161MS		149-161	25	3.80	3.65
JSC174MS		162-174	25	4.00	3.80
JSC187MS		175-187	25	4.05	3.85
JSC200MS		188-200	25	4.20	4.00
JSC213MS		201-213	25	4.60	4.40
JSC226MS		214-226	25	5.00	4.75
JSC239MS		227-239	25	5.50	5.25
JSC252MS		240-252	25	6.80	6.50
JSC265MS		253-265	25	6.50	6.20



Superclamps

304 Stainless Steel

Code	P31	Size mm	Band mm	Price 1-49	Price 50+
JSC019SS		17-19	18	2.95	2.85
JSC022SS		20-22	18	3.05	2.90
JSC025SS		23-25	18	3.20	3.05
JSC028SS		26-28	18	3.30	3.15
JSC031SS		29-31	18	3.40	3.25
JSC035SS		32-35	20	3.60	3.45
JSC039SS		36-39	20	3.60	3.45
JSC043SS		40-43	20	3.60	3.45
JSC047SS		44-47	20	3.60	3.45
JSC051SS		48-51	20	3.65	3.50
JSC055SS		52-55	20	3.75	3.60
JSC059SS		56-59	20	3.80	3.65
JSC063SS		60-63	20	3.90	3.75
JSC067SS		64-67	25	8.15	7.75
JSC073SS		68-73	25	7.60	7.25
JSC079SS		74-79	25	7.65	7.30
JSC085SS		80-85	25	7.75	7.40
JSC091SS		86-91	25	7.95	7.60
JSC097SS		92-97	25	8.00	7.60
JSC103SS		98-103	25	8.10	7.70
JSC112SS		104-112	25	8.20	7.80
JSC121SS		113-121	25	8.40	8.00
JSC130SS		122-130	25	8.35	7.95
JSC139SS		131-139	25	8.75	8.35
JSC148SS		140-148	25	8.85	8.45
JSC161SS		149-161	25	9.05	8.60
JSC174SS		162-174	25	9.25	8.80
JSC187SS		175-187	25	10.55	10.05
JSC200SS		188-200	25	10.85	10.35
JSC213SS		201-213	25	11.20	10.65
JSC226SS		214-226	25	11.70	11.15
JSC239SS		227-239	25	12.20	11.60
JSC252SS		240-252	25	15.75	15.00
JSC265SS		253-265	25	16.40	15.60

Hose Clips



Superclamps

316 Stainless Steel

Code P31	Size mm	Band mm	Price 1-49	Price 50+
JSC019SS316	17-19	18	5.35	5.10
JSC022SS316	20-22	18	5.55	5.30
JSC025SS316	23-25	18	5.80	5.55
JSC028SS316	26-28	18	5.95	5.70
JSC031SS316	29-31	18	6.20	5.90
JSC035SS316	32-35	20	6.20	5.90
JSC039SS316	36-39	20	6.60	6.30
JSC043SS316	40-43	20	6.25	5.95
JSC047SS316	44-47	20	6.20	5.90
JSC051SS316	48-51	20	6.40	6.10
JSC055SS316	52-55	20	6.80	6.50
JSC059SS316	56-59	20	6.60	6.30
JSC063SS316	60-63	20	6.75	6.45
JSC067SS316	64-67	25	14.25	13.55
JSC073SS316	68-73	25	14.45	13.75
JSC079SS316	74-79	25	15.40	14.65
JSC085SS316	80-85	25	15.20	14.45
JSC091SS316	86-91	25	15.60	14.85
JSC097SS316	92-97	25	15.65	14.90
JSC103SS316	98-103	25	15.95	15.20
JSC112SS316	104-112	25	16.15	15.35
JSC121SS316	113-121	25	17.55	16.70
JSC130SS316	122-130	25	17.90	17.05
JSC139SS316	131-139	25	17.25	16.40
JSC148SS316	140-148	25	17.50	16.65
JSC161SS316	149-161	25	17.80	16.95
JSC174SS316	162-174	25	17.70	16.85
JSC187SS316	175-187	25	20.75	19.75
JSC200SS316	188-200	25	21.40	20.35
JSC213SS316	201-213	25	22.00	20.90
JSC226SS316	214-226	25	23.00	21.85
JSC239SS316	227-239	25	24.10	22.90
JSC252SS316	240-252	25	24.40	23.20
JSC265SS316	253-265	25	29.65	28.20

For Coloured Reinforced PVC Hose



See page 494

Hose Clips



Original

Mild Steel

Code	P31	Size mm	Band mm	Price 1-49	Price 50+
JUB-000		9.5-12	9.9	0.75	0.70
JUB-M00		11-16	9.9	0.75	0.70
JUB-00		13-20	9.9	0.80	0.75
JUB-0		16-22	13	0.85	0.80
JUB-0X		18-25	13	0.90	0.85
JUB-1A		22-30	13	0.95	0.90
JUB-1X		30-40	13	1.00	0.95
JUB-1		32-45	13	1.00	0.95
JUB-2A		35-50	13	1.10	1.05
JUB-2		40-55	13	1.15	1.10
JUB-2X		45-60	13	1.20	1.15
JUB-3		55-70	13	1.30	1.25
JUB-3X		60-80	13	1.40	1.35
JUB-4		70-90	13	1.50	1.45
JUB-4X		85-100	13	1.60	1.55
JUB-5		90-120	13	1.85	1.80
JUB-6		110-140	13	2.05	1.95
JUB-6X		120-150	13	2.20	2.10
JUB-7		135-165	13	2.30	2.20
JUB-7.5		158-190	13	2.80	2.70
JUB-8.5		184-216	13	3.10	2.95
JUB-9.5		210-242	13	3.35	3.20
JUB-10.5		235-267	13	3.60	3.45
JUB-11.5		260-292	13	4.00	3.80
JUB-12.5		286-318	13	4.20	4.00



Original

304 Stainless Steel

Code	P31	Size mm	Band mm	Price 1-49	Price 50+
JUB-000SS		9.5-12	9.9	1.95	1.90
JUB-M00SS		11-16	9.9	2.00	1.90
JUB-00SS		13-20	9.9	2.00	1.90
JUB-0SS		16-22	13	2.45	2.35
JUB-0XSS		18-25	13	2.50	2.40
JUB-1ASS		22-30	13	2.70	2.60
JUB-1SS		25-35	13	2.70	2.60
JUB-1XSS		30-40	13	2.85	2.75
JUB-1MSS		32-45	13	3.00	2.85
JUB-2ASS		35-50	13	3.20	3.05
JUB-2SS		40-55	13	3.20	3.05
JUB-2XSS		45-60	13	3.40	3.25
JUB-3SS		55-70	13	3.60	3.45
JUB-3XSS		60-80	13	3.80	3.65
JUB-4SS		70-90	13	4.15	3.95
JUB-4XSS		85-100	13	4.40	4.20
JUB-5SS		90-120	13	4.75	4.55
JUB-6SS		110-140	13	5.10	4.85
JUB-6XSS		120-150	13	5.40	5.15
JUB-7SS		135-165	13	5.80	5.55
JUB-7.5SS		158-190	13	6.35	6.05
JUB-8.5SS		184-216	13	7.20	6.85
JUB-9.5SS		210-242	13	8.20	7.80
JUB-10.5SS		235-267	13	8.90	8.50
JUB-11.5SS		260-292	13	9.45	9.00
JUB-12.5SS		286-318	13	9.95	9.50

Hose Clips



Original

316 Stainless Steel

Code	P31	Size mm	Band mm	Price 1-49	Price 50+
JUB-000SS316		9.5-12	9.9	3.00	2.85
JUB-M00SS316		11-16	9.9	3.00	2.85
JUB-00SS316		13-20	9.9	3.00	2.85
JUB-0SS316		16-22	13	3.70	3.55
JUB-0XSS316		18-25	13	3.75	3.60
JUB-1ASS316		22-30	13	4.00	3.80
JUB-1SS316		25-35	13	4.15	3.95
JUB-1XSS316		30-40	13	2.85	2.75
JUB-1MSS316		32-45	13	4.45	4.25
JUB-2ASS316		35-50	13	4.75	4.55
JUB-2SS316		40-55	13	5.00	4.75
JUB-2XSS316		45-60	13	5.20	4.95
JUB-3SS316		55-70	13	5.55	5.30
JUB-3XSS316		60-80	13	3.95	3.80
JUB-4SS316		70-90	13	4.15	3.95
JUB-4XSS316		85-100	13	6.55	6.25
JUB-5SS316		90-120	13	4.75	4.55
JUB-6SS316		110-140	13	7.40	7.05
JUB-6XSS316		120-150	13	8.10	7.70
JUB-7SS316		135-165	13	8.60	8.20
JUB-7.5SS316		158-190	13	9.55	9.10
JUB-8.5SS316		184-216	13	10.20	9.70
JUB-9.5SS316		210-242	13	11.95	11.40
JUB-10.5SS316		235-267	13	13.35	12.70
JUB-11.5SS316		260-292	13	14.20	13.50
JUB-12.5SS316		286-318	13	14.90	14.20



Junior

Mild Steel

Code	P31	Size mm	Band mm	Price 1-49	Price 50+
NB0709		7-9	9.1	0.40	0.37
NB0810		8-10	9.1	0.40	0.37
NB0911		9-11	9.1	0.40	0.37
NB1012		10-12	9.1	0.40	0.37
NB1113		11-13	9.1	0.40	0.37
NB1214		12-14	9.1	0.40	0.37
NB1315		13-15	9.1	0.40	0.37
NB1416		14-16	9.1	0.40	0.37
NB1517		15-17	9.1	0.40	0.37
NB1618		16-18	9.1	0.40	0.37
NB1820		18-20	9.1	0.50	0.47



Junior

304 Stainless Steel

Code	P31	Size mm	Band mm	Price 1-49	Price 50+
NB0709SS		7-9	9.1	1.20	1.15
NB0810SS		8-10	9.1	1.20	1.15
NB0911SS		9-11	9.1	1.30	1.25
NB1012SS		10-12	9.1	1.30	1.25
NB1113SS		11-13	9.1	1.30	1.25
NB1214SS		12-14	9.1	1.30	1.25
NB1315SS		13-15	9.1	1.35	1.30
NB1416SS		14-16	9.1	1.30	1.25

Hose Clips



Wingspade Range

Mild Steel

Code	P31	Size mm	Band mm	Price 1-49	Price 50+
WS12		9.5-12	9.9	1.60	1.55
WS16		11-16	9.9	1.60	1.55
WS20		13-20	9.9	1.60	1.55
WS27		16-27	9.9	1.65	1.60
WS32		20-32	9.9	1.45	1.40
WS40		25-40	9.9	1.75	1.70
WS45		30-45	9.9	1.80	1.75
WS-50IQ		32-50	9.9	1.55	1.50
WS60		40-60	9.9	1.90	1.85
WS70		50-70	9.9	2.00	1.90



Multiband, 7mm

304 Stainless Steel, Bands

Code	P31	Length m	Price
1601		25	101.00
1602		50	173.70

Multiband, 7mm

304 Stainless Steel, Housing/Screw Sets

Code	P31	Type	Quantity	Price
1603		Slotted	25 Pieces	59.15



Multiband, 11mm

Mild Steel, Bands

Code	P31	Length m	Price
1701		10	31.55
1702		30	85.90



Multiband, 11mm

304 Stainless Steel, Bands

Code	P31	Length m	Price
1802		30	184.85

Multiband, 11mm

Mild Steel, Housing/Screw Sets

Code	P31	Type	Quantity	Price
1704		Slotted	25 Pieces	25.30
1705		Allen	25 Pieces	77.15
1706		Captive	25 Pieces	46.35

Multiband, 11mm

304 Stainless Steel, Housing/Screw Sets

Code	P31	Type	Quantity	Price
1803		Slotted	25 Pieces	53.45
1804		Allen	25 Pieces	62.25
1805		Captive	25 Pieces	119.50

Multiband, 11mm

Mild Steel, Handy Pack

Code	P31	Description	Price
1708		10m Band with 25 Housing/Screws	56.40

Multiband, 11mm

304 Stainless Steel, Handy Pack

Code	P31	Description	Price
1806		10m Band with 25 Housing/Screws	129.15

Hose Clips

143 of the most popular Jubilee® Clips to suit applications from 9.5mm to 40mm in a sturdy plastic container suitable for any tough industrial environment.

Contents

Type	000	M00	00	0	0X	1A	1X
Quantity	24	32	28	13	14	12	7



Original Workshop Pack

Mild Steel

Code P31	Quantity	Price
HCP143MS	143 Pieces	134.45

Original Workshop Pack

304 Stainless Steel

Code P31	Quantity	Price
HCP143SS	143 Pieces	348.95

Original Workshop Pack

316 Stainless Steel

Code P31	Quantity	Price
HCP143SS316	143 Pieces	619.40

This convenient small pack contains 32 Jubilee® Clips with recommended adjustment ranges from 9.5mm to 40mm.

Contents

Type	000	M00	00	0	0X	1A	1	1X
Quantity	6	6	6	4	4	2	2	2



Original Pocket Pack

Mild Steel, Zinc Protected

Code P31	Quantity	Price
PPMS	32 Pieces	31.60

Original Pocket Pack

304 Stainless Steel

Code P31	Quantity	Price
PPSS	32 Pieces	77.45

Original Pocket Pack

316 Stainless Steel

Code P31	Quantity	Price
PPSS316	32 Pieces	113.40

Hose Clips

Assortment of 165 Jubilee® Junior clips suitable for connecting hoses in low pressure applications from 7mm to 14mm.

Contents

Type	NB0709	NB0810	NB0911	NB1012	NB1113	NB1214
Quantity	25	25	25	30	30	30



Junior Assortment

Mild Steel

Code	P31	Quantity	Price
JA165		165 Pieces	91.50

Junior Assortment

304 Stainless Steel

Code	P31	Quantity	Price
JA165SS		165 Pieces	217.45

The apposite Jubilee Wingspade® pocket contains 22 clips each with a wing screw for easy fitting without the need for any tools, covering fittings from 9.5m to 55mm.

Contents

Type	WS012	W016	WS020	WS027	WS035	WS045	WS055
Quantity	4	4	4	4	2	2	2



Wingspade Pocket Pack

Mild Steel, Zinc Protected, with Plastic Spade

Code	P31	Quantity	Price
PPWS		22 Pieces	40.00

This useful compact pack contains 54 Jubilee® Junior clips to suit low pressure fittings from 7mm to 16mm.

Contents

Type	NB0709	NB0810	NB0911	NB1315	NB1012	NB1214	NB1113	NB1416
Quantity	6	6	6	6	8	8	10	4

Junior Pocket Pack

Mild Steel, Zinc Protected

Code	P31	Quantity	Price
PPJJMS		54 Pieces	26.35



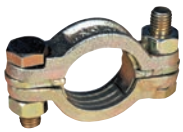
Junior Pocket Pack

304 Stainless Steel

Code	P31	Quantity	Price
PPJJSS		54 Pieces	72.05

Malleable Iron Pipe Clamp

Standard



Code	M04	Size mm	Price 1-24	Price 25+
MIPC17-22		17-22	2.70	2.60
MIPC20-29		20-29	3.40	3.25
MIPC28-35		28-35	3.50	3.35
MIPC32-40		32-40	4.50	4.30
MIPC39-49		39-49	5.60	5.35
MIPC48-60		48-60	7.05	6.70
MIPC60-76		60-76	9.35	8.90
MIPC77-94		77-94	13.10	12.45
MIPC89-101		89-101	19.90	18.95
MIPC94-115		94-115	16.00	15.20
MIPC113-127		113-127	24.70	23.50
MIPC115-145		115-145	29.20	27.75
MIPC127-140		127-140	30.45	28.95
MIPC135-155		135-155	30.45	28.95
MIPC155-175		155-175	30.05	28.55
MIPC175-195		175-195	40.75	38.75
MIPC210-225		210-225	62.95	59.85
MIPC227-250		227-250	75.05	71.30

Malleable Iron Pipe Clamp

With Safety Claw



Code	M04	Size mm	Price 1-24	Price 25+
MIPC22-29S		22-29	4.95	4.75
MIPC28-32S		28-32	4.85	4.65
MIPC35-42S		35-42	6.55	6.25
MIPC42-45S		42-45	8.20	7.80
MIPC45-53S		45-53	8.65	8.25
MIPC55-60S		55-60	12.15	11.55
MIPC60-73S		60-73	15.65	14.90
MIPC86-102S		86-102	26.55	25.25

Pliers

O Clip



Code	M17	Price
0417.022		7.15

Tube Cutters

Heavy Duty



Replacement Blade



Code	M03	Description	Price
TCUT0001		Up to 20mm Tube	16.30
TCUT0101		Replacement Blade up to 20mm	3.85

Tube Cutters

Heavy Duty



Code	C01	Description	Price 1-49	Price 50+
TCH22		To Suit up to 22mm Pipe	63.85	60.70

Tube Cutters

Standard



Code	M01	Description	Price 1-49	Price 50+
TCS14		To Suit up to 14mm Tube	3.65	3.50

Tube Clips

Nylon, 10 per Strip



Code	X01	To Suit Plastic Pipe OD mm	Price
1824431000		6	3.15
1824431001		8	3.30
1824431002		12	4.15

Crimpers

CV500

Hose crimper furnished with mounting holes for permanent installations or it may be used as a portable tool for hose assembly in the field.

Crimps 1/4" to 3/8" ID hose in either one or two braid design.

In addition to the standard dies provided with the CV500 Hose Crimper, the die sets shown below are also available. Each die set includes the two die halves required to crimp a ferrule onto the hose.

CV501

Large diameter hose crimper designed for use with 7/8" to 1.1/2" OD (1/2" to 1" ID) hose. This crimper is sold without dies.



Hose Crimper

Small Bore

Code	N60	To Suit Hose ID	Price
CV500		1/4" to 3/8"	151.00

Hose Crimper

Large Bore

Code	N60	To Suit Hose ID	Price
CV501		1/2" to 1"	120.45

Die Sets

To Suit CV500



Code	N60	To Suit Hose OD	Price
CV500-DS7		7/16"	22.45
CV500-DS8		3/4"	18.70
CV500-DS9		13/16"	21.80
CV500-DS10		3/8"	20.10

Die Sets

To Suit CV501



Code	N60	To Suit Hose OD	Price
CV501-DS1		11/16"	20.65
CV501-DS2		23/32"	19.15
CV501-DS3		3/4"	20.65
CV501-DS4		25/32"	20.65
CV501-DS5		13/16"	20.65
CV501-DS6		27/32"	20.65
CV501-DS7		7/8"	20.65
CV501-DS8		29/32"	20.65
CV501-DS9		15/16"	18.60
CV501-DS10		31/32"	20.65
CV501-DS11		1"	19.15
CV501-DS12		1.1/32"	18.60
CV501-DS13		1.1/16"	19.15
CV501-DS14		1.1/8"	19.15
CV501-DS15		1.3/16"	20.65
CV501-DS16		1.1/4"	24.40
CV501-DS17		1.5/16"	19.15
CV501-DS18		1.3/8"	23.00
CV501-DS19		1.7/16"	18.60
CV501-DS20		1.1/2"	18.60

- Crimping machine for easy and safe assembly of low pressure hoses from 2 to 25mm ID
- Exact assembling of fitting, hose and socket through centric crimping of the socket
- Fast assembling at reasonable cost
- Improved safety through perfect fit

SPR 333

- For fitting pneumatic connections and quick couplings
- Two crimping jaw sets
- Suitable ferrules: LPH 12.5-23
- Weight: 12.2kg

SPR 500

- For fitting claw couplings and screw sets
- Three quick-change crimping jaw sets
- For mobile use
- Suitable ferrules: LPH 23-41
- Weight: 18kg



SPR-500

SPR-333

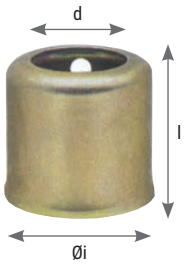
Crimping Machine

Hand Operated

Code	M02	To Suit Hose mm ID	To Suit Hose mm OD	Price
SPR-333		2-19	10-22	927.15
SPR-500		13-25	23-40	2362.20

Ferrules

- Red hot steel, zinc-plated and yellow chromated
- Easy, fast and safe hose crimping with hand-operated assembly machines: SPR 333 (use LPH-12.5 to LPH-23) and SPR 500 (use LPH-25 to LPH-41)
- No danger of hurt, closed and unremovable connection
- For crimping of various hoses and fittings for different fluids
- Maximum working pressure: 16 bar



Ferrules for Low Pressure Hoses

Steel

Code M04	I.D. Ø	To Suit Hose DIN20018	To Suit Hose Water	To Suit Hose PVC	l	d	Weight g	Price 1-49	Price 50+
LPH-12.5	12.5	-	-	-	17	8.5	3	0.30	0.28
LPH-13.5	13.5	-	-	6 x 3	20	9.3	5	0.30	0.28
LPH-14.5	14.5	6 x 3.5	-	-	17	10	5	0.30	0.28
LPH-16	16.0	-	-	8 x 3	17	11.5	5	0.35	0.32
LPH-18	18.0	9 x 3.4	-	10 x 3	20	13.5	7	0.40	0.37
LPH-19	19.0	-	-	12 x 3	20	13.9	9	0.55	0.52
LPH-19.5	19.5	-	-	-	26	14.5	10	0.80	0.75
LPH-22	22.0	-	-	-	32	17.0	16	0.90	0.85
LPH-23	23.0	-	12 x 3	-	32	17.0	18	0.70	0.66
LPH-25	25.0	13 x 5	-	-	32	17.0	19	0.90	0.85
LPH-28	28.0	15 x 6	-	-	32	20.5	22	1.05	1.00
LPH-30	30.5	-	19 x 4	-	33	24.3	24	1.35	1.30
LPH-33	33.0	19 x 6	-	-	35	24.8	40	1.65	1.60
LPH-38	38.0	-	25 x 4.5	-	35	28.0	47	2.00	1.90
LPH-41	41.0	25 x 7	-	-	40	30.0	64	2.35	2.25



Hose Ferrules

Brass

Code N61	Hose ID	Length	Price 1-49	Price 50+
HF3588	0.562"	3/4"	0.80	0.75
HF7244	0.875"	7/8"	1.50	1.45
HF5029	0.900"	7/8"	1.15	1.10
HF7322	0.500"	1"	0.80	0.75
HF7323	0.525"	1"	0.95	0.90
HF7325	0.568"	1"	0.80	0.75
HF7326	0.593"	1"	0.80	0.75
HF7327	0.625"	1"	0.80	0.75
HF7328	0.656"	1"	0.80	0.75
HF7329	0.687"	1"	0.80	0.75
HF7330	0.718"	1"	0.80	0.75
HF7331	0.750"	1"	1.00	0.95
HF7332	0.781"	1"	1.35	1.30
HF7333	0.812"	1"	0.70	0.66
HF1275	1.257"	1.1/4"	4.25	4.05

Techmatic FRL Units













Section 5

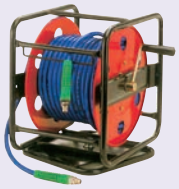
Series 2000, 3000, 4000 & 5000

- Sizes from M5 to 1”
- Filters
- Pressure Regulators
- Filter Regulators
- Filter + Regulator + Lubricator
- Accessories

See pages 307-312

Hose Reels & Fuelling



	580-582	Faicom Hose Reels
	583-585	Redashe Hose Reels
	586	Legacy Hose Reels
	587	Flexzilla Hose Reels
	588-591	Reelcraft Hose Reels
	592	Air Hose Reels
	593-594	PCL Tyre Inflation Equipment
	594	Techmatic Tyre Inflation Equipment
	595-598	Fuel Equipment
	595	Delivery Hoses
	596	Trigger Nozzles
	597-598	Transfer Pumps & Kits

Hose Reels

- Automatic air hose reels for professional use
- Moulded steel painted with electrostatic powder system to guarantee long life
- Hose winds automatically, user can stop at any length
- Incorporated revolving stand
- Supplied with distribution flexible hose in polyurethane, reinforced with textile braid
- Optional stand for side wall installation and flexible hose for connection to the system can be supplied

Maximum Pressure

- 20 bar

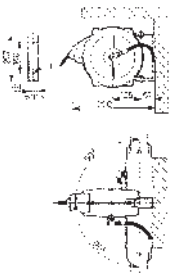
- Automatic hose reels suitable for fluids of several pressures and temperatures
- Moulded steel painted with electrostatic powder system to guarantee long life
- Hose winds automatically, user can stop at any length
- Flexible hose for connection to the system and revolving stand can be supplied
- Models equipped with special hoses can be supplied

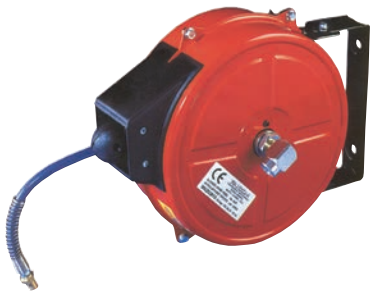
Fluid Temperature

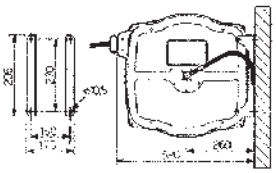
- 40°C max

Maximum Pressure

- 18 bar









Compact Hose Reel

Polyurethane Braided Hose

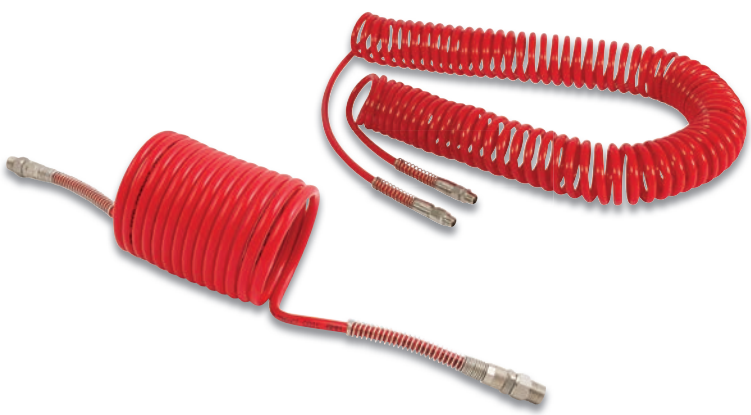
Code P33	Female Inlet BSP	Male Outlet BSP	Hose Ø mm	Hose Length m	Weight kg	Price
MN203810	G3/8"	G1/4"	PU 8 x 12	10	8	**239.00**
MD203812	G3/8"	G1/4"	PU 8 x 12	12	9	**288.80**
MD201010	G3/8"	G3/8"	PU 10 x 14	10	9	**311.55**

Heavy-duty Hose Reel

Rubber Hose

Code P33	Female Inlet BSP	Male Outlet BSP	Hose Ø mm	Hose Length m	Price
MC180810	G3/8"	G3/8"	8 x 14	10	**421.05**
MC180815	G3/8"	G3/8"	8 x 14	15	**465.15**
MC180820	G3/8"	G3/8"	8 x 14	20	**507.80**
MC181010	G3/8"	G3/8"	10 x 17	10	**439.35**
MC181015	G3/8"	G3/8"	10 x 17	15	**477.95**
MC181310	G1/2"	G1/2"	13 x 20	10	**509.20**

For Recoil Hoses



See pages 511-512

Hose Reels

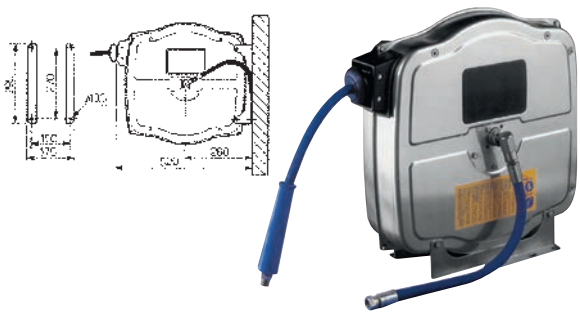
- Automatic hose reels suitable for hot water cleaning at low and high pressures
- AISI 304 stainless steel, suitable for environments requiring good resistance to corrosion
- Can be used in food factories, large kitchens, slaughter houses, dairies, chemical and pharmaceutical industries, and swimming pools
- Flexible hose for connection to the system and revolving stand can be supplied
- Models equipped with special hoses can be supplied

Fluid Temperature

- 100°C

Maximum Pressure

- 10 bar



Heavy-duty Hose Reel

Stainless Steel

Code P33	Hose Ø mm	Hose Length m	Price
MCX101310K	13 x 21	10	948.50

- Automatic hose reels suitable for hot water cleaning at low and high pressures
- AISI 304 stainless steel, suitable for environments requiring good resistance to corrosion
- Can be used in food factories, large kitchens, slaughter houses, dairies, chemical and pharmaceutical industries, and swimming pools
- Hose winds automatically, user can stop at any length
- Flexible hose for connection to the system and revolving stand can be supplied

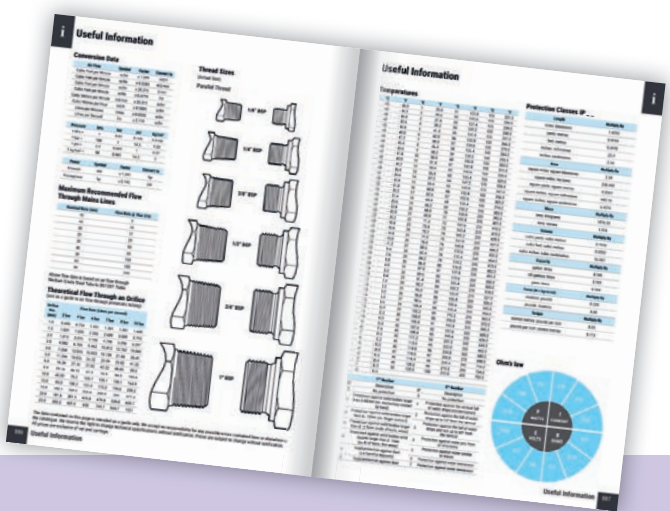


Heavy-duty Hose Reel

Stainless Steel

Code P33	Fluid Water	Maximum Pressure bar	Hose Ø	Hose Length m	Price
AX101310K	100°C	10	13 x 21	10	875.75
AX101315K	100°C	10	13 x 21	15	894.70
ALX101320K	100°C	10	13 x 21	20	1140.55
AX4H3810	150°C	400	3/8"	10	887.40
AX4H3815	150°C	400	3/8"	15	967.45
ALX4H3820	150°C	400	3/8"	20	1232.15

For Useful Information



See pages 886-887

Hose Reels

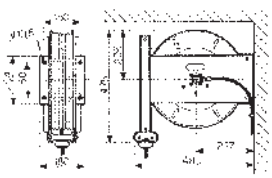
- Automatic hose reels suitable for fluids of several pressures and temperatures
- Moulded steel painted with electrostatic powder system to guarantee long life
- Hose winds automatically, user can stop at any length
- Flexible hose for connection to the system and revolving stand can be supplied
- Models equipped with special hoses can be supplied

Fluid Temperature

- 40°C max

Maximum Pressure

- 18 bar





Open Hose Reel

Mild Steel

Code P33	Female Inlet BSP	Male Outlet BSP	Hose Ø mm	Hose Length m	Price
A180810	G3/8"	G3/8"	8 x 14	10	430.60
A180815	G3/8"	G3/8"	8 x 14	15	465.15
A180820	G3/8"	G3/8"	8 x 14	20	507.80
A181010	G3/8"	G3/8"	10 x 17	10	439.35
A181015	G3/8"	G3/8"	10 x 17	15	477.95
A181020	G3/8"	G3/8"	10 x 17	20	519.35
A181310	G1/2"	G1/2"	13 x 20	10	497.85
A181315	G1/2"	G1/2"	13 x 20	15	543.35



Swivel Brackets

Steel

Code P33	Description	Price
MCSG10	Steel, for MC	22.75
ASG15	Steel, for A	38.45
AXSG15	Stainless Steel, for AX	82.55
ALXSG20	Stainless Steel, for ALX	96.75

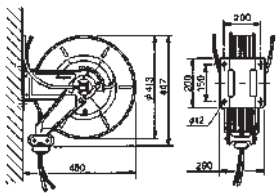
- Constructed to rewind twin hose for oxygen/acetylene and oxygen/propane
- Moulded steel, powder coated
- Winds automatically, user can stop at any length
- Rubber twin hoses and connection hoses are manufactured in conformity to EN 559

Maximum Pressure

- 20 bar/280 psi

Inlet Diameter

- 8-10mm



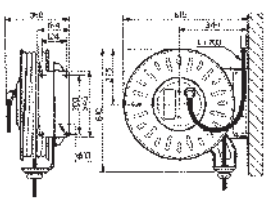


Hose Reel

Twin Welding

Code P33	Hose Ø mm	Hose Length	Price
OSV200815	8 x 14 Twin	15m / 50'	1022.70
OSV200820	8 x 14 Twin	20m / 65'	1127.45
OSV201015	10 x 17 Twin	15m / 50'	1080.90

- Automatic hose reels constructed to wind flexible hoses with diameters up to 1" and suitable for fluids at different pressures and temperatures
- Moulded steel, powder coated
- Winds automatically, user can stop at any length
- Drum rotates on ball bearings to reduce friction and improve functionality





Air/Water Hose Reel

Large Bore

Code P33	Fluid	Maximum Pressure bar	Maximum Pressure psi	Female Inlet mm	Hose Ø mm	Hose Length m	Price
BG181325	Air	18	250	G1/2"	13 x 20	25	1324.10
BG181330	Air	18	250	G1/2"	13 x 20	30	1372.75
BG181625	Water	18	250	G1/2"	16 x 23	25	1372.75
BG181920	40° Max	Rubber Hose		G3/4"	19 x 27	20	1372.75
BG182515	40° Max	Rubber Hose		G1"	25 x 34	15	1376.90

Hose Reels

- High impact UV stabilised polypropylene
- Positive latching mechanism locks hose at any length
- Reel dimensions: 290 W x 495 D x 495 H (mm)
- Unique 30m spring rewind capacity
- Hose layering system ensures neat and trouble-free storage of hose
- Complete with adjustable spray/jet water nozzle

Working Pressure

- 145 psi (10 bar)



Garden Hose Reel

Heavy-duty

Code D02	Hose Length	Hose ID	Inlet/Outlet	Price
C760-GAR	100' (30m)	1/2" (12.5mm)	3/4"	219.55

The C2766 series are constructed in green impact resistant polypropylene. This unit comes supplied with fitted hose and integral wall/overhead pivoting mounting bracket. Supplied with 20m of hose and is suitable for domestic water delivery only.

Features

- Lightweight and durable - just 10.6kg
- Constructed in high impact UV stabilised polypropylene
- Supplied and fitted with PVC hose for immediate and trouble free installation
- Fully assembled, includes 36"/0.9m connecting hose
- Complete with water gun and convenient handle for portable use
- Fitted with speed control to help automatic hose rewinding constant and at a safe speed keeping it under control at all time
- Hose layering system ensures neat and trouble free storage of hose
- Spring fully enclosed and lubricated
- Integral wall/overhead pivoting bracket
- Non-snag rollers reduce hose wear 12 month manufacturer's warranty



Garden Hose Reel

Spring Rewind

Code D02	Hose Length	Hose ID	Price
C2766	20m	1/2"	179.15

For Whip Check Hose Safety Device



See page 480

Redashe

Features:

- Lightweight & durable just 5.7kgs.
- Constructed in high-impact UV stabilised polypropylene.
- Supplied with correct type of hose for specific application.
- Fully assembled, includes 3' connecting hose.
- Suitable for air, water depending on model ordered.



Reelworks Compact Hose Reels

PVC Hose

Code D02	Female Inlet BSP	Male Outlet BSP	Capacity ID	Capacity Length	Price
C705-100	G1/4"	G1/4"	1/4"	33'/10m	133.05
C705-200	G1/4"	G1/4"	5/16"	33'/8m	138.55

- Tough, corrosion-free polypropylene construction
- Lightweight – average just 10kg, easy to install
- Latching or free run of hose
- Fully automatic hose rewind for neat and tidy storage
- Low effort easy-to-use rewind tension
- Virtually maintenance free
- Completely serviceable – all parts readily available

This compact, spring rewind hose reel is constructed in durable impact-resistant polypropylene. Supplied complete with 15m super flexible hybrid polymer hose, 1.5m inlet hose and integral pivoting wall bracket. The compact size makes this reel ideal for use in smaller workshops where space is limited.

Features:

- Supplied with 15m flexible, premium hybrid polymer hose
- Hose has no memory and lays flat when in use
- Integral pivoting wall bracket, swivels through 180°
- Latching of hose at any length
- Latching system can be set to free run if required



new

Reelworks Compact Hose Reels

Automatic Spring Rewind Hose Reels, suitable for Air & Water

Code D02	Hose ID	Length Metres	Working Pressure	Price
C2753	1/2"	15	20 bar	177.00
C2752	3/8"	15	20 bar	159.30



Rectracta Spring Rewind Hose Reels

High Impact Corrosion-free Polypropylene Body

Code D02	Application	Hose Length m	Hose ID	Hose Type Size	Working Pressure	Female Inlet BSP	Male Outlet BSP	Colour	Price
AR100	Compressed Air	20	3/8"	Reinforced PVC	16 bar	G3/8"	G1/4"	Red	427.95
AR200	Compressed Air	15	1/2"	Reinforced PVC	16 bar	G3/8"	G3/8"	Red	452.75
CW100	Cold Wash 40°	15	1/2"	Reinforced PVC	10 bar	G3/8"	Bare Hose	Blue	513.20
HW100	Hot Wash 90°	12	1/2"	Reinforced Rubber	10 bar	G3/8"	G3/8"	Red	581.40
HW100P	Propane	15	3/8"	Reinforced Rubber	20 bar	G3/8"	G3/8"	Red	579.55
WHP100	High Pressure Water 95°	12	3/8"	Wire Reinforced Rubber	205 bar	G3/8"	G3/8"	Red	747.30
OA100	Oxyacetylene	12	1/4"	Dual Hose Reinforced Rubber	14 bar	G1/4"	G1/4"	Blue	502.35
OA200	Oxyacetylene	10	3/8"	Dual Hose Reinforced Rubber	14 bar	G1/4"	G3/8"	Blue	498.25
GR100	Grease	10	1/4"	Wire Reinforced Rubber	340 bar	G1/4"	G1/8"	Black	682.80
BH100	Breathing Air (EN139)	15	3/8"	Reinforced NBR/PVC	12 bar	G3/8"	G3/8"	Red	705.10

Hose Reels

High visibility, high capacity spring (CRHA series) and manual rewind (CRWM series) hose reels.

Constructed in a heavy gauge steel and finished in a durable, high gloss, powder-coated paint. Strength, performance and reliability are the signature features of this series, along with the professional, modern look.

Capacities range from 20m x 1/2" to 30m x 1" of internal bore hose, with working pressures up to 2700 psi (CRHA) and 700 psi (CRWM). The compact size of both height and width make this range of reel a must for applications where longer and larger hoses are required.

- Heavy gauge mild steel
- Highly visible powder-coated finish
- Rolled and ribbed side discs for strength and rigidity
- Large 4-way roller guide to reduce hose wear
- Externally mounted spring canister and swivel assembly for easy maintenance
- Floor and wall mounting options
- Pressures up to 2700 psi
- Capacities up to 30m

High Visibility, High Capacity Reels

Spring Rewind



Code D02	ID	OD	Hose Length m	Maximum Pressure	Swivel In/Out	Dimensions mm	Price
CRHA-920-AW	3/8"	5/8"	20	2700 psi	3/8" BSP	316 W x 525 D x 485 H	**774.30**
CRHA-930-AW	3/8"	5/8"	30	2700 psi	3/8" BSP	316 W x 525 D x 485 H	**895.05**
CRHA-1320-AW	1/2"	7/8"	20	2500 psi	1/2" BSP	378 W x 525 D x 485 H	**825.00**
CRHA-1330-AW	1/2"	7/8"	30	2500 psi	1/2" BSP	378 W x 575 D x 540 H	**912.75**
CRHA-1920-AW	3/4"	1.1/8"	20	1500 psi	3/4" BSP	378 W x 575 D x 540 H	**1000.10**
CRHA-1930-AW	3/4"	1.1/8"	30	1500 psi	3/4" BSP	448 W x 625 D x 620 H	**1111.25**
CRHA-2520-AW	1"	1.1/2"	20	1200 psi	1" BSP	448 W x 625 D x 620 H	**1263.15**

NB: Reels Supplied with air/water hose.

High Visibility, High Capacity Reels

Manual Rewind



Code D02	ID	OD	Hose Length m	Maximum Pressure	Swivel In/Out	Dimensions mm	Price
CRWM-1320-AW	1/2"	7/8"	20	700 psi	1/2" BSP	415 W x 525 D x 485 H	**652.40**
CRWM-1340-AW	1/2"	7/8"	40	700 psi	1/2" BSP	475 W x 525 D x 485 H	**780.80**
CRWM-1920-AW	3/4"	1.1/8"	20	700 psi	3/4" BSP	475 W x 575 D x 564 H	**850.75**
CRWM-1940-AW	3/4"	1.1/8"	40	700 psi	3/4" BSP	545 W x 625 D x 620 H	**1116.15**
CRWM-2520-AW	1"	1.1/2"	20	700 psi	1" BSP	545 W x 575 D x 565 H	**1123.85**

NB: Reels Supplied with air/water hose.

- Compact, lightweight design
- Fitted inlet cable for connection to supply
- Latching of cable at any length
- Fully automatic spring rewind
- Virtually maintenance free
- Cable length
- 15m (50')
- Amps (cum)
- 3/10
- Reel Dimensions (mm)
- 495 H x 290 W x 495 D



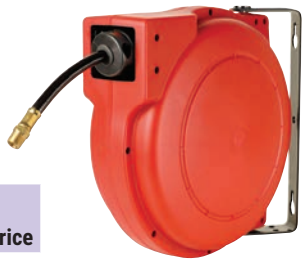
Cable Reel

240V Cable

Code D02	Number of Cores	Weight kg	Price
C605-100	3 x 1.5mm	5.2	**109.70**

Hose Reels

- Auto rewind
- Hose latching every 450mm
- Feeder hose, 1m length
- Mounting bracket for wall or ceiling installation



L8200 Series Reel

Spring Rewind

Code U01	Hose Included	Connection IN/Out	Working Pressure	Dimensions mm	Weight kg	Price
L8250-EU	15m x 10mm ID (PVC)	M1/4"	20 bar	180 W x 450 L x 370 H	7.5	**277.05**

- Extra large swivel for best flow
- Maintainable without special tools
- Free-standing base
- Durable construction
- Latching switch
- 7-position locking brace
- Mounting bracket included
- Adjustable hose stop

LevelWind™ Technology

A layering system that makes hose retraction smooth and easy.



L8300 Series LevelWind™ Reel

Spring Rewind

Code U01	Applications	Hose Included	Hose Material	Connection In/Out	Working Pressure	Temperature Range °C	Weight kg	Price
L8306-EU	Air	23m x 10mm ID	PVC	M1/4" BSPT	24 bar	+10 to +65	12	**406.95**
L8310-EU	Air	30m x 10mm ID	PVC	M1/4" BSPT	24 bar	+10 to +65	12	**405.05**
L8335-EU	Air/Water	15m x 13mm ID	PVC	M1/2" BSPT	20 bar	+10 to +65**	12	**385.95**
L8351-EU	Marine*	18m x 16mm ID	PVC	M1/2" BSPT	10 bar	+5 to +60	15	**525.40**
L8350-EU	Potable Water	23m x 13mm ID	PVC	M1/2" BSPT	10 bar	+5 to +60	12	**395.50**
L8345-EU	Garden	23m x 13mm ID	PVC	M1/2" BSPT	10 bar	+5 to +60	12	**412.70**

* With stainless steel critical components

** +5ºC to +60ºC for water application

Legacy Zilla Air Reels

- Spring retractable
- Premium Hybrid Polymer 'Flexzilla hose'
- Superior 'all weather' flexiblilty
- Colour makes hose more visible in workplace







Bridge engineering reel-solutions

Other models available for other applications

Hose Reels

- Extra large swivel for best flow
- Maintainable without special tools
- Free-standing base
- Durable construction

LevelWind™ Technology

A layering system that makes hose retraction smooth and easy.

- Latching switch
- 7-position locking brace
- Mounting bracket included
- Adjustable hose stop

Includes Flexzilla hose, a premium hybrid polymer hose with all weather flexibility and kink resistant under pressure



L8300 Series LevelWind™ Reel

Flexzilla Spring Rewind

Code U01	Applications	Hose Included	Hose Material	Connection In/ Out	Working Pressure	Temperature Range °C	Weight kg	Price
L8306-FZ	Air	23m x 10mm ID	Flexzilla	M1/4" NPT	20 bar	-40 to +60	12	**445.20**
L8335-FZ	Air	15m x 13mm ID	Flexzilla	M3/8" NPT	20 bar	-40 to +60	15	**445.20**

- Lays flat, no memory, superior bend radius
- Kink resistant under pressure
- Extreme all weather flexibility
- Includes bend restrictor to prolong hose life
- With anodized aircraft aluminium fittings



ZillaReel Air Hose Reel

Spring Rewind

Code U01	Applications	Hose Included	Hose Material	Connection In/Out	Working Pressure	Temperature Range °C	Weight kg	Price
L8230FZ	Air	9m x 10mm ID	Flexzilla	M1/4" NPT	10 bar	-40 to +60	5	**202.55**
L8250FZ	Air	15m x 10mm ID	Flexzilla	M1/4" NPT	10 bar	-40 to +60	7.5	**357.25**

Hose Reels

REELCRAFT

Reelcraft's new value series hose reels were developed for medium duty, spring-driven hose reel applications. Designed for stationary indoor and outdoor use, these reels can be attached to most surfaces that can be drilled. Series LC reels are available in stainless steel or powder-coated steel construction.

- Robust construction
- Base and guide arm made of heavy-gauge steel stampings with reinforcing ribs
- Easy mounting
- Base slots to facilitate mounting and adjustment
- Latch spring
- Field-proven torsion spring, stainless steel construction
- Corrosion resistant
- Individually powder-coated steel or high quality stainless steel components



Medium-duty Hose Reel, Spring Retractable

Air/Water PVC Hose

Code B03	Male Outlet BSP	Female Inlet BSP	Hose Ø mm	Maximum Working Pressure	Length m	Weight kg	Price
LC650-OLP70	3/8"	3/8"	10 x 15	20 bar	15	17	313.45
LC850-OLP70	1/2"	1/2"	13 x 19	20 bar	15	19	356.40
LC670-OLP70	3/8"	3/8"	10 x 15	20 bar	21	20	336.60
LC870-OLP70	1/2"	1/2"	13 x 19	20 bar	21	22	382.95

Series S reels are economical, lighter weight, easy to handle and meet the demands of a medium-duty industrial-grade reel for continuous operation.

- The design protects the hose and allows easy cleaning of both hose and reel
- Wall, ceiling or floor mount
- Vented case – the reel is ideal for outdoor applications with openings that allow water to drain
- External hose tensioning – hoses can easily be replaced and re-tensioned without disassembling the reel
- Unique mounting – bracket system allows mounting in any position with the advantage of the swivel feature



Spring Retractable Composite Reel

Air/Water PVC Hose

Code B03	Male Outlet BSP	Female Inlet BSP	Hose Ø mm	Maximum Working Pressure	Length m	Weight kg	Price
SGA3665-OLP	3/8"	3/8"	10 x 16	16 bar	20	11	406.05
SGA3850-OLP	1/2"	1/2"	13 x 20	17 bar	16	10	394.60



Spring Retractable Composite Reel

Hot Water PVC Hose

Code B03	Male Outlet BSP	Female Inlet BSP	Hose Ø mm	Maximum Working Pressure	Length m	Weight kg	Price
SHA3850-OLP	1/2"	1/2"	13 x 20	16 bar	15	10	444.80

Series 4000 reels are durable and compact for a wide range of applications with critical space requirements. A full flow shaft and swivel assures maximum product delivery.

- Reinforced steel – the robotically-welded steel base offers maximum strength and consistent quality. All steel components are powder coated for maximum corrosion resistance
- Full flow, stress-free swivel design – the full flow swivel combines the highest grade seal design and materials with bearing areas to ensure maximum service life. The hose is plumbed into the base to eliminate the risk of undue stress on the swivel
- Long life drive spring – de-clutching arbor virtually eliminates possibility of spring damage due to reverse winding
- Only the highest quality spring steel is used and conditioned to ensure there are no imperfections, offering maximum service life
- Quiet speed latch– the latch cam is designed for reliable, quiet operation



Premium Duty Hose Reel, Spring Retractable

Air/Water PVC Hose

Code B03	Male Outlet BSP	Female Inlet BSP	Hose Ø mm	Maximum Working Pressure	Length m	Weight kg	Price
4435-OLP118	1/4"	3/8"	6 x 12	21 bar	11	9	325.70
4625-OLP118	1/4"	3/8"	10 x 15	21 bar	8	9	414.65
5650-OLP118	1/4"	3/8"	10 x 15	21 bar	15	16	521.90

Reelcraft's Series 7000 is very robust and ideal for the most demanding applications. The reel's base and guide arm are formed from high-grade steel and engineered with structural forms and gussets to yield the greatest amount of strength. The standard low pressure hose is for air or water service only.

- The basic reel without hose can be used for air, water or oil
- Guide arm adjusts to three positions
- Reinforced steel – the steel guide arm and base are stamped with ribs and gussets to ensure maximum strength and lightest possible weight
- Full flow, stress-free swivel design – the full flow swivel combines the highest grade seal design and materials with bearing areas to ensure maximum service life. The hose is plumbed into the base to eliminate the risk of undue stress on the swivel
- Long life drive spring – de-clutching arbor virtually eliminates possibility of spring damage due to reverse winding. Only the highest quality spring steel is used and conditioned to ensure there are no imperfections, offering maximum service life
- Quality finish and corrosion resistant – individually powder coated components offer the maximum protection from premature corrosion



Heavy Duty Hose Reel, Spring Retractable

Air/Water PVC Hose

Code B03	Male Outlet BSP	Female Inlet BSP	Hose Ø mm	Maximum Working Pressure	Length m	Weight kg	Price
7650-OLP118	1/4"	1/2"	10 x 15	21 bar	15	20	647.10
7670-OLP118	1/4"	1/2"	10 x 15	21 bar	22	21	704.10
7850-OLP118	3/8"	1/2"	13 x 19	21 bar	15	21	647.10

Reelcraft's Series 80000 and D80000 spring-retractable reels incorporate the most current design and manufacturing techniques to guarantee long life and trouble-free performance. All-steel construction and a baked-on powder coat finish combine to produce a rugged, corrosion-resistant product suitable for a wide variety of heavy duty applications. Series D80000 reels are also supplied with Reelcraft's ball-bearing style swivel.

- Reinforced steel – the steel guide arm and dual pedestal base are stamped with ribs and gussets and are robotically welded to ensure maximum strength and lightest possible weight. The unitised cast fluid path and ratchet reduce wearable parts and ease of assembly
- Full flow, stress-free swivel design – the full flow swivel combines the highest grade seal design and materials with bearing areas to ensure maximum service life
- Long life drive spring – the unitised cast aluminium fluid path, with built-in de-clutching arbor, virtually eliminates possibility of leakage and spring damage due to reverse winding. Only the highest quality spring steel is used and conditioned to ensure there are no imperfections, offering maximum service life
- Quality finish and corrosion resistant – individually powder-coated components offer the maximum protection from premature corrosion



Heavy Duty Hose Reel, Dual Pedestal

Air/Water PVC Hose

Code B03	Male Outlet BSP	Female Inlet BSP	Hose Ø mm	Maximum Working Pressure	Length m	Weight kg	Price
83050-OLP118	3/4"	3/4"	19 x 27	17 bar	15	40	1094.70
D83075-OLP118	3/4"	3/4"	19 x 27	17 bar	23	46	1355.65
D84050-OLP118	1"	1"	25 x 35	17 bar	15	47	1355.65

Hose Reels

REELCRAFT

Reelcraft's spring retractable fuel delivery reels, equipped with Viton seals, incorporate metal forms to ensure the greatest possible strength and are ideal for mobile and permanent-mount applications. These rugged, corrosion-resistant reels are suitable for a wide variety of fuel applications including E85. Series F7000/F80000 reels are supplied with our ball-bearing style swivel.

- Robust latching mechanism – latch and ratchet are made of heavy duty cast aluminium with substantial surface area to limit the opportunity for premature wear
- Full flow, stress-free swivel design – the full flow swivel combines the highest grade seal design and materials with bearing areas to ensure maximum service life
- Long life drive spring – de-clutching arbor virtually eliminates possibility of spring damage due to reverse winding. Only the highest quality spring steel is used and conditioned to ensure there are no imperfections offering maximum service life
- Quality finish and corrosion resistant – individually powder coated components offer the maximum protection from premature corrosion



Spring Retractable Fuel Reel

Low Pressure Fuel Hose

Code B03	Male Outlet BSP	Female Inlet BSP	Hose Ø mm	Maximum Working Pressure	Length m	Weight kg	Price
F7925-OLP118	3/4"	3/4"	19 x 30	3 bar	8	21	929.70
F83050-OLP118	3/4"	3/4"	19 x 30	3 bar	15	40	1548.05



Spring Retractable Fuel Reel

Low Pressure Fuel Hose

Code B03	Male Outlet BSP	Female Inlet BSP	Hose Ø mm	Maximum Working Pressure	Length m	Weight kg	Price
FD84050-OLP118	1"	1"	25 x 38	3 bar	15	52	1753.20

Reelcraft's spring retractable fuel delivery reels, equipped with Viton seals, incorporate metal forms to ensure the greatest possible strength and are ideal for mobile and permanent-mount applications. These rugged, corrosion-resistant reels are suitable for a wide variety of fuel applications, including E85.

- Robust roller guides – high impact UHMW composite roller guides have outstanding wear and corrosion resistance
- Containerised external drive spring is easily and safely serviced
- Ductile iron fluid path is strong and reliable
- Oversized cast aluminium latch and ratchet, combined with a stainless steel latch spring, offer the longest possible life



Spring Retractable Fuel Reel

Low Pressure Fuel Hose

Code B03	Male Outlet BSP	Female Inlet BSP	Hose Ø mm	Maximum Working Pressure	Length m	Weight kg	Price
FSD13050-OLP118	3/4"	1"	19 x 30	3 bar	15	50	1679.90
FSD14050-OLP118	1"	1"	25 x 38	3 bar	15	58	2069.00

Hose Reels

REELCRAFT

Reelcraft's spring retractable fuel delivery reels, equipped with Viton seals, incorporate metal forms to ensure the greatest possible strength and are ideal for mobile and permanent-mount applications. These rugged, corrosion-resistant reels are suitable for a wide variety of fuel applications, including E85.

- Series FD9000 reels are supplied with our ball-bearing style swivel
- Substantial base frame – the full width frame has the greatest amount of mounting area and overall strength of reels within its class
- Full flow, stress-free swivel design – the full flow swivel combines the highest grade seal design and materials with bearing areas to ensure maximum service life
- Long life drive spring – de-clutching arbor virtually eliminates possibility of spring damage due to reverse winding. Only the highest quality spring steel is used and conditioned to ensure there are no imperfections, offering maximum service life
- Quality finish and corrosion resistant – individually powder coated components offer the maximum protection from premature corrosion



Spring Retractable Fuel Reel

Low Pressure Fuel Hose

Code B03	Male Outlet BSP	Female Inlet BSP	Hose Ø mm	Maximum Working Pressure	Length m	Weight kg	Price
FD9450-OLPBW118	1"	1"	25 x 38	3 bar	15	71	1889.25

Reelcraft's static discharge reels are used to ground equipment operating in hazardous atmospheres. When properly clamped to the ground, the static discharge reel dissipates static electrical build-up, reducing the chances of sparking and the potential for explosion.

*Nylon-covered cable (1/8" OD).

- Strength – made from industrial grade carbon steel
- Compact design – reels require little mounting space for applications where space is a critical requirement
- Corrosion resistance – steel components are powder coated for superior corrosion resistance. Steel cable available with nylon coating for longer service life
- Easily adjust spring tension – loosening two screws allows user to add or remove spring tension



Spring Retractable Grounding Reel

Nylon Covered Cable

Code B03	Clamp Rating amp	Maximum Temperature °C	Hose Ø	Length m	Weight kg	Price
G-3050-N	100	99	1/8"	15	6	492.55

Reelcraft's static discharge reels are used to ground equipment operating in hazardous atmospheres. When properly clamped to the ground, the static discharge reel dissipates static electrical build-up, reducing the chances of sparking and the potential for explosion.

*Nylon-covered cable (1/8" OD).

- Strength – made from industrial grade carbon steel
- Compact design – reels require little mounting space for applications where space is a critical requirement
- Corrosion resistance – steel components are powder coated for superior corrosion resistance. Steel cable available with nylon coating for longer service life
- Versatility – guide arm adjusts to one of several payout positions requiring only standard tools



Spring Retractable Grounding Reel with Guide Arm

Hi-Vis Orange Nylon-covered Cable

Code B03	Clamp Rating amp	Maximum Temperature °C	Hose Ø	Length m	Weight kg	Price
GA-3100-N	100	52	1/8"	30	7	633.05

Hose Reels

Working Pressure
- 8.0 bar

Break Pressure
- 24 bar

Connection Style
- 1/4" male



Air Hose Reel

Polyurethane Tube, Spring Rewind

Code	M05	Hose mm	Hose Length m	Net Weight kg	Price
HR65/6M		6.5 x 9.5	6	1.8	73.75

Working Pressure
- 15 bar

Break Pressure
- 60 bar

Connection Style
- 1/4" male



Air Hose Reel

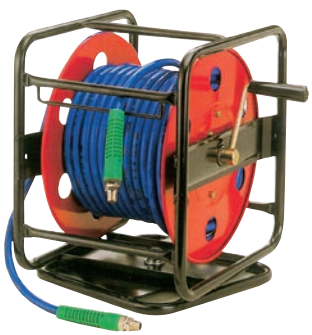
Polyurethane Braid Hose, Spring Rewind

Code	M05	Hose mm	Hose Length m	Net Weight kg	Price
HR031010BL		8 x 12	10	9	167.70

Working Pressure
- 14 bar

Break Pressure
- 60 bar

Connection Style
- 1/4" male



Jumbo Air Hose Reel

Polyurethane Braid Hose, Manual Rewind

Code	M05	Hose mm	Hose Length m	Net Weight kg	Price
HRM85/30M		8 x 12	30	8	168.85

With the unique HELIX Ultra-Coil self layering hose system, combined with a precision machined solid brass central spindle, the Jamec Pem Pro Series hose reels are ideally suited for the trade or industrial workshop.

- High impact tough and durable polypropylene construction
- Fully enclosed weather resistant and UV stabilised outer case protects the hose and inner drum assembly against dirt and other contaminants
- Auto lock and rewind mechanism provides positive hose latching every full revolution of the hose drum
- 2 metre length leader hose with quality brass fittings included as standard
- Heavy duty mounting bracket with fixed in-line or optional 180 degree swivel mount is suitable for wall or overhead mounting
- Convenient carry handle located on the top panel for removing and refitting the hose reel from the mounting bracket
- Adjustable hose stopper
- Includes wall mounting bracket
- Brass fittings

- Leader hose length: 2m with 3/8" BSP male
- Hose material: Reinforced PVC braided
- Reel/Case type: Retractable/polypropylene
- Auto lock/auto rewind: Yes
- Max. working pressure: 300 p.s.i., 2068 kPa
- Fitting size: 3/8" BSP male brass swivel
- Bracket: 180º pivoting
- Case dimension: 440 L x 210 W x 400 H mm
- Application: Air



Pro Series PVC Air 20M

Reinforced PVC Braid Hose, Spring Rewind

Code	L11	Hose Length m	Hose I.D.	Hose O.D.	Weight kg	Price
58.1034		20	9.5mm-3/8"	16mm-5/8"	8	173.70

- Leader hose length: 2m with 1/2" BSP male
- Hose material: Reinforced PVC braided
- Reel/Case type: Retractable/polypropylene
- Auto lock/auto rewind: Yes
- Max. working pressure 300 p.s.i., 2068 kPa
- Fitting size: 1/2" BSP male brass swivel
- Bracket: 180º pivoting
- Case dimension: 440 L x 210 W x 400 H mm
- Application: Air (high volume)



Pro Series PVC Air 15M

Reinforced PVC Braid Hose, Spring Rewind

Code	L11	Hose Length m	Hose I.D.	Hose O.D.	Weight kg	Price
58.1056		15	12.5mm-1/2"	18.5mm-3/4"	8	173.70

Tyre Inflation Equipment

- Guaranteed accuracy
- Cast aluminium body with impact-absorbing rubber bumper
- Light (weighs less than 1kg) yet robust and durable
- Slimline design – attractive, easy to hold
- Magnified linear scale – accurate and easy to read anti-mist scale for inflation and deflation
- Ergonomically designed trigger – comfortable and easy to use with two-click action
- Designed for higher pressure applications, available with dual scale calibration of 45-300 psi/3-21 bar



'Airforce MK4' High Pressure Tyre Inflator

Inlet 1/4" BSPP

Code D03	Hose Length	Connection	Price
AFG6H04	1.8m (6ft)	Single Clip-on	184.85

- Open end: unvalved (air straight through)
- Hold on: hold onto valve to inflate
- Clip on: clip slides down to hold onto valve to inflate
- Calibrated: 0-138 psi/0-9.6 bar
- Supplied with a certificate of calibration

A new and improved version of the highly regarded MK3 tyre inflator.

new



'Airforce MK4' Tyre Inflator

MK4 Standard

Code D03	Connection	Price
AFG4H03	Twin Hold-on	102.20
AFG4H04	Single Clip-on	100.50

new



'Airforce MK4' Tyre Inflator

MK4 Tyre Shop

Code D03	Hose Length	Connector	Price
AFG4H05	1.8m (6ft)	Twin Clip-on	136.40
AFG4H06	2.7m (9ft)	Twin Clip-on	138.50
AFG4H061	2.7m (9ft)	Single Clip-on	117.25

Premium electronic tyre inflation for simplicity, speed and accuracy in tyre shops, garages and transport depots.

- Robust electronic design
- Ceramic sensor
- Over-pressure warning if pressure exceeds 174 lbf/in
- Long battery life, over 950 working hours
- Low battery warning light



'Airforce' Tyre Inflator, Dial Display

Inlet 1/4" BSPP

Code D03	Description	Hose Length	Connection	Price
AFG1H03	Dial Display	21"	Twin Hold-on	104.35

Premium mechanical air line gauge for dependable high performance tyre inflation in tyre shops, garages and transport depots.

- Direct valve design increasing inflation and deflation rates
- Individually tested and certified
- Built-in swivel and hanging device

Accuracy

Exceeds EC Directive 86/217.

Reading Accuracy

0.2 psi.

Inflation Flow

910L/min at 13 bar supply.



'Accura 1' Tyre Inflator, Digital Display

Inlet 1/4" BSPP

Code D03	Description	Hose Length	Connection	Price
DAC1A03	Digital Display	21"	Twin Hold-on	144.00

Tyre Inflation Equipment

The Accura MK4 tyre inflator marries the ruggedness of a metal analogue inflator with the lightness, accuracy and ease-of-use of a digital gauge.

- Twin hold-on connector
- Extremely robust aluminium body with protective rubber bumper
- Permanently backlit in use, auto off after 25 seconds no-use (easy to read in dark workshops or at night)
- Three units of calibration toggle as standard (psi, bar and kPa)
- The lightest digital inflator on the market
- Higher pressure range for multiple applications
- Individually tested and certified against national approved gauges



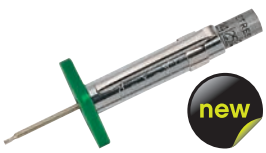
'Accura MK4' Tyre Inflator, Digital Display

Inlet 1/4" BSPP

Code	D03	Hose Length	Pressure	Price
DAC403		21"	0.3-17.2 bar	118.15

Tread Depth Gauge

1-26mm, VOSA approved



Code	D03	Description	Price
TDG16C05		Complies with EC Directive 89/459/EEC, 1.6mm Marking	6.10

Tyre Pressure Gauges

Pocket Type, Angled Head, Dual Calibrated



Code	D03	Description	Price
TPG3H01		10 to 120lbf/in² in 2lb Units & 0.8 bar Units	15.95
TPG1H01		6 to 50lbf/in² in 1lb Units, 0.5 to 3.4 bar in 0.1 bar Units	13.75

Tyre Pressure Gauges

Pocket Service Type, Dual Calibrated



Code	D03	Description	Price
TPG4H01		10 to 120lbf/in² in 2lb Units & 0.8 to 8.2 bar in 0.2 bar Units	22.85

- Open end: unvalved (air straight through)
- Closed end: valved (operates when valve opens tyre valve)
- Hold on: hold onto valve to inflate
- Clip on: clip slides down to hold onto valve to inflate



Tyre Valve Connectors

Inlet 1/4" BSPP

Code	D03	Description	Price
CO1A03		Twin Hold-on Connector (Open End)	14.30
CO1B03		Twin Hold-on Connector (Closed End)	14.85
CO2E03		Single Clip-on Connector (Open End) Tailpiece for 4.75mm (3/16") Bore Hose	16.25
CO2F03		Single Clip-on Connector (Closed End) Tailpiece for 4.75mm (3/16") Bore Hose	16.25
CO2H03		Single Clip-on Connector (Open End) Tailpiece for 6.35mm (1/4") Bore Hose	15.90
CO2J03		Single Clip-on Connector (Closed End) Tailpiece for 6.35mm (1/4") Bore Hose	16.25
CO3A03		Twin Clip-on Connector (Open End)	46.05
CO3B03		Twin Clip-on Connector (Closed End)	46.05
CO8E72		Euro Style Single Clip-on Connector (Open End) for 4.75mm (3/16") Bore Hose	6.45

Tyre Inflation Equipment

- Measurement range: 0-170 psi
- Air inlet: 1/4"
- Hose interior diameter: 10mm
- Length: 600mm
- Weight: 0.76kg



Dial Type Inflator

Straight

Code	M06	Description	Price 1-9	Price 10+
TGPC-1		Dial Type Inflator	28.40	27.00

Dial Type Inflator

Pistol



Code	M06	Description	Price 1-9	Price 10+
DTAG-3		Pistol Type Inflator	20.45	19.45

Fuel Equipment

- Steel construction
- Pumping rate: 16 litres/min
- Suction tube: telescopic 480-900mm (19”-36”)



Hand Pump

Lever Action

Code	P34	Description	Price
13012		2” BSP, 16L/min	33.25

Kit fits into 2” socket, for use on 205 litre drums and tanks up to 1.5m deep.

- 1” semi-rotary hand pump
- Manual nozzle
- Tank/pump connector
- 4m x 3/4” outlet hose



Semi-rotary Pump

Kit

Code	P34	Description	Price
SRG2A.KIT		1” BSP Hand Pump Kit	446.25

- Suitable for diesel and biodiesel up to B100, light oils and water
- Semi-rotary, double acting
- Cast iron body with brass internals
- Flanged in-line threaded ports



Semi-rotary Pump

1” BSPP

Code	P34	Price
SRG2A		152.15

- Suitable for pumping most liquids: acids, alkalines, antifreeze, degreaser, distilled water, diesel, biodiesel B100, light oils and solvents
- Includes delivery hose and suction pipe



Syphon Pumps

Manual

Code	P34	Description	Price
HPS25		Fits 5-25L Containers	3.10
HPS205		Fits 205L Drums	12.20

- Suitable for fuels, water, oils and many other liquids
- Removes oil from vehicles, lawnmowers and motorbikes without draining
- Can remove water from bunded fuel tank cabinets and suck up any fuel spillages



Liquid Extraction Vacuum Pumps

Manual

Code	P34	Description	Price
HP.SUC6		Holds 6 Litres	106.90
HP.SUC17		Holds 17 Litres	239.80

- Suitable for use with diesel fuel, kerosene and light lubricating oil.



Rotary Hand Drum Pump

Cast Iron

Code	P34	Description	Price
MS-25		2” BSP, 25L/min, 320-1000mm, 3 Piece Pipe	29.00



Drum Tap

Barrel Tap

Code	P34	Description	Price
DG1900		Plastic, 3/4” BSP	2.70
DG1909		Metal, Self Closing, 3/4” BSP	12.75
DG1902		Plastic, 2” BSP	23.80

- Only suitable for diesel or biodiesel up to B30
- Brass hose tails, threaded BSPM taper
- Ends held in place with stainless steel machine bands
- Maximum operating pressure: 50 psi (3 bar)
- Not electrically bonded, nylon reinforcement



Delivery Hoses

1” BSPT Male Connections

Code	P34	Description	Price
CH4.25-IQ		4m x 1” BSPM	34.60
CH6.25-IQ		6m x 1” BSPM	46.85
CH10.25-IQ		10m x 1” BSPM	72.55

Fuel Equipment

- Aluminium construction with bonded nitrile valve seal
- Automatic nozzle, stainless steel
- Includes Viton seal and 3/4" fixed inlet



Basic Trigger Nozzle

Manual

Code	P34	Description	Price
TN6000		1" BSP Female Thread, No Latch	21.95

- Can be used with gravity feed tanks or electric pumps
- Only suitable for diesel B30
- 3/4" hose tail
- Integral hook for tidy storage

Maximum Working Pressure

- 60 psi (4 bar)



Professional Trigger Nozzle

Automatic, Stainless Steel

Code	P34	Description	Price
NOZA.SS		60L/min, 3/4"	397.70

- Only suitable with diesel or biodiesel up to B100
- Cast aluminium body, 1" BSPF swivel inlet
- Can be used with gravity feed tanks or electric pumps
- Integral hook for tidy storage when not in use



Polyethylene Trigger Nozzle

Manual

Code	P34	Description	Price
NOZ.C		Polyethylene Nozzle	18.40

- Automatically shuts off the flow of fuel when vehicle tank is full
- Only suitable with diesel B30
- 3-position stay open latch
- For use with electric pumps only



Piusi Self 3000 Trigger Nozzle

Manual

Code	P34	Description	Price
NOZ.S3A		150L/min, with Swivel	51.05

- Aluminium body, Viton disc, plastic moulded scruff guard

Minimum Operating Pressure

- 4 psi (0.27 bar)



Professional Trigger Nozzle

Automatic

Code	P34	Description	Price
NOZA.X		80L/min, 1"	179.05
NOZA.X25		140L/min, 1"	335.30



Trigger Nozzle

Automatic

Code	P34	Description	Price
M3700		1" BSP 80L/min	280.35

Fuel Equipment

- Only suitable for diesel, biodiesel B30 and water to 80°C
- Length 147mm, diameter 52.5mm, weight 0.4kg
- 12V centrifugal submersible pump
- 2m outlet hose (1/2")
- 500 hour life expectancy
- 3m long battery cable and clips
- Continuously rated for periods up to 1 hour
- Does not run dry

Maximum Flow

- 18 litres/min

Maximum Working Pressure

- 15 psi (1 bar)



Battery Submersible Pump Kit

12V

Code	P34	Price
12SP18A.KIT		45.70

- Only suitable with diesel or biodiesel up to B30
- Sturdy steel case with carry handle
- On/off switch and bypass valve
- 2m long battery lead and crocodile clips

Maximum Flow

- 40 litres/min



Battery Portable Pump Kit

12V

Code	P34	Price
12PA.KIT1B		306.05

- Only suitable with diesel, biodiesel B30 and water to 80°C
- Length 145mm, diameter 47.5mm
- 12V centrifugal submersible pump
- 3m outlet hose (1/2")
- 500 hour life expectancy

Maximum Flow

- 18 litres/min



Battery Portable Pump

12V

Code	P34	Price
12PA.BARE		206.25

- Only suitable for use with agricultural chemicals or water
- For spraying and transferring liquids
- With pressure switch and fittings
- Self priming to 2m
- EPDM diaphragm
- 1/2" and 3/4" barb plug-in ports



On-demand Diaphragm Pumps

12V

Code	P34	Description	Price
DP12.4		4L/min, 35 psi (2.4 bar)	49.85
DP12.17		17L/min, 40 psi (2.8 bar)	124.60

Maximum pressure

- 50 psi, 3.5 bar

Accuracy

- +/- 2%



Flow Meter

4 Digit Register

Code	P34	Description	Price
FM4		1" BSPPorts, 20-120L/min	124.65

Fuel Equipment

- Only suitable with diesel or biodiesel up to B100
- Pumping speeds 50, 80 or 100 litres/min
- Switch and 2m long mains cable
- Weatherproof to IP55 for outdoor use
- Direct drive, self priming, vane pumping units



Mains Diesel Transfer Pumps

50L/min

Code P34	Voltage	Price
SPT70B	230V	269.65
SPT70K-110	110V	771.45

- Only suitable with diesel or biodiesel up to B100 and clean oils up to SAE 90
- Vane pump unit
- Switch and bypass value, 3/4" BSPF ports
- Foot mounting plate
- Weatherproof to IP55

Maximum Flow

- 20 litres/min (SAE 30 at 20°C)



Mains Piusi Transfer Pump

20L/min

Code P34	Voltage	Price
VISCO	230V	742.75
VISCO.110	110V	751.95

- Only suitable with diesel or biodiesel up to B30
- Pumping speed 50 or 75 litres/min
- Fits directly into a 2" socket, for use on 205L



Mains Diesel Pump Kit

Direct Mount, 50L/min

Code P34	Voltage	Price
SPS.KTMK	230V	785.45

- Only suitable with diesel or biodiesel up to B30
- Fits on outlet side only
- 1" BSPF ports
- Cast aluminium head with see-through polycarbonate bowl

Maximum Gravity Flow

- 45 litres/min



Bowl Filters

Fuel

Code P34	Description	Price
FFILT.KIT	Filter Kit, Particles (495)	77.90
FFILT.ET	Particle Element	12.60
FFILT.KITW	Filter Kit, Water & Particles (496)	88.05
FFILT.ELW	Water & Particle Element	29.60

Legacy Zilla Air Reels

Spring retractable

Premium Hybrid Polymer 'Flexzilla hose'

Superior 'all weather' flexibility

Colour makes hose more visible in workplace







Bridge engineering reel-solutions

Other models available for other applications

MIKALOR











Much more than just HEAVY-DUTY clamps





603 Multilayer Bendable Pipe



605 System Pipes



606-608 Technopolymer Fittings & Valves



610-611 Aluminium Fittings



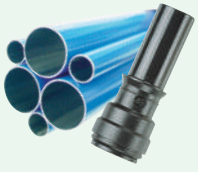
612-613 168.3mm – 6” Tubing & Fittings



614-615 Aluminium Valves, Manifolds & Common System Accessories



617 Quick Line Kits



620-622 John Guest Air Line Ring Main System



623-625 Plastic Plumbing Push-in Fittings



626-632 UPVC Metric Pipe System



633-641 UPVC & ABS Imperial Pipe System



642-643 UPVC Threaded Fittings



644 Threaded Polypropylene Fittings



645-647 Compression Fittings for Polyethylene Pipe



648-649 Polyethylene Pipe Universal Transition Fittings & Valves



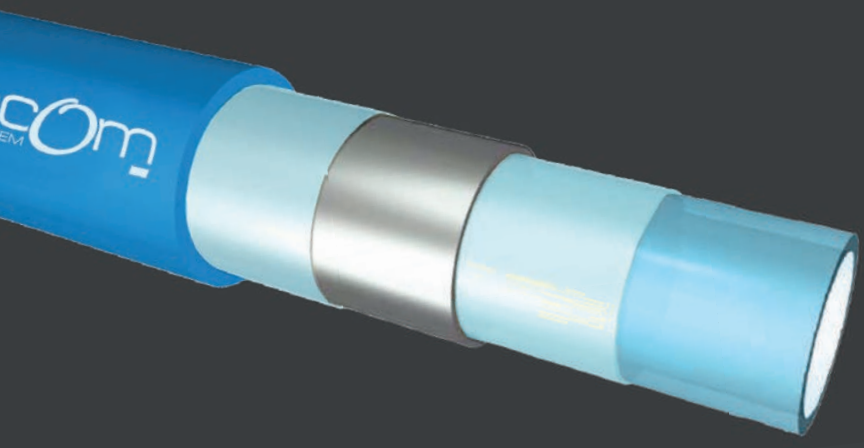
650 Pipe Cutters & Tube Benders



651 Leak Detection



653-663 Misting Systems



MULTILAYER BENDABLE PIPE

Bendable, resistant and specific for compressed air

Due to its unique structure, Aircom's multilayer pipe for compressed air delivers excellent physical and chemical features, typical of PE-RT.

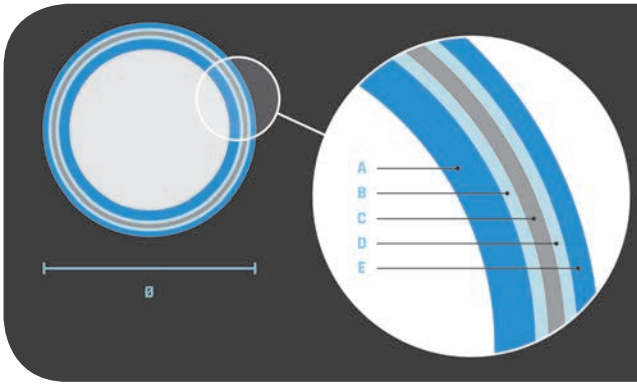
The structure of the multilayer pipe incorporates an aluminium layer, providing resistance to high pressures and high operating temperatures.

The lightness of the material enables easy shaping of piping sections, making installation trouble-free even in problem areas.

AIRCOM'S MULTILAYER PIPE ADVANTAGES

- ✔ Specifically for compressed air piping.
- ✔ Easy creation of shaped piping sections.
- ✔ Easy to fit around obstacles, corners, pillars, etc.
- ✔ Easy installation owing to its bendability.
- ✔ Linear thermal expansion factor similar to aluminium pipe.
- ✔ Corrosion resistant.
- ✔ Outstanding durability.

LAYERS AND MATERIALS



- **A** PE-RT (inner layer, colourless)
- **B** Adhesive layer
- **C** Aluminium layer, overlapped and ultrasonic welded
- **D** Adhesive layer
- **E** PE-RT (outer layer, blue)

Multilayer Bendable Pipe

new

aircom PIPINGSYSTEM





Coated Aluminium Pipe

Compressed Air, 50 Metre Coils, Blue

Code P68	Ø mm	Price
QLTUMLST016	16	377.05
QLTUMLST020	20	505.80
QLTUMLST025	25	662.15

Bending Gun

Heavy-duty

Code P68	To Suit mm	Price
DIRPIEGTMLS1625	16-25	1502.10







Calibrator & Chamfering Tool

Heavy-duty

Code P68	To Suit mm	Price
DIRCALML016025	16-25	35.70

Outer Bending Spring

Heavy-duty

Code P68	To Suit mm	Price
DIRMOLMLEST16	16	51.75
DIRMOLMLEST20	20	52.85
DIRMOLMLEST25	25	52.35

Inner Bending Spring

Heavy-duty

Code P68	To Suit mm	Price
DIRMOLMLINT16	16	51.75
DIRMOLMLINT20	20	51.75
DIRMOLMLINT25	25	52.85

For Heavy-duty Pipe Cutter



See page 622

TECHNOPOLYMER SYSTEM



Lightweight, but powerful

The Quick Line technopolymer product range comes in the following diameters:

16, 20, 25, 32, 40, 50 and 63 mm

A careful study and design of dimensions and materials enable us to achieve a light and functional, all-technopolymer product in a wide range of sizes, allowing you to create your systems without any problems.

ENERGY SAVING

Short installation time

The quick and easy assembly of our piping systems is the result of an innovative technology, with an instant connection of the fitting components to the aluminium pipe.

Air quality and maintenance

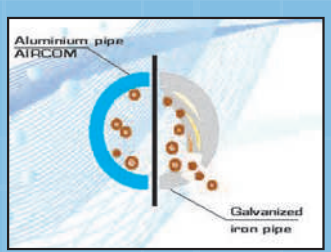
Owing to full technopolymer construction, air quality keeps constant features from compressor outlet up to all end user points. Minimum roughness of internal pipe surfaces allows optimal air flow. The high quality and high resistance features of our fittings will significantly reduce maintenance costs.

Modularity and resistance

Our modular and lightweight technopolymer systems are an optimal solution to reduce installation time.

Owing to careful study of components and of materials, our fittings feature noticeable resistance to corrosion, mechanical shocks and thermal variations.

Quick Line technopolymer is the most advanced evolution in the field of systems for compressed air and pressurised fluids distribution.





Coated Aluminium Pipe

Compressed Air, 6 Metres, Blue

Code P50	Ø mm	Price
QLTUAL6020	20	40.05
QLTUAL6025	25	52.70
QLTUAL6032	32	70.10
QLTUAL6040	40	95.75
QLTUAL6050	50	137.05
QLTUAL6063	63	168.90
QLTUAL6080	80	224.50
QLTUAL6110	110	312.35



Coated Aluminium Pipe

Vacuum, 6 Metres, Grey

Code P50	Ø mm	Price
QLTUALGY6020	20	40.05
QLTUALGY6025	25	52.70
QLTUALGY6032	32	70.10
QLTUALGY6040	40	95.75
QLTUALGY6050	50	137.05
QLTUALGY6063	63	168.90
QLTUALGY6080	80	224.50



Coated Aluminium Pipe

Compressed Air, 4 Metres, Blue

Code P50	Ø mm	Price
QLTUAL4016	16	20.15
QLTUAL4020	20	26.70
QLTUAL4025	25	35.15
QLTUAL4032	32	46.75
QLTUAL4040	40	63.85
QLTUAL4050	50	91.40
QLTUAL4063	63	112.60



Coated Aluminium Pipe

Nitrogen, 6 Metres, Green

Code P50	Ø mm	Price
QLTUALG6020	20	42.10
QLTUALG6025	25	56.95
QLTUALG6040	40	108.25
QLTUALG6063	63	184.00



Double Bend

Tube

Code P41	Ø mm	Price
QLSCI016	16	18.45
QLSCI020	20	22.65
QLSCI025	25	25.15



Classic Technoplastic Pipe

Compressed Air, 4 Metres

Code P50	Ø mm	Price
AIRTU020	20	21.90
AIRTU025	25	28.90
AIRTU032	32	44.15
AIRTU040	40	69.05
AIRTU050	50	97.95
AIRTU063	63	142.55

Technopolymer Fittings



Straight Couplings

Equal Tube x Tube

Code P41	Ø mm	Price
QLMAPA016	16	7.05
QLMAPA020	20	8.80
QLMAPA025	25	11.20
QLMAPA032	32	16.25
QLMAPA040	40	20.25
QLMAPA050	50	27.45
QLMAPA063	63	37.85



Straight Couplings

Reducing Tube x Tube

Code P41	Ø mm	Price
QLRIDPA025020	25 x 20	13.90
QLRIDPA032025	32 x 25	20.15
QLRIDPA040025	40 x 25	23.45
QLRIDPA040032	40 x 32	25.05
QLRIDPA050040	50 x 40	34.00



Unions

Male Thread x Tube

Code P41	Ø mm	BSP	Price
QLMNPA016048	16	G1/2"	7.30
QLMNPA020048	20	G1/2"	7.45
QLMNPA020068	20	G3/4"	7.45
QLMNPA025048	25	G1/2"	10.75
QLMNPA025068	25	G3/4"	10.75
QLMNPA025088	25	G1"	10.75
QLMNPA032088	32	G1"	12.05
QLMNPA032108	32	G1.1/4"	12.05
QLMNPA040088	40	G1"	15.35
QLMNPA040108	40	G1.1/4"	15.35
QLMNPA040128	40	G1.1/2"	15.35
QLMNPA050128	50	G1.1/2"	21.85
QLMNPA050168	50	G2"	21.85
QLMNPA063168	63	G2"	27.50



Elbows

90° Equal Tube x Tube

Code P41	Ø mm	Price
QLGO90PA016	16	8.65
QLGO90PA020	20	10.40
QLGO90PA025	25	13.15
QLGO90PA032	32	18.60
QLGO90PA040	40	22.60
QLGO90PA050	50	31.15
QLGO90PA063	63	40.65



Elbows

45° Equal Tube x Tube

Code P41	Ø mm	Price
QLGO45PA020	20	12.15
QLGO45PA025	25	15.35
QLGO45PA032	32	21.75
QLGO45PA040	40	25.05
QLGO45PA050	50	36.45
QLGO45PA063	63	50.40



Elbows

90° Male Thread x Tube

Code P41	Ø mm	BSP	Price
QLGO90PM020048	20	G1/2"	8.80
QLGO90PM025048	25	G1/2"	10.20
QLGO90PM025068	25	G3/4"	12.35



Tees

Equal Tube x Tube

Code P41	Ø mm	Price
QLTEPA016	16	12.15
QLTEPA020	20	16.85
QLTEPA025	25	20.70
QLTEPA032	32	25.20
QLTEPA040	40	34.70
QLTEPA050	50	46.15
QLTEPA063	63	55.85



Tees

Unequal, Reducing on Branch, Tube x Tube

Code P41	Ø mm	Price
QLTRPA025016	25 x 16	20.25
QLTRPA025020	25 x 20	20.50
QLTRPA032020	32 x 20	25.20
QLTRPA032025	32 x 25	25.20
QLTRPA040025	40 x 25	34.70
QLTRPA040032	40 x 32	34.70
QLTRPA050032	50 x 32	46.15
QLTRPA050040	50 x 40	46.15
QLTRPA063040	63 x 40	64.20
QLTRPA063050	63 x 50	66.00



Tees

Female Thread, Branch x Tube

Code P41	Ø mm	BSP	Price
QLTPPA020048	20	G1/2"	24.30
QLTPPA025048	25	G1/2"	26.30



End Caps

Tube

Code P41	Ø mm	Price
QLCAPA016	16	8.15
QLCAPA020	20	9.10
QLCAPA025	25	10.05
QLCAPA032	32	12.30
QLCAPA040	40	20.20
QLCAPA050	50	26.65
QLCAPA063	63	31.75



Quick Branch Plugs

Tube x Tube

Code P41	Ø mm	Price
QLDERPA025016	25 x 16	22.90
QLDERPA025020	25 x 20	22.90
QLDERPA032016	32 x 16	24.45
QLDERPA032020	32 x 20	24.45
QLDERPA040016	40 x 16	27.50
QLDERPA040020	40 x 20	27.50
QLDERPA040025	40 x 25	27.50
QLDERPA050016	50 x 16	30.55
QLDERPA050020	50 x 20	30.55
QLDERPA050025	50 x 25	30.55
QLDERPA063020	63 x 20	35.35
QLDERPA063025	63 x 25	35.35
QLDERPA063032	63 x 32	36.65
QLDERPA080025	80 x 25	68.70
QLDERPA080032	80 x 32	68.70
QLDERPA110025	110 x 25	70.05
QLDERPA110032	110 x 32	70.05



Quick Branch Plugs

Female Threaded x Tube

Code P41	Ø mm	BSP	Price
DIRDERFF025048	25	G1/2"	25.20
DIRDERFF032048	32	G1/2"	26.90
DIRDERFF040048	40	G1/2"	30.25
DIRDERFF040068	40	G3/4"	31.25
DIRDERFF050048	50	G1/2"	33.60
DIRDERFF050068	50	G3/4"	34.35
DIRDERFF063048	63	G1/2"	40.30
DIRDERFF063068	63	G3/4"	40.30
DIRDERFF063088	63	G1"	40.30
DIRDERFF080048	80	G1/2"	70.35
DIRDERFF080068	80	G3/4"	72.15
DIRDERFF080088	80	G1"	72.95
DIRDERFF110068	110	G3/4"	73.10
DIRDERFF110088	110	G1"	73.10



Assembly Tools

QL Nut Wrench

Code P41	Ø mm	Price
QLCLE016020	16-20	16.60
QLCLE025032	25-32	21.35
QLCLE040050	40-50	32.05
QLCLE063	63	138.70



Pipe Fitting Insertion Meter

Cutting Template

Code P41	Ø mm	Price
QLMIS016063	16-63	21.35

Pneumatic Valve

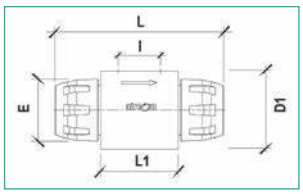
Single Acting

In large compressed air distribution systems, the task of selecting the system or cutting off the descent lines is normally carried out by regular ball valves.

These valves are usually in positions that are difficult to reach, commonly arranged near the top of the building and are normally activated using ladders or systems for hoisting people.

The need and usefulness of an actuated servo valve is observable during the following steps:

- Maintenance
- Need to isolate operating islands from the rest of the system
- Safety in case of failure wherein the immediate interruption of the supply of compressed air is important for the safety of people and equipment





Code	P41	Ø mm	D1	L	L1	I	E	Price
QLVAVIP050		50	109	245	110	57	87	435.40
QLVAVIP063		63	140	290	140	60	97	565.30



Quick Line Stainless Steel Ball Valve

Tube x Tube

Code	P41	Ø mm	Price
QLVAINOX025		25	92.20
QLVAINOX032		32	153.60
QLVAINOX040		40	161.25
QLVAINOX050		50	198.30
QLVAINOX063		63	218.25



Quick Line Brass Ball Valve

Male Thread x Tube

Code	P41	Ø mm	BSP	Price
QLVAM016048		16	G1/2"	44.65
QLVAM020048		20	G1/2"	37.25
QLVAM025068		25	G3/4"	44.00



Quick Line Stainless Steel Ball Valve

Female Thread x Tube

Code	P41	Ø mm	BSP	Price
QLVAINOXF025088		25	G1"	93.85
QLVAINOXF032128		32	G1.1/2"	157.65
QLVAINOXF040128		40	G1.1/2"	190.75
QLVAINOXF050168		50	G2"	221.50
QLVAINOXF063168		63	G2"	271.40



Quick Line Brass Ball Valve

Female Thread x Tube

Code	P41	Ø mm	BSP	Price
QLVAF016048		16	G1/2"	43.20
QLVAF020048		20	G1/2"	34.15
QLVAF025068		25	G3/4"	44.45

ALUMINIUM SYSTEM



Lightweight, but powerful

The Quick Line aluminium product range comes in the following diameters:

20, 25, 32, 40, 50, 63, 80, and 110 mm

A careful study and design of dimensions and materials enable us to achieve a lightweight but powerful, all-aluminium product in a wide range of sizes. With the Ø 110 mm size you will have a powerful flow rate potential, allowing you to create compressor rooms without any problems.

ENERGY SAVING

Short installation time

The quick and easy assembly of our piping systems is the result of an innovative technology, with an instant connection of the fitting components to the aluminium pipe.

Air quality and maintenance

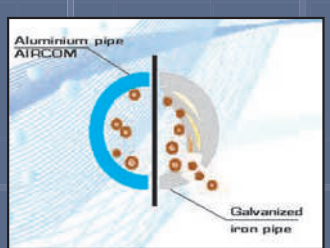
Owing to full aluminium construction, air quality keeps constant features from compressor outlet up to all end user points. Minimum roughness of internal pipe surfaces allows optimal air flow. The high quality and high resistance features of our fittings will significantly reduce maintenance costs.

Modularity and resistance

Our modular and lightweight aluminium systems are an optimal solution to reduce installation time.

Owing to careful study of components and of materials, our fittings feature noticeable resistance to corrosion, mechanical shocks and thermal variations.

Quick Line aluminium is the most advanced evolution in the field of systems for compressed air and pressurised fluids distribution.





Straight Couplings

Equal Tube x Tube

Code P41	Ø mm	Price
QLMAAL020	20	17.90
QLMAAL025	25	19.55
QLMAAL032	32	24.45
QLMAAL040	40	35.80
QLMAAL050	50	49.65
QLMAAL063	63	74.85
QLMAAL080	80	84.60
QLMAAL110	110	113.90



Straight Couplings

Male Thread x Tube

Code P41	Ø mm	BSP	Price
QLMNMAL020048	20	G1/2"	10.55
QLMNMAL020068	20	G3/4"	10.85
QLMNMAL025068	25	G3/4"	12.50
QLMNMAL025088	25	G1"	12.60
QLMNMAL032108	32	G1.1/4"	16.70
QLMNMAL040128	40	G1.1/2"	24.20
QLMNMAL050168	50	G2"	37.00
QLMNMAL063168	63	G2"	56.85
QLMNMAL063208	63	G2.1/2"	64.30
QLMNMAL080208	80	G2.1/2"	74.85
QLMNMAL080248	80	G3"	83.00



Straight Couplings

Female Thread x Tube

Code P41	Ø mm	BSP	Price
QLMPMAL020048	20	G1/2"	13.00
QLMPMAL020068	20	G3/4"	13.70
QLMPMAL025068	25	G3/4"	15.30
QLMPMAL025088	25	G1"	15.30
QLMPMAL032108	32	G1.1/4"	16.80
QLMPMAL040128	40	G1.1/2"	21.75
QLMPMAL050168	50	G2"	37.10
QLMPMAL063208	63	G2.1/2"	63.25



Elbows

90º Equal Tube x Tube

Code P41	Ø mm	Price
QLGO90AL020	20	19.55
QLGO90AL025	25	21.15
QLGO90AL032	32	27.70
QLGO90AL040	40	37.45
QLGO90AL050	50	64.30
QLGO90AL063	63	83.00
QLGO90AL080	80	100.90
QLGO90AL110	110	154.55



Elbows

45º Equal Tube x Tube

Code P41	Ø mm	Price
QLGO45AL020	20	18.85
QLGO45AL025	25	21.65
QLGO45AL032	32	26.25
QLGO45AL040	40	37.75



Elbows

Male Thread x Tube

Code P41	Ø mm	BSP	Price
QLGO90MAL020048	20	G1/2"	14.85
QLGO90MAL025048	25	G1/2"	16.95
QLGO90MAL025068	25	G3/4"	17.25



Tees

Equal Tube x Tube

Code P41	Ø mm	Price
QLTEAL020	20	24.35
QLTEAL025	25	28.25
QLTEAL032	32	34.05
QLTEAL040	40	53.65
QLTEAL050	50	86.90
QLTEAL063	63	112.75
QLTEAL080	80	135.80
QLTEAL110	110	189.25



Tees

Female Thread Branch x Tube

Code P41	Ø mm	BSP	Price
QLTPAL020048	20	G1/2"	23.20
QLTPAL025068	25	G3/4"	25.90
QLTPAL032088	32	G1"	29.45
QLTPAL040108	40	G1.1/4"	40.10
QLTPAL050128	50	G1.1/2"	67.05
QLTPAL063168	63	G2"	105.95
QLTPAL080208	80	G2.1/2"	127.70
QLTPAL110248	110	G3"	148.85

Aluminium Fittings



Quick Branch Plugs

Tube x Tube

Code P41	Ø mm	Price
QLDERAL025020	25 x 20	26.55
QLDERAL032020	32 x 20	28.05
QLDERAL040020	40 x 20	30.95
QLDERAL040025	40 x 25	31.85
QLDERAL050020	50 x 20	34.00
QLDERAL050025	50 x 25	34.85
QLDERAL063020	63 x 20	38.70
QLDERAL063025	63 x 25	39.50
QLDERAL063032	63 x 32	41.65
QLDERAL080025	80 x 25	72.25
QLDERAL080032	80 x 32	73.05
QLDERAL110020	110 x 20	73.55
QLDERAL110025	110 x 25	73.55
QLDERAL110032	110 x 32	74.35



End Caps

Tube

Code P41	Ø mm	Price
QLCAAL020	20	13.90
QLCAAL025	25	14.95
QLCAAL032	32	19.40
QLCAAL040	40	22.45
QLCAAL050	50	32.60
QLCAAL063	63	58.90
QLCAAL080	80	72.40



Flanged Couplings

Female Thread x Tube

Code P41	Ø mm	DIN	Price
QLMFLAL080248DIN	80	G3"	166.70
QLMFLAL110328DIN	110	G4"	117.90



Assembly Tools

QL Nut Wrench for Aluminium Fittings

Code P41	Ø mm	Price
QLCLEAL020025	20-25	21.70
QLCLEAL032040	32-40	32.55
QLCLEAL050	50	45.40
QLCLEAL063	63	52.15
QLCLEAL080	80	58.35



Pipe Fitting Insertion Meter

Cutting Template

Code P41	Ø mm	Price
QLMISAL020110	20-110	27.10

For Aluminium Valves, Manifolds & Accessories



See pages 614-615

For Galvanised Tubes & Fittings



See page 666

168.3mm – 6” Tubing & Fittings

new

aircom PIPINGSYSTEM

A full range of ready-to-use, pre-grooved 168.3mm – 6” aluminium products.

In large industrial sites, main compressed air distribution networks need a flow rate of over 3,000m³ per hour. Such large installations are typical for the following sectors:

- Automotive
- Aeronautical and aerospace
- Textile
- Food
- Printing systems

Compatibility & Specifications

Deliverable fluids:

- Compressed air
- Inert gases
- Vacuum
- Other (please contact sales office for more information)

Operating Temperature:

- -30°c to +80°C approximately

Operating Pressure:

- 12 bar

Vacuum Level:

- 99% (about 10 mbar) approximately



Coated Aluminium Pipe with Grooved Ends

Compressed Air, 6 Metres, Blue

Code	P68	Ø mm	Price
QLTUAL6168		168.3	1043.40



Reduction Pipe

Tube x Tube

Code	P68	Ø mm	Price
QLRIDTU168063		168.3 x 63	1346.60
QLRIDTU168080		168.3 x 80	1395.35
QLRIDTU168110		168.3 x 110	1195.85



Elbow with Grooved Ends

45º Equal Tube x Tube

Code	P68	Ø mm	Price
QLGO45AL168		168.3	805.45



Elbow with Grooved Ends

90º Equal Tube x Tube

Code	P68	Ø mm	Price
QLGO90AL168		168.3	743.50



Tee with Grooved Ends

Equal Tube x Tube

Code	P68	Ø mm	Price
QLTEAL168		168.3	1019.90



Portable Manual Grooving Tool for 168.3mm

Manual Operation with Ratchet Handle

Code	P68	Price
DIRRULLUNI		11871.15

168.3mm – 6" Tubing & Fittings



Expansion Joint

Flanged

Code	P68	Ø mm	DIN	Pressure Rating	Price
DIRDIL168DIN		168.3	4"	PN10/16	365.00

NB: requires **1x QLFLA168480DIN** on each side.



Flanged Adaptor

Tube x DIN

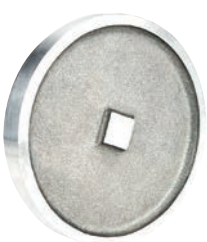
Code	P68	Ø mm	DIN	Pressure Rating	Price
QLFLA168480DIN		168.3	4"	PN10/16	364.60



Straight Rigid Coupling

Equal Tube x Tube

Code	P68	Ø mm	Price
QLMAAL168		168.3	245.45



End Cap with Grooved Ends

Tube

Code	P68	Ø mm	Price
QLCAAL168		168.3	733.95

NB: to be assembled with **QLMAAL168** to lock in place.



Flexible Rigid Coupling

Equal Tube x Tube

Code	P68	Ø mm	Price
QLMAAFL168		168.3	390.80



Quick Branch Plug

Tube x Female Thread

Code	P68	Ø mm	BSP	Price
QLDER168108		168.3	G1.1/4"	171.60
QLDER168128		168.3	G1.1/2"	171.60
QLDER168168		168.3	G2"	171.60
QLDER168208		168.3	G2.1/2"	171.60
QLDER168248		168.3	G3"	171.60



Butterfly Valve

With Coupling

Code	P68	Ø mm	DIN	Pressure Rating	Price
QLVALFAR168		168.3	4"	PN10/16	1505.25



Pipe Bracket

M8 Insert Pieces

Code	P68	Ø mm	Price
DIRFEM10168CF		168.3	14.25

Aluminium Valves

Quick Line Stainless Steel Ball Valve

Tube x Tube



Code P41	Ø mm	Price
QLVAINOX025	25	92.20
QLVAINOX032	32	153.60
QLVAINOX040	40	161.25
QLVAINOX050	50	198.30
QLVAINOX063	63	218.25
QLVAINOX080	80	474.00

Quick Line Stainless Steel Ball Valve

Female Thread x Tube



Code P41	Ø mm	BSP	Price
QLVAINOXF025088	25	G1"	93.85
QLVAINOXF032128	32	G1.1/2"	157.65
QLVAINOXF040128	40	G1.1/2"	190.75
QLVAINOXF050168	50	G2"	221.50
QLVAINOXF063168	63	G2"	271.40
QLVAINOXF080248	80	G3"	565.25

Quick Line Brass Ball Valve

Female Thread x Tube



Code P41	Ø mm	BSP	Price
QLVAF020048AL	20	G1/2"	48.10
QLVAF025068AL	25	G3/4"	60.65

Quick Line Brass Ball Valve

Male Thread x Tube



Code P41	Ø mm	BSP	Price
QLVAM020048AL	20	G1/2"	49.30
QLVAM025068AL	25	G3/4"	63.15

Aluminium Manifolds

Manifolds

Single Port, Female Thread x Female Thread

With drain, 1/4" (blind).



Code P41	Inlet BSP	Outlet BSP	Price
DIRAPMAL048048	G1/2"	G1/2"	30.05

Manifolds

4 Port, Female Thread x Female Thread

With drain, 1/4" (blind).



Code P41	Inlet BSP	Outlet BSP	Price
DIRAPLAL048048	G1/2"	G1/2" (x 4)	53.10
DIRAPLAL068068	G3/4"	G1/2" (x 2) , 3/4" (x 2)	54.20

Manifolds

Double Port, Female Thread x Female Thread

With drain, 1/4" (blind).



Code P41	Inlet BSP	Outlet BSP	Price
APLALL048	G1/2"	G1/2" (x 2)	34.50
APLALL068	G3/4"	G1/2" (x 2)	37.00

Manifolds

5 Port, Female Thread x Female Thread

With drain, 1/4" (blind).



Code P41	Inlet BSP	Outlet BSP	Price
DIRPMUAL120	G3/4"	G1/2" (x 3), 3/4" (x 2)	67.25

Manifolds

3 Port, Female Thread x Female Thread

With drain, 1/4" (blind).



Code P41	Inlet BSP	Outlet BSP	Price
DIRAPFRLAL048048	G1/2"	G1/2" (x 3)	43.05

Manifolds

7 Port, Female Thread x Female Thread

With drain, 1/4" (blind).



Code P41	Inlet BSP	Outlet BSP	Price
DIRPMUAL200	G3/4"	G1/2" (x 5), 3/4" (x 2)	91.25



Pipe Brackets

M8 Insert Pieces

Code P41	Ø mm	Price
DIRFEM8016CF	16	0.90
DIRFEM8020CF	20	1.10
DIRFEM8025CF	25	1.20
DIRFEM8032CF	32	2.45
DIRFEM8040CF	40	3.35
DIRFEM8050CF	50	3.80
DIRFEM8063CF	63	4.45
DIRFEM8080CF	80	8.40
DIRFEM8110CF	110	12.05
DIRSPE020032	Spacer for 20-32 Bracket	1.80
DIRSPE040063	Spacer for 40-63 Bracket	2.10



Deburrers

To Suit Tube

Code P41	Ø mm	Price
DIRSM016050	16-50	142.30
DIRSM063110	63-110	677.50



Aluminium Spigots

Male Thread x Tube

Code P41	Ø mm	BSP	Price
QLPUNM016038	16	G3/8"	9.95
QLPUNM020048	20	G1/2"	12.25
QLPUNM020068	20	G3/4"	16.80
QLPUNM025088	25	G1"	24.60
QLPUNM032108	32	G1.1/4"	34.70
QLPUNM040128	40	G1.1/2"	47.25
QLPUNM050168	50	G2"	68.70
QLPUNM063168	63	G2"	74.25
QLPUNM080248	80	G3"	102.65



Flexible Hoses

Tube x Tube on Outside Diameter

Code P41	Ø mm	Length mm	Price
QLFLEX020	20	800	120.00
QLFLEX025	25	820	133.30
QLFLEX032	32	960	177.85
QLFLEX040	40	1200	230.85
QLFLEX050	50	1430	290.25
QLFLEX063	63	1650	424.60

Quick Connect Couplings



See section 5

QUICK LINE KIT

Your professional
compressed air piping system!









QUICK

EASY

RELIABLE



QUICK LINE KIT
A NEW ERA FOR
COMPRESSED AIR D.I.Y.

Simple and easy to assemble your own compressed air system





3 AVAILABLE SIZES!

DIAMETERS 16 / 20 / 25 mm

FROM 20 TO 36 LINEAR METER



QL KIT 16 mm

QL KIT 20 mm

QL KIT 25 mm

16mm Quick Line Kit
20 metres, 3 drops, Ø16mm

Code	P51	Description	Price
QLKIT-16		16mm Pipe x 3 drops x 20 metres	496.70

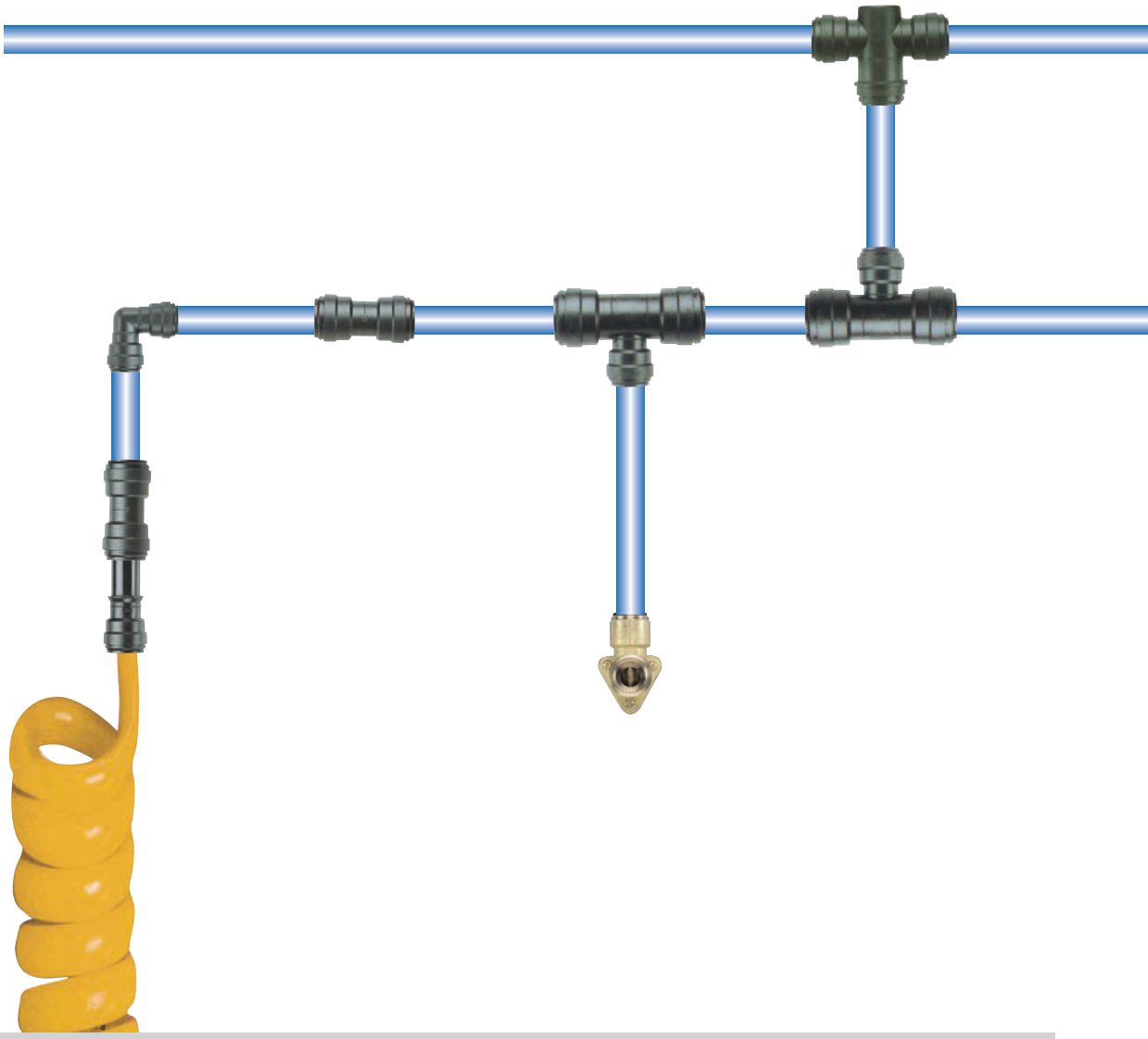
20mm Quick Line Kit
30 metres, 4 drops, Ø20mm

Code	P51	Description	Price
QLKIT-20		20mm Pipe x 4 drops x 30 metres	720.50

25mm Quick Line Kit
36 metres, 5 drops, Ø25mm

Code	P51	Description	Price
QLKIT-25		25mm Pipe x 5 drops x 36 metres	1212.90

Air Ring Main System



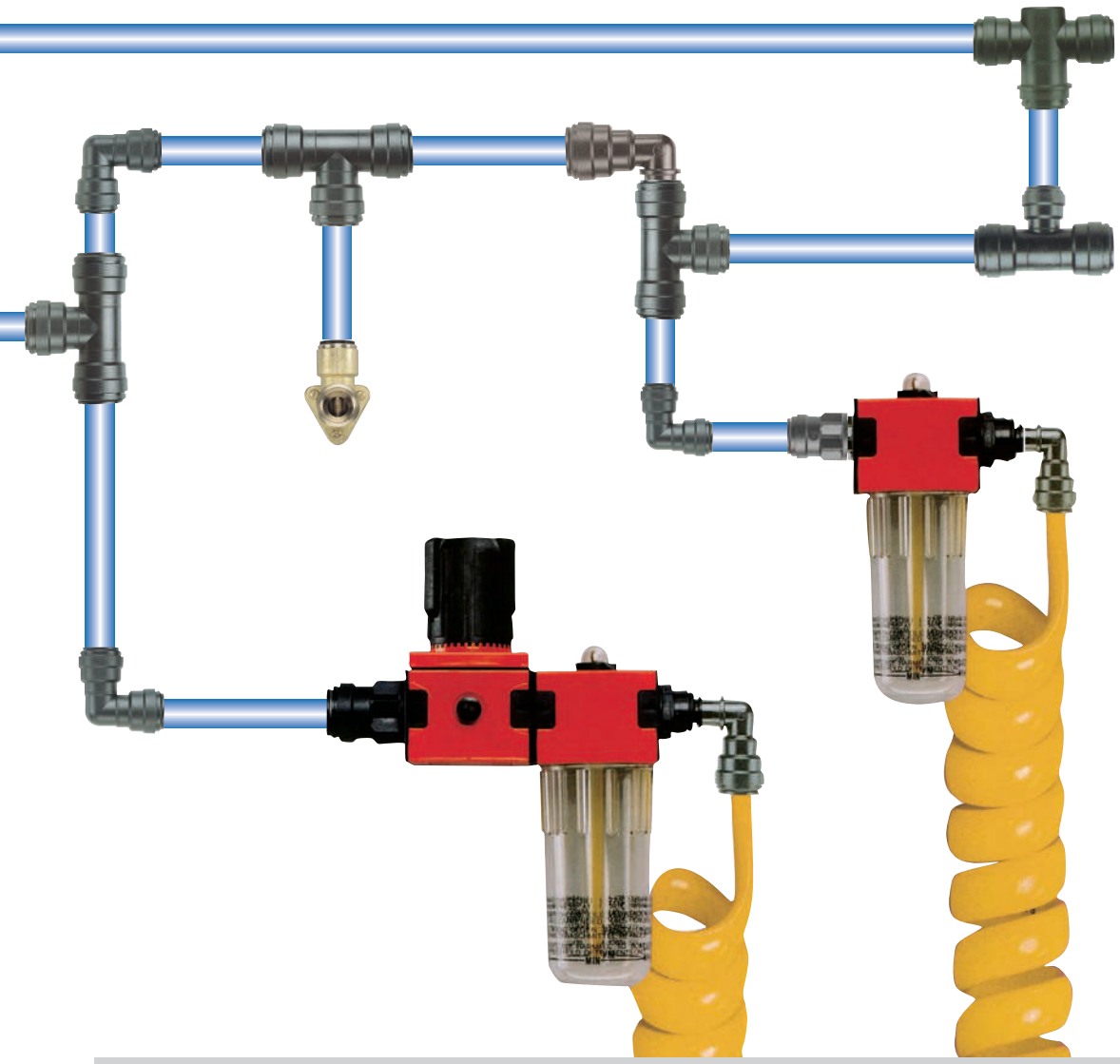
Easy to use push-fit connectors for air line ring mains

The John Guest range of push-fit fittings and pipe provides the ideal connection from compressor receiver and air line service components through to complete ring main and take off points.

Working temperature: -20ºC to +70ºC
Working pressure: 10 bar @ 23ºC

- Designed for air line ring main applications
- Safe, secure and leakproof
- Easy to install
- Easy to disconnect and reconfigure the system
- Recommended for soft metal or plastic pipe
- Proven product design – many millions in use
- Collet cover makes fitting tamper-proof
- Working pressures 0-10 bar

**The fittings are produced in either a tough engineering plastics material or in brass with sizes 12mm to 28mm. They are intended for use with John Guest's nylon pipe, but can also be used with copper or aluminium alternatives.*



Making a connection

Standard fittings

Cut the pipe square
We recommend using the JG Pipe Cutter.



Push up to pipe stop



Pull to check secure
Test the system before use.



To disconnect
Ensure the system is depressurised. Push the collet towards the fitting and remove the pipe. The fitting can be reused.



28mm fittings

28mm fittings also have a collet with stainless steel teeth and an o-ring.



After inserting the pipe, a screw cap is turned approx 1/4 turn. This locks the collet in place and reduces lateral and sideways movement of the pipe.



To disconnect
Turn the screw cap 1/4 turn, push in the collet and remove the pipe. The fitting and pipe can be reused.



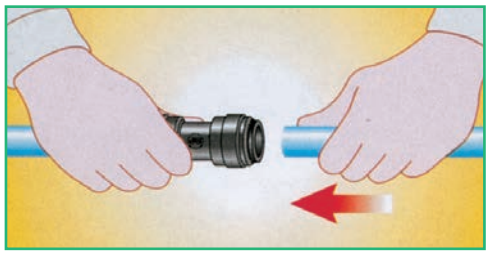
Air Line Ring Main System

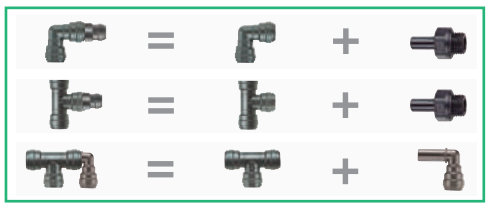
Easy to Use Push-in System for Air Line Ring Mains

The **John Guest** range of push-in fittings provides the ideal connection from compressor receiver and air line service components through to complete ring main and take off points.

Using the **John Guest** system, a compressed air ring main can be installed quickly and easily, considerably reducing the need for specialist staff and providing much reduced production downtime. No need to prepare threaded pipe or apply solvent; all the connections can be made with a simple push-in action. The system is then immediately ready for use.

Because the **John Guest** system is so easy to disconnect, alterations and extensions can be achieved with a minimum of production shut down.





Adaptability

Standard **Super Speedfit®** products can be coupled together to form integral new fittings.



Rigid Nylon Pipe

Compressed Air, 3 Metres, Blue

Code	C02	Size mm OD	Size mm ID	Price 1-9	Price 10+
PA-1209-3M		12	9	9.60	9.15
PA-1512-3M		15	12	11.55	11.00
PA-1814-3M		18	14	19.65	18.70
PA-2218-3M		22	18	23.90	22.75
PA-2823-3M		28	23	39.00	37.05



Straight Connectors

Equal Tube x Tube

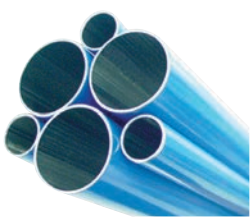
Code	C01	Tube OD mm	Price 1-9	Price 10+
PM0412E		12	2.80	2.70
PM0415E		15	3.15	3.00
PM0418E		18	3.95	3.80
PM0422E		22	4.80	4.60
KM0428E		28	9.80	9.35



Straight Adaptor

Male Thread x Tube

Code	C01	Tube OD mm	Thread BSP	Price 1-9	Price 10+
MM011504N		15	G1/2"	9.15	8.70
MM012206N		22	G3/4"	16.25	15.45
MM012808N		28	G1"	31.90	30.35



Coated Aluminium Pipe

Compressed Air, 3 Metres, Blue

Code	C01	OD mm	Price 1-9	Price 10+
AL-RM1513-3M		15	28.10	26.70
AL-RM1816-3M		18	35.50	33.75
AL-RM2220-3M		22	39.95	38.00
AL-RM2826-3M		28	64.40	61.20



Straight Adaptor

Male Thread x Tube

Code	C01	Tube mm	Tube BSP	Price 1-9	Price 10+
PM011213E		12	G3/8"	3.25	3.10
PM011214E		12	G1/2"	3.55	3.40
PM011514E		15	G1/2"	4.15	3.95
PM011814E		18	G1/2"	4.40	4.20
PM012216E		22	G3/4"	4.70	4.50



Elbows

Equal 90º Tube x Tube

Code	C01	Tube OD mm	Price 1-9	Price 10+
PM0312E		12	3.70	3.55
PM0315E		15	4.40	4.20
PM0318E		18	5.45	5.20
PM0322E		22	6.55	6.25
KM0328E		28	11.80	11.25

Air Line Ring Main System



Tees

Equal Tube x Tube

Code	C01	Tube OD mm	Price 1-9	Price 10+
PM0212E		12	3.90	3.75
PM0215E		15	4.60	4.40
PM0218E		18	5.75	5.50
PM0222E		22	6.95	6.65
KM0228E		28	14.30	13.60



Tees

Reducing on Branch, Tube x Tube

Code	C01	Tube OD mm		Price 1-9	Price 10+
PM3018AE		18	15	7.05	6.70
PM3022AE		22	15	7.40	7.05



Reducer

Reducing Stem x Tube

Code	C01	OD mm Stem	OD mm Tube	Price 1-9	Price 10+
PM061512E		15	12	3.95	3.80
PM061815E		18	15	4.80	4.60
PM062215E		22	15	4.80	4.60
PM062218E		22	18	4.80	4.60
PM062815E		28	15	7.50	7.15
KM062822E		28	22	8.50	8.10

Converts Super Speedfit end to female thread.



Stem Adaptors

Female Thread x Tube

Code	C01	Tube OD mm	Thread BSP	Price 1-9	Price 10+
MM501514N		15	G1/2"	10.00	9.50
MM502216N		22	G3/4"	15.70	14.95

Converts Super Speedfit end to male thread.



Stem Adaptors

Male Thread x Tube

Code	C01	Tube OD mm	Thread BSP	Price 1-9	Price 10+
PM051213E		12	G3/8"	1.80	1.75
PM051214E		12	G1/2"	1.95	1.90
PM051513E		15	G3/8"	1.90	1.85
PM051514E		15	G1/2"	2.40	2.30
PM051814E		18	G1/2"	2.65	2.55
PM052214E		22	G1/2"	2.90	2.80
PM052216E		22	G3/4"	3.45	3.30

Converts Super Speedfit end to male thread.



Stem Adaptors

Male Thread x Tube

Code	C01	Tube OD mm	Thread BSP	Price 1-9	Price 10+
MM051504N		15	G1/2"	10.00	9.50
MM052206N		22	G3/4"	14.00	13.30
MM052818N		28	G1"	24.65	23.45

Please note: a collet cover cannot be used on a Speedfit end assembled with the stem of a 22mm stem elbow.



Stem Elbow

90° Equal Elbow, Stem x Tube

Code	C01	OD mm Tube	OD mm Stem	Price 1-9	Price 10+
PM221212E		12	12	3.70	3.55
PM221515E		15	15	4.40	4.20
PM221818E		18	18	5.45	5.20
PM222222E		22	22	6.55	6.25



Water Trap Tee

Equal Tube x Tube

Code	C01	Tube OD Ends mm	Price 1-9	Price 10+
PMTT22E		22	12.75	12.15



Wing Back Elbow

Female Thread x Tube

Code	C01	Tube OD mm	Thread BSP	Price 1-9	Price 10+
PM15WB		15	G1/2"	21.20	20.15
PM22WB		22	G3/4"	24.90	23.70



Porting Block

Female Thread

Code	C01	BSP	Price 1-9	Price 10+
JG-L-WSK		1/2" (x5)	18.60	17.70

The **John Guest** water trap tee convertor is a simple and convenient way of converting a standard **John Guest** 28mm tee, part no. KM0228E, to a water trap tee.

When fitted, it will stop condensed water within the air ring main circuit from entering the vertical take off spurs.



Water Trap Tee Convertor

Tube

Code	C01	Tube OD Ends mm	Price 1-9	Price 10+
WTC28		28	11.25	10.70



Aluminium Wall Box

Female Thread x Female Thread

Code	C01	Inlets BSP	Outlets BSP	Price 1-9	Price 10+
JGWALLBOX-1/2		G1/2"	G2 x 1/2"	45.50	43.25
JGWALLBOX-3/4		G3/4"	G2 x 1/2"	45.50	43.25

Air Line Ring Main System



Plastic Plug

Tube

Code	C01	Tube OD mm	Colour	Price 1-9	Price 10+
PM0812R		12	Red	1.25	1.20
PM0815E		15	Black	1.40	1.35
PM0818E		18	Black	1.60	1.55
PM0822E		22	Black	1.70	1.65
PM0828E		28	Black	2.20	2.10



End Stop

Tube

Code	C01	Tube OD mm	Price 1-9	Price 10+
PM4612E		12	2.80	2.70
PM4615E		15	3.10	2.95
PM4622E		22	3.75	3.60



Pipe Cutter

Nylon Pipe

Code	C01	Description	Price 1-9	Price 10+
TCH22		For up to and including 22mm pipe	63.85	60.70



Pipe Cutters

Heavy-duty

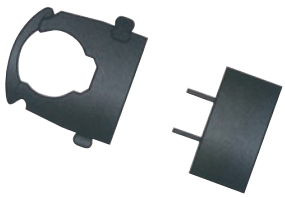
Code	C01	Description	Price 1-9	Price 10+
HDC28		For up to and including 28mm pipe	86.60	82.30
BLADEHDC		Blade to suit	32.50	30.90



U-bend

Equal Tube x Tube

Code	C01	OD mm	Price 1-9	Price 10+
PMUB15E		15	5.40	5.15



Pipe Clips

Code	C01	Tube OD mm	Price 1-9	Price 10+
PC15E		15	0.40	0.37
PC22E		22	0.40	0.37
PC28E		28	0.45	0.42

Spacers

Code	C01	Price 1-9	Price 10+
PCSE		0.30	0.28



Release Aid

Black

Code	C01	Size mm	Price 1-9	Price 10+
15RA		15	0.20	0.18
22RA		22	1.35	1.30
28RA		28	1.90	1.85

Collet covers prevent accidental removal or tampering with piping. The pipe can be inserted with the collet cover already attached to the fitting or the cover can slide into position afterwards.

We recommend covers be fitted when pipework is hidden inside walls, ceilings, etc. Collet covers can be removed to allow the pipe to be disconnected as and when required.



Collet Covers

Black

Code	C01	Tube OD mm	Price 1-9	Price 10+
PM1912E		12	0.35	0.32
PM1915E		15	0.45	0.42
PM1918E		18	0.45	0.42
PM1922E		22	0.50	0.47

Couplings
Straight



Code	C05	OD mm	Price
PEM0410W		10	5.05
PKM0415W		15	3.75
PKM0422W		22	5.90
PEM0428W		28	14.90

Couplings
Reducing



Code	C05	OD mm	OD mm	Price
PKM201510W		15	10	8.80
PKM202215W		22	15	10.40

Couplings
Brass BSPP Male



Code	C05	OD mm	Thread	Price
15MC		15	G1/2"	14.40
22MC		22	G3/4"	23.30

Couplings
BSPP Female to Tap Connector



Code	C05	OD mm	Thread	Price
PEM3210W		10	G1/2"	7.10
PEM3201W		15	G1/2"	4.15
PEM3203W		15	G3/4"	9.00
PEM3202W		22	G3/4"	6.25

Elbows
Equal



Code	C05	OD mm	Price
PEM0310W		10	6.25
PKM0315W		15	4.45
PKM0322W		22	7.10
PEM03228W		28	17.35

- Provides a swivel type connection.

Elbows
Stem



Code	C05	OD mm	Stem OD mm	Price
PEM221010W		10	10	7.75
PKM221515W		15	15	8.75
PKM222222W		22	22	13.20



Elbows
Brass Wing Back, BSPP Female

Code	C05	OD mm	Thread	Price
15WB		15	G1/2"	25.60

- Suitable for normal hot and cold water services.
- Central heating applications, including pressurised and combi systems.
- Suitable for use with copper tube, use pipe inserts when using plastic tube.
- Manufactured to BS7291 Parts 1 & 3 Class S.
- Not to be used for gas, fuel oil or compressed air applications.

Central Heating	3 bar at 92°C
Hot Water	6 bar at 65°C
Cold Water	2 bar at 20°C

Tees
Equal



Code	C05	OD mm	Price
PEM0210W		10	7.15
PKM0215W		15	6.45
PKM0222W		22	9.60
PEM0228W		28	24.80

Tees
Reducing



Code	C05	A OD mm	B OD mm	C OD mm	Price
PKM3022CW		15	15	22	10.75
PEM3022BW		22	15	15	10.75
PKM3022AW		22	22	15	10.75
PKM3022DW		22	15	22	10.75
PEM3028AW		28	28	22	27.00
PEM3028DW		28	22	28	27.00

End Stops
Push-in Blank End



Code	C05	OD mm	Price
PSE4610W		10	4.90
PKM4615W		15	5.05
PKM4622W		22	6.15

To be used on installation when using plastic pipe.

Pipe Inserts
Support Stem



Code	C05	OD mm	Price
TSM10N		10	0.75
TSM15N		15	0.75
TSM22N		22	0.90
TSM28N		28	1.35

Plastic Plumbing Push-in Fittings

Speedfit®



Reducers

Stem Reducer

Code	C05	OD mm	Stem OD mm	Price
PEM061510W		10	15	4.35
PEM062215W		15	22	5.65
PEM062815W		15	28	11.60
PEM062822W		22	28	12.60



Connectors

Tap, BSPP Female

Code	C05	OD mm	Thread	Price
PKMSTC1514		15	1/2" Straight	7.35
PKMSTC1516		15	3/4" Straight	8.75
PKMSTC2216		22	3/4" Straight	9.60

Maximum wall thickness of tank = 4mm.

Note: requires hand tightening only.



Connectors

Tank

Code	C05	OD mm	Price
CM0715S		15	6.30
CM0722S		22	8.05
CM0728S		28	30.85

Speedfit Drain Cocks cannot be used where collet covers are fitted. They can be used with a standard fitting fitted with a collet clip.



Brass Drain Cock

Stem Valve

Code	C05	OD mm	Price
15BDC		15	17.10

N.B: Hot and Cold water only 65°C max.

Not suitable for central heating systems.



Service Valves

Plastic

Code	C05	OD mm	Price
15ISV		15	14.50



Service Valves

Brass Chrome Plated

Code	C05	OD mm	Price
10HSV		10	25.45
15HSV		15	30.55
22HSV		22	68.50



Service Valves

Brass Chrome Plated with Tap Connector BSPP Female

Code	C05	OD mm	Thread	Price
15PTSV		15	G1/2"	30.30
22PTSV		22	G3/4"	74.35

Suitable for central heating systems, each valve has a red and blue indice.



Brass Chrome Plated Ball Valves

In-line

Code	C05	OD mm	Price
10BV		10	35.85
15BV		15	39.60
22BV		22	78.25

N.B. Hot and cold water only 65ºC max.



Valves

Stop

Code	C05	OD mm	Price
15STV		15	18.00
22STV		22	27.55



Valves

Brass Stop

Code	C05	OD mm	Price
15BSC		15	39.75

N.B. Hot and cold water only 65°C max.

Not suitable for central heating systems.



Valves

Double Check

Code	C05	OD mm	Price
15DCV		15	26.60



Taps

Emergency Shut Off

Code	C05	OD mm	Price
15ESOT		15	13.60

N.B. Hot and cold water only 65°C max.



Taps

Washing Machine, BSPP

Code	C05	OD mm	Thread	Price
15APT-B		15	G3/4"	12.35

Plastic Plumbing Push-in Fittings

British Gas accepted for water pipe in vented and sealed central heating systems.
The pipe has an inner barrier to stop the ingress of atmosphere.



Barrier Pipes

Pex Coils

Code	C05	OD mm	Length mtrs	Price
10BPEX-25C		10	25	91.85
15BPEX-50C		15	50	191.00
15BPEX-100C		15	100	382.00
22BPEX-25C		22	25	187.30
22BPEX-50C		22	50	374.60

This pipe is made from a soft material with little memory ensuring a flexible system. It has an inner barrier to stop the ingress of atmosphere. British Gas accepted for water pipe in vented and sealed central heating systems.

- Easy to handle
- Ultra flexible



Barrier Pipes

Layflat Polybutylene

Code	C05	OD mm	Length mtrs	Price
15BPB-25C		15	25	112.30
15BPB-50C		15	50	224.60
15BPB-100C		15	100	449.30
22BPB-25C		22	25	214.00
22BPB-50C		22	50	427.85





Barrier Pipes

Straight Lengths

Code	C05	OD mm	Length mtrs	Box	Price
15BPEX-20X2L		15	2	20	158.85
15BPEX-20X3L		15	3	20	238.30
22BPEX-20X2L		22	2	20	295.75
22BPEX-20X3L		22	3	20	500.90
28BPEX-10X3L		28	3	10	304.55



Flexi Hoses

Push-in to BSPP Female

Code	C05	OD mm	Thread	Length Mtrs	Price
FLX15		15	G1/2"	300	13.35
FLX18		15	G1/2"	500	19.30
FLX16		15	G3/4"	300	16.80
FLX20		15	G3/4"	500	21.75
FLX22		22	G3/4"	300	18.30
FLX19		22	G3/4"	500	23.10
FLX23		22	G3/4"	500 Full Bore	33.40



Flexi Hoses

Push-in to Push-in

Code	C05	OD mm	Thread	Price
FLX33		15 x 10	300	11.35
FLX17		15 x 15	300	16.50
FLX21		15 x 15	500	24.20
FLX26		22 x 22	300	20.20
FLX27		22 x 22	500	27.55



Flexi Hoses

Push-in to BSPP Female with Service Valve

Code	C05	OD mm	Thread	Length Mtrs	Price
FLX37		15	G1/2"	300 Full Bore	25.35
FLX24		15	G1/2"	300	38.20
FLX31		15	G1/2"	500	41.80
FLX38		15	G3/4"	500	46.00
FLX25		22	G3/4"	300 Full Bore	71.80



N.B. Hot & cold water only, 65°C maximum

Flexi Hoses

For Monobloc Mixers

Code	C05	OD mm	Thread	Length Mtrs	Price
FLX29		15	M12	300	25.15



N.B. Hot & cold water only, 65°C maximum

Flexi Hoses

Elbow

Code	C05	OD mm	Thread	Length Mtrs	Price
FLX36		15	G1/2"	300	17.80



Adaptors

Brass Male Cylinder, BSPP

Code	C05	OD mm	Thread	Price
22CMA		22	G1"	35.80



Adaptors

Brass Female Cylinder, BSPP

Code	C05	OD mm	Thread	Price
22CFA		22	G1"	35.80

UPVC Metric Pipe System

WRAS APPROVED PRODUCT

PVC-U Metric Pipe Systems

Lightweight PVC-U (unplasticised polyvinyl chloride) is highly resistant to both abrasion and chemicals and is one of the most widely used thermoplastic materials for pipework installations. With a superior smooth bore, PVC-U has excellent flow characteristics without deposit or sediment and it's tasteless / odourless properties make it an excellent choice for use with potable water systems and most food products.

Standards

- Manufactured in accordance with EN1452-2
- Fittings are manufactured in accordance with EN1452-3 and ISO161/1
- Resistant to most solutions of salts, acids, alkalis and water soluble solvents, PVC-U has excellent chemical resistant properties (please note these products are NOT resistant to chlorinated or aromatic hydrocarbons)
- Pressure ratings for plastic pipe work systems are always quoted at +20°C if the temperature is increased then the pressure rating must be reduced. PVC-U systems are not suitable for use at temperatures in excess of +60°C. The table below provides a guide as to the temperature/pressure relationship of PVC-U pipe work systems

20°C	30°C	40°C	50°C	60°C
16.0 bar	12.8 bar	9.2 bar	6.2 bar	3.5 bar

- Connections can be made by either BSP threaded fittings or solvent cement
- Resistant to most acids, alkalis, solvents and salts
- PVC-U products are identifiable by their dark grey colour
- WRAS approved
- Approved by the Water Research Advisory Scheme (WRAS) for use with potable water

Working Temperature:

- Pressures quoted based on a working temperature of +20°C
- PVC-U systems are not suitable for use at temperatures in excess of +60°C

Maximum Working Pressure:

- 16 bar (plain fittings)
- 12 bar (threaded fittings) sizes 200mm/225mm with reduced safety factor



Sockets & Reducers

Equal Socket

Code S35	ID mm	Price
UPVCEFS-16	16	1.15
UPVCEFS-20	20	1.25
UPVCEFS-25	25	1.35
UPVCEFS-32	32	1.55
UPVCEFS-40	40	2.30
UPVCEFS-50	50	2.90
UPVCEFS-63	63	4.20
UPVCEFS-75	75	10.00
UPVCEFS-90	90	16.45
UPVCEFS-110	110	23.60
UPVCEFS-125	125	36.80
UPVCEFS-140	140	47.60
UPVCEFS-160	160	59.95
UPVCEFS-200	200	122.40
UPVCEFS-225	225	149.20



Sockets & Reducers

Plain x Threaded Socket, BSPP

Code S35	ID mm	Thread	Price
UPVCFS-16-3/8	16	G3/8"	2.65
UPVCFS-20-1/2	20	G1/2"	2.80
UPVCFS-25-3/4	25	G3/4"	3.00
UPVCFS-32-1	32	G1"	3.95
UPVCFS-40-1.1/4	40	G1.1/4"	6.00
UPVCFS-50-1.1/2	50	G1.1/2"	7.25
UPVCFS-63-2	63	G2"	9.65
UPVCFS-75-2.1/2	75	G2.1/2"	29.85
UPVCFS-90-3	90	G3"	31.75
UPVCFS-110-4	110	G4"	39.60
UPVCFS-125-5	125	G5"	53.50



Sockets & Reducers

Reducing Socket

Code S35	ID mm	ID mm	Price
UPVCRFS-20-16	20	16	1.30
UPVCRFS-25-16	25	16	1.35
UPVCRFS-25-20	25	20	1.35
UPVCRFS-32-20	32	20	1.80
UPVCRFS-32-25	32	25	1.80
UPVCRFS-40-20	40	20	2.05
UPVCRFS-40-25	40	25	2.05
UPVCRFS-40-32	40	32	2.05
UPVCRFS-50-25	50	25	3.20
UPVCRFS-50-32	50	32	3.20
UPVCRFS-50-40	50	40	3.20
UPVCRFS-63-40	63	40	6.05
UPVCRFS-63-50	63	50	5.80
UPVCRFS-75-40	75	40	10.65
UPVCRFS-75-50	75	50	10.65
UPVCRFS-75-63	75	63	10.65
UPVCRFS-90-40	90	40	13.20
UPVCRFS-90-50	90	50	13.20
UPVCRFS-90-63	90	63	13.40
UPVCRFS-90-75	90	75	13.40
UPVCRFS-110-50	110	50	22.45
UPVCRFS-110-63	110	63	22.45
UPVCRFS-110-75	110	75	22.45
UPVCRFS-110-90	110	90	22.45
UPVCRFS-125-90	125	90	39.10
UPVCRFS-125-110	125	110	39.10
UPVCRFS-140-90	140	90	50.25
UPVCRFS-140-110	140	110	50.25
UPVCRFS-140-125	140	125	50.25
UPVCRFS-160-110	160	110	95.40
UPVCRFS-160-140	160	140	95.40

Sockets & Reducers

Reducing Bush



Code S35	OD mm	ID mm	Price
RB-2016-UPVC	20	16	0.95
RB-2516-UPVC	25	16	1.15
RB-2520-UPVC	25	20	1.15
RB-3216-UPVC	32	16	1.40
RB-3220-UPVC	32	20	1.40
RB-3225-UPVC	32	25	1.40
RB-4020-UPVC	40	20	1.85
RB-4025-UPVC	40	25	1.85
RB-4032-UPVC	40	32	1.85
RB-5025-UPVC	50	25	2.25
RB-5032-UPVC	50	32	2.25
RB-5040-UPVC	50	40	2.25
RB-6325-UPVC	63	25	2.90
RB-6332-UPVC	63	32	2.90
RB-6340-UPVC	63	40	2.90
RB-6350-UPVC	63	50	2.90
RB-7532-UPVC	75	32	5.65
RB-7540-UPVC	75	40	5.65
RB-7550-UPVC	75	50	5.65
RB-7563-UPVC	75	63	5.65
RB-9050-UPVC	90	50	9.75
RB-9063-UPVC	90	63	9.75
RB-9075-UPVC	90	75	9.75
RB-11063-UPVC	110	63	12.75
RB-11075-UPVC	110	75	12.75
RB-11090-UPVC	110	90	12.75
RB-12575-UPVC	125	75	22.60
RB-12590-UPVC	125	90	22.60
RB-125110-UPVC	125	110	22.60
RB-14090-UPVC	140	90	29.35
RB-140110-UPVC	140	110	29.35
RB-140125-UPVC	140	125	29.35
RB-16090-UPVC	160	90	60.40
RB-160110-UPVC	160	110	39.60
RB-160125-UPVC	160	125	39.60

Code S35	OD mm	ID mm	Price
RB-160140-UPVC	160	140	39.60
RB-180125-UPVC	180	125	39.15
RB-180140-UPVC	180	140	39.15
RB-180160-UPVC	180	160	39.15
RB-200160-UPVC	200	160	68.45
RB-200180-UPVC	200	180	68.45
RB-225160-UPVC	225	160	100.20
RB-225200-UPVC	225	200	100.20

Elbow & Bends

Equal 90º



Code S35	ID mm	Price
EE-90-16-UPVC	16	1.30
EE-90-20-UPVC	20	1.60
EE-90-25-UPVC	25	1.85
EE-90-32-UPVC	32	2.30
EE-90-40-UPVC	40	4.15
EE-90-50-UPVC	50	5.25
EE-90-63-UPVC	63	8.10
EE-90-75-UPVC	75	17.05
EE-90-90-UPVC	90	23.50
EE-90-110-UPVC	110	35.75
EE-90-125-UPVC	125	69.20
EE-90-140-UPVC	140	89.60
EE-90-160-UPVC	160	138.50
EE-90-200-UPVC	200	243.25
EE-90-225-UPVC	225	278.05

Elbow & Bends

Equal 45º Elbow



Code S35	ID mm	Price
EE-45-16-UPVC	16	2.50
EE-45-20-UPVC	20	2.70
EE-45-25-UPVC	25	2.85
EE-45-32-UPVC	32	3.30
EE-45-40-UPVC	40	4.80
EE-45-50-UPVC	50	5.25
EE-45-63-UPVC	63	9.00
EE-45-75-UPVC	75	15.85
EE-45-90-UPVC	90	21.15
EE-45-110-UPVC	110	44.45
EE-45-125-UPVC	125	69.10
EE-45-140-UPVC	140	82.40
EE-45-160-UPVC	160	104.50
EE-45-200-UPVC	200	186.45
EE-45-225-UPVC	225	250.85

Elbow & Bends

Equal 90º Bend, Short Radius



Code S35	ID mm	Price
EES-90-20-UPVC	20	6.10
EES-90-25-UPVC	25	7.60
EES-90-32-UPVC	32	10.15
EES-90-40-UPVC	40	14.45
EES-90-50-UPVC	50	17.60
EES-90-63-UPVC	63	23.70
EES-90-75-UPVC	75	45.95
EES-90-90-UPVC	90	58.80
EES-90-110-UPVC	110	101.75

UPVC Metric Pipe System

WRAS APPROVED PRODUCT

Elbow & Bends

Equal 45º Bend, Short Radius



Code	S35	ID mm	Price
EB-45-32-UPVC		32	11.25
EB-45-40-UPVC		40	12.75
EB-45-63-UPVC		63	28.95
EB-45-75-UPVC		75	40.45
EB-45-90-UPVC		90	78.50

Elbow & Bends

Plain x Threaded 90º Elbow, BSPP



Code	S35	ID mm	Thread	Price
TE-90-16-UPVC		16	G3/8"	2.40
TE-90-20-UPVC		20	G1/2"	3.15
TE-90-25-UPVC		25	G3/4"	3.55
TE-90-32-UPVC		32	G1"	4.70
TE-90-40-UPVC		40	G1.1/4"	9.75
TE-90-50-UPVC		50	G1.1/2"	10.95
TE-90-63-UPVC		63	G2"	15.75
TE-90-75-UPVC		75	G2.1/2"	33.65
TE-90-90-UPVC		90	G3"	38.20
TE-90-110-UPVC		110	G4"	52.70

Elbow & Bends

Plain x Threaded 45º Elbow, BSPP



Code	S35	ID mm	Thread	Price
TE-45-16-UPVC		16	G3/8"	3.10
TE-45-20-UPVC		20	G1/2"	3.00
TE-45-25-UPVC		25	G3/4"	3.35
TE-45-32-UPVC		32	G1"	4.25
TE-45-40-UPVC		40	G1.1/4"	6.90
TE-45-50-UPVC		50	G1.1/2"	8.15
TE-45-63-UPVC		63	G2"	11.40
TE-45-75-UPVC		75	G2.1/2"	33.30
TE-45-90-UPVC		90	G3"	47.75
TE-45-110-UPVC		110	G4"	85.10

Tees

Equal Tee



Code	S35	ID mm	Price
T-16-UPVC		16	1.55
T-20-UPVC		20	1.85
T-25-UPVC		25	2.25
T-32-UPVC		32	3.10
T-40-UPVC		40	4.35
T-50-UPVC		50	6.90
T-63-UPVC		63	10.30
T-75-UPVC		75	19.95
T-90-UPVC		90	29.70
T-110-UPVC		110	45.20
T-125-UPVC		125	92.25
T-140-UPVC		140	130.15
T-160-UPVC		160	154.80
T-200-UPVC		200	280.80
T-225-UPVC		225	305.60

Tees

Equal 45º Tee



Code	S35	ID mm	Price
TY-16-UPVC		16	9.10
TY-20-UPVC		20	7.55
TY-25-UPVC		25	8.40
TY-32-UPVC		32	12.40
TY-40-UPVC		40	18.25
TY-50-UPVC		50	21.15
TY-63-UPVC		63	31.40

Tees

Reducing Branch Tee



Code	S35	ID mm	ID mm	Price
TR-2016-UPVC		20	16	1.85
TR-2516-UPVC		25	16	2.25
TR-2520-UPVC		25	20	2.25
TR-3216-UPVC		32	16	3.00
TR-3220-UPVC		32	20	3.00
TR-3225-UPVC		32	25	3.00
TR-4016-UPVC		40	16	4.45
TR-4020-UPVC		40	20	4.45
TR-4025-UPVC		40	25	4.45
TR-4032-UPVC		40	32	4.45
TR-5020-UPVC		50	20	6.90
TR-5025-UPVC		50	25	6.90
TR-5032-UPVC		50	32	6.90
TR-5040-UPVC		50	40	6.90
TR-6320-UPVC		63	20	10.30
TR-6325-UPVC		63	25	10.30
TR-6332-UPVC		63	32	10.30
TR-6340-UPVC		63	40	10.30
TR-6350-UPVC		63	50	10.30
TR-7532-UPVC		75	32	18.20
TR-7540-UPVC		75	40	18.20
TR-7550-UPVC		75	50	18.20
TR-7563-UPVC		75	63	18.20
TR-9040-UPVC		90	40	29.70
TR-9050-UPVC		90	50	29.70
TR-9063-UPVC		90	63	29.70
TR-9075-UPVC		90	75	29.70
TR-11050-UPVC		110	50	45.20
TR-11063-UPVC		110	63	45.20
TR-11075-UPVC		110	75	45.20
TR-11090-UPVC		110	90	45.20
TR-12563-UPVC		125	63	89.95
TR-12575-UPVC		125	75	89.95
TR-12590-UPVC		125	90	89.95
TR-125110-UPVC		125	110	89.95
TR-14075-UPVC		140	75	150.75
TR-14090-UPVC		140	90	150.75
TR-140110-UPVC		140	110	150.75
TR-140125-UPVC		140	125	150.75
TR-16090-UPVC		160	90	154.80
TR-160110-UPVC		160	110	154.80
TR-160125-UPVC		160	125	154.80
TR-160140-UPVC		160	140	154.80

UPVC Metric Pipe System

WRAS APPROVED PRODUCT

Cross

Equal Cross



Code S35	ID mm	Price
X-16-UPVC	16	5.30
X-20-UPVC	20	3.75
X-25-UPVC	25	6.00
X-32-UPVC	32	7.10
X-40-UPVC	40	11.15
X-50-UPVC	50	14.05
X-63-UPVC	63	19.50
X-75-UPVC	75	50.20
X-90-UPVC	90	97.70
X-110-UPVC	110	152.65

Unions

Equal Union



Code S35	ID mm	Price
U-16-UPVC	16	4.70
U-20-UPVC	20	5.65
U-25-UPVC	25	6.15
U-32-UPVC	32	8.35
U-40-UPVC	40	10.30
U-50-UPVC	50	14.45
U-63-UPVC	63	19.15
U-75-UPVC	75	52.50
U-90-UPVC	90	77.80
U-110-UPVC	110	94.50

Threaded Adaptors

Male, BSPP



Code S35	ID mm	OD mm	Thread	Price
MTA-12-38-UPVC	12	16	G3/8"	2.00
MTA-16-12-UPVC	16	20	G1/2"	2.00
MTA-16-38-UPVC	16	20	G3/8"	2.00
MTA-20-12-UPVC	20	25	G1/2"	2.05
MTA-20-34-UPVC	20	25	G3/4"	2.05
MTA-20-38-UPVC	20	25	G3/8"	2.05
MTA-25-1-UPVC	25	32	G1"	2.40
MTA-25-12-UPVC	25	32	G1/2"	2.40
MTA-25-34-UPVC	25	32	G3/4"	2.40
MTA-32-1-UPVC	32	40	G1"	2.90
MTA-32-114-UPVC	32	40	G1.1/4"	2.60
MTA-32-34UPVC	32	40	G3/4"	2.60
MTA-40-1-UPVC	40	50	G1"	5.80
MTA-40-112-UPVC	40	50	G1.1/2"	5.80
MTA-40-114-UPVC	40	50	G1.1/4"	5.80
MTA-50-112-UPVC	50	63	G1.1/2"	8.55
MTA-50-114-UPVC	50	63	G1.1/4"	8.55
MTA-50-2-UPVC	50	63	G2"	8.55
MTA-63-112-UPVC	63	75	G1.1/2"	13.65
MTA-63-2-UPVC	63	75	G2"	13.65
MTA-63-212-UPVC	63	75	G2.1/2"	13.65
MTA-75-2-UPVC	75	90	G2"	24.00
MTA-75-212-UPVC	75	90	G2.1/2"	24.00
MTA-75-3-UPVC	75	90	G3"	24.00
MTA-90-212-UPVC	90	110	G2.1/2"	27.45
MTA-90-3-UPVC	90	110	G3"	27.45
MTA-90-4-UPVC	90	110	G4"	27.45
MTA-110-3-UPVC	110	125	G3"	35.60
MTA-110-4-UPVC	110	125	G4"	35.60
MTA-110-5-UPVC	110	125	G5"	35.60

Blanking Caps

Plain



Code S35	ID mm	Price
BC-16-UPVC	16	0.95
BC-20-UPVC	20	1.15
BC-25-UPVC	25	1.30
BC-32-UPVC	32	1.45
BC-40-UPVC	40	2.25
BC-50-UPVC	50	3.30
BC-63-UPVC	63	4.25
BC-75-UPVC	75	11.80
BC-90-UPVC	90	13.70
BC-110-UPVC	110	21.10
BC-125-UPVC	125	37.15
BC-140-UPVC	140	37.45
BC-160-UPVC	160	55.00
BC-200-UPVC	200	160.05
BC-225-UPVC	225	177.40

Unions

Plain x Threaded
Socket Union, BSPP



Code S35	ID mm	Thread	Price
UT-16-UPVC	16	G3/8"	10.30
UT-20-UPVC	20	G1/2"	10.35
UT-25-UPVC	25	G3/4"	11.05
UT-32-UPVC	32	G1"	14.40
UT-40-UPVC	40	G1.1/4"	16.55
UT-50-UPVC	50	G1.1/2"	24.00
UT-63-UPVC	63	G2"	36.15
UT-75-UPVC	75	G2.1/2"	56.85
UT-90-UPVC	90	G3"	77.70
UT-110-UPVC	110	G4"	94.50

UPVC Metric Pipe System

WRAS APPROVED PRODUCT



Threaded Adaptors

Female, BSPP

Code S35	OD mm	Thread	Price
FTA-16-38-UPVC	16	G3/8"	2.80
FTA-16-12-UPVC	16	G1/2"	2.90
FTA-20-12-UPVC	20	G1/2"	3.25
FTA-20-34-UPVC	20	G3/4"	3.45
FTA-25-1-UPVC	25	G1"	3.95
FTA-25-12-UPVC	25	G1/2"	3.95
FTA-25-34-UPVC	25	G3/4"	3.95
FTA-32-1-UPVC	32	G1"	4.60
FTA-32-34-UPVC	23	G3/4"	4.30
FTA-40-1-UPVC	40	G1"	5.40
FTA-40-114-UPVC	40	G1.1/4"	5.40
FTA-50-112-UPVC	50	G1.1/2"	9.30
FTA-50-114-UPVC	50	G1.1/4"	9.30
FTA-50-2-UPVC	50	G2"	8.10
FTA-63-112-UPVC	63	G1.1/2"	11.30
FTA-63-2-UPVC	63	G2"	11.30
FTA-75-2-UPVC	75	G2"	18.70
FTA-75-212-UPVC	75	G2.1/2"	18.70
FTA-90-212-UPVC	90	G2.1/2"	26.90
FTA-90-3-UPVC	90	G3"	26.90
FTA-90-4-UPVC	90	G4"	26.90
FTA-110-3-UPVC	110	G3"	33.65
FTA-110-4-UPVC	110	G4"	34.00



Flanges

PN16 Full Face Flange

Code S35	To Suit mm	Flange Size	Price
FPN16-20-UPVC	20	1/2"	7.65
FPN16-25-UPVC	25	3/4"	7.85
FPN16-32-UPVC	32	1"	8.40
FPN16-40-UPVC	40	1.1/4"	9.95
FPN16-50-UPVC	50	1.1/2"	11.70
FPN16-63-UPVC	63	2"	14.80
FPN16-75-UPVC	75	2.1/2"	21.45
FPN16-90-UPVC	90	3"	27.60
FPN16-110-UPVC	110	4"	38.20



Flanges

PN16 Blanking Flange

Code S35	To Suit mm	Flange Size	Price
BPN16-20-UPVC	20	1/2"	35.20
BPN16-25-UPVC	25	3/4"	39.45
BPN16-32-UPVC	32	1"	43.40
BPN16-40-UPVC	40	1.1/4"	17.35
BPN16-50-UPVC	50	1.1/2"	18.90
BPN16-63-UPVC	63	2"	23.65
BPN16-75-UPVC	75	2.1/2"	79.45
BPN16-90-UPVC	90	3"	36.20
BPN16-110-UPVC	110	4"	48.30

Flanges

ASA150 Full Face Flange

Code S35	To Suit mm	Flange Size	Price
FASA150-25-UPVC	25	3/4"	17.55
FASA150-32-UPVC	32	1"	20.55
FASA150-40-UPVC	40	1.1/4"	21.70
FASA150-50-UPVC	50	1.1/2"	24.60
FASA150-63-UPVC	63	2"	29.85
FASA150-75-UPVC	75	2.1/2"	40.80
FASA150-90-UPVC	90	3"	49.60
FASA150-110-UPVC	110	4"	63.50

Flanges

ASA150 Blanking Flange

Code S35	To Suit mm	Flange Size	Price
BASA150-32-UPVC	32	1"	43.40
BASA150-40-UPVC	40	1.1/4"	44.10
BASA150-50-UPVC	50	1.1/2"	49.90
BASA150-63-UPVC	63	2"	57.85
BASA150-75-UPVC	75	2.1/2"	79.45
BASA150-90-UPVC	90	3"	101.20
BASA150-110-UPVC	110	4"	128.75



Flanges

Stub Flange, Serrated Face

Code S35	ID mm	Price
SF-20-UPVC	20	1.35
SF-25-UPVC	25	1.55
SF-32-UPVC	32	1.85
SF-40-UPVC	40	2.90
SF-50-UPVC	50	4.45
SF-63-UPVC	63	7.85
SF-75-UPVC	75	11.10
SF-90-UPVC	90	14.65
SF-110-UPVC	110	20.45



Flanges

PN16 Full Face Flange

Code S35	To Suit mm	Price
SFG-20	20	1.85
SFG-25	25	1.85
SFG-32	32	2.50
SFG-40	40	3.05
SFG-50	50	3.15
SFG-63	63	3.35
SFG-75	75	3.50
SFG-90	90	4.30
SFG-110	110	5.80



Flanges

PN16 Galvanised Backing Ring

Code S35	To Suit mm	Price
GBR-20	20	11.85
GBR-25	25	12.20
GBR-32	32	13.65
GBR-40	40	13.95
GBR-50	50	18.30
GBR-63	63	22.60
GBR-75	75	28.10
GBR-90	90	35.75
GBR-110	110	47.85

UPVC Metric Pipe System



Flanges

PN16 Flange Gasket EPDM

Code	S35	To Suit mm	Price
PNFG-20		20	3.55
PNFG-25		25	3.70
PNFG-32		32	4.30
PNFG-40		40	5.00
PNFG-50		50	6.90
PNFG-63		63	7.50
PNFG-75		75	10.10
PNFG-90		90	10.40
PNFG-110		110	15.15



Flanges

ASA150 Flange Gasket EPDM

Code	S35	To Suit mm	Price
ASAFG-20		20	3.55
ASAFG-25		25	3.70
ASAFG-32		32	4.30
ASAFG-40		40	5.00
ASAFG-50		50	6.90
ASAFG-63		63	7.50
ASAFG-75		75	10.10
ASAFG-90		90	10.40
ASAFG-110		110	15.15



Flanges

PN16 UPVC Backing Ring

Code	S35	To Suit mm	Price
UPVCBR-20		20	7.90
UPVCBR-25		25	8.30
UPVCBR-32		32	9.60
UPVCBR-40		40	12.75
UPVCBR-50		50	14.00
UPVCBR-63		63	17.90
UPVCBR-75		75	21.00
UPVCBR-90		90	24.05
UPVCBR-110		110	30.00

Working Temperature:

All pressures quoted are based on a working temperature of +20°C.
PVC-U systems should never be used for temperatures in excess of +60°C.

Maximum Working Pressure:

- 16 bar (plain ends)
- 12 bar (threaded ends up to 63mm)
- 10 bar (75mm-110mm)



Industrial Valves

Double Union Ball Valve, EPDM Seals

Code	S35	ID mm	Price
DUBV-16-UPVC		16	63.95
DUBV-20-UPVC		20	63.95
DUBV-25-UPVC		25	75.95
DUBV-32-UPVC		32	91.30
DUBV-40-UPVC		40	115.80
DUBV-50-UPVC		50	151.80
DUBV-63-UPVC		63	191.20
DUBV-75-UPVC		75	377.35
DUBV-90-UPVC		90	458.90
DUBV-110-UPVC		110	637.40



Industrial Valves

Double Union Spring
Check Valve, EPDM Seals

Code	S35	ID mm	Price
DUCV-16-UPVC		16	53.95
DUCV-20-UPVC		20	55.55
DUCV-25-UPVC		25	61.80
DUCV-32-UPVC		32	66.50
DUCV-40-UPVC		40	80.25
DUCV-50-UPVC		50	97.70
DUCV-63-UPVC		63	140.35
DUCV-75-UPVC		75	337.65
DUCV-90-UPVC		90	374.80
DUCV-110-UPVC		110	636.90



Industrial Valves

Double Union Foot Valve, EPDM Seals

Code	S35	ID mm	Price
DUFV-20-UPVC		20	48.20
DUFV-25-UPVC		25	58.55
DUFV-32-UPVC		32	65.15
DUFV-40-UPVC		40	75.40
DUFV-50-UPVC		50	105.75
DUFV-63-UPVC		63	147.45
DUFV-75-UPVC		75	337.10
DUFV-90-UPVC		90	444.75
DUFV-110-UPVC		110	467.00

UPVC Metric Pipe System

Working Temperature:

All pressures quoted are based on a working temperature of +20°C.
PVC-U Systems should never be used for temperatures in excess of +60°C.

Maximum Working Pressure:

- 16 bar

Please note: clear PVC pipe is not suitable for outdoor use without adequate UV protection.



Type 1 Type 2 Type 3





UPVC Tubing

PN16, 6 Metre Lengths

Code S35	OD mm	Price
UPVC/TUBE-6-16	16	13.45
UPVC/TUBE-6-20	20	13.55
UPVC/TUBE-6-25	25	21.00
UPVC/TUBE-6-32	32	33.15
UPVC/TUBE-6-40	40	51.35
UPVC/TUBE-6-50	50	79.25
UPVC/TUBE-6-63	63	104.00
UPVC/TUBE-6-75	75	147.45
UPVC/TUBE-6-90	90	211.45
UPVC/TUBE-6-110	110	313.55
UPVC/TUBE-6-140	140	644.85
UPVC/TUBE-6-160	160	654.25
UPVC/TUBE-6-225	225	1504.95

UPVC Tubing

PN16, 3 Metre Lengths

Code S35	OD mm	Price
UPVC/TUBE-3-16	16	6.75
UPVC/TUBE-3-20	20	7.00
UPVC/TUBE-3-25	25	10.75
UPVC/TUBE-3-32	32	16.55
UPVC/TUBE-3-40	40	25.75
UPVC/TUBE-3-50	50	40.95
UPVC/TUBE-3-63	63	53.25
UPVC/TUBE-3-75	75	77.55
UPVC/TUBE-3-90	90	108.30
UPVC/TUBE-3-110	110	160.60
UPVC/TUBE-3-140	140	330.25
UPVC/TUBE-3-160	160	344.30
UPVC/TUBE-3-225	225	791.90

Clear UPVC Tubing

With Blue Tint, 5 Metre Lengths

Code S35	OD mm	Thickness	Price
CUPVC/TUBE2015	20	1.5	88.15
CUPVC/TUBE2515	25	1.5	111.45
CUPVC/TUBE2519	25	1.9	125.55
CUPVC/TUBE3218	32	1.8	134.65
CUPVC/TUBE3224	32	2.4	171.95
CUPVC/TUBE4020	40	2	185.65
CUPVC/TUBE4030	40	3	269.15
CUPVC/TUBE5018	50	1.8	264.75
CUPVC/TUBE5024	50	2.4	308.95
CUPVC/TUBE5037	50	3.7	468.70
CUPVC/TUBE6318	63	1.8	338.65
CUPVC/TUBE6330	63	3	444.40
CUPVC/TUBE6347	63	4.7	747.00
CUPVC/TUBE-7518	75	1.8	403.95
CUPVC/TUBE-7536	75	3.6	710.10
CUPVC/TUBE-9018	90	1.8	408.15
CUPVC/TUBE-9043	90	4.3	1010.65
CUPVC/TUBE-11022	110	2.2	594.00
CUPVC/TUBE-11053	110	5.3	1507.85
CUPVC/TUBE-12525	125	2.5	1011.60
CUPVC/TUBE-14028	140	2.8	1308.60
CUPVC/TUBE-16032	160	3.2	1462.00
CUPVC/TUBE-16047	160	4.7	2450.25

Pipe Clips

Black PP Clips

Code S35	OD mm	Type	Price
PPCLIP-16	16	1	2.55
PPCLIP-20	20	1	3.00
PPCLIP-25	25	1	3.20
PPCLIP-32	32	1	3.50
PPCLIP-40	40	2	4.70
PPCLIP-50	50	2	5.05
PPCLIP-63	63	2	6.40
PPCLIP-75	75	2	12.25
PPCLIP-90	90	2	14.90
PPCLIP-110	110	2	20.50
PPCLIP-140	140	2	36.55
PPCLIP-160	160	2	46.15
PPCLIP-225	225	3	80.20

UPVC & ABS Imperial Pipe System

WRAS APPROVED PRODUCT

ABS It is recommended for use with air ring mains. Please note UPVC is not suitable for use with compressed air.

ABS
= acrylonitrile-butadiene-styrene copolymers

UPVC
= unplasticised poly vinyl chloride

Recommended Working Temperature:

- 0°C to 60°C

Pressure Ratings for Fittings:

- 15 bar (please note 8" with reduced safety factor)

Nominal Bore	Outside Diameter mm
3/8"	17.1
1/2"	1.3
3/4"	26.7
1"	33.4
1.1/4"	42.2
1.1/2"	48.3
2"	60.3

Nominal Bore	Outside Diameter mm
2.1/2"	75
3"	88.9
4"	114.3
5"	140
6"	168.3
8"	219.1



Sockets & Reducing Bushes

UPVC, Equal Socket

Code S35	NB	Price
UPVCES-12	1/2"	1.20
UPVCES-34	3/4"	1.40
UPVCES-1	1"	1.65
UPVCES-114	1.1/4"	2.85
UPVCES-112	1.1/2"	3.35
UPVCES-2	2"	4.70
UPVCES-212	2.1/2"	11.00
UPVCES-3	3"	18.05
UPVCES-4	4"	26.25
UPVCES-5	5"	52.30
UPVCES-6	6"	65.65
UPVCES-8	8"	227.65

Sockets & Reducing Bushes

ABS, Equal Socket

Code S35	NB	Price
ABSES-12	1/2"	1.25
ABSES-34	3/4"	1.40
ABSES-1	1"	1.65
ABSES-114	1.1/4"	2.75
ABSES-112	1.1/2"	3.05
ABSES-2	2"	4.60
ABSES-212	2.1/2"	10.05
ABSES-3	3"	18.40
ABSES-4	4"	26.15



Sockets & Reducing Bushes

UPVC, Reducing Socket

Code S35	NB	NB	Price
UPVCRS-3412	3/4"	1/2"	1.90
UPVCRS-134	1"	3/4"	2.30
UPVCRS-1141	1.1/4"	1"	3.60
UPVCRS-112112	1.1/2"	1.1/4"	4.05
UPVCRS-2112	2"	1.1/2"	5.45
UPVCRS-2122	2.1/2"	2"	16.45
UPVCRS-3212	3"	2.1/2"	18.65
UPVCRS-43	4"	3"	27.20

Sockets & Reducing Bushes

ABS, Reducing Socket

Code S35	NB	NB	Price
ABSRS-3412	3/4"	1/2"	1.90
ABSRS-134	1"	3/4"	2.30
ABSRS-1141	1.1/4"	1"	3.60
ABSRS-112114	1.1/2"	1.1/4"	3.55
ABSRS-2112	2"	1.1/2"	6.20
ABSRS-3212	3"	2.1/2"	19.35
ABSRS-43	4"	3"	25.45



Sockets & Reducing Bushes

UPVC, Reducing Bushes

Code S35	NB	NB	Price
UPVCRB-3412	3/4"	1/2"	1.25
UPVCRB-112	1"	1/2"	1.65
UPVCRB-134	1"	3/4"	1.65
UPVCRB-11434	1.1/4"	3/4"	2.00
UPVCRB-1141	1.1/4"	1"	1.40
UPVCRB-11234	1.1/2"	3/4"	2.35
UPVCRB-1121	1.1/2"	1"	2.60
UPVCRB-112114	1.1/2"	1.1/4"	2.60
UPVCRB-21	2"	1"	3.55
UPVCRB-2114	2"	1.1/4"	3.35
UPVCRB-2112	2"	1.1/2"	3.35
UPVCRB-212112	2.1/2"	1.1/2"	6.30
UPVCRB-2122	2.1/2"	2"	6.30
UPVCRB-3112	3"	1.1/2"	9.35
UPVCRB-32	3"	2"	10.05
UPVCRB-3212	3"	2.1/2"	10.05
UPVCRB-42	4"	2"	13.85
UPVCRB-4212	4"	2.1/2"	12.75
UPVCRB-43	4"	3"	13.85
UPVCRB-53	5"	3"	36.75
UPVCRB-54	5"	4"	37.95
UPVCRB-64	6"	4"	42.90
UPVCRB-86	8"	6"	136.00

UPVC & ABS Imperial Pipe System

WRAS APPROVED PRODUCT



Sockets & Reducing Bushes

ABS, Reducing Bushes

Code	S35	NB	NB	Price
ABSRB-3412		3/4"	1/2"	1.25
ABSRB-112		1"	1/2"	1.65
ABSRB-134		1"	3/4"	1.65
ABSRB-11412		1.1/4"	1/2"	1.90
ABSRB-11434		1.1/4"	3/4"	1.90
ABSRB-1141		1.1/4"	1"	2.05
ABSRB-11234		1.1/2"	3/4"	2.55
ABSRB-1121		1.1/2"	1"	2.70
ABSRB-112114		1.1/2"	1.1/4"	2.70
ABSRB-21		2"	1"	3.60
ABSRB-2114		2"	1.1/4"	3.60
ABSRB-2112		2"	1.1/2"	3.60
ABSRB-2122		2.1/2"	2"	5.90
ABSRB-3112		3"	1.1/2"	10.35
ABSRB-32		3"	2"	10.35
ABSRB-3212		3"	2.1/2"	9.40
ABSRB-42		4"	2"	13.85
ABSRB-4212		4"	2.1/2"	12.30
ABSRB-43		4"	3"	13.85
ABSRB-54		5"	4"	43.35



Sockets & Reducing Bushes

UPVC, Socket, Imperial x Metric

Code	S35	NB	ID mm	Price
UPVCS-3534		3/4"	25	1.75
UPVCS-321		1"	32	2.15
UPVCS-40114		1.1/4"	40	2.85
UPVCS-50112		1.1/2"	50	4.65
UPVCS-632		2"	63	10.15
UPVCS-903		3"	90	17.05
UPVCS-1104		4"	110	30.95

Sockets & Reducing Bushes



UPVC, Plain x Threaded Reducing Bush, BSPP

Code	S35	NB	Thread	Price
UPVCRBT-3814		3/8"	G1/4"	7.05
UPVCRBT-1214		1/2"	G1/4"	10.05
UPVCRBT-3412		3/4"	G1/2"	2.40
UPVCRBT-134		1"	G3/4"	3.60
UPVCRBT-1141		1.1/4"	G1"	5.45
UPVCRBT-112114		1.1/2"	G1.1/4"	6.40
UPVCRBT-2112		2"	G1.1/2"	7.75
UPVCRBT-2122		2.1/2"	G2"	13.15
UPVCRBT-3212		3"	G2.1/2"	21.30
UPVCRBT-43		4"	G3"	30.15

Elbows & Bends



UPVC, Equal 90˚

Code	S35	NB	Price
UPVCEE90-12		1/2"	1.70
UPVCEE90-34		3/4"	1.90
UPVCEE90-1		1"	2.70
UPVCEE90-114		1.1/4"	4.70
UPVCEE90-112		1.1/2"	6.10
UPVCEE90-2		2"	9.05
UPVCEE90-212		2.1/2"	18.75
UPVCEE90-3		3"	26.00
UPVCEE90-4		4"	39.20
UPVCEE90-5		5"	98.60
UPVCEE90-6		6"	154.70
UPVCEE90-8		8"	374.65

Elbows & Bends

ABS, Equal 90˚

Code	S35	NB	Price
ABSEE90-12		1/2"	1.55
ABSEE90-34		3/4"	1.90
ABSEE90-1		1"	2.70
ABSEE90-114		1.1/4"	4.20
ABSEE90-112		1.1/2"	6.00
ABSEE90-2		2"	9.00
ABSEE90-212		2.1/2"	17.35
ABSEE90-3		3"	26.05
ABSEE90-4		4"	38.85
ABSEE90-5		5"	79.95
ABSEE90-6		6"	155.50

Elbows & Bends



UPVC, Plain x Threaded 90° Elbow, BSPP

Code	S35	NB	Thread	Price
UPVC90E-12		1/2"	1/2"	3.80
UPVC90E-34		3/4"	3/4"	4.05
UPVC90E-1		1"	1"	5.50
UPVC90E-114		1.1/4"	1.1/4"	10.30
UPVC90E-112		1.1/2"	1.1/2"	11.35
UPVC90E-2		2"	2"	16.05
UPVC90E-212		2.1/2"	2.1/2"	33.65
UPVC90E-3		3"	3"	36.20
UPVC90E-4		4"	4"	53.50



Elbows & Bends

UPVC, Equal 90˚ Bend Short Radius

Code	S35	NB	Price
UPVCBSR90-12		1/2"	6.10
UPVCBSR90-34		3/4"	7.20
UPVCBSR90-1		1"	9.95
UPVCBSR90-114		1.1/4"	14.25
UPVCBSR90-112		1.1/2"	17.60
UPVCBSR90-2		2"	23.05
UPVCBSR90-212		2.1/2"	50.60
UPVCBSR90-3		3"	59.10
UPVCBSR90-4		4"	98.40

Elbows & Bends

ABS, Equal 90˚ Bend, Short Radius

Code	S35	NB	Price
ABSBSR90-12		1/2"	6.20
ABSBSR90-34		3/4"	7.00
ABSBSR90-1		1"	9.10
ABSBSR90-114		1.1/4"	13.05
ABSBSR90-112		1.1/2"	16.85
ABSBSR90-2		2"	23.20
ABSBSR90-212		2.1/2"	47.00
ABSBSR90-3		3"	59.35
ABSBSR90-4		4"	128.55

UPVC & ABS Imperial Pipe System

WRAS APPROVED PRODUCT

Elbows & Bends

UPVC, Equal 45˚



Code	S35	NB	Price
UPVCEE45-12		1/2"	3.10
UPVCEE45-34		3/4"	3.30
UPVCEE45-1		1"	4.05
UPVCEE45-114		1.1/4"	5.30
UPVCEE45-112		1.1/2"	7.20
UPVCEE45-2		2"	10.05
UPVCEE45-212		2.1/2"	17.40
UPVCEE45-3		3"	23.70
UPVCEE45-4		4"	48.75
UPVCEE45-5		5"	90.65
UPVCEE45-6		6"	92.80
UPVCEE45-8		8"	340.50

Elbows & Bends

ABS, Equal 45˚

Code	S35	NB	Price
ABSEE45-12		1/2"	2.90
ABSEE45-34		3/4"	3.00
ABSEE45-1		1"	3.70
ABSEE45-114		1.1/4"	5.80
ABSEE45-112		1.1/2"	7.20
ABSEE45-2		2"	10.05
ABSEE45-212		2.1/2"	15.80
ABSEE45-3		3"	21.70
ABSEE45-4		4"	48.75
ABSEE45-6		6"	93.30

Elbows & Bends

UPVC, Plain x Threaded 45° Elbow, BSPP



Code	S35	NB	Thread	Price
UPVC45E-12		1/2"	G1/2"	3.60
UPVC45E-34		3/4"	G3/4"	3.95
UPVC45E-1		1"	G1"	4.80
UPVC45E-114		1.1/4"	G1.1/4"	6.70
UPVC45E-112		1.1/2"	G1.1/2"	8.40
UPVC45E-2		2"	G2"	11.75
UPVC45E-212		2.1/2"	G2.1/2"	28.85
UPVC45E-3		3"	G3"	34.05
UPVC45E-4		4"	G4"	60.75

Tees

UPVC, Equal Tee



Code	S35	NB	Price
UPVCET-12		1/2"	1.85
UPVCET-34		3/4"	2.50
UPVCET-1		1"	3.55
UPVCET-114		1.1/4"	5.15
UPVCET-112		1.1/2"	7.35
UPVCET-2		2"	11.60
UPVCET-212		2.1/2"	21.90
UPVCET-3		3"	33.55
UPVCET-4		4"	49.15
UPVCET-5		5"	134.85
UPVCET-6		6"	157.70
UPVCET-8		8"	399.40

Tees

ABS, Equal Tee

Code	S35	NB	Price
ABSET-12		1/2"	1.85
ABSET-34		3/4"	2.60
ABSET-1		1"	3.60
ABSET-114		1.1/4"	5.15
ABSET-112		1.1/2"	7.55
ABSET-2		2"	11.45
ABSET-212		2.1/2"	19.85
ABSET-3		3"	33.35
ABSET-4		4"	49.05
ABSET-5		5"	116.25
ABSET-6		6"	173.55

Tees

UPVC, 45˚ Tee



Code	S35	NB	Price
UPVCT45-12		1/2"	7.50
UPVCT45-34		3/4"	9.00
UPVCT45-1		1"	10.15
UPVCT45-114		1.1/4"	11.10
UPVCT45-112		1.1/2"	15.70
UPVCT45-2		2"	24.30
UPVCT45-212		2.1/2"	48.95

Tees

ABS, 45˚ Tee

Code	S35	NB	Price
ABST45-12		1/2"	8.80
ABST45-34		3/4"	9.00
ABST45-1		1"	9.20
ABST45-114		1.1/4"	10.80
ABST45-2		2"	21.50

Tees

UPVC, BSPP Branch x Plain



Code	S35	NB	Thread	Price
UPVCT-12		1/2"	1/2"	4.90
UPVCT-34		3/4"	3/4"	4.90
UPVCT-1		1"	1"	6.00
UPVCT-114		1.1/4"	1.1/4"	10.30
UPVCT-112		1.1/2"	1.1/2"	11.90
UPVCT-2		2"	2"	16.85
UPVCT-212		2.1/2"	2.1/2"	28.90
UPVCT-3		3"	3"	31.45
UPVCT-4		4"	4"	39.20

UPVC & ABS Imperial Pipe System

WRAS APPROVED PRODUCT

Crosses

UPVC



Code	S35	NB	Price
CR33-12-UPVC		1/2"	6.60
CR33-34-UPVC		3/4"	6.65
CR33-1-UPVC		1"	8.60
CR33-114-UPVC		1.1/4"	13.50
CR33-112-UPVC		1.1/2"	15.45
CR33-2-UPVC		2"	21.20
CR33-212-UPVC		2.1/2"	84.20

Crosses

ABS

Code	S35	NB	Price
ABSEC-12		1/2"	6.25
ABSEC-34		3/4"	6.95
ABSEC-1		1"	8.40
ABSEC-2		2"	19.35



Caps

UPVC

Code	S35	NB	Price
UPVCCAP-12		1/2"	1.20
UPVCCAP-34		3/4"	1.40
UPVCCAP-1		1"	1.60
UPVCCAP-114		1.1/4"	2.50
UPVCCAP-112		1.1/2"	4.05
UPVCCAP-2		2"	4.80
UPVCCAP-212		2.1/2"	13.00
UPVCCAP-3		3"	14.95
UPVCCAP-4		4"	23.05
UPVCCAP-5		5"	41.10
UPVCCAP-6		6"	48.25
UPVCCAP-8		8"	164.65

Caps

ABS

Code	S35	NB	Price
ABSCAP-12		1/2"	1.20
ABSCAP-34		3/4"	1.40
ABSCAP-1		1"	1.60
ABSCAP-114		1.1/4"	2.40
ABSCAP-112		1.1/2"	3.95
ABSCAP-2		2"	5.15
ABSCAP-212		2.1/2"	12.85
ABSCAP-3		3"	15.10
ABSCAP-4		4"	21.40

Unions

UPVC



Code	S35	NB	Price
UPVCEU-12		1/2"	6.30
UPVCEU-34		3/4"	7.20
UPVCEU-1		1"	9.20
UPVCEU-114		1.1/4"	11.60
UPVCEU-112		1.1/2"	15.85
UPVCEU-2		2"	20.45
UPVCEU-212		2.1/2"	57.75
UPVCEU-3		3"	76.20
UPVCEU-4		4"	103.10

Unions

ABS

Code	S35	NB	Price
ABSEU-12		1/2"	6.00
ABSEU-34		3/4"	7.00
ABSEU-1		1"	9.40
ABSEU-114		1.1/4"	11.45
ABSEU-112		1.1/2"	15.80
ABSEU-2		2"	20.60
ABSEU-212		2.1/2"	55.65
ABSEU-3		3"	76.30
ABSEU-4		4"	102.70

Unions

UPVC Male,
BSPP Threaded x Plain



Code	S35	NB	Thread	Price
UPVCMU112		1.1/2"	G1.1/2"	12.05
UPVCMU2-112		2"	G1.1/2"	13.25
UPVCMU2		2"	G2"	16.80

Unions

UPVC Female,
BSPP Threaded x Plain



Code	S35	NB	Thread	Price
UPVCFU12		1/2"	G1/2"	7.85
UPVCFU34		3/4"	G3/4"	9.50
UPVCFU1		1"	G1"	10.80
UPVCFU114		1.1/4"	G1.1/4"	14.45
UPVCFU112		1.1/2"	G1.1/2"	19.00
UPVCFU2		2"	G2"	24.05
UPVCFU212		2.1/2"	G2.1/2"	56.85
UPVCFU3		3"	G3"	70.05
UPVCFU4		4"	G4"	95.15

Threaded Adaptors

UPVC Male, BSPP



Code	S35	NB	Thread	Price
UPVCMTA-1212		1/2"	G1/2"	2.05
UPVCMTA-3412		3/4"	G1/2"	2.30
UPVCMTA-3434		3/4"	G3/4"	2.30
UPVCMTA-341		3/4"	G1"	3.15
UPVCMTA-11		1"	G1"	3.55
UPVCMTA-1114		1"	G1.1/4"	4.95
UPVCMTA-114114		1.1/4"	G1.1/4"	4.95
UPVCMTA-114112		1.1/4"	G1.1/2"	6.70
UPVCMTA-112112		1.1/2"	G1.1/2"	6.50
UPVCMTA-1122		1.1/2"	G2"	8.20
UPVCMTA-22		2"	G2"	8.85
UPVCMTA-212212		2.1/2"	G2.1/2"	21.00
UPVCMTA-33		3"	G3"	26.05
UPVCMTA-44		4"	G4"	35.15



Threaded Adaptors

UPVC Female, BSPP

Code	S35	NB	Thread	Price
UPVCFTA-1212		1/2"	G1/2"	3.20
UPVCFTA-3412		1/2"	G3/4"	3.00
UPVCFTA-1234		3/4"	G1/2"	3.00
UPVCFTA-3434		3/4"	G3/4"	3.75
UPVCFTA-134		3/4"	G1"	3.35
UPVCFTA-341		1"	G3/4"	3.35
UPVCFTA-11		1"	G1"	4.35
UPVCFTA-1141		1"	G1.1/4"	4.50
UPVCFTA-114114		1.1/4"	G1.1/4"	5.20
UPVCFTA-112114		1.1/4"	G1.1/2"	5.70
UPVCFTA-112112		1.1/2"	G1.1/2"	6.60
UPVCFTA-2112		1.1/2"	G2"	8.20
UPVCFTA-1122		2"	G1.1/2"	7.25
UPVCFTA-22		2"	G2"	11.10
UPVCFTA-2122		2"	G2.1/2"	14.00
UPVCFTA-212212		2.1/2"	G2.1/2"	24.60
UPVCFTA-3212		2.1/2"	G3"	28.70
UPVCFTA-2123		3"	G2.1/2"	17.45
UPVCFTA-33		3"	G3"	33.10
UPVCFTA-43		3"	G4"	30.00
UPVCFTA-34		4"	G3"	43.70
UPVCFTA-44		4"	G4"	52.20

Equal Barrel Nipples



UPVC, Male BSPT

Code S35	Thread	Price
UPVCEBN-14	R1/4"	7.00
UPVCEBN-38	R3/8"	2.50
UPVCEBN-12	R1/2"	2.35
UPVCEBN-34	R3/4"	3.05
UPVCEBN-1	R1"	4.05
UPVCEBN-114	R1.1/4"	5.50
UPVCEBN-112	R1.1/2"	5.70
UPVCEBN-2	R2"	7.60
UPVCEBN-212	R2.1/2"	15.65
UPVCEBN-3	R3"	19.55
UPVCEBN-4	R4"	34.55

Equal Barrel Nipples



UPVC, Stem Nipple, BSPT

Code S35	Thread	NB	Length mm	Price
UPVCEBN-3843	R3/8"	3/8"	43	2.10
UPVCEBN-1250	R1/2"	1/2"	50	2.55
UPVCEBN-3456	R3/4"	3/4"	56	3.05
UPVCEBN-163	R1"	1"	63	4.05
UPVCEBN-11475	R1.1/4"	1.1/4"	75	5.50
UPVCEBN-11288	R1.1/2"	1.1/2"	88	5.70
UPVCEBN-288	R2"	2"	88	7.60
UPVCEBN-212106	R2.1/2"	2.1/2"	106	16.20
UPVCEBN-3128	R3"	3"	128	19.95
UPVCEBN-4153	R4"	4"	153	33.85

Hose Connections



UPVC, Male BSPP

Code S35	Thread	To Suit Hose ID	Price
UPVCMHC-1412	G1/4"	12mm	1.80
UPVCMHC-3816	G3/8"	16mm	3.05
UPVCMHC-1212	G1/2"	1/2"	26.10
UPVCMHC-1220	G1/2"	20mm	3.15
UPVCMHC-3434	G3/4"	3/4"	24.40
UPVCMHC-3425	G3/4"	25mm	4.20
UPVCMHC-11	G1"	1"	26.65
UPVCMHC-132	G1"	32mm	5.00
UPVCMHC-11440	G1.1/4"	40mm	7.25
UPVCMHC-11250	G1.1/2"	50mm	8.70
UPVCMHC-260	G2"	60mm	13.40

Equal Barrel Nipples

ABS, Male BSPT

Code S35	Thread	Price
ABSEBN-12	R1/2"	2.35
ABSEBN-34	R3/4"	2.90
ABSEBN-1	R1"	3.85
ABSEBN-114	R1.1/4"	4.80
ABSEBN-112	R1.1/2"	5.45
ABSEBN-2	R2"	7.35
ABSEBN-212	R2.1/2"	15.10
ABSEBN-3	R3"	21.40
ABSEBN-4	R4"	49.80

Equal Barrel Nipples

ABS, Stem Nipple, BSPT

Code S35	Thread	NB	Length mm	Price
ABSEBN-1250	R1/2"	1/2"	50	2.50
ABSEBN-3456	R3/4"	3/4"	56	3.10
ABSEBN-163	R1"	1"	63	4.15
ABSEBN-11475	R1.1/4"	1.1/4"	75	4.95
ABSEBN-11288	R1.1/2"	1.1/2"	88	5.30
ABSEBN-288	R2"	2"	88	7.60
ABSEBN-212106	R2.1/2"	2.1/2"	106	16.20
ABSEBN-3128	R3"	3"	128	18.25
ABSEBN-4153	R4"	4"	153	43.85

Hose Connections



UPVC, Stem Adaptor

Code S35	NB	To Suit Hose ID mm	Price
UPVCSAHC-12	1/2"	20	3.05
UPVCSAHC-34	3/4"	25	3.35
UPVCSAHC-1	1"	32	3.80
UPVCSAHC-114	1.1/4"	40	4.65
UPVCSAHC-112	1.1/2"	50	6.85
UPVCSAHC-2	2"	60	11.25

Hose Connections



UPVC, Female BSPP

Code S35	Thread	To Suit Hose ID mm	Price
UPVCFHC-3416	G3/4"	16	7.25
UPVCFHC-120	G1"	20	8.20
UPVCFHC-11425	G1.1/4"	25	10.50
UPVCFHC-11230	G1.1/2"	30	12.70
UPVCFHC-240	G2"	40	17.75
UPVCFHC-21450	G2.1/4"	50	26.00
UPVCFHC-23460	G2.3/4"	60	27.35

For Air Ring Mains use ABS. UPVC is not suitable for use with compressed air.

UPVC & ABS Imperial Pipe System

WRAS APPROVED PRODUCT



Tank Connectors

UPVC, Equal BSPP

Code	S35	NB	Thread	Price
UPVCETC-12		1/2"	G1/2"	7.85
UPVCETC-34		3/4"	G3/4"	9.05
UPVCETC-1		1"	G1"	21.60
UPVCETC-114		1.1/4"	G1.1/4"	42.05
UPVCETC-112		1.1/2"	G1.1/2"	48.90
UPVCETC-2		2"	G2"	54.85
UPVCETC-212		2.1/2"	G2.1/2"	86.20
UPVCETC-3		3"	G3"	82.75
UPVCETC-4		4"	G4"	99.70

Tank Connectors

ABS, Equal BSPP

Code	S35	NB	Thread	Price
ABSETC-12		1/2"	G1/2"	6.70
ABSETC-34		3/4"	G3/4"	8.65
ABSETC-1		1"	G1"	20.60
ABSETC-114		1.1/4"	G1.1/4"	40.10
ABSETC-112		1.1/2"	G1.1/2"	41.60
ABSETC-2		2"	G2"	52.20
ABSETC-212		2.1/2"	G2.1/2"	98.35
ABSETC-3		3"	G3"	78.80
ABSETC-4		4"	G4"	91.80



Flanges

UPVC, Stub Flange, Serrated Face

Code	S35	NB	Price
UPVCSF-12		1/2"	1.45
UPVCSF-34		3/4"	1.55
UPVCSF-1		1"	1.75
UPVCSF-114		1.1/4"	3.15
UPVCSF-112		1.1/2"	5.15
UPVCSF-2		2"	7.35
UPVCSF-212		2.1/2"	12.10
UPVCSF-3		3"	14.70
UPVCSF-4		4"	19.30
UPVCSF-5		5"	47.95
UPVCSF-6		6"	49.70
UPVCSF-8		8"	145.85



Flanges

ABS, Stub Flanges, Serrated Face

Code	S35	NB	Price
ABSSF-12		1/2"	1.45
ABSSF-34		3/4"	1.40
ABSSF-1		1"	1.75
ABSSF-112		1.1/2"	4.95
ABSSF-2		2"	7.55
ABSSF-212		2.1/2"	11.95
ABSSF-3		3"	14.70
ABSSF-4		4"	19.05
ABSSF-5		5"	44.30
ABSSF-6		6"	45.55



Flanges

UPVC, Full Face Table E

Code	S35	NB	Price
UPVCFF-12		1/2"	6.60
UPVCFF-34		3/4"	6.70
UPVCFF-1		1"	7.70
UPVCFF-114		1.1/4"	9.10
UPVCFF-112		1.1/2"	10.75
UPVCFF-2		2"	14.00
UPVCFF-3		3"	25.35
UPVCFF-4		4"	35.05



Flanges

ABS, Full Face Table E

Code	S35	NB	Price
ABSFF-12		1/2"	6.40
ABSFF-34		3/4"	7.55
ABSFF-1		1"	8.35
ABSFF-114		1.1/4"	11.55
ABSFF-112		1.1/2"	12.90
ABSFF-2		2"	16.10
ABSFF-3		3"	25.20
ABSFF-4		4"	33.60



Flanges

UPVC, PN16 Blanking Flange

Code	S35	Size	Price
UPVCPN16BF-12		1/2"	35.20
UPVCPN16BF-34		3/4"	14.50
UPVCPN16BF-1		1"	18.60
UPVCPN16BF-114		1.1/4"	17.40
UPVCPN16BF-112		1.1/2"	18.90
UPVCPN16BF-2		2"	23.65
UPVCPN16BF-3		3"	36.15
UPVCPN16BF-4		4"	48.30
UPVCPN16BF-5		5"	150.65
UPVCPN16BF-6		6"	85.50



Flanges

Stub Flange Gasket, EPDM

Code	S35	Size	Price
SFG-12		1/2"	1.75
SFG-34		3/4"	1.90
SFG-1		1"	2.40
SFG-114		1.1/4"	3.05
SFG-112		1.1/2"	3.15
SFG-2		2"	3.35
SFG-212		2.1/2"	3.50
SFG-3		3"	4.30
SFG-4		4"	5.90
SFG-5		5"	8.55

UPVC & ABS Imperial Pipe System

WRAS APPROVED PRODUCT



Flanges

BS4504, PN16 Flange Gasket

Code S35	Size	Price
FGPN16-12	1/2"	3.35
FGPN16-34	3/4"	3.50
FGPN16-1	1"	4.75
FGPN16-114	1.1/4"	5.65
FGPN16-112	1.1/2"	6.90
FGPN16-2	2"	7.50
FGPN16-3	3"	10.40
FGPN16-4	4"	15.15
FGPN16-6	6"	23.05



Flanges

BS10, Table E Flange Gasket

Code S35	Size	Price
FGTABE-12	1/2"	3.55
FGTABE-34	3/4"	3.75
FGTABE-1	1"	4.30
FGTABE-114	1.1/4"	4.95
FGTABE-112	1.1/2"	6.15
FGTABE-2	2"	7.50
FGTABE-3	3"	10.40
FGTABE-4	4"	15.15
FGTABE-6	6"	24.20



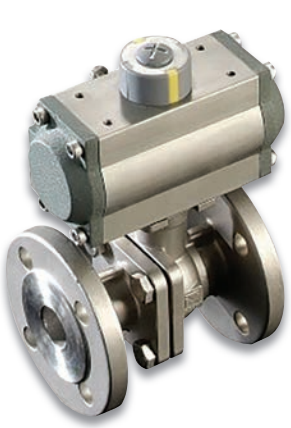
Flanges

PN16 Galvanised Backing Ring

Code S35	Size	Price
GPN16BR16-12	1/2"	11.85
GPN16BR16-34	3/4"	12.20
GPN16BR16-1	1"	13.70
GPN16BR16-114	1.1/4"	13.95
GPN16BR16-112	1.1/2"	18.30
GPN16BR16-2	2"	22.65
GPN16BR16-212	2.1/2"	28.10
GPN16BR16-3	3"	35.75
GPN16BR16-4	4"	47.85
GPN16BR16-5	5"	67.10
GPN16BR16-6	6"	75.20
GPN16BR16-8	8"	107.95

For Valves

TECHMATIC™





See pages 255-263

UPVC & ABS Imperial Pipe System

WRAS APPROVED PRODUCT



Valves

UPVC, Industrial Double Union Ball Valves, EPDM Seals

Code S35	NB	Price
UPVCIDUBV-38	3/8"	60.85
UPVCIDUBV-12	1/2"	60.85
UPVCIDUBV-34	3/4"	75.95
UPVCIDUBV-1	1"	89.00
UPVCIDUBV-114	1.1/4"	115.75
UPVCIDUBV-112	1.1/2"	146.15
UPVCIDUBV-2	2"	181.70
UPVCIDUBV-212	2.1/2"	377.40
UPVCIDUBV-3	3"	458.85
UPVCIDUBV-4	4"	637.30

Valves

ABS, Industrial Double Union Ball Valves, EPDM Seals

Code S35	NB	Price
ABSIDUBV-12	1/2"	61.40
ABSIDUBV-34	3/4"	73.05
ABSIDUBV-1	1"	87.20
ABSIDUBV-114	1.1/4"	111.75
ABSIDUBV-112	1.1/2"	144.05
ABSIDUBV-2	2"	183.15
ABSIDUBV-212	2.1/2"	364.00
ABSIDUBV-3	3"	467.20
ABSIDUBV-4	4"	649.20

Valves

UPVC, Economy Double Union Ball Valves, EPDM Seals

Code S35	NB	Price
UPVCEDUBV-12	1/2"	19.80
UPVCEDUBV-34	3/4"	23.85
UPVCEDUBV-1	1"	38.25
UPVCEDUBV-114	1.1/4"	45.90
UPVCEDUBV-112	1.1/2"	56.80
UPVCEDUBV-2	2"	86.50
UPVCEDUBV-212	2.1/2"	262.05
UPVCEDUBV-3	3"	277.45
UPVCEDUBV-4	4"	521.85



Valves

UPVC, Industrial 3 Way Ball Valves, L Port, EPDM Seals

Code S35	NB	Price
UPVCL3BV-12	1/2"	59.40
UPVCL3BV-34	3/4"	72.90
UPVCL3BV-1	1"	88.85
UPVCL3BV-114	1.1/4"	100.90
UPVCL3BV-112	1.1/2"	139.05
UPVCL3BV-2	2"	166.65

Valves

UPVC, Industrial 3 Way Ball Valves, T Port, EPDM Seals

Code S35	NB	Price
UPVCT3BV-12	1/2"	53.05
UPVCT3BV-34	3/4"	72.90
UPVCT3BV-1	1"	88.85
UPVCT3BV-114	1.1/4"	113.40
UPVCT3BV-112	1.1/2"	124.20
UPVCT3BV-2	2"	166.65

Tube O.D. – Size Conversion Table

Nominal Bore	Outside Diameter
3/8"	17.1mm
1/2"	21.3mm
3/4"	26.7mm
1"	33.4mm
1.1/4"	42.2mm
1.1/2"	48.3mm
2"	60.3mm
2.1/2"	75mm
3"	88.9mm
4"	114.3mm
5"	140mm
6"	168.3mm
8"	219.1mm



Valves

UPVC, Industrial Check Valves, EPDM Seals

Code S35	NB	Price
UPVCCV-12	1/2"	55.50
UPVCCV-34	3/4"	61.80
UPVCCV-1	1"	66.50
UPVCCV-114	1.1/4"	80.25
UPVCCV-112	1.1/2"	97.70
UPVCCV-2	2"	140.35

Valves

ABS, Industrial Check Valves, EPDM Seals

Code S35	NB	Price
ABSCV-12	1/2"	64.15
ABSCV-34	3/4"	73.85
ABSCV-1	1"	78.00
ABSCV-114	1.1/4"	110.80
ABSCV-112	1.1/2"	120.60
ABSCV-2	2"	172.90

For Air Ring Mains use ABS. UPVC is not suitable for use with compressed air.

UPVC = Unplasticized Poly Vinyl Chloride

ABS = Acrylonitrile-Butadiene-Styrene Copolymers

NOTE:

FPM Seals available on request.

UPVC & ABS Imperial Pipe System

WRAS APPROVED PRODUCT



UPVC Tubing

Class C, 9 bar, 3 Metre Lengths

Code S35	NB	Price
UPVCTUBEC-3-2	2"	31.60
UPVCTUBEC-3-3	3"	65.10
UPVCTUBEC-3-4	4"	102.00
UPVCTUBEC-3-5	5"	151.05
UPVCTUBEC-3-6	6"	218.50
UPVCTUBEC-3-8	8"	350.95

UPVC Tubing

Class C, 9 bar, 6 Metre Lengths

Code S35	NB	Price
UPVCTUBEC-6-2	2"	63.15
UPVCTUBEC-6-3	3"	130.05
UPVCTUBEC-6-4	4"	204.00
UPVCTUBEC-6-5	5"	416.70
UPVCTUBEC-6-6	6"	436.85

UPVC Tubing

Class E, 15 bar, 3 Metre Lengths

Code S35	NB	Price
UPVCTUBEE-3-12	1/2"	8.55
UPVCTUBEE-3-34	3/4"	12.05
UPVCTUBEE-3-1	1"	15.20
UPVCTUBEE-3-114	1.1/4"	23.00
UPVCTUBEE-3-112	1.1/2"	30.00
UPVCTUBEE-3-2	2"	46.80
UPVCTUBEE-3-3	3"	100.50
UPVCTUBEE-3-4	4"	158.85

UPVC Tubing

Class E, 15 bar, 6 Metre Lengths

Code S35	NB	Price
UPVCTUBEE-6-12	1/2"	17.05
UPVCTUBEE-6-34	3/4"	24.10
UPVCTUBEE-6-1	1"	30.40
UPVCTUBEE-6-114	1.1/4"	45.95
UPVCTUBEE-6-112	1.1/2"	60.00
UPVCTUBEE-6-2	2"	93.75
UPVCTUBEE-6-3	3"	200.95
UPVCTUBEE-6-4	4"	317.50

Due to restrictions imposed by the Transport of Dangerous Goods Act, these products are available for delivery to MAINLAND UK ONLY. For further information please contact our customer service department.



ABS Tubing

Class C, 9 bar, 3 Metre Lengths

Code S35	NB	Price
ABSTUBEC-3-1	1"	28.80
ABSTUBEC-3-114	1.1/4"	65.80
ABSTUBEC-3-112	1.1/2"	61.40
ABSTUBEC-3-2	2"	82.65
ABSTUBEC-3-212	2.1/2"	142.90
ABSTUBEC-3-3	3"	170.45
ABSTUBEC-3-4	4"	280.80
ABSTUBEC-3-5	5"	616.70
ABSTUBEC-3-6	6"	555.20
ABSTUBEC-3-8	8"	1264.05

ABS Tubing

Class C, 9 bar, 6 Metre Lengths

Code S35	NB	Price
ABSTUBEC-6-1	1"	57.55
ABSTUBEC-6-114	1.1/4"	131.60
ABSTUBEC-6-112	1.1/2"	122.90
ABSTUBEC-6-2	2"	165.20
ABSTUBEC-6-212	2.1/2"	285.75
ABSTUBEC-6-3	3"	340.80
ABSTUBEC-6-4	4"	561.50

ABS Tubing

Class E, 15 bar, 3 Metre Lengths

Code S35	NB	Price
ABSTUBEE-3-12	1/2"	43.90
ABSTUBEE-3-34	3/4"	33.85
ABSTUBEE-3-1	1"	44.55
ABSTUBEE-3-114	1.1/4"	66.40
ABSTUBEE-3-112	1.1/2"	87.80
ABSTUBEE-3-2	2"	109.75
ABSTUBEE-3-3	3"	220.70
ABSTUBEE-3-4	4"	354.55

ABS Tubing

Class E, 15 bar, 6 Metre Lengths

Code S35	NB	Price
ABSTUBEE-6-12	1/2"	43.90
ABSTUBEE-6-34	3/4"	67.75
ABSTUBEE-6-1	1"	89.00
ABSTUBEE-6-114	1.1/4"	132.90
ABSTUBEE-6-112	1.1/2"	175.40
ABSTUBEE-6-2	2"	219.40
ABSTUBEE-6-3	3"	441.30



Pipe Clips

Black PP Clips

Code S35	NB	Type	Price
PPCLIP-38	3/8"	1	2.55
PPCLIP-12	1/2"	1	3.00
PPCLIP-34	3/4"	1	3.15
PPCLIP-1	1"	1	3.50
PPCLIP-114	1.1/4"	2	4.65
PPCLIP-112	1.1/2"	2	5.05
PPCLIP-2	2"	2	5.55
PPCLIP-75	2.1/2"	2	12.25
PPCLIP-90	3"	2	14.90
PPCLIP-4	4"	2	20.70
PPCLIP-140	5"	2	36.55
PPCLIP-6	6"	2	46.60
PPCLIP-8	8"	3	80.15



Solvent Cement

ABS

Code S35	ml	Price
SCABS-500	500	19.15



Solvent Cement

UPVC

Code S35	ml	Price
SCUPVC-500	500	40.60



Cleaning Fluid

500ml

Code S35	ml	Price
CF-500	500	19.15

Please note: 6 metre lengths of tube are available on a 3 to 5 working day delivery service. Named delivery dates and times cannot be confirmed and carriage is an additional charge based on weight and delivery options chosen. Delivery of 3 metre lengths of tube may take up to 48 hours to be delivered. Please call our sales department for additional information.

UPVC Threaded Fittings

WRAS APPROVED PRODUCT



Double Socket

Female BSPP

Code	S35	Thread	Price
PVCS-12		G1/2"	2.70
PVCS-34		G3/4"	3.10
PVCS-1		G1"	3.80
PVCS-114		G1.1/4"	4.80
PVCS-112		G1.1/2"	6.60
PVCS-2		G2"	8.90



Reducing Socket

Female BSPP

Code	S35	Thread	Thread	Price
PVCRS-1238		G1/2"	G3/8"	3.20
PVCRS-3412		G3/4"	G1/2"	15.45
PVCRS-134		G1"	G3/4"	4.95
PVCRS-1141		G1.1/4"	G1"	6.85
PVCRS-112114		G1.1/2"	G1.1/4"	7.90
PVCRS-2112		G2"	G1.1/2"	32.95
PVCRS-2122		G2.1/2"	G2"	20.80
PVCRS-3212		G3"	G2.1/2"	26.60
PVCRS-43		G4"	G3"	40.10



Enlarging Piece

Male BSPP x Female BSPP

Code	S35	Male Thread	Female Thread	Price
PVCEN-3812		G3/8"	G1/2"	3.20
PVCEN-1234		G1/2"	G3/4"	2.75
PVCEN-341		G3/4"	G1"	3.25
PVCEN-1114		G1"	G1.1/4"	3.95
PVCEN-114112		G1.1/4"	G1.1/2"	5.65
PVCEN-1122		G1.1/2"	G2"	8.90
PVCEN-2212		G2"	G2.1/2"	15.15
PVCEN-2123		G2.1/2"	G3"	26.60
PVCEN-34		G3"	G4"	44.05



Reducing Male x Female

Male BSPP x Female BSPP

Code	S35	Male Thread	Female Thread	Price
PVCR-1238		G1/2"	G3/8"	2.00
PVCR-3438		G3/4"	G3/8"	2.80
PVCR-3412		G3/4"	G1/2"	2.75
PVCR-138		G1"	G3/8"	3.75
PVCR-112		G1"	G1/2"	3.50
PVCR-134		G1"	G3/4"	3.50
PVCR-11412		G1.1/4"	G1/2"	5.25
PVCR-11434		G1.1/4"	G3/4"	3.80
PVCR-1141		G1.1/4"	G1"	5.25
PVCR-11234		G1.1/2"	G3/4"	6.10
PVCR-1121		G1.1/2"	G1"	6.10
PVCR-21		G2"	G1"	9.20
PVCR-2114		G2"	G1.1/4"	9.20
PVCR-2112		G2"	G1.1/2"	6.50
PVCR-212112		G2.1/2"	G1.1/2"	11.45
PVCR-2122		G2.1/2"	G2"	11.45
PVCR-3112		G3"	G1.1/2"	10.40
PVCR-32		G3"	G2"	14.25
PVCR-3212		G3"	G2.1/2"	19.80
PVCR-42		G4"	G2"	27.95
PVCR-4212		G4"	G2.1/2"	27.95
PVCR-43		G4"	G3"	27.95



Reducing Bush Male x Female

Male BSPP x Female BSPP

Code	S35	Male Thread	Female Thread	Price
PVCRB-3412		G3/4"	G1/2"	2.35
PVCRB-134		G1"	G3/4"	3.30
PVCRB-1141		G1.1/4"	G1"	4.50
PVCRB-112114		G1.1/2"	G1.1/4"	4.05
PVCRB-2112		G2"	G1.1/2"	7.75
PVCRB-2122		G2.1/2"	G2"	10.50
PVCRB-3212		G3"	G2.1/2"	17.90
PVCRB-43		G4"	G3"	33.35



Nipple

Male BSPP

Code	S35	Thread	Price
PVCN-38		G3/8"	1.80
PVCN-12		G1/2"	1.80
PVCN-34		G3/4"	2.15
PVCN-1		G1"	2.65
PVCN-114		G1.1/4"	4.05
PVCN-112		G1.1/2"	4.25
PVCN-2		G2"	5.45
PVCN-212		G2.1/2"	8.80
PVCN-4		G4"	27.35



Reducing Nipple

Male BSPP

Code	S35	Thread	Thread	Price
PVCRN-3412		G3/4"	G1/2"	2.10
PVCRN-134		G1"	G3/4"	2.80
PVCRN-1141		G1.1/4"	G1"	3.45
PVCRN-112114		G1.1/2"	G1.1/4"	4.95
PVCRN-2122		G2.1/2"	G2"	11.45
PVCRN-3212		G3"	G2.1/2"	18.50
PVCRN-43		G4"	G3"	32.30

UPVC Threaded Fittings

WRAS APPROVED PRODUCT

Elbow 90º

Female BSPP



Code	S35	Thread	Price
PVCE-12		G1/2"	2.65
PVCE-34		G3/4"	3.10
PVCE-1		G1"	4.20
PVCE-114		G1.1/4"	5.90
PVCE-112		G1.1/2"	8.35
PVCE-2		G2"	11.45
PVCE-212		G2.1/2"	26.15
PVCE-3		G3"	44.10

Elbow 45°

Female BSPP



Code	S35	Thread	Price
PVCE45-38		G3/8"	3.25
PVCE45-12		G1/2"	3.60
PVCE45-34		G3/4"	3.85
PVCE45-1		G1"	5.15
PVCE45-114		G1.1/4"	9.05
PVCE45-112		G1.1/2"	10.40
PVCE45-2		G2"	15.45
PVCE45-212		G2.1/2"	25.50
PVCE45-3		G3"	37.65
PVCE45-4		G4"	41.60

Tee 90º

Female BSPP



Code	S35	Thread	Price
PVCT-38		G3/8"	2.80
PVCT-12		G1/2"	3.80
PVCT-34		G3/4"	4.45
PVCT-1		G1"	5.60
PVCT-114		G1.1/4"	8.70
PVCT-112		G1.1/2"	12.00
PVCT-2		G2"	19.05
PVCT-3		G3"	51.95
PVCT-4		G4"	89.50

Union

Female BSPP



Code	S35	Thread	Price
PVCU-38		G3/8"	7.60
PVCU-12		G1/2"	5.75
PVCU-34		G3/4"	6.75
PVCU-1		G1"	9.05
PVCU-114		G1.1/4"	11.25
PVCU-112		G1.1/2"	13.25
PVCU-2		G2"	17.55
PVCU-212		G2.1/2"	46.75
PVCU-3		G3"	75.40
PVCU-4		G4"	102.70

Cap

Female BSPP



Code	S35	Thread	Price
PVCC-38		G3/8"	3.10
PVCC-12		G1/2"	2.15
PVCC-34		G3/4"	2.35
PVCC-1		G1"	2.90
PVCC-114		G1.1/4"	4.05
PVCC-112		G1.1/2"	5.25
PVCC-2		G2"	6.95
PVCC-212		G2.1/2"	21.45
PVCC-3		G3"	28.45
PVCC-4		G4"	32.40

Plug

Male BSPP



Code	S35	Thread	Price
PVCP-38		G3/8"	1.80
PVCP-12		G1/2"	1.55
PVCP-34		G3/4"	1.80
PVCP-1		G1"	2.65
PVCP-112		G1.1/2"	4.50
PVCP-2		G2"	1.45
PVCP-212		G2.1/2"	12.00
PVCP-3		G3"	19.55
PVCP-4		G4"	34.15

Locknuts

BSPP



Code	S35	Thread	Price
PVCLN-38		G3/8"	1.35
PVCLN-12		G1/2"	1.90
PVCLN-34		G3/4"	1.70
PVCLN-1		G1"	3.00
PVCLN-114		G1.1/4"	7.15
PVCLN-112		G1.1/2"	7.10
PVCLN-2		G2"	7.65
PVCLN-212		G2.1/2"	11.25
PVCLN-3		G3"	17.70
PVCLN-4		G4"	15.85

Threaded Polypropylene Fittings



Reducing Bush

BSPP Male x BSPP Female

Code	S35	Male Thread	Female Thread	Price
PPRB-3412		G3/4"	G1/2"	1.30
PPRB-112		G1"	G1/2"	1.35
PPRB-134		G1"	G3/4"	0.65
PPRB-11412		G1.1/4"	G1/2"	2.30
PPRB-11434		G1.1/4"	G3/4"	2.30
PPRB-1141		G1.1/4"	G1"	2.15
PPRB-11234		G1.1/2"	G3/4"	0.85
PPRB-1121		G1.1/2"	G1"	2.35
PPRB-112114		G1.1/2"	G1.1/4"	2.35
PPRB-234		G2"	G3/4"	5.65
PPRB-21		G2"	G1"	5.65
PPRB-2114		G2"	G1.1/4"	5.65
PPRB-2112		G2"	G1.1/2"	6.75
PPRB-2122		G2.1/2"	G2"	11.30
PPRB-32		G3"	G2"	16.90
PPRB-3212		G3"	G2.1/2"	17.35



Male x Female Reducer

BSPP Male x BSPP Female

Code	S35	Male Thread	Female Thread	Price
PPMFR-1238		G1/2"	G3/8"	1.70
PPMFR-3412		G3/4"	G1/2"	1.85
PPMFR-112		G1"	G1/2"	1.60
PPMFR-134		G1"	G3/4"	1.60
PPMFR-1141		G1.1/4"	G1"	2.85
PPMFR-112114		G1.1/2"	G1.1/4"	3.35
PPMFR-2112		G2"	G1.1/2"	5.15



Reducing Nipple

BSPP Male x BSPP Male

Code	S35	Thread	Thread	Price
PPRN-3412		G3/4"	G1/2"	0.60
PPRN-134		G1"	G3/4"	0.90
PPRN-1141		G1.1/4"	G1"	1.60
PPRN-112114		G1.1/2"	G1.1/4"	2.05
PPRN-2112		G2"	G1.1/2"	3.45
PPRN-2122		G2.1/2"	G2"	10.80



Nipple

BSPP Male x BSPP Male

Code	S35	Thread	Thread	Price
PPEN-1212		G1/2"	G1/2"	0.55
PPEN-3434		G3/4"	G3/4"	0.60
PPEN-11		G1"	G1"	1.10
PPEN-114114		G1.1/4"	G1.1/4"	1.75
PPEN-112112		G1.1/2"	G1.1/2"	0.90
PPEN-22		G2"	G2"	3.60
PPEN-33		G3"	G3"	9.00



Plug

BSPP Male

Code	S35	Thread	Price
PPMP-12		G1/2"	0.80
PPMP-34		G3/4"	0.85
PPMP-1		G1"	1.10
PPMP-114		G1.1/4"	0.55
PPMP-112		G1.1/2"	2.10
PPMP-2		G2"	3.10
PPMP-212		G2.1/2"	6.15
PPMP-3		G3"	10.35



Reducing Socket

BSPP Female x BSPP Female

Code	S35	Thread	Thread	Price
PPRS-3412		G3/4"	G1/2"	1.30
PPRS-134		G1"	G3/4"	1.60
PPRS-1141		G1.1/4"	G1"	3.60
PPRS-112114		G1.1/2"	G1.1/4"	6.15
PPRS-2112		G2"	G1.1/2"	8.30



Socket

BSPP Female x BSPP Female

Code	S35	Thread	Thread	Price
PPES-1212		G1/2"	G1/2"	1.30
PPES-3434		G3/4"	G3/4"	1.35
PPES-11		G1"	G1"	1.75
PPES-114114		G1.1/4"	G1.1/4"	3.55
PPES-112112		G1.1/2"	G1.1/2"	7.00
PPES-22		G2"	G2"	8.60
PPES-212212		G2.1/2"	G2.1/2"	30.80
PPES-33		G3"	G3"	34.70



Cap

BSPP Female

Code	S35	Thread	Price
PPFC-12		G1/2"	0.55
PPFC-34		G3/4"	0.60
PPFC-1		G1"	0.80
PPFC-114		G1.1/4"	1.25
PPFC-112		G1.1/2"	2.50
PPFC-2		G2"	2.75

Compression Fittings for Polyethylene Pipe

Applications

- Potable water systems
- Irrigation systems
- Fertilising irrigation systems
- Alimentary fluids
- Industrial equipment for salts and acid bases
- Ship installations
- Swimming pools (fresh/sea water)

Materials

- Body and Nut: Polypropylene
- O-Ring: Nitrile
- Clenching Ring: Polyacetal Resin
- Metal Reinforcements: Stainless Steel

Please note: Materials fully conform with the International Specification relating to Hygiene and Sanitary Requirements for the Transport of Potable Water and Alimentary Fluids.

Rated Pressure:

- 16 bar, Atm at 20°C up to 63mm bore
- 10 bar, Atm at 20°C from 75mm bore

Working Temperature:

- +80°C



Straight Connector

Tube x Tube

Code	S35	OD mm	Price
PESC-16		16	4.50
PESC-20		20	4.90
PESC-25		25	6.05
PESC-32		32	7.85
PESC-40		40	10.80
PESC-50		50	17.30
PESC-63		63	23.50
PESC-75		75	49.85
PESC-90		90	75.60
PESC-110		110	141.50



Reducing Coupling

Tube x Tube

Code	S35	OD mm	OD mm	Price
PERC-2016		20	16	4.70
PERC-2520		25	20	5.60
PERC-3220		32	20	6.45
PERC-3225		32	25	7.55
PERC-4032		40	32	9.55
PERC-5032		50	32	15.70
PERC-5040		50	40	13.95
PERC-6350		63	50	19.50



End Plug

Tube

Code	S35	OD mm	Price
PEEP-16		16	2.85
PEEP-20		20	3.00
PEEP-25		25	4.30
PEEP-32		32	5.50
PEEP-50		50	10.55
PEEP-63		63	15.45



Female Adaptor

BSPT

Code	S35	OD mm	Thread	Price
PEFA-1612		16	R1/2"	3.50
PEFA-2012		20	R1/2"	4.10
PEFA-2034		20	R3/4"	4.10
PEFA-2512		25	R1/2"	4.95
PEFA-2534		25	R3/4"	4.95
PEFA-251		25	R1"	5.20
PEFA-3234		32	R3/4"	6.20
PEFA-321		32	R1"	6.20
PEFA-401		40	R1"	8.95
PEFA-40114		40	R1.1/4"	8.95
PEFA-50112		50	R1.1/2"	11.90
PEFA-632		63	R2"	17.05
PEFA-75212		75	R2.1/2"	35.10
PEFA-903		90	R3"	51.00
PEFA-1104		110	R4"	105.15



Male Adaptor

BSPT

Code	S35	OD mm	Thread	Price
PEMA-1612		16	R1/2"	3.00
PEMA-2012		20	R1/2"	3.10
PEMA-2034		20	R3/4"	3.10
PEMA-2512		25	R1/2"	4.00
PEMA-2534		25	R3/4"	3.80
PEMA-251		25	R1"	4.00
PEMA-3234		32	R3/4"	5.20
PEMA-321		32	R1"	5.20
PEMA-32114		32	R1.1/4"	5.20
PEMA-401		40	R1"	7.20
PEMA-40114		40	R1.1/4"	7.55
PEMA-40112		40	R1.1/2"	6.65
PEMA-50114		50	R1.1/4"	8.05
PEMA-50112		50	R1.1/2"	8.15
PEMA-502		50	R2"	9.35
PEMA-632		63	R2"	14.90
PEMA-752		75	R2"	26.15
PEMA-75212		75	R2.1/2"	26.55
PEMA-903		90	R3"	46.20

Compression Fittings for Polyethylene Pipe



90º Equal Elbows

Tube x Tube

Code	S35	OD mm	Price
PEEE90-16		16	4.25
PEEE90-20		20	5.00
PEEE90-25		25	6.15
PEEE90-32		32	8.60
PEEE90-40		40	13.35
PEEE90-50		50	18.70
PEEE90-63		63	25.80
PEEE90-90		90	76.05



90º Equal Tee

Tube x Tube

Code	S35	OD mm	Price
PEET90-16		16	6.60
PEET90-20		20	7.55
PEET90-25		25	9.20
PEET90-32		32	11.95
PEET90-40		40	18.90
PEET90-50		50	27.40
PEET90-63		63	34.25
PEET90-75		75	82.35



Wall Support Bracket

BSPP

Code	S35	OD mm	Thread	Price
PESB-2012		20	G1/2"	5.50
PESB-2534		25	G3/4"	7.60



90º Equal Elbows

Male, BSPT

Code	S35	OD mm	Thread	Price
PEMEE90-2012		20	R1/2"	3.80
PEMEE90-2512		25	R1/2"	4.95
PEMEE90-2534		25	R3/4"	5.40
PEMEE90-3234		32	R3/4"	6.85
PEMEE90-321		32	R1"	7.75
PEMEE90-50112		50	R1.1/2"	13.35
PEMEE90-632		63	R2"	16.75



90º Equal Tee

Male, BSPT

Code	S35	OD mm	Thread	Price
PEMET90-2012		20	R1/2"	5.50
PEMET90-2534		25	R3/4"	6.25
PEMET90-321		32	R1"	8.70
PEMET90-50112		50	R1.1/2"	20.00
PEMET90-632		63	R2"	30.15



90º Reducing Tee

Branch

Code	S35	OD mm	OD mm	Price
PERT90-2520		25	20	9.00
PERT90-3225		32	25	11.00
PERT90-4032		40	32	20.45
PERT90-6350		63	50	27.95

Conforms to the following Standards:

UNE EN-712, UNE EN-713, UNE EN-715, UNE EN-714, ISO 351, ISO 3503, ISO 3458, ISO 3459, DIN 8076, ISO 7, ISO 228, DIN 2999, DIN 259



90º Equal Elbows

Female, BSPT

Code	S35	OD mm	Thread	Price
PEFEE90-1612		16	R1/2"	4.25
PEFEE90-2012		20	R1/2"	4.30
PEFEE90-2512		25	R1/2"	5.70
PEFEE90-2534		25	R3/4"	6.60
PEFEE90-3234		32	R3/4"	7.55
PEFEE90-321		32	R1"	8.60
PEFEE90-40114		40	R1.1/4"	11.15
PEFEE90-50112		50	R1.1/2"	15.00
PEFEE90-632		63	R2"	18.90



90º Equal Tee

Female, BSPP

Code	S35	OD mm	Thread	Price
PEFET90-1612		16	G1/2"	5.65
PEFET90-2012		20	G1/2"	6.40
PEFET90-2512		25	G1/2"	7.35
PEFET90-2534		25	G3/4"	7.35
PEFET90-3234		32	G3/4"	11.50
PEFET90-321		32	G1"	10.05
PEFET90-40114		40	G1.1/4"	17.55
PEFET90-50112		50	G1.1/2"	23.35
PEFET90-632		63	G2"	29.80
PEFET90-903		90	G3"	81.35



Compression Flange

Tube

Code	S35	OD mm	Price
PECF-50		50	41.55
PECF-63		63	50.85
PECF-75		75	63.50
PECF-90		90	117.00

Compression Fittings for Polyethylene Pipe



Pipe Liner

Support Stem

Code	S35	To Suit Hose OD mm	Price
PL-20		20	0.80
PL-25		25	0.90
PL-32		32	1.15



MDPE Pipes

Blue

Code	S35	OD mm	Length Metres	Price
MDPE20BL-100M		20	100	249.35
MDPE25BL-100M		25	100	295.70
MDPE32BL-100M		32	100	492.85
MDPE63BL-100M		63	100	1861.20



Repair Coupling

Tube x Tube

Code	S35	OD mm	Price
RCTT-20		20	4.25
RCTT-25		25	5.75
RCTT-32		32	6.50
RCTT-50		50	16.80
RCTT-75		75	46.85



MDPE Pipes

Black

Code	S35	OD mm	Length Metres	Price
MDPE20BK-100M		20	100	249.35
MDPE25BK-100M		25	100	295.70
MDPE32BK-100M		32	100	492.85
MDPE63BK-100M		63	100	1843.80



Spanner

Fitting Wrench

Code	S35	To Suit	Price
SP-2032		20mm to 32mm	7.75
SP-4063		40mm to 63mm	9.80
SP-2063		20mm to 63mm	11.35
SP-75110		75mm to 110mm	374.20

Polyethylene Pipe Universal Transition Fittings

This Universal STP Kit is compatible with any fitting, allowing the transition between pipes of any material with diameters from 15mm to 35mm (1/2" to 1") and polyethylene pipes between 16mm to 63mm.

Universal Fittings

Universal Fitting



Code	S35	Inlet	Outlet	Price
PEUFAD15-25		15-22mm	To Suit 25mm Body	17.20
PEUFAD21-32		21-27mm	To Suit 32mm Body	19.10
PEUFAD27-35		27-35mm	To Suit 40mm Body	21.20

Rubber adaptor suitable for all STP fittings that allow the transition from copper (15-16 mm) to galvanised or UPVC (1/2").

Universal Fittings

For Copper Tubing



Code	S35	Price
PEUSP715		3.15

Couplings

Tube x Tube



Code	S35	OD	OD mm	Price
PEUC-15-16		15-22mm (1/2")	16	21.45
PEUC-15-20		15-22mm (1/2")	20	24.40
PEUC-15-25		15-22mm (1/2")	25	21.60
PEUC-15-32		15-22mm (1/2")	32	22.85
PEUC-15-40		15-22mm (1/2")	40	23.15
PEUC-21-20		21-27mm (3/4")	20	27.90
PEUC-21-25		21-27mm (3/4")	25	24.65
PEUC-21-32		21-27mm (3/4")	32	28.40
PEUC-21-40		21-27mm (3/4")	40	27.35
PEUC-21-50		21-27mm (3/4")	50	32.55
PEUC-27-25		27-35mm (1")	25	29.25
PEUC-27-32		27-35mm (1")	32	33.40
PEUC-27-40		27-35mm (1")	40	30.60
PEUC-27-50		27-35mm (1")	50	33.35
PEUC-27-63		27-35mm (1")	63	34.85
PEUC-35-32		35-50mm (1.1/2")	32	40.65
PEUC-35-40		35-50mm (1.1/2")	40	43.30
PEUC-35-50		35-50mm (1.1/2")	50	52.65
PEUC-35-63		35-50mm (1.1/2")	63	55.10

Adaptors

Male, BSPT



Code	S35	OD	Thread	Price
PEUFMSC-15-12		15-22mm (1/2")	R1/2"	18.30
PEUFMSC-15-34		15-22mm (1/2")	R3/4"	18.55
PEUFMSC-15-1		15-22mm (1/2")	R1"	18.30
PEUFMSC-21-34		21-27mm (3/4")	R3/4"	20.95
PEUFMSC-21-1		21-27mm (3/4")	R1"	20.95
PEUFMSC-21-114		21-27mm (3/4")	R1.1/4"	18.40
PEUFMSC-27-1		27-35mm (1")	R1"	23.45
PEUFMSC-27-114		27-35mm (1")	R1.1/4"	24.60
PEUFMSC-27-112		27-35mm (1")	R1.1/2"	24.65
PEUFMSC-35-114		35-50mm (1.1/2")	R1.1/4"	52.45
PEUFMSC-35-112		35-50mm (1.1/2")	R1.1/2"	46.15
PEUFMSC-35-2		35-50mm (1.1/2")	R2"	52.45

Adaptors

Female, BSPP



Code	S35	OD	Thread	Price
PEUFASC-15-12		15-22mm (1/2")	G1/2"	19.05
PEUFASC-15-34		15-22mm (1/2")	G3/4"	16.75
PEUFASC-15-1		15-22mm (1/2")	G1"	16.85
PEUFASC-21-34		21-27mm (3/4")	G3/4"	21.75
PEUFASC-21-1		21-27mm (3/4")	G1"	21.75
PEUFASC-27-1		27-35mm (1")	G1"	25.60
PEUFASC-27-114		27-35mm (1")	G1.1/4"	25.60
PEUFASC-35-112		35-50mm (1.1/2")	G1.1/2"	56.90

End Caps

Tube



Code	S35	OD	Price
PEUEC-15		15-22mm (1/2")	16.30
PEUEC-21		21-27mm (3/4")	21.15
PEUEC-27		27-35mm (1")	25.05
PEUEC-35		35-50mm (1.1/2")	45.95

Elbows

Tube x Tube



Code	S35	OD	OD mm	Price
PEUF90-15-20		15-22mm (1/2")	20	17.40
PEUF90-15-25		15-22mm (1/2")	25	17.60
PEUF90-21-25		21-27mm (3/4")	25	22.90
PEUF90-21-32		21-27mm (3/4")	32	23.60
PEUF90-27-40		27-35mm (1")	40	25.55

Elbows

Male, BSPT



Code	S35	OD	Thread	Price
PEUME-15-12		15-22mm (1/2")	R1/2"	17.25
PEUME-15-34		15-22mm (1/2")	R3/4"	17.25
PEUME-21-34		21-27mm (3/4")	R3/4"	22.90
PEUME-21-1		21-27mm (3/4")	R1"	20.50
PEUME-27-1		27-35mm (1")	R1"	24.00
PEUME-27-114		27-35mm (1")	R1.1/4"	24.00

Elbows

Female, BSPP



Code	S35	OD	Thread	Price
PEUFE-15-12		15-22mm (1/2")	G1/2"	17.75
PEUFE-15-34		15-22mm (1/2")	G3/4"	17.75
PEUFE-21-34		21-27mm (3/4")	G3/4"	20.65
PEUFE-21-1		21-27mm (3/4")	G1"	23.45
PEUFE-27-1		27-35mm (1")	G1"	28.50
PEUFE-27-114		27-35mm (1")	G1.1/4"	25.00

Polyethylene Pipe Universal Transition Fittings & Valves

Tees

Tube x Tube, Universal x PP x PP



Code	S35	A OD	B OD mm	C OD mm	Price
PEUBT-15-25-25		15-22mm (1/2")	25	25	19.65
PEUBT-15-25-20		15-22mm (1/2")	25	20	19.50
PEUBT-21-32-32		21-27mm (3/4")	32	32	22.95
PEUBT-21-32-25		21-27mm (3/4")	32	25	22.65
PEUBT-27-40-40		27-35mm (1")	40	40	30.95
PEUBT-27-40-32		27-35mm (1")	40	32	30.60

Tees

Tube x Tube, Universal x PP x Universal



Code	S35	A OD	B OD mm	Price
PEUCT-15-25		15-22mm (1/2")	25	33.15
PEUCT-15-20		15-22mm (1/2")	20	32.95
PEUCT-15-32		15-22mm (1/2")	32	21.15
PEUCT-21-25		21-27mm (3/4")	25	37.60
PEUCT-21-32		21-27mm (3/4")	32	37.95
PEUCT-21-40		21-27mm (3/4")	40	27.10
PEUCT-27-32		27-35mm (1")	32	47.20
PEUCT-27-40		27-35mm (1")	40	47.65

Tees

Female x BSPP



Code	S35	A OD	B OD mm	Thread	Price
PEUFT-15-12		15-22mm (1/2")	25	1/2"	19.00
PEUFT-15-34		15-22mm (1/2")	25	3/4"	19.00
PEUFT-21-34		21-27mm (3/4")	32	3/4"	22.65
PEUFT-21-1		21-27mm (3/4")	32	1"	22.65
PEUFT-27-1		27-35mm (1")	40	1"	28.20
PEUFT-27-114		27-35mm (1")	40	1.1/4"	28.20

Tees

Male x BSPT



Code	S35	A OD	B OD mm	Thread	Price
PEUMT-15-12		15-22mm (1/2")	25	R1/2"	18.30
PEUMT-15-34		15-22mm (1/2")	25	R3/4"	18.30
PEUMT-21-1		21-27mm (3/4")	32	R1"	21.65
PEUMT-27-114		27-35mm (1")	40	R1.1/4"	26.10



Compression Valves

Tube x Tube

Code	S35	OD mm	Price
PEUBV-20		20	23.20
PEUBV-25		25	33.05
PEUBV-32		32	37.45
PEUBV-40		40	45.90
PEUBV-50		50	52.15
PEUBV-63		63	77.95



Compression Valves

Tube x BSPT Male

Code	S35	OD mm	Thread	Price
PEUBVM-20-12		20	R1/2"	24.55
PEUBVM-25-34		25	R3/4"	31.65
PEUBVM-32-1		32	R1"	34.50
PEUBVM-40-114		40	R1.1/4"	42.15
PEUBVM-50-112		50	R1.1/2"	46.15
PEUBVM-63-2		63	R2"	80.10



Compression Valves

Tube x BSPP Female

Code	S35	OD mm	Thread	Price
PEUBVF-20-12		20	G1/2"	24.55
PEUBVF-25-34		25	G3/4"	31.65
PEUBVF-32-1		32	G1"	32.85
PEUBVF-40-114		40	G1.1/4"	42.15
PEUBVF-50-112		50	G1.1/2"	53.15
PEUBVF-63-2		63	G2"	80.10

Universal Compression Valves

Tube x Tube, Universal x PP



Code	S35	OD mm	OD mm	Price
PEUBV-15-25		15-22	25	58.55
PEUBV-21-25		21-27	25	50.85
PEUBV-15-32		15-22	32	52.15
PEUBV-21-32		21-27	32	75.30
PEUBV-27-40		27-35	40	72.70

Universal Compression Valves

Universal x Universal



Code	S35	OD mm	OD mm	Price
PEUUBV-15-22		15-22	15-22	73.50
PEUUBV-21-22		21-27	15-22	67.60
PEUUBV-21-27		21-27	21-27	80.40
PEUUBV-27-35		27-35	27-35	84.60

Universal Compression Valves

Tube x BSPP Female



Code	S35	OD mm	Thread	Price
PEUBVF-15-34		15-22	G3/4"	58.55
PEUBVF-15-1		15-22	G1"	51.00
PEUBVF-21-34		21-27	G3/4"	58.45
PEUBVF-21-1		21-27	G1"	61.35
PEUBVF-27-114		27-35	G1.1/4"	68.35
PEUBVF-27-112		27-35	G1.1/2"	69.05

Universal Compression Valves

Tube x BSPT Male



Code	S35	OD mm	Thread	Price
PEUBVM-15-12		15-22	R1/2"	48.85
PEUBVM-15-34		15-22	R3/4"	56.85
PEUBVM-15-1		15-22	R1"	51.00
PEUBVM-21-34		21-27	R3/4"	53.25
PEUBVM-21-1		21-27	R1"	53.25
PEUBVM-27-114		27-35	R1.1/4"	42.15
PEUBVM-27-112		27-35	R1.1/2"	69.05

Pipe Cutters & Tube Benders

Also suitable for light alloys.



Copper Pipe Cutters

Mini, Copper Tube

Code	M17	OD Capacity Ø	Weight g	Price
0770.022		22mm (7/8")	99	11.80

Also suitable for light alloys.



Copper Pipe Cutters

Copper Tube

Code	M17	OD Capacity Ø	Weight g	Price
0772.032		32mm (1.1/4")	278	23.40

Also suitable for light alloys.



Copper Pipe Cutters

Telescopic, Copper Tube

Code	M17	OD Capacity Ø	Weight g	Price
0774.032		32mm (1.1/4")	272	21.45



Spare Blades

For Cutters 770, 772 & 774

Code	M17	OD Capacity Ø	Tube	Weight g	Price
0775.110		18 x 3	Copper	3	0.80
0775.210		18 x 3	Stainless Steel	3	4.35

Also suitable for light alloys.



Copper Pipe Cutters

Telescopic Action, Copper Tube

Code	M17	OD Capacity Ø	Tube	Weight g	Price
0776.063		63mm (2.1/2")	-	540	79.50
0776.110		Blade 18 x 3mm	Copper	3	1.00
0776.210		Blade 18 x 3mm	Stainless Steel	3	4.35
0776.310		Blade 18 x 3mm	Plastic	6	1.60



PVC Pipe Cutters

42mm

Code	M17	OD Capacity Ø	Weight g	Price
0790.042		42mm (1.5/8")	318	24.65



PVC Pipe Cutters

Auto, 42mm

Code	M17	OD Capacity Ø	Weight g	Price
0792.042		42mm (1.5/8")	536	43.30
0792.142		Blade to Suit	74	8.60



PVC Pipe Cutters

Quick Release, 42mm

Code	M17	OD Capacity Ø	Weight g	Price
0786.042		42	767	78.90



PVC Pipe Cutters

63mm

Code	M17	OD Capacity Ø	Weight g	Price
0794.063		63mm (2.1/2")	1074	89.20
0794.163		Blade to Suit	170	26.45



Steel Pipe Cutters

2"

Code	M17	OD Capacity Ø	Tube	Weight g	Price
0782.002		2"	-	2500	98.00
0782.110		Blade 31 x 19mm	Steel	25	5.30
0782.210		Blade 31 x 19mm	Stainless Steel	23	14.85



Tube Bender

6mm, 8mm & 10mm Tubes

Code	M17	Tool Length mm	Weight g	Price
0799.010		275	427	29.55

AccuTrak Leak Detection

AccuTrak® VPE represents the state-of-the-art in ultrasonic technology for leak detection and preventative maintenance, and incorporates several of the most recent patents in the field.

AccuTrak® is extremely sensitive to ultrasonic sound of turbulence and friction that is associated with costly equipment faults. Using a technique called “heterodyning”, AccuTrak® translates the otherwise inaudible ultrasound to a lower frequency where it can be heard through a set of headphones.

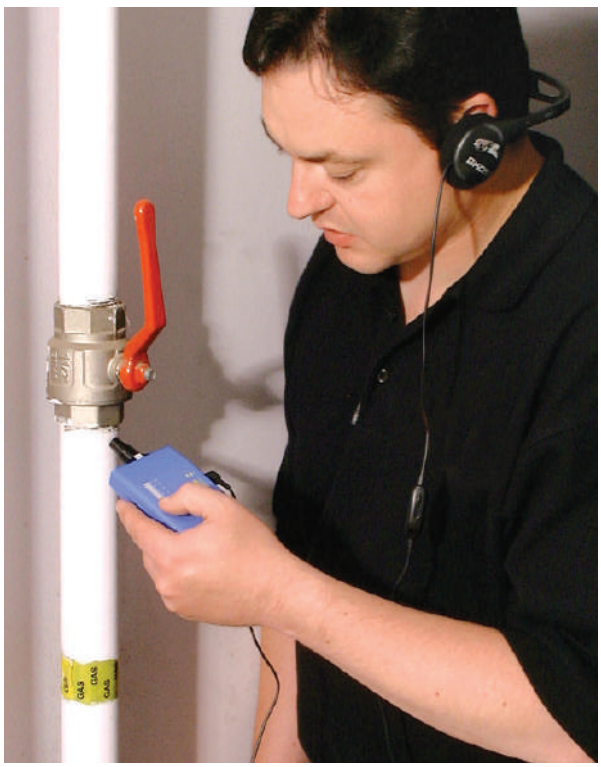


Ultrasonic Leak Detector

High Frequency

Code	Z02	Price
VPE		1302.25

AccuTrak® delivers a clear ultrasonic sound reproduction making it possible to distinguish leaks from other competing background sounds. It is so sensitive you can actually hear the blink of an eye, yet most background noise will not interfere with detection accuracy.



new

FOGCO

Misting Systems

Fogco Enviromental is a recognised industry leading manufacturer of high quality misting equipment for residential, commercial and industrial markets.



Pump Kits

See page 653-654



Pumps

See page 655



Fans

See page 656



Air Injection Dry Fog System

See page 658



Slip Lok Push-in Fittings

See page 659



Nozzles

See page 660



Adaptors

See page 661



Filters

See page 662



Controllers

See page 663

Misting Systems - Pump Kits

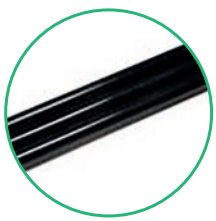
new

FOGCO

This kit range includes a 1,000 psi Fogco direct drive misting pump with either a flexible nylon, pre-fabricated copper or stainless steel tubing mist line, a filter assembly with water supply connections, plus all of the necessary fittings and components to complete a mist system installation for the listed lengths. These Fogco misting kits include a direct drive 230V mist pump and a standard brass and stainless steel misting nozzle with 24" spacing.







Direct Drive Kit

With Nylon Tube

FACTORY DISPATCH

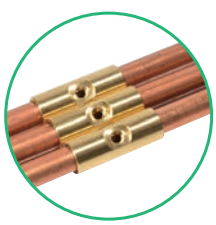
Code M29	Tube Length Feet	No. of Nozzles	Total LPM	Pump Specification LPM	HP	FLA	Direct Pump Ref. no	Price
8N20215	20	10	0.76	0.8	1	7.1	8100215	4601.35
8N30215	30	15	1.14	1.6	1	7.1	8200215	4984.45
8N40215	40	20	1.52	1.6	1	7.1	8200215	5086.60
8N50215	50	25	1.9	3.5	1	7.1	8300215	5290.80
8N60215	60	30	2.28	3.5	1	7.1	8300215	5538.65
8N70215	70	35	2.66	3.5	1	7.1	8300215	5628.10
8N80215	80	40	3.04	3.5	1	7.1	8300215	5724.75
8N90215	90	45	3.42	3.5	1	7.1	8300215	6209.40

Direct Drive Kit

With Copper Tube

FACTORY DISPATCH

Code M29	Tube Length Feet	No. of Nozzles	Total LPM	Pump Specification LPM	HP	FLA	Direct Pump Ref. no	Price
8C20215	20	10	0.76	0.8	1	7.1	8100215	4928.35
8C30215	30	15	1.14	1.6	1	7.1	8200215	5268.25
8C40215	40	20	1.52	1.6	1	7.1	8200215	5545.40
8C50215	50	25	1.9	3.5	1	7.1	8300215	5700.45
8C60215	60	30	2.28	3.5	1	7.1	8300215	6194.15
8C70215	70	35	2.66	3.5	1	7.1	8300215	6472.40
8C80215	80	40	3.04	3.5	1	7.1	8300215	6745.80
8C90215	90	45	3.42	3.5	1	7.1	8300215	7025.40



Direct Drive Kit

With Stainless Steel Tube

FACTORY DISPATCH

Code M29	Tube Length Feet	No. of Nozzles	Total LPM	Pump Specification LPM	HP	FLA	Direct Pump Ref. no	Price
8S20215	20	10	0.76	0.8	1	7.1	8100215	5098.75
8S30215	30	15	1.14	1.6	1	7.1	8200215	5503.15
8S40215	40	20	1.52	1.6	1	7.1	8200215	5847.15
8S50215	50	25	1.9	3.5	1	7.1	8300215	6188.00
8S60215	60	30	2.28	3.5	1	7.1	8300215	6630.20
8S70215	70	35	2.66	3.5	1	7.1	8300215	6971.60
8S80215	80	40	3.04	3.5	1	7.1	8300215	7313.50
8S90215	90	45	3.42	3.5	1	7.1	8300215	7655.60



Key:

LPM: Litres per minute
HP: Horse power
FLA: Full load amperage

Misting Systems - Pump Kits

new

FOGCO

This kit range includes a 1,000 psi Fogco pulley drive misting pump with either a flexible nylon, copper or stainless steel tubing mist line, a filter assembly with water supply connections, plus all of the necessary fittings and components to complete a mist system installation for the listed lengths. These Fogco misting kits include our pulley drive 230V mist pump and our standard brass and stainless steel misting nozzle with 24" spacing.

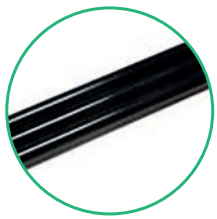


Pulley Drive Kit

With Nylon Tube

FACTORY DISPATCH

Code M29	Tube Length Feet	No. of Nozzles	Total LPM	Pump Specification			Pulley Pump Ref. no	Price
				LPM	HP	FLA		
7N20215	20	10	0.76	1	1	7.1	7100215	**7512.70**
7N30215	30	15	1.14	2	1	7.1	7200215	**7721.00**
7N40215	40	20	1.52	2	1	7.1	7200215	**7927.00**
7N50215	50	25	1.9	4	1	7.1	7400215	**8130.45**
7N60215	60	30	2.28	4	1	7.1	7400215	**8402.40**
7N70215	70	35	2.66	4	1	7.1	7400215	**8606.45**
7N80215	80	40	3.04	4	1	7.1	7400215	**8815.55**
7N90215	90	45	3.42	4	1	7.1	7400215	**8750.40**

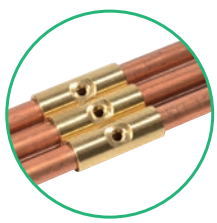


Pulley Drive Kit

With Copper Tube

FACTORY DISPATCH

Code M29	Tube Length Feet	No. of Nozzles	Total LPM	Pump Specification			Pulley Pump Ref. no	Price
				LPM	HP	FLA		
7C20215	20	10	0.76	1	1	7.1	7100215	**7836.05**
7C30215	30	15	1.14	2	1	7.1	7200215	**8112.90**
7C40215	40	20	1.52	4	1	7.1	7200215	**8388.90**
7C50215	50	25	1.9	4	1	7.1	7400215	**8663.40**
7C60215	60	30	2.28	4	1	7.1	7400215	**9005.05**
7C70215	70	35	2.66	4	1	7.1	7400215	**9280.75**
7C80215	80	40	3.04	4	1	7.1	7400215	**9558.35**
7C90215	90	45	3.42	4	1	7.1	7400215	**9834.85**



Pulley Drive Kit

With Stainless Steel Tube

FACTORY DISPATCH

Code M29	Tube Length Feet	No. of Nozzles	Total LPM	Pump Specification			Pulley Pump Ref. no	Price
				LPM	HP	FLA		
7S20215	20	10	0.76	1	1	7.1	7100215	**8006.45**
7S30215	30	15	1.14	2	1	7.1	7200215	**8347.35**
7S40215	40	20	1.52	4	1	7.1	7200215	**8688.60**
7S50215	50	25	1.9	4	1	7.1	7400215	**9030.95**
7S60215	60	30	2.28	4	1	7.1	7400215	**9437.30**
7S70215	70	35	2.66	4	1	7.1	7400215	**9779.90**
7S80215	80	40	3.04	4	1	7.1	7400215	**10121.45**
7S90215	90	45	3.42	4	1	7.1	7400215	**10463.30**



Key:

LPM: Litres per minute
HP: Horse power
FLA: Full load amperage

Misting Systems - Pumps

new

FOGCO

The 50Hz direct drive mist pump range are medium duty outdoor rated units, designed to operate at 70 bar for 8 hours per day, seven days a week under normal operating conditions. This range is ideal for light to medium duty mist applications. These pumps provide quality components in a small and convenient platform.

This mist pump range is available in 230V and includes:

- Direct drive pump
- On/off switch
- Inlet solenoid
- Adjustable regulator with bypass thermal relief valve
- Glycerine filled pressure gauge
- Rubber isolation feet
- Filter assembly



Direct Drive Pump

230V/50Hz

FACTORY DISPATCH

Code M29	Description LPM	HP	FLA	Weight Kg	Dimensions cm L	W	H	Price
8100215	0.8	1	7.1	27.7	59.7	31.8	26.7	**3434.60**
8200215	1.6	1	7.1	27.7	59.7	31.8	26.7	**3717.75**
8300215	3.5	1	7.1	27.7	58.4	31.8	26.7	**3775.25**
8400215	4.4	1	7.1	27.7	58.4	31.8	26.7	**3775.25**
8700215	6.6	1.5	11.3	29.9	58.4	37.8	26.7	**4144.30**

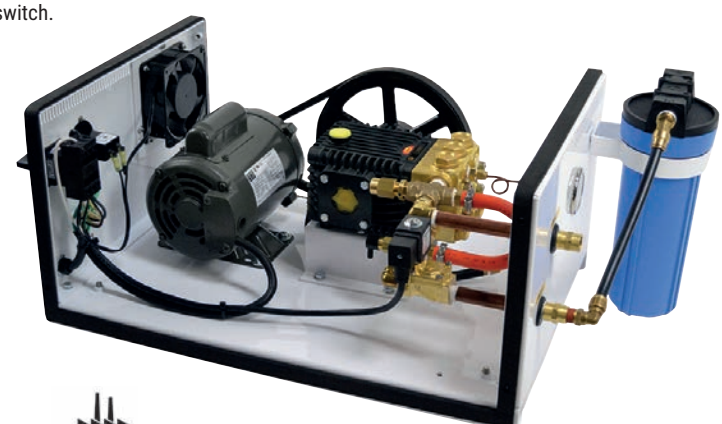
Key:

LPM: Litres per minute
HP: Horse power
FLA: Full load amperage

The 50Hz pulley drive mist pumps are industrial duty outdoor rated units, designed to operate at 70 bar for 24/7 use, under normal operating conditions. This range is ideal for industrial and commercial applications that includes UL compliant thermal and short circuit protection, as well as a low water pressure cut-off switch.

This mist pump range is available in 230V and includes:

- Pulley drive pump
- Exhaust fan
- Panel mount switch
- Inlet solenoid
- Adjustable regulator with bypass thermal relief valve
- Hour meter
- Glycerine filled pressure gauge
- Rubber isolation feet
- Filter assembly



Pulley Driven Pump

230V/50Hz

FACTORY DISPATCH

Code M29	Description LPM	HP	FLA	RPM	Weight Kg	Dimensions cm L	W	H	Price
7100215	1	1	7.1	770	49.9	66.0	30.5	40.6	**6017.70**
7200215	2	1	7.1	598	49.9	66.0	30.5	40.6	**6017.70**
7400215	4	1	7.1	486	49.9	66.0	30.5	40.6	**6329.95**
7800215	8	1.5	11.3	973	53.5	66.0	30.5	40.6	**6443.50**
7120215	12	3	13	1450	59.0	66.0	30.5	40.6	**6443.50**

Key:

LPM: Litres per minute
HP: Horse power
FLA: Full load amperage
RPM: Revs per minute

Misting Systems - Fans

The **Revolution** misting fan provides improved evaporative cooling and humidification, compared to traditional misting fans. Its unique design allows a more uniformed distribution of the fog and improved absorption of the moisture.

By integrating a focused horizontal air stream into the fog, the water droplets can cover more surface area. This allows the mist system to cool or humidify up to 5 times the amount of air, compared to static line misting systems. This mist fan can cover up to 3,600 sq.ft. or 36,000 cu.ft.

This misting fan is available in 230V and uses 0.8 amps. The unit includes a stainless steel fog ring with 10 nozzle fittings.



Revolution

230V Ceiling Mount Fan

Code	M29	Fan Specification HP	FLA	Weight Kg	Dimensions cm L	W	H	Price
93820		0.25	0.9	18.1	61.0	61.0	25.4	**2193.10**

The **Revolution II** misting fan is a smaller version of the **Revolution** and provides improved evaporative cooling and humidification. Its unique design allows a more uniformed distribution of the fog and improved absorption of the moisture.

Similar to the **Revolution**, integrating a focused horizontal air stream into the fog, the water droplets can cover more surface area. This allows the mist system to cool or humidify up to 5 times the amount of air compared to static line misting systems. This mist fan can cover up to 900 sq.ft. or 9,000 cu.ft.

This misting fan provides 250 cfm and is available in 230V and uses 0.12 amps. The unit includes 10ft of 18 gauge insulated power cord, 10ft of flexible high pressure feed line and a rustproof treated and powder coated housing with a 6 nozzle stainless steel fog ring. Custom fog rings are also available.



Revolution II

Ceiling Mount Fan

Code	M29	Fan Specification HP	FLA	Weight Kg	Dimensions cm L	W	H	Price
94820		0.25	0.12	2.0	30.5	30.5	8.9	**1131.60**

Key:

HP : Horse power
FLA : Full load amperage



The **Evolution** is designed for effective climate control for smaller areas with restricted clearance for the fog. The misting fan is suitable for cooling, humidification and limited dust control applications and provides 250 cfm using 0.12 amps at 230V. The mist fan covers up to 1,000 sq.ft. or 10,000 cu.ft.

The cannon design and the internal guide fins produce a strong and focused air stream which projects the fog up to 50ft from the unit making it ideal for low ceiling applications.

The **Evolution** is designed to provide a projection of fog over longer distances with a narrower focus range. The unit can effectively cover an area of 20ft in width and up to 50ft in length. The unit will provide better absorption of the moisture from the system, and a more uniformed distribution of the fog.



Evolution

230V Fan

Code	M29	Fan Specification HP	FLA	Weight Kg	Dimensions cm L	W	H	Price
95820		1/25	0.12	2.7	24.1	20.3	20.3	**1268.70**



Evolution

Wall/Pole Mount Bracket

Code	M29	Weight g	Dimensions cm L	W	H	Price
95030		113.4	16.5	20.3	1.3	**54.00**

NB: For use with the **Evolution** fan only.

Misting Systems - Fans

new

FOGCO

The **Evolution Mini** does not include the cannon shaped housing, so it requires a shorter distance for the absorption of the fog compared to the projection that is capable with the standard **Evolution**.

Because of this characteristic, the **Evolution Mini** is well suited for low ceilings and restricted or confined applications. Due to the reduced noise level and low profile design, this fan can be used in an office or warehouse environment.

The **Evolution Mini** uses a single misting nozzle but multiple nozzle configurations are also available, if increased moisture is required.

The **Evolution Mini** requires a 6 Watt 12V DC power supply. Once the unit is wall mounted, with the provided bracket, it can be adjusted both horizontally and vertically.

The power supply includes a DIN rail and is designed to be mounted in a cabinet or enclosure.







Evolution Mini

12V DC Wall Mount Fan

FACTORY DISPATCH

Code	M29	Weight Kg	Dimensions cm L	W	H	Price
93000-12VDC		2.7	24.1	20.3	20.3	**807.15**



Evolution Mini

12V DC 30 Watt Power Supply

FACTORY DISPATCH

Code	M29	Weight g	Dimensions cm L	W	H	Price
94169		226.8	2.5	10.2	10.2	**130.30**

Misting Systems
- Air Injection Dry Fog System

new FOGCO

The Fogco Air Injection Dry Fog System utilises the proprietary control box, capable of producing over 150 lbs of dry fog per hour. It includes the FOGCOntroller II microprocessor.

The box allows on-site adjustments to the system performance and output. The Drip Free air injection nozzles prevent dripping when the system shuts down and to prevent the water supply from running if there is a loss of air pressure.

The air injection nozzles are capable of producing flow rates from 8 lbs/hr to 16 lbs/hr while providing droplets as small as 1 micron and achieving humidity levels up to 99%.

The Fogco Air Injection System requires the availability of compressed air of at least 80 psi and 25 cfm and water pressure of 60 psi to produce the maximum output of 150 lbs/hr.

The system utilises directionally adjustable dry fog nozzles on a magnetic base or hung using an 3/8" mount.









FACTORY DISPATCH

Air Injection Control Box

Includes FOGCOntroller II Microprocessor

Code M29	Weight Kg	Dimensions cm H	W	L	Price
96100	13.6	30.5	30.5	25.4	4858.85

FACTORY DISPATCH

Drip Free Adjustable Air Nozzle

With All-Thread Mount

Code	M29	Flow	Price
96081		8lbs/hr - 16lbs/hr	1967.85

FACTORY DISPATCH

Drip Free Adjustable Air Nozzle

With Magnetic Base

Code	M29	Flow	Price
96080		8lbs/hr - 16lbs/hr	2156.80

Misting Systems - Slip Lok Push-in Fittings

new

FOGCO

The Fogco line of industrial Slip Lok fittings are rated at 1,500 psi and have been used successfully in industrial applications for over 20 years.

The fittings include a heavy duty body, thicker locking ferrule and an over sized viton o-ring. Their unique design allows them to be easily removed, replaced or re-installed anytime after the initial installation. No special tools or crimping procedures are required.

- Standard threads are 10/24 UNC.





Male Stud

Male Thread, NPT x Tube

Code	M29	Tube OD	Thread NPT	Price
94853		1/4"	1/4"	11.85
92712		3/8"	1/4"	27.10
92707		3/8"	3/8"	19.00



Mistscaping Adaptor

Tube x UNC

Code	M29	Tube OD	Thread UNC	Price
92923		3/8"	10/24	35.25



Equal Elbow

Tube x Tube

Code	M29	Tube OD	Price
92703		3/8"	29.80



Mistscaping Equal Joiner

Tube x UNC

Code	M29	Tube OD	Thread UNC	Price
94630		1/4"	10/24	15.80
92630		3/8"	10/24	25.15



Equal Tee

Tube x Tube

Code	M29	Tube OD	Price
92704		3/8"	33.55



Equal Cross

Tube x Tube

Code	M29	Tube OD	Price
92711		3/8"	86.80



End Plug

Tube

Code	M29	Material	Tube OD	Price
94706		Plastic	1/4"	3.80
92706		Brass	3/8"	5.05



Joiners

Tube x Tube

Code	M29	Tube OD	Price
92702		3/8"	27.90

Misting Systems - Nozzles

new

FOGCO

These misting nozzles are available in brass with stainless steel orifices.
The sizes range from 0.008" to 0.020" with flow rates from 0.020 gpm to 0.055 gpm.

- Spray patterns vary from 60º to 90º.
- Standard threads are 10/24 UNC.
- All stainless steel and 12/24 UNC are available on request.



Standard Mist Nozzle

Brass

Code M29	Orifice Size Inches	LPM	Spray Pattern	O-Ring Colour	Weight g	Dimensions cm L	W	H	Price
93508	0.008	0.76	60º	Red	9.1	2.5	1.0	1.0	**6.90**
93512	0.012	0.110	70º	Black	9.1	2.5	1.0	1.0	**6.90**
80450	0.016	0.167	80º	Brown	9.1	2.5	1.0	1.0	**6.90**
93520	0.020	0.208	90º	Green	9.1	2.5	1.0	1.0	**6.90**



All cleanable misting nozzles include an anti-drip adaptor. This range is available in brass with a stainless steel orifice or all stainless steel design.

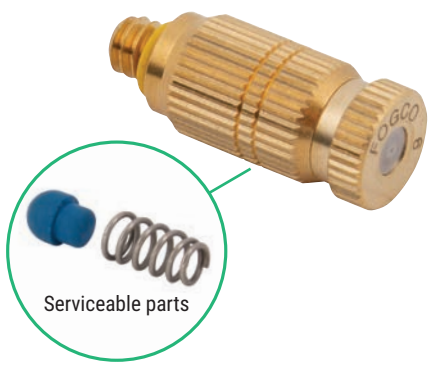
The sizes range from 0.006" to 0.020" with flow rate from 0.01 gpm to 0.045 gpm.

- Spray patterns from 45º to 85º.
- Larger orifice sizes and different threads are also available as special order items.
- Standard threads are 10/24 UNC.
- All stainless steel and 12/24 UNC are available on request.

Cleanable Anti-drip Nozzle

Brass

Code M29	Orifice Size Inches	LPM	Spray Pattern	O-Ring Colour	Weight g	Dimensions cm L	W	H	Price
95031	0.006	0.037	45º	Yellow	9.1	2.5	1.0	1.0	**19.20**
95037	0.008	0.060	55°	Red	9.1	2.5	1.0	1.0	**15.65**
95038	0.012	0.095	65°	Black	9.1	2.5	1.0	1.0	**15.65**
95039	0.016	0.136	75°	Brown	9.1	2.5	1.0	1.0	**15.65**
95040	0.020	0.170	85°	Green	9.1	2.5	1.0	1.0	**15.65**



Cleanable Anti-drip Nozzle

Stainless Steel

Code M29	Orifice Size Inches	LPM	Spray Pattern	O-Ring Colour	Weight g	Dimensions cm L	W	H	Price
95032	0.006	0.037	45º	Brown	9.1	2.5	1.0	1.0	**31.20**
95033	0.008	0.060	55º	Brown	9.1	2.5	1.0	1.0	**22.65**
95034	0.012	0.095	65º	Brown	9.1	2.5	1.0	1.0	**22.65**
95035	0.016	0.136	75º	Brown	9.1	2.5	1.0	1.0	**22.65**
95036	0.020	0.170	85º	Brown	9.1	2.5	1.0	1.0	**22.65**



Misting Systems - Adaptors

new

FOGCO

The nozzle adaptor range includes extensions, clusters and adaptors to provide more options in the designing and installation of a mist system.

Clusters allow 3 or 5 nozzles to be placed in a single nozzle fitting.

Extensions allow the fog to be directed in a specific way, while extending the fog up to 12 inches from the line.



Nozzle Extension

Brass

Code	M29	Nozzle Length Inches	Male Thread UNC	Female Thread UNC	Price
93501		1.5	10/24	10/24	9.45



Nozzle Extension

Copper

Code	M29	Nozzle Length Inches	Male Thread UNC	Female Thread UNC	Price
93597		6	10/24	10/24	37.55
92808		12	10/24	10/24	38.55



Nozzle Extension

Stainless Steel

Code	M29	Nozzle Length Inches	Male Thread UNC	Female Thread UNC	Price
94506		6	10/24	10/24	52.60
94512		12	10/24	10/24	55.35



Nozzle Cluster

Stainless Steel

Code	M29	Male Thread UNC	Female Thread UNC	Price
93019		10/24	5 x 10/24	89.10



Nozzle Swivel Adaptor

Nickel-plated

Code	M29	Male Thread UNC	Female Thread UNC	Price
95041		10/24	10/24	28.35



Auto Drain Valve

Medium Pressure

Code	M29	Male Thread UNC	Price
93503		10/24	19.00



Nozzle Adaptor

Brass

Code	M29	Male Thread	Female Thread UNC	Price
92519		1/8" NPT	10/24	12.50
92520		12/24 UNC	10/24	9.70



Nozzle Plug

Brass

Code	M29	Male Thread UNC	Price
93505		10/24	3.80



Nozzle Removal Tool

Plastic

Code	M29	Price
92100		25.00



Nozzle O-Rings

Plastic

Code	M29	Material	Price
10252		Nitrile	0.45
93598		Viton	0.45



Replacement Spring

For Cleanable Anti-drip Nozzle

Code	M29	Price
92788		0.80



Replacement Stemmed Ball

For Cleanable Anti-drip Nozzle

Code	M29	Price
93354		2.35

Misting Systems - Filters

new

FOGCO

Filtration is highly recommended for every mist system. Fogco offer a full range of filter cartridges and housing. From their smallest 'hose end' calcium inhibitor filter to the larger 10" filter housing with varying micron cartridges.

Fogco's filter range also includes a special phosphate cartridge for the 10" filter housing. This cartridge helps eliminate the adverse effects of calcium and dissolved solids present in the water supply.

For very high flow rates, Fogco offers an increased capacity filtration option that includes a larger housing and a dual stage cartridge. This filter housing includes 1" ports for maximum flow.



Water Pretreatment Kit

With Cartridges

Code	M29	Type	Price
93613		Polyphosphate	186.10
93614		Scalex	377.90



10" Filter Housing

1" Ports, High Flow

Code	M29	Price
92611		236.60



10" Blue Slimline Filter Housing

1/2" Ports

Code	M29	Price
92609		83.70



10" Dual Filter Cartridge

For 92611

Code	M29	Pre-filter Micron µm	Filter Micron µm	GPM	Price
92612		25	1	30	93.00



Filter Cartridges

Particle Removal Filter

Code	M29	Micron µm	Price
92603		1	19.95
92608		2	19.95



Filter Cartridges

Limescale/Corrosion Inhibiting Filter

Code	M29	Type	Price
93039		Polyphosphate	99.35
92613		Scalex	269.95



Calcium Inhibitor Filter

2.0 LPM

Code	M29	Price
10109		48.80



Mounting Bracket

For 92609

Code	M29	Price
95022		8.00



Replacement O-Ring

For 92609

Code	M29	Price
95024		8.20



Filter Wrench

For 92609

Code	M29	Price
95062		10.00

Misting Systems - Controllers

new

FOGCO

The FOGCOntroller is a 2 zone 24V AC microprocessor that accepts input from two separate sensors. The controller has 5 independent programmable relays that can control a series of fans, zone valves, and pumps.

The controller also includes a programmable time delay NC contact that can be used to terminate all output signals from the controller if a defined condition develops with the system.

The humidity settings range from 30% to 99% with a hysteresis range between 1 and 9. The temperature settings range from 70° to 99° with a hysteresis range between 1 and 9.

The standard sensor will have an accuracy of +/- 2% from 10% to 70% humidity. It is recommended that the high humidity sensor be used for applications requiring humidity levels above 70%.

- The controller requires a 50 Watt 24V AC transformer as a power supply.



FACTORY DISPATCH

FOGCOntroller

2 Zone Microprocessor

Code	M29	Weight g	Dimensions cm L	W	H	Price
92910		454	15.2	8.9	5.7	1965.15

The FOGCOntroller II is a humidity controller, with an internal humidity sensor that provides automated operation of a fog system. The unit can operate based on its internal sensor or it can be wired to an external sensor for high humidity applications.

The humidity settings range from 10% to 99% with a hysteresis range between 1 and 5. It is recommended to use the external sensor for humidity levels above 50% and our high humidity sensor for humidity levels above 70%.

The FOGCOntroller II is a single zone microprocessor and has two output relays with a programmable delay start and stop.

The internal and external sensors are fully calibrated re-flow humidity sensors with digital output that sends binary data over RS485 protocol. The sensor will have an accuracy of +/- 2%.

- The controller requires a 50 Watt 24V AC transformer as a power supply.



FACTORY DISPATCH

FOGCOntroller II

Single Zone Microprocessor

Code	M29	Weight g	Dimensions cm L	W	H	Price
94160		182	14	7.6	2.5	1438.50

FACTORY DISPATCH

Sensor

For High Humidity



Code	M29	Detection Range	Weight g	Dimensions cm L	W	H	Price
92906		0 to 99%	137	10.2	10.2	2.5	2355.60

FACTORY DISPATCH

Remote Sensor

For Temperature/Humidity



Code	M29	Detection Range	Weight g	Dimensions cm L	W	H	Price
92909		0 to 70%	91	10.2	5.1	2.5	914.45

FACTORY DISPATCH

4 Pin Connector

To Suit FOGCOntroller & FOGCOntroller II



Code	M29	Weight g	Dimensions cm L	W	H	Price
92908		10	2.5	2.5	2.5	61.20

The Universal Remote Control (URC) with transmitter and wireless receiver allows automated operation of a fog system up to 150ft away and plugs into standard 20 amp receptacles.

The 230V units are available in both 15 and 20 amp versions. They include a NEMA plug and receptacle. The 230V units are rated to operate a 3hp motor, with a draw of 12 amp and 16 amp respectively.

These controllers include a key fob, a radio frequency wireless receiver, a motor start contactor, a power supply cord and a power cord receptacle in an outdoor rated enclosure. The receiver and transmitter operate on one of four frequency channels.



Universal Remote Control

230V/20 AMP

FACTORY DISPATCH

Code	M29	Weight Kg	Dimensions cm L	W	H	Price
94320.20		1.9	20.3	20.3	10.2	794.85

John Guest®
The Push-fit People

RELIABILITY IS TRUST

The simplicity of John Guest's Speedfit Technology is what makes it so special The only tools you'll ever need are your hands. But we realise that every time that you make a connection, you are placing great trust in our hands.

We take that responsibility very seriously and have created a unique engineering environment to ensure that your trust is deserved and re-paid many times over.

we are proud to be the Push-fit People.

AIR & PNEUMATIC CONNECTIONS

Speedfit® Technology



info@johnguest.com

www.johnguest.com

EST.1961

AS BRITISH AS THE DAY IT WAS BORN

Push-in Fittings



Section 6

Grey Push-in Fittings
See pages 356-360

Blue Push-in Fittings
See pages 361-366

NPT Plastic Push-in Fittings
• Metric
See pages 368-370

NPT Plastic Push-in Fittings
• Imperial
See pages 371-372

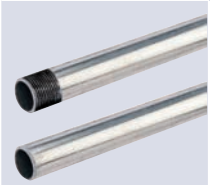
All Stainless Steel Push-in Fittings
See pages 373-374

Malleable Iron





668-672 Pipe Fittings



673 Galvanised Steel Tube



674 Red Oxide Steel Tube



675 Malleable Iron Accessories



676-678 Handrail Pipe Clamp Systems



679-680 Handrail Pipe Clamp Systems, Swivel Range



681-683 Flanges



683 Flange Gaskets

Barrel Nipple

Galvanised, Heavy-duty



Code	T03	Size BSPT	Size mm	Price 1-9	Price 10+
GBN38		R3/8"	50	1.85	1.80
GBN12		R1/2"	60	1.90	1.85
GBN34		R3/4"	60	2.00	1.90
GBN1		R1"	60	3.20	3.05
GBN114		R1.1/4"	80	4.75	4.55
GBN112		R1.1/2"	80	5.40	5.15
GBN2		R2"	100	7.80	7.45

Barrel Nipple

Galvanised, Extended Lengths



Code	T03	Size BSPT	Size mm	Price 1-9	Price 10+
GBN12-0150		R1/2"	150	3.90	3.75
GBN12-0200		R1/2"	200	4.95	4.75
GBN12-0250		R1/2"	250	6.15	5.85
GBN12-0300		R1/2"	300	7.35	7.00
GBN12-0400		R1/2"	400	9.60	9.15
GBN12-0500		R1/2"	500	0.70	0.66
GBN34-0100		R3/4"	100	3.45	3.30
GBN34-0150		R3/4"	150	5.15	4.90
GBN34-0200		R3/4"	200	6.30	6.00
GBN34-0250		R3/4"	250	6.50	6.20
GBN34-0300		R3/4"	300	9.35	8.90
GBN34-0500		R3/4"	500	11.60	11.05
GBN1-0100		R1"	100	5.20	4.95
GBN1-0150		R1"	150	7.85	7.50
GBN1-0200		R1"	200	9.60	9.15
GBN1-0250		R1"	250	11.30	10.75
GBN1-0300		R1"	300	14.50	13.80
GBN1-0400		R1"	400	15.75	15.00
GBN1-0500		R1"	500	16.65	15.85
GBN114-0150		R1.1/4"	150	9.30	8.85
GBN114-0200		R1.1/4"	200	11.50	10.95
GBN114-0250		R1.1/4"	250	12.50	11.90
GBN114-0300		R1.1/4"	300	16.95	16.15
GBN112-0150		R1.1/2"	150	10.65	10.15
GBN112-0200		R1.1/2"	200	13.00	12.35
GBN112-0300		R1.1/2"	300	19.45	18.50
GBN2-0150		R2"	150	15.00	14.25
GBN2-0200		R2"	200	18.35	17.45
GBN2-0250		R2"	250	7.75	7.40
GBN2-0300		R2"	300	27.45	26.10

Barrel Nipple

Black, Heavy-duty



Code	T03	Size BSPT	Size mm	Price 1-9	Price 10+
BBN12		R1/2"	60	1.85	1.80
BBN34		R3/4"	60	1.95	1.90
BBN1		R1"	60	3.25	3.10
BBN114		R1.1/4"	80	4.60	4.40
BBN112		R1.1/2"	80	5.25	5.00
BBN2		R2"	100	7.60	7.25

Barrel Nipple

Black, Extended Lengths



Code	T03	Size BSPT	Size mm	Price 1-9	Price 10+
BBN12-0100		R1/2"	100	2.40	2.30
BBN12-0200		R1/2"	200	4.40	4.20
BBN34-0100		R3/4"	100	3.05	2.90
BBN34-0200		R3/4"	200	5.60	5.35
BBN1-0100		R1"	100	4.75	4.55
BBN1-0200		R1"	200	8.75	8.35
BBN114-0150		R1.1/4"	150	8.40	8.00
BBN114-0200		R1.1/4"	200	10.25	9.75
BBN112-0150		R1.1/2"	150	9.75	9.30
BBN112-0200		R1.1/2"	200	11.80	11.25
BBN2-0150		R2"	150	13.70	13.05
BBN2-0200		R2"	200	16.65	15.85

Reducing Nipple

Galvanised, 245



Code	T04	Size BSPT A	Size BSPT B	Price 1-9	Price 10+
GHRN1214		R1/2"	R1/4"	1.70	1.65
GHRN1238		R1/2"	R3/8"	1.70	1.65
GHRN3438		R3/4"	R3/8"	2.10	2.00
GHRN3412		R3/4"	R1/2"	2.10	2.00
GHRN112		R1"	R1/2"	3.00	2.85
GHRN134		R1"	R3/4"	3.00	2.85
GHRN11412		R1.1/4"	R1/2"	5.05	4.80
GHRN11434		R1.1/4"	R3/4"	5.05	4.80
GHRN1141		R1.1/4"	R1"	5.05	4.80
GHRN11234		R1.1/2"	R3/4"	6.15	5.85
GHRN1121		R1.1/2"	R1"	6.15	5.85
GHRN112114		R1.1/2"	R1.1/4"	6.20	5.90
GHRN21		R2"	R1"	9.05	8.60
GHRN2114		R2"	R1.1/4"	9.20	8.75
GHRN2112		R2"	R1.1/2"	9.20	8.75
GHRN32		R3"	R2"	39.20	37.25

Reducing Female Socket

Galvanised, 240



Code	T04	Size BSPP A	Size BSPP B	Price 1-9	Price 10+
GRFS1238		G1/2"	G3/8"	1.25	1.20
GRFS3412		G3/4"	G1/2"	1.95	1.90
GRFS138		G1"	G3/8"	2.70	2.60
GRFS112		G1"	G1/2"	2.70	2.60
GRFS134		G1"	G3/4"	2.70	2.60
GRFS11412		G1.1/4"	G1/2"	3.85	3.70
GRFS11434		G1.1/4"	G3/4"	3.85	3.70
GRFS1141		G1.1/4"	G1"	3.85	3.70
GRFS11212		G1.1/2"	G1/2"	4.60	4.40
GRFS11234		G1.1/2"	G3/4"	4.60	4.40
GRFS1121		G1.1/2"	G1"	4.60	4.40
GRFS112114		G1.1/2"	G1.1/4"	4.60	4.40
GRFS212		G2"	G1/2"	7.00	6.65
GRFS234		G2"	G3/4"	7.00	6.65
GRFS21		G2"	G1"	7.15	6.80
GRFS2114		G2"	G1.1/4"	7.00	6.65
GRFS2112		G2"	G1.1/2"	7.15	6.80
GRFS3112		G3"	G1.1/2"	18.95	18.05
GRFS32		G3"	G2"	20.75	19.75
GRFS42		G4"	G2"	34.85	33.15
GRFS43		G4"	G3"	35.45	33.70

Equal Hexagon Nipple

Galvanised, 280



Code	T04	Size BSPT	Price 1-9	Price 10+
GHEN38		R3/8"	1.15	1.10
GHEN12		R1/2"	1.25	1.20
GHEN34		R3/4"	1.70	1.65
GHEN1		R1"	2.40	2.30
GHEN114		R1.1/4"	3.40	3.25
GHEN112		R1.1/2"	4.70	4.50
GHEN2		R2"	6.55	6.25
GHEN3		R3"	18.15	17.25
GHEN4		R4"	29.10	27.65

Equal Hexagon Nipple

Black, 290



Code	T04	Size BSPT	Price 1-9	Price 10+
BHEN12		R1/2"	1.15	1.10
BHEN34		R3/4"	1.55	1.50
BHEN1		R1"	2.15	2.05
BHEN114		R1.1/4"	3.20	3.05
BHEN112		R1.1/2"	4.30	4.10
BHEN2		R2"	6.00	5.70

Malleable Iron Pipe Fittings

Equal Female Socket

Galvanised, 270



Code	T04	Size BSPP	Price 1-9	Price 10+
GFS38		G3/8"	1.15	1.10
GFS12		G1/2"	1.25	1.20
GFS34		G3/4"	1.60	1.55
GFS1		G1"	2.70	2.60
GFS114		G1.1/4"	3.75	3.60
GFS112		G1.1/2"	4.60	4.40
GFS2		G2"	7.15	6.80
GFS3		G3"	18.15	17.25
GFS4		G4"	29.45	28.00

Equal Female Socket

Black, 270



Code	T04	Size BSPP	Price 1-9	Price 10+
BFS12		G1/2"	1.15	1.10
BFS34		G3/4"	1.45	1.40
BFS1		G1"	2.40	2.30
BFS114		G1.1/4"	3.35	3.20
BFS112		G1.1/2"	4.20	4.00
BFS2		G2"	6.50	6.20

Equal 90º Female Elbow

Galvanised, 90



Code	T04	Size BSPP	Price 1-9	Price 10+
GFFEE38		G3/8"	1.70	1.65
GFFEE12		G1/2"	1.45	1.40
GFFEE34		G3/4"	2.15	2.05
GFFEE1		G1"	3.35	3.20
GFFEE114		G1.1/4"	5.05	4.80
GFFEE112		G1.1/2"	6.60	6.30
GFFEE2		G2"	9.95	9.50
GFFEE212		G2.1/2"	14.40	13.70
GFFEE3		G3"	26.65	25.35
GFFEE4		G4"	48.10	45.70

Equal 90º Female Elbow

Black, 90



Code	T04	Size BSPP	Price 1-9	Price 10+
BFFEE12		G1/2"	1.30	1.25
BFFEE34		G3/4"	1.95	1.90
BFFEE1		G1"	3.10	2.95
BFFEE114		G1.1/4"	4.60	4.40
BFFEE112		G1.1/2"	6.15	5.85
BFFEE2		G2"	9.20	8.75

Reducing Bush

Galvanised, 241



Code	T04	Size BSPP A	Size BSPP B	Price 1-9	Price 10+
GRB1214		G1/2"	G1/4"	1.25	1.20
GRB1238		G1/2"	G3/8"	1.15	1.10
GRB3438		G3/4"	G3/8"	1.45	1.40
GRB3412		G3/4"	G1/2"	1.45	1.40
GRB138		G1"	G3/8"	2.10	2.00
GRB112		G1"	G1/2"	2.10	2.00
GRB134		G1"	G3/4"	2.10	2.00
GRB11412		G1.1/4"	G1/2"	3.35	3.20
GRB11434		G1.1/4"	G3/4"	3.35	3.20
GRB1141		G1.1/4"	G1"	3.35	3.20
GRB11212		G1.1/2"	G1/2"	3.85	3.70
GRB11234		G1.1/2"	G3/4"	4.00	3.80
GRB1121		G1.1/2"	G1"	3.85	3.70
GRB112114		G1.1/2"	G1.1/4"	4.00	3.80
GRB212		G2"	G1/2"	5.30	5.05
GRB234		G2"	G3/4"	5.35	5.10
GRB21		G2"	G1"	5.35	5.10
GRB2114		G2"	G1.1/4"	5.30	5.05
GRB2112		G2"	G1.1/2"	5.30	5.05
GRB31		G3"	G1"	13.10	12.45
GRB3112		G3"	G1.1/2"	13.10	12.45
GRB32		G3"	G2"	13.35	12.70
GRB42		G4"	G2"	24.90	23.70
GRB4212		G4"	G2.1/2"	22.80	21.70
GRB43		G4"	G3"	24.55	23.35

Reducing Bush

Black, 241



Code	T04	Size BSPP A	Size BSPP B	Price 1-9	Price 10+
BRB1238		G1/2"	G3/8"	1.15	1.10
BRB3412		G3/4"	G1/2"	1.25	1.20
BRB112		G1"	G1/2"	1.90	1.85
BRB134		G1"	G3/4"	1.90	1.85
BRB11412		G1.1/4"	G1/2"	3.10	2.95
BRB11434		G1.1/4"	G3/4"	3.10	2.95
BRB1141		G1.1/4"	G1"	3.10	2.95
BRB11212		G1.1/2"	G1/2"	3.60	3.45
BRB11234		G1.1/2"	G3/4"	3.60	3.45
BRB1121		G1.1/2"	G1"	3.60	3.45
BRB112114		G1.1/2"	G1.1/4"	3.60	3.45
BRB212		G2"	G1/2"	5.05	4.80
BRB234		G2"	G3/4"	5.05	4.80
BRB21		G2"	G1"	5.05	4.80
BRB2114		G2"	G1.1/4"	5.05	4.80
BRB2112		G2"	G1.1/2"	5.05	4.80

Equal 90º Male/ Female Elbow

Galvanised, 92



Code	T04	Size BSPP	Price 1-9	Price 10+
GMFEE38		G3/8"	1.85	1.80
GMFEE12		G1/2"	1.70	1.65
GMFEE34		G3/4"	2.40	2.30
GMFEE1		G1"	3.60	3.45
GMFEE114		G1.1/4"	6.20	5.90
GMFEE112		G1.1/2"	7.55	7.20
GMFEE2		G2"	10.70	10.20
GMFEE212		G2.1/2"	18.00	17.10
GMFEE3		G3"	36.75	34.95
GMFEE4		G4"	61.35	58.30

Equal 90º Male/ Female Elbow

Black, 92



Code	T04	Size BSPP	Price 1-9	Price 10+
BMFEE12		G1/2"	1.55	1.50
BMFEE34		G3/4"	2.15	2.05
BMFEE1		G1"	3.25	3.10
BMFEE114		G1.1/4"	5.70	5.45
BMFEE112		G1.1/2"	7.15	6.80
BMFEE2		G2"	9.95	9.50

Malleable Iron Pipe Fittings

Equal 90º Female Bend

Galvanised, 2



Code	T04	Size BSPP	Price 1-9	Price 10+
GFFEB9038		G3/8"	2.80	2.70
GFFEB9012		G1/2"	2.75	2.65
GFFEB9034		G3/4"	5.35	5.10
GFFEB901		G1"	6.15	5.85
GFFEB90114		G1.1/4"	10.00	9.50
GFFEB90112		G1.1/2"	13.95	13.30
GFFEB902		G2"	21.30	20.25
GFFEB903		G3"	92.15	87.55
GFFEB904		G4"	98.45	93.55

Equal Female Tee

Galvanised, 130



Code	T04	Size BSPP	Price 1-9	Price 10+
GFET38		G3/8"	2.10	2.00
GFET12		G1/2"	1.90	1.85
GFET34		G3/4"	2.75	2.65
GFET1		G1"	4.30	4.10
GFET114		G1.1/4"	6.55	6.25
GFET112		G1.1/2"	8.25	7.85
GFET2		G2"	12.25	11.65
GFET3		G3"	34.45	32.75
GFET4		G4"	63.05	59.90

Reducing Tee on Branch

Galvanised, 130



Code	T04	Size BSPP A	Size BSPP B	Price 1-9	Price 10+
GFRT1238		G1/2"	G3/8"	2.75	2.65
GFRT3438		G3/4"	G3/8"	3.40	3.25
GFRT3412		G3/4"	G1/2"	3.40	3.25
GFRT138		G1"	G3/8"	5.15	4.90
GFRT112		G1"	G1/2"	5.15	4.90
GFRT134		G1"	G3/4"	5.15	4.90
GFRT11412		G1.1/4"	G1/2"	7.80	7.45
GFRT11434		G1.1/4"	G3/4"	7.80	7.45
GFRT1141		G1.1/4"	G1"	7.80	7.45
GFRT11212		G1.1/2"	G1/2"	9.95	9.50
GFRT11234		G1.1/2"	G3/4"	9.75	9.30
GFRT1121		G1.1/2"	G1"	9.75	9.30
GFRT112114		G1.1/2"	G1.1/4"	9.75	9.30
GFRT212		G2"	G1/2"	13.95	13.30
GFRT234		G2"	G3/4"	13.95	13.30
GFRT21		G2"	G1	14.10	13.40
GFRT2114		G2"	G1.1/4"	14.15	13.45
GFRT2112		G2"	G1.1/2"	13.95	13.30

Equal 90º Female Bend

Black, 2



Code	T04	Size BSPP	Price 1-9	Price 10+
BFFEB9012		G1/2"	2.60	2.50
BFFEB9034		G3/4"	4.00	3.80
BFFEB901		G1"	5.65	5.40
BFFEB90114		G1.1/4"	9.10	8.65
BFFEB90112		G1.1/2"	12.85	12.25
BFFEB902		G2"	19.70	18.75

Equal Female Tee

Black, 130



Code	T04	Size BSPP	Price 1-9	Price 10+
BFET12		G1/2"	1.75	1.70
BFET34		G3/4"	2.55	2.45
BFET1		G1"	4.00	3.80
BFET114		G1.1/4"	6.10	5.80
BFET112		G1.1/2"	7.65	7.30
BFET2		G2"	11.50	10.95

Reducing Tee on Branch

Black, 130



Code	T04	Size BSPP A	Size BSPP B	Price 1-9	Price 10+
BFRT1238		G1/2"	G3/8"	3.60	3.45
BFRT3412		G3/4"	G1/2"	3.10	2.95
BFRT112		G1"	G1/2"	4.80	4.60
BFRT134		G1"	G3/4"	4.80	4.60
BFRT11412		G1.1/4"	G1/2"	7.20	6.85
BFRT11434		G1.1/4"	G3/4"	7.20	6.85
BFRT11234		G1.1/2"	G3/4"	9.10	8.65
BFRT1121		G1.1/2"	G1"	9.10	8.65
BFRT112114		G1.1/2"	G1.1/4"	9.10	8.65
BFRT234		G2"	G3/4"	12.85	12.25
BFRT21		G2"	G1"	12.85	12.25
BFRT2114		G2"	G1.1/4"	12.85	12.25

Reducing 90º Elbow

Galvanised, 245



Code	T04	Size BSPP A	Size BSPP B	Price 1-9	Price 10+
GFFRE1238		G1/2"	G3/8"	2.05	1.95
GFFRE3438		G3/4"	G3/8"	4.05	3.85
GFFRE3412		G3/4"	G1/2"	2.30	2.20
GFFRE112		G1"	G1/2"	3.40	3.25
GFFRE134		G1"	G3/4"	3.50	3.35
GFFRE11412		G1.1/4"	G1/2"	9.30	8.85
GFFRE1141		G1.1/4"	G1"	5.35	5.10
GFFRE1121		G1.1/2"	G1"	6.75	6.45
GFFRE112114		G1.1/2"	G1.1/4"	6.75	6.45
GFFRE21		G2"	G1"	9.90	9.45
GFFRE2114		G2"	G1.1/4"	16.65	15.85
GFFRE2112		G2"	G1.1/2"	9.90	9.45

45º Female Elbow

Galvanised, 155



Code	T04	Size BSPP	Price 1-9	Price 10+
GFFEB4538		G3/8"	5.15	4.90
GFFEB4512		G1/2"	5.60	5.35
GFFEB4534		G3/4"	6.95	6.65
GFFEB451		G1"	8.60	8.20
GFFEB45114		G1.1/4"	16.20	15.40
GFFEB45112		G1.1/2"	20.45	19.45
GFFEB452		G2"	29.30	27.85
GFFEB453		G3"	41.20	39.15

Malleable Iron Pipe Fittings

Equal Female Cross

Galvanised, 180



Code	T04	Size BSPP	Price 1-9	Price 10+
GFEC38		G3/8"	6.75	6.45
GFEC12		G1/2"	3.80	3.65
GFEC34		G3/4"	5.30	5.05
GFEC1		G1"	7.65	7.30
GFEC114		G1.1/4"	10.70	10.20
GFEC112		G1.1/2"	14.40	13.70
GFEC2		G2"	19.80	18.85

Equal Female Cross

Black, 180



Code	T04	Size BSPP	Price 1-9	Price 10+
BFEC12		G1/2"	3.60	3.45
BFEC34		G3/4"	5.65	5.40
BFEC1		G1"	6.60	6.30
BFEC114		G1.1/4"	10.60	10.10
BFEC112		G1.1/2"	13.35	12.70
BFEC2		G2"	18.45	17.55

Equal Female Union

Galvanised, 340



Code	T04	Size BSPP	Price 1-9	Price 10+
GFEU38		G3/8"	9.70	9.25
GFEU12		G1/2"	5.80	5.55
GFEU34		G3/4"	7.20	6.85
GFEU1		G1"	8.45	8.05
GFEU114		G1.1/4"	12.45	11.85
GFEU112		G1.1/2"	16.55	15.75
GFEU2		G2"	24.90	23.70
GFEU3		G3"	65.45	62.20

Equal Female Union

Black, 340



Code	T04	Size BSPP	Price 1-9	Price 10+
BFEU12		G1/2"	5.25	5.00
BFEU34		G3/4"	6.60	6.30
BFEU1		G1"	7.80	7.45
BFEU114		G1.1/4"	10.70	10.20
BFEU112		G1.1/2"	14.10	13.40
BFEU2		G2"	22.65	21.55

Equal Male/ Female Union

Galvanised, 341



Code	T04	Size BSP A	Size BSP B	Price 1-9	Price 10+
GMFEU38		R3/8"	G3/8"	8.25	7.85
GMFEU12		R1/2"	G1/2"	7.30	6.95
GMFEU34		R3/4"	G3/4"	8.80	8.40
GMFEU1		R1"	G1"	11.00	10.45
GMFEU114		R1.1/4"	G1.1/4"	17.45	16.60
GMFEU112		R1.1/2"	G1.1/2"	21.75	20.70
GMFEU2		R2"	G2"	35.55	33.80

Equal Male/ Female Union

Black, 341



Code	T04	Size BSP A	Size BSP B	Price 1-9	Price 10+
BMFEU12		R1/2"	G1/2"	5.20	4.95
BMFEU34		R3/4"	G3/4"	6.15	5.85
BMFEU1		R1"	G1"	8.65	8.25
BMFEU114		R1.1/4"	G1.1/4"	13.60	12.95
BMFEU112		R1.1/2"	G1.1/2"	17.35	16.50
BMFEU2		R2"	G2"	27.70	26.35

Reducing Hexagon Nipple

Black, 245



Code	T04	Size BSPT A	Size BSPT B	Price 1-9	Price 10+
BHRN3412		R3/4"	R1/2"	1.90	1.85
BHRN112		R1"	R1/2"	2.75	2.65
BHRN134		R1"	R3/4"	2.80	2.70
BHRN1141		R1.1/4"	R1"	4.60	4.40
BHRN112114		R1.1/2"	R1.1/4"	5.70	5.45
BHRN2112		R2"	R1.1/2"	8.45	8.05

Male Hollow Plug

Galvanised, 290



Code	T04	Size BSPT	Price 1-9	Price 10+
GMBP38		R3/8"	1.10	1.05
GMBP12		R1/2"	0.90	0.85
GMBP34		R3/4"	1.15	1.10
GMBP1		R1"	1.75	1.70
GMBP114		R1.1/4"	2.80	2.70
GMBP112		R1.1/2"	3.20	3.05
GMBP2		R2"	4.10	3.90
GMBP3		R3"	10.70	10.20
GMBP4		R4"	34.65	32.95

Male Hollow Plug

Black, 290



Code	T04	Size BSPT	Price 1-9	Price 10+
BMBP12		R1/2"	0.90	0.85
BMBP34		R3/4"	1.15	1.10
BMBP1		R1"	1.55	1.50
BMBP114		R1.1/4"	2.30	2.20
BMBP112		R1.1/2"	2.70	2.60
BMBP2		R2"	3.80	3.65

Reducing Socket

Black, 240



Code	T04	Size BSPP A	Size BSPP B	Price 1-9	Price 10+
BRFS1238		G1/2"	G3/8"	1.25	1.20
BRFS3412		G3/4"	G1/2"	1.85	1.80
BRFS112		G1"	G1/2"	2.40	2.30
BRFS134		G1"	G3/4"	2.40	2.30
BRFS11412		G1.1/4"	G1/2"	3.60	3.45
BRFS11434		G1.1/4"	G3/4"	3.60	3.45
BRFS1141		G1.1/4"	G1"	3.60	3.45
BRFS11212		G1.1/2"	G1/2"	4.25	4.05
BRFS11234		G1.1/2"	G3/4"	4.25	4.05
BRFS1121		G1.1/2"	G1"	4.30	4.10
BRFS112114		G1.1/2"	G1.1/4"	4.25	4.05
BRFS212		G2"	G1/2"	6.50	6.20
BRFS234		G2"	G3/4"	6.50	6.20
BRFS21		G2"	G1"	6.50	6.20
BRFS2114		G2"	G1.1/4"	6.50	6.20
BRFS2112		G2"	G1.1/2"	6.50	6.20

Malleable Iron Pipe Fittings

Blanking Cap

Galvanised, 300



Code	T04	Size BSPP	Price 1-9	Price 10+
GFBC38		G3/8"	1.30	1.25
GFBC12		G1/2"	1.60	1.55
GFBC34		G3/4"	1.95	1.90
GFBC1		G1"	1.95	1.90
GFBC114		G1.1/4"	2.90	2.80
GFBC112		G1.1/2"	3.75	3.60
GFBC2		G2"	5.30	5.05

Blanking Cap

Black, 300



Code	T04	Size BSPP	Price 1-9	Price 10+
BFBC12		G1/2"	1.10	1.05
BFBC34		G3/4"	1.55	1.50
BFBC1		G1"	1.85	1.80
BFBC114		G1.1/4"	2.70	2.60
BFBC112		G1.1/2"	3.50	3.35
BFBC2		G2"	5.05	4.80

Back Nut

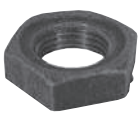
Galvanised, 310



Code	T04	Size BSPP	Price 1-9	Price 10+
GBNT38		G3/8"	1.55	1.50
GBNT12		G1/2"	1.05	1.00
GBNT34		G3/4"	1.05	1.00
GBNT1		G1"	1.15	1.10
GBNT114		G1.1/4"	1.70	1.65
GBNT112		G1.1/2"	2.10	2.00
GBNT2		G2"	3.50	3.35

Back Nut

Black, 310



Code	T04	Size BSPP	Price 1-9	Price 10+
BBNT12		G1/2"	0.90	0.85
BBNT34		G3/4"	1.05	1.00
BBNT1		G1"	1.25	1.20
BBNT114		G1.1/4"	1.55	1.50
BBNT112		G1.1/2"	1.90	1.85
BBNT2		G2"	3.00	2.85

Galvanised Single Pipe Ring

M10 Tapped



Code	M15	Bore Ø	Price 1-9	Price 10+
GSPR12		1/2"	2.50	2.40
GSPR34		3/4"	2.85	2.75
GSPR1		1"	3.30	3.15
GSPR114		1.1/4"	3.85	3.70
GSPR112		1.1/2"	4.80	4.60
GSPR2		2"	5.35	5.10

Black Single Pipe Ring

M10 Tapped



Code	M15	Bore Ø	Price 1-9	Price 10+
BSPR12		1/2"	1.70	1.65
BSPR34		3/4"	1.95	1.90
BSPR1		1"	2.55	2.45
BSPR112		1.1/2"	4.75	4.55
BSPR2		2"	3.85	3.70

Galvanised Double Pipe Ring

M10 Tapped



Code	M15	Bore Ø	Price 1-9	Price 10+
GDPR12		1/2"	5.10	4.85
GDPR34		3/4"	3.50	3.35
GDPR1		1"	3.85	3.70
GDPR114		1.1/4"	4.25	4.05
GDPR112		1.1/2"	4.15	3.95
GDPR2		2"	6.00	5.70

Girder Clamp

Metric Thread



Code	M16	Description	Price 1-9	Price 10+
GGC-M10		M10 Tapped	3.20	3.05

Galvanised Pipe Bracket

School Board



Code	M15	Bore Ø	Price 1-9	Price 10+
GPBT12		1/2"	2.55	2.45
GPBT34		3/4"	2.85	2.75
GPBT1		1"	3.65	3.50
GPBT114		1.1/4"	4.15	3.95
GPBT112		1.1/2"	5.90	5.65
GPBT2		2"	8.45	8.05

Black Pipe Bracket

School Board



Code	M15	Bore Ø	Price 1-9	Price 10+
BPBT12		1/2"	1.70	1.65
BPBT34		3/4"	2.00	1.90
BPBT1		1"	2.40	2.30
BPBT112		1.1/2"	4.35	4.15
BPBT2		2"	5.75	5.50

Back Plates

Galvanised



Code	M16	Description	Price 1-9	Price 10+
GBP-M10		M10 Tapped	2.00	1.90

Back Plates

Black



Code	M16	Description	Price 1-9	Price 10+
BBP-M10		M10 Tapped	1.50	1.45

Girder Stud

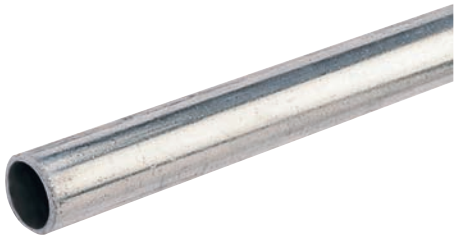
Metric Thread



Code	M16	Description	Price 1-9	Price 10+
GSM10-1M		M10 x 1m	3.35	3.20

Malleable Iron Steel Tube





Medium-duty Galvanised Steel Tubing

6.4m Lengths, Screwed & Socketed

Code L06	Size BSP	Price
GMIT12	1/2"	34.85
GMIT34	3/4"	46.80
GMIT1	1"	55.05
GMIT114	1.1/4"	66.30
GMIT112	1.1/2"	93.85
GMIT2	2"	131.85

Medium-duty Galvanised Steel Tubing

6.4m Length, Plain End

Code L06	Size	Price
GMIT12PE	1/2"	29.95
GHRT34	3/4"	44.10
GHRT1	1"	64.00
GHRT114	1.1/4"	74.05
GHRT112	1.1/2"	100.75
GHRT2	2"	138.00

Medium-duty Galvanised Steel Tubing

3.2m Lengths, Screwed & Socketed

Code L06	Size BSP	Price
GMIT12/2	1/2"	17.25
GMIT34/2	3/4"	22.15
GMIT1/2	1"	33.55
GMIT114/2	1.1/4"	43.70
GMIT112/2	1.1/2"	49.50
GMIT2/2	2"	71.75

Medium-duty Galvanised Steel Tubing

3.2m Length, Plain End

Code L06	Size	Price
GMIT12/2PE	1/2"	16.55
GHRT34/2	3/4"	25.30
GHRT1/2	1"	35.15
GHRT114/2	1.1/4"	43.60
GHRT112/2	1.1/2"	45.15
GHRT2/2	2"	71.05

For Aluminium Ring Mains



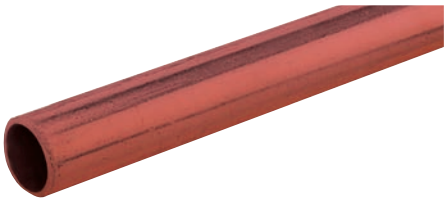
See section 11



Medium-duty Red Oxide Steel Tubing

6.4m Lengths, Screwed & Socketed

Code L06	Size BSP	Price
RMIT12	1/2"	27.35
RMIT34	3/4"	32.20
RMIT1	1"	46.05
RMIT114	1.1/4"	57.05
RMIT112	1.1/2"	66.55
RMIT2	2"	93.55



Medium-duty Red Oxide Steel Tubing

6.4m Lengths, Plain End

Code L06	Size BSP	Price
RMIT12PE	1/2"	23.65
RMIT34PE	3/4"	26.80
RMIT1PE	1"	22.80
RMIT114PE	1.1/4"	47.75
RMIT112PE	1.1/2"	55.55
RMIT2PE	2"	78.20

Medium-duty Red Oxide Steel Tubing

3.2m Lengths, Screwed & Socketed

Code L06	Size BSP	Price
RMIT12/2	1/2"	13.90
RMIT34/2	3/4"	17.85
RMIT1/2	1"	27.50
RMIT114/2	1.1/4"	32.10
RMIT112/2	1.1/2"	42.35
RMIT2/2	2"	60.50

Medium-duty Red Oxide Steel Tubing

3.2m Lengths, Plain End

Code L06	Size BSP	Price
RMIT12/2PE	1/2"	13.95
RMIT34/2PE	3/4"	15.85
RMIT1/2PE	1"	22.80
RMIT114/2PE	1.1/4"	28.30
RMIT112/2PE	1.1/2"	32.80
RMIT2/2PE	2"	46.20

Heavy-duty Red Oxide Steel Tubing

6.4m Lengths, Screwed & Socketed

Code L06	Size BSP	Price
RHIT12	1/2"	32.40
RHIT34	3/4"	38.50
RHIT1	1"	56.30
RHIT114	1.1/4"	69.95
RHIT112	1.1/2"	81.65
RHIT2	2"	113.30

Heavy-duty Red Oxide Steel Tubing

6.4m Lengths, Plain End

Code L06	Size BSP	Price
RHIT12PE	1/2"	29.25
RHIT34PE	3/4"	33.40
RHIT1PE	1"	48.75
RHIT114PE	1.1/4"	102.20
RHIT112PE	1.1/2"	70.45
RHIT2PE	2"	97.70

Heavy-duty Red Oxide Steel Tubing

3.2m Lengths, Screwed & Socketed

Code L06	Size BSP	Price
RHIT12/2	1/2"	25.10
RHIT34/2	3/4"	29.75
RHIT1/2	1"	33.30
RHIT114/2	1.1/4"	41.30
RHIT112/2	1.1/2"	48.15
RHIT2/2	2"	66.90

Heavy-duty Red Oxide Steel Tubing

3.2m Lengths, Plain End

Code L06	Size BSP	Price
RHIT12/2PE	1/2"	17.20
RHIT34/2PE	3/4"	21.60
RHIT1/2PE	1"	28.75
RHIT114/2PE	1.1/4"	35.55
RHIT112/2PE	1.1/2"	41.55
RHIT2/2PE	2"	57.65

Malleable Iron Accessories



PTFE Thread Sealing Tape

12mm x 12 Metres

Code	W01	Size	Price 1-49	Price 50+
PTFEIQ		12mm x 12m	0.55	0.52



Pipe Jointing Compounds

Boss White

Code	H03	Description	Price 1-4	Price 5+
BOSS4W		400g	5.45	5.20



Pipe Jointing Compounds

Boss Green

Code	H03	Description	Price 1-4	Price 5+
BOSS4G		400g	8.00	7.60

For Air Receivers



See page 351

For Pipe Seal



See page 828

Handrail Pipe Clamp Systems

new

Using standard tube and pipe clamp fittings, imagination is your only limitation to what can be built. From industry to retail, from safety to play, all can use the pipe clamp system.

Manufactured to BS EN 1562 1997.

Galvanised to BS EN 1461 1999.

Applications

- Safety railings
- Storage bays
- Handrails
- Support framework
- Racking
- Compounds
- Cycle racks
- Hanging rails
- Access and invalid ramps
- Door access and entry guarding

Pipe Clamp Size	Tube OD mm	Tube OD inch	Nominal Bore mm	Nominal Bore inch
1	26.9	1.1/16	20	3/4"
2	33.7	1.11/32	25	1"
3	42.4	1.11/16	32	1.1/4"
4	48.3	1.29/32	40	1.1/2"
5	60.3	2.3/8	50	2"

FACTORY DISPATCH

Handrails

6.4m Lengths



Code L04	Pipe Clamp Size	Price
GHRT34	1	44.10
GHRT1	2	64.00
GHRT114	3	74.05
GHRT112	4	100.75
GHRT2	5	138.00

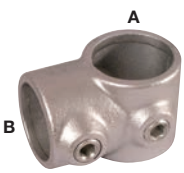
Handrails

3.2m Lengths

Code L04	Pipe Clamp Size	Price
GHRT34/2	1	25.30
GHRT1/2	2	35.15
GHRT114/2	3	43.60
GHRT112/2	4	45.15
GHRT2/2	5	71.05

Short Tees

101



Code L05	Pipe Clamp Size A	Pipe Clamp Size B	Price
PC-101-1	1	1	3.10
PC-101-2	2	2	4.25
PC-101-3	3	3	5.80
PC-101-4	4	4	7.30
PC-101-4/3	4	3	14.65
PC-101-5	5	5	22.50
PC-101-5/4	5	4	27.85

Long Tees

104



Code L05	Pipe Clamp Size	Price
PC-104-1	1	5.80
PC-104-2	2	6.55
PC-104-3	3	9.90
PC-104-4	4	12.80
PC-104-5	5	23.70

3 Way Through

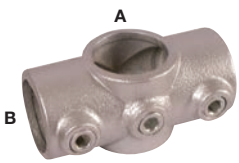
116



Code L05	Pipe Clamp Size	Price
PC-116-1	1	5.30
PC-116-2	2	5.70
PC-116-3	3	7.90
PC-116-4	4	8.75
PC-116-5	5	16.10

2 Socket Crosses

119



Code L05	Pipe Clamp Size A	Pipe Clamp Size B	Price
PC-119-1	1	1	4.10
PC-119-2	2	2	6.20
PC-119-3	3	3	8.70
PC-119-4	4	4	9.80
PC-119-5	5	5	17.20

90° 2 Way Elbows

125



Code L05	Pipe Clamp Size	Price
PC-125-1	1	4.75
PC-125-2	2	5.05
PC-125-3	3	7.25
PC-125-4	4	8.25
PC-125-5	5	16.05

90° 3 Way Elbows

128



Code L05	Pipe Clamp Size	Price
PC-128-1	1	6.60
PC-128-2	2	7.05
PC-128-3	3	10.10
PC-128-4	4	12.40

Adjustable Tees

129



Code L05	Pipe Clamp Size	Price
PC-129-2	2	5.25
PC-129-3	3	9.25
PC-129-4	4	9.05

Handrail Pipe Clamp Systems

new

Adjustable Cross

130



Code	L05	Pipe Clamp Size	Price
PC-130-2		2	11.55

Wall Plates

131



Code	L05	Pipe Clamp Size	Price
PC-131-1		1	4.45
PC-131-2		2	5.25
PC-131-3		3	6.40
PC-131-4		4	9.35
PC-131-5		5	15.25

Base Plates

132



Code	L05	Pipe Clamp Size	Price
PC-132-1		1	7.25
PC-132-2		2	9.55
PC-132-3		3	12.40
PC-132-4		4	14.40
PC-132-5		5	21.85

Plastic Plugs

133



Code	L05	Pipe Clamp Size	Price
PC-133-1		1	1.00
PC-133-2		2	0.55
PC-133-3		3	0.55
PC-133-4		4	0.75
PC-133-5		5	1.00

Ground Sockets

134



Code	L05	Pipe Clamp Size	Price
PC-134-3		3	40.55
PC-134-4		4	41.60

Retro Fit Clamps

135



Code	L05	Pipe Clamp Size	Price
PC-135-2		2	9.10
PC-135-3		3	9.80
PC-135-4		4	11.60

Gate Eyes

138



Code	L05	Pipe Clamp Size	Price
PC-138-1		1	4.50
PC-138-2		2	3.65
PC-138-3		3	4.80
PC-138-4		4	4.70

Gate Hinges

140



Code	L05	Pipe Clamp Size	Price
PC-140-1		1	4.20
PC-140-2		2	5.30
PC-140-3		3	5.40

Wall Mounted Handrail Brackets

143



Code	L05	Pipe Clamp Size	Price
PC-143-1		1	4.75
PC-143-2		2	5.40
PC-143-3		3	7.90
PC-143-4		4	9.45

Structural Offset Side Palm Fixings

144



Code	L05	Pipe Clamp Size	Price
PC-144-2		2	9.70
PC-144-3		3	12.90
PC-144-4		4	15.55

Non-structural Offset Side Palm Fixing

145



Code	L05	Pipe Clamp Size	Price
PC-145-2		2	10.45

Structural Flush Side Palm Fixings

146



Code	L05	Pipe Clamp Size	Price
PC-146-2		2	9.35
PC-146-3		3	14.75
PC-146-4		4	17.15

Handrail Pipe Clamp Systems

new

Offset Swivel Tees
147



Code L05	Pipe Clamp Size	Price
PC-147-3	3	7.80
PC-147-4	4	7.95

4 Way Crosses
158



Code L05	Pipe Clamp Size	Price
PC-158-2	2	11.25
PC-158-3	3	17.15
PC-158-4	4	15.70

Short Swivel In-line Tees
148



Code L05	Pipe Clamp Size	Price
PC-148-1	1	6.65
PC-148-2	2	5.10
PC-148-3	3	7.45
PC-148-4	4	6.10

Retro Fit Clamp On Tees
160



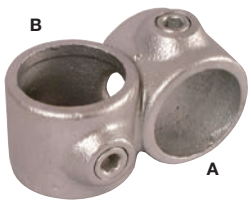
Code L05	Pipe Clamp Size A	Pipe Clamp Size B	Price
PC-160-2	2	2	3.00
PC-160-3	3	3	4.00
PC-160-4	4	4	6.00
PC-160-5	5	5	22.50

In-line External Tube Connectors
149



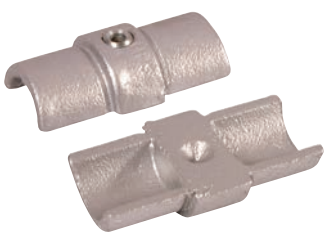
Code L05	Pipe Clamp Size	Price
PC-149-1	1	4.60
PC-149-2	2	4.80
PC-149-3	3	6.45
PC-149-4	4	7.30
PC-149-5	5	10.00

Offset 90° Crossovers
161



Code L05	Pipe Clamp Size A	Pipe Clamp Size B	Price
PC-161-1	1	1	9.20
PC-161-2	2	2	4.20
PC-161-3	3	3	6.05
PC-161-3/2	3	2	11.75
PC-161-4	4	4	5.65
PC-161-4/2	4	2	5.30

In-line Internal Tube Connectors
150



Code L05	Pipe Clamp Size	Price
PC-150-2	2	4.80
PC-150-3	3	6.20
PC-150-4	4	7.30

Combination Sockets
165



Code L05	Pipe Clamp Size	Price
PC-165-1	1	5.35
PC-165-3	3	6.45
PC-165-5	5	30.25

Handrail Pipe Clamp Systems, Swivel Range

The swivel range is constructed using female and male parts. The 173F is common to all combinations. The lugs on fitting sizes 1 to 5 have the same dimensions, and sizes can be mixed if required, ie: 173F-1 with 173M-4.

In addition to being used with the 173F to make the combination, 'M' fittings can also be used to secure various types of infill in place.

WARNING
An entire structure should not be built using swivel fittings only.

Manufactured to BS EN 1562 1997.

Galvanised to BS EN 1461 1999.

Pipe Clamp Size	Tube OD mm	Tube OD inch	Nominal Bore mm	Nominal Bore inch
1	26.9	1.1/16	20	3/4"
2	33.7	1.11/32	25	1"
3	42.4	1.11/16	32	1.1/4"
4	48.3	1.29/32	40	1.1/2"
5	60.3	2.3/8	50	2"



Double In-line Swivel Combinations

167

Code	L05	Pipe Clamp Size	Price
PC-167-1		1	10.90
PC-167-2		2	13.30
PC-167-3		3	13.50
PC-167-4		4	19.25
PC-167-5		5	62.80



90° Corner Swivels

168

Code	L05	Pipe Clamp Size	Price
PC-168-2		2	15.80
PC-168-3		3	16.35
PC-168-4		4	16.35



Male Swivel Locating Flange

169M

Code	L05	Price
PC-169M		7.75



Swivel Locating Flanges

169

Code	L05	Pipe Clamp Size	Price
PC-169-1		1	18.95
PC-169-2		2	9.55
PC-169-3		3	9.60
PC-169-4		4	11.50



Female Swivels

173F

Code	L05	Pipe Clamp Size	Price
PC-173F-1		1	4.00
PC-173F-2		2	4.10
PC-173F-3		3	5.50
PC-173F-5		5	14.50



Single Male Swivels

173M

Code	L05	Pipe Clamp Size	Price
PC-173M-2		2	3.15
PC-173M-3		3	4.30
PC-173M-4		4	4.90
PC-173M-5		5	8.90



Single-sided Mesh Panel Clips

170

Code	L05	Pipe Clamp SIze	Price
PC-170-1		1	3.50
PC-170-2		2	1.60
PC-170-3		3	1.80
PC-170-4		4	1.60
PC-170-5		5	5.05



Double-sided Mesh Panel Clips

171

Code	L05	Pipe Clamp Size	Price
PC-171-1		1	5.45
PC-171-2		2	2.65
PC-171-3		3	2.65
PC-171-5		5	6.05



3 Way Outlet Tees

176

Code	L05	Pipe Clamp Size	Price
PC-176-2		2	7.80
PC-176-3		3	11.60
PC-176-4		4	14.40
PC-176-5		5	36.75

Handrail Pipe Clamp Systems, Swivel Range

new



Locking Collars

179

Code	L05	Pipe Clamp Size	Price
PC-179-1		1	2.25
PC-179-2		2	2.90
PC-179-3		3	3.20
PC-179-4		4	3.80



Hooks

182

Code	L05	Pipe Clamp Size	Price
PC-182-2		2	3.45
PC-182-3		3	4.75
PC-182-4		4	4.70



Slope Range Elbow

225

Code	L05	Pipe Clamp Size	Price
PC-225-4		4	9.55



Spare Grubscrew

GS

Code	L05	Pipe Clamp Size	Price
PC-GS3-4-5		3-4-5	1.35



Dual Ratchet

233

Code	L05	Pipe Clamp Size	Price
PC-233		1-5	140.00



Allen Keys

235

Code	L05	Pipe Clamp Size	Hex	Price
PC-235-1-2		1-2	1/4"	3.05
PC-2353-4-5		3-4-5	3/8"	3.75

Flanges



Carbon Steel Flanges

Slip-on Plate Flanges, Table D

Code	W10	ID mm	Price
FLAN-D-32-SOP		32	19.55
FLAN-D-50-SOP		50	19.55
FLAN-D-65-SOP		65	24.10
FLAN-D-80-SOP		80	28.65
FLAN-D-100-SOP		100	35.10
FLAN-D-125-SOP		125	47.80
FLAN-D-150-SOP		150	47.65
FLAN-D-200-SOP		200	59.80
FLAN-D-250-SOP		250	106.20
FLAN-D-300-SOP		300	139.15

Carbon Steel Flanges

Slip-on Plate Flanges, Table E

Code	W10	ID mm	Price
FLAN-E-15-SOP		15	16.05
FLAN-E-20-SOP		20	13.55
FLAN-E-25-SOP		25	13.55
FLAN-E-32-SOP		32	12.55
FLAN-E-40-SOP		40	14.60
FLAN-E-50-SOP		50	11.10
FLAN-E-65-SOP		65	25.80
FLAN-E-80-SOP		80	28.65
FLAN-E-100-SOP		100	91.20
FLAN-E-125-SOP		125	57.90
FLAN-E-150-SOP		150	90.50
FLAN-E-200-SOP		200	139.20
FLAN-E-250-SOP		250	222.60
FLAN-E-300-SOP		300	297.25



Carbon Steel Flanges

Slip-on Boss Flanges, Table D

Code	W10	ID mm	Price
FLAN-D-50-SOB		50	37.80
FLAN-D-80-SOB		80	61.25
FLAN-D-100-SOB		100	75.45
FLAN-D150-12-SOB		150 (6.1/2")	175.70
FLAN-D150-58-SOB		150 (6.5/8")	129.20
FLAN-D-200-SOB		200	207.70
FLAN-D-250-SOB		250	342.85
FLAN-D-300-SOB		300	451.50

Carbon Steel Flanges

Slip-on Boss Flanges, Table E

Code	W10	ID mm	Price
FLAN-E-15-SOB		15	26.20
FLAN-E-20-SOB		20	28.00
FLAN-E-25-SOB		25	28.00
FLAN-E-32-SOB		32	28.00
FLAN-E-40-SOB		40	25.05
FLAN-E-50-SOB		50	35.30
FLAN-E-65-SOB		65	45.75
FLAN-E-80-SOB		80	57.20
FLAN-E-100-SOB		100	85.20
FLAN-E-125-SOB		125	169.05
FLAN-E150-12-SOB		150 (6.1/2")	124.30
FLAN-E150-58-SOB		150 (6.5/8")	124.30
FLAN-E-250-SOB		250	211.95



Carbon Steel Flanges

Screwed Boss Flanges, Table D, BSPP

Code	W10	Thread Size	Price
FLAN-D-12-SCR		1/2"	45.45
FLAN-D-34-SCR		3/4"	48.65
FLAN-D-1-SCR		1"	48.65
FLAN-D-114-SCR		1.1/4"	55.95
FLAN-D-2-SCR		2"	51.80
FLAN-D-212-SCR		2.1/2"	62.15
FLAN-D-3-SCR		3"	69.55
FLAN-D-4-SCR		4"	96.80
FLAN-D-6-SCR		6" (6.1/2")	216.00

Carbon Steel Flanges

Screwed Boss Flanges, Table E, BSPP

Code	W10	Thread Size	Price
FLAN-E-12-SCR		1/2"	45.45
FLAN-E-34-SCR		3/4"	45.45
FLAN-E-1-SCR		1"	45.45
FLAN-E-114-SCR		1.1/4"	55.95
FLAN-E-112-SCR		1.1/2"	47.25
FLAN-E-2-SCR		2"	45.45
FLAN-E-212-SCR		2.1/2"	66.45
FLAN-E-3-SCR		3"	69.55
FLAN-E-4-SCR		4"	53.00
FLAN-E-5-SCR		5"	216.00
FLAN-E-6-SCR		6" (6.1/2")	216.00



Carbon Steel Flanges

Blank Flanges, Table D

Code	W10	ID mm	Price
FLAN-D-15-BLANK		15	13.10
FLAN-D-20-BLANK		20	13.10
FLAN-D-25-BLANK		25	14.05
FLAN-D-32-BLANK		32	19.80
FLAN-D-50-BLANK		50	21.20
FLAN-D-65-BLANK		65	22.90
FLAN-D-80-BLANK		80	33.90
FLAN-D-100-BLANK		100	40.00
FLAN-D-150-BLANK		150	87.15
FLAN-D-200-BLANK		200	104.60
FLAN-D-250-BLANK		250	257.50
FLAN-D-300-BLANK		300	267.90

Carbon Steel Flanges

Blank Flanges, Table E

Code	W10	ID mm	Price
FLAN-E-15-BLANK		15	13.10
FLAN-E-25-BLANK		25	13.10
FLAN-E-32-BLANK		32	19.80
FLAN-E-40-BLANK		40	18.50
FLAN-E-50-BLANK		50	21.20
FLAN-E-65-BLANK		65	22.90
FLAN-E-80-BLANK		80	33.90
FLAN-E-100-BLANK		100	50.50
FLAN-E-125-BLANK		125	92.30
FLAN-E-150-BLANK		150	120.30
FLAN-E-200-BLANK		200	128.45
FLAN-E-250-BLANK		250	332.55
FLAN-E-300-BLANK		300	484.65



Forged Steel Flanges

Weld Neck, PN16/111, BS4504: 1989, Table 16

Code	W10	ID	Price
FLAN-T16-1-WN		1"	21.05
FLAN-T16-114-WN		1.1/4"	37.50
FLAN-T16-112-WN		1.1/2"	24.30
FLAN-T16-2-WN		2"	26.00
FLAN-T16-212-WN		2.1/2"	29.75
FLAN-T16-3-WN		3"	45.05
FLAN-T16-4-WN		4"	42.10

Forged Steel Flanges

Weld Neck, PN40/111, BS4505: 1989, Table 40

Code	W10	ID	Price
FLAN-T40-1-WN		1"	14.05
FLAN-T40-112-WN		1.1/2"	64.85
FLAN-T40-2-WN		2"	24.10
FLAN-T40-212-WN		2.1/2"	57.70
FLAN-T40-4-WN		4"	24.00

Forged Steel Flanges

Weld Neck, 150lb, ANSI B16.5a/1992, ASA 150

Code	W10	ID	Price
FLAN-A150-1-WN		1"	25.60
FLAN-A150-114-WN		1.1/4"	25.60
FLAN-A150-112-WN		1.1/2"	21.60
FLAN-A150-2-WN		2"	12.00
FLAN-A150-212-WN		2.1/2"	22.15
FLAN-A150-3-WN		3"	54.60
FLAN-A150-4-WN		4"	37.80

Forged Steel Flanges

Weld Neck, 300lb, ANSI B16.5a/1992, ASA 300

Code	W10	ID	Price
FLAN-A300-212-WN		2.1/2"	19.30
FLAN-A300-3-WN		3"	27.75
FLAN-A300-4-WN		4"	41.20



Forged Steel Flanges

Slip-on, PN16/112, BS4504: 1989, Table 16

Code	W10	ID	Price
FLAN-T16-12-SOP		1/2"	6.60
FLAN-T16-34-SOP		3/4"	4.65
FLAN-T16-1-SOP		1"	38.05
FLAN-T16-114-SOP		1.1/4"	25.30
FLAN-T16-112-SOP		1.1/2"	33.75
FLAN-T16-2-SOP		2"	20.00
FLAN-T16-212-SOP		2.1/2"	26.85
FLAN-T16-3-SOP		3"	36.60
FLAN-T16-4-SOP		4"	48.15

Forged Steel Flanges

Slip-on, PN40/112, BS4504: 1989, Table 40

Code	W10	ID	Price
FLAN-T40-12-SOP		1/2"	48.15
FLAN-T40-112-SOP		1.1/2"	57.90
FLAN-T40-2-SOP		2"	53.85
FLAN-T40-212-SOP		2.1/2"	31.10
FLAN-T40-3-SOP		3"	13.55
FLAN-T40-4-SOP		4"	18.45

Forged Steel Flanges

Slip-on, 150lb, ANSI B16.5a/1992, ASA 150

Code	W10	ID	Price
FLAN-A150-12-SOP		1/2"	6.10
FLAN-A150-34-SOP		3/4"	7.85
FLAN-A150-1-SOP		1"	7.25
FLAN-A150-112SOP		1.1/2"	11.55
FLAN-A150-2-SOP		2"	21.40
FLAN-A150-3-SOP		3"	23.75
FLAN-A150-4-SOP		4"	58.15

Forged Steel Flanges

Slip-on, 300lb, ANSI B16.5a/1992, ASA 300

Code	W10	ID	Price
FLAN-A300-34-SOP		3/4"	4.35
FLAN-A300-114SOP		1.1/4"	5.75
FLAN-A300-2-SOP		2"	17.20
FLAN-A300-4-SOP		4"	34.10

Flanges & Flange Gaskets



Forged Steel Flanges

Screwed, PN16/113, BS4504: 1989, Table 16, BSPP

Code W10	Thread Size	Price
FLAN-T16-12-SCR	1/2"	14.75
FLAN-T16-34-SCR	3/4"	6.90
FLAN-T16-1-SCR	1"	13.50
FLAN-T16-114-SCR	1.1/4"	16.05
FLAN-T16-2-SCR	2"	25.45
FLAN-T16-212-SCR	2.1/2"	36.80
FLAN-T16-3-SCR	3"	44.55
FLAN-T16-4-SCR	4"	44.85

Forged Steel Flanges

Screwed, PN40/113, BS4504: 1989, Table 40, BSPP

Code W10	Thread Size	Price
FLAN-T40-12-SCR	1/2"	4.30
FLAN-T40-34-SCR	3/4"	10.75
FLAN-T40-1-SCR	1"	28.85
FLAN-T40-114-SCR	1.1/4"	30.60
FLAN-T40-112-SCR	1.1/2"	38.35
FLAN-T40-2-SCR	2"	31.90
FLAN-T40-212-SCR	2.1/2"	47.55
FLAN-T40-3-SCR	3"	69.40
FLAN-T40-4-SCR	4"	56.30

Forged Steel Flanges

Screwed, 150lb, ANSI B16.5a/1992, ASA 150, BSPP

Code W10	Thread Size	Price
FLAN-A150-112SCR	1.1/2"	19.40
FLAN-A150-2-SCR	2"	28.80
FLAN-A150-212SCR	2.1/2"	33.90
FLAN-A150-3-SCR	3"	49.15

Forged Steel Flanges

Screwed, 300lb, ANSI B16.5a/1992, ASA 300, BSPP

Code W10	Thread Size	Price
FLAN-A300-12-SCR	1/2"	4.85
FLAN-A300-34-SCR	3/4"	14.90
FLAN-A300-1-SCR	1"	41.40
FLAN-A300-112SCR	1.1/2"	15.30
FLAN-A300-2-SCR	2"	31.90



Rubber Gaskets

Table D, Full Face

Code X02	ID	Price
GRD2	2"	2.00
GRD3	3"	2.50
GRD4	4"	3.50
GRD6	6"	4.25
GRD8	8"	5.75



Rubber Gaskets

PN16, Full Face

Code X02	ID	Price
GRNP162	2"	1.85
GRNP163	3"	2.25
GRNP164	4"	3.50
GRNP166	6"	4.25
GRNP168	8"	5.75



Rubber Gaskets

IBC PN16

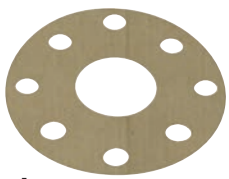
Code X02	ID	Price
GRIBCNP162	2"	0.60
GRIBCNP163	3"	1.75
GRIBCNP164	4"	2.00
GRIBCNP166	6"	2.40
GRIBCNP168	8"	3.65



Rubber Gaskets

IBC PN16 & Table D

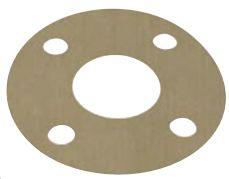
Code X02	ID	Price
GKIBCNP162	2"	2.70
GKIBCNP163	3"	3.25
GKIBCNP164	4"	6.75
GKIBCNP166	6"	2.70



Rubber Gaskets

PN16, Full Face (Klinger)

Code X02	ID	Price
GKNP163	3"	5.85
GKNP166	6"	23.85



Fibre Gaskets

Table D, Full Face, (Top Graph Araflex)

Code X02	ID	Price
GKD2	2"	7.50
GKD3	3"	16.75

Stainless Steel





686-687 Air Service Units



688-689 High Pressure Regulators



690-691 ISO 6432 Mini Air Cylinders & Accessories



692-695 ISO 15552 Air Cylinders & Accessories



696 Manual Ball Valves



697 Ball Valves, ISO Mounting Pad



698 Gate, Globe & Check Valves



699 Deadman Handle Ball Valves & Y Strainers



700-701 Actuated Valves



702-709 150lb Fittings



710 Flanges



711-713 316L Hygienic Pipe Fittings, BS Type

Stainless Steel Air Service Units

Filter

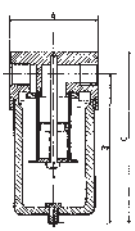
BSP

Technical Specifications

- Body, bowl and internal parts: AIS1316 stainless steel
- O-ring: NBR
- Filtration: 50 micron
- Working pressure: 50 bar
- Connections: standard BSP (NPT on request)
- Working temperature range: +20°C to +80°C

Dimensions

Code	243M & 243N	233N & 233L	233P & 233Q	273Q & 273R
A mm	40	65	80	110
B mm	93	140	165	200
C mm	104	155	175	230





Code P18	Type	Thread BSP	Flow Rate* m³/hr	Weight kg	Price
243MGE06	F318MC	G1/8"	35	0.9	**215.70**
243NGE06	F314MC	G1/4"	35	0.9	**215.70**
233NGE06	F314ST	G1/4"	198	1.6	**320.80**
233LGE06	F338ST	G3/8"	198	1.6	**320.80**
233PGE06	F312ST	G1/2"	244	2.0	**412.45**
233QGE06	F334ST	G3/4"	244	2.0	**448.90**
273QGE06	F334M	G3/4"	640	5.0	**872.20**
273RGE06	F310M	G1"	640	5.0	**882.50**

*Measured at 8 bar.

Pressure Regulator

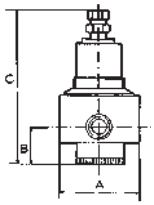
BSP

Technical Specifications

- Body and internal parts: AIS1316 stainless steel
- O-ring: NBR
- Pressure range: 0-8 bar (other ranges on request)
- Maximum inlet pressure: 30 bar (50 bar on request)
- Connections: standard BSP (NPT on request)
- Working temperature range: +20°C to +80°C

Dimensions

Code	543M & 543N	533N & 533L	533P & 533Q	573R
A mm	50	65	80	125
B mm	28	34	37	66
C mm	110	145	155	286





Code P18	Type	Thread BSP	Flow Rate* m³/hr	Weight kg	Price
543MDD1	R318MC	G1/8"	30	0.25	**199.50**
543NDD1	R314MC	G1/4"	30	0.25	**287.10**
533NDD1	R3114C	G1/4"	55	2.0	**509.70**
533LDD1	R3138C	G3/8"	55	2.0	**457.75**
533PDD1	R3121C	G1/2"	90	2.5	**531.20**
533QDD1	R3121C	G3/4"	90	2.5	**567.50**
573RDD1	R3123C	G1"	275	10.0	**1379.35**

*Measured at 2.5 bar outlet pressure.

Lubricator

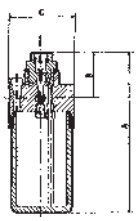
BSP

Technical Specifications

- Body, bowl and internal parts: AIS1316 stainless steel
- O-ring: NBR
- Working pressure: 30 bar
- Connections: standard BSP (NPT on request)
- Working temperature range: +20°C to +80°C

Dimensions

Code	343M & 343N	333N & 333L	333P & 333Q	373Q & 373R
A mm	170	159	175	220
B mm	44	46	46	56
C mm	40	65	80	110





Code P18	Type	Thread BSP	Flow Rate* m³/hr	Weight kg	Price
343M21	L318MC	G1/8"	60	1.0	**272.35**
343N21	L314MC	G1/4"	60	1.0	**272.35**
333N23	L314ST	G1/4"	82	1.6	**330.30**
333L23	L338ST	G3/8"	82	1.6	**330.30**
333P23	L312ST	G1/2"	140	2.0	**416.60**
333Q23	L334ST	G3/4"	140	2.0	**420.65**
373Q23	L334M	G3/4"	360	5.0	**672.75**
373R23	L310M	G1"	360	5.0	**622.15**

*Measured at 8 bar.

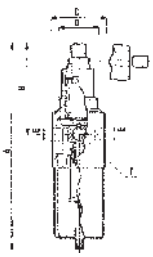
Stainless Steel Air Service Units

Technical Specifications

- Body, bowl and internal parts: AIS1316 stainless steel
- Working spring: SS 304
- Diaphragm: rubber on cotton
- O-ring: NBR
- Filtration: 50 micron
- Pressure range: 0-8 bar (other ranges on request)
- Maximum inlet pressure: 30 bar (50 bar on request)
- Connections: standard BSP (NPT on request)
- Working temperature range: +20°C to +80°C

Dimensions

Code	443M & 443N	433N & 433L	433P & 433Q	473Q & 473R
A mm	188	250	280	350
B mm	72	110	130	205
C mm	40	65	80	90
D mm	30.5	45	50	60
F	1/4"	1/4"	1/4"	1/4"





Filter Regulator

BSP

Code P18	Type	Thread BSP	Flow Rate* m³/hr	Weight kg	Price
443MDG35	FR318MCL	G1/8"	30	1.5	323.55
443NDG35	FR314MC	G1/4"	30	1.5	451.40
433NDG26	FR314ST	G1/4"	55	3.0	465.10
433LDG26	FR338ST	G3/8"	55	3.0	549.60
433PDG26	FR312ST	G1/2"	90	5.0	594.45
433QDG26	FR334ST	G3/4"	90	5.0	630.90
473QDG26	FR334M	G3/4"	275	6.5	1121.60
473RDG26	FR310ST	G1"	275	6.5	1085.15

*Measured at 8 bar.



Lock Nuts

To Suit Regulators

Code P18	To Suit Size	Price
18413ZBO	1/8" & 1/4"	18.95
016120004	1/4" & 3/8"	24.30
016120012	1/2" & 3/4"	26.40



Brackets

To Suit Filters

Code P18	To Suit Size	Price
M13001	1/4" & 3/8"	20.25
M13002	1/2" & 3/4"	31.00
M13003	3/4"	39.15



Bracket & Lock Nut

To Suit Regulators

Code P18	To Suit Size	Price
M14301	1/8" & 1/4"	25.30
M13302	1/4" & 3/8"	47.20
M13301	1/2" & 3/4"	51.20
M13303	3/4"	80.40

For Stainless Steel Push-in Fittings



See section 6

Stainless Steel High Pressure Regulators

Features

- Pressure regulator for inlet pressure up to 50 bar (725 psi)
- Connection ports: R3114 1/4”-F, R3138 3/8”-F, R3121 1/2”-F
- Different connections available on request: 3/4” or welded flanges
- Outlet pressure, up to 15 bar (217 psi), is controlled by stainless steel diaphragm; greater outlet pressure is controlled by a piston
- Balanced main valve
- ATEX 2014/34/EU version available on request
- Brand CE Ex II2GcIICTX, CE Ex II2DcIIICTX
- For use in potentially explosive atmosphere zones: 1, 21, 2, 22 (not applicable in mines and zone 0)
- EAC-EX TP TC 012/2011 available for the Russian market
- The product complies with the 2014/68/EU PED directive
- The product is registered at the Canadian authority ABSA, CRN 0C11053.2, and can be sold and used in Canada



Pressure Regulator, High Pressure

Maximum Inlet Pressure 50 bar/Piston Controlled

Code	P18	Thread BSP	Price
R3114		G1/4”	**503.95**
R3138		G3/8”	**518.50**
R3121		G1/2”	**911.00**

Features

- Pressure regulator for inlet pressure up to 50 bar (725 psi) in the standard version
- Connections 3/4”-F, 1”-F, 1.1/4”-F and 1.1/2”-F by flanges screwed to the body. Other connections available on request
- Outlet pressure is controlled by a piston in stainless steel (AISI 316L)
- Main valve is balanced
- ATEX 2014/34/EU version available on request
- Brand CE Ex II2GcIICTX, CE Ex II2DcIIICTX
- For use in potentially explosive zones: 1, 21, 2, 22 (not applicable in mines and zone 0)
- EAC TP TC 032/2013 or EAC-EX TP TC 012/2011 versions available for the Russian market
- The product complies with the directive 2014/68/EU (PED)
- Available units composed of Filter + Regulator + Lubricator



Pressure Regulator, High Pressure

Maximum Inlet Pressure 50 bar/Piston Controlled

Code	P18	Thread BSP	Price
310R2-34		G3/4”	**669.95**
310R2-1		G1”	**669.95**
310R2-114		G1.1/4”	**832.75**
310R2-112		G1.1/2”	**832.75**

Stainless Steel High Pressure Regulators

Features

- Pressure regulator for inlet pressure up to 50 bar (725 psi)
- Connections by flanges screwed to the body
- R3130 1.1/2"-GF
- R3130/2" 2"-GF
- Connections with EN or Asme flanges available on request
- Outlet pressure is controlled by a stainless steel AISI 316L piston
- ATEX 2014/34/EU version available on request
- Brand: II2GcIICTX, II2DcIIICTX
- For use in potentially explosive atmosphere zones: 1, 21, 2, 22 (not for mines and zone 0)
- EAC TP TC 032/2013 or EAC-EX TP TC 012/2011 versions available for the Russian market
- The product complies with the directive 2014/68/EU PED
- Gauge for outlet pressure, accuracy class 1.6



Pressure Regulator, High Pressure

Maximum Inlet Pressure 50 bar/Piston Controlled

Code	P18	Thread BSP	Price
R3130		G1.1/2"	3325.70
R3130-2		G2"	3325.70

Stainless Steel Precision Regulator

Features

- Precision pressure regulator for inlet pressure up to 10 bar (145 psi)
- Connections 1/2"-GF for standard version
- Outlet pressure is controlled by a rubber diaphragm. The regulator's main valve is balanced
- ATEX 2014/34/EU version available on request
- Brand: CE Ex II2GcIICTX, CE Ex II2DcIIICTX
- For use in potentially explosive atmosphere zones: 1, 21, 2, 22 (not applicable in mines and zone 0)
- EAC-EX TP TC 012/2011 available for the Russian market
- The product complies with the directive 2014/68/EU PED



Precision Regulator

Maximum Inlet Pressure 10 bar/Piston Controlled

Code	P18	Thread BSP	Price
R3150		G1/2"	482.95

ISO 6432 Mini Air Cylinders, All Stainless Steel

Technical Specifications

- ISO 6432 stainless steel micro-cylinders are available in various versions with a wide range of accessories
- With or without magnet execution
- Double-acting, single or through-rod
- Gaskets: polyurethane or FKM/FPM (for high temperatures)
- Fixing accessories

Fluid

- Lubricated or non-lubricated air

Temperature Range:

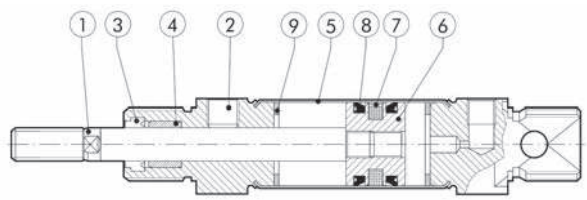
- -10°C to 80°C

Maximum Operating Pressure:

- 10 bar



1. Piston rod: AISI 316 steel
2. Head: AISI 304 steel
3. Piston rod gasket: polyurethane or FKM/FPM
4. Guide bushing: sintered bronze
5. Barrel: AISI 304 steel
6. Piston: brass
7. Piston gasket: polyurethane or FKM/FPM
8. Magnet: plastoferrite
9. Static O-rings: NBR or FKM/FPM



ISO 6432 Mini Cylinders, Double Acting

Magnetic

Code P19	Ø mm	Stroke mm	Price
W1800160010	16	10	76.95
W1800160025	16	25	78.20
W1800160050	16	50	80.40
W1800160080	16	80	77.55
W1800160100	16	100	84.80
W1800160125	16	125	81.15
W1800160160	16	160	84.00
W1800160200	16	200	87.35
W1800160250	16	250	91.95
W1800160320	16	320	107.30
W1800200010	20	10	88.75
W1800200025	20	25	91.05
W1800200050	20	50	94.75
W1800200080	20	80	99.20
W1800200100	20	100	102.20
W1800200125	20	125	99.00
W1800200160	20	160	103.85

Code P19	Ø mm	Stroke mm	Price
W1800200200	20	200	109.45
W1800200250	20	250	118.20
W1800200320	20	320	130.35
W1800200400	20	400	144.35
W1800250010	25	10	92.90
W1800250025	25	25	102.00
W1800250050	25	50	106.85
W1800250080	25	80	111.70
W1800250100	25	100	114.90
W1800250125	25	125	111.05
W1800250160	25	160	116.25
W1800250200	25	200	122.15
W1800250250	25	250	129.80
W1800250320	25	320	142.00
W1800250400	25	400	168.40
W1800250500	25	500	171.75

ISO 6432 Mini Air Cylinder Accessories, All Stainless Steel



Foot Mountings

To Suit ISO 6432 Mini Cylinders

Code P19	To Suit Size mm	Price
W095X120001	16	7.45
W095X200001	20/25	13.85



Flange

To Suit ISO 6432 Mini Cylinders

Code P19	Size to Suit mm	Price
W095X120002	16	6.95
W095X200002	20/25	12.10



Female Hinges

To Suit ISO 6432 Mini Cylinders

Code P19	To Suit Size mm	Price
W095X120005	16	11.05
W095X200005	20/25	16.40



Fork Clevis

To Suit ISO 6432 Cylinders

Code P19	To Suit Size mm	Thread	Price
W095X120020	16	M6 x 1	7.75
W095X200020	20	M8 x 1	14.45
W095X322020	25/32	M10 x 1.25	23.25



Rod Nuts

To Suit ISO 6432 Mini Cylinders

Code P19	To Suit Size mm	Thread	Price
W095X120011	16	M6 x 1	0.90
W095X200011	20	M8 x 1	1.10
W095X322011	25/32	M10 x 1.25	1.55



Reed Switch

To Suit ISO 6432 Mini Cylinders

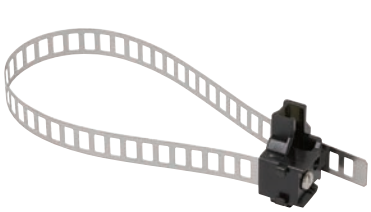
Code P19	Description	Price
W0952028184	With M8 Connection	26.70



Cylinder Head Nuts

To Suit ISO 6432 Mini Cylinders

Code P19	To Suit Size mm	Thread	Price
W095X120010	16	M16 x 1.25	2.00
W095X200010	20/25	M22 x 1.5	3.10



Mounting for Reed Switch

To Suit ISO 6432 Mini Cylinders

Code P19	To Suit Size mm	Price
W0950001103	8-63	16.20

ISO 15552 Air Cylinders, All Stainless Steel (Formerly ISO 6431)

Technical Specifications

- Fluid: lubricated or non-lubricated air

Temperature Range:

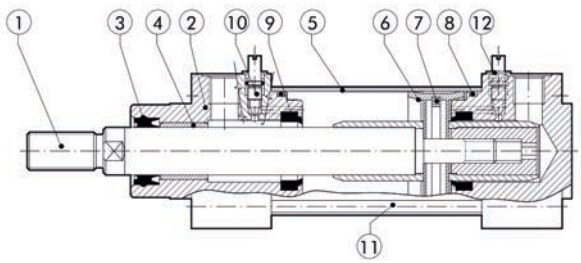
- -10°C to +80°C

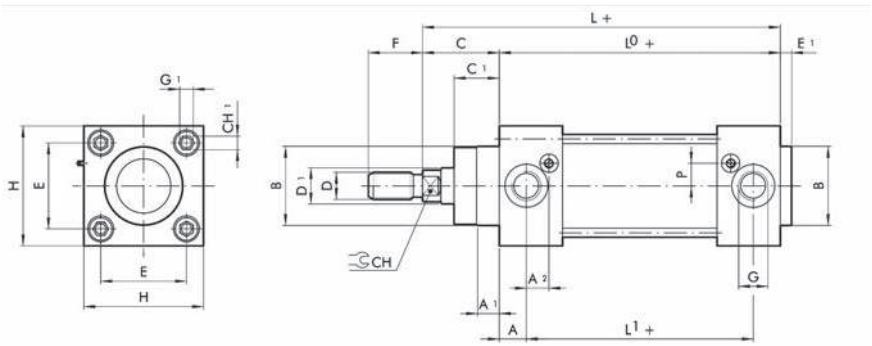
Maximum Operating Pressure:

- 10 bar



1. Piston rod: AISI 316 steel
2. Head: AISI 304 steel
3. Piston rod gasket: polyurethane or FKM/FPM
4. Guide bushing: sintered bronze
5. Barrel: AISI 304 steel
6. Enbloc gasket: NBR or FKM/FPM
7. Magnet: plastoferrite
8. Static O-rings: NBR or FKM/FPM
9. Cushioning gasket: polyurethane or FKM/FPM
10. Cushioning needle: AISI 304 steel
11. Tie rod: AISI 316 steel
12. Needle-retaining ring: technopolymer





Ø.	A	A_1	A_2	B	C	C_1	CH	CH_1	D	D_1	E	E_1	F	G	G_1	H	L	L_0	L_1	L_2	P
32	13	9	11.3	30	26	18	10	6	M10x1.25	12	32.5	4	22	G1/8	M6	50	120	94	68	146	6
40	14	9	13	35	30	22	13	6	M12x1.25	16	38	4	24	G1/4	M6	55	135	105	77	165	8
50	14	9	12.7	40	37	25.5	17	8	M16x1.5	20	46.5	4	32	G1/4	M8	65	143	106	78	180	11.8
63	16	9	15.8	45	37	25	17	8	M16x1.5	20	56.5	4	32	G3/8	M8	75	158	121	89	195	11.7
80	17	10	16.3	45	46	35	22	-	M20x1.5	25	72	4	40	G3/8	M10	95	174	128	94	220	15.5
100	18	10	15.5	55	51	38	22	-	M20x1.5	25	89	4	40	G1/2	M10	110	189	138	102	240	15.5
125	18	11	20	60	65	46	27	-	M27x2	32	110	6	54	G1/2	M12	140	225	160	124	290	15

ISO 15552 Air Cylinders, All Stainless Steel (Formerly ISO 6431)

Technical Specifications

- Fluid: lubricated or non-lubricated air

Temperature Range:

- -10°C to +80°C

Maximum Operating Pressure:

- 10 bar



ISO 15552 Cylinders, Double Acting

Magnetic

Code P19	Diameter mm	Stroke mm	Price
W1840320025	32	25	310.10
W1840320050	32	50	318.05
W1840320080	32	80	327.45
W1840320100	32	100	333.80
W1840320125	32	125	341.70
W1840320160	32	160	352.75
W1840320200	32	200	365.40
W1840320250	32	250	381.15
W1840320320	32	320	403.30
W1840320400	32	400	428.60
W1840320500	32	500	460.20
W1840400025	40	25	335.15
W1840400050	40	50	343.40
W1840400080	40	80	353.25
W1840400100	40	100	385.50
W1840400125	40	125	368.15
W1840400160	40	160	379.65
W1840400200	40	200	392.85
W1840400250	40	250	409.35
W1840400320	40	320	432.45
W1840400400	40	400	458.85
W1840400500	40	500	491.80
W1840500025	50	25	403.40
W1840500050	50	50	442.65
W1840500080	50	80	425.05
W1840500100	50	100	432.85
W1840500125	50	125	442.75
W1840500160	50	160	456.55
W1840500200	50	200	472.30
W1840500250	50	250	527.05
W1840500320	50	320	519.60
W1840500400	50	400	551.10
W1840500500	50	500	590.50

Code P19	Diameter mm	Stroke mm	Price
W1840630025	63	25	460.90
W1840630050	63	50	508.95
W1840630080	63	80	492.15
W1840630100	63	100	503.55
W1840630125	63	125	517.75
W1840630160	63	160	366.90
W1840630200	63	200	600.25
W1840630250	63	250	588.75
W1840630320	63	320	628.55
W1840630400	63	400	721.95
W1840630500	63	500	730.80
W1840800025	80	25	591.70
W1840800050	80	50	627.55
W1840800080	80	80	649.15
W1840800100	80	100	710.75
W1840800125	80	125	681.50
W1840800160	80	160	756.95
W1840800200	80	200	735.35
W1840800250	80	250	771.25
W1840800320	80	320	821.50
W1840800400	80	400	941.55
W1840800500	80	500	950.80
W1841000025	100	25	820.35
W1841000050	100	50	841.80
W1841000080	100	80	867.65
W1841000100	100	100	947.75
W1841000125	100	125	906.25
W1841000160	100	160	936.35
W1841000200	100	200	970.70
W1841000250	100	250	1013.65
W1841000320	100	320	1073.80
W1841000400	100	400	1142.55
W1841000500	100	500	1228.50

ISO 15552 Air Cylinder Accessories, All Stainless Steel (Formerly ISO 6431)



Foot Mounting

To Suit ISO 15552 Cylinders

Code P19	To Suit Size mm	Price
W095X322001	32	35.05
W095X402001	40	32.70
W095X502001	50	45.80
W095X632001	63	49.40
W095X802001	80	81.55
W095XA12001	100	82.75



Male 90° Hinge

To Suit ISO 15552 Cylinders

Code P19	To Suit Size mm	Price
W095X322008	32	128.40
W095X402008	40	155.10
W095X502008	50	190.80
W095X632008	63	212.95
W095X802008	80	271.45
W095XA12008	100	296.80



Male Hinge

To Suit ISO 15552 Cylinders

Code P19	To Suit Size mm	Price
W095X322004	32	119.75
W095X402004	40	140.80
W095X502004	50	177.25
W095X632004	63	209.00
W095X802004	80	231.15
W095XA12004	100	316.50



Female Hinge

To Suit ISO 15552 Cylinders

Code P19	To Suit Size mm	Price
W095X322003	32	119.75
W095X402003	40	140.80
W095X502003	50	177.25
W095X632003	63	209.00
W095X802003	80	247.60
W095XA12003	100	316.50

ISO 15552 Air Cylinder Accessories, All Stainless Steel (Formerly ISO 6431)



Hinge Pin

To Suit ISO 15552 Cylinders

Code P19	To Suit Size mm	Price
W095X322050	32	10.45
W095X402050	40	12.85
W095X502050	50	13.85
W095X632050	63	20.55
W095X802050	80	23.05
W095XA12050	100	27.40



Flange

To Suit ISO 15552 Cylinders

Code P19	To Suit Size mm	Price
W095X322002	32	87.95
W095X402002	40	99.40
W095X502002	50	119.75
W095X632002	63	159.00
W095X802002	80	201.85
W095XA12002	100	287.85



Fork Clevis

To Suit ISO 15552 Cylinders

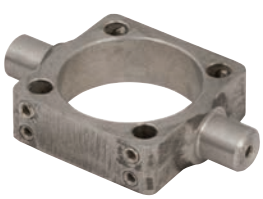
Code P19	To Suit Size mm	Thread	Price
W095X322020	25/32	M10 x 1.25	23.25
W095X402020	40	M12 x 1.25	28.75
W095X502020	50/63	M16 x 1.5	64.95
W095X802020	80/100	M20 x 1.5	95.10



Rod Nuts

To Suit ISO 15552 Cylinders

Code P19	To Suit Size	Thread	Price
W095X322011	25/32	M10 x 1.25	1.55
W095X402011	40	M12 x 1.25	2.15
W095X502011	50/63	M16 x 1.5	2.75
W095X802011	80/100	M20 x 1.5	3.80



Intermediate Hinge

To Suit ISO 15552 Cylinders

Code P19	To Suit Size mm	Price
W095X322007	32	137.60
W095X402007	40	165.45
W095X502007	50	188.45
W095X632007	63	231.15
W095X802007	80	295.15
W095XA12007	100	350.55



Reed Switch

To Suit ISO 15552 Cylinders

Code P19	Thread	Price
W0952022180	With Moulded Cable	26.70
W0952028184	With M8 Connection	26.70



Mounting for Reed Switch

To Suit ISO 15552 Cylinders

Code P19	Price
W0950001100	23.35

Manual Ball Valves

- Body: 316 stainless steel.
- Seal: PTFE.

Working Temperature:

- -20°C to +200°C

Maximum Working Pressure:

- 1/4" to 1.1/4" – 1000 psi
- 1.1/2" to 2" – 800 psi



Ball Valve, One Piece

Reduced Bore

Code N23	Thread BSPP	Price
BVSS14	G1/4"	11.20
BVSS38	G3/8"	11.70
BVSS12	G1/2"	13.70
BVSS34	G3/4"	18.20
BVSS1	G1"	25.05
BVSS114	G1.1/4"	37.45
BVSS112	G1.1/2"	44.00
BVSS2	G2"	65.90

- Body: 316 stainless steel.
- Seal: PTFE.
- **Working Temperature:**
- -20°C to +200°C
- **Maximum Working Pressure:**
- 1000 psi



Ball Valve, Two Piece

Full Bore, Lockable

Code N23	Thread BSPP	Price
BV2SS14	G1/4"	17.05
BV2SS38	G3/8"	16.90
BV2SS12	G1/2"	19.80
BV2SS34	G3/4"	26.50
BV2SS1	G1"	39.15
BV2SS114	G1.1/4"	60.40
BV2SS112	G1.1/2"	87.05
BV2SS2	G2"	131.00
BV2SS212	G2.1/2"	272.55
BV2SS3	G3"	267.45

- Body: 316 stainless steel.
- Seal: PTFE.
- Contact our Technical Deptartment for seal kits.
- **Working Temperature:**
- -20°C to +200°C

Maximum Working Pressure:

- 1000 psi



Ball Valve, Three Piece

Full Bore, Lockable

Code N23	Thread BSPP	Price
BV3SS14	G1/4"	20.65
BV3SS38	G3/8"	22.95
BV3SS12	G1/2"	25.45
BV3SS34	G3/4"	35.75
BV3SS1	G1"	49.00
BV3SS114	G1.1/4"	74.15
BV3SS112	G1.1/2"	112.70
BV3SS2	G2"	166.00
BV3SS212	G2.1/2"	316.60
BV3SS3	G3"	436.00
BV3SS4	G4"	809.75

- Seal: Viton

Working Temperature:

- -40°C to +230°C

Maximum Working Pressure:

- 600 psi



Mini Ball Valves

Male x Female

Code N54	Thread BSPP	Price
SSMBV2MF	G1/4"	20.45
SSMBV3MF	G3/8"	20.10
SSMBV4MF	G1/2"	25.40
SSMBV5MF	G3/4"	32.20
SSMBV6MF	G1"	58.15

- Seal: Viton

Working Temperature:

- -40°C to +230°C

Maximum Working Pressure:

- 600 psi



Mini Ball Valves

Female x Female

Code N54	Thread BSPP	Price
SSMBV2FF	G1/4"	20.35
SSMBV3FF	G3/8"	18.40
SSMBV4FF	G1/2"	24.15
SSMBV5FF	G3/4"	32.20
SSMBV6FF	G1"	38.10

Ball Valves, ISO Mounting Pad

- Body: 316 stainless steel.
- Seal: PTFE.

Working Temperature:

- -20°C to +200°C

Maximum Working Pressure:

- 1000 psi



Ball Valve, Two Piece

With ISO Mounting Pad, Lockable

Code N52	Thread BSPP	Price
BV2SS12P	G1/2"	37.15
BV2SS34P	G3/4"	56.50
BV2SS1P	G1"	70.20
BV2SS114P	G1.1/4"	103.45
BV2SS112P	G1.1/2"	130.20
BV2SS2P	G2"	133.20

- Body: 316 stainless steel.
- Seal: PTFE.

Working Temperature:

- -20°C to +200°C

Maximum Working Pressure:

- 1000 psi



Ball Valve, Three Piece

With ISO Mounting Pad, Lockable

Code N52	Thread BSPP	Price
BV3SS12P	G1/2"	37.85
BV3SS34P	G3/4"	50.40
BV3SS1P	G1"	70.85
BV3SS114P	G1.1/4"	106.15
BV3SS112P	G1.1/2"	156.50
BV3SS2P	G2"	222.10
BV3SS212P	G2.2"	394.90
BV3SS3P	G3"	585.90

- Body: 316 stainless steel.
- Seal: PTFE.

Working Temperature:

- -20°C to +200°C

Maximum Working Pressure:

- 1000 psi



L Port Valve, Three Way

With ISO Mounting Pad, Lockable

Code N53	Thread BSPP	Price
BVSS3L12P	G1/2"	76.70
BVSS3L34P	G3/4"	110.80
BVSS3L1P	G1"	140.95
BVSS3L114P	G1.1/4"	198.15
BVSS3L112P	G1.1/2"	288.30
BVSS3L2P	G2"	419.75

T Port Valve, Three Way

With ISO Mounting Pad, Lockable

Code N53	Thread BSPP	Price
BVSS3T12P	G1/2"	84.00
BVSS3T34P	G3/4"	110.80
BVSS3T1P	G1"	147.80
BVSS3T114P	G1.1/4"	198.15
BVSS3T112P	G1.1/2"	302.25
BVSS3T2P	G2"	419.75

For Techmatic Stainless Steel Push-in Fittings



TECHMATIC™

All seals have FDA Certification

See section 6

Gate, Globe & Check Valves

Maximum Working Temperature:
- +200°C

Maximum Working Pressure:
- 200 psi



Gate Valves
BSPP

Code N54	Thread BSPP	Price
GV38SS	G3/8"	54.35
GV12SS	G1/2"	52.10
GV34SS	G3/4"	54.50
GV1SS	G1"	73.45
GV114SS	G1.1/4"	92.20
GV112SS	G1.1/2"	122.85
GV2SS	G2"	160.35
GV212SS	G2.1/2"	371.55
GV3SS	G3"	546.65

Maximum Working Temperature:
- +100°C

Maximum Working Pressure:
- 200 psi



Swing Check Valve
BSPP

Code N54	Thread BSPP	Price
SCV14SS	G1/4"	37.70
SCV38SS	G3/8"	37.70
SCV12SS	G1/2"	36.60
SCV34SS	G3/4"	45.80
SCV1SS	G1"	58.05
SCV114SS	G1.1/4"	77.35
SCV112SS	G1.1/2"	114.30
SCV2SS	G2"	143.20
SCV212SS	G2.1/2"	269.30
SCV3SS	G3"	452.25

- Seals: PTFE

Maximum pressure:
- 16 bar at +120°C
- 10 bar at +180°C

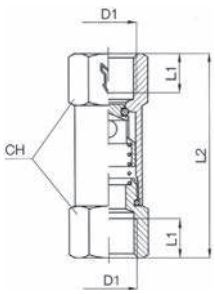


Globe Valve
BSPP

Code N23	Thread BSPP	Price
GVSS12	G1/2"	45.75
GVSS34	G3/4"	52.10
GVSS1	G1"	63.00
GVSS114	G1.1/4"	89.20
GVSS112	G1.1/2"	102.85
GVSS2	G2"	149.45

Non-return Valve
- One way flow (arrow direction engraved on body)
- Working pressure: 2 to 10 bar
- Opening pressure: 0.2 bar
- Working temperature range: -10°C to +150°C

Technical Data
- Recommended hoses: according to the fitting connected to the valve
- Application field: pneumatic installations fed with filtered, lubricated air



Dimensions

L1	L2	CH
8	40	13
9	48	16



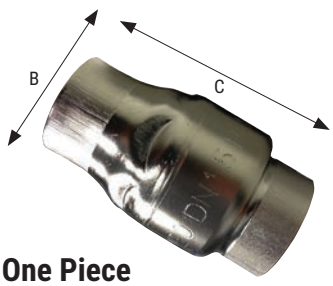
Compact Non-return Valve
BSPP

Code P49	Thread BSPP	Weight g	Price
VX230018	G1/8"	26	44.05
VX230014	G1/4"	38	49.20

- Body: 304SS
- Stem: 304SS
- Spring: 304SS
- Seal: FPM (Viton)

Maximum Pressure:
- 16 bar

Working Temperature:
- -20°C to +150°C



Piston Check Valve, One Piece
BSPP

Code N55	Thread BSPP	Dimensions mm DN	B	C	Price
PCV38SS	G3/8"	10	32	54	58.60
PCV12SS	G1/2"	15	32	54	38.10
PCV34SS	G3/4"	20	44	68	46.80
PCV1SS	G1"	25	53	83	86.75
PCV114SS	G1.1/4"	32	62	102	117.60
PCV112SS	G1.1/2"	40	78	115	134.80
PCV2SS	G2"	50	86	120	306.40

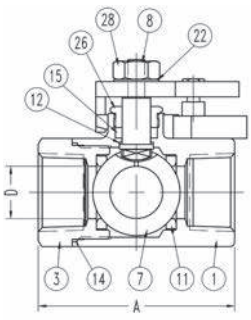
‘Deadman’ Handle Ball Valves

Materials

Item	Parts	Material
1	Body	A351-CF8M
3	Body Cap	A351-CF8M
7	Ball	A351-CF8M
8	Stem	316 SS
11	Seat	RTFE
12	Stem Seal	RTFE
14	Gasket	TFE
15	Stem Packing	TFE
21	Washer	304 SS
22	Spring Washer	304 SS
26	Gland	316 SS
28	Nut	304 SS
28-1	Lock Nut	304 SS
30	Supporter	A351-CF8M
31	Pipe	304 SS
33	Spring	301 SS
39	Connector	304 SS
42	Adjustable Stem	304 SS
4	Hex Bolt	304 SS
48	Socket Head Cap Screws	304 SS
59	Mounting Plate	A351-CF8M

Dimensions

Size	1/4”	3/8”	1/2”	3/4”	1”
A	52.8	52.8	59.5	71	82.7
D	9.5	9.5	12.7	17.5	22.2
L	180	180	180	185	185
LA	124	124	124	125	125
LB	146	146	146	152	152
Kg	0.5	0.5	0.6	0.8	1.1





Ball Valve with ‘Deadman’ Spring Return Handle

BSPP

Code N54	Thread BSPP	Price
BV2SS14DM	G1/4”	144.70
BV2SS38DM	G3/4”	168.80
BV2SS12DM	G1/2”	168.80
BV2SS34DM	G3/4”	177.65
BV2SS1DM	G1”	203.75

Y Strainers

Maximum working pressure:

- 800 psi

Maximum working Temperature:

- +100º



Y Strainer

BSP

Code N23	Thread BSPP	Price
YS14SS	G1/4”	25.35
YS38SS	G3/8”	25.35
YS12SS	G1/2”	24.60
YS34SS	G3/4”	32.05
YS1SS	G1”	50.25
YS114SS	G1.1/4”	58.80
YS112SS	G1.1/2”	85.70
YS2SS	G2”	126.50
YS212SS	G2.1/2”	298.60
YS3SS	G3”	394.80

For Techmatic Valves



TECHMATIC™

See section 4

Valve Features

- Suitable for medium pressure applications
- Working temperature range: -20°C to +150°C for fluids
- Working pressure: see diagram
- Fluids: air, water, oil, gas, petroliferous and petrochemical products, aggressive media
- Surface threaded ends as per UNI/ISO 7/1 Rp specifications

NB: in spring return version, valves are mounted in normally closed position; please specify if other position are required.

Actuator Features

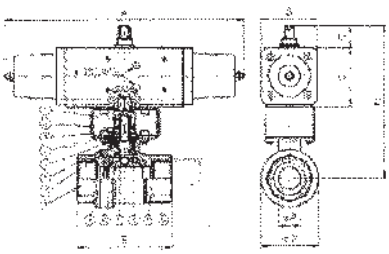
- Rotation angle: 90°
- Temperature range: 0°C to +80°C +20°C to +80°C with dry air only
- Air supply: 5.6 bar
- Maximum working supply: 8.4 bar
- Operating media: dry filtered air, not necessary lubricated. In case of lubricated air, either non detergent oil or NBR compatible oil must be used
- Automatic closing in a clockwise direction (for spring return version)

Actuators

Type	Suits
SR 15	DN 10 to DN 15 Valves
SR 30	DN 20 to DN 25 Valves
SR 45	DN 32 Valves
SR 60	DN 40 Valves
SR 90	DN 50 Valves

Valve Materials

Item	Parts	Material
1	Shaft	AISI 316
2	Nut holder	AISI 304
3	Lock nut	AISI 304
4	Spring	AISI 301
5	Washer	AISI 304
6	Gland nut ring	AISI 304
7	Static ring	PTFE
8	End	AISI 316
9	Seals	PTFE
10	Ball	AISI 316
11	O-ring	FKM
12	Bottom tight ring	PTFE
13	Body with female end	AISI 316
14	Top sealing	PTFE



More Variations Available
Flanged, Tri-clamp, Weld Ends



Actuated Ball Valve

Stainless Steel Body, Single Acting

Code P46	DN mm	Thread BSPP	Dimensions mm A	B	C	D	E	ØG	H	Weight kg	Price
S401H003	10	G3/8"	221	55	60	20	50	29	141.5	1.7	**288.45**
S401H004	15	G1/2"	221	55	60	20	60	34	145.5	1.8	**323.90**
S401H005	20	G3/4"	240	65	70	20	70	42.5	162.5	2.6	**367.55**
S401H006	25	G1"	240	65	70	20	85	50.5	166.5	2.9	**434.75**
S401A007	32	G1.1/4"	294	72	78	20	95	63	183	3.7	**491.25**
S401H008	40	G1.1/2"	320	80	86	30	105	75.5	207	5.4	**580.45**
S401A009	50	G2"	357	90	96	30	125	891	234	7.77	**820.05**

Actuated Valves

‘ARES’ Angle Seat Valve

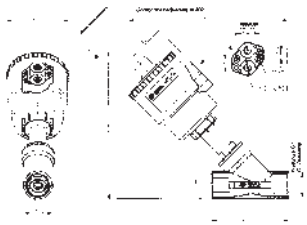
Water Hammer Free

Code P20	DN	Thread BSPP	Actuator	A	C	D	Ø E	F	ch.L	Price
J4SPG1603	15	G3/8”	DN 40*	146	133.5	35	61	65	25	207.50
J4SPG1604	15	G1/2”	DN 50	190	169	44	70	85	25	208.75
J4SPG1605	20	G3/4”	DN 50	195	176	44	70	95	31	234.35
J4SPG1805	20	G3/4”	DN 63	213	194.4	50.5	84.4	95	31	261.70
J4SPG1806	25	G1”	DN 63	219	202	50.5	84.4	105	38	223.55
J4SPG2106	25	G1”	DN 90	259	242	66.2	116.4	105	38	349.40
J4SPG2107	32	G1.1/4”	DN 90	266	249	66.2	116.4	120	47	387.15
J4SPG2108	40	G1.1/2”	DN 90	271	258	66.2	116.4	130	54	412.15
J4SPG2308	40	G1.1/2”	DN 110	307	294	77.4	140.6	130	54	492.15
J4SPG2309	50	G2”	DN 110	321	310	77.4	140.6	150	66	545.45

*Control cylinder without NAMUR interface.



More Variations Available
Flanged, Tri-clamp, Weld Ends



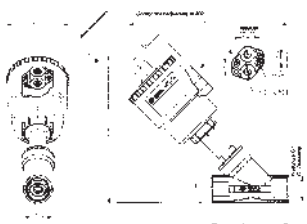
‘ARES’ Angle Seat Valve

Flow from Above the Seat

Code P20	DN	Thread BSPP	Actuator	A	C	D	Ø E	F	ch.L	Price
J4CPG1603	15	G3/8”	DN 50	190	169	44	70	85	25	199.65
J4CPG1604	15	G1/2”	DN 50	190	169	44	70	85	25	130.10
J4CPG1605	20	G3/4”	DN 50	195	176	44	70	95	31	225.10
J4CPG1806	25	G1”	DN 63	219	202	50,5	84,4	105	38	243.85
J4CPG2107	32	G1.1/4”	DN 90	266	249	66,2	116,4	120	47	357.25
J4CPG2108	40	G1.1/2”	DN 90	271	258	66,2	116,4	130	54	382.20
J4CPG2308	40	G1.1/2”	DN 110	307	294	77,4	140,6	130	54	434.95
J4CPG2109	50	G2”	DN 90	285	274	66,2	116,4	150	66	447.90
J4CPG2309	50	G2”	DN 110	321	310	77,4	140,6	150	66	501.25



More Variations Available
Flanged, Tri-clamp, Weld Ends



‘Atena’ Compact Angle Seat Valve

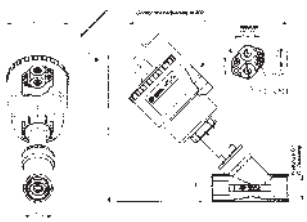
Water Hammer Free

Code P20	DN	Thread BSPP	Actuator	A	C	D	Ø E	F	ch.L	Price
J4CPG1403	15	G3/8”	DN 40*	146	133.5	35	61	65	25	169.95
J4CPG1404	15	G1/2”	DN 40*	153	141.5	35	61	75	31	156.40
J4CPG1405	50	G3/4”	DN 40*	285	274	66.2	116.4	150	66	171.85

*Control cylinder without NAMUR interface.



More Variations Available
Flanged, Tri-clamp, Weld Ends



Stainless Steel Fittings, 150lb



Barrel Nipple

BSPT

Code T02	Thread BSPT	Length mm	Price 1-9	Price 10+
SSBN18	R1/8"	30	2.55	2.45
SSBN14	R1/4"	30	2.70	2.60
SSBN38	R3/8"	40	3.15	3.00
SSBN12	R1/2"	60	4.20	4.00
SSBN34	R3/4"	60	5.55	5.30
SSBN1	R1"	60	7.70	7.35
SSBN114	R1.1/4"	80	13.00	12.35
SSBN112	R1.1/2"	80	15.15	14.40
SSBN2	R2"	100	23.75	22.60
SSBN212	R2.1/2"	100	42.80	40.70
SSBN3	R3"	120	58.75	55.85
SSBN4	R4"	120	82.35	78.25



Equal Hexagon Nipple

BSPT

Code T02	Thread BSPT	Price 1-9	Price 10+
SSHN18	R1/8"	1.60	1.55
SSHN14	R1/4"	2.20	2.10
SSHN38	R3/8"	2.75	2.65
SSHN12	R1/2"	4.50	4.30
SSHN34	R3/4"	5.95	5.70
SSHN1	R1"	8.70	8.30
SSHN114	R1.1/4"	12.30	11.70
SSHN112	R1.1/2"	13.95	13.30
SSHN2	R2"	20.90	19.90
SSHN212	R2.1/2"	32.10	30.50
SSHN3	R3"	42.60	40.50
SSHN4	R4"	74.75	71.05



Reducing Hexagon Nipple

BSPT

Code T02	Thread BSPT	Thread BSPT	Price 1-9	Price 10+
SSHRN1418	R1/4"	R1/8"	2.10	2.00
SSHRN3814	R3/8"	R1/4"	2.75	2.65
SSHRN1214	R1/2"	R1/4"	3.50	3.35
SSHRN1238	R1/2"	R3/8"	3.55	3.40
SSHRN3412	R3/4"	R1/2"	4.90	4.70
SSHRN112	R1"	R1/2"	7.15	6.80
SSHRN134	R1"	R3/4"	7.35	7.00
SSHRN1141	R1.1/4"	R1"	11.75	11.20
SSHRN1121	R1.1/2"	R1"	14.80	14.10
SSHRN21	R2"	R1"	17.90	17.05
SSHRN2112	R2"	R1.1/2"	20.30	19.30
SSHRN212112	R2.1/2"	R1.1/2"	43.30	41.15
SSHRN2122	R2.1/2"	R2"	48.40	46.00
SSHRN32	R3"	R2"	47.50	45.15
SSHRN3212	R3"	R2.1/2"	71.30	67.75
SSHRN42	R4"	R2"	123.15	117.00
SSHRN43	R4"	R3"	123.15	117.00



Threaded Half Socket

BSPP

Code T02	Thread BSPP	Price 1-9	Price 10+
SSHFS18	G1/8"	0.95	0.90
SSHFS14	G1/4"	1.30	1.25
SSHFS38	G3/8"	1.40	1.35
SSHFS12	G1/2"	2.10	2.00
SSHFS34	G3/4"	3.00	2.85
SSHFS1	G1"	4.35	4.15
SSHFS114	G1.1/4"	7.15	6.80
SSHFS112	G1.1/2"	7.60	7.25
SSHFS2	G2"	12.30	11.70
SSHFS212	G2.1/2"	18.10	17.20
SSHFS3	G3"	24.80	23.60
SSHFS4	G4"	40.30	38.30

Stainless Steel Fittings, 150lb



Threaded Full Socket

BSPP

Code T02	Thread BSPP	Price 1-9	Price 10+
SSFS18	G1/8"	1.30	1.25
SSFS14	G1/4"	2.10	2.00
SSFS38	G3/8"	2.50	2.40
SSFS12	G1/2"	3.95	3.80
SSFS34	G3/4"	5.55	5.30
SSFS1	G1"	8.60	8.20
SSFS114	G1.1/4"	13.50	12.85
SSFS112	G1.1/2"	14.70	14.00
SSFS2	G2"	22.60	21.50
SSFS212	G2.1/2"	36.60	34.80
SSFS3	G3"	46.00	43.70
SSFS4	G4"	74.40	70.70



Equal 90º Female Elbow

BSPP

Code T02	Thread BSPP	Price 1-9	Price 10+
SSFE18	G1/8"	2.15	2.05
SSFE14	G1/4"	2.75	2.65
SSFE38	G3/8"	4.00	3.80
SSFE12	G1/2"	4.75	4.55
SSFE34	G3/4"	6.50	6.20
SSFE1	G1"	11.10	10.55
SSFE114	G1.1/4"	16.20	15.40
SSFE112	G1.1/2"	21.55	20.50
SSFE2	G2"	30.35	28.85
SSFE212	G2.1/2"	54.80	52.10
SSFE3	G3"	80.10	76.10
SSFE4	G4"	145.90	138.65

For Stainless Steel DIN2353 Fittings



See section 16

Reducing Female Socket

BSPP



Code T02	Thread BSPP	Thread BSPP	Price 1-9	Price 10+
SSRFS1418	G1/4"	G1/8"	1.90	1.85
SSRFS3814	G3/8"	G1/4"	2.35	2.25
SSRFS1238	G1/2"	G3/8"	4.15	3.95
SSRFS3412	G3/4"	G1/2"	5.00	4.75
SSRFS134	G1"	G3/4"	7.80	7.45
SSRFS1141	G1.1/4"	G1"	11.75	11.20
SSRFS112114	G1.1/2"	G1.1/4"	15.75	15.00
SSRFS2112	G2"	G1.1/2"	23.15	22.00
SSRFS212112	G2.1/2"	G1.1/2"	50.75	48.25
SSRFS2122	G2"	G1.1/2"	39.00	37.05
SSRFS3112	G3"	G1.1/2"	49.80	47.35
SSRFS32	G3"	G2"	51.80	49.25
SSRFS3212	G3"	G2.1/2"	60.80	57.80
SSRFS42	G4"	G2"	66.55	63.25
SSRFS4212	G4"	G2.1/2"	72.55	68.95
SSRFS43	G4"	G3"	82.30	78.20

Lock Nut

BSPP



Code T02	Thread BSPP	Price 1-9	Price 10+
SSLN14	G1/4"	0.95	0.90
SSLN38	G3/8"	1.35	1.30
SSLN12	G1/2"	1.60	1.55
SSLN34	G3/4"	2.40	2.30
SSLN1	G1"	3.35	3.20
SSLN114	G1.1/4"	5.70	5.45
SSLN112	G1.1/2"	6.30	6.00
SSLN2	G2"	9.90	9.45

Equal 45º Female Bend

BSPP



Code T02	Thread BSPP	Price 1-9	Price 10+
SSFB18	G1/8"	2.40	2.30
SSFB14	G1/4"	2.75	2.65
SSFB38	G3/8"	3.35	3.20
SSFB12	G1/2"	5.00	4.75
SSFB34	G3/4"	6.35	6.05
SSFB1	G1"	12.10	11.50
SSFB114	G1.1/4"	14.20	13.50
SSFB112	G1.1/2"	19.50	18.55
SSFB2	G2"	29.95	28.50
SSFB212	G2.1/2"	57.10	54.25
SSFB3	G3"	69.75	66.30
SSFB4	G4"	118.60	112.70

Equal 90º Male/Female Elbow

Male BSPT x Female BSPP



Code T02	Thread BSPT	Female Thread BSPP	Price 1-9	Price 10+
SSMFE18	G1/8"	G1/8"	2.40	2.30
SSMFE14	G1/4"	G1/4"	3.30	3.15
SSMFE38	G3/8"	G3/8"	4.70	4.50
SSMFE12	G1/2"	G1/2"	5.30	5.05
SSMFE34	G3/4"	G3/4"	7.70	7.35
SSMFE1	G1"	G1"	11.75	11.20
SSMFE114	G1.1/4"	G1.1/4"	17.35	16.50
SSMFE112	G1.1/2"	G1.1/2"	21.75	20.70
SSMFE2	G2"	G2"	31.75	30.20
SSMFE212	G2.1/2"	G2.1/2"	55.30	52.55
SSMFE3	G3"	G3"	94.30	89.60
SSMFE4	G4"	G4"	195.75	186.00

Stainless Steel Fittings, 150lb



Reducing Bush

Male BSPT x Female BSPP

Code T02	Male Thread BSPT	Female Thread BSPP	Price 1-9	Price 10+
SSRB1418	R1/4"	G1/8"	1.50	1.45
SSRB3818	R3/8"	G1/8"	2.10	2.00
SSRB3814	R3/8"	G1/4"	4.00	3.80
SSRB1218	R1/2"	G1/8"	3.30	3.15
SSRB1214	R1/2"	G1/4"	2.90	2.80
SSRB1238	R1/2"	G3/8"	2.75	2.65
SSRB3414	R3/4"	G1/4"	4.20	4.00
SSRB3438	R3/4"	G3/8"	3.95	3.80
SSRB3412	R3/4"	G1/2"	3.55	3.40
SSRB114	R1"	G1/4"	7.35	7.00
SSRB138	R1"	G3/8"	7.40	7.05
SSRB112	R1"	G1/2"	6.80	6.50
SSRB134	R1"	G3/4"	5.80	5.55
SSRB11412	R1.1/4"	G1/2"	11.50	10.95
SSRB11434	R1.1/4"	G3/4"	10.60	10.10
SSRB1141	R1.1/4"	G1"	9.50	9.05
SSRB11212	R1.1/2"	G1/2"	13.35	12.70
SSRB11234	R1.1/2"	G3/4"	12.35	11.75
SSRB1121	R1.1/2"	G1"	11.50	10.95
SSRB112114	R1.1/2"	G1.1/4"	9.50	9.05
SSRB234	R2"	G3/4"	22.10	21.00
SSRB21	R2"	G1"	22.40	21.30
SSRB2114	R2"	G1/4"	19.50	18.55
SSRB2112	R2"	G1.1/2"	17.00	16.15
SSRB212112	R2.1/2"	G1.1/2"	34.35	32.65
SSRB2122	R2.1/2"	G2"	29.15	27.70
SSRB3112	R3"	G1.1/2"	47.20	44.85
SSRB32	R3"	G2"	42.35	40.25
SSRB3212	R3"	G2.1/2"	36.35	34.55
SSRB42	R4"	G2"	118.70	112.80
SSRB4212	R4"	G2.1/2"	118.60	112.70
SSRB43	R4"	G3"	80.75	76.75



Equal Female Tee

BSPP

Code T02	Thread BSPP	Price 1-9	Price 10+
SSFT18	G1/8"	2.55	2.45
SSFT14	G1/4"	3.60	3.45
SSFT38	G3/8"	4.70	4.50
SSFT12	G1/2"	5.40	5.15
SSFT34	G3/4"	8.60	8.20
SSFT1	G1"	14.50	13.80
SSFT114	G1.1/4"	19.50	18.55
SSFT112	G1.1/2"	23.70	22.55
SSFT2	G2"	35.40	33.65
SSFT212	G2.1/2"	62.40	59.30
SSFT3	G3"	91.70	87.15
SSFT4	G4"	172.80	164.20



Reducing on Branch Female Tee

BSPP

Code T02	Thread BSPP	Thread BSPP	Price 1-9	Price 10+
SSRFT1418	G1/4"	G1/8"	6.80	6.50
SSRFT3814	G3/8"	G1/4"	9.15	8.70
SSRFT1214	G1/2"	G1/4"	9.15	8.70
SSRFT1238	G1/2"	G3/8"	9.50	9.05
SSRFT3438	G3/4"	G3/8"	10.00	9.50
SSRFT3412	G3/4"	G1/2"	11.15	10.60
SSRFT112	G1"	G1/2"	19.70	18.75
SSRFT134	G1"	G3/4"	19.70	18.75
SSRFT11434	G1.1/4"	G3/4"	26.70	25.40
SSRFT1141	G1.1/4"	G1"	26.70	25.40
SSRFT11234	G1.1/2"	G3/4"	37.70	35.85
SSRFT1121	G1.1/2"	G1"	37.70	35.85
SSRFT112114	G1.1/2"	G1.1/4"	37.70	35.85
SSRFT212	G2"	G1/2"	55.50	52.75
SSRFT21	G2"	G1"	55.50	52.75
SSRFT2114	G2"	G1.1/4"	49.60	47.15
SSRFT2112	G2"	G1.1/2"	55.50	52.75

45º Male/Female Elbow

Male BSPT x Female BSPP



Code	T02	Male Thread BSPT	Female Thread BSPP	Price 1-9	Price 10+
SSMFE4518		R1/8"	G1/8"	8.40	8.00
SSMFE4514		R1/4"	G1/4"	8.95	8.55
SSMFE4538		R3/8"	G3/8"	12.80	12.20
SSMFE4512		R1/2"	G1/2"	19.50	18.55
SSMFE4534		R3/4"	G3/4"	23.30	22.15
SSMFE451		R1"	G1"	29.15	27.70
SSMFE45114		R1.1/4"	G1.1/4"	44.95	42.75
SSMFE45112		R1.1/2"	G1.1/2"	55.70	52.95
SSMFE452		R2"	G2"	83.50	79.35

Reducing Female Elbow

BSPP



Code	T02	Thread BSPP	Thread BSPP	Price 1-9	Price 10+
SSRFE1418		G1/4"	G1/8"	5.10	4.85
SSRFE3814		G3/8"	G1/4"	6.60	6.30
SSRFE1214		G1/2"	G1/4"	10.90	10.40
SSRFE1238		G1/2"	G3/8"	10.90	10.40
SSRFE3438		G3/4"	G3/8"	11.75	11.20
SSRFE3412		G3/4"	G1/2"	13.10	12.45
SSRFE112		G1"	G1/2"	18.60	17.70
SSRFE134		G1"	G3/4"	18.50	17.60
SSRFE11434		G1.1/4"	G3/4"	31.80	30.25
SSRFE1141		G1.1/4"	G1"	31.80	30.25
SSRFE1121		G1.1/2"	G1"	42.70	40.60
SSRFE112114		G1.1/2"	G1.1/4"	38.10	36.20
SSRFE21		G2"	G1"	49.70	47.25
SSRFE2114		G2"	G1.1/4"	44.35	42.15
SSRFE2112		G2"	G1.1/2"	49.70	47.25

Equal Y Piece

BSPP



Code	T02	Thread BSPP	Price 1-9	Price 10+
SSFY18		G1/8"	21.55	20.50
SSFY14		G1/4"	21.55	20.50
SSFY38		G3/8"	23.50	22.35
SSFY12		G1/2"	24.70	23.50
SSFY34		G3/4"	32.00	30.40
SSFY1		G1"	59.00	56.05

Hose Tail

BSPT x Hose ID



Code	T02	Thread BSPT	Hose ID	Price 1-9	Price 10+
SSHT18		R1/8"	1/8"	15.30	14.55
SSHT14		R1/4"	1/4"	5.40	5.15
SSHT38		R3/8"	3/8"	3.15	3.00
SSHT12		R1/2"	1/2"	4.15	3.95
SSHT34		R3/4"	3/4"	6.30	6.00
SSHT1		R1"	1"	9.35	8.90
SSHT114		R1.1/4"	1.1/4"	12.70	12.10
SSHT112		R1.1/2"	1.1/2"	17.20	16.35
SSHT2		R2"	2"	27.30	25.95
SSHT212		R2.1/2"	2.1/2"	48.00	45.60
SSHT3		R3"	3"	57.30	54.45
SSHT4		R4"	4"	108.90	103.50

Female Hose Tail

BSPP x Hose ID



Code	T02	Thread BSPP	Hose ID	Price 1-9	Price 10+
SSFHT14		G1/4"	1/4"	4.00	3.80
SSFHT38		G3/8"	3/8"	4.80	4.60
SSFHT12		G1/2"	1/2"	5.75	5.50
SSFHT34		G3/4"	3/4"	7.80	7.45
SSFHT1		G1"	1"	12.10	11.50
SSFHT114		G1.1/4"	1.1/4"	15.75	15.00
SSFHT112		G1.1/2"	1.1/2"	26.20	24.90
SSFHT2		G2"	2"	32.40	30.80

Stainless Steel Fittings, 150lb

Equal Female Cross

BSPP



Code T02	Thread BSPP	Price 1-9	Price 10+
SSFC18	G1/8"	3.55	3.40
SSFC14	G1/4"	4.90	4.70
SSFC38	G3/8"	6.60	6.30
SSFC12	G1/2"	10.50	10.00
SSFC34	G3/4"	15.15	14.40
SSFC1	G1"	24.30	23.10
SSFC114	G1.1/4"	30.90	29.40
SSFC112	G1.1/2"	45.50	43.25
SSFC2	G2"	61.15	58.10
SSFC212	G2.1/2"	170.70	162.20
SSFC3	G3"	142.20	135.10
SSFC4	G4"	336.55	319.75

Close Nipple

BSPP



Code T02	Thread BSPP	Price 1-9	Price 10+
SSCTN14	G1/4"	2.90	2.80
SSCTN18	G3/8"	4.80	4.60
SSCTN12	G1/2"	4.00	3.80
SSCTN34	G3/4"	4.75	4.55
SSCTN1	G1"	6.70	6.40
SSCTN114	G1.1/4"	9.00	8.55
SSCTN112	G1.1/2"	10.95	10.45
SSCTN2	G2"	15.00	14.25
SSCTN212	G2.1/2"	27.80	26.45
SSCTN3	G3"	42.15	40.05
SSCTN4	G4"	94.10	89.40

Equal Male/Female Union, Conical Seat

Male BSPT x Female BSPP



Code T02	Male Thread BSPT	Female Thread BSPP	Price 1-9	Price 10+
SSMFU18	R1/8"	G1/8"	8.15	7.75
SSMFU14	R1/4"	G1/4"	7.15	6.80
SSMFU38	R3/8"	G3/8"	10.55	10.05
SSMFU12	R1/2"	G1/2"	12.70	12.10
SSMFU34	R3/4"	G3/4"	17.80	16.95
SSMFU1	R1"	G1"	25.35	24.10
SSMFU114	R1.1/4"	G1.1/4"	31.90	30.35
SSMFU112	R1.1/2"	G1.1/2"	38.90	37.00
SSMFU2	R2"	G2"	61.00	57.95

Equal Female Union, Conical Seat

BSPP



Code T02	Thread BSPP	Price 1-9	Price 10+
SSFU18	G1/8"	7.20	6.85
SSFU14	G1/4"	6.70	6.40
SSFU38	G3/8"	9.90	9.45
SSFU12	G1/2"	11.20	10.65
SSFU34	G3/4"	15.60	14.85
SSFU1	G1"	22.15	21.05
SSFU114	G1.1/4"	28.20	26.80
SSFU112	G1.1/2"	34.40	32.70
SSFU2	G2"	52.70	50.10
SSFU212	G2.1/2"	81.95	77.90
SSFU3	G3"	137.70	130.85
SSFU4	G4"	187.20	177.85

Hose Joiner



Hose ID x Hose ID

Code T02	Hose ID	Price 1-9	Price 10+
SSHJ14	1/4" (6mm)	6.60	6.30
SSHJ516	5/16" (8mm)	8.20	7.80
SSHJ38	3/8" (10mm)	8.60	8.20
SSHJ12	1/2" (13mm)	11.10	10.55
SSHJ34	3/4" (19mm)	46.00	43.70
SSHJ1	1" (25mm)	49.00	46.55
SSHJ114	1.1/4" (32mm)	64.20	61.00
SSHJ112	1.1/2" (38mm)	82.00	77.90
SSHJ2	2" (51mm)	103.00	97.85

Reducing Hose Tail



BSPT x Hose ID

Code T02	Thread BSPT	Hose ID	Price 1-9	Price 10+
SSHT18316	R1/8"	3/16"	19.30	18.35
SSHT1814	R1/8"	1/4"	1.55	1.50
SSHT18516	R1/8"	5/16"	6.00	5.70
SSHT1418	R1/4"	1/8"	19.30	18.35
SSHT14316	R1/4"	3/16"	19.30	18.35
SSHT14516	R1/4"	5/16"	2.35	2.25
SSHT1438	R1/4"	3/8"	2.90	2.80
SSHT1412	R1/4"	1/2"	3.30	3.15
SSHT3814	R3/8"	1/4"	11.95	11.40
SSHT3812	R3/8"	1/2"	3.95	3.80
SSHT1214	R1/2"	1/4"	10.90	10.40
SSHT1238	R1/2"	3/8"	4.10	3.90
SSHT1234	R1/2"	3/4"	5.30	5.05
SSHT121	R1/2"	1"	8.55	8.15
SSHT3412	R3/4"	1/2"	7.55	7.20
SSHT3458	R3/4"	5/8"	26.60	25.30
SSHT341	R3/4"	1"	26.75	25.45
SSHT1-12	R1"	1/2"	43.00	40.85
SSHT134	R1"	3/4"	9.40	8.95
SSHT1114	R1"	1.1/4"	10.60	10.10
SSHT1112	R1"	1.1/2"	47.90	45.55
SSHT1141	R1.1/4"	1"	32.15	30.55
SSHT114112	R1.1/4"	1.1/2"	47.90	45.55
SSHT1121	R1.1/2"	1"	67.40	64.05
SSHT112114	R1.1/2"	1.1/4"	49.60	47.15
SSHT1122	R1.1/2"	2"	73.50	69.85
SSHT2112	R2"	1.1/2"	105.00	99.75

Extended Barrel Nipple



BSPT

Code T02	Thread BSPT	Length mm	Price 1-9	Price 10+
SSBN14-0100	R1/4"	100	9.10	8.65
SSBN14-0150	R1/4"	150	14.00	13.30
SSBN14-0200	R1/4"	200	14.70	14.00
SSBN14-0300	R1/4"	300	21.15	20.10
SSBN38-0100	R3/8"	100	11.20	10.65
SSBN38-0150	R3/8"	150	15.60	14.85
SSBN38-0200	R3/8"	200	20.55	19.55
SSBN38-0300	R3/8"	300	26.70	25.40
SSBN12-0100	R1/2"	100	15.35	14.60
SSBN12-0150	R1/2"	150	21.55	20.50
SSBN12-0200	R1/2"	200	30.70	29.20
SSBN12-0300	R1/2"	300	36.75	34.95
SSBN34-0100	R3/4"	100	20.75	19.75
SSBN34-0150	R3/4"	150	26.35	25.05
SSBN34-0200	R3/4"	200	34.15	32.45
SSBN34-0300	R3/4"	300	45.70	43.45
SSBN1-0100	R1"	100	10.10	9.60
SSBN1-0150	R1"	150	14.35	13.65
SSBN1-0200	R1"	200	50.30	47.80
SSBN1-0300	R1"	300	67.90	64.55
SSBN114-0100	R1.1/4"	100	34.30	32.60
SSBN114-0150	R1.1/4"	150	49.00	46.55
SSBN114-0200	R1.1/4"	200	58.75	55.85
SSBN114-0300	R1.1/4"	300	86.10	81.80
SSBN112-0100	R1.1/2"	100	38.70	36.80
SSBN112-0150	R1.1/2"	150	55.50	52.75
SSBN112-0200	R1.1/2"	200	64.60	61.40
SSBN112-0300	R1.1/2"	300	97.50	92.65
SSBN2-0150	R2"	150	77.55	73.70
SSBN2-0200	R2"	200	84.95	80.75
SSBN2-0300	R2"	300	137.00	130.15

Stainless Steel Fittings, 150lb



Round Blanking Cap

BSPP

Code T02	Thread BSPP	Price 1-9	Price 10+
SSRBC18	G1/8"	1.30	1.25
SSRBC14	G1/4"	1.40	1.35
SSRBC38	G3/8"	1.70	1.65
SSRBC12	G1/2"	3.00	2.85
SSRBC34	G3/4"	3.75	3.60
SSRBC1	G1"	6.35	6.05
SSRBC114	G1.1/4"	8.75	8.35
SSRBC112	G1.1/2"	10.50	10.00
SSRBC2	G2"	15.10	14.35
SSRBC212	G2.1/2"	24.15	22.95
SSRBC3	G3"	37.30	35.45
SSRBC4	G4"	53.95	51.30



Square Head Blanking Plug

BSPT

Code T02	Thread BSPT	Price 1-9	Price 10+
SSSP18	R1/8"	1.20	1.15
SSSP14	R1/4"	2.20	2.10
SSSP38	R3/8"	1.70	1.65
SSSP12	R1/2"	2.40	2.30
SSSP34	R3/4"	3.60	3.45
SSSP1	R1"	5.95	5.70
SSSP114	R1.1/4"	7.70	7.35
SSSP112	R1.1/2"	9.95	9.50
SSSP2	R2"	14.15	13.45
SSSP212	R2.1/2"	21.35	20.30
SSSP3	R3"	29.60	28.15
SSSP4	R4"	52.30	49.70



Hexagon Blanking Plug

BSPT

Code T02	Thread BSPT	Price 1-9	Price 10+
SSHP18	R1/8"	1.30	1.25
SSHP14	R1/4"	1.90	1.85
SSHP38	R3/8"	1.95	1.90
SSHP12	R1/2"	2.95	2.85
SSHP34	R3/4"	4.00	3.80
SSHP1	R1"	5.95	5.70
SSHP114	R1.1/4"	8.70	8.30
SSHP112	R1.1/2"	11.20	10.65
SSHP2	R2"	16.55	15.75
SSHP212	R2.1/2"	29.15	27.70
SSHP3	R3"	35.50	33.75
SSHP4	R4"	65.95	62.70



Hexagon Blanking Cap

BSPP

Code T02	Thread BSPP	Price 1-9	Price 10+
SSHBC18	G1/8"	1.30	1.25
SSHBC14	G1/4"	1.60	1.55
SSHBC38	G3/8"	2.15	2.05
SSHBC12	G1/2"	2.55	2.45
SSHBC34	G3/4"	3.30	3.15
SSHBC1	G1"	6.20	5.90
SSHBC114	G1.1/4"	9.30	8.85
SSHBC112	G1.1/2"	12.10	11.50
SSHBC2	G2"	17.00	16.15
SSHBC212	G2.1/2"	28.40	27.00
SSHBC3	G3"	37.00	35.15
SSHBC4	G3.1/2"	64.15	60.95

316 Stainless Steel Flanges



Slip-on, PN16/3

BS4504: Sect 3.1:1989

Code T10	Size	Price
SLIPSSF-34	3/4"	28.25
SLIPSSF-12	1"	40.00
SLIPSSF-112	1.1/2"	60.60
SLIPSSF-2	2"	79.00
SLIPSSF-3	3"	97.35



Table E

Slip-on

Code T10	Size	Price
TABSSEF-1	1"	20.05
TABSSEF-112	1.1/2"	33.80
TABSSEF-2	2"	41.05
TABSSEF-3	3"	63.60



Blind, 150lb

BS4504: Sect 3.1:1989

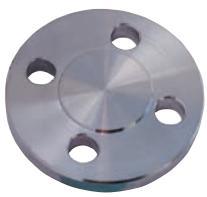
Code T10	Size	Price
BLSSAF-12	1/2"	11.80
BLSSAF-34	3/4"	17.45
BLSSAF-1	1"	26.90
BLSSAF-2	2"	126.55
BLSSAF-3	3"	132.10



Slip-on, 150lb

ANSI B16.5

Code T10	Size	Price
SLIPSSAF-12	1/2"	15.25
SLIPSSAF-1	1"	27.05
SLIPSSAF-112	1.1/2"	42.60
SLIPSSAF-2	2"	118.70



Blind, PN16/8

BS4504: Sect 3.1:1989

Code T10	Size	Price
BLSSPN16F-12	1/2"	24.10
BLSSPN16F-34	3/4"	29.40
BLSSPN16F-1	1"	42.90
BLSSPN16F-2	2"	82.00
BLSSPN16F-3	3"	126.70



Weld Neck, 150lb

ANSI B16.5

Code T10	Size	Price
WNSSAF-12	1/2"	16.15
WNSSAF-34	3/4"	38.40
WNSSAF-1	1"	35.00
WNSSAF-2	2"	124.15
WNSSAF-3	3"	157.80



Table D

Slip-on

Code T10	Size	Price
TABSSDF-112	1.1/2"	107.05
TABSSDF-2	2"	65.10
TABSSDF-4	4"	565.90

For Gaskets



See section 12

316L Hygienic Pipe Fittings, BS Type

new

- Most process lines have to be frequently dismantled for cleaning and all ranges of our hygienic fittings are suitable for this purpose



Elbows

90° Bends, Long

Code T11	OD	Price
BSL2S-316-1	1"	10.55
BSL2S-316-1.5	1.1/2"	14.65
BSL2S-316-2	2"	19.90
BSL2S-316-2.5	2.1/2"	29.50
BSL2S-316-3	3"	41.35
BSL2S-316-4	4"	83.60



Elbows

90° Bends, Short

Code T11	OD	Price
BS2WCL-316-1	1"	9.60
BS2WCL-316-1.5	1.1/2"	12.95
BS2WCL-316-2	2"	20.40
BS2WCL-316-2.5	2.1/2"	29.45
BS2WCL-316-3	3"	40.30
BS2WCL-316-4	4"	83.60



Elbows

45° Bends, Long

Code T11	OD	Price
BSL2KS-316-1	1"	9.60
BSL2KS-316-1.5	1.1/2"	12.45
BSL2KS-316-2	2"	17.10
BSL2KS-316-2.5	2.1/2"	26.20
BSL2KS-316-3	3"	38.25
BSL2KS-316-4	4"	70.60

- Clamp unions provide a crevice-free connection with a rapid breakdown and assembly, with no tools required
- RJT unions are probably the most widely used for frequent breakdown and cleaning



Tees

Long

Code T11	OD	Price
BS7WWW-316-1	1"	15.55
BS7WWW-316-1.5	1.1/2"	20.35
BS7WWW-316-2	2"	28.25
BS7WWW-316-2.5	2.1/2"	40.80
BS7WWW-316-3	3"	55.75
BS7WWW-316-4	4"	109.05



Tees

Short Pulled

Code T11	OD	Price
BS7WWO-316-1	1"	10.95
BS7WWO-316-1.5	1.1/2"	14.40
BS7WWO-316-2	2"	19.80
BS7WWO-316-2.5	2.1/2"	29.40
BS7WWO-316-3	3"	40.25
BS7WWO-316-4	4"	78.60

- IDF unions provide an alternative security and limit unauthorised access
- Sizes to suit OD tube



Reducers

Concentric Reducing Cone

Code T11	OD A	OD B	Price
BSL31-316-1.5X1	1.1/2"	1"	13.95
BSL31-316-2X1	2"	1"	22.45
BSL31-316-2X1.5	2"	1.1/2"	19.65
BSL31-316-2.5X1	2.1/2"	1"	33.90
BSL31-316-2.5X15	2.1/2"	1.1/2"	29.85
BSL31-316-2.5X2	2.1/2"	2"	21.95
BSL31-316-3X1	3"	1"	58.45
BSL31-316-3X1.5	3"	1.1/2"	47.40
BSL31-316-3X2	3"	2"	33.80
BSL31-316-3X2.5	3"	2.1/2"	28.00
BSL31-316-4X1.5	4"	1.1/2"	87.90
BSL31-316-4X2	4"	2"	73.70
BSL31-316-4X2.5	4"	2.1/2"	56.35
BSL31-316-4X3	4"	3"	45.80



Reducers

Eccentric Reducing Cone

Code T11	OD A	OD B	Price
BSL32-316-1.5X1	1.1/2"	1"	16.50
BSL32-316-2X1	2"	1"	25.95
BSL32-316-2X1.5	2"	1.1/2"	22.00
BSL32-316-2.5X1	2.1/2"	1"	38.80
BSL32-316-2.5X15	2.1/2"	1.1/2"	34.15
BSL32-316-2.5X2	2.1/2"	2"	24.25
BSL32-316-3X1	3"	1"	64.90
BSL32-316-3X1.5	3"	1.1/2"	51.80
BSL32-316-3X2	3"	2"	42.40
BSL32-316-3X2.5	3"	2.1/2"	32.60
BSL32-316-4X1.5	4"	1.1/2"	91.90
BSL32-316-4X3	4"	3"	59.75
BSL32-316-4X2.5	4"	2.1/2"	61.55
BSL32-316-4X2	4"	2"	78.10

316L Hygienic Pipe Fittings, BS Type

new



IDF Weld Fittings

Hex Nut

Code T11	Size	Price
BSIDF-13H-1	1"	9.95
BSIDF-13H-1.5	1.1/2"	12.80
BSIDF-13H-2	2"	16.35
BSIDF-13H-2.5	2.1/2"	20.15
BSIDF-13H-3	3"	24.75
BSIDF-13H-4	4"	33.95



RJT Weld Fittings

Hex Nut

Code T11	Size	Price
BSRJT-13H-1	1"	8.40
BSRJT-13H-1.5	1.1/2"	10.50
BSRJT-13H-2	2"	12.75
BSRJT-13H-2.5	2.1/2"	14.65
BSRJT-13H-3	3"	18.60
BSRJT-13H-4	4"	23.70



RJT Weld Fittings

EPDM Seal

Code T11	Size	Price
BSRJT-SEAL-1	1"	0.45
BSRJT-SEAL-1.5	1.1/2"	0.55
BSRJT-SEAL-2	2"	0.80
BSRJT-SEAL-2.5	2.1/2"	0.90
BSRJT-SEAL-3	3"	1.00
BSRJT-SEAL-4	4"	1.45



IDF Weld Fittings

Welding Male

Code T11	Size	Price
BSIDF-15-1	1"	7.05
BSIDF-15-1.5	1.1/2"	8.85
BSIDF-15-2	2"	11.35
BSIDF-15-2.5	2.1/2"	13.80
BSIDF-15-3	3"	17.20
BSIDF-15-4	4"	35.05



RJT Weld Fittings

Welding Male

Code T11	Size	Price
BSRJT-15-1	1"	7.00
BSRJT-15-1.5	1.1/2"	9.85
BSRJT-15-2	2"	12.25
BSRJT-15-2.5	2.1/2"	14.40
BSRJT-15-3	3"	17.25
BSRJT-15-4	4"	22.65



Hose Liner

Stainless Steel

Code T11	Size	Price
RJTHL1	1"	66.35
RJTHL112	1.1/2"	65.00
RJTHL2	2"	81.10
RJTHL212	2.1/2"	84.50
RJTHL3	3"	100.50



IDF Weld Fittings

Welding Liner

Code T11	Size	Price
BSIDF-14-1	1"	5.65
BSIDF-14-1.5	1.1/2"	6.20
BSIDF-14-2	2"	7.60
BSIDF-14-2.5	2.1/2"	9.15
BSIDF-14-3	3"	11.80
BSIDF-14-4	4"	21.70



RJT Weld Fittings

Welding Liner

Code T11	Size	Price
BSRJT-14-1	1"	3.50
BSRJT-14-1.5	1.1/2"	5.00
BSRJT-14-2	2"	5.65
BSRJT-14-2.5	2.1/2"	6.80
BSRJT-14-3	3"	10.30
BSRJT-14-4	4"	11.25



RJT Fittings

Spanner

Code T11	Size	Price
SPAN-RJT-1	1"	43.85
SPAN-RJT-112	1.1/2"	55.20
SPAN-RJT-2	2"	61.55
SPAN-RJT-212	2.1/2"	61.90
SPAN-RJT-3	3"	89.25
SPAN-RJT-4	4"	117.45



IDF Weld Fittings

EPDM Seal

Code T11	Size	Price
BSIDF-SEAL-1	1"	0.45
BSIDF-SEAL-1.5	1.1/2"	0.55
BSIDF-SEAL-2	2"	0.80
BSIDF-SEAL-2.5	2.1/2"	0.90
BSIDF-SEAL-3	3"	1.00
BSIDF-SEAL-4	4"	1.45



RJT Weld Fittings

Blanking Nut

Code T11	Size	Price
BSRJT-13HBN-1	1"	15.40
BSRJT-13HBN-1.5	1.1/2"	19.60
BSRJT-13HBN-2	2"	24.00
BSRJT-13HBN-2.5	2.1/2"	27.05
BSRJT-13HBN-3	3"	33.30
BSRJT-13HBN-4	4"	46.10



Hygienic Tube

3 Metre Lengths

Code T11	Size	Price
SSHYGT-1-3M	1"	73.95
SSHYGT-112-3M	1.1/2"	99.85
SSHYGT-2-3M	2"	137.30
SSHYGT-212-3M	2.1/2"	183.30
SSHYGT-3-3M	3"	185.65
SSHYGT-4-3M	4"	335.40

316L Hygienic Pipe Fittings, BS Type

new

Clamp Fittings

Weld Ferrule



Code T11	Clamp Size	Price
14MMP-0.5	1/2"	3.85
14MMP-0.75	3/4"	3.85
14MMP-1	1"	5.20
14MMP-1.5	1.1/2"	4.60
14MMP-2	2"	5.75
14MMP-2.5	2.1/2"	8.20
14MMP-3	3"	15.40
14MMP-4	4"	13.95

Clamp Fittings

Male Adaptor, NPT



Code T11	Clamp Size	Thread	Length mm	Price
21MPB-0.5	1/2"	1/2"	45	20.45
21MPB-0.75	3/4"	3/4"	45	22.65
21MPB-1	1"	1"	50	46.80
21MPB-1.5	1.1/2"	1.1/2"	50	46.80
21MPB-2	2"	2"	55	67.45

Clamp Fittings

Female Adaptor, NPT



Code T11	Clamp Size	Thread	Length mm	Price
22MPB-0.5	1/2"	1/2"	33	14.00
22MPB-0.75	3/4"	3/4"	33	30.90
22MPB-1	1"	1"	39	19.75
22MPB-1.5	1.1/2"	1.1/2"	39	35.90
22MPB-2	2"	2"	39	46.95

Clamp Fittings

Heavy-duty Single Pin Clamp



Code T11	Clamp Size	Price
13MHH-0.5	1/2"-3/4"	6.10
13MHH-1	1"-1.1/2"	8.90
13MHH-2	2"	10.50
13MHH-2.5	2.1/2"	11.50
13MHH-3	3"	21.00
13MHH-4	4"	27.50

Clamp Fittings

Heavy-duty Double Pin Clamp



Code T11	Clamp Size	Price
13MHHM-1	1"-1.1/2"	13.00
13MHHM-2	2"	14.30
13MHHM-2.5	2.1/2"	16.05
13MHHM-3	3"	18.20
13MHHM-4	4"	21.90

Clamp Fittings

End Cap



Code T11	Clamp Size	Price
16AMP-0.5	1/2"-3/4"	3.45
16AMP-1	1"-1.1/2"	5.45
16AMP-2	2"	7.20
16AMP-2.5	2.1/2"	9.55
16AMP-3	3"	12.10
16AMP-4	4"	23.30

Clamp Fittings

Clamp Joint Seal, EPDM



Code T11	Clamp Size	Price
13PG-0.5	1/2"	0.25
13PG-0.75	3/4"	0.25
13PG-1	1"	0.40
13PG-1.5	1.1/2"	0.45
13PG-2	2"	0.55
13PG-2.5	2.1/2"	0.70
13PG-3	3"	0.85
13PG-4	4"	1.25

Blow Guns



	**716**	Premium Quality Blow Gun
	**717-720**	Air Boy Blow Guns
	**721**	Air/Water Blow Guns
	**722**	Jet Air Nozzles
	**722**	Inflating Guns
	**723**	Sodablaster Air Blow Guns
	**724**	600 Series Blow Gun System
	**725-726**	Air Blow Guns
	**727-728**	Water Guns
	**727**	Safety Washing Guns
	**728**	Nozzles
	**729**	Workshop Guns

Premium Quality Blow Gun



5 YEARS GUARANTEE

- Very hard wearing and long lasting
- High blowing force
- Air pipe: electroplated steel
- Valve: acetal plastic
- Housing and trigger: hard wearing acetal plastic
- Connection: 1/4”BSP internal thread
- Spring: hardened stainless steel spring wire
- Temperature range: -10°C to +80°C
- Air supply: max 16 bar
- Air consumption: max 380 litres air/min at 8 bar

Techmatic Premium Blow Gun

G1/4” Internal Thread Connection

Code	P35	Description	Price 1-9	Price 10+
TMBG-1		8mm Bent Pipe	11.60	11.10

Air Boy Blow Guns

Air Boy blow guns represent the best Danish quality and are very hard-wearing and long-lasting. Air Boy blow guns are available with a wide variety of different characteristics, such as low noise, safety nozzles, a very high blowing force and/or a combination.

- Air Boy – your guarantee for a leak-free blow gun
- 25 year warranty on the valve system in our Air Boy blow guns
- Very high blowing force
- Ergonomically correct design to reduce hand fatigue
- Airflow is easily adjusted with the trigger
- Produced in a very hard-wearing acetal plastic
- Protective shields and rubber nozzles are available
- Air Boy rubber nozzles are particularly suitable for cleaning items with a delicate surface

Technical Specifications

- Air pipe: electroplated steel
- Housing and trigger: acetal plastic
- Gasket and O-ring: nitrite rubber
- Valve: acetal plastic
- Spring: hardened stainless steel spring wire
- Connection: 1/4" internal thread
- Air supply: maximum 16 bar
- Air consumption: maximum 380 litres air/min at 8 bar
- Temperature range: -10°C to + 80°C

- Air Boy – your guarantee for a leak-free blow gun
- 25 year warranty on the valve system in our Air Boy blow guns
- Silent Air Boy is a low noise blow gun equipped with a non-obstructive safety nozzle
- Nozzle can be dismounted and cleaned
- Silent Air Boy is designed to keep the noise level below 79dB in accordance with regulations
- Airflow is easily adjusted with the trigger
- Produced in a very hard-wearing acetal plastic
- Ergonomically correct design to reduce hand fatigue

Technical Specifications

- Air pipe: electroplated steel
- Nozzle: electroplated brass
- Housing and trigger: acetal plastic
- Gasket and O-ring: nitrile rubber
- Valve: acetal plastic
- Connection: 1/4" internal thread
- Air supply: maximum 16 bar
- Consumption: maximum 260 litres air/min at 8 bar
- Temperature range: -10°C to +60°C
- Noise level: 76 dB (8 bar) at 72 dB (6 bar) inlet pressure



Safety Nozzle



Air Boy

Standard

Code	P35	Description	Price 1-24	Price 25+
140101-000		8mm Bent Pipe	12.85	12.25



Air Boy

Silent

Code	P35	Description	Price 1-9	Price 10+
140125-000		8mm Bent Pipe	20.90	19.90



Air Boy

Adjustable

Code	P35	Description	Price 1-24	Price 25+
140103-000		8mm Bent Pipe	29.70	28.25

For Reinforced PVC Hose



See pages 494-495

Air Boy Blow Guns

Air Boy Classic – the basis of the Air Boy range – is a standard range of blowing tubes offering many options with various dimensions and lengths. Standard diameters of 6mm and 8mm are available, with lengths varying from 20mm to 2,000mm, straight or bent, galvanised or stainless steel AISI316.

Air Boy Classic blow guns are suitable for all practical blow-off, cleaning and drying purposes in all sectors of industry, including metal and woodworking, agriculture and car workshops.

- Air Boy Classic: robust impact-resistant design, common to all Air Boy blow guns
- Guaranteed long service life, even after 28 million operations
- Perfect ergonomic design for both right-handed and left-handed users
- Adjustable
- Guaranteed leak-free valve system, even after 10 million operations

Technical Specifications

- Maximum working pressure: 16 bar
- Temperature range: -10°C to +80°C
- Air consumption: maximum 380 litres air/min at 8 bar
- Thread: BSP/NPT

Materials

- Handle and trigger: acetal plastic
- Valve: acetal plastic
- Gaskets/O-rings: nitrile
- Blowing tube and shaft: steel, electrically galvanised
- Springs: hardened spring wire



Air Boy

Classic, Extended Nozzle

Code P35	Description	Price
140112-000	8mm x 300mm, Straight Pipe	21.70
140113-000	8mm x 500mm, Straight Pipe	24.15
140114-000	8mm x 1000mm, Straight Pipe	28.40

Air Boy Turbo – a particularly efficient solution, with a venturi nozzle that increases air flow by 100%. Air Boy Turbo is also a safety blow gun with an unblockable nozzle. Nozzles are available as accessories.

Technical Specifications

- Maximum working pressure: 16 bar
- Temperature range: -10°C to +80°C
- Air consumption: 300 litres air/min at 8 bar
- Thread: BSP/NPT

Materials

- Handle and trigger: acetal plastic
- Valve: acetal plastic
- Gaskets and O-rings: nitrile
- Blowing tube and shaft: steel, electrically galvanised
- Springs: hardened spring wire



Air Boy

Turbo

Code P35	Description	Price
140111-000	8mm Bent Pipe	26.85

JWL Air Boy stainless steel blow guns are suitable for practically all blow-off, cleaning and drying purposes in industries where compressed air is used. Specifically for the food and off-shore industries and also ideal for fluids.

Technical Specifications

- Maximum working pressure: 16 bar
- Temperature range: -10°C to +80°C
- Air consumption: maximum 380 litres air/min at 8 bar
- Thread: BSP/NPT

Materials

- Handle and trigger: acetal plastic
- Valve: acetal plastic
- Gaskets/O-rings: nitrile
- Blowing tube and shaft: stainless steel
- Springs: stainless spring wire



Air Boy

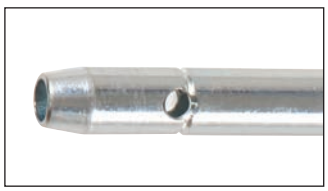
Stainless Steel Nozzle

Code P35	Description	Price
140120-000	8mm Bent Pipe	27.20
140183-000	8mm x 1500mm Straight Pipe	157.70

Air Boy Blow Guns

- Air Boy Anti-Block – robust, impact-resistant and leakage free
- Blowgun with bent pipe and unblockable nozzle, Ø6mm
- The holes in the side of the blowing tube ensure that air can get out if the tip is blocked
- The JWL ergonomic design is a classic in itself; we use the compressed air to ease the activation of the handle, making it easy, precise and simple to operate
- The Air Boy Anti-Block is produced in an impact-resistant acetal plastic (POM)



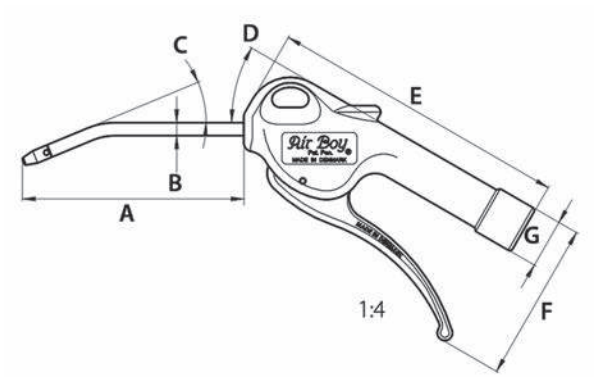


Technical Specifications

- Maximum working pressure: 16 bar
- Temperature range: -10°C to +80°C
- Air consumption: maximum 330 litres air/min at 8 bar

Materials

- Handle and trigger: acetal plastic
- Valve: acetal plastic
- Gaskets and O-rings: nitrile
- Blowing tube and shaft: steel, electrically galvanised
- Spring: hardened spring wire



Air Boy

Anti-Block

Code	P35	Description	Price
140106-000		6mm Bent Pipe, Unblockable Nozzle	20.95

Dimensions

A 102mm **C** 25,5° **E** 138mm **G** Ø 22.6mm
B Ø 6mm **D** 30° F 73.6mm 1/4" BSP

Air Boy Blow Guns

The Air Boy range of blow guns is acknowledged all over the world for being exceptionally reliable and hard-wearing with a very long lifetime.

The high blowing force supplied by the Jet Air Boy blow gun is an important advantage, since most silent blow guns on the market are characterised by a very low blowing force.

The Jet Air 1 and 2 flat nozzles can be purchased separately and are designed for applications requiring a regulated, flat airflow.

- Combines high blowing force and low noise with a non-obstructive safety nozzle
- Fulfils OSHA requirements
- The Jet Air nozzle reduces air consumption between 20-55%
- Easy trigger adjustment of airflow

Technical Specifications

- Jet Air 1 nozzle: ABS
- Jet Air 2 nozzle: ULTEM 1000
- Housing and trigger: acetal plastic
- Gasket and O-ring: nitrile rubber
- Valve: acetal plastic
- Connection gun: 1/4" internal thread
- Connection nozzles: 1/4" external thread
- Air supply: 4-8 bar
- Temperature range, Jet Air 1 nozzle: -10°C to +80°C
- Temperature range, Jet Air 2 nozzle: -10°C to +200°C
- Air consumption: maximum 420 litres air/min at 5 bar
- Blowing force: 515g (5,15 N)
- Noise level: 81.5 dB (8 bar) at 78 dB (6 bar) inlet pressure



Air Boy

Jet

Code	P35	Description	Price 1-9	Price 10+
140026-134		Mounted with Jet Air 1	26.55	25.25



Air Boy

Jet, Adjustable

Code	P35	Description	Price 1-9	Price 10+
140027-134		Mounted with Jet Air 1, Adjustable	25.50	24.25

The Super Silent Air Boy represents all the best characteristics combined into one blow gun.

- Low noise
- Safety features
- Extremely high blowing force
- Unblockable nozzle

Technical Specifications

- Air supply: maximum 12 bar
- Consumption: maximum 330 litres air/min at 8 bar
- Temperature range: -10°C to +60°C
- Noise level: 78.5dB (8 bar) at 76.8dB (6 bar) inlet pressure



Safety Nozzle



Air Boy

Super Silent, OSHA Safety Compliant

Code	P35	Description	Price
140141-000		8mm Bent Pipe, Super Silent	24.00

The Safety Air Boy blow gun is fitted with a reduction valve inside the handle. Due to this construction, the outlet pressure is limited to 2 bar or 3.5 bar, at inlet pressures between 4 bar and 16 bar.

The Safety Air Boy fulfils even the strictest safety demands.

- Air Boy – your guarantee for a leak-free blow gun
- Equipped with a built-in reduction valve
- Ergonomically correct design to reduce hand fatigue
- Airflow is easily adjusted with the trigger
- High quality product with a long lifespan



Air Boy

Safety, with Automatic Pressure Reduction

Code	P35	Description	Price
140161-000		8mm Bent Pipe, Max. 2 bar	66.40
140171-000		8mm Bent Pipe, Max. 3.5 bar	63.90

Air/Water Blow Guns

Adjustable nozzle allows quick and easy spraying of cleaners and degreasing agents without having liquids in contact with hands.

Corrosion-free

- 100% synthetic material
- Easy and clean adjustment of nozzle for liquid spray
- Air Boy handle offers a perfect handgrip
- Flow easily adjusted with the trigger

Technical Specifications

- Connection: 1/4" internal thread
- Container capacity: 1.2 litres
- Air supply: 6-12 bar (90-175 psi)
- Working pressure: 6-12 bar (87-174 psi)
- Air consumption: maximum 100 litres air/min at 8 bar (3.5 SCFM)



Cleaning Gun

Adjustable

Code P35	Description	Price
142135-000	Standard, 200mm pipe	50.00
142130-000	Short, 150mm pipe	48.50
142131-000	With Suction Hose & 150mm tube	43.45
143300	Replacement Container, 1.2L	25.95

Ideal for cleaning and wash down applications where higher water pressure than the mains supply is needed.

- Lightweight, and no splash back – you stay dry
- Adjustable jet spray and easy pressure adjustment with trigger
- Fitted with adaptor for water coupling

Technical Specifications

- Air connection: G1/4" internal thread
- Water connection: Gardena profile
- Working pressure: 6-10 bar
- Air consumption: maximum 380 litres air/min



Air/Water Boy

Adjustable

Code P35	Description	Price
142180-000	G1/4" Thread	46.80

For Extraflex Reinforced PVC Water Hose



See page 514

Jet Air Nozzles

Technical Specifications
- Maximum working pressure: 8 bar
- Temperature range: -10°C to +80°C
- Air consumption: 580 litres air/min at 8 bar
- Thread: BSP

Materials
- Pom Plastic



Jet Air Nozzle
Black

Code P35	Description	Price
141000-000	Jet Air 1 Nozzle, Black	11.55

Technical Specifications
- Maximum working pressure: 10 bar
- Temperature range: -10°C to +200°C
- Air consumption: 580 litres air/min at 8 bar
- Thread: BSP

Materials
- ULTEM 1000 Plastic



Jet Air Nozzle
Grey

Code P35	Description	Price
141001-000	Jet Air 2 Nozzle, Grey	17.25

JWL Inflating Guns

JWL inflating guns are used to inflate tyres of all types. They are well designed and provide continuous reliability and user-friendly operation. Inflating guns are available in several models for cars, lorries, bicycles and footballs. Supplied with pipe or hose.
- Ergonomically designed and user friendly
- Lightweight and easily operated
- Adjustable airflow using trigger
- Guaranteed long service life, even after 28 million operations
- Guaranteed leak-free valve system, even after 10 million operations



Inflating Guns
Footballs & Inflatables

Code P35	Price
140108-000	27.65



Inflating Guns
Bicycles

Code P35	Price
140118-000	31.40

Technical Specifications
- Connection: 1/4" internal thread
- Maximum working pressure: 12 bar
- Gauge (standard): 0-12 bar (87-174 psi)
- Hose: 0.5m



Inflating Guns
Tyres

Code P35	Description	Price
150123-134	63mm Dial with Twin Connector	76.35

Sodablaster Air Blow Guns

Sodablaster 2 is an enhancement of JWL's successful Sodablasting Gun. The nozzle on the Sodablaster is already set for the optimal output, the prescision nozzle can also be changed. A high-performance wide nozzle is available as an additional fitting (145955-000)

Technical Specifications

- Air Consumption - Minimum 180 l/min
- Handle & Trigger - Acetal Plastic
- Valve - Acetal Plastic
- Gaskets/ O-Rings - Nitrile
- Nozzle - Hardened Steel
- Spring - Hardened Spring Wire
- Connection - 1/4" Internal Thread

Maximum Working Pressure:

- 6 to 12 bar



Sodablaster V2

Air Blow Gun complete with Bowl

Code	P35	Thread ID	Price
145154-000		1/4"	128.00

Sodablasting is a fast and gentle method of removing paint and corrosion - even from hard to reach places. Sodablasting neither warms up, nor stretches sheet metal. Sodablasting does not damage glass, rubber or plastic and due to this fact, sodablasting requires a minimal need for shielding. Sodablasting protects the bare metal from rusting right away in contrast to sandblasting.

Technical Specifications

- Air Consumption - Minimum 450 l/min
- Handle & Trigger - Acetal Plastic
- Valve - Acetal Plastic
- Gaskets/O-Rings - Nitrile
- Nozzle - Hardened Steel
- Spring - Hardened Spring Wire
- Connection - 1/4" Internal Thread
- Clean or Remove without Damaging

Maximum Working Pressure:

- 6 to 12 bar



Sodablasting Set

Air Blow Gun with Hose & Feeder Tube

Code	P35	Thread ID	Price
145110-000		1/4"	195.30

- Soda specifically intended for blasting (Non Hazardous)



Soda

5 Litre

Code	P35	Description	Price
320103-000		For Sodablaster	29.95



Precision Nozzle

Hardened Steel

Code	P35	Thread ID	Price
145950-000		1/4"	23.55



Wide Nozzle

Pack of 3

Code	P35	Description	Price
145955-000		For use with Sodablaster V2	22.80



Rubber Nozzle

Ø8 mm

Code	P35	Description	Price
114124		For use with Sodablaster V2	3.00

Fits all blowguns with Ø8mm pipes, except for Super Silent Airboy

Technical Specifications:

- Shield ABS Plastic
- Bushing Brass
- Gaskets/O-rings Nitrile



Protective Chip Shield

Ø8mm

Code	P35	Description	Price
144180		Fits all Blow Guns	9.50

600 Series Blow Gun System

Specification

- Pressure rating: 150 psi
- Operating temperature: 0ºC to +80ºC
- Body: die-cast zinc (chrome plated)
- Nozzle: brass
- Thumb grip: vinyl
- Internal components: brass

Features

- Available with a wide selection of nozzles to fit any application
- Four self-lubricating o-rings prevent valve leakage, making blow gun repairs unnecessary

Nozzles

- Safety (standard)
- Safety booster
- Safety shield
- Rubber
- Siphon
- Brass
- 3, 6, 8, 10, 12, 16, 18, 24, 30 and 36” safety extensions
- 6 and 12” flexible safety extensions



Standard Safety Gun

G1/4” BSPP Female

Code	M19	Price
600S-DL		17.50

Nozzles

To Suit 600S-DL

Code	M19	Description	Price
ST11		Safety Booster Nozzle	2.20
ST12		Safety Shield Nozzle	14.60
SAT13		Rubber Nozzle	1.05
SAT14		Syphon Nozzle	18.75
SAT15		Brass Nozzle	3.10
ST203		3” Extension Nozzle	5.20
ST206		6” Extension Nozzle	5.55
ST208		8” Extension Nozzle	6.85
ST210		10” Extension Nozzle	8.35
ST212		12” Extension Nozzle	8.40
ST216		16” Extension Nozzle	13.95
ST218		18” Extension Nozzle	18.75
ST224		24” Extension Nozzle	15.60
ST230		30” Extension Nozzle	17.75
ST236		36” Extension Nozzle	21.30
STFF06		6” Flexible Extension Nozzle	18.50
STFF12		12” Flexible Extension Nozzle	37.85



ST11



ST12



SAT13



SAT15



SAT14



ST203



STFF12

Air Blow Guns



Standard Air Blow Gun

R1/4" Female Inlet

Code	M13	Material	Price 1-24	Price 25+
BG-1		Die-cast	8.00	7.60



Air Duster Gun

1/4" Male Inlet

Code	M13	Nozzle Length	Material	Price 1-24	Price 25+
DG-10-1		12mm	Aluminium	11.40	10.85

For Nylon Recoil Hose



See page 512

Features

- Maximum air pressure: 130 psi
- R1/4" female Inlet

Material

- Nylon fibre handle
- Seamless iron air duct
- Chrome-plated tube



Pistol Air Blow Gun

4" Nozzle

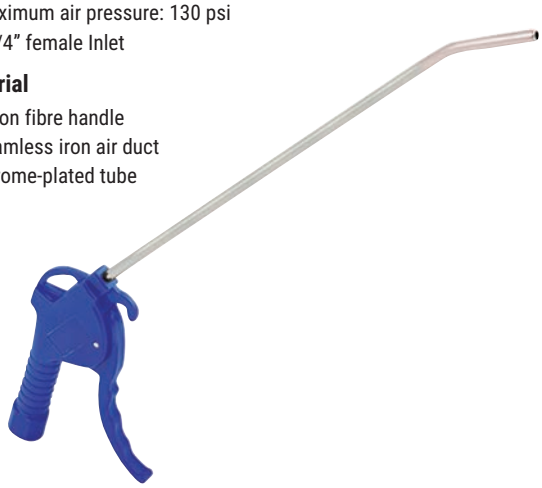
Code	M13	Price 1-24	Price 25+
BG-4N		9.25	8.80

Features

- Maximum air pressure: 130 psi
- G1/4" female Inlet

Material

- Nylon fibre handle
- Seamless iron air duct
- Chrome-plated tube



Pistol Air Blow Gun

10" Nozzle

Code	M13	Price 1-24	Price 25+
BG-10N		12.60	12.00

Air Blow Guns



Pistol Blow Gun

Aluminium

Code	P37	Connection	Price
269.11		6mm	19.30
269.17		9mm	19.25
269.18		13mm	18.80
269.41		Euro Coupling Plug	18.55
5269.00		Basic Gun (No Nozzle or Fitting)	17.90

- Medium: filtered compressed air
- Maximum operating pressure: 10 bar
- Operating temperature: +10ºC to +50ºC
- Recommended working pressure: 2-6 bar
- Noise level (standard nozzle): over 90dB(A) at pressures above 4 bar
- Weight: 150g



Compact Blow Gun

Plastic

Code	P37	Description	Price
470.40		1/4" BSPP Thread	13.45
470.140		With Extension Nozzle, 1/4" BSPP	17.95



Nozzles

For Pistol & Compact Blow Guns

Code	P37	Description	Price
105-6		Normal Nozzle, 1.5mm	1.90
269-33		Silent Nozzle	4.00
269-45		Full Jet Nozzle, Plastic, 2mm	6.35
269-59		Full Jet Nozzle, Aluminium, 2.5mm	12.10
269-27		Air Shield Nozzle	5.45
470-39		Safety & Silent Nozzle	21.45



Protection Shield

Nozzle Safety Shield

Code	P37	Description	Price
269-15		70mm Diameter	2.10

This blow gun leaves not a 'trace' behind. For all applications in which sensitive surfaces must be safeguarded against damage on contact. Works by bending the rubber nozzle. Compressed air connection by hose tail.

- Operating temperature: -10ºC to +50ºC
- Maximum operating pressure: 6 bar
- Recommended working pressure: 1-2 bar



Rubber Blow Gun

Hose Tail

Code	P37	Hose Tail	Price
319.11		6mm	20.30
319.17		9mm	20.75



Blow Pen

Euro Coupling Plug Connection

Code	P37	Price
271.41		9.15



Extension Nozzles

1/4" BSPP

Code	P37	Description	Price
470-12		Bent Nozzle, 110mm	5.10
470-72		110mm Nozzle with Rubber Tip	7.10
470-43		SafetyStar Silencing Nozzle	9.30
470-76		Bent Nozzle, 800mm	27.95
470-79		Straight Nozzle, 800mm	25.65

With M12 x 1.25 adaptor.



Safety Flat Beam Nozzles

G1/4" BSPP Connection

Code	P37	Description	Price
470-61		27mm Wide, G1/4"	25.90
470-60		47mm Wide, G1/4"	33.60

Water Guns

High pressure washing guns (in brass and aluminium for long life) can be connected to water pumps for working pressures up to 40 bar. Safety model with lever operation for 'open' and 'shut'. The jet can be adjusted from full jet to spray. For cleaning with cold or warm water, with an adjustable pattern from fine spray to concentrated jet. For temperatures above 50°C, gloves are recommended.

Features

- Rugged brass
- Rubber isolated trigger handle
- Robust blue EPDM rubber casting
- Automatic water shut-off
- Maximum pressure: 24 bar (350 psi)
- Maximum temperature: 50°C
- Standard G1/2" BSP female thread
- Clear red arrow to show water beam direction
- Stainless steel shaft with two EPDM sealing o-rings
- Modified handgrip for better heat isolation

Not for use with steam.



Heavy Duty Water Guns

Brass

Code	P38	Description	Price 1-9	Price 10+
AKMN001-B		G1/2" Female, Blue	46.85	44.55

Water Flow Rates						
Operating pressure (bar)	4	6	10	16	25	40
Flow rates (l/min)	4	5	6.3	8	10	13

Max. Working Pressure

- 40 bar

Working Temperature

- 0°C to +90°C



Safety Washing Guns

Multiclean

Code	P37	Description	Price
404.30		G1/2" Female Thread	151.10

Features

- Rugged stainless steel (316) housing
- EPDM rubber covers and seals
- Trigger handle and pusher in stainless steel
- G1/2" BSP female inlet
- Maximum temperature: 90°C intermittent use
- Maximum pressure: 24 bar (350 psi)
- Weight: approximately 970g
- Controllable water beam from broad to strong jet
- Clear red arrow to show water beam direction

Not for use with steam.



Heavy Duty Water Guns

Stainless Steel, Hygienic

Code	P38	Description	Price
AKRN001-W		G1/2" Female, White	146.15

Water Flow Rates						
Operating pressure (bar)	4	6	10	16	25	
Flow rates (l/min)	4	5	6.3	8	10	

Max. Working Pressure

- 25 bar

Working Temperature

- 0°C to +90°C



Safety Washing Guns

Proficlean

Code	P37	Description	Price
412.30		G1/2" Female Thread	128.90

Water Guns & Nozzles

Top quality nozzles in natural brass or nickel-plated brass. Adjustable from closed to open and from a wide spray patter into a jet spray. Suitable for watering and washing purposes. Saves water.



Adjustable Spray Nozzles

Brass & Nickel-plated Brass

Code	E01	Description	Price
20000A4		Brass, 1/2" / 3/4" Hose	16.85
20300A9		Nickel-plated Brass, 3/4" BSP Female	40.10

- Material: Terluran® GP-22 natural
- Working temperature: -40°C + 80°C
- Connection: male 1/4" taper



Air Blowing Nozzles

1/4" Male Thread

Code	E01	Description	Price
USG48		Flat, 48mm Wide, R1/4" Male Thread	14.75
USP28		Flat, 28mm Wide, R1/4" Male Thread	8.25
UST25		Round, 28mm Diameter, R1/4" Male Thread	9.50

- Insulated moulded grip for spraying hot or cold water
- Male hose threaded front for attaching accessories
- Rubber head guard to protect threads
- Solid brass valve stem with permanent adjusting nut



Gilmour Water Guns

G3/4"

Code	E01	Description	Price
GG-1		Gilmour Gun, G3/4" Connection	30.00

Designed to dispense water in such applications as a radiator or windscreen water bottle filler, PCL's water dispenser provides a simple solution.

- Sturdy design
- Lever gives instant flow and cut-off



Water Dispenser

R3/8" Female Inlet

Code	E13	Price
RF104		51.30

Workshop Guns

Specifications

- Nozzle Ø: 22mm
- Air pressure: 6.3 bar
- Air inlet: G1/4" BSP
- Hose ID: 10mm
- Length: 144mm
- Weight: 0.31kg

Accessories

- 1 x wonder gun
- 2 x hose clamps
- 1 x hose
- 1 x bag
- 1 x crevice tool
- 1 x concentrator
- 1 x upholstery tool
- 1 x extension tube



Wonder Gun Kit

Blow/Vacuum

Code	M24	Price 1-9	Price 10+
WGK-1		54.80	52.10

Specifications

- Maximum air pressure 10 bar
- Air connection 1/4" BSPF
- Universal gun for use with cartridges (400cc) or bulk (500cc)



Air Grease Gun

400cc

Code	M07	Price
AGG-1-AP		39.60

Specifications

- Body: metal
- Bore tube length: 2" x 8.1/2"
- Weight: 1.1kg
- Length: 12"
- Air pressure: 30-60 psi



Air Caulking Gun

C3 (215 x 50mm)

Code	M07	Price
ACG-1		35.05

Specifications

- Fluid tip ID: 1.6mm
- Air pressure: 3.5-5 bar
- Air inlet: G1/4" BSP
- Fluid inlet: 3/8"
- Airflow: 10-12.7 cfm
- Weight: 1.1kg
- Capacity: 1 litre



Spray Gun

General Purpose

Code	M27	Nozzle	Price
SPG-1-15		1.5mm	80.15
SPG-1-18		1.8mm	95.10
SPG-1-20		2mm	119.70

Specifications

- Air pressure: 3.5-5 bar
- Air inlet: G1/4" BSP
- Fluid inlet: 3/8"
- Airflow: 9.2-12 cfm
- Weight: 0.95kg
- Capacity: 1 litre



Spray Gun

Professional

Code	M27	Nozzle	Price
SPG-2-15		1.5mm	164.70
SPG-2-20		2mm	164.70
SPG-2-25		2.5mm	164.70

AIR CONTROL JWL®

Air Boy®
Made in Denmark



Blowguns for multiple use

1	**Air Boy® Classic**	Robust and impact resistant, infinitely adjustable, leak free
2	**Silent Air Boy®**	Low noise level and unblockable
3	**SUPER Silent Air Boy®**	Low noise level, unblockable and high blowing force
4	**Safety Air Boy®**	Safety blowgun with automatic pressure reduction to 2 or 3,5 bar
5	**Air Boy® Anti-Block**	Unblockable Safety Blowgun
6	**Air Boy® Non Scratch**	It prevents scratching and damage
7	**Air Boy® THRUST**	Extremely high airflow
8	**Air Boy® Stainless**	Ideal for fluids and aggressive environments
9	**Air Boy® TURBO**	The venturi nozzle increases air flow by 100%
10	**Jet Air Boy®**	High blowing force, unblockable and low noise level
11	**Air Boy® Bicycle**	Inflating guns for bicycles with Dunlop & Presta valves
12	**Air Boy® Ball**	Inflating guns for footballs etc.
13	**Air Boy® Car**	Inflating guns for cars, bicycles & etc. with Schrader valves

TECHMATIC™







Quality is our No.1 Responsibility

The Techmatic™ range has been developed based on our extensive industry knowledge and experience.

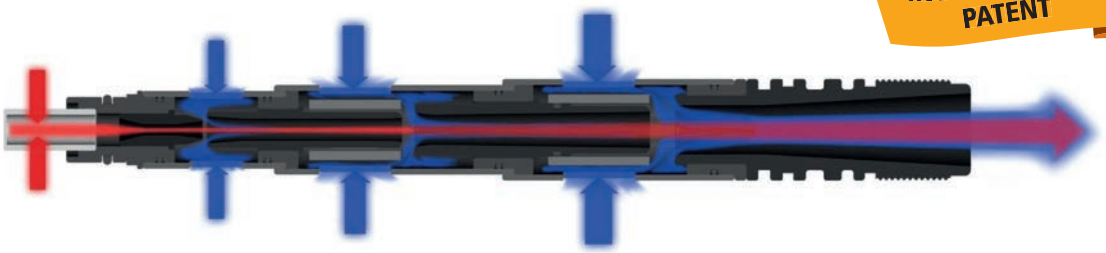
Each product has been carefully selected with these three fundamentals:

Quality, Price and Availability



VMECA Innovative Vacuum Cartridge Technology

INTERNATIONAL PATENT



Vacuum Pumps



See section 3 Vacuum


AEROPRO


735 Pistol Grip Drills


735 Straight Grip Drills


736 Air Impact Wrenches


737 Ratchet Wrenches


737 Air Impact Hammers


737 Air Impact Screwdriver


738 Grinders


739 2 in 1 Air Nailer & Stapler


739 Basic Air Tool Kit


739 Air Multifunction Tool


740 Riveter


740 Caulking Gun


740 Grease Gun


740 Sander


741 Spring Tool Balancers


741 Pneumatic Oil

AEROPRO

ENGINEERED FOR PROFESSIONALS

PNEUMATIC POWER TOOLS



HEAVY-DUTY, TOP QUALITY

Pneumatic Power Tools

new

AEROPRO
ENGINEERED FOR PROFESSIONALS

Specifications

- Suited to compact low profile applications
- Variable speed throttle for easy starts
- Precision machined gearing ensures maximum power transfer and durability
- Convenient one hand push button (forward/reverse)
- Lightweight – helps avoid fatigue during prolonged use
- Quiet operation with rear exhaust, which directs air away from workplace
- Ball bearing construction
- Recommended air pressure: 90 psi



Model No.	Chuck Size	Free Speed RPM	Air Inlet	Air Hose (ID)	Overall Length		Average Air Consumption		Net Weight	
					In	mm	cfm	l/min	Lbs	Kgs
AP17101	3/8"	1,800	1/4"	3/8"	7	180	3.7	104	1.98	0.9

Pistol Grip Reversible Drill

3/8" Keyed Chuck

Code	M07	Price
AP17101		43.50

Specifications

- Suited to compact low profile applications
- Variable speed throttle for easy starts
- Precision machined gearing ensures maximum power transfer and durability
- Convenient one hand push button (forward/reverse)
- Lightweight – helps avoid fatigue during prolonged use
- Quiet operation with rear exhaust, which directs air away from the workplace
- Ball bearing construction
- Recommended air pressure: 90 psi



Model No.	Chuck Size	Free Speed RPM	Air Inlet	Air Hose (ID)	Overall Length		Average Air Consumption		Net Weight	
					In	mm	cfm	l/min	Lbs	Kgs
AP17107	1/2"	700	1/4"	3/8"	7.68	195	4	115	1.18	1.19

Pistol Grip Reversible Drill

1/2" Keyed Chuck

Code	M07	Price
AP17107		45.85

Specifications

- For applications where a compact and low profile tool is required
- Precision machined gearing ensures maximum power transfer and durability
- Lightweight – helps prevent fatigue during prolonged use
- Ideal for drilling into confined spaces
- Recommended air pressure: 90 psi



Model No.	Chuck Size	Free Speed RPM	Air Inlet	Air Hose (ID)	Overall Length		Average Air Consumption		Net Weight	
					In	mm	cfm	l/min	Lbs	Kgs
AP17111	3/8"	2,600	1/4"	3/8"	8.8	225	4.0	115	1.87	0.85

Straight Grip Drill

3/8" Keyed Chuck

Code	M07	Price
AP17111		36.40

Pneumatic Power Tools

new

AEROPRO
ENGINEERED FOR PROFESSIONALS

Specifications

- Twin hammer mechanism has two identical hammers that deliver an instantaneous balanced blow, reducing vibration and transferring more torque to the drive than any other mechanism on the market
- Provides more power and smooth balanced blows
- Screened filter air inlet keeps dirt and debris from damaging the tool
- Rear exhaust
- Recommended air pressure: 90 psi



Model No.	Square Drive	Capacity Bolt Size		Free Speed RPM	Working Torque		Overall Length		Air Inlet	Air Hose (ID)	Average Air Consumption		Net Weight	
		Imp	Met mm		Ft-Lb	N.m	In	mm			cfm	l/min	Lbs	Kgs
AP7451	1/2"	5/8"	16	7,500	450	610	7.48	190	1/4"	3/8"	6.5	183.9	4.2	1.9

Air Impact Wrench

1/2" Square Drive

Code	M07	Price
AP7451		102.00

Specifications

- Twin hammer mechanism has two identical hammers that deliver an instantaneous balanced blow, reducing vibration and transferring more torque to the drive than any other mechanism on the market
- Provides more power and smooth balanced blows
- Screened filter air inlet keeps dirt and debris from damaging the tool
- Rear exhaust
- Recommended air pressure: 90 psi



Model No.	Square Drive	Capacity Bolt Size		Free Speed RPM	Working Torque		Overall Length		Air Inlet	Air Hose (ID)	Average Air Consumption		Net Weight	
		Imp	Met mm		Ft-Lb	N.m	In	mm			cfm	l/min	Lbs	Kgs
AP7460	3/4"	1"	25	7000	1000	1355	8.2	208	3/8"	1/2	9.5	269	6.6	3.0

Air Impact Wrench

3/4" Square Drive

Code	M07	Price
AP7460		187.25

Specifications

- Ergonomic handle design, central gravity for steady control
- Alloy steel strike structure, strong, anti-fatigue, long life and excellent torque/weight ratio
- 45° air inlet design, to decrease hose twisting
- Extended drive shaft for easy accessibility to concave restricted access
- Four speed forward and reverse setting



Model No.	Square Drive	Capacity Bolt Size		Free Speed RPM	Working Torque		Overall Length		Air Inlet	Air Hose (ID)	Average Air Consumption		Net Weight		Suggested Air Comp
		Imp	Met mm		Ft-Lb	N.m	Imp	Met mm			cfm	l/min	Lbs	Kgs	
AP7495	1"	2"	50	2800	2500	3480	25.4	644	1/2"	5/8"	43	1225	41.6	18.9	5 HP

Air Impact Wrench

1" Square Drive

Code	M07	Price
AP7495		455.70

Specifications

- Twin hammer mechanism has two identical hammers that deliver an instantaneous balanced blow, reducing vibration and transferring more torque to the drive than any other mechanism on the market
- Provides more power and smooth balanced blows
- Screened filter air inlet keeps dirt and debris from damaging the tool
- Rear exhaust
- Recommended air pressure: 90 psi

Contents

- 1 x AP17407 1/2" impact wrench
- 10 x impact sockets (9, 10, 11, 13, 14, 17, 19, 22, 24, 27mm)
- 1 x 5" extension bar
- 1 x oil pot
- 1 x hex wrench
- 1 x mini oiler
- 1 x nipple
- 1 x blow moulded case



Model No.	Square Drive	Capacity Bolt Size		Free Speed RPM	Working Torque		Overall Length		Air Inlet	Air Hose (ID)	Average Air Consumption		Net Weight	
		Imp	Met mm		Ft-Lb	N.m	In	mm			cfm	l/min	Lbs	Kgs
AP17407	1/2"	5/8"	16	7,500	450	610	7.30	187.4	1/4"	3/8"	6.5	183.5	4.9	2.26

Air Impact Wrench Kit

1/2" Square Drive, 17 Piece Kit

Code	M07	Price
AP17808		84.30

Pneumatic Power Tools

new

AEROPRO
ENGINEERED FOR PROFESSIONALS

Specifications

- Designed with superior technology and manufactured with precision and high quality to deliver more power and a longer life
- Ball bearing mounted air motor produces enough power for most requirements
- Fully hardened planetary gears reduce friction for extended tool productivity
- Comfortable composite grip handle
- Ball socket retainer provides fast and easy socket replacement
- Heat-treated components for increased durability
- Lightweight aluminium body
- Compact head design allows flexibility in tight areas
- Forward/reverse lever located behind the ratchet head for quick change of direction
- Side exhaust
- Recommended air pressure: 90 psi



Model No.	Square Drive	Capacity Bolt Size		Free Speed RPM	Working Torque		Overall Length		Air Inlet	Air Hose (ID)	Average Air Consumption		Net Weight	
		Imp	Met mm		Ft-Lb	N.m	In	mm			cfm	l/min	Lbs	Kgs
AP17411	3/8"	1/2	13	160	50	68	10.8	275	1/4"	3/8"	3	85.5	2.5	1.15

Ratchet Wrench

3/8" Square Drive

Code	M07	Price
AP17411-3/8		49.30

Specifications

- Designed with superior technology and manufactured with precision and high quality to deliver more power and a longer life
- Ball bearing mounted air motor produces enough power for most requirements
- Fully hardened planetary gears reduce friction for extended tool productivity
- Comfortable composite grip handle
- Ball socket retainer provides fast and easy socket replacement
- Heat-treated components for increased durability
- Lightweight aluminium body
- Compact head design allows flexibility in tight areas
- Forward/reverse lever located behind the ratchet head for quick change of direction
- Side exhaust
- Recommended air pressure: 90 psi



Model No.	Square Drive	Capacity Bolt Size		Free Speed RPM	Working Torque		Overall Length		Air Inlet	Air Hose (ID)	Average Air Consumption		Net Weight	
		Imp	Met mm		Ft-Lb	N.m	In	mm			cfm	l/min	Lbs	Kgs
AP17411	1/2"	1/2"	13	160	50	68	10	254	1/4"	3/8"	2.7	77	2.4	1.1

Ratchet Wrench

1/2" Square Drive

Code	M07	Price
AP17411-1/2		45.50

Specifications

- Ergonomic grip for comfort and stability
- Heat-treated impact parts for enhanced durability
- Positive action trigger and built-in air regulator for simple power and speed control
- Screened filter air inlet to keep dirt and debris from damaging the tool
- Standard quick change spring for speed and ease of chisel change
- Front exhaust
- Recommended air pressure: 90 psi
- Four-piece chisel set included



Model No.	Chisel Shank mm	Blows per min	Air Inlet	Air Hose (ID)	Overall Length		Average Air Consumption		Net Weight	
					In	mm	cfm	l/min	Lbs	Kgs
AP17621	10.2	4,500	1/4"	3/8"	6.10	155	2.8	79.8	2.65	1.2

Air Impact Hammer

Heavy-duty

Code	M07	Price
AP17621		26.55

Specifications

- Durable aluminium housing
- Quick change chuck uses 1/4" hex bits
- Suitable for 5.0mm screws, maximum
- Recommended air pressure: 90 psi (6.3 bar)



Model No.	Square Drive	Capacity Bolt Size		Free Speed RPM	Working Torque		Overall Length		Air Inlet	Air Hose (ID)	Average Air Consumption		Net Weight		Suggested Air Comp
		Imp	Met mm		Ft-Lb	N.m	Imp	Met mm			cfm	l/min	Lbs	Kgs	
AP7225	1/4"	2"	50	11000	33	45	6.9	176	1/4"	1/4"	2.6	74	1.83	0.76	2 HP

Air Impact Screwdriver

1/4" Square Drive

Code	M07	Price
AP7225		39.50

Pneumatic Power Tools

new

AEROPRO
ENGINEERED FOR PROFESSIONALS

Specifications

- Lightweight aluminium body
- Safety lever prevents accidental starts
- Rear exhaust
- Can be used with all types of accessories for porting, weld breaking and smoothing sharp edges, as well as deburring, polishing and grinding
- Recommended air pressure: 90 psi



Model No.	Grinder Cap	Free Speed RPM	Air Inlet	Air Hose (ID)	Average Air Consumption		Net Weight	
					cfm	l/min	Lbs	Kgs
AP17313	1/4"	20,000	1/4"	3/8"	3	86.25	0.70	0.32

Die Grinder

Straight, 1/4”

Code	M07	Price
AP17313		21.50

Specifications

- Built-in regulator to control speed
- Planetary gearing balances load on bearings and gears for greater power
- Side exhaust.
- Recommended air pressure: 90 psi



Model No.	Sanding Pad		Free Speed RPM	Air Inlet	Air Hose (ID)	Average Air Consumption		Net Weight	
	In	mm				cfm	l/min	Lbs	Kgs
AP7319	4"	100	10,000	1/4"	3/8"	5	140	2.86	1.3

4” Angle Grinder

Heavy-duty

Code	M07	Price
AP7319		46.40

Specifications

- Angled head provides easy access into confined spaces
- Lightweight aluminium body
- Safety lever prevents accidental starts
- Rear exhaust
- Can be used with all types of accessories for porting, weld breaking and smoothing sharp edges, as well as deburring, polishing and grinding
- Recommended air pressure: 90 psi



Model No.	Grinder Cap	Free Speed RPM	Air Inlet	Air Hose (ID)	Average Air Consumption		Net Weight	
					cfm	l/min	Lbs	Kgs
AP17315	1/4"	20,000	1/4"	3/8"	2.2	62	0.99	0.45

Die Grinder

Angled, 1/4”

Code	M07	Price
AP17315		36.35

Specifications

- Angled head provides easy access into confined spaces
- Lightweight aluminium body
- Safety lever prevents accidental starts
- Rear exhaust
- Can be used with all types of accessories for porting, weld breaking and smoothing sharp edges as well as deburring, polishing and grinding
- Recommended air pressure: 90 psi

Kit contains

- 1 x angle die grinder (AP17315)
- 2 x hand wrenches
- 10 x grinding stones
- 1 x nipple
- 1 x collet
- 1 x blow case



Model No.	Grinder Cap	Free Speed RPM	Air Inlet	Air Hose (ID)	Average Air Consumption		Net Weight	
					cfm	l/min	Lbs	Kgs
AP17315	1/4"	20,000	1/4"	3/8"	2.2	62	0.99	0.45

Angle Die Grinder Kit

16 Piece Kit

Code	M07	Price
AP17803-A		40.95

Pneumatic Power Tools

new

AEROPRO
ENGINEERED FOR PROFESSIONALS

Kit contains

- Paint spray gun
- Blow gun
- Tyre inflation gun
- Wash gun
- 5mm recoil air hose



Basic Air Tool Kit

5 Piece Set

Code	M07	Price
AP8031K5G		30.75

Specifications

- Strong and lightweight aluminium die-cast gun body
- Multi-directional exhaust port directs air away from the operator and work surface
- Hardened one-piece drive blade for professional application
- Teflon O-ring to protect the piston from wearing
- Tool free depth-of-drive adjustment for exact setting of nail head
- Adjustable knob for either sequential or contact firing
- Designed for Ga18 type nails and staples up to 50mm length

Includes

- Nailer
- Rugged carrying case
- Oil
- Wrenches
- Operating manual



Model No.	Dimensions (mm)	Required Pressure		Max Pressure		Nail Capacity	Weight	
		psi	bar	psi	bar		lbs	kgs
APSF5040RC	283x256x60	70-110	4.8-7.5	120	8.3	100 Pcs	3.52	1.6

2 in 1 Air Nailer & Stapler

Includes Carry Case

Code	M07	Price
APSF5040RC		70.15

Specifications

- Multifunction polishing and cutting tool
- Versatile multi-position blade mounting
- Ergonomic design
- Lightweight to help prevent fatigue during prolonged use
- Variable speed throttle for easy start

21 piece accessory kit includes

- Air powered polishing/cutting tool
- 3.1/2" half moon blade
- 2.1/2" half moon diamond grinding disc
- 2" rigid scraper
- 2" rigid flush scraper
- 1.1/2", 3/4" and 3/8" flush cut blades
- 3" triangular sanding pad
- 12 piece sandpaper, 60/80/100/120 grit



Model No.	Max Swing Angle	Swing Frequency	Air Inlet	Air Hose (ID)	Overall Length		Average Air Consumption		Net Weight	
					Imp	Met mm	cfm	l/min	Lbs	Kgs
AP7636	2.8"	16000	1/4"	3/8"	8.5	217	4.5	128	1.87	0.853

Air Multifunction Tool

21 Piece Kit

Code	M07	Price
AP7636		55.20

Miscellaneous Air Tools

Specifications

- Maximum rivet capacity: 3/16”
- Air pressure: 90 psi
- Tool length and height: 271 x 255 mm
- Tool weight: 1.75 kg
- Air inlet: 1/4” BSPP female
- Air consumption: 4.2 cfm
- Sound pressure: 73 dB (A)
- Sound power: 65 dB (A)
- Vibration level: 0.7 m/s2



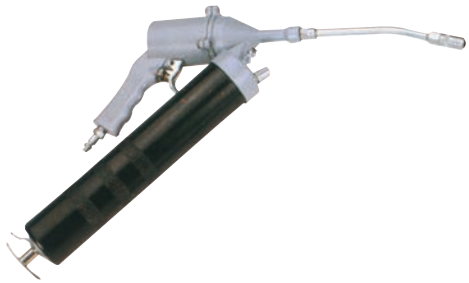
Blind Riveter, 3/16” Capacity

Pop Riveter

Code	M07	Price
RV316-AP		96.25

Specifications

- Maximum air pressure: 10 bar
- Air connection: 1/4” BSPF
- Universal gun for use with cartridges (400cc) or bulk (500cc)



Air Grease Gun

400cc

Code	M07	Price
AGG-1-AP		39.60

Contents

- 20 piece: 1/8” x 7/32”
- 30 piece: 5/32” x 7/32”
- 30 piece: 1/8” x 5/16”
- 20 piece: 3/16” x 5/16”

new



100 Piece Blind Rivet Assortment

For use with RV316-AP

Code	M07	Price
RIV-100		2.05

Specifications

- Pad size: 6”
- Free speed: 10,000 rpm
- Weight: 2kg
- Average air consumption: 0.12m³/min
- Hose ID: 3/8”
- Air inlet: 1/4”
- Air pressure: 90 psi



Dual Action Sander, 6”

10,000 rpm

Code	M07	Price
DAS-6		105.90

Specifications

- Body: metal
- Bore tube length: 2” x 8.1/2”
- Weight: 1.1kg
- Length: 12”
- Air pressure: 30-60 psi



Air Caulking Gun

C3 (215 x 50mm)

Code	M07	Price
ACG-1		35.05

Air Tool Accessories



Spring Tool Balancer

Steel Wire

Code M28	Capacity kg	Wire Length m	Net Weight kg	Price
TB-0615	0.6-1.5	1.6	0.5	29.25
TB-1020	1-2	1.6	0.6	28.80
TB-1530	1.5-3	1.6	0.6	28.80
TB-3050	3-5	1.5	0.7	34.50
TB-4070	4-7	1.5	1.45	147.60
TB-6090	6-9	1.5	1.55	233.50



Pneumatic Oil

Viscosity ISO 22

Code M10	Description	Price
PNEU-OIL	1 Litre Bottle	11.25
PNEU-OIL-5	5 Litre Bottle	37.25



Quality-Line

Quick Connect Coupling Systems for compressed air applications



OptiFlow-Line

Energy efficient Quick Connect Coupling Systems for compressed air and fluid applications



SafeConnect-Line

Quick Connect Coupling Systems for compressed air applications with safety function



TempTec by LÜDECKE

Quick Connect Coupling Systems for temperature control applications

BECK AIR

Pneumatic Accessories

Maintenance free, powerful and energy efficient.

Air Amplifiers

These high suction ringjets are perfect for dewatering and cooling applications.

Air Knives

The Neublade is a high pressure air knife for drying, spreading and cleaning.

Air Nozzles

Deliver a high pressure air stream for swarf removal, cooling and drying.

Air Conveyors

For bulk material conveying without the need for electrical power.

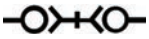




	746-747	Series 70, 72 & 76 Couplings
	748	Valves
	749	Bonded Seals
	750-759	Adaptors
	760-768	Hose Coupling Inserts
	769-775	DIN2353 Fittings
	776-781	DIN2353 Stainless Steel Fittings
	782-789	Twin Ferrule, Stainless Steel
	790-794	Hydraulic Tube
	795-806	Clamps
	807-813	Hydraulic Tank Accessories
	814	Hydraulic Tank Filler Breather

Hydraulic Couplings, Series 70

Double Shut-off



ISO 7241-B

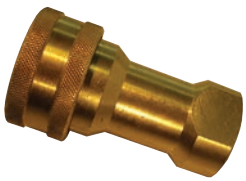
Interchangeability

- Hansen HK
- Parker 60
- Rectus 70
- Faster HNV
- ISO 7241-1 Series B

Material

- Seals: Buna-N
  (Viton on stainless units)

Attention: only plug and coupling with the same thread fit together.



Coupling

Female Thread, Brass

Code	N10	Thread BSPP	Max. Pressure @50°C	Price
QRCH14F		G1/4"	250 bar	11.20
QRCH38F		G3/8"	200 bar	16.45
QRCH12F		G1/2"	150 bar	26.00
QRCH34F		G3/4"	100 bar	43.45
QRCH1F		G1"	100 bar	66.35



Plug

Female Thread, Brass

Code	N10	Thread BSPP	Max. Pressure @50°C	Price
QRPH14F		G1/4"	250 bar	5.20
QRPH38F		G3/8"	200 bar	5.90
QRPH12F		G1/2"	150 bar	8.95
QRPH34F		G3/4"	100 bar	14.20
QRPH1F		G1"	100 bar	24.10



Coupling

Female Thread, Steel

Code	N11	Thread BSPP	Max. Pressure @50°C	Price
QRCHB14F-S		G1/4"	250 bar	8.25
QRCHB38F-S		G3/8"	200 bar	9.90
QRCHB12F-S		G1/2"	150 bar	15.20
QRCHB34F-S		G3/4"	100 bar	26.00
QRCHB1F-S		G1"	100 bar	34.55



Plug

Female Thread, Steel

Code	N11	Thread BSPP	Max. Pressure @50°C	Price
QRPHB14F-S		G1/4"	250 bar	4.15
QRPHB38F-S		G3/8"	200 bar	4.40
QRPHB12F-S		G1/2"	150 bar	5.60
QRPHB34F-S		G3/4"	100 bar	7.65
QRPHB1F-S		G1"	100 bar	14.85



Coupling

Female Thread, Stainless Steel

Code	N12	Thread BSPP	Max. Pressure @50°C	Price
QRCH14FSSV		G1/4"	250 bar	23.10
QRCH38FSSV		G3/8"	250 bar	37.05
QRCH12FSSV		G1/2"	250 bar	61.15
QRCH34FSSV		G3/4"	160 bar	103.15
QRCH1FSSV		G1"	100 bar	141.40



Plug

Female Thread, Stainless Steel

Code	N12	Thread BSPP	Max. Pressure @50°C	Price
QRPH14FSSV		G1/4"	250 bar	10.00
QRPH38FSSV		G3/8"	250 bar	16.40
QRPH12FSSV		G1/2"	250 bar	21.85
QRPH34FSSV		G3/4"	160 bar	33.00
QRPH1FSSV		G1"	100 bar	52.95

Hydraulic Couplings, Series 76

Double Shut-off



ISO 7241-A

Interchangeability

- Faster ANV Series
- Stucchi Bir Series
- Intertraco A Series
- Safeway S565
- Hansen HA 15000 (Gromelle)

Material

- Seals: Buna-N (Viton on stainless units)

Temperature Range

- -20°C to +100°C

Attention: only plug and coupling with the same thread fit together.

Coupling

Steel



Code	N11	Thread BSPP	Working Pressure bar	Price
QRCHA14F		G1/4"	400	7.05
QRCHA38F		G3/8"	300	9.20
QRCHA12F		G1/2"	250	9.20
QRCHA34F		G3/4"	250	17.20
QRCHA1F		G1"	230	33.45

Plug

Steel



Code	N11	Thread BSPP	Working Pressure bar	Price
QRPHA14F		G1/4"	400	3.85
QRPHA38F		G3/8"	300	4.05
QRPHA12F		G1/2"	250	4.95
QRPHA34F		G3/4"	250	9.65
QRPHA1F		G1"	230	14.10

Coupling

Stainless Steel with Viton Seals



Code	N12	Thread BSPP	Working Pressure bar	Price
QRCHA14FSSV		G1/4"	400	21.20
QRCHA38FSSV		G3/8"	300	29.60
QRCHA12FSSV		G1/2"	250	56.40
QRCHA34FSSV		G3/4"	250	84.75
QRCHA1FSSV		G1"	230	125.90

Plug

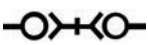
Stainless Steel with Viton Seals



Code	N12	Thread BSPP	Working Pressure bar	Price
QRPHA14FSSV		G1/4"	400	10.60
QRPHA38FSSV		G3/8"	300	12.75
QRPHA12FSSV		G1/2"	250	19.40
QRPHA34FSSV		G3/4"	250	32.90
QRPHA1FSSV		G1"	230	54.80

Hydraulic Couplings, Series 72

Double Shut-off



ISO 16028

Material

- Seals: Steel, Nitrile

Temperature Range

- -20°C to +100°C

Attention: only plug and coupling with the same thread fit together.

Flat Face Coupling

Steel



Code	N11	Thread BSPP	Body Size	Working Pressure bar	Price
QRCHF0614F-S		G1/4"	6mm	325	17.00
QRCHF1038F-S		G3/8"	10mm	325	26.40
QRCHF1012F-S		G1/2"	10mm	325	26.60
QRCHF1212F-S		G1/2"	12mm	325	28.35
QRCHF1234F-S		G3/4"	12mm	325	36.95
QRCHF1634F-S		G3/4"	16mm	270	67.70
QRCHF1910F-S		G1"	19mm	270	50.30

Flat Face Plug

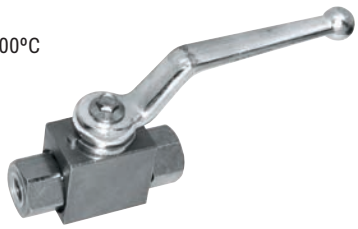
Steel



Code	N11	Thread BSPP	Body Size	Working Pressure bar	Price
QRPHF0614F-S		G1/4"	6mm	325	11.40
QRPHF1038F-S		G3/8"	10mm	325	15.65
QRPHF1012F-S		G1/2"	10mm	325	14.65
QRPHF1212F-S		G1/2"	12mm	325	17.50
QRPHF1234F-S		G3/4"	12mm	325	19.95
QRPHF1634F-S		G3/4"	16mm	270	42.70
QRPHF1910F-S		G1"	19mm	270	26.75

Hydraulic Valves

- Plated carbon steel body
- Temperature: -10°C to +100°C

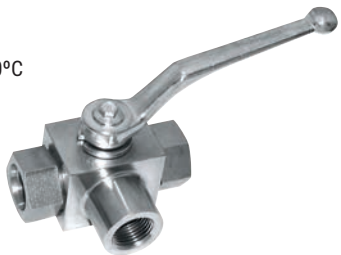


2 Way Ball Valve

Zinc-plated Steel Body

Code	N14	Thread BSP	Max. Flow L/min	Max. Pressure bar	Price
2HBV14FF		1/4"	25	500	16.40
2HBV38FF		3/8"	35	500	18.70
2HBV12FF		1/2"	60	310	20.40
2HBV34FF		3/4"	100	310	32.10
2HBV1FF		1"	180	310	48.10
2HBV114FF		1.1/4"	180	350	67.05
2HBV112FF		1.1/2"	180	350	93.35

- Plated carbon steel body
- Temperature: -10°C to +100°C
- Open centre

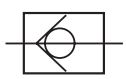


3 Way Ball Valve, Open Centre

Zinc-plated Steel Body

Code	N14	Thread BSP	Max. Flow L/min	Max. Pressure bar	Price
3HBV14FF		1/4"	25	310	23.20
3HBV38FF		3/8"	35	310	25.50
3HBV12FF		1/2"	60	310	27.25
3HBV34FF		3/4"	100	250	48.45
3HBV1FF		1"	180	250	70.65

- Plated carbon steel body
- Standard spring set at 0.4 bar
- Temperature: -10°C to +100°C



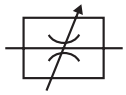


Check Valve

Zinc-plated Steel Body

Code	N14	Thread BSP	Max. Flow L/min	Max. Pressure bar	Price
HCV14FF		1/4"	30	250	11.75
HCV38FF		3/8"	45	250	13.00
HCV12FF		1/2"	70	250	15.20
HCV34FF		3/4"	110	250	21.70
HCV1FF		1"	160	250	31.15
HCV114FF		1.1/4"	200	250	65.65
HCV112FF		1.1/2"	300	250	101.55

- Plated carbon steel body



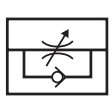


Flow Control Valve

Flow Adjustable in Both Directions

Code	N14	Thread BSP	Max. Flow L/min	Max. Pressure bar	Price
2HNV14FF		1/4"	15	400	19.85
2HNV38FF		3/8"	30	400	29.15
2HNV12FF		1/2"	50	400	41.25
2HNV34FF		3/4"	80	400	62.30

- Plated carbon steel body





Flow Control Valve

Flow Adjustable One Way Only

Code	N14	Thread BSP	Max. Flow L/min	Max. Pressure bar	Price
1HNV14FF		1/4"	15	400	22.30
1HNV38FF		3/8"	30	400	32.10
1HNV12FF		1/2"	50	400	43.25
1HNV34FF		3/4"	80	400	61.30

Bonded Seals



Nitrile Rubber
Mild Steel

Code	S21	To Suit Thread BSPP	Price 1-99	Price 100+
BS18		G1/4"	0.25	0.22
BS14		G1/4"	0.25	0.22
BS38		G3/8"	0.25	0.22
BS12		G1/2"	0.40	0.37
BS58		G5/8"	0.50	0.47
BS34		G3/4"	0.45	0.42
BS1		G1"	0.60	0.57
BS114		G1.1/4"	1.10	1.05
BS112		G1.1/2"	1.35	1.30
BS2		G2"	2.00	1.90

Nitrile Rubber
Stainless Steel

Code	S21	To Suit Thread BSPP	Price 1-99	Price 100+
BS18SS		G1/8"	1.60	1.55
BS14SS		G1/4"	1.25	1.20
BS38SS		G3/8"	1.95	1.90
BS12SS		G1/2"	2.10	2.00
BS58SS		G5/8"	3.50	3.35
BS34SS		G3/4"	3.10	2.95
BS1SS		G1"	5.75	5.50
BS114SS		G1.1/4"	10.10	9.60
BS112SS		G1.1/2"	13.45	12.80
BS2SS		G2"	15.65	14.90

Nitrile Rubber
Mild Steel, To Suit Metric Thread

Code	S21	To Suit Metric Thread	Price 1-99	Price 100+
BSM08		M8	0.20	0.18
BSM10		M10	0.35	0.32
BSM12		M12	0.40	0.37
BSM14		M14	0.35	0.32
BSM16		M16	0.45	0.42
BSM18		M18	0.45	0.42
BSM20		M20	0.35	0.32
BSM22		M22	0.35	0.32
BSM24		M24	0.45	0.42

For Spill Control





See section 19

BSP Male x BSP Male

BSPP x BSPP



Code	S07	Thread BSPP	Thread BSPP	Price
HBPN18		G1/8"	G1/8"	1.20
HBPN1814		G1/8"	G1/4"	1.40
HBPN1838		G1/8"	G3/8"	1.60
HBPN14		G1/4"	G1/4"	1.20
HBPN1438		G1/4"	G3/8"	1.40
HBPN1412		G1/4"	G1/2"	1.75
HBPN1458		G1/4"	G5/8"	3.35
HBPN1434		G1/4"	G3/4"	4.15
HBPN141		G1/4"	G1"	6.45
HBPN38		G3/8"	G3/8"	1.40
HBPN3812		G3/8"	G1/2"	1.75
HBPN3858		G3/8"	G5/8"	2.45
HBPN3834		G3/8"	G3/4"	3.15
HBPN381		G3/8"	G1"	6.45
HBPN12		G1/2"	G1/2"	1.75
HBPN1258		G1/2"	G5/8"	2.30
HBPN1234		G1/2"	G3/4"	3.00
HBPN121		G1/2"	G1"	5.20
HBPN12114		G1/2"	G1.1/4"	18.00
HBPN12112		G1/2"	G1.1/2"	22.00
HBPN122		G1/2"	G2"	27.70
HBPN58		G5/8"	G5/8"	2.30
HBPN5834		G5/8"	G3/4"	3.00
HBPN581		G5/8"	G1"	5.25
HBPN58114		G5/8"	G1.1/4"	18.00
HBPN34		G3/4"	G3/4"	3.00
HBPN341		G3/4"	G1"	5.20
HBPN34114		G3/4"	G1.1/4"	17.20
HBPN34112		G3/4"	G1.1/2"	19.95
HBPN342		G3/4"	G2"	26.60
HBPN1		G1"	G1"	5.00
HBPN1114		G1"	G1.1/4"	11.65
HBPN1112		G1"	G1.1/2"	14.80
HBPN21		G1"	G2"	23.35
HBPN114		G1.1/4"	G1.1/4"	10.70
HBPN114112		G1.1/4"	G1.1/2"	13.85
HBPN1142		G1.1/4"	G2"	23.30
HBPN112		G1.1/2"	G1.1/2"	13.00
HBPN1122		G1.1/2"	G2"	21.05
HBPN2		G2"	G2"	21.05

BSP Male x BSP Male

BSPP x BSPT



Code	S07	Thread BSPP	Thread BSPT	Price
HBPTN1818		G1/8"	R1/8"	1.40
HBPTN1814		G1/8"	R1/4"	1.55
HBPTN1414		G1/4"	R1/4"	1.40
HBPTN1438		G1/4"	R3/8"	1.75
HBPTN1412		G1/4"	R1/2"	2.40
HBPTN1434		G1/4"	R3/4"	4.15
HBPTN3818		G3/8"	R1/8"	2.40
HBPTN3814		G3/8"	R1/4"	1.95
HBPTN3838		G3/8"	R3/8"	1.75
HBPTN3812		G3/8"	R1/2"	2.40
HBPTN3834		G3/8"	R3/4"	4.00
HBPTN381		G3/8"	R1"	7.15
HBPTN1214		G1/2"	R1/4"	2.40
HBPTN1238		G1/2"	R3/8"	2.20
HBPTN1212		G1/2"	R1/2"	1.95
HBPTN1234		G1/2"	R3/4"	3.30
HBPTN121		G1/2"	R1"	5.60
HBPTN12114		G1/2"	R1.1/4"	12.85
HBPTN3414		G3/4"	R1/4"	4.75
HBPTN3438		G3/4"	R3/8"	4.40
HBPTN3412		G3/4"	R1/2"	3.30
HBPTN3434		G3/4"	R3/4"	3.00
HBPTN341		G3/4"	R1"	5.60
HBPTN112		G1"	R1/2"	5.60
HBPTN134		G1"	R3/4"	5.60
HBPTN11		G1"	R1"	5.60
HBPTN1114		G1"	R1.1/4"	12.30
HBPTN1112		G1"	R1.1/2"	14.80
HBPTN1141		G1.1/4"	R1"	12.85
HBPTN114114		G1.1/4"	R1.1/4"	11.90
HBPTN114112		G1.1/4"	R1.1/2"	15.40
HBTPN112114		G1.1/2"	R1.1/4"	15.40
HBPTN112112		G1.1/2"	R1.1/2"	14.80
HBPTN22		G2"	R2"	24.70

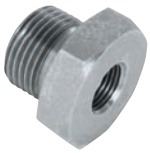
BSP Male x Metric Male

BSPP x Metric



Code	S07	Thread BSPP	Thread Metric	Price
HBPMN18M1415		G1/8"	M14 x 1.5	2.30
HBPMN14M1015		G1/4"	M10 x 1.5	2.30
HBPMN14M1010		G1/4"	M10 x 1	2.30
HBPMN14M1215		G1/4"	M12 x 1.5	2.30
HBPMN14M1415		G1/4"	M14 x 1.5	2.30
HBPMN14M1615		G1/4"	M16 x 1.5	2.35
HBPMN14M1815		G1/4"	M18 x 1.5	2.70
HBPMN14M2015		G1/4"	M20 x 1.5	3.00
HBPMN14M2215		G1/4"	M22 x 1.5	3.00
HBPMN38M1215		G3/8"	M12 x 1.5	2.40
HBPMN38M1415		G3/8"	M14 x 1.5	2.40
HBPMN38M1615		G3/8"	M16 x 1.5	2.35
HBPMN38M1815		G3/8"	M18 x 1.5	2.70
HBPMN38M2015		G3/8"	M20 x 1.5	3.00
HBPMN38M2215		G3/8"	M22 x 1.5	3.00
HBPMN12M1215		G1/2"	M12 x 1.5	2.75
HBPMN12M1415		G1/2"	M14 x 1.5	2.75
HBPMN12M1615		G1/2"	M16 x 1.5	2.70
HBPMN12M1815		G1/2"	M18 x 1.5	3.20
HBPMN12M2015		G1/2"	M20 x 1.5	3.00
HBPMN12M2215		G1/2"	M22 x 1.5	3.00
HBPMN12M2415		G1/2"	M24 x 1.5	3.30
HBPMN12M2615		G1/2"	M26 x 1.5	3.30
HBPMN34M2015		G3/4"	M20 x 1.5	3.30
HBPMN34M2215		G3/4"	M22 x 1.5	3.30
HBPMN34M2615		G3/4"	M26 x 1.5	3.30
HBPMN1M1815		G1"	M18 x 1.5	6.65
HBPMN1M2215		G1"	M22 x 1.5	6.65
HBPMN1M2615		G1"	M26 x 1.5	11.00

Adaptors



BSP Male x BSP Female Reducing Bush

BSPP x BSPP

Code	S07	Thread BSPP (M)	Thread BSPP (F)	Price
HBPRB1418		G1/4"	G1/8"	1.00
HBPRB3818		G3/8"	G1/8"	3.45
HBPRB3814		G3/8"	G1/4"	1.30
HBPRB1214		G1/2"	G1/4"	2.55
HBPRB1238		G1/2"	G3/8"	1.70
HBPRB3414		G3/4"	G1/4"	3.80
HBPRB3438		G3/4"	G3/8"	3.60
HBPRB3412		G3/4"	G1/2"	2.00
HBPRB114		G1"	G1/4"	6.55
HBPRB138		G1"	G3/8"	6.20
HBPRB112		G1"	G1/2"	6.20
HBPRB134		G1"	G3/4"	3.95
HBPRB11412		G1.1/4"	G1/2"	14.40
HBPRB11434		G1.1/4"	G3/4"	14.40
HBPRB1141		G1.1/4"	G1"	14.40
HBPRB11234		G1.1/2"	G3/4"	25.05
HBPRB1121		G1.1/2"	G1"	25.05
HBPRB112114		G1.1/2"	G1.1/4"	10.85
HBPRB212		G2"	G1/2"	59.85
HBPRB234		G2"	G3/4"	59.85
HBPRB21		G2"	G1"	31.60
HBPRB2114		G2"	G1.1/4"	31.60
HBPRB2112		G2"	G1.1/2"	31.60



BSP Male x BSP Female Fixed

BSPP x BSPP

Code	S07	Thread BSPP (M)	Thread BSPP (F)	Price
HBPA1414		G1/4"	G1/4"	2.35
HBPA3814		G1/4"	G3/8"	2.60
HBPA1214		G1/4"	G1/2"	3.25
HBPA3414		G1/4"	G3/4"	10.60
HBPA3838		G3/8"	G3/8"	2.60
HBPA1238		G3/8"	G1/2"	2.80
HBPA3438		G3/4"	G3/8"	10.60
HBPA1212		G1/2"	G1/2"	2.80
HBPA3412		G1/2"	G3/4"	5.85
HBPA112		G1/2"	G1"	10.20
HBPA3434		G3/4"	G3/4"	4.00
HBPA134		G3/4"	G1"	9.20
HBPA11434		G3/4"	G1.1/4"	51.30
HBPA11		G1"	G1"	7.80
HBPA1141		G1"	G1.1/4"	24.45
HBPA1121		G1"	G1.1/2"	26.00
HBPA112114		G1.1/4"	G1.1/2"	28.95
HBPA2114		G1.1/4"	G2"	36.80
HBPA2112		G1.1/2"	G2"	46.20



BSP Female Equal Fixed Adaptor

BSPP x BSPP

Code	S07	Thread BSPP (F)	Thread BSPP (F)	Price
HBPS18		G1/8"	G1/8"	2.55
HBPS14		G1/4"	G1/4"	1.95
HBPS12		G1/2"	G1/2"	2.30
HBPS58		G5/8"	G5/8"	3.45
HBPS34		G3/4"	G3/4"	5.00
HBPS1		G1"	G1"	8.30
HBPS114		G1.1/4"	G1.1/4"	15.80
HBPS112		G1.1/2"	G1.1/2"	25.25
HBPS2		G2"	G2"	41.40



BSP Female x BSP Female Swivel

BSPP x BSPP

Code	S07	Thread BSPP	Thread BSPP	Price
HSSFF14		G1/4"	G1/4"	2.20
HSSFF1438		G1/4"	G3/8"	2.35
HSSFF1412		G1/4"	G1/2"	3.55
HSSFF38		G3/8"	G3/8"	2.35
HSSFF3812		G3/8"	G1/2"	3.45
HSSFF12		G1/2"	G1/2"	3.25
HSSFF1258		G1/2"	G5/8	4.20
HSSFF1234		G1/2"	G3/4	6.00
HSSFF121		G1/2"	G1"	8.65
HSSFF58		G5/8"	G5/8"	4.20
HSSFF5834		G5/8"	G3/4"	6.00
HSSFF581		G5/8"	G1"	13.20
HSSFF34		G3/4"	G3/4"	5.10
HSSFF341		G3/4"	G1"	7.80
HSSFF1		G1"	G1"	7.30
HSSFF1114		G1"	G1.1/4"	15.80
HSSFF1112		G1"	G1.1/2"	26.30
HSSFF114		G1.1/4"	G1.1/4"	25.75
HSSFF114112		G1.1/4"	G1.1/2"	46.05
HSSFF112		G1.1/2"	G1.1/2"	27.60
HSSFF2		G2"	G2"	51.95



BSP Male x BSP Female Swivel

BSPP x BSPP

Code	S07	Thread BSPP (M)	Thread BSPP (F)	Price
HSSMF1414		G1/4"	G1/4"	2.00
HSSMF1438		G1/4"	G3/8"	2.35
HSSMF1412		G1/4"	G1/2"	3.50
HSSMF3838		G3/8"	G3/8"	2.30
HSSMF3814		G3/8"	G1/4"	2.35
HSSMF3812		G3/8"	G1/2"	3.20
HSSMF1238		G1/2"	G3/8"	3.20
HSSMF1212		G1/2"	G1/2"	3.20
HSSMF1234		G1/2"	G3/4"	5.00
HSSMF3412		G3/4"	G1/2"	5.00
HSSMF3434		G3/4"	G3/4"	4.70
HSSMF341		G3/4"	G1"	7.60
HSSMF134		G1"	G3/4"	7.60
HSSMF11		G1"	G1"	6.90
HSSMF1141		G1.1/4"	G1"	15.20
HSSMF114114		G1.1/4"	G1.1/4"	15.20
HSSMF112114		G1.1/2"	G1.1/4"	23.05
HSSMF112112		G1.1/2"	G1.1/2"	23.90
HSSMF2114		G2"	G1.1/4"	64.60
HSSMF2112		G2"	G1.1/2"	30.85
HSSMF22		G2"	G2"	40.60



BSP Male x BSP Male Compact 90° Elbow

BSPP x BSPP

Code	S07	Thread BSPP	Thread BSPP	Price
HMEE18		G1/8"	G1/8"	6.80
HMEE14		G1/4"	G1/4"	5.25
HMEE38		G3/8"	G3/8"	6.80
HMEE12		G1/2"	G1/2"	7.30
HMEE58		G5/8"	G5/8"	16.90
HMEE34		G3/4"	G3/4"	11.45
HMEE1		G1"	G1"	22.50
HMEE114		G1.1/4"	G1.1/4"	49.55
HMEE112		G1.1/2"	G1.1/2"	80.45
HMEE2		G2"	G2"	94.05



BSP Female Fixed Reducer

BSPP x BSPP

Code	S07	Thread BSPP	Thread BSPP	Price
HBPRS1418		G1/4"	G1/8"	3.85
HBPRS3818		G3/8"	G1/8"	4.00
HBPRS3814		G3/8"	G1/4"	4.05
HBPRS1214		G1/2"	G1/4"	4.40
HBPRS1238		G1/2"	G3/8"	4.40
HBPRS3438		G3/4"	G3/8"	8.90
HBPRS3412		G3/4"	G1/2"	7.05
HBPRS112		G1"	G1/2"	10.95
HBPRS134		G1"	G3/4"	10.80
HBPRS11434		G1.1/4"	G3/4"	23.45
HBPRS1141		G1.1/4"	G1"	24.75
HBPRS1121		G1.1/2"	G1"	27.65
HBPRS112114		G1.1/2"	G1.1/4"	27.15
HBPRS2114		G2"	G1.1/4"	32.80
HBPRS2112		G2"	G1.1/2"	35.90



BSP Male x BSP Female Swivel Compact 90° Elbow

BSPP x BSPP

Code	S07	Thread BSPP	Thread BSPP	Price
HBSEMF18		G1/8"	G1/8"	5.50
HBSEMF14		G1/4"	G1/4"	5.50
HBSEMF38		G3/8"	G3/8"	7.80
HBSEMF12		G1/2"	G1/2"	8.40
HBSEMF58		G5/8"	G5/8"	11.00
HBSEMF34		G3/4"	G3/4"	13.60
HBSEMF1		G1"	G1"	22.50
HBSEMF114		G1.1/4"	G1.1/4"	38.50
HBSEMF112		G1.1/2"	G1.1/2"	75.95
HBSEMF2		G2"	G2"	106.95



BSP Female x BSP Female Swivel Compact 90° Elbow

BSPP x BSPP

Code	S07	Thread BSPP	Thread BSPP	Price
HBSEFF18		G1/8"	G1/8"	7.20
HBSEFF14		G1/4"	G1/4"	7.20
HBSEFF38		G3/8"	G3/8"	7.30
HBSEFF12		G1/2"	G1/2"	9.85
HBSEFF58		G5/8"	G5/8"	12.10
HBSEFF34		G3/4"	G3/4"	14.00
HBSEFF1		G1"	G1"	17.10
HBSEFF114		G1.1/4"	G1.1/4"	39.60
HBSEFF112		G1.1/2"	G1.1/2"	88.15
HBSEFF2		G2"	G2"	123.90

Adaptors



BSP Equal Male Tee

BSPP x BSPP x BSPP

Code	S07	Thread BSPP	Price
HTMMM18		G1/8"	6.60
HTMMM14		G1/4"	5.80
HTMMM38		G3/8"	7.50
HTMMM12		G1/2"	9.40
HTMMM58		G5/8"	10.50
HTMMM34		G3/4"	12.90
HTMMM1		G1"	22.50
HTMMM114		G1.1/4"	48.40
HTMMM112		G1.1/2"	119.65
HTMMM2		G2"	109.55



BSP Equal Female Swivel Tee

BSPP x BSPP x BSPP

Code	S07	Thread BSPP	Price
HTFFF18		G1/8"	7.00
HTFFF14		G1/4"	7.35
HTFFF38		G3/8"	8.20
HTFFF12		G1/2"	9.80
HTFFF58		G5/8"	13.50
HTFFF34		G3/4"	15.45
HTFFF1		G1"	21.05
HTFFF114		G1.1/4"	57.80
HTFFF112		G1.1/2"	100.90
HTFFF2		G2"	130.80



BSP Equal Male x Female x Male Tee

BSPP x BSPP x BSPP

Code	S07	Thread BSPP	Price
HTMFM14		G1/4"	7.35
HTMFM38		G3/8"	8.20
HTMFM12		G1/2"	9.65
HTMFM34		G3/4"	15.25
HTMFM1		G1"	20.85
HTMFM114		G1.1/4"	51.45
HTMFM112		G1.1/2"	140.60
HTMFM2		G2"	349.60



BSP Male x Male x Female Equal Tee

BSPP

Code	S07	Thread BSPP	Price
HTFMM14		G1/4"	9.20
HTFMM38		G3/8"	10.20
HTFMM12		G1/2"	12.45
HTFMM34		G3/4"	20.25
HTFMM1		G1"	24.75
HTFMM114		G1.1/4"	51.45
HTFMM112		G1.1/2"	138.85
HTFMM2		G2"	181.80



BSP Male x Female x Female Equal Tee

BSPP x BSPP x BSPP

Code	S07	Thread BSPP	Price
HTFFM14		G1/4"	8.75
HTFFM38		G3/8"	9.60
HTFFM12		G1/2"	12.45
HTFFM34		G3/4"	19.40
HTFFM1		G1"	23.60
HTFFM114		G1.1/4"	51.45
HTFFM112		G1.1/2"	212.60



BSP Female x Female Equal Swept 45º Elbow

BSPP x BSPP

Code	S07	Thread BSPP	Price
HSFFB4514		G1/4"	6.00
HSFFB4538		G3/8"	7.25
HSFFB4512		G1/2"	8.90
HSFFB4534		G3/4"	13.75
HSFFB451		G1"	22.40



BSP Male x Female Equal Swept 45º Elbow

BSPP x BSPP

Code	S07	Thread BSPP	Price
HSMFB4514		G1/4"	6.00
HSMFB4538		G3/8"	7.25
HSMFB4512		G1/2"	8.90
HSMFB4558		G5/8"	12.05
HSMFB4534		G3/4"	13.75
HSMFB451		G1"	22.40
HSMFB45114		G1.1/4"	35.00
HSMFB45112		G1.1/2"	84.20
HSMFB452		G2"	122.05



BSP Female x Female Equal Swept 90º Elbow

BSPP x BSPP

Code	S07	Thread BSPP	Price
HSFFB9014		G1/4"	6.00
HSFFB9038		G3/8"	7.25
HSFFB9012		G1/2"	8.90
HSFFB9058		G5/8"	12.05
HSFFB9034		G3/4"	13.75
HSFFB901		G1"	22.40



BSP Male x Male Equal Swept 90º Elbow

BSPP x BSPP

Code	S07	Thread BSPP	Price
HSMMB9014		G1/4"	6.00
HSMMB9038		G3/8"	7.25
HSMMB9012		G1/2"	8.90
HSMMB9058		G5/8"	12.05
HSMMB9034		G3/4"	13.75
HSMMB901		G1"	22.40
HSMMB90114		G1.1/4"	53.30



BSP Male x Female Equal Swept 90º Elbow

BSPP x BSPP

Code	S07	Thread BSPP	Price
HSMFB9014		G1/4"	6.00
HSMFB9038		G3/8"	7.25
HSMFB9012		G1/2"	8.40
HSMFB9058		G5/8"	12.05
HSMFB9034		G3/4"	13.75
HSMFB901		G1"	22.40
HSMFB90114		G1.1/4"	35.00
HSMFB90112		G1.1/2"	84.20
HSMFB902		G2"	122.05



BSP Male Plug 60º Cone Hex Head

BSPP

Code	S07	Thread BSPP	Price
HCP18		G1/8"	1.05
HCP14		G1/4"	1.10
HCP38		G3/8"	1.45
HCP12		G1/2"	1.60
HCP58		G5/8"	2.40
HCP34		G3/4"	2.55
HCP1		G1"	4.05
HCP114		G1.1/4"	9.00
HCP112		G1.1/2"	12.60
HCP2		G2"	19.40



BSP Inner Hex Plug

BSPP

Code	S07	Thread BSPP	Price
HRP18		G1/8"	1.20
HRP14		G1/4"	1.40
HRP38		G3/8"	1.70
HRP12		G1/2"	2.40
HRP34		G3/4"	3.20
HRP1		G1"	10.00
HRP114		G1.1/4"	17.30
HRP112		G1.1/2"	18.60



BSP Male Plug Solid Hex Head

BSPP

Code	S07	Thread BSPP	Price
HSP18		G1/8"	1.05
HSP14		G1/4"	1.10
HSP38		G3/8"	1.45
HSP12		G1/2"	1.55
HSP58		G5/8"	2.40
HSP34		G3/4"	2.60
HSP1		G1"	4.00
HSP114		G1.1/4"	8.90
HSP112		G1.1/2"	12.20
HSP2		G2"	19.20



BSP Female Cap 60º Cone

BSPP

Code	S07	Thread BSPP	Price
HBFC14		G1/4"	2.00
HBFC38		G3/8"	2.20
HBFC12		G1/2"	2.40
HBFC58		G5/8"	3.20
HBFC34		G3/4"	3.85
HBFC1		G1"	6.20
HBFC114		G1.1/4"	10.20
HBFC112		G1.1/2"	16.60
HBFC2		G2"	33.45



BSP Female Equal Cross 60º Cone

BSPP

Code	S07	Thread BSPP	Price
HBFX14		G1/4"	17.25
HBFX38		G3/8"	18.80
HBFX12		G1/2"	22.60
HBFX34		G3/4"	27.45
HBFX1		G1"	41.40

Adaptors



BSP Male Cross Equal 60° Cone

BSPP

Code	S07	Thread BSPP	Price
HBMX14		G1/4"	10.35
HBMX38		G3/8"	12.45
HBMX12		G1/2"	14.95
HBMX34		G3/4"	25.65



BSP Bulkhead with Lock Nut

BSPP

Code	S07	Thread BSPP	Price
HBBH14		G1/4"	4.25
HBBH38		G3/8"	4.80
HBBH12		G1/2"	5.20
HBBH34		G3/4"	8.80
HBBH1		G1"	12.25
HBBH114		G1.1/4"	24.10
HBBH112		G1.1/2"	45.55
HBBH2		G2"	62.45



Spare Lock Nut

BSPP

Code	S07	Thread BSPP	Price
HLN14		1/4"	0.80
HLN38		3/8"	0.85
HLN12		12"	1.10
HLN34		3/4"	1.35
HLN1		1"	2.10
HLN114		1.1/4"	4.40
HLN112		1.1/2"	5.00
HLN2		2"	10.05



BSPP Male x JIC 37° Male Coupling

BSPP x JIC

Code	S07	Thread BSPP	JIC 37°	Price
50.19.04.02		G1/8"	7/16"	1.95
50.19.04.04		G1/4"	7/16"	1.40
50.19.05.04		G1/4"	1/2"	1.60
50.19.06.04		G1/4"	9/16"	1.50
50.19.08.04		G1/4"	3/4"	2.30
50.19.10.04		G1/4"	7/8"	3.60
50.19.04.06		G3/8"	7/16"	1.60
50.19.05.06		G3/8"	1/2"	1.60
50.19.06.06		G3/8"	9/16"	1.50
50.19.08.06		G3/8"	3/4"	1.95
50.19.10.06		G3/8"	7/8"	2.30
50.19.12.06		G3/8"	1.1/16"	3.60
50.19.04.08		G1/2"	7/16"	2.40
50.19.05.08		G1/2"	1/2"	2.40
50.19.06.08		G1/2"	9/16"	2.00
50.19.08.08		G1/2"	3/4"	1.95
50.19.10.08		G1/2"	7/8"	2.30
50.19.12.08		G1/2"	1.1/16"	3.00
50.19.04.12		G3/4"	7/16"	3.80
50.19.05.12		G3/4"	1/2"	3.80
50.19.06.12		G3/4"	9/16"	3.80
50.19.08.12		G3/4"	3/4"	3.30
50.19.10.12		G3/4"	7/8"	3.30
50.19.12.12		G3/4"	1.1/16"	3.00
50.19.16.12		G3/4"	1.5/16"	5.20
50.19.20.12		G3/4"	1.5/8"	15.00
50.19.08.16		G1"	3/4"	5.85
50.19.10.16		G1"	7/8"	5.85
50.19.12.16		G1"	1.1/16"	5.20
50.19.16.16		G1"	1.5/16"	5.20
50.19.20.16		G1"	1.5/8"	13.30
50.19.20.20		G1.1/4"	1.5/8"	13.30
50.19.16.20		G1.1/4"	1.5/16"	13.30
50.19.24.20		G1.1/4"	1.7/8"	19.50
50.19.16.24		G1.1/2"	1.5/16"	19.50
50.19.24.24		G1.1/2"	1.7/8"	19.50



BSPT Male x JIC 37° Male Coupling

BSPT x JIC

Code	S07	Thread BSPT	JIC 37°	Price
50.26.04.02		R1/8"	7/16"	1.85
50.26.04.04		R1/4"	7/16"	1.85
50.26.05.02		R1/8"	1/2"	1.85
50.26.05.04		R1/4"	1/2"	2.00
50.26.06.04		R1/4"	9/16"	2.00
50.26.06.06		R3/8"	9/16"	2.20
50.26.06.08		R1/2"	9/16"	3.00
50.26.08.04		R1/4"	3/4"	2.60
50.26.08.06		R3/8"	3/4"	2.40
50.26.08.08		R1/2"	3/4"	2.75
50.26.10.06		R3/8"	7/8"	2.50
50.26.10.08		R1/2"	7/8"	2.80
50.26.10.12		R3/4"	7/8"	4.90
50.26.12.08		R1/2"	1.1/16"	4.40
50.26.12.12		R3/4"	1.1/16"	4.15
50.26.12.16		R1"	1.1/16"	6.00
50.26.16.08		R1/2"	1.5/16"	6.15
50.26.16.12		R3/4"	1.5/16"	6.00
50.26.16.16		R1"	1.5/16"	6.00
50.26.20.16		R1.1/4"	1.5/8"	18.35
50.26.20.20		R1"	1.5/8"	18.35
50.26.24.24		R1.1/2"	1.7/8"	39.90

JIC 37° Male x BSP Female



BSPP x JIC

Code	S07	Thread BSPP	Thread JIC	Price
50.29.04.02		G1/8"	7/16"	2.55
50.29.04.04		G1/4"	7/16"	2.55
50.29.05.02		G1/8"	1/2"	1.95
50.29.05.04		G1/4"	1/2"	1.95
50.29.06.04		G1/4"	9/16"	2.30
50.29.06.06		G3/8"	9/16"	7.35
50.29.08.06		G3/8"	3/4"	2.35
50.29.08.08		G1/2"	3/4"	3.20
50.29.10.08		G1/2"	7/8"	3.15
50.29.12.08		G1/2"	1.1/16"	3.80
50.29.12.12		G3/4"	1.1/16"	4.80
50.29.16.16		G1"	1.5/16"	10.00
50.29.20.20		G1"	1.5/8"	19.85
50.29.24.24		G1.1/2"	1.7/8"	27.50

JIC 37° Gauge Adaptor



BSPP x JIC

Code	S07	Thread BSPP	Thread JIC	Price
50.90.04.04		1/4"	7/16"	13.20
50.90.04.08		1/2"	7/16"	23.70
50.90.05.04		1/4"	1/2"	14.40
50.90.05.08		1/2"	1/2"	24.60
50.90.06.04		1/4"	9/16"	14.00
50.90.06.08		1/2"	9/16"	27.65
50.90.08.04		1/4"	3/4"	17.40
50.90.08.08		1/2"	3/4"	27.65

BSP Male x JIC 37° Female Swivel



BSPP x JIC

Code	S07	Thread BSPP (M)	Thread JIC (F)	Price
50.49.04.02		G1/8"	7/16"	3.55
50.49.04.04		G1/4"	7/16"	3.55
50.49.05.04		G1/4"	1/2"	3.55
50.49.06.04		G1/4"	9/16"	3.55
50.49.08.04		G1/4"	3/4"	3.85
50.49.10.04		G1/4"	7/8"	19.95
50.49.04.06		G3/8"	7/16"	3.85
50.49.05.06		G3/8"	1/2"	3.85
50.49.06.06		G3/8"	9/16"	3.85
50.49.08.06		G3/8"	3/4"	3.85
50.49.10.06		G3/8"	7/8"	4.40
50.49.04.08		G1/2"	7/16"	4.40
50.49.05.08		G1/2"	1/2"	4.40
50.49.06.08		G1/2"	9/16"	4.40
50.49.08.08		G1/2"	3/4"	3.85
50.49.10.08		G1/2"	7/8"	4.25
50.49.12.08		G1/2"	1.1/16"	7.60
50.49.06.12		G3/4"	9/16"	12.20
50.49.08.12		G3/4"	3/4"	6.45
50.49.10.12		G3/4"	7/8"	6.75
50.49.12.12		G3/4"	1.1/16"	7.60
50.49.16.12		G3/4"	1.5/16"	13.65
50.49.12.16		G1"	1.1/16"	10.60
50.49.16.16		G1"	1.5/16"	13.65
50.49.20.20		G1.1/4"	1.5/8"	21.95
50.49.24.20		G1.1/4"	1.7/8"	30.05
50.49.24.24		G1.1/2"	1.7/8"	30.05

BSP Female Swivel x JIC 37° Male



BSPP x JIC

Code	S07	Thread BSPP (F)	Thread JIC (M)	Price
2011623877		G1/4"	7/16"	6.70
2011026614		G3/8"	7/16"	8.35
2011030000		G1/2"	7/16"	8.35
2011623887		G1/4"	1/2"	6.70
2011021185		G3/8"	1/2"	3.30
2011024304		G1/2"	1/2"	8.35
2011623894		G1/4"	9/16"	6.70
2011623895		G3/8"	9/16"	7.35
2011623896		G1/2"	9/16"	7.45
2011623912		G3/8"	3/4"	7.35
2011623913		G1/2"	3/4"	8.05
2011623927		G3/8"	7/8"	8.35
2011623928		G1/2"	7/8"	8.35
2011021187		G5/8"	7/8"	12.65
2011021189		G3/4"	7/8"	12.65
2011623935		G3/4"	1.1/16"	12.65
2011623936		G1"	1.1/16"	18.45
2011021190		G3/4"	1.5/16"	18.60
2011623947		G1"	1.5/16"	18.60

Adaptors

BSP Male x JIC 37° Male Swivel Elbow

BSPP x JIC



Code	S07	Thread BSPP	Thread JIC	Price
54.05.04.02		G1/8"	7/16"	5.05
54.05.04.04		G1/4"	7/16"	9.20
54.05.05.04		G1/4"	1/2"	5.60
54.05.06.04		G1/4"	9/16"	9.20
54.05.06.06		G3/8"	9/16"	11.15
54.05.08.04		G1/4"	3/4"	6.70
54.05.08.06		G3/8"	3/4"	11.15
54.05.08.08		G1/2"	3/4"	13.25
54.05.10.06		G3/8"	7/8"	7.65
54.05.10.08		G1/2"	7/8"	13.25
54.05.10.12		G3/4"	7/8"	12.60
54.05.12.08		G1/2"	1.1/16"	10.60
54.05.12.12		G3/4"	1.1/16"	18.00
54.05.16.12		G3/4"	1.5/16"	21.00
54.05.16.16		G1"	1.5/16"	30.40
54.05.16.20		G1.1/4"	1.5/16"	34.20
54.05.20.20		G1.1/4"	1.5/8"	36.85
54.05.24.24		G1.1/2"	1.7/8"	49.95

BSPT Male x JIC 37° Male Elbow

BSPT x JIC



Code	S07	Thread BSPT	Thread JIC	Price
54.12.04.02		R1/8"	7/16"	5.00
54.12.04.04		R1/4"	7/16"	5.85
54.12.05.02		R1/8"	1/2"	5.25
54.12.05.04		R1/4"	1/2"	5.85
54.12.06.04		R3/8"	9/16"	5.85
54.12.06.06		R3/8"	9/16"	6.00
54.12.06.08		R1/2"	9/16"	7.20
54.12.08.04		R1/4"	3/4"	7.30
54.12.08.06		R3/8"	3/4"	7.20
54.12.08.08		R1/2"	3/4"	7.20
54.12.10.06		R3/8"	7/8"	9.60
54.12.10.08		R1/2"	7/8"	9.35
54.12.10.12		R3/4"	7/8"	13.15
54.12.12.08		R1/2"	1.1/16"	12.25
54.12.12.12		R3/4"	1.1/16"	11.95
54.12.16.12		R3/4"	1.5/16"	17.85
54.12.16.16		R1"	1.5/16"	20.80
54.12.20.16		R1"	1.5/8"	35.55
54.12.20.20		R1.1/4"	1.5/8"	35.55
54.12.24.24		R1.1/2"	1.7/8"	67.05

JIC 37° Male x JIC 37° Male

JIC x JIC



Code	S07	Thread JIC	Thread JIC	Price
50.17.00.04		7/16"	7/16"	1.55
50.17.04.05		7/16"	1/2"	2.30
50.17.04.06		7/16"	9/16"	2.30
50.17.04.08		7/16"	3/4"	3.20
50.17.04.10		7/16"	7/8"	6.70
50.17.00.05		1/2"	1/2"	1.75
50.17.05.06		1/2"	9/16"	2.30
50.17.05.08		1/2"	3/4"	3.20
50.17.05.10		1/2"	7/8"	4.15
50.17.00.06		9/16"	9/16"	1.75
50.17.06.08		9/16"	3/4"	2.70
50.17.06.10		9/16"	7/8"	3.10
50.17.00.08		3/4"	3/4"	2.20
50.17.08.10		3/4"	7/8"	2.80
50.17.08.12		3/4"	1.1/16"	7.35
50.17.00.10		7/8"	7/8"	2.55
50.17.10.12		7/8"	1.1/16"	3.80
50.17.10.16		7/8"	1.5/16"	5.20
50.17.00.12		1.1/16"	1.1/16"	3.60
50.17.00.16		1.5/16"	1.5/16"	5.10
50.17.00.20		1.5/8"	1.5/8"	11.15
50.17.00.24		1.7/8"	1.7/8"	13.50

JIC 37° Male x JIC 37° Male Compact 90° Elbow

JIC x JIC



Code	S07	Thread JIC	Thread JIC	Price
54.01.00.04		7/16"	7/16"	5.60
54.01.00.05		1/2"	1/2"	5.50
54.01.00.06		9/16"	9/16"	5.85
54.01.00.08		3/4"	3/4"	8.15
54.01.00.10		7/8"	7/8"	8.60
54.01.00.12		1.1/16"	1.1/16"	10.10
54.01.00.16		1.5/16"	1.5/16"	19.95
54.01.00.20		1.5/8"	1.5/8"	39.55
54.01.00.24		1.7/8"	1.7/8"	63.00

JIC 37° Female x JIC 37° Female Swivel Compact 90° Elbow

JIC x JIC



Code	S07	Thread JIC	Thread JIC	Price
2011026616		7/16"	7/16"	13.00
2011623137		9/16"	9/16"	16.90
2011623138		3/4"	3/4"	13.90
2011026617		7/8"	7/8"	19.30
2011623140		1.1/16"	1.1/16"	22.75
2011024099		1.5/16"	1.5/16"	58.85
2011024098		1.5/8"	1.5/8"	63.60

JIC 37° Male x JIC 37° Female Swivel Elbow

JIC x JIC



Code	S07	Thread JIC	Thread JIC	Price
54.09.00.04		7/16"	7/16"	7.30
54.09.00.05		1/2"	1/2"	7.70
54.09.00.06		9/16"	9/16"	8.00
54.09.00.08		3/4"	3/4"	10.05
54.09.00.10		7/8"	7/8"	13.15
54.09.00.12		1.1/16"	1.1/16"	17.10
54.09.00.16		1.5/16"	1.5/16"	31.40
54.09.00.20		1.5/8"	1.5/8"	40.40
54.09.00.24		1.7/8"	1.7/8"	56.60

JIC 37° Male x JIC 37° Female Swivel



JIC x JIC

Code S07	Thread JIC (M)	Thread JIC (F)	Price
50.42.04.04	7/16"	7/16"	4.20
50.42.04.06	7/16"	9/16"	4.25
50.42.05.05	1/2"	1/2"	4.20
50.42.05.06	1/2"	9/16"	4.25
50.42.06.04	9/16"	7/16"	4.20
50.42.06.05	9/16"	1/2"	4.20
50.42.06.06	9/16"	9/16"	4.20
50.42.06.08	9/16"	3/4"	4.40
50.42.06.10	9/16"	7/8"	5.05
50.42.08.06	3/4"	9/16"	4.40
50.42.08.08	3/4"	3/4"	4.40
50.42.08.10	3/4"	7/8"	5.05
50.42.08.12	3/4"	1.1/16"	7.60
50.42.10.10	7/8"	7/8"	5.05
50.42.10.12	7/8"	1.1/16"	7.60
50.42.12.12	1.1/16"	1.1/16"	7.35
50.42.12.16	1.1/16"	1.5/16"	12.40
50.42.12.20	1.1/16"	1.5/8"	48.20
50.42.16.12	1.5/16"	1.1/16"	23.50
50.42.16.16	1.5/16"	1.5/16"	23.50
50.42.16.20	1.5/16"	1.5/8"	25.50
50.42.20.24	1.5/8"	1.7/8"	32.45

JIC 37° Female Swivel x JIC 37° Female Swivel



JIC x JIC

Code S07	Thread JIC	Thread JIC	Price
50.57.00.04	7/16"	7/16"	4.20
50.57.04.06	7/16"	9/16"	4.20
50.57.00.05	1/2"	1/2"	4.20
50.57.05.06	1/2"	9/16"	4.20
50.57.00.06	9/16"	9/16"	4.00
50.57.06.08	9/16"	3/4"	4.40
50.57.06.10	9/16"	7/8"	5.35
50.57.00.08	3/4"	3/4"	4.40
50.57.08.10	3/4"	7/8"	5.30
50.57.00.10	7/8"	7/8"	5.30
50.57.10.12	7/8"	1.1/16"	19.80
50.57.00.12	1.1/16"	1.1/16"	12.35
50.57.12.16	1.1/16"	1.5/16"	12.85
50.57.00.16	1.5/16"	1.5/16"	12.85
50.57.00.20	1.5/8"	1.5/8"	26.70
50.57.00.24	1.7/8"	1.5/8"	40.60

JIC 37° Equal Female Swivel Tee



JIC x JIC x JIC

Code S07	Thread JIC	Price
2011624003	7/16"	16.00
2011624004	1/2"	17.00
2011029884	9/16"	20.65
2011624005	3/4"	22.50
2011624006	7/8"	26.70
2011624007	1.1/16"	44.15
2011026579	1.5/16"	72.40

JIC 37° Equal Male Tee



JIC x JIC x JIC

Code S07	Thread JIC	Price
54.51.00.04	7/16"	7.15
54.51.00.05	1/2"	5.40
54.51.00.06	9/16"	7.60
54.51.00.08	3/4"	9.55
54.51.00.10	7/8"	12.65
54.51.00.12	1.1/16"	15.60
54.51.00.16	1.5/16"	21.05
54.51.00.20	1.5/8"	4.65
54.51.00.24	1.7/8"	7.80

JIC 37° Equal Male x Female x Male Tee



JIC x JIC x JIC

Code S07	Thread JIC	Price
54.55.00.04	7/16"	8.85
54.55.00.05	1/2"	11.45
54.55.00.06	9/16"	8.85
54.55.00.08	3/4"	10.95
54.55.00.10	7/8"	14.05
54.55.00.12	1.1/16"	13.50
54.55.00.16	1.5/16"	18.90
54.55.00.20	1.5/8"	74.95
54.55.00.24	1.7/8"	119.75

Adaptors

JIC 37° Equal Male x Male x Female Tee

JIC x JIC x JIC



Code S07	Thread JIC	Price
54.59.00.04	7/16"	8.85
54.59.00.05	1/2"	8.85
54.59.00.06	9/16"	8.85
54.59.00.08	3/4"	10.95
54.59.00.10	7/8"	14.05
54.59.00.12	1.1/16"	26.00
54.59.00.16	1.5/16"	37.75
54.59.00.20	1.5/8"	78.65
54.59.00.24	1.7/8"	102.05

JIC 37° Tube Nut

JIC



Code S07	Thread JIC	Price
50.13.00.04	7/16"	0.60
50.13.00.05	1/2"	0.60
50.13.00.06	9/16"	0.75
50.13.00.08	3/4"	0.80
50.13.00.10	7/8"	1.20
50.13.00.12	1.1/16"	1.85
50.13.00.16	1.5/16"	2.65
50.13.00.20	1.5/8"	9.45
50.13.00.24	1.7/8"	13.05

JIC 37° Metric Tube Ferrule

JIC



Code S07	Ø Tube mm	To Suit JIC	Price
50.83.00.06	6	7/16"	0.35
50.83.00.08	8	1/2"	0.40
50.83.00.10	10	9/16"	0.40
50.83.00.12	12	3/4"	0.45
50.83.00.14	14	7/8"	0.70
50.83.00.15	15	7/8"	0.70
50.83.00.16	16	7/8"	0.70
50.83.00.18	18	1.1/16"	1.10
50.83.00.20	20	1.1/16"	1.15
50.83.00.25	25	1.5/16"	1.30
50.83.00.30	30	1.5/8"	3.55
50.83.00.32	32	1.5/8"	3.90
50.83.00.38	38	1.5/8"	4.50

BSP Male x JIC 37° Male Branch Tee

BSPP x JIC



Code S07	Thread BSPP	Thread JIC	Price
54.61.04.02	G1/8"	7/16"	6.90
54.61.05.02	G1/8"	1/2"	6.90
54.61.06.04	G1/4"	9/16"	7.00
54.61.06.06	G3/8"	9/16"	9.40
54.61.08.06	G3/8"	3/4"	9.40
54.61.10.08	G1/2"	7/8"	12.00
54.61.12.08	G1/2"	1.1/16"	16.50
54.61.12.12	G1/2"	1.1/16"	16.70
54.61.16.16	G1/2"	1.1/16"	26.80

JIC 37° Imperial Tube Ferrule

JIC



Code S07	To Suit JIC	To Suit JIC	Price
50.15.00.04	1/4"	7/16"	0.35
50.15.00.05	5/16"	1/2"	0.40
50.15.00.06	3/8"	9/16"	0.40
50.15.00.08	1/2"	3/4"	0.45
50.15.00.10	1/2"	7/8"	0.70
50.15.00.12	3/4"	1.1/16"	1.15
50.15.00.16	1"	1.5/16"	1.25
50.15.00.20	1/2"	1.5/8"	3.55
50.15.00.24	1.1/2"	1.7/8"	4.90

JIC Male Plug Hex Head

JIC



Code S07	Thread JIC	Price
50.45.00.04	7/16"	1.20
50.45.00.05	1/2"	1.75
50.45.00.06	9/16"	2.05
50.45.00.08	3/4"	1.75
50.45.00.10	7/8"	2.05
50.45.00.12	1.1/16"	2.60
50.45.00.16	1.5/16"	5.10
50.45.00.20	1.5/8"	13.45
50.45.00.24	1.7/8"	16.75

JIC Female Cap

JIC



Code S07	Thread JIC	Price
50.43.00.04	7/16"	2.40
50.43.00.05	1/2"	2.40
50.43.00.06	9/16"	2.55
50.43.00.08	3/4"	3.20
50.43.00.10	7/8"	4.20
50.43.00.12	1.1/16"	6.00
50.43.00.16	1.5/16"	7.80
50.43.00.20	1.5/8"	10.75
50.43.00.24	1.7/8"	16.80

Hose Coupling Inserts



BSP Parallel Male

60º Cone Seat

Code A02	Hose Ø	Thread BSPP	bar	psi	Price
3001-04-02	1/4"	G1/8"	350	5000	3.10
3001-04-04	1/4"	G1/4"	450	6500	2.30
3001-04-06	1/4"	G3/8"	450	6500	3.00
3001-04-08	1/4"	G1/2"	415	6000	5.00
3001-05-04	5/16"	G1/4"	350	5000	3.30
3001-05-06	5/16"	G3/8"	350	5000	2.75
3001-05-08	5/16"	G1/2"	350	5000	10.80
3001-06-04	3/8"	G1/4"	445	6500	3.30
3001-06-06	3/8"	G3/8"	445	6500	2.80
3001-06-08	3/8"	G1/2"	415	6000	4.15
3001-08-06	1/2"	G3/8"	415	6000	4.15
3001-08-08	1/2"	G1/2"	415	6000	4.15
3001-08-10	1/2"	G5/8"	350	5000	6.40
3001-08-12	1/2"	G3/4"	350	5000	7.15
3001-10-08	5/8"	G1/2"	350	5000	6.40
3001-10-10	5/8"	G5/8"	350	5000	5.30
3001-10-12	5/8"	G3/4"	350	5000	7.10
3001-12-08	3/4"	G1/2"	350	5000	96.40
3001-12-12	3/4"	G3/4"	350	5000	5.95
3001-12-16	3/4"	G1"	280	4000	13.30
3001-16-12	1"	G3/4"	280	4000	102.20
3001-16-16	1"	G1"	280	4000	11.65
3001-16-20	1"	G1.1/4"	250	3600	23.50
3001-20-20	1.1/4"	G1.1/4"	210	3000	19.30
3001-20-24	1.1/4"	G1.1/2"	210	3000	32.25
3001-24-24	1.1/2"	G1.1/2"	185	2700	26.50
3001-24-32	1.1/2"	G2"	185	2700	394.85
3001-32-32	2"	G2"	175	2500	49.25



BSP Straight Female

60º Cone

Code A02	Hose Ø	Thread BSPP	bar	psi	Price
3002-04-02	1/4"	G1/8"	350	5000	2.50
3002-04-04	1/4"	G1/4"	450	6500	1.90
3002-04-06	1/4"	G3/8"	450	6500	2.45
3002-04-08	1/4"	G1/2"	450	6500	4.10
3002-05-04	5/16"	G1/4"	350	5000	2.10
3002-05-06	5/16"	G3/8"	350	5000	2.40
3002-05-08	5/16"	G1/2"	350	5000	4.10
3002-06-04	3/8"	G1/4"	445	6500	2.80
3002-06-06	3/8"	G3/8"	445	6500	2.50
3002-06-08	3/8"	G1/2"	415	6000	3.50
3002-08-06	1/2"	G3/8"	415	6000	3.30
3002-08-08	1/2"	G1/2"	415	6000	3.30
3002-08-10	1/2"	G5/8"	350	5000	4.45
3002-08-12	1/2"	G3/4"	350	5000	5.60
3002-10-08	5/8"	G1/2"	350	5000	12.90
3002-10-10	5/8"	G5/8"	350	5000	4.15
3002-10-12	5/8"	G3/4"	350	5000	5.30
3002-12-08	3/4"	G1/2"	350	5000	19.80
3002-12-10	3/4"	G5/8"	350	5000	105.70
3002-12-12	3/4"	G3/4"	350	5000	5.30
3002-12-16	3/4"	G1"	280	4000	10.40
3002-16-12	1"	G3/4"	280	4000	52.75
3002-16-16	1"	G1"	280	4000	9.50
3002-16-20	1"	G1.1/4"	250	3600	19.15
3002-20-20	1.1/4"	G1.1/4"	210	3000	15.50
3002-20-24	1.1/4"	G1.1/2"	210	3000	28.45
3002-24-24	1.1/2"	G1.1/2"	185	2700	23.00
3002-24-32	1.1/2"	G2"	185	2700	158.95
3002-32-32	2"	G2"	175	2500	36.90

Hose Coupling Inserts



45º BSPP Swept Elbow

60º Cone

Code A02	Hose Ø	Thread BSPP	bar	psi	Price
3003-04-02	1/4"	G1/8"	350	5000	4.15
3003-04-04	1/4"	G1/4"	450	6500	2.95
3003-04-06	1/4"	G3/8"	450	6500	3.50
3003-04-08	1/4"	G1/2"	450	6500	28.80
3003-05-04	5/16"	G1/4"	350	5000	3.75
3003-05-06	5/16"	G3/8"	350	5000	3.80
3003-05-08	5/16"	G1/2"	350	5000	28.10
3003-06-04	3/8"	G1/4"	445	6500	24.30
3003-06-06	3/8"	G3/8"	445	6500	4.10
3003-06-08	3/8"	G1/2"	415	6000	5.30
3003-08-06	1/2"	G3/8"	415	6000	5.30
3003-08-08	1/2"	G1/2"	415	6000	5.30
3003-08-10	1/2"	G5/8"	350	5000	7.10
3003-08-12	1/2"	G3/4"	350	5000	9.40
3003-10-08	5/8"	G1/2"	350	5000	8.25
3003-10-10	5/8"	G5/8"	350	5000	6.75
3003-10-12	5/8"	G3/4"	350	5000	10.65
3003-12-08	3/4"	G1/2"	350	5000	130.35
3003-12-10	3/4"	G5/8"	350	5000	134.95
3003-12-12	3/4"	G3/4"	350	5000	9.25
3003-12-16	3/4"	G1"	280	4000	52.15
3003-16-12	1"	G3/4"	280	4000	149.15
3003-16-16	1"	G1"	280	4000	15.80
3003-16-20	1"	G1.1/4"	250	3600	90.40
3003-20-20	1.1/4"	G1.1/4"	210	3000	26.10
3003-20-24	1.1/4"	G1.1/2"	210	3000	152.55
3003-24-24	1.1/2"	G1.1/2"	185	2700	38.65
3003-24-32	1.1/2"	G2"	185	2700	403.70



90º BSPP Swept Elbow

60º Cone

Code A02	Hose Ø	Thread BSPP	bar	psi	Price
3004-04-02	1/4"	G1/8"	350	5000	3.95
3004-04-04	1/4"	G1/4"	450	6500	2.95
3004-04-06	1/4"	G3/8"	450	6500	3.80
3004-04-08	1/4"	G1/2"	450	6500	24.00
3004-05-04	5/16"	G1/4"	350	5000	3.75
3004-05-06	5/16"	G3/8"	350	5000	3.80
3004-05-08	5/16"	G1/2"	350	5000	23.40
3004-06-04	3/8"	G1/4"	445	6500	4.45
3004-06-06	3/8"	G3/8"	445	6500	3.50
3004-06-08	3/8"	G1/2"	415	6000	5.30
3004-08-06	1/2"	G3/8"	415	6000	5.40
3004-08-08	1/2"	G1/2"	415	6000	5.30
3004-08-10	1/2"	G5/8"	350	5000	6.75
3004-08-12	1/2"	G3/4"	350	5000	8.90
3004-10-08	5/8"	G1/2"	350	5000	25.20
3004-10-10	5/8"	G5/8"	350	5000	6.90
3004-10-12	5/8"	G3/4"	350	5000	10.65
3004-12-08	3/4"	G1/2"	350	5000	130.35
3004-12-10	3/4"	G5/8"	350	5000	134.95
3004-12-12	3/4"	G3/4"	350	5000	9.40
3004-12-16	3/4"	G1"	280	4000	19.15
3004-16-12	1"	G3/4"	280	4000	149.15
3004-16-16	1"	G1"	280	4000	15.75
3004-16-20	1"	G1.1/4"	250	3600	32.10
3004-20-20	1.1/4"	G1.1/4"	210	3000	26.45
3004-20-24	1.1/4"	G1.1/2"	210	3000	47.50
3004-24-24	1.1/2"	G1.1/2"	185	2700	39.25
3004-24-32	1.1/2"	G2"	185	2700	379.90
3004-32-32	2"	G2"	175	2500	68.10

Hose Coupling Inserts

90º BSPP Compact Elbow

60º Cone



Code A02	Hose Ø	Thread BSPP	bar	psi	Price
3005-04-04	1/4"	G1/4"	450	6500	6.60
3005-05-06	5/16"	G3/8"	450	6500	10.90
3005-06-06	3/8"	G3/8"	445	6500	8.60
3005-08-08	1/2"	G1/2"	415	6000	10.60
3005-12-12	3/4"	G3/4"	350	5000	17.45
3005-16-16	1"	G1"	280	4000	29.80

BSP Bolt

BSPP



Code A02	Thread BSPP	Price
3007-02	G1/8"	2.30
3007-04	G1/4"	2.40
3007-06	G3/8"	3.00
3007-08	G1/2"	4.45
3007-10	G5/8"	5.30
3007-12	G3/4"	5.50
3007-16	G1"	12.90

BSP Banjo

To Suit BSPP



Code A02	Hose Ø	To Suit BSPP Thread	bar	psi	Price
3006-04-02	1/4"	G1/8"	280	4000	4.80
3006-04-04	1/4"	G1/4"	280	4000	4.10
3006-04-06	1/4"	G3/8"	280	4000	5.00
3006-04-08	1/4"	G1/2"	250	3600	25.80
3006-05-04	5/16"	G1/4"	280	4000	4.65
3006-05-06	5/16"	G3/8"	280	4000	5.65
3006-06-04	3/8"	G1/4"	280	4000	6.00
3006-06-06	3/8"	G3/8"	280	4000	5.10
3006-06-08	3/8"	G1/2"	250	3600	10.25
3006-08-06	1/2"	G3/8"	280	4000	11.60
3006-08-08	1/2"	G1/2"	250	3600	10.25
3006-08-12	1/2"	G3/4"	210	3000	56.65
3006-10-10	5/8"	G5/8"	210	3000	13.80
3006-10-12	5/8"	G3/4"	210	3000	28.00
3006-12-12	3/4"	G3/4"	210	3000	24.80
3006-12-16	3/4"	G1"	165	2400	48.40
3006-10-16	5/8"	G1"	165	2400	94.80

JIC Male, 74º Cone

JIC



Code A02	Hose Ø	Thread JIC	bar	psi	Price
3008-04-07	1/4"	7/16"	400	5800	1.90
3008-04-08	1/4"	1/2"	400	5800	1.95
3008-04-09	1/4"	9/16"	350	5000	2.30
3008-05-08	5/16"	1/2"	350	5000	2.40
3008-05-09	5/16"	9/16"	350	5000	2.80
3008-05-12	5/16"	3/4"	350	5000	4.10
3008-06-09	3/8"	9/16"	350	5000	2.40
3008-06-12	3/8"	3/4"	350	5000	3.40
3008-06-14	3/8"	7/8"	350	5000	5.40
3008-08-12	1/2"	3/4"	350	5000	3.25
3008-08-14	1/2"	7/8"	350	5000	4.30
3008-08-17	1/2"	1.1/16"	350	5000	6.80
3008-10-14	5/8"	7/8"	350	5000	4.50
3008-10-17	5/8"	1.1/16"	350	5000	5.95
3008-12-14	3/4"	7/8"	350	5000	6.80
3008-12-17	3/4"	1.1/16"	350	5000	5.90
3008-12-19	3/4"	1.3/16"	280	4000	7.10
3008-12-21	3/4"	1.5/16"	280	4000	11.60
3008-16-17	1"	1.1/16"	280	4000	11.60
3008-16-21	1"	1.5/16"	280	4000	9.45
3008-16-26	1"	1.5/8"	280	4000	21.45
3008-20-26	1.1/4"	1.5/8"	210	3000	17.30
3008-20-30	1.1/4"	1.7/8"	185	2700	27.80
3008-24-30	1.1/2"	1.7/8"	185	2700	24.10
3008-32-40	2"	2.1/2"	175	2500	44.40

Hose Coupling Inserts



JIC Straight Female, 74º Cone Seat

JIC

Code A02	Hose Ø	Thread JIC	bar	psi	Price
3009-04-07	1/4"	7/16"	400	5800	2.00
3009-04-08	1/4"	1/2"	400	5800	2.10
3009-04-09	1/4"	9/16"	350	5000	2.30
3009-05-08	5/16"	1/2"	350	5000	2.40
3009-05-09	5/16"	9/16"	350	5000	2.45
3009-05-12	5/16"	3/4"	350	5000	3.80
3009-06-09	3/8"	9/16"	350	5000	2.30
3009-06-12	3/8"	3/4"	350	5000	3.30
3009-06-14	3/8"	7/8"	350	5000	4.80
3009-08-12	1/2"	3/4"	350	5000	3.15
3009-08-14	1/2"	7/8"	350	5000	3.95
3009-08-17	1/2"	1.1/16"	350	5000	6.25
3009-10-14	5/8"	7/8"	350	5000	4.15
3009-10-17	5/8"	1.1/16"	350	5000	5.45
3009-12-14	3/4"	7/8"	350	5000	6.40
3009-12-17	3/4"	1.1/16"	350	5000	5.25
3009-12-19	3/4"	1.3/16"	280	4000	7.10
3009-12-21	3/4"	1.5/16"	280	4000	9.15
3009-16-17	1"	1.1/16"	280	4000	10.30
3009-16-21	1"	1.5/16"	280	4000	9.00
3009-16-26	1"	1.5/8"	210	3000	19.30
3009-20-26	1 1/4"	1.5/8"	210	3000	16.40
3009-20-30	1 1/4"	1.7/8"	185	2700	28.25
3009-24-30	1 1/2"	1.7/8"	185	2700	22.90
3009-32-40	2"	2.1/2"	175	2500	44.65



JIC 45º Female Swept Elbow, 74º Cone Seat

JIC

Code A02	Hose Ø	Thread JIC	bar	psi	Price
3010-04-07	1/4"	7/16"	400	5800	2.80
3010-04-08	1/4"	1/2"	400	5800	3.10
3010-04-09	1/4"	9/16"	350	5000	3.60
3010-05-08	5/16"	1/2"	350	5000	3.80
3010-05-09	5/16"	9/16"	350	5000	4.15
3010-05-12	5/16"	3/4"	350	5000	73.35
3010-06-09	3/8"	9/16"	350	5000	3.60
3010-06-12	3/8"	3/4"	350	5000	5.30
3010-06-14	3/8"	7/8"	350	5000	7.90
3010-08-12	1/2"	3/4"	350	5000	5.25
3010-08-14	1/2"	7/8"	350	5000	6.45
3010-08-17	1/2"	1.1/16"	350	5000	10.50
3010-10-14	5/8"	7/8"	350	5000	6.80
3010-10-17	5/8"	1.1/16"	350	5000	8.60
3010-12-14	3/4"	7/8"	350	5000	10.50
3010-12-17	3/4"	1.1/16"	350	5000	8.60
3010-12-19	3/4"	1.3/16"	280	4000	13.40
3010-12-21	3/4"	1.5/16"	280	4000	18.95
3010-16-17	1"	1.1/16"	280	4000	18.95
3010-16-21	1"	1.5/16"	280	4000	15.60
3010-16-26	1"	1.5/8"	210	3000	31.25
3010-20-26	1.1/4"	1.5/8"	210	3000	26.95
3010-20-30	1.1/4"	1.7/8"	185	2700	200.85
3010-24-30	1.1/2"	1.7/8"	185	2700	37.95
3010-32-40	2"	2.1/2"	175	2500	77.25

Hose Coupling Inserts

JIC 90° Female Swept Elbow, 74° Cone Seat

Medium



Code A02	Hose Ø	Thread JIC	bar	psi	Price
3011-04-07	1/4"	7/16"	415	6000	2.65
3011-04-08	1/4"	1/2"	400	5800	3.10
3011-04-09	1/4"	9/16"	350	5000	3.75
3011-05-08	5/16"	1/2"	350	5000	3.80
3011-05-09	5/16"	9/16"	350	5000	4.15
3011-06-09	3/8"	9/16"	350	5000	3.75
3011-06-12	3/8"	3/4"	350	5000	4.90
3011-08-12	1/2"	3/4"	350	5000	4.80
3011-08-14	1/2"	7/8"	350	5000	6.45
3011-10-14	5/8"	7/8"	350	5000	6.45
3011-10-17	5/8"	1.1/16"	350	5000	8.80
3011-12-14	3/4"	7/8"	350	5000	10.50
3011-12-17	3/4"	1.1/16"	350	5000	8.60
3011-12-19	3/4"	1.3/16"	280	4000	13.40
3011-12-21	3/4"	1.5/16"	280	4000	18.95
3011-16-21	1"	1.5/16"	280	4000	15.60
3011-16-26	1"	1.5/8"	210	3000	31.25
3011-20-26	1.1/4"	1.5/8"	210	3000	26.95
3011-20-30	1.1/4"	1.7/8"	185	2700	46.90
3011-24-30	1.1/2"	1.7/8"	185	2700	40.40
3011-32-40	2"	2.1/2"	175	2500	90.95

ORFS Male

UNF



Code A02	Hose Ø	Thread UNF	bar	psi	Price
3012-04-04	1/4"	9/16"	450	6500	2.40
3012-04-12	1/4"	1.1/16"	450	6500	8.10
3012-05-12	5/16"	1.1/16"	350	5000	16.50
3012-06-12	3/8"	1.3/16"	450	6500	8.20
3012-06-10	3/8"	1"	450	6500	89.25
3012-08-10	1/2"	1"	415	6000	4.95
3012-08-12	1/2"	1.3/16"	415	6000	7.40
3012-10-10	5/8"	1"	350	5000	5.00
3012-12-12	3/4"	1.3/16"	350	5000	7.25
3012-12-16	3/4"	1.7/16"	350	5000	12.30
3012-16-16	1"	1.7/16"	280	4000	12.15
3012-20-20	1.1/4"	1.11/16"	210	3000	17.75
3012-24-24	1.1/2"	2"	185	2700	28.25

ORFS Female 45° Swept Elbow

UNF



Code A02	Hose Ø	Thread UNF	bar	psi	Price
3013-04-04	1/4"	9/16"	450	6500	3.10
3013-04-12	1/4"	1.1/16"	450	6500	16.70
3013-05-12	5/16"	1.1/16"	350	5000	19.40
3013-06-12	3/8"	1.3/16"	450	6500	13.70
3013-08-12	1/2"	1.3/16"	415	6000	10.75
3013-08-10	1/2"	1"	415	6000	8.30
3013-10-10	5/8"	1"	350	5000	8.30
3013-12-12	3/4"	1.3/16"	350	5000	10.75
3013-12-16	3/4"	1.7/16"	350	5000	16.95
3013-16-16	1"	1.7/16"	280	4000	16.95
3013-20-20	1.1/14"	1.11/16"	210	3000	91.00
3013-24-24	1.1/2"	2"	185	2700	177.00

Hose Coupling Inserts

ORFS Female 90º Swept Elbow, Short

UNF



Code A02	Hose Ø	Thread UNF	bar	psi	Price
3014-04-04	1/4"	9/16"	450	6500	3.10
3014-04-12	1/4"	1.1/16"	450	6500	16.70
3014-05-12	5/16"	1.1/16"	350	5000	21.60
3014-06-12	3/8"	1.3/16"	450	6500	5.50
3014-08-10	1/2"	1"	415	6000	8.40
3014-08-12	1/2"	1.3/16"	415	6000	10.75
3014-10-10	5/8"	1"	350	5000	7.80
3014-10-12	5/8"	1.3/16"	350	5000	10.25
3014-12-16	3/4"	1.7/16"	350	5000	16.95
3014-16-16	1"	1.7/16"	350	5000	16.95
3014-20-20	1.1/14"	1.11/16"	210	3000	87.10
3014-24-24	1.1/2"	2"	185	2700	181.00

Metric Female 24º O-Ring Cone, Light Duty

Metric



Code A02	Hose Ø	Thread Metric	bar	psi	Price
3015-04-M12	1/4"	M12 x 1.5	280	4000	3.10
3015-04-M14	1/4"	M14 x 1.5	280	4000	1.95
3015-04-M16	1/4"	M16 x 1.5	280	4000	2.25
3015-04-M18	1/4"	M18 x 1.5	280	4000	3.10
3015-05-M16	5/16"	M16 x 1.5	280	4000	2.60
3015-05-M18	5/16"	M18 x 1.5	280	4000	7.30
3015-06-M16	3/8"	M16 x 1.5	280	4000	2.75
3015-06-M18	3/8"	M18 x 1.5	280	4000	2.80
3015-06-M22	3/8"	M22 x 1.5	280	4000	3.90
3015-08-M22	1/2"	M22 x 1.5	280	4000	3.60
3015-08-M26	1/2"	M26 x 1.5	210	3000	5.10
3015-10-M26	5/8"	M26 x 1.5	210	3000	5.00
3015-10-M30	5/8"	M30 x 2	210	3000	8.00
3015-12-M26	3/4"	M26 x 1.5	210	3000	18.90
3015-12-M30	3/4"	M30 x 2	210	3000	7.10
3015-16-M36	1"	M36 x 2	165	2400	11.30
3015-20-M45	1.1/4"	M45 x 2	100	1450	16.80
3015-24-M52	1.1/2"	M52 x 2	100	1450	32.75

Metric Female 24º O-Ring Cone, Heavy Duty

Metric



Code A02	Hose Ø	Thread Metric	bar	psi	Price
3016-04-M14	1/4"	M14 x 1.5	450	6500	3.10
3016-04-M16	1/4"	M16 x 1.5	450	6500	2.40
3016-04-M18	1/4"	M18 x 1.5	450	6500	2.75
3016-04-M20	1/4"	M20 x 1.5	450	6500	7.20
3016-05-M18	5/16"	M18 x 1.5	350	5000	3.10
3016-05-M20	5/16"	M20 x 1.5	350	5000	3.60
3016-06-M18	3/8"	M18 x 1.5	445	6500	2.75
3016-06-M20	3/8"	M20 x 1.5	445	6500	3.40
3016-06-M22	3/8"	M22 x 1.5	445	6500	3.80
3016-08-M22	1/2"	M22 x 1.5	415	6000	4.40
3016-08-M24	1/2"	M24 x 1.5	415	6000	4.65
3016-10-M30	5/8"	M30 x 2	350	5000	6.80
3016-12-M30	3/4"	M30 x 2	350	5000	8.40
3016-12-M36	3/4"	M36 x 2	350	5000	10.95
3016-16-M36	1"	M36 x 2	280	4000	13.75
3016-16-M42	1"	M42 x 2	280	4000	15.65
3016-20-M42	1.1/4"	M42 x 2	210	3000	61.60
3016-20-M52	1.1/4"	M52 x 2	210	3000	24.15
3016-24-M52	1.1/2"	M52 x 2	185	2700	32.90

Hose Coupling Inserts

45° Metric Female Swept Elbow, 24° O-Ring Cone, Light Duty

Metric



Code A02	Hose Ø	Thread Metric	bar	psi	Price
3017-04-M12	1/4"	M12 x 1.5	280	4000	5.00
3017-04-M14	1/4"	M14 x 1.5	280	4000	3.00
3017-04-M16	1/4"	M16 x 1.5	280	4000	2.95
3017-04-M18	1/4"	M18 x 1.5	280	4000	17.10
3017-05-M16	5/16"	M16 x 1.5	280	4000	2.25
3017-05-M18	5/16"	M18 x 1.5	280	4000	4.15
3017-06-M16	3/8"	M16 x 1.5	280	4000	3.50
3017-06-M18	3/8"	M18 x 1.5	280	4000	3.50
3017-06-M22	3/8"	M22 x 1.5	280	4000	17.75
3017-08-M22	1/2"	M22 x 1.5	280	4000	5.00
3017-08-M26	1/2"	M26 x 1.5	210	3000	7.95
3017-10-M26	5/8"	M26 x 1.5	210	3000	7.95
3017-10-M30	5/8"	M30 x 2	210	3000	41.90
3017-12-M26	3/4"	M26 x 1.5	210	3000	117.10
3017-12-M30	3/4"	M30 x 2	210	3000	10.60
3017-16-M36	1"	M36 x 2	165	2400	16.90
3017-20-M45	1.1/4"	M45 x 2	100	1450	28.40
3017-24-M52	1.1/2"	M52 x 2	100	1450	44.75

45° Metric Female Swept Elbow, 24° O-Ring Cone, Heavy Duty

Metric



Code A02	Hose Ø	Thread Metric	bar	psi	Price
3018-04-M14	1/4"	M14 x 1.5	450	6500	5.10
3018-04-M16	1/4"	M16 x 1.5	450	6500	3.45
3018-04-M18	1/4"	M18 x 1.5	450	6500	3.80
3018-04-M20	1/4"	M20 x 1.5	450	6500	16.80
3018-05-M18	5/16"	M18 x 1.5	350	5000	3.40
3018-05-M20	5/16"	M20 x 1.5	350	5000	3.80
3018-06-M18	3/8"	M18 x 1.5	445	6500	20.20
3018-06-M20	3/8"	M20 x 1.5	445	6500	5.25
3018-06-M22	3/8"	M22 x 1.5	445	6500	5.40
3018-08-M22	1/2"	M22 x 1.5	415	6000	24.90
3018-08-M24	1/2"	M24 x 1.5	415	6000	6.10
3018-10-M30	5/8"	M30 x 2	350	5000	12.10
3018-12-M30	3/4"	M30 x 2	350	5000	11.95
3018-12-M36	3/4"	M36 x 2	350	5000	14.80
3018-16-M36	1"	M36 x 2	280	4000	18.80
3018-16-M42	1"	M42 x 2	280	4000	25.50
3018-20-M42	1.1/4"	M42 x 2	210	3000	167.50
3018-20-M52	1.1/4"	M52 x 2	210	3000	41.25
3018-24-M52	1.1/2"	M52 x 2	185	2700	54.00

90° Metric Female Swept Elbow, 24° O-Ring Cone, Light Duty

Metric



Code A02	Hose Ø	Thread Metric	bar	psi	Price
3019-04-M12	1/4"	M12 x 1.5	280	4000	5.10
3019-04-M14	1/4"	M14 x 1.5	280	4000	3.15
3019-04-M16	1/4"	M16 x 1.5	280	4000	2.95
3019-04-M18	1/4"	M18 x 1.5	280	4000	4.45
3019-05-M16	5/16"	M16 x 1.5	280	4000	8.00
3019-05-M18	5/16"	M18 x 1.5	280	4000	4.40
3019-06-M16	3/8"	M16 x 1.5	280	4000	3.95
3019-06-M18	3/8"	M18 x 1.5	280	4000	3.95
3019-06-M22	3/8"	M22 x 1.5	280	4000	15.10
3019-08-M22	1/2"	M22 x 1.5	280	4000	5.10
3019-08-M26	1/2"	M26 x 1.5	210	3000	7.95
3019-10-M26	5/8"	M26 x 1.5	210	3000	7.60
3019-10-M30	5/8"	M30 x 2	210	3000	6.60
3019-12-M26	3/4"	M26 x 1.5	210	3000	9.45
3019-12-M30	3/4"	M30 x 2	210	3000	10.75
3019-16-M36	1"	M36 x 2	165	2400	16.90
3019-20-M45	1.1/4"	M45 x 2	100	1450	26.60
3019-24-M52	1.1/2"	M52 x 2	100	1450	44.75

90° Metric Female Swept Elbow, 24° O-Ring Cone, Heavy Duty

Metric



Code A02	Hose Ø	Thread Metric	bar	psi	Price
3020-04-M14	1/4"	M14 x 1.5	450	6500	5.10
3020-04-M16	1/4"	M16 x 1.5	450	6500	3.45
3020-04-M18	1/4"	M18 x 1.5	450	6500	3.80
3020-04-M20	1/4"	M20 x 1.5	450	6500	5.40
3020-05-M18	5/16"	M18 x 1.5	350	5000	4.40
3020-05-M20	5/16"	M20 x 1.5	350	5000	4.65
3020-06-M18	3/8"	M18 x 1.5	445	6500	4.45
3020-06-M20	3/8"	M20 x1 .5	445	6500	5.00
3020-06-M22	3/8"	M22 x 1.5	445	6500	5.45
3020-08-M22	1/2"	M22 x 1.5	415	6000	20.25
3020-08-M24	1/2"	M24 x 1.5	415	6000	6.60
3020-10-M30	5/8"	M30 x 2	350	5000	10.25
3020-12-M30	3/4"	M30 x 2	350	5000	12.65
3020-12-M36	3/4"	M36 x 2	350	5000	14.80
3020-16-M36	1"	M36 x 2	280	4000	16.90
3020-16-M42	1"	M42 x 2	280	4000	24.10
3020-20-M42	1.1/4"	M42 x 2	210	3000	143.40
3020-20-M52	1.1/4"	M52 x 2	210	3000	41.25
3020-24-M52	1.1/2"	M52 x 2	185	2700	50.50

Hose Coupling Inserts



Metric Standpipe

Metric

Code A02	Hose Ø	OD mm	bar	psi	Price
3021-04-06	1/4"	6	280	4000	1.65
3021-04-08	1/4"	8	450	6500	1.95
3021-04-10	1/4"	10	450	6500	2.15
3021-04-12	1/4"	12	450	6500	5.90
3021-05-10	5/16"	10	350	5000	3.90
3021-05-12	5/16"	12	350	5000	4.10
3021-06-10	3/8"	10	350	5000	2.30
3021-06-12	3/8"	12	445	6500	3.25
3021-06-14	3/8"	14	445	6500	2.80
3021-06-15	3/8"	15	280	4000	2.80
3021-08-14	1/2"	14	415	6000	7.40
3021-08-15	1/2"	15	280	4000	3.50
3021-08-18	1/2"	18	210	3000	4.50
3021-10-18	5/8"	18	210	3000	4.50
3021-10-20	5/8"	20	350	5000	4.95
3021-10-22	5/8"	22	210	3000	5.90
3021-12-18	3/4"	18	210	3000	15.10
3021-12-20	3/4"	20	350	5000	6.10
3021-12-22	3/4"	22	210	3000	6.50
3021-12-25	3/4"	25	350	5000	9.40
3021-16-25	1"	25	280	4000	8.60
3021-16-28	1"	28	165	2400	9.65
3021-16-30	1"	30	280	4000	10.90
3021-20-30	1.1/4"	30	210	3000	42.15
3021-20-35	1.1/4"	35	125	1800	17.60
3021-20-38	1.1/4"	38	210	3000	20.95
3021-24-38	1.1/2"	38	185	2700	55.40
3021-24-42	1.1/2"	42	100	1450	25.45



90º Metric Standpipe, One Piece

Metric

Code A02	Hose Ø	OD mm	bar	psi	Price
3022-04-06	1/4"	6	280	4000	5.40
3022-04-10	1/4"	10	450	6500	3.10
3022-04-12	1/4"	12	450	6500	12.10
3022-05-10	5/16"	10	350	5000	11.20
3022-05-12	5/16"	12	350	5000	11.90
3022-06-10	3/8"	10	350	5000	3.50
3022-06-12	3/8"	12	445	6500	4.10
3022-06-14	3/8"	14	445	6500	3.75
3022-06-15	3/8"	15	280	4000	18.30
3022-08-14	1/2"	14	415	6000	17.10
3022-08-15	1/2"	15	280	4000	5.40
3022-08-16	1/2"	16	415	6000	5.40
3022-08-18	1/2"	18	210	3000	7.00
3022-10-18	5/8"	18	210	3000	7.30
3022-10-20	5/8"	20	350	5000	10.30
3022-10-22	5/8"	22	210	3000	35.50
3022-12-18	3/4"	18	210	3000	83.40
3022-12-20	3/4"	20	350	5000	10.95
3022-12-22	3/4"	22	210	3000	10.90
3022-12-25	3/4"	25	350	5000	13.30
3022-16-25	1"	25	280	4000	11.90
3022-16-28	1"	28	165	2400	19.80
3022-16-30	1"	30	280	4000	13.25
3022-20-30	1.1/4"	30	210	3000	105.00
3022-20-35	1.1/4"	35	125	1800	32.95
3022-20-38	1.1/4"	38	210	3000	116.80
3022-24-38	1.1/2"	38	185	2700	112.70
3022-24-32	1.1/2"	42	100	1450	222.20

Hose Coupling Inserts

BXT1 Swaged Ferrule, Mild Steel

Non Skive



Code	A02	DN	Size	Inch	OD mm	Length mm	Applications	Price
3035-04		6	04	1/4"	20.0	27.0	1SN, R1AT, 2SC	2.00
3035-05		8	05	5/16"	22.0	27.5	1SN, R1AT, 2SC	2.40
3035-06		10	06	3/8"	24.5	30.0	1SN, R1AT, 2SC	2.60
3035-08		12	08	1/2"	28.0	32.5	1SN, R1AT, 2SC	3.40
3035-10		16	10	5/8"	32.0	35.0	1SN, R1AT, 2SC	5.50
3035-12		19	12	3/4"	36.0	40.0	1SN, R1AT, 2SC	6.30
3035-16		25	16	1"	45.0	50.0	1SN, R1AT, 2SC	11.90
3035-20		31	20	1.1/4"	54.0	50.0	1SN, R1AT	20.50
3035-24		38	24	1.1/2"	62.0	55.0	1SN, R1AT	41.90
3035-32		51	32	2"	76.0	60.0	1SN, R1AT	62.35

BXT2 Swaged Ferrule

Non Skive



Code	A02	DN	Size	Inch	OD mm	Length mm	Applications	Price
3036-04		6	04	1/4"	22	26.0	2SN, R2AT, 1SN, R1AT, 2SC	2.30
3036-05		8	05	5/16"	24	27.5	2SN, R2AT, 1SN, R1AT, 2SC	2.80
3036-06		10	06	3/8"	26	30.0	2SN, R2AT, 1SN, R1AT, 2SC	3.10
3036-08		12	08	1/2"	30	32.5	2SN, R2AT, 1SN, R1AT, 2SC	4.00
3036-10		16	10	5/8"	34	35.0	2SN, R2AT, 1SN, R1AT, 2SC	5.60
3036-12		19	12	3/4"	38	40.0	2SN, R2AT, 1SN, R1AT, 2SC	7.70
3036-16		25	16	1"	48	50.0	2SN, R2AT	5.80
3036-20		31	20	1.1/4"	60	57.0	2SN, R2AT	27.80
3036-24		38	24	1.1/2"	67	62.0	2SN, R2AT	40.00
3036-32		51	32	2"	80	66.0	2SN, R2AT	69.95

BXS Swaged Ferrule

Skive



Code	A02	DN	Size	Inch	OD mm	Length mm	Applications	Price
3037-04		6	04	1/4"	22	30.0	4SP, R9R**	2.95
3037-06		10	06	3/8"	26	32.5	4SP, R9R**, R12, 2ST, R2A	3.80
3037-08		12	08	1/2"	30	35.0	4SP, R9R**, R12, 2ST, R2A	5.15
3037-10		16	10	5/8"	34	38.5	4SP, R9R**, R12, 2ST, R2A	7.00
3037-12		19	12	3/4"	38	43.5	4SP, R9R**, 4SH**, R12, 2ST, R2A	7.90
3037-16		25	16	1"	46	54.0	4SP, R9R**, 4SH**, R12, 2ST, R2A	14.70
3037-20		31	20	1 1/4"	56	61.0	4SP, R12, 2ST, R2A,	28.75
3037-24		38	24	1 1/2"	65	68.0	4SP, R12, 2ST, R2A	51.55
3037-32		51	32	2"	78	74.0	4SP	85.85

Series LL, L & S - DIN2353 Fittings

- Profile sealing ring
- Standard seal material: NBR (Buna-N®)
- Male stud according to ISO 1179-2 (Type E)
- Port according to ISO 1179-1



Straight Male Stud Fitting

Type FI-GE-...-R-WD, Series L

Code A05	Tube OD mm	BSPP	PN (bar)	Price
IQ-GE-06LR-WD	6	G1/8"	500	3.40
IQ-GE-06LR1/4-WD	6	G1/4"	500	4.75
IQ-GE-06LR3/8-WD	6	G3/8"	400	6.20
IQ-GE-08LR1/8-WD	8	G1/8"	500	6.25
IQ-GE-08LR-WD	8	G1/4"	500	4.35
IQ-GE-08LR3/8-WD	8	G3/8"	400	5.80
IQ-GE-10LR1/8-WD	10	G1/8"	500	9.05
IQ-GE-10LR-WD	10	G1/4"	500	4.60
IQ-GE-10LR3/8-WD	10	G3/8"	400	5.70
IQ-GE-10LR1/2-WD	10	G1/2"	400	8.80
IQ-GE-12LR1/4-WD	12	G1/4"	400	6.00
IQ-GE-12LR-WD	12	G3/8"	400	5.70
IQ-GE-12LR1/2-WD	12	G1/2"	400	8.25
IQ-GE-12LR3/4-WD	12	G3/4"	250	15.60
IQ-GE-15LR3/8-WD	15	G3/8"	400	9.15
IQ-GE-15LR-WD	15	G1/2"	400	7.95
IQ-GE-15LR3/4-WD	15	G3/4"	250	17.55
IQ-GE-18LR-WD	18	G1/2"	400	9.85
IQ-GE-18LR3/4-WD	18	G3/4"	250	17.20
IQ-GE-22LR1/2-WD	22	G1/2"	250	23.15
IQ-GE-22LR-WD	22	G3/4"	250	13.95
IQ-GE-22LR1-WD	22	G1"	250	32.55
IQ-GE-28LR3/4-WD	28	G3/4"	250	38.90
IQ-GE-28LR-WD	28	G1"	250	25.60
IQ-GE-35LR1-WD	35	G1"	250	49.15
IQ-GE-35LR-WD	35	G1.1/4"	250	35.75
IQ-GE-42LR11/4WD	42	G1.1/4"	250	48.90
IQ-GE-42LR-WD	42	G1.1/2"	250	43.95

Straight Male Stud Fitting

Type FI-GE-...-R-WD, Series S

Code A05	Tube OD mm	BSPP	PN (bar)	Price
IQ-GE-06SR-WD	6	G1/4"	800	4.60
IQ-GE-08SR-WD	8	G1/4"	800	5.00
IQ-GE-08SR3/8-WD	8	G3/8"	800	10.75
IQ-GE-10SR1/4-WD	10	G1/4"	800	8.40
IQ-GE-10SR-WD	10	G3/8"	800	6.20
IQ-GE-10SR1/2-WD	10	G1/2"	800	9.20
IQ-GE-12SR1/4-WD	12	G1/4"	630	10.90
IQ-GE-12SR-WD	12	G3/8"	630	6.75
IQ-GE-12SR1/2-WD	12	G1/2"	630	8.10
IQ-GE-12SR3/4-WD	12	G3/4"	630	28.65
IQ-GE-16SR3/8-WD	16	G3/8"	630	20.50
IQ-GE-16SR-WD	16	G1/2"	630	10.80
IQ-GE-16SR3/4-WD	16	G3/4"	630	17.05
IQ-GE-20SR1/2-WD	20	G1/2"	400	25.00
IQ-GE-20SR-WD	20	G3/4"	400	15.80
IQ-GE-20SR1-WD	20	G1"	400	49.60
IQ-GE-25SR3/4-WD	25	G3/4"	400	39.45
IQ-GE-25SR-WD	25	G1"	400	27.60
IQ-GE-30SR3/4-WD	30	G3/4"	400	65.70
IQ-GE-30SR1-WD	30	G1"	400	49.85
IQ-GE-30SR-WD	30	G1.1/4"	400	41.60
IQ-GE-30SR11/2WD	30	G1.1/2"	400	64.10
IQ-GE-38SR1-WD	38	G1"	400	89.65
IQ-GE-38SR11/4WD	38	G1.1/4"	400	58.95
IQ-GE-38SR-WD	38	G1.1/2"	400	52.55

Series LL, L & S - DIN2353 Fittings



Equal Cross

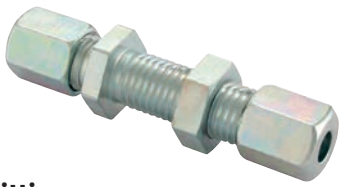
Type FI-K, Series L

Code	A05	Tube OD mm	PN (bar)	Price
IQ-K-06L		6	500	37.10
IQ-K-08L		8	500	41.20
IQ-K-10L		10	500	44.50
IQ-K-12L		12	400	49.05
IQ-K-15L		15	400	58.55
IQ-K-18L		18	400	76.00
IQ-K-22L		22	250	108.30
IQ-K-28L		28	250	145.00

Equal Cross

Type FI-K, Series S

Code	A05	Tube OD mm	PN (bar)	Price
IQ-K-06S		6	800	44.90
IQ-K-10S		10	800	52.55
IQ-K-12S		12	630	56.00
IQ-K-16S		16	630	81.25
IQ-K-20S		20	400	117.40
IQ-K-25S		25	400	145.55
IQ-K-30S		30	400	195.95
IQ-K-38S		38	400	282.55



Straight Bulkhead Fitting

Type FI-GS, Series L

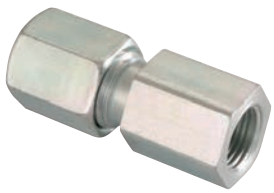
Code	A05	Tube OD mm	PN (bar)	Price
IQ-GS-06L		6	500	7.60
IQ-GS-08L		8	500	7.95
IQ-GS-10L		10	500	9.80
IQ-GS-12L		12	400	11.15
IQ-GS-15L		15	400	17.20
IQ-GS-18L		18	400	27.80
IQ-GS-22L		22	250	35.35
IQ-GS-28L		28	250	54.10
IQ-GS-35L		35	250	82.70
IQ-GS-42L		42	250	112.55

Straight Bulkhead Fitting

Type FI-GS, Series S

Code	A05	Tube OD mm	PN (bar)	Price
IQ-GS-06S		6	800	8.90
IQ-GS-08S		8	800	11.30
IQ-GS-10S		10	800	12.80
IQ-GS-12S		12	630	17.15
IQ-GS-14S		14	630	29.15
IQ-GS-16S		16	630	27.95
IQ-GS-20S		20	400	43.15
IQ-GS-25S		25	400	69.25
IQ-GS-30S		30	400	84.55
IQ-GS-38S		38	400	138.35

Series LL, L & S - DIN2353 Fittings



Straight Female Stud Fitting

Type FI-GA-...-R, Series L

Code A05	Tube OD mm	PN (bar)	Thread BSPP	Price
IQ-GA-06LR	6	315	G1/8"	4.50
IQ-GA-06LR1/4	6	315	G1/4"	13.20
IQ-GA-08LR	8	315	G1/4"	4.90
IQ-GA-08LR3/8	8	315	G3/8"	17.20
IQ-GA-10LR	10	315	G1/4"	5.30
IQ-GA-10LR3/8	10	315	G3/8"	27.40
IQ-GA-12LR1/4	12	315	G1/4"	10.90
IQ-GA-12LR	12	315	G3/8"	7.95
IQ-GA-12LR1/2	12	315	G1/2"	23.05
IQ-GA-15LR	15	315	G1/2"	9.05
IQ-GA-18LR	18	315	G1/2"	12.05
IQ-GA-22LR	22	160	G3/4"	17.80
IQ-GA-28LR	28	160	G1"	45.50
IQ-GA-35LR	35	160	G1.1/4"	71.50
IQ-GA-42LR	42	160	G1.1/2"	78.85

Straight Female Stud Fitting

Type FI-GA-...-R, Series S

Code A05	Tube OD mm	PN (bar)	Thread BSPP	Price
IQ-GA-06SR	6	630	G1/4"	9.00
IQ-GA-08SR	8	630	G1/4"	9.55
IQ-GA-10SR	10	630	G3/8"	11.80
IQ-GA-12SR	12	630	G3/8"	12.25
IQ-GA-14SR	14	630	G1/2"	21.20
IQ-GA-16SR	16	630	G1/2"	16.60
IQ-GA-20SR	20	400	G3/4"	27.40
IQ-GA-25SR	25	400	G1"	53.35
IQ-GA-30SR	30	400	G1.1/4"	72.65
IQ-GA-38SR	38	400	G1.1/2"	86.80

Series LL, L & S - DIN2353 Fittings

- Suitable liquid/plastic sealant required
- Male stud according to DIN 3852-2 (Form C)
- Port according to DIN 3852-2 (Form Z)



Straight Male Stud Fitting

Type FI-GE-...-M-WD, Series L

Code A05	Tube OD mm	Thread Metric	PN (bar)	Price
IQ-GE-06LM-WD	6	M10 x 1	500	3.40
IQ-GE-08LM-WD	8	M12 x 1.5	500	4.10
IQ-GE-10LM12x1.5	10	M12 x 1.5	400	15.55
IQ-GE-10LM-WD	10	M14 x 1.5	400	4.60
IQ-GE-10LM16x1.5	10	M16 x 1.5	400	8.00
IQ-GE-10LM18x1.5	10	M18 x 1.5	400	10.65
IQ-GE-12LM-WD	12	M16 x 1.5	400	5.70
IQ-GE-12LM18x1.5	12	M18 x 1.5	400	9.70
IQ-GE-12LM22x1.5	12	M22 x 1.5	400	11.05
IQ-GE-15LM16x1.5	15	M16 x 1.5	400	15.60
IQ-GE-15LM-WD	15	M18 x 1.5	400	6.90
IQ-GE-22LM-WD	22	M26 x 1.5	250	14.10
IQ-GE-28LM-WD	28	M33 x 2	250	24.75
IQ-GE-42LM-WD	42	M48 x 2	250	44.80

Straight Male Stud Fitting

Type FI-GE-...-M-WD, Series S

Code A05	Tube OD mm	Thread Metric	PN (bar)	Price
IQ-GE-06SM-WD	6	M12 x 1.5	800	4.50
IQ-GE-08SM-WD	8	M14 x 1.5	800	5.00
IQ-GE-10SM-WD	10	M16 x 1.5	800	6.20
IQ-GE-12SM-WD	12	M18 x 1.5	630	6.80
IQ-GE-16SM-WD	16	M22 x 1.5	630	10.80
IQ-GE-20SM-WD	20	M27 x 2	400	15.85
IQ-GE-25SM-WD	25	M33 x 2	400	27.40
IQ-GE-30SM-WD	30	M42 x 2	400	41.20
IQ-GE-38SM-WD	38	M48 x 2	400	52.55



Male Stud Elbow

Type FI-WE-...-Rk, Series LL

Code A05	Tube OD mm	Thread BSPT	PN (bar)	Price
IQ-WE-04LLRK	4	R1/8 keg.	100	8.60
IQ-WE-06LLRK	6	R1/8 keg.	100	7.00
IQ-WE-08LLRK	8	R1/8 keg.	100	10.00

Male Stud Elbow

Type FI-WE-...-Rk, Series L

Code A05	Tube OD mm	Threas BSPT	PN (bar)	Price
IQ-WE-06LRK	6	R1/8 keg.	315	9.05
IQ-WE-06LR1/4K	6	R1/4 keg.	315	29.45
IQ-WE-08LR1/8K	8	R1/8 keg.	315	35.75
IQ-WE-08LRK	8	R1/4 keg.	315	9.70
IQ-WE-08LR3/8K	8	R3/8 keg.	315	26.75
IQ-WE-10LRK	10	R1/4 keg.	315	10.75
IQ-WE-10LR3/8K	10	R3/8 keg.	315	22.65
IQ-WE-12LR1/4K	12	R1/4 keg.	315	18.20
IQ-WE-12LRK	12	R3/8 keg.	315	12.90
IQ-WE-12LR1/2K	12	R1/2 keg.	315	27.85
IQ-WE-15LRK	15	R1/2 keg.	315	15.85
IQ-WE-18LRK	18	R1/2 keg.	315	20.90
IQ-WE-22LRK	22	R3/4 keg.	160	46.40

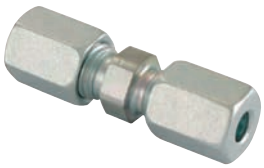
Male Stud Elbow

Type FI-WE-...-Rk, Series S

Code A05	Tube OD mm	Thread BSPT	PN (bar)	Price
IQ-WE-06SRK	6	R1/4 keg.	630	10.40
IQ-WE-08SRK	8	R1/4 keg.	630	12.10
IQ-WE-10SRK	10	R3/8 keg.	630	13.85
IQ-WE-12SRK	12	R3/8 keg.	630	15.55
IQ-WE-12SR1/2K	12	R1/2 keg.	630	38.80
IQ-WE-16SRK	16	R1/2 keg.	400	22.55
IQ-WE-20SRK	20	R3/4 keg.	400	69.05

Series LL, L & S – DIN2353 Fittings

- Suitable liquid/plastic sealant required
- Port according to DIN 3852-2 (Form Z)



Straight Fitting

Type FI-G, Series LL

Code	A05	Tube OD mm	PN (bar)	Price
IQ-G-04LL		4	100	4.10
IQ-G-06LL		6	100	4.40
IQ-G-08LL		8	100	4.75

Straight Fitting

Type FI-G, Series L

Code	A05	Tube OD mm	PN (bar)	Price
IQ-G-06L		6	500	3.95
IQ-G-08L		8	500	4.40
IQ-G-10L		10	500	5.20
IQ-G-12L		12	400	6.20
IQ-G-15L		15	400	8.80
IQ-G-18L		18	400	13.60
IQ-G-22L		22	250	18.50
IQ-G-28L		28	250	33.30
IQ-G-35L		35	250	45.60
IQ-G-42L		42	250	59.60

Straight Fitting

Type FI-G, Series S

Code	A05	Tube OD mm	PN (bar)	Price
IQ-G-06S		6	800	5.00
IQ-G-08S		8	800	5.55
IQ-G-10S		10	800	6.65
IQ-G-12S		12	630	7.80
IQ-G-14S		14	630	14.40
IQ-G-16S		16	630	14.65
IQ-G-20S		20	400	21.70
IQ-G-25S		25	400	36.70
IQ-G-30S		30	400	50.90
IQ-G-38S		38	400	70.05



Straight Reducer

Type FI-G, Series LL

Code	A05	Tube OD mm A	Tube OD mm B	PN (bar)	Price
IQ-G-06/04LL		6	4	100	9.60

Straight Reducer

Type FI-G, Series L

Code	A05	Tube OD mm A	Tube OD mm B	PN (bar)	Price
IQ-G-08/06L		8	6	500	8.35
IQ-G-10/06L		10	6	500	9.15
IQ-G-10/08L		10	8	500	9.55
IQ-G-12/06L		12	6	400	10.35
IQ-G-12/08L		12	8	400	10.60
IQ-G-12/10L		12	10	400	10.90
IQ-G-15/10L		15	10	400	13.70
IQ-G-15/12L		15	12	400	14.00
IQ-G-18/10L		18	10	400	19.05
IQ-G-18/12L		18	12	400	19.20
IQ-G-18/15L		18	15	400	20.15
IQ-G-22/12L		22	12	250	30.65
IQ-G-22/15L		22	15	250	25.15
IQ-G-22/18L		22	18	250	27.15
IQ-G-28/18L		28	18	250	51.20
IQ-G-28/22L		28	22	250	51.60

Straight Reducer

Type FI-G, Series S

Code	A05	Tube OD mm A	Tube OD mm B	PN (bar)	Price
IQ-G-10/08S		10	8	800	15.00
IQ-G-12/06S		12	6	630	15.30
IQ-G-12/08S		12	8	630	15.30
IQ-G-12/10S		12	10	630	15.95
IQ-G-16/12S		16	12	630	20.95
IQ-G-20/12S		20	12	400	29.45
IQ-G-20/16S		20	16	400	30.40
IQ-G-25/16S		25	16	400	54.80
IQ-G-25/20S		25	20	400	54.15
IQ-G-30/25S		30	25	400	77.50
IQ-G-38/30S		38	30	400	109.10

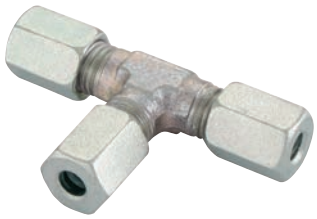
Series LL, L & S - DIN2353 Fittings



Equal Elbow

Type FI-W, Series LL

Code	A05	Tube OD mm	PN (bar)	Price
IQ-W-04LL		4	100	9.40
IQ-W-06LL		6	100	9.40
IQ-W-08LL		8	100	10.50



Equal Tee

Type FI-T, Series LL

Code	A05	Tube OD mm	PN (bar)	Price
IQ-T-04LL		4	100	11.55
IQ-T-06LL		6	100	11.65
IQ-T-08LL		8	100	13.60

Equal Elbow

Type FI-W, Series L

Code	A05	Tube OD mm	PN (bar)	Price
IQ-W-06L		6	500	9.20
IQ-W-08L		8	500	10.00
IQ-W-10L		10	500	10.75
IQ-W-12L		12	400	12.55
IQ-W-15L		15	400	17.30
IQ-W-18L		18	400	23.60
IQ-W-22L		22	250	32.90
IQ-W-28L		28	250	52.40
IQ-W-35L		35	250	75.60
IQ-W-42L		42	250	100.30

Equal Tee

Type FI-T, Series L

Code	A05	Tube OD mm	PN (bar)	Price
IQ-T-06L		6	500	12.10
IQ-T-08L		8	500	13.20
IQ-T-10L		10	500	14.60
IQ-T-12L		12	400	17.45
IQ-T-15L		15	400	23.30
IQ-T-18L		18	400	32.40
IQ-T-22L		22	250	45.60
IQ-T-28L		28	250	74.10
IQ-T-35L		35	250	99.75
IQ-T-42L		42	250	142.45

Equal Elbow

Type FI-W, Series S

Code	A05	Tube OD mm	PN (bar)	Price
IQ-W-06S		6	800	10.80
IQ-W-08S		8	800	11.55
IQ-W-10S		10	800	13.40
IQ-W-12S		12	630	15.20
IQ-W-14S		14	630	25.85
IQ-W-16S		16	630	24.35
IQ-W-20S		20	400	33.55
IQ-W-25S		25	400	55.60
IQ-W-30S		30	400	77.20
IQ-W-38S		38	400	111.65

Equal Tee

Type FI-T, Series S

Code	A05	Tube OD mm	PN (bar)	Price
IQ-T-06S		6	800	14.10
IQ-T-08S		8	800	15.55
IQ-T-10S		10	800	17.85
IQ-T-12S		12	630	19.80
IQ-T-14S		14	630	35.45
IQ-T-16S		16	630	33.30
IQ-T-20S		20	400	52.40
IQ-T-25S		25	400	79.10
IQ-T-30S		30	400	102.20
IQ-T-38S		38	400	154.30

Series LL, L & S - DIN2353 Fittings



Cutting Ring

Type FI-S (Single Edge), Series LL

Code	A05	Tube OD mm	PN (bar)	Price
IQ-S-04LL		4	100	0.60
IQ-S-06LL		6	100	0.60
IQ-S-08LL		8	100	0.60

Cutting Ring

Type FI-S (Double Edge), Series L

Code	A05	Tube OD mm	PN (bar)	Price
IQ-DS-06L/S		6	500	0.60
IQ-DS-08L/S		8	500	0.60
IQ-DS-10L/S		10	500	0.75
IQ-DS-12L/S		12	400	0.85
IQ-DS-15L		15	400	0.90
IQ-DS-18L		18	400	1.40
IQ-DS-22L		22	250	1.65
IQ-DS-28L		28	250	1.85
IQ-DS-35L		35	250	3.05
IQ-DS-42L		42	250	4.35

Cutting Ring

Type FI-DS (Double Edge), Series S

Code	A05	Tube OD mm	PN (bar)	Price
IQ-DS-14S		14	630	1.45
IQ-DS-16S		16	630	1.45
IQ-DS-20S		20	400	1.85
IQ-DS-25S		25	400	2.35
IQ-DS-30S		30	400	3.00
IQ-DS-38S		38	400	4.05



Union Nut

Type FI-m, Series LL

Code	A05	Tube OD mm	Thread Metric	PN (bar)	Price
IQ-M-04LL		4	M8 x 1	100	0.50
IQ-M-06LL		6	M10 x 1	100	0.60
IQ-M-08LL		8	M12 x 1	100	0.60

Union Nut

Type FI-m, Series L

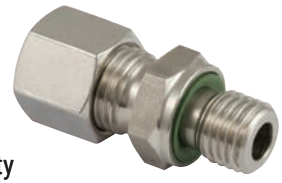
Code	A05	Tube OD mm	Thread	PN (bar)	Price
IQ-M-06L		6	M12 x 1.5	500	0.60
IQ-M-08L		8	M14 x 1.5	500	0.75
IQ-M-10L		10	M16 x 1.5	500	0.75
IQ-M-12L		12	M18 x 1.5	400	1.00
IQ-M-15L		15	M22 x 1.5	400	1.55
IQ-M-18L		18	M26 x 1.5	400	2.90
IQ-M-22L		22	M30 x 2	250	4.05
IQ-M-28L		28	M36 x 2	250	7.60
IQ-M-35L		35	M45 x 2	250	9.45
IQ-M-42L		42	M52 x 2	250	10.40

Union Nut

Type FI-m, Series S

Code	A05	Tube OD mm	Thread	PN (bar)	Price
IQ-M-06S		6	M14 x 1.5	800	0.75
IQ-M-08S		8	M16 x 1.5	800	0.90
IQ-M-10S		10	M18 x 1.5	800	1.05
IQ-M-12S		12	M20 x 1.5	630	1.45
IQ-M-14S		14	M22 x 1.5	630	2.20
IQ-M-16S		16	M24 x 1.5	630	2.90
IQ-M-20S		20	M30 x 2	400	4.40
IQ-M-25S		25	M36 x 2	400	8.60
IQ-M-30S		30	M42 x 2	400	10.60
IQ-M-38S		38	M52 x 2	400	15.55

Series LL, L & S - Stainless Steel - DIN2353 Fittings



Male Stud Coupling

BSPP with Seal, (L) Light Duty

Code A06	Tube OD mm	Thread BSPP	Price
IQSS-GE-06LR	6	G1/8"	16.30
IQSS-GE-06LR1/4	6	G1/4"	18.15
IQSS-GE-08LR1/8	8	G1/8"	20.15
IQSS-GE-08LR	8	G1/4"	16.65
IQSS-GE-08LR3/8	8	G3/8"	23.10
IQSS-GE-10LR1/8	10	G1/8"	23.70
IQSS-GE-10LR	10	G1/4"	17.80
IQSS-GE-10LR3/8	10	G3/8"	25.75
IQSS-GE-10LR1/2	10	G1/2"	28.95
IQSS-GE-12LR1/4	12	G1/4"	24.60
IQSS-GE-12LR	12	G3/8"	20.40
IQSS-GE-12LR1/2	12	G1/2"	29.20
IQSS-GE-12LR3/4	12	G3/4"	47.80
IQSS-GE-15LR3/8	15	G3/8"	29.00
IQSS-GE-15LR	15	G1/2"	27.35
IQSS-GE-15LR3/4	15	G3/4"	41.60
IQSS-GE-18LR	18	G1/2"	34.75
IQSS-GE-18LR3/4	18	G3/4"	50.70
IQSS-GE-22LR1/2	22	G1/2"	55.20
IQSS-GE-22LR	22	G3/4"	43.80
IQSS-GE-22LR1	22	G1"	62.90
IQSS-GE-28LR3/4	28	G3/4"	70.80
IQSS-GE-28LR	28	G1"	67.15
IQSS-GE-28LR11/4	28	G1.1/4"	106.45
IQSS-GE-35LR1	35	G1"	115.45
IQSS-GE-35LR	35	G1.1/4"	104.40
IQSS-GE-35LR11/2	35	G1.1/2"	133.30
IQSS-GE-42LR11/4	42	G1.1/4"	183.35
IQSS-GE-42LR	42	G1.1/2"	134.20

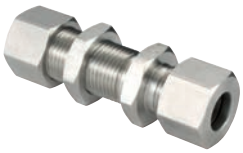
Male Stud Coupling

BSPP with Seal, (S) Heavy Duty

Code A06	Tube OD mm	Thread BSPP	Price
IQSS-GE-06SR1/8	6	G1/8"	22.35
IQSS-GE-06SR	6	G1/4"	25.45
IQSS-GE-06SR3/8	6	G3/8"	26.95
IQSS-GE-08SR1/8	8	G1/8"	23.80
IQSS-GE-08SR	8	G1/4"	20.80
IQSS-GE-08SR3/8	8	G3/8"	24.05
IQSS-GE-10SR	10	G3/8"	25.05
IQSS-GE-12SR1/4	12	G1/4"	31.10
IQSS-GE-12SR	12	G3/8"	23.30
IQSS-GE-12SR1/2	12	G1/2"	33.00
IQSS-GE-12SR3/4	12	G3/4"	40.60
IQSS-GE-14SR	14	G1/2"	44.65
IQSS-GE-16SR3/8	16	G3/8"	36.85
IQSS-GE-16SR	16	G1/2"	28.90
IQSS-GE-16SR3/4	16	G3/4"	48.30
IQSS-GE-20SR1/2	20	G1/2"	48.70
IQSS-GE-20SR	20	G3/4"	49.75
IQSS-GE-20SR1	20	G1"	56.05
IQSS-GE-25SR1/2	25	G1/2"	88.85
IQSS-GE-25SR3/4	25	G3/4"	79.45
IQSS-GE-25SR	25	G1"	78.20
IQSS-GE-25SR11/4	25	G1.1/4"	58.90
IQSS-GE-30SR3/4	30	G3/4"	130.65
IQSS-GE-30SR1	30	G1"	115.90
IQSS-GE-30SR	30	G1.1/4"	109.45
IQSS-GE-30SR11/2	30	G1.1/2"	172.10
IQSS-GE-38SR11/4	38	G1.1/4"	186.85
IQSS-GE-38SR	38	G1.1/2"	170.75

Series LL, L & S - Stainless Steel - DIN2353 Fittings

Bulkhead Equal Straight Connector



Tube x Tube, (L) Light Duty

Code	A06	Tube OD mm	Price
IQSS-GS-06L		6	30.50
IQSS-GS-08L		8	30.70
IQSS-GS-10L		10	28.65
IQSS-GS-12L		12	40.30
IQSS-GS-15L		15	51.95
IQSS-GS-18L		18	80.65
IQSS-GS-22L		22	102.40
IQSS-GS-28L		28	145.65
IQSS-GS-35L		35	223.35
IQSS-GS-42L		42	260.95

90° Equal Elbow Bulkhead Connector



Tube x Tube, (L) Light Duty

Code	A06	Tube OD mm	Price
IQSS-WS-06L		6	51.95
IQSS-WS-08L		8	58.30
IQSS-WS-10L		10	64.85
IQSS-WS-12L		12	69.35
IQSS-WS-15L		15	94.40
IQSS-WS-18L		18	121.50
IQSS-WS-22L		22	166.95
IQSS-WS-28L		28	264.45
IQSS-WS-42L		42	483.85

Bulkhead Equal Straight Connector

Tube x Tube, (S) Heavy Duty

Code	A06	Tube OD mm	Price
IQSS-GS-06S		6	43.50
IQSS-GS-08S		8	40.55
IQSS-GS-10S		10	50.20
IQSS-GS-12S		12	51.45
IQSS-GS-14S		14	72.95
IQSS-GS-16S		16	80.10
IQSS-GS-20S		20	120.40
IQSS-GS-25S		25	180.60
IQSS-GS-30S		30	235.45
IQSS-GS-38S		38	235.65

90° Equal Elbow Bulkhead Connector

Tube x Tube, (S) Heavy Duty

Code	A06	Tube OD mm	Price
IQSS-WS-08S		8	59.00
IQSS-WS-10S		10	75.80
IQSS-WS-12S		12	90.55
IQSS-WS-14S		14	107.50
IQSS-WS-16S		16	116.00
IQSS-WS-20S		20	179.10
IQSS-WS-25S		25	299.60
IQSS-WS-30S		30	373.45
IQSS-WS-38S		38	529.35

Series LL, L & S - Stainless Steel - DIN2353 Fittings



Male Stud Coupling

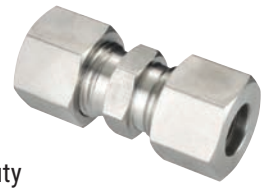
BSPT, (L) Light Duty

Code A06	Tube OD mm	Thread BSPT	Price
IQSS-GE-06LRK	6	R1/8"	15.45
IQSS-GE-06LR1/4K	6	R1/4"	15.25
IQSS-GE-08LRK	8	R1/4"	16.25
IQSS-GE-08LR1/2K	8	R1/2"	31.35
IQSS-GE-10LR1/8K	10	R1/8"	49.80
IQSS-GE-10LRK	10	R1/4"	17.95
IQSS-GE-10LR3/8K	10	R3/8"	19.65
IQSS-GE-10LR1/2K	10	R1/2"	25.50
IQSS-GE-12LR1/4K	12	R1/4"	24.40
IQSS-GE-12LRK	12	R3/8"	21.25
IQSS-GE-12LR1/2K	12	R1/2"	24.60
IQSS-GE-15LR3/8K	15	R3/8"	31.00
IQSS-GE-15LRK	15	R1/2"	27.85
IQSS-GE-15LR3/4K	15	R3/4"	43.50
IQSS-GE-18LRK	18	R1/2"	36.80
IQSS-GE-22LRK	22	R3/4"	48.85

Male Stud Coupling

BSPT, (S) Heavy Duty

Code A06	Tube OD mm	Thread BSPT	Price
IQSS-GE-10SRK	10	R3/8"	26.40
IQSS-GE-25SRK	25	R1"	67.20
IQSS-GE-30SRK	30	R1.1/4"	104.20



Equal Straight Connector

Tube x Tube, (LL) Extra Light Duty

Code A06	Tube OD mm	Price
IQSS-G-04LL	4	18.15
IQSS-G-06LL	6	20.20
IQSS-G-08LL	8	34.15

Equal Straight Connector

Tube x Tube, (L) Light Duty

Code A06	Tube OD mm	Price
IQSS-G-06L	6	11.70
IQSS-G-08L	8	14.55
IQSS-G-10L	10	18.00
IQSS-G-12L	12	20.70
IQSS-G-15L	15	27.45
IQSS-G-18L	18	40.95
IQSS-G-22L	22	53.25
IQSS-G-28L	28	84.40
IQSS-G-35L	35	120.05
IQSS-G-42L	42	159.20

Equal Straight Connector

Tube x Tube, (S) Heavy Duty

Code A06	Tube OD mm	Price
IQSS-G-06S	6	14.70
IQSS-G-08S	8	17.40
IQSS-G-10S	10	21.80
IQSS-G-12S	12	24.35
IQSS-G-14S	14	30.70
IQSS-G-16S	16	40.60
IQSS-G-20S	20	57.95
IQSS-G-25S	25	96.25
IQSS-G-30S	30	133.15
IQSS-G-38S	38	174.85

Series LL, L & S - Stainless Steel - DIN2353 Fittings



Unequal Straight Connector

Tube x Tube, (L) Light Duty

Code	A06	Tube OD mm		Price
IQSS-G-08/06L		8	6	22.35
IQSS-G-10/08L		10	8	25.75
IQSS-G-12/08L		12	8	28.85
IQSS-G-12/10L		12	10	28.35
IQSS-G-15/08L		15	8	34.80
IQSS-G-15/10L		15	10	42.30
IQSS-G-18/15L		18	15	35.30
IQSS-G-22/18L		22	18	76.40
IQSS-G-28/22L		28	22	115.50

Unequal Straight Connector

Tube x Tube, (S) Heavy Duty

Code	A06	Tube OD mm		Price
IQSS-G-12/08S		12	8	37.80
IQSS-G-16/10S		16	10	51.50
IQSS-G-16/12S		16	12	52.55
IQSS-G-20/16S		20	16	77.20
IQSS-G-25/20S		25	20	128.60



90º Equal Elbow Connector

Tube x Tube, (LL)
Extra Light Duty

Code	A06	Tube OD mm	Price
IQSS-W-04LL		4	30.00
IQSS-W-06LL		6	31.90
IQSS-W-08LL		8	34.25

90º Equal Elbow Connector

Tube x Tube, (L) Light Duty

Code	A06	Tube OD mm	Price
IQSS-W-06L		6	23.00
IQSS-W-08L		8	23.90
IQSS-W-10L		10	27.80
IQSS-W-12L		12	31.90
IQSS-W-15L		15	42.00
IQSS-W-18L		18	61.35
IQSS-W-22L		22	76.15
IQSS-W-28L		28	140.75
IQSS-W-35L		35	218.55
IQSS-W-42L		42	344.45

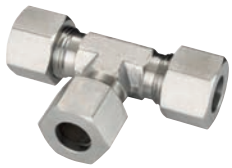
90º Equal Elbow Connector

Tube x Tube, (S) Heavy Duty

Code	A06	Tube OD mm	Price
IQSS-W-06S		6	24.90
IQSS-W-08S		8	28.55
IQSS-W-10S		10	33.85
IQSS-W-12S		12	38.55
IQSS-W-14S		14	46.30
IQSS-W-16S		16	60.65
IQSS-W-20S		20	81.15
IQSS-W-25S		25	168.15
IQSS-W-30S		30	223.00
IQSS-W-38S		38	334.10

Series LL, L & S - Stainless Steel - DIN2353 Fittings

Reducers on application.



Equal Tee Connector

Tube x Tube, (LL) Extra Light Duty

Code A06	Tube OD mm	Price
IQSS-T-04LL	4	48.40
IQSS-T-06LL	6	61.85
IQSS-T-08LL	8	56.15

Equal Tee Connector

Tube x Tube, (L) Light Duty

Code A06	Tube OD mm	Price
IQSS-T-06L	6	31.55
IQSS-T-08L	8	34.25
IQSS-T-10L	10	38.65
IQSS-T-12L	12	46.50
IQSS-T-15L	15	65.30
IQSS-T-18L	18	88.90
IQSS-T-22L	22	125.80
IQSS-T-28L	28	198.90
IQSS-T-35L	35	340.75
IQSS-T-42L	42	474.10

Equal Tee Connector

Tube x Tube, (S) Heavy Duty

Code A06	Tube OD mm	Price
IQSS-T-06S	6	34.35
IQSS-T-08S	8	37.80
IQSS-T-10S	10	46.70
IQSS-T-12S	12	57.45
IQSS-T-14S	14	63.50
IQSS-T-16S	16	90.40
IQSS-T-20S	20	127.40
IQSS-T-25S	25	218.55
IQSS-T-30S	30	318.75
IQSS-T-38S	38	496.35



90º Equal Swivel Elbow

Tube & Swivel, O-Ring Type, (L) Light Duty

Code A06	Tube OD mm	Price
IQSS-EWD-06L-V	6	35.65
IQSS-EWD-08L-V	8	35.80
IQSS-EWD-10L-V	10	46.55
IQSS-EWD-12L-V	12	51.00
IQSS-EWD-15L-V	15	59.65
IQSS-EWD-18L-V	18	92.30
IQSS-EWD-22L-V	22	116.25
IQSS-EWD-28L-V	28	180.35
IQSS-EWD-35L-V	35	253.30
IQSS-EWD-42L-V	42	372.75

90º Equal Swivel Elbow

Tube & Swivel, O-Ring Type, (S) Heavy Duty

Code A06	Tube OD mm	Price
IQSS-EWD-06S-V	6	38.75
IQSS-EWD-08S-V	8	43.40
IQSS-EWD-10S-V	10	52.35
IQSS-EWD-12S-V	12	64.35
IQSS-EWD-14S-V	14	72.70
IQSS-EWD-16S-V	16	96.60
IQSS-EWD-20S-V	20	124.70
IQSS-EWD-25S-V	25	197.20
IQSS-EWD-30S-V	30	269.95
IQSS-EWD-38S-V	38	389.55

Series LL, L & S - Stainless Steel - DIN2353 Fittings

Silver-plated stainless steel nuts.



Nut

Tube, (LL) Extra Light Duty

Code A06	Tube OD mm	Price
IQSS-M-04LL	4	2.40
IQSS-M-06LL	6	2.75
IQSS-M-08LL	8	3.60



Cutting Ring

Tube, (LL) Extra Light Duty

Code A06	Tube OD mm	Price
IQSS-S-04LL	4	0.80
IQSS-S-06LL	6	1.00
IQSS-S-08LL	8	1.30

Nut

Tube, (L) Light Duty

Code A06	Tube OD mm	Price
IQSS-M-06L	6	2.35
IQSS-M-08L	8	2.70
IQSS-M-10L	10	2.90
IQSS-M-12L	12	3.50
IQSS-M-15L	15	4.90
IQSS-M-18L	18	9.40
IQSS-M-22L	22	11.40
IQSS-M-28L	28	16.95
IQSS-M-35L	35	25.00
IQSS-M-42L	42	34.10

Cutting Ring

Tube, (L) Light Duty

Code A06	Tube OD mm	Price
IQSS-DS-06L/S	6	2.35
IQSS-DS-08L/S	8	1.95
IQSS-DS-10L/S	10	2.65
IQSS-DS-12L/S	12	3.00
IQSS-DS-15L	15	3.80
IQSS-DS-18L	18	4.05
IQSS-DS-22L	22	4.60
IQSS-DS-28L	28	7.00
IQSS-DS-35L	35	10.20
IQSS-DS-42L	42	11.65

Nut

Tube, (S) Heavy Duty

Code A06	Tube OD mm	Price
IQSS-M-06S	6	2.90
IQSS-M-08S	8	3.20
IQSS-M-10S	10	3.80
IQSS-M-12S	12	4.30
IQSS-M-14S	14	5.90
IQSS-M-16S	16	8.80
IQSS-M-20S	20	12.15
IQSS-M-25S	25	22.40
IQSS-M-30S	30	28.60
IQSS-M-38S	38	40.80

Cutting Ring

Tube, (S) Heavy Duty

Code A06	Tube OD mm	Price
IQSS-DS-14S	14	3.60
IQSS-DS-16S	16	3.80
IQSS-DS-20S	20	4.60
IQSS-DS-25S	25	6.80
IQSS-DS-30S	30	9.75
IQSS-DS-38S	38	10.45

Twin Ferrule - Stainless Steel



Union

Tube x Tube, Imperial

Code	A07	Tube OD	Price
IL-SU-4SS		1/4"	16.95
IL-SU-6SS		3/8"	20.35
IL-SU-8SS		1/2"	29.30

Union

Tube x Tube, Metric

Code	A07	Tube OD mm	Price
IL-SU-6MSS		6	13.15
IL-SU-8MSS		8	14.65
IL-SU-10MSS		10	20.35
IL-SU-12MSS		12	29.30
IL-SU-16MSS		16	37.05
IL-SU-20MSS		20	48.55
IL-SU-25MSS		25	56.10



Equal Bulkhead Union

Tube x Tube, Imperial

Code	A07	Tube OD	Price
IL-SBHU-4SS		1/4"	22.85
IL-SBHU-6SS		3/8"	28.90
IL-SBHU-8SS		1/2"	38.15
IL-SBHU-12SS		3/4"	57.40
IL-SBHU-16SS		1"	101.30

Equal Bulkhead Union

Tube x Tube, Metric

Code	A07	Tube OD mm	Price
IL-SBHU-6MSS		6	18.40
IL-SBHU-8MSS		8	25.50
IL-SBHU-10MSS		10	22.10
IL-SBHU-12MSS		12	29.75
IL-SBHU-16MSS		16	44.70
IL-SBHU-20MSS		20	82.50
IL-SBHU-25MSS		25	101.30



Reducing Union

Tube x Tube, Imperial x Imperial

Code	A07	Tube OD	Tube OD	Price
IL-SRU-5-4SS		5/16"	1/4"	12.40
IL-SRU-6-4SS		3/8"	1/4"	20.60
IL-SRU-6-5SS		3/8"	5/16"	14.70
IL-SRU-8-4SS		1/2"	1/4"	23.00
IL-SRU-8-6SS		1/2"	3/8"	30.25
IL-SRU-12-8SS		3/4"	1/2"	47.35
IL-SRU-16-12SS		1"	3/4"	70.40

Reducing Union

Tube x Tube, Metric x Metric

Code	A07	Tube OD mm	Tube OD mm	Price
IL-SRU-8M-6MSS		8	6	12.40
IL-SRU-10M-8MSS		10	8	14.70
IL-SRU-12M-10MSS		12	10	26.20
IL-SRU-12M-6MSS		12	6	23.00
IL-SRU-12M-8MSS		12	8	23.00
IL-SRU-16M-12MSS		16	12	32.85
IL-SRU-25M-20MSS		25	20	70.40

Twin Ferrule - Stainless Steel



Male Connector, NPT

Tube x NPT, Imperial

Code A07	Tube OD mm	Thread NPT	Price
IL-SMC-4-2NSS	1/4"	1/8"	8.90
IL-SMC-4-4NSS	1/4"	1/4"	8.10
IL-SMC-4-6NSS	1/4"	3/8"	9.35
IL-SMC-4-8NSS	1/4"	1/2"	11.75
IL-SMC-6-4NSS	3/8"	1/4"	13.25
IL-SMC-6-6NSS	3/8"	3/8"	10.55
IL-SMC-6-8NSS	3/8"	1/2"	13.90
IL-SMC-8-12NSS	1/2"	3/4"	22.45
IL-SMC-8-4NSS	1/2"	1/4"	13.45
IL-SMC-8-6NSS	1/2"	3/8"	18.10
IL-SMC-8-8NSS	1/2"	1/2"	15.45
IL-SMC-12-12NSS	3/4"	3/4"	23.15
IL-SMC-12-16NSS	3/4"	1"	38.45
IL-SMC-12-8NSS	3/4"	1/2"	20.45
IL-SMC-16-12NSS	1"	3/4"	47.55
IL-SMC-16-16NSS	1"	1"	47.55



Male Connector, BSPP

Tube x BSPP, Imperial

Code A07	Tube OD mm	Thread BSPP	Price
IL-SGMC-4-2GSS	1/4"	G1/8"	10.90
IL-SGMC-4-4GSS	1/4"	G1/4"	13.75
IL-SGMC-4-6GSS	1/4"	G3/8"	16.05
IL-SGMC-4-8GSS	1/4"	G1/2"	22.20
IL-SGMC-5-2GSS	5/16"	G1/8"	14.80
IL-SGMC-5-4GSS	5/16"	G1/4"	15.65
IL-SGMC-5-6GSS	5/16"	G3/8"	15.90
IL-SGMC-5-8GSS	5/16"	G1/2"	21.45
IL-SGMC-6-4GSS	3/8"	G1/4"	15.65
IL-SGMC-6-6GSS	3/8"	G3/8"	17.80
IL-SGMC-6-8GSS	3/8"	G1/2"	23.30
IL-SGMC-8-12GSS	1/2"	G3/4"	34.60
IL-SGMC-8-4GSS	1/2"	G1/4"	23.25
IL-SGMC-8-6GSS	1/2"	G3/8"	24.30
IL-SGMC-8-8GSS	1/2"	G1/2"	28.90
IL-SGMC-12-8GSS	3/4"	G1/2"	54.05
IL-SGMC-16-12GSS	1"	G3/4"	61.80

Male Connector, NPT

Tube x NPT, Metric

Code A07	Tube OD mm	Thread NPT	Price
IL-SMC-6M-4NSS	6	1/4"	8.90
IL-SMC-6M-6NSS	6	3/8"	9.35
IL-SMC-6M-8NSS	6	1/2"	11.75
IL-SMC-8M-4NSS	8	1/4"	9.05
IL-SMC-8M-6NSS	8	3/8"	9.70
IL-SMC-8M-8NSS	8	1/2"	12.50
IL-SMC-10M-4NSS	10	1/4"	10.00
IL-SMC-10M-6NSS	10	3/8"	10.55
IL-SMC-10M-8NSS	10	1/2"	12.65
IL-SMC-12M-4NSS	12	1/4"	13.90
IL-SMC-12M-6NSS	12	3/8"	13.95
IL-SMC-12M-8NSS	12	1/2"	15.45
IL-SMC-16M-12NSS	16	3/4"	20.75
IL-SMC-16M-6NSS	16	3/8"	15.55
IL-SMC-16M-8NSS	16	1/2"	16.15
IL-SMC-20M-12NSS	20	3/4"	38.10
IL-SMC-20M-8NSS	20	1/2"	38.10
IL-SMC-25M-12NSS	25	3/4"	41.75
IL-SMC-25M-16NSS	25	1"	41.75

Male Connector, BSPP

Tube x BSPP, Metric

Code A07	Tube OD mm	Thread BSPP	Price
IL-SGMC6M4GSS	6	G1/4"	11.80
IL-SGMC6M6GSS	6	G3/8"	14.05
IL-SGMC6M8GSS	6	G1/2"	17.80
IL-SGMC8M4GSS	8	G1/4"	16.30
IL-SGMC8M6GSS	8	G3/8"	16.70
IL-SGMC8M8GSS	8	G1/2"	18.10
IL-SGMC10M4GSS	10	G1/4"	17.55
IL-SGMC10M6GSS	10	G3/8"	15.60
IL-SGMC10M8GSS	10	G1/2"	21.45
IL-SGMC12M4GSS	12	G1/4"	25.40
IL-SGMC12M6GSS	12	G3/8"	24.30
IL-SGMC12M8GSS	12	G1/2"	28.90
IL-SGMC16M6GSS	16	G3/8"	29.50
IL-SGMC16M8GSS	16	G1/2"	30.10
IL-SGMC20M8GSS	20	G1/2"	44.00
IL-SGMC20M12GSS	20	G3/4"	49.10
IL-SGMC25M12GSS	25	G3/4"	54.20
IL-SGMC25M16GSS	25	G1"	60.45

Twin Ferrule - Stainless Steel



Female Connector, NPT

Tube x NPT, Imperial

Code	A07	Tube OD	Thread NPT	Price
IL-SFC-8-4NSS		1/2"	1/4"	18.70
IL-SFC-8-6NSS		1/2"	3/8"	16.80
IL-SFC-8-8NSS		1/2"	1/2"	22.80
IL-SFC-12-8NSS		3/4"	1/2"	25.45
IL-SFC-12-12NSS		3/4"	3/4"	32.70
IL-SFC-16-12NSS		1"	3/4"	52.70
IL-SFC-16-16NSS		1"	1"	59.40

Female Connector, NPT

Tube x NPT, Metric

Code	A07	Tube OD mm	Thread NPT	Price
IL-SFC-6M-4NSS		6	1/4"	9.00
IL-SFC-8M-4NSS		8	1/4"	15.00
IL-SFC-8M-6NSS		8	3/8"	15.55
IL-SFC-8M-8NSS		8	1/2"	57.05
IL-SFC-10M-4NSS		10	1/4"	14.20
IL-SFC-12M-8NSS		12	1/2"	22.90



Union Elbow

Tube x Tube, Imperial

Code	A07	Tube OD	Price
IL-SUE-4SS		1/4"	22.10
IL-SUE-6SS		3/8"	22.40
IL-SUE-8SS		1/2"	35.40
IL-SUE-12SS		3/4"	58.75
IL-SUE-16SS		1"	110.60

Union Elbow

Tube x Tube, Metric

Code	A07	Tube OD mm	Price
IL-SUE-6MSS		6	16.05
IL-SUE-8MSS		8	23.15
IL-SUE-10MSS		10	24.15
IL-SUE-12MSS		12	37.90
IL-SUE-16MSS		16	33.55
IL-SUE-20MSS		20	68.50
IL-SUE-25MSS		25	87.85



Metric Gauge Connector, BSPP

Tube x BSPP, Imperial

Code	A07	Tube OD	Thread BSPP	Price
IL-SGC-4-4GSS		1/4"	G1/4"	17.65
IL-SGC-4-6GSS		1/4"	G3/8"	19.50
IL-SGC-4-8GSS		1/4"	G1/2"	26.40
IL-SGC-6-4GSS		3/8"	G1/4"	19.30
IL-SGC-6-6GSS		3/8"	G3/8"	21.00
IL-SGC-6-8GSS		3/8"	G1/2"	27.80
IL-SGC-8-4GSS		1/2"	G1/4"	23.05
IL-SGC-8-6GSS		1/2"	G3/8"	24.05
IL-SGC-8-8GSS		1/2"	G1/2"	32.00

Metric Gauge Connector, BSPP

Tube x BSPP, Metric

Code	A07	Tube OD mm	Thread BSPP	Price
IL-SGC-6M-4GSS		6	G1/4"	19.55
IL-SGC-6M-6GSS		6	G3/8"	22.20
IL-SGC-6M-8GSS		6	G1/2"	26.40
IL-SGC-8M-4GSS		8	G1/4"	17.80
IL-SGC-8M-6GSS		8	G3/8"	20.40
IL-SGC-8M-8GSS		8	G1/2"	25.20
IL-SGC-10M-4GSS		10	G1/4"	19.30
IL-SGC-10M-6GSS		10	G3/8"	21.00
IL-SGC-10M-8GSS		10	G1/2"	27.80
IL-SGC-12M-4GSS		12	G1/4"	23.55
IL-SGC-12M-6GSS		12	G3/8"	24.05
IL-SGC-12M-8GSS		12	G1/2"	31.25
IL-SGC-20M-8GSS		20	G1/2"	49.10



Bulkhead Male Connector

Tube x NPT, Imperial

Code	A07	Tube OD	Thread NPT	Price
IL-SBMC-4-2NSS		1/4"	1/8"	16.50
IL-SBMC-4-4NSS		1/4"	1/4"	16.50
IL-SBMC-6-4NSS		3/8"	1/4"	21.55
IL-SBMC-6-6NSS		3/8"	3/8"	31.95
IL-SBMC-6-8NSS		3/8"	1/2"	30.90
IL-SBMC-8-6NSS		1/2"	3/8"	30.05
IL-SBMC-8-8NSS		1/2"	1/2"	30.90
IL-SBMC-12-12NSS		3/4"	3/4"	57.70
IL-SBMC-16-16NSS		1"	1"	84.50

Twin Ferrule - Stainless Steel



90º Male Elbow, NPT

Tube x NPT, Imperial

Code A07	Tube OD	Thread NPT	Price
IL-SME-4-2NSS	1/4"	1/8"	14.35
IL-SME-4-4NSS	1/4"	1/4"	17.65
IL-SME-6-4NSS	3/8"	1/4"	17.00
IL-SME-6-6NSS	3/8"	3/8"	17.80
IL-SME-6-8NSS	3/8"	1/2"	23.05
IL-SME-8-4NSS	1/2"	1/4"	20.20
IL-SME-8-6NSS	1/2"	3/8"	23.05
IL-SME-8-8NSS	1/2"	1/2"	29.45
IL-SME-12-12NSS	3/4"	3/4"	39.95
IL-SME-12-8NSS	3/4"	1/2"	32.80
IL-SME-16-12NSS	1"	3/4"	47.95
IL-SME-16-16NSS	1"	1"	65.10

90º Male Elbow, NPT

Tube x NPT, Metric

Code A07	Tube OD mm	Thread NPT	Price
IL-SME-6M-2NSS	6	1/8"	14.70
IL-SME-6M-4NSS	6	1/4"	15.70
IL-SME-6M-6NSS	6	3/8"	16.50
IL-SME-6M-8NSS	6	1/2"	21.00
IL-SME-8M-2NSS	8	1/8"	15.60
IL-SME-8M-4NSS	8	1/4"	14.15
IL-SME-8M-6NSS	8	3/8"	16.80
IL-SME-8M-8NSS	8	1/2"	22.75
IL-SME-10M-4NSS	10	1/4"	17.00
IL-SME-10M-6NSS	10	3/8"	17.80
IL-SME-10M-8NSS	10	1/2"	25.95
IL-SME-12M-12NSS	12	3/4"	36.25
IL-SME-12M-4NSS	12	1/4"	25.15
IL-SME-12M-6NSS	12	3/8"	20.20
IL-SME-12M-8NSS	12	1/2"	25.85
IL-SME-16M-12NSS	16	3/4"	39.10
IL-SME-16M-6NSS	16	3/8"	26.35
IL-SME-16M-8NSS	16	1/2"	28.60
IL-SME-20M-12NSS	20	3/4"	45.95
IL-SME-20M-8NSS	20	1/2"	44.85
IL-SME-25M-12NSS	25	3/4"	46.75
IL-SME-25M-16NSS	25	1"	57.05



90º Adjustable Male Elbow, BSPP

Tube x BSPP, Imperial

Code A07	Tube OD	Thread BSPP	Price
IL-SPME-4-2GSS	1/4"	G1/8"	25.15
IL-SPME-4-4GSS	1/4"	G1/4"	26.20
IL-SPME-6-4GSS	3/8"	G1/4"	30.90
IL-SPME-6-6GSS	3/8"	G3/8"	30.90
IL-SPME-8-8GSS	1/2"	G1/2"	45.10
IL-SPME-10-8GSS	5/8"	G1/2"	46.35
IL-SPME-12-12GSS	3/4"	G3/4"	80.90
IL-SPME-12-8GSS	3/4"	G1/2"	77.05
IL-SPME-16-12GSS	1"	G3/4"	112.40
IL-SPME-16-16GSS	1"	G1"	112.40

90º Adjustable Male Elbow, BSPP

Tube x BSPP, Metric

Code A07	Tube OD mm	Thread BSPP	Price
IL-SPME6M2GSS	6	G1/8"	25.45
IL-SPME6M4GSS	6	G1/4"	26.20
IL-SPME8M2GSS	8	G1/8"	23.20
IL-SPME8M4GSS	8	G1/4"	25.15
IL-SPME10M4GSS	10	G1/4"	29.40
IL-SPME10M6GSS	10	G3/8"	29.40
IL-SPME12M12GSS	12	G3/4"	65.55
IL-SPME12M4GSS	12	G1/4"	43.00
IL-SPME12M6GSS	12	G3/8"	45.10
IL-SPME12M8GSS	12	G1/2"	43.00
IL-SPME25M16GSS	25	G1"	89.05

Twin Ferrule - Stainless Steel

90° Female Elbow, NPT

Tube x NPT, Imperial



Code A07	Tube OD	Thread NPT	Price
IL-SFE-2-2NSS	1/8"	1/8"	14.35
IL-SFE-2-4NSS	1/8"	1/4"	14.50
IL-SFE-3-2NSS	3/16"	1/8"	14.35
IL-SFE-3-4NSS	3/16	1/4"	15.35
IL-SFE-4-2NSS	1/4"	1/8"	16.55
IL-SFE-4-4NSS	1/4"	1/4"	18.80
IL-SFE-4-6NSS	1/4"	3/8"	23.35
IL-SFE-4-8NSS	1/4"	1/2"	31.50
IL-SFE-5-2NSS	5/16"	1/8"	19.45
IL-SFE-5-4NSS	5/16"	1/4"	19.45
IL-SFE-5-6NSS	5/16"	3/8"	23.15
IL-SFE-6-12NSS	3/8"	3/4"	65.45
IL-SFE-6-2NSS	3/8"	1/8"	19.55
IL-SFE-6-4NSS	3/8"	1/4"	17.45
IL-SFE-6-6NSS	3/8"	3/8"	23.15
IL-SFE-6-8NSS	3/8"	1/2"	32.60
IL-SFE-8-4NSS	1/2"	1/4"	29.10
IL-SFE-8-6NSS	1/2"	3/8"	30.70
IL-SFE-8-8NSS	1/2"	1/2"	36.05
IL-SFE-8-12NSS	1/2"	3/4"	64.20
IL-SFE-10-6NSS	5/8"	3/8"	26.35
IL-SFE-10-8NSS	5/8"	1/2"	28.60
IL-SFE-12-12NSS	3/4"	3/4"	68.05
IL-SFE-12-8NSS	3/4"	1/2"	45.50
IL-SFE-14-12NSS	7/8"	3/4"	45.95
IL-SFE-16-12NSS	1"	3/4"	87.55
IL-SFE-16-16NSS	1"	1"	115.95

90° Female Elbow, NPT

Tube x NPT, Metric

Code A07	Tube OD mm	Thread NPT	Price
IL-SFE-6M-4NSS	6	1/4"	18.80
IL-SFE-6M-6NSS	6	3/8"	23.35
IL-SFE-6M-8NSS	6	1/2"	31.50
IL-SFE-8M-4NSS	8	1/4"	19.45
IL-SFE-8M-8NSS	8	1/2"	32.60
IL-SFE-10M-4NSS	10	1/4"	22.20
IL-SFE-10M-6NSS	10	3/8"	23.15
IL-SFE-10M-8NSS	10	1/2"	32.60
IL-SFE-12M-6NSS	12	3/8"	30.70
IL-SFE-12M-8NSS	12	1/2"	36.05

Equal Union Tee

Tube x Tube, Imperial



Code A07	Tube OD	Price
IL-SUT-4SS	1/4"	31.55
IL-SUT-6SS	3/8"	33.75
IL-SUT-8SS	1/2"	51.15
IL-SUT-16SS	1"	112.80

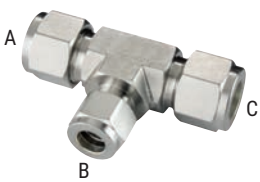
Equal Union Tee

Tube x Tube, Metric

Code A07	Tube OD mm	Price
IL-SUT-6MSS	6	31.55
IL-SUT-8MSS	8	33.05
IL-SUT-10MSS	10	37.10
IL-SUT-12MSS	12	51.15
IL-SUT-16MSS	16	47.45
IL-SUT-20MSS	20	91.00
IL-SUT-25MSS	25	112.80

Reducing on Branch Union Tee

Tube x Tube, Imperial



Code A07	Tube OD A	Tube OD B	Tube OD C	Price
IL-SRUT664SS	3/8"	1/4"	3/8"	34.60
IL-SRUT884SS	1/2"	1/4"	1/2"	49.20
IL-SRUT886SS	1/2"	3/8"	1/2"	49.20
IL-SRUT10106SS	5/8"	3/8"	5/8"	44.90
IL-SRUT12124SS	3/4"	1/4"	3/4"	74.60
IL-SRUT12126SS	3/4"	3/8"	3/4"	71.30
IL-SRUT12128SS	3/4"	1/2"	3/4"	71.30
IL-SRUT161612SS	1"	3/4"	1"	141.45
IL-SRUT16164SS	1"	1/4"	1"	147.90
IL-SRUT16166SS	1"	3/8"	1"	141.45
IL-SRUT16168SS	1"	1/2"	1"	141.45

Reducing on Branch Union Tee

Tube x Tube, Metric

Code A07	Tube OD mm A	Tube OD mm B	Tube OD mm C	Price
IL-SRUT1212M6MSS	12	6	12	93.80

Twin Ferrule - Stainless Steel



Equal Union Cross

Tube x Tube, Imperial

Code A07	Tube OD	Price
IL-SUC-4SS	1/4”	38.90
IL-SUC-6SS	3/8”	55.15
IL-SUC-8SS	1/2”	61.75
IL-SUC-12SS	3/4”	102.95
IL-SUC-16SS	1”	183.75

Equal Union Cross

Tube x Tube, Metric

Code A07	Tube OD mm	Price
IL-SUC-6MSS	6	45.05
IL-SUC-8MSS	8	44.30
IL-SUC-10MSS	10	52.35
IL-SUC-12MSS	12	55.15
IL-SUC-16MSS	16	61.80
IL-SUC-20MSS	20	129.90
IL-SUC-25MSS	25	183.75



Reducing Standpipe

Tube x Stem, Imperial x Imperial

Code A07	Stem OD	Tube OD	Price
IL-SR-4-12SS	1/4”	3/4”	13.35
IL-SR-4-5SS	1/4”	5/16”	7.90
IL-SR-4-6SS	1/4”	3/8”	7.90
IL-SR-4-8SS	1/4”	1/2”	8.55
IL-SR-6-4SS	3/8”	1/4”	10.00
IL-SR-6-8SS	3/8”	1/2”	10.55
IL-SR-8-12SS	1/2”	3/4”	17.35
IL-SR-8-16SS	1/2”	1”	18.70
IL-SR-8-4SS	1/2”	1/4”	14.50
IL-SR-8-6SS	1/2”	3/8”	12.75
IL-SR-12-16SS	3/4”	1”	29.10

Reducing Standpipe

Tube x Stem, Metric x Imperial

Code A07	Stem OD mm	Tube OD	Price
IL-SR-6M-4SS	6	1/4”	9.10
IL-SR-10M-6SS	10	3/8”	11.65

Reducing Standpipe

Tube x Stem, Metric x Metric

Code A07	Stem OD mm	Tube OD mm	Price
IL-SR-10M-12MSS	10	12	12.00
IL-SR-10M-6MSS	10	6	10.00
IL-SR-10M-8MSS	10	8	10.55
IL-SR-12M-16MSS	12	16	15.05
IL-SR-6M-10MSS	6	10	9.10
IL-SR-6M-12MSS	6	12	9.70
IL-SR-6M-8MSS	6	8	9.10
IL-SR-8M-10MSS	8	10	9.70
IL-SR-8M-12MSS	8	12	10.10
IL-SR-20M-25MSS	20	25	35.10

Twin Ferrule - Stainless Steel



Port Connector

Tube, Imperial

Code A07	Tube OD	Price
IL-SPC-4SS	1/4"	11.05
IL-SPC-6SS	3/8"	15.70
IL-SPC-8SS	1/2"	9.65
IL-SPC-12SS	3/4"	12.10
IL-SPC-16SS	1"	34.60

Port Connector

Tube, Metric

Code A07	Tube OD mm	Price
IL-SPC-6MSS	6	11.05
IL-SPC-8MSS	8	13.75
IL-SPC-10MSS	10	15.70
IL-SPC-12MSS	12	21.25
IL-SPC-16MSS	16	25.00



Bulkhead Female Connector

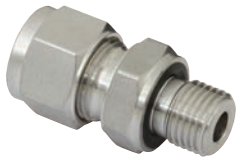
Imperial Tube x NPT

Code A07	Tube OD	Thread NPT	Price
IL-SBFC-4-2NSS	1/4"	1/8"	20.55
IL-SBFC-4-4NSS	1/4"	1/4"	18.60
IL-SBFC-8-6NSS	1/2"	3/8"	41.60
IL-SBFC-8-8NSS	1/2"	1/2"	42.40
IL-SBFC-12-12NSS	3/4"	3/4"	48.85
IL-SBFC-6-4NSS	3/8"	1/4"	53.95
IL-SBFC-16-16NSS	1"	1"	115.45

Bulkhead Female Connector

Metric Tube x NPT

Code A07	Tube OD mm	Thread NPT	Price
IL-SBFC-6M-4NSS	6	1/4"	18.60
IL-SBFC-8M-4NSS	8	1/4"	25.75
IL-SBFC-12M-8NSS	12	1/2"	42.40



Male Connector

Imperial Tube x UNF

Code A07	Tube OD	Thread UNF	Price
IL-SOSC-2-2USS	1/8"	5/16"	11.90
IL-SOSC-3-3USS	3/16"	3/8"	12.10
IL-SOSC-4-4USS	1/4"	7/16"	14.10
IL-SOSC-5-5USS	5/16"	1/2"	14.75
IL-SOSC-6-6USS	3/8"	9/16"	16.55
IL-SOSC-8-8USS	1/2"	3/4"	23.75
IL-SOSC-12-12USS	3/4"	1.1/16"	33.70
IL-SOSC-16-16USS	1"	1.5/16"	62.50



Back Ferrule

Metric

Code A07	OD mm	Price
IL-SBF-6MSS	6	3.50
IL-SBF-8MSS	8	3.35
IL-SBF-10MSS	10	3.30
IL-SBF-12MSS	12	5.05
IL-SBF-16MSS	16	4.60
IL-SBF-20MSS	20	6.35
IL-SBF-25MSS	25	9.30

Back Ferrule

Imperial

Code A07	OD	Price
IL-SBF-4SS	1/4"	3.50
IL-SBF-5SS	5/16"	2.05
IL-SBF-6SS	3/8"	4.20
IL-SBF-8SS	1/2"	5.05
IL-SBF-12SS	3/4"	8.45
IL-SBF-16SS	1"	5.15

Twin Ferrule - Stainless Steel



Plug

Metric

Code	A07	OD mm	Price
IL-SP-6MSS		6	10.10
IL-SP-8MSS		8	10.35
IL-SP-10MSS		10	11.50
IL-SP-12MSS		12	6.85
IL-SP-16MSS		16	22.75
IL-SP-20MSS		20	34.25
IL-SP-25MSS		25	45.05



Nut

Metric

Code	A07	OD mm	Price
IL-SN-6MSS		6	3.50
IL-SN-8MSS		8	3.95
IL-SN-10MSS		10	4.90
IL-SN-12MSS		12	6.40
IL-SN-16MSS		16	8.80
IL-SN-20MSS		20	13.75
IL-SN-25MSS		25	20.00

Plug

Imperial

Code	A07	OD	Price
IL-SP-4SS		1/4"	11.65
IL-SP-5SS		5/16"	11.95
IL-SP-6SS		3/8"	13.25
IL-SP-8SS		1/2"	19.75
IL-SP-12SS		3/4"	31.75
IL-SP-16SS		1"	52.10

Nut

Imperial

Code	A07	OD	Price
IL-SN-4SS		1/4"	3.50
IL-SN-5SS		5/16"	3.90
IL-SN-6SS		3/8"	4.85
IL-SN-8SS		1/2"	6.35
IL-SN-12SS		3/4"	10.45
IL-SN-16SS		1"	19.95



Cap

Metric

Code	A07	OD mm	Price
IL-SC-6MSS		6	5.10
IL-SC-8MSS		8	7.00
IL-SC-10MSS		10	10.25
IL-SC-12MSS		12	9.95
IL-SC-16MSS		16	12.25
IL-SC-20MSS		20	24.35
IL-SC-25MSS		25	35.75



Front Ferrule

Metric

Code	A07	OD mm	Price
IL-SFF-6MSS		6	1.70
IL-SFF-8MSS		8	2.05
IL-SFF-10MSS		10	2.25
IL-SFF-12MSS		12	3.10
IL-SFF-16MSS		16	3.60
IL-SFF-20MSS		20	7.10
IL-SFF-25MSS		25	8.60

Cap

Imperial

Code	A07	OD	Price
IL-SC-4SS		1/4"	6.40
IL-SC-6SS		3/8"	7.35
IL-SC-8SS		1/2"	11.55
IL-SC-12SS		3/4"	18.10
IL-SC-16SS		1"	35.40

Front Ferrule

Imperial

Code	A07	OD	Price
IL-SFF-4SS		1/4"	1.65
IL-SFF-5SS		5/16"	2.05
IL-SFF-6SS		3/8"	2.25
IL-SFF-8SS		1/2"	3.10
IL-SFF-12SS		3/4"	4.80
IL-SFF-16SS		1"	8.60

Hydraulic Tube



Chromium Plated Steel Tube

Metric, 3m Lengths

Code N13	OD mm	Wall mm	Price
HSTY04-10-3M	4	1.0	12.10
HSTY06-10-3M	6	1.0	11.80
HSTY06-15-3M	6	1.5	13.15
HSTY06-20-3M	6	2.0	17.85
HSTY08-10-3M	8	1.0	15.40
HSTY08-15-3M	8	1.5	14.35
HSTY10-10-3M	10	1.0	15.35
HSTY10-15-3M	10	1.5	17.55
HSTY10-20-3M	10	2.0	19.35
HSTY12-10-3M	12	1.0	16.60
HSTY12-15-3M	12	1.5	18.85
HSTY12-20-3M	12	2.0	20.75
HSTY15-15-3M	15	1.5	21.85
HSTY15-20-3M	15	2.0	29.55
HSTY16-15-3M	16	1.5	24.65

Code N13	OD mm	Wall mm	Price
HSTY16-20-3M	16	2.0	27.85
HSTY16-30-3M	16	3.0	38.80
HSTY18-15-3M	18	1.5	26.55
HSTY18-20-3M	18	2.0	31.55
HSTY18-25-3M	18	2.5	34.50
HSTY20-20-3M	20	2.0	35.55
HSTY20-25-3M	20	2.5	39.45
HSTY20-30-3M	20	3.0	45.45
HSTY22-15-3M	22	1.5	30.00
HSTY22-20-3M	22	2.0	39.70
HSTY22-25-3M	22	2.5	42.80
HSTY25-20-3M	25	2.0	46.10
HSTY25-25-3M	25	2.5	51.40
HSTY25-30-3M	25	3.0	57.75

Code N13	OD mm	Wall mm	Price
HSTY25-40-3M	25	4.0	69.65
HSTY28-20-3M	28	2.0	52.10
HSTY28-25-3M	28	2.5	58.60
HSTY28-30-3M	28	3.0	60.30
HSTY30-25-3M	30	2.5	87.55
HSTY30-30-3M	30	3.0	69.25
HSTY30-40-3M	30	4.0	88.45
HSTY30-50-3M	30	5.0	157.05
HSTY35-20-3M	35	2.0	63.60
HSTY35-30-3M	35	3.0	77.30
HSTY38-30-3M	38	3.0	83.30
HSTY38-40-3M	38	4.0	115.80
HSTY42-20-3M	42	2.0	98.25
HSTY42-30-3M	42	3.0	99.30

Chromium Plated Steel Tube

Metric, 6m Lengths

Code N13	OD mm	Wall mm	Price
HSTY04-10-6M	4	1.0	23.40
HSTY06-10-6M	6	1.0	22.15
HSTY06-15-6M	6	1.5	24.75
HSTY06-20-6M	6	2.0	33.35
HSTY08-10-6M	8	1.0	27.85
HSTY08-15-6M	8	1.5	29.30
HSTY10-10-6M	10	1.0	29.20
HSTY10-15-6M	10	1.5	33.50
HSTY10-20-6M	10	2.0	37.55
HSTY12-10-6M	12	1.0	32.30
HSTY12-15-6M	12	1.5	37.40
HSTY12-20-6M	12	2.0	45.00
HSTY15-15-6M	15	1.5	46.05
HSTY15-20-6M	15	2.0	55.95
HSTY16-15-6M	16	1.5	47.95

Code N13	OD mm	Wall mm	Price
HSTY16-20-6M	16	2.0	58.90
HSTY16-30-6M	16	3.0	75.30
HSTY18-15-6M	18	1.5	50.30
HSTY18-20-6M	18	2.0	60.00
HSTY18-25-6M	18	2.5	64.70
HSTY20-20-6M	20	2.0	66.70
HSTY20-25-6M	20	2.5	72.65
HSTY20-30-6M	20	3.0	87.90
HSTY22-15-6M	22	1.5	58.35
HSTY22-20-6M	22	2.0	76.45
HSTY22-25-6M	22	2.5	87.10
HSTY25-20-6M	25	2.0	86.85
HSTY25-25-6M	25	2.5	101.65
HSTY25-30-6M	25	3.0	114.25

Code N13	OD mm	Wall mm	Price
HSTY25-40-6M	25	4.0	131.55
HSTY28-20-6M	28	2.0	101.15
HSTY28-25-6M	28	2.5	109.90
HSTY28-30-6M	28	3.0	116.55
HSTY30-25-6M	30	2.5	166.35
HSTY30-30-6M	30	3.0	133.95
HSTY30-40-6M	30	4.0	171.45
HSTY30-50-6M	30	5.0	314.15
HSTY35-20-6M	35	2.0	123.45
HSTY35-30-6M	35	3.0	149.75
HSTY38-30-6M	38	3.0	175.50
HSTY38-40-6M	38	4.0	229.65
HSTY42-20-6M	42	2.0	196.40
HSTY42-30-6M	42	3.0	199.85

Hydraulic Tube

DIN 2391/C ST37.4 Phosphated Tube

Metric, 3m Lengths



Code N13	OD mm	Wall mm	Price
HSTP06-10-3M	6	1.0	9.70
HSTP06-15-3M	6	1.5	9.85
HSTP08-10-3M	8	1.0	11.60
HSTP08-15-3M	8	1.5	20.75
HSTP08-20-3M	8	2.0	16.00
HSTP10-10-3M	10	1.0	12.95
HSTP10-15-3M	10	1.5	18.45
HSTP10-20-3M	10	2.0	28.05
HSTP12-10-3M	12	1.0	14.35
HSTP12-15-3M	12	1.5	16.75
HSTP12-20-3M	12	2.0	32.00
HSTP12-25-3M	12	2.5	24.65
HSTP12-30-3M	12	3.0	48.10
HSTP14-15-3M	14	1.5	17.40
HSTP14-20-3M	14	2.0	20.35
HSTP15-15-3M	15	1.5	29.05
HSTP15-20-3M	15	2.0	26.70
HSTP16-15-3M	16	1.5	20.55
HSTP16-20-3M	16	2.0	39.50
HSTP16-25-3M	16	2.5	32.10
HSTP16-30-3M	16	3.0	35.25
HSTP18-15-3M	18	1.5	21.65

Code N13	OD mm	Wall mm	Price
HSTP18-20-3M	18	2.0	23.85
HSTP18-25-3M	18	2.5	30.70
HSTP20-15-3M	20	1.5	19.90
HSTP20-20-3M	20	2.0	31.95
HSTP20-25-3M	20	2.5	94.70
HSTP20-30-3M	20	3.0	40.50
HSTP20-40-3M	20	4.0	52.70
HSTP22-15-3M	22	1.5	26.90
HSTP22-20-3M	22	2.0	31.80
HSTP22-25-3M	22	2.5	37.10
HSTP22-30-3M	22	3.0	44.95
HSTP25-15-3M	25	1.5	35.05
HSTP25-20-3M	25	2.0	38.60
HSTP25-25-3M	25	2.5	44.80
HSTP25-30-3M	25	3.0	45.15
HSTP25-40-3M	25	4.0	60.40
HSTP28-20-3M	28	2.0	42.30
HSTP28-25-3M	28	2.5	56.75
HSTP28-30-3M	28	3.0	69.85
HSTP30-20-3M	30	2.0	86.20
HSTP30-25-3M	30	2.5	71.60
HSTP30-30-3M	30	3.0	58.45

Code N13	OD mm	Wall mm	Price
HSTP30-40-3M	30	4.0	77.15
HSTP30-50-3M	30	5.0	86.80
HSTP32-20-3M	32	2.0	43.50
HSTP35-20-3M	35	2.0	50.45
HSTP35-25-3M	35	2.5	55.20
HSTP35-30-3M	35	3.0	60.55
HSTP35-60-3M	35	6.0	255.10
HSTP38-30-3M	38	3.0	78.55
HSTP38-40-3M	38	4.0	96.05
HSTP38-50-3M	38	5.0	128.00
HSTP38-60-3M	38	6.0	133.30
HSTP42-20-3M	42	2.0	88.80
HSTP42-30-3M	42	3.0	87.40
HSTP42-40-3M	42	4.0	119.60
HSTP50-50-3M	50	5.0	155.40

DIN 2391/C ST37.4 Phosphated Tube

Metric, 6m Lengths

Code N13	OD mm	Wall mm	Price
HSTP06-10-6M	6	1.0	18.80
HSTP06-15-6M	6	1.5	20.30
HSTP08-10-6M	8	1.0	23.20
HSTP08-15-6M	8	1.5	31.90
HSTP08-20-6M	8	2.0	30.40
HSTP10-10-6M	10	1.0	25.90
HSTP10-15-6M	10	1.5	29.55
HSTP10-20-6M	10	2.0	37.15
HSTP12-10-6M	12	1.0	28.75
HSTP12-15-6M	12	1.5	33.55
HSTP12-20-6M	12	2.0	44.10
HSTP12-25-6M	12	2.5	50.65
HSTP12-30-6M	12	3.0	99.95
HSTP14-15-6M	14	1.5	38.60
HSTP14-20-6M	14	2.0	43.45
HSTP15-15-6M	15	1.5	40.20
HSTP15-20-6M	15	2.0	53.30
HSTP16-15-6M	16	1.5	41.10
HSTP16-20-6M	16	2.0	54.35
HSTP16-25-6M	16	2.5	61.60

Code N13	OD mm	Wall mm	Price
HSTP16-30-6M	16	3.0	67.80
HSTP18-15-6M	18	1.5	43.20
HSTP18-20-6M	18	2.0	49.10
HSTP18-25-6M	18	2.5	63.25
HSTP20-15-6M	20	1.5	39.80
HSTP20-20-6M	20	2.0	63.85
HSTP20-25-6M	20	2.5	66.20
HSTP20-30-6M	20	3.0	82.00
HSTP20-40-6M	20	4.0	105.30
HSTP22-15-6M	22	1.5	50.40
HSTP22-20-6M	22	2.0	67.00
HSTP22-25-6M	22	2.5	74.05
HSTP22-30-6M	22	3.0	89.85
HSTP25-15-6M	25	1.5	65.50
HSTP25-20-6M	25	2.0	72.25
HSTP25-25-6M	25	2.5	84.15
HSTP25-30-6M	25	3.0	96.50
HSTP25-40-6M	25	4.0	120.85
HSTP28-20-6M	28	2.0	84.55
HSTP28-25-6M	28	2.5	100.70

Code N13	OD mm	Wall mm	Price
HSTP28-30-6M	28	3.0	106.00
HSTP30-20-6M	30	2.0	172.45
HSTP30-25-6M	30	2.5	100.30
HSTP30-30-6M	30	3.0	116.80
HSTP30-40-6M	30	4.0	144.00
HSTP30-50-6M	30	5.0	173.60
HSTP32-20-6M	32	2.0	87.10
HSTP35-20-6M	35	2.0	97.55
HSTP35-25-6M	35	2.5	104.90
HSTP35-30-6M	35	3.0	135.55
HSTP35-60-6M	35	6.0	510.20
HSTP38-30-6M	38	3.0	145.40
HSTP38-40-6M	38	4.0	192.10
HSTP38-50-6M	38	5.0	227.95
HSTP38-60-6M	38	6.0	266.60
HSTP42-20-6M	42	2.0	177.60
HSTP42-30-6M	42	3.0	164.90
HSTP42-40-6M	42	4.0	228.80
HSTP50-50-6M	50	5.0	310.80

Hydraulic Tube



Self Colour Steel Tube

Imperial, 3m Lengths

Code N13	OD	Wall mm	SWG	Price
HSTI025-16-3M	1/4"	1.625	16	13.10
HSTI025-18-3M	1/4"	1.218	18	12.40
HSTI025-20-3M	1/4"	0.914	20	33.25
HSTI038-16-3M	3/8"	1.625	16	14.60
HSTI038-20-3M	3/8"	0.914	20	19.70
HSTI050-10-3M	1/2"	3.251	10	34.95
HSTI050-14-3M	1/2"	2.032	14	17.00
HSTI050-16-3M	1/2"	1.625	16	19.30
HSTI050-18-3M	1/2"	1.218	18	59.70
HSTI050-20-3M	1/2"	0.914	20	42.00
HSTI063-12-3M	5/8"	2.642	12	98.60
HSTI063-16-3M	5/8"	1.625	16	22.85
HSTI063-18-3M	5/8"	1.218	18	28.35
HSTI075-12-3M	3/4"	2.642	12	57.25
HSTI075-14-3M	3/4"	2.032	14	44.65
HSTI075-16-3M	3/4"	1.625	16	25.25
HSTI075-18-3M	3/4"	1.218	18	35.55
HSTI100-10-3M	1"	3.251	10	96.95
HSTI100-12-3M	1"	2.642	12	100.40
HSTI100-14-3M	1"	2.032	14	57.75
HSTI100-16-3M	1"	1.625	16	34.15
HSTI100-18-3M	1"	1.218	18	54.00
HSTI125-10-3M	1.1/4"	3.251	10	116.05
HSTI125-12-3M	1.1/4"	2.642	12	143.75
HSTI150-10-3M	1.1/2"	3.251	10	184.40

Self Colour Steel Tube

Imperial, 6m Lengths

Code N13	OD	Wall mm	SWG	Price
HSTI025-16-6M	1/4"	1.625	16	28.40
HSTI025-18-6M	1/4"	1.218	18	24.75
HSTI025-20-6M	1/4"	0.914	20	24.30
HSTI038-16-6M	3/8"	1.625	16	32.35
HSTI038-20-6M	3/8"	0.914	20	39.35
HSTI050-10-6M	1/2"	3.251	10	69.85
HSTI050-14-6M	1/2"	2.032	14	34.00
HSTI050-16-6M	1/2"	1.625	16	40.85
HSTI050-18-6M	1/2"	1.218	18	119.45
HSTI050-20-6M	1/2"	0.914	20	84.05
HSTI063-12-6M	5/8"	2.642	12	70.30
HSTI063-16-6M	5/8"	1.625	16	47.15
HSTI063-18-6M	5/8"	1.218	18	56.65
HSTI075-12-6M	3/4"	2.642	12	114.55
HSTI075-14-6M	3/4"	2.032	14	89.35
HSTI075-16-6M	3/4"	1.625	16	52.25
HSTI075-18-6M	3/4"	1.218	18	71.10
HSTI100-10-6M	1"	3.251	10	193.80
HSTI100-12-6M	1"	2.642	12	200.75
HSTI100-14-6M	1"	2.032	14	115.55
HSTI100-16-6M	1"	1.625	16	72.35
HSTI100-18-6M	1"	1.218	18	107.90
HSTI125-10-6M	1.1/4"	3.251	10	232.20
HSTI125-12-6M	1.1/4"	2.642	12	287.45
HSTI150-10-6M	1.1/2"	3.251	10	368.80

Hydraulic Tube



316 Stainless Steel Tube

Metric, 3m Lengths

Code N13	OD mm	Wall mm	Price
HSST04-10-3M	4	1.0	114.95
HSST06-10-3M	6	1.0	28.60
HSST06-15-3M	6	1.5	34.30
HSST08-10-3M	8	1.0	39.00
HSST08-15-3M	8	1.5	76.50
HSST08-20-3M	8	2.0	126.35
HSST10-10-3M	10	1.0	45.15
HSST10-15-3M	10	1.5	85.15
HSST10-20-3M	10	2.0	110.75
HSST12-10-3M	12	1.0	77.55
HSST12-15-3M	12	1.5	93.70
HSST12-20-3M	12	2.0	152.65
HSST12-30-3M	12	3.0	407.95
HSST14-15-3M	14	1.5	98.40

Code N13	OD mm	Wall mm	Price
HSST15-15-3M	15	1.5	117.00
HSST15-20-3M	15	2.0	123.25
HSST16-15-3M	16	1.5	132.15
HSST16-20-3M	16	2.0	149.75
HSST16-25-3M	16	2.5	291.20
HSST16-30-3M	16	3.0	274.20
HSST18-15-3M	18	1.5	136.65
HSST18-20-3M	18	2.0	163.35
HSST20-20-3M	20	2.0	162.20
HSST20-25-3M	20	2.5	262.45
HSST20-30-3M	20	3.0	261.30
HSST22-15-3M	22	1.5	169.60
HSST22-20-3M	22	2.0	202.00
HSST25-15-3M	25	1.5	202.00

Code N13	OD mm	Wall mm	Price
HSST25-20-3M	25	2.0	199.70
HSST25-25-3M	25	2.5	312.60
HSST25-30-3M	25	3.0	372.55
HSST25-40-3M	25	4.0	610.05
HSST28-20-3M	28	2.0	256.30
HSST28-30-3M	28	3.0	460.15
HSST30-30-3M	30	3.0	386.90
HSST30-40-3M	30	4.0	647.20
HSST35-20-3M	35	2.0	465.45
HSST35-30-3M	35	3.0	421.20
HSST38-30-3M	38	3.0	637.70
HSST38-40-3M	38	4.0	816.55
HSST38-50-3M	38	5.0	719.45
HSST42-30-3M	42	3.0	624.00

316 Stainless Steel Tube

Metric, 6m Lengths

Code A12	OD mm	Wall mm	Price
HSST04-10-6M	4	1.0	229.95
HSST06-10-6M	6	1.0	60.75
HSST06-15-6M	6	1.5	118.55
HSST08-10-6M	8	1.0	87.65
HSST08-15-6M	8	1.5	137.30
HSST08-20-6M	8	2.0	252.70
HSST10-10-6M	10	1.0	158.90
HSST10-15-6M	10	1.5	152.90
HSST10-20-6M	10	2.0	187.20
HSST12-10-6M	12	1.0	160.05
HSST12-15-6M	12	1.5	181.25
HSST12-20-6M	12	2.0	305.45
HSST12-30-6M	12	3.0	815.95
HSST14-15-6M	14	1.5	196.75

Code A12	OD mm	Wall mm	Price
HSST15-15-6M	15	1.5	261.15
HSST15-20-6M	15	2.0	329.00
HSST16-15-6M	16	1.5	244.60
HSST16-20-6M	16	2.0	309.50
HSST16-25-6M	16	2.5	582.40
HSST16-30-6M	16	3.0	548.35
HSST18-15-6M	18	1.5	198.45
HSST18-20-6M	18	2.0	326.65
HSST20-20-6M	20	2.0	365.40
HSST20-25-6M	20	2.5	524.90
HSST20-30-6M	20	3.0	646.95
HSST22-15-6M	22	1.5	324.15
HSST22-20-6M	22	2.0	404.05
HSST25-15-6M	25	1.5	401.40

Code A12	OD mm	Wall mm	Price
HSST25-20-6M	25	2.0	429.00
HSST25-25-6M	25	2.5	561.00
HSST25-30-6M	25	3.0	745.05
HSST25-40-6M	25	4.0	483.60
HSST28-20-6M	28	2.0	398.30
HSST28-30-6M	28	3.0	920.25
HSST30-30-6M	30	3.0	693.35
HSST30-40-6M	30	4.0	1294.40
HSST35-20-6M	35	2.0	930.85
HSST35-30-6M	35	3.0	998.40
HSST38-30-6M	38	3.0	1275.35
HSST38-40-6M	38	4.0	1633.10
HSST38-50-6M	38	5.0	1438.95
HSST42-30-6M	42	3.0	1085.75



316 Stainless Steel Tube

Imperial, 3m Lengths

Code A12	OD mm	Wall mm	SWG	Price
HSSTI025-18-3M	1/4"	1.218	18	51.75
HSSTI025-20-3M	1/4"	0.914	20	53.80
HSSTI025-22-3M	1/4"	0.711	22	85.80
HSSTI038-16-3M	3/8"	1.625	16	84.25
HSSTI038-18-3M	3/8"	1.218	18	104.75
HSSTI038-20-3M	3/8"	0.914	20	74.25
HSSTI500-16-3M	1/2"	1.625	16	105.05
HSSTI500-18-3M	1/2"	1.218	18	100.55
HSSTI500-20-3M	1/2"	0.914	20	76.75
HSSTI750-12-3M	3/4"	2.642	12	349.95
HSSTI750-14-3M	3/4"	2.032	14	260.90
HSSTI750-16-3M	3/4"	1.625	16	186.20
HSSTI750-18-3M	3/4"	1.218	18	118.30
HSSTI100-12-3M	1"	2.642	12	249.70
HSSTI100-16-3M	1"	1.625	16	203.40
HSSTI100-18-3M	1"	1.218	18	148.10

316 Stainless Steel Tube

Imperial, 6m Lengths

Code A12	OD mm	Wall mm	SWG	Price
HSSTI025-18-6M	1/4"	1.218	18	121.70
HSSTI025-20-6M	1/4"	0.914	20	96.70
HSSTI025-22-6M	1/4"	0.711	22	171.60
HSSTI038-16-6M	3/8"	1.625	16	168.50
HSSTI038-18-6M	3/8"	1.218	18	209.45
HSSTI038-20-6M	3/8"	0.914	20	184.10
HSSTI500-16-6M	1/2"	1.625	16	210.05
HSSTI500-18-6M	1/2"	1.218	18	201.20
HSSTI500-20-6M	1/2"	0.914	20	153.50
HSSTI750-12-6M	3/4"	2.642	12	641.20
HSSTI750-14-6M	3/4"	2.032	14	521.80
HSSTI750-16-6M	3/4"	1.625	16	372.40
HSSTI750-18-6M	3/4"	1.218	18	236.60
HSSTI100-12-6M	1"	2.642	12	499.35
HSSTI100-16-6M	1"	1.625	16	406.85
HSSTI100-18-6M	1"	1.218	18	296.20

Stainless Steel Pipe Brackets

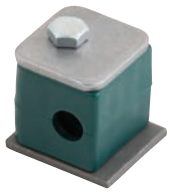
Metric



Code A11	Pipe OD mm	Price 1-49	Price 50+
SSPC06M	6	2.70	2.60
SSPC08M	8	3.10	2.95
SSPC10M	10	3.10	2.95
SSPC12M	12	4.90	4.70
SSPC15M	15	5.40	5.15
SSPC16M	16	12.60	12.00
SSPC18M	18	5.95	5.70
SSPC20M	20	6.15	5.85
SSPC22M	22	6.40	6.10
SSPC25M	25	9.75	9.30

Clamps

Manufactured to DIN3015.



Standard Polypropylene Clamps, Group 1

Complete Clamps

Code	A10	Description	OD mm	Price
1110000765		SP 106 PP-DP-AS M W10	6.0	1.75
1110000766		SP 106,4 PP-DP-AS M W10	6.4	1.75
1110000767		SP 108 PP-DP-AS M W10	8.0	1.80
1110000768		SP 109,5 PP-DP-AS M W10	9.5	1.75
1110000769		SP 110 PP-DP-AS M W10	10.0	1.75
1110000771		SP 112 PP-DP-AS M W10	12.0	1.65

Manufactured to DIN3015.



Standard Polypropylene Clamps, Group 1A

Complete Clamps

Code	A10	Description	OD mm	Price
1110000774		SP 106a PP-DP-AS M W10	6.0	2.15
1110000775		SP 106,4a PP-DP-AS M W10	6.4	2.15
1110000776		SP 108a PP-DP-AS M W10	8.0	2.15
1110000777		SP 109,5a PP-DP-AS M W10	9.5	2.15
1110000778		SP 110a PP-DP-AS M W10	10.0	2.15
1110000780		SP 112a PP-DP-AS M W10	12.0	2.15



Standard Polypropylene Clamps, Group 1

Jaws x 2

Code	A10	Description	OD mm	Price
1130002984		106 PP	6.0	0.55
1130002987		106,4 PP	6.4	0.55
1130002990		108 PP	8.0	0.60
1130002993		109,5 PP	9.5	0.55
1130002996		110 PP	10.0	0.55
1130003000		112 PP	12.0	0.45



Standard Polypropylene Clamps, Group 1A

Jaws x 2

Code	A10	Description	OD mm	Price
1130005074		106a PP	6.0	0.50
1130005065		106,4a PP	6.4	0.50
1130005104		108a PP	8.0	0.50
1130005118		109,5a PP	9.5	0.50
1130005148		110a PP	10.0	0.50
1130005192		112a PP	12.0	0.50



Standard Polypropylene Clamps, Group 1

Top Plate

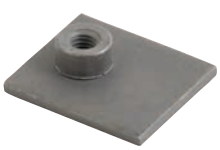
Code	A10	Description	Price
1130000255		DP 1 W3	0.30



Standard Polypropylene Clamps, Group 1A

Top Plate

Code	A10	Description	Price
1130000258		DP 1a W3	0.30



Standard Polypropylene Clamps, Group 1

Weld Plate

Code	A10	Description	Price
1120001151		SP 1 M W2	0.75



Standard Polypropylene Clamps, Group 1A

Weld Plate

Code	A10	Description	Price
1120001153		SP 1a M W2	1.05



Standard Polypropylene Clamps, Group 1

Bolt x 1

Code	A10	Description	Price
1130004020		AS-M6X30-DIN931/933-8.8-W3	0.15

Manufactured to DIN3015.



Standard Polypropylene Clamps, Group 2

Complete Clamps

Code	A10	Description	OD mm	Price
1110000784		SP 212,7 PP-DP-AS M W10	12.7	2.30
1110000785		SP 213,5 PP-DP-AS M W10	13.5	2.30
1110000786		SP 214 PP-DP-AS M W10	14.0	2.35
1110000787		SP 215 PP-DP-AS M W10	15.0	2.30
1110000788		SP 216 PP-DP-AS M W10	16.0	2.30
1110000789		SP 217,2 PP-DP-AS M W10	17.2	2.30
1110000790		SP 218 PP-DP-AS M W10	18.0	2.30

Manufactured to DIN3015.



Standard Polypropylene Clamps, Group 3

Complete Clamps

Code	A10	Description	OD mm	Price
1110000794		SP 319 PP-DP-AS M W10	19.0	2.50
1110000795		SP 320 PP-DP-AS M W10	20.0	2.45
1110000796		SP 321,3 PP-DP-AS M W10	21.3	3.20
1110000797		SP 322 PP-DP-AS M W10	22.0	2.50
1110000799		SP 325 PP-DP-AS M W10	25.0	3.05
1110000800		SP 325,4 PP-DP-AS M W10	25.4	4.25



Standard Polypropylene Clamps, Group 2

Jaws x 2

Code	A10	Description	OD mm	Price
1130005237		212,7 PP	12.7	0.60
1130005259		213,5 PP	13.5	0.60
1130005274		214 PP	14.0	0.65
1130005294		215 PP	15.0	0.60
1130005333		216 PP	16.0	0.60
1130005368		217,2 PP	17.2	0.60
1130005386		218 PP	18.0	0.60



Standard Polypropylene Clamps, Group 3

Jaws x 2

Code	A10	Description	OD mm	Price
1130005518		319 PP	19.0	0.70
1130005534		320 PP	20.0	0.65
1130005562		321,3 PP	21.3	0.70
1130005579		322 PP	22.0	0.70
1130005630		325 PP	25.0	0.95
1130005639		325,4 PP	25.4	1.60



Standard Polypropylene Clamps, Group 2

Top Plate

Code	A10	Description	Price
1130000261		DP 2 W3	0.30



Standard Polypropylene Clamps, Group 3

Top Plate

Code	A10	Description	Price
1130000264		DP 3 W3	0.35



Standard Polypropylene Clamps, Group 2

Weld Plate

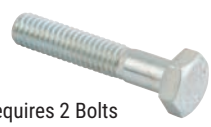
Code	A10	Description	Price
1120001156		SP 2 M W2	1.10



Standard Polypropylene Clamps, Group 3

Weld Plate

Code	A10	Description	Price
1120001161		SP 3 M W2	1.15

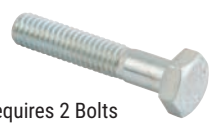


Standard Polypropylene Clamps, Group 2

Bolt x 1

■ Requires 2 Bolts

Code	A10	Description	Price
1130004021		AS-M6X30-DIN931/933-8.8-W3	0.45



Standard Polypropylene Clamps, Group 3

Bolt x 1

■ Requires 2 Bolts

Code	A10	Description	Price
1130004022		AS-M6X40-DIN931/933-8.8-W3	0.15

Clamps

Manufactured to DIN3015.

Standard Polypropylene Clamps, Group 4

Complete Clamps



Code	A10	Description	OD mm	Price
1110000802		SP 426,9 PP-DP-AS M W10	26.9	2.95
1110000803		SP 428 PP-DP-AS M W10	28.0	2.95
1110000804		SP 430 PP-DP-AS M W10	30.0	2.90

Standard Polypropylene Clamps, Group 4

Jaws x 2



Code	A10	Description	OD mm	Price
1130003765		426,9 PP	26.9	0.90
1130003768		428 PP	28.0	0.90
1130003771		430 PP	30.0	0.85

Standard Polypropylene Clamps, Group 4

Top Plate



Code	A10	Description	Price
1130000267		DP 4 W3	0.40

Standard Polypropylene Clamps, Group 4

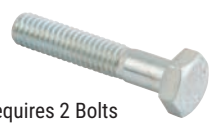
Weld Plate



Code	A10	Description	Price
1120001167		SP 4 M W2	1.25

Standard Polypropylene Clamps, Group 4

Bolt x 1



■ Requires 2 Bolts

Code	A10	Description	Price
1130004023		AS-M6X45-DIN931/933-8.8-W3	0.20

Standard Polypropylene Clamps, Group 5

Complete Clamps



Code	A10	Description	OD mm	Price
1110000807		SP 532 PP-DP-AS M W10	32.0	3.60
1110000808		SP 533,7 PP-DP-AS M W10	33.7	3.60
1110000809		SP 535 PP-DP-AS M W10	35.0	3.60
1110000811		SP 538 PP-DP-AS M W10	38.0	3.60
1110000812		SP 540 PP-DP-AS M W10	40.0	3.65
1110000813		SP 542 PP-DP-AS M W10	42.0	3.65

Standard Polypropylene Clamps, Group 5

Jaws x 2



Code	A10	Description	OD mm	Price
1130005953		532 PP	32.0	1.30
1130005980		533,7 PP	33.7	1.30
1130005997		535 PP	35.0	1.30
1130006026		538 PP	38.0	1.30
1130006051		540 PP	40.0	1.35
1130006069		542 PP	42.0	1.35

Standard Polypropylene Clamps, Group 5

Top Plate



Code	A10	Description	Price
1130000269		DP 5 W3	0.50

Standard Polypropylene Clamps, Group 5

Weld Plate



Code	A10	Description	Price
1120001171		SP 5 M W2	1.30

Standard Polypropylene Clamps, Group 5

Bolt x 1



■ Requires 2 Bolts

Code	A10	Description	Price
1130004024		AS-M6X60-DIN931/933-8.8-W3	0.25

Manufactured to DIN3015.

Standard Polypropylene Clamps, Group 6

Complete Clamps



Code	A10	Description	OD mm	Price
1110000817		SP 644,5 PP-DP-AS M W10	44.5	5.50
1110000819		SP 648,3 PP-DP-AS M W10	48.3	8.75
1110000821		SP 650,8 PP-DP-AS M W10	50.8	5.40
1110000823		SP 654,0 PP-DP-AS M W10	54.0	9.30

Standard Polypropylene Clamps, Group 6

Jaws x 2



Code	A10	Description	OD mm	Price
1130003551		644,5 PP	44.5	2.50
1130003554		648,3 PP	48.3	4.60
1130003560		650,8 PP	50.8	2.40
1130003563		654 PP	54.0	5.10

Standard Polypropylene Clamps, Group 6

Top Plate



Code	A10	Description	Price
1130000273		DP 6 W3	0.60

Standard Polypropylene Clamps, Group 6

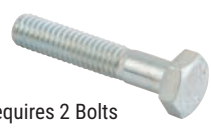
Weld Plate



Code	A10	Description	Price
1120001175		SP 6 M W2	1.70

Standard Polypropylene Clamps, Group 6

Bolt x 1



■ Requires 2 Bolts

Code	A10	Description	Price
1130004025		AS-M6X70-DIN931/933-8.8-W3	0.30

Standard Polypropylene Clamps, Group 7

Complete Clamps



Code	A10	Description	OD mm	Price
1110000826		SP 757,2 PP-DP-AS M W10	57.2	14.55
1110000827		SP 760,3 PP-DP-AS M W10	60.3	14.55
1110000828		SP 763,5 PP-DP-AS M W10	63.5	14.55
1110000829		SP 770 PP-DP-AS M W10	70.0	14.55
1110007156		SP 773 PP-DP-AS M W10	73.0	15.20
1110000830		SP 776,1 PP-DP-AS M W10	76.1	14.55

Standard Polypropylene Clamps, Group 7

Jaws x 2



Code	A10	Description	OD mm	Price
1130006216		757,2 PP	57.2	6.40
1130006221		760,3 PP	60.3	6.40
1130006226		763,5 PP	63.5	6.40
1130006230		770 PP	70.0	6.40
1130008666		773 PP	73.0	7.10
1130006234		776,1 PP	76.1	6.40

Standard Polypropylene Clamps, Group 7

Top Plate



Code	A10	Description	Price
1130001501		DP 7 W3	3.40

Standard Polypropylene Clamps, Group 7

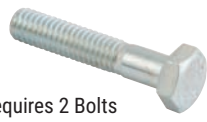
Weld Plate



Code	A10	Description	Price
1120001180		SP 7 M W2	3.95

Standard Polypropylene Clamps, Group 7

Bolt x 1



■ Requires 2 Bolts

Code	A10	Description	Price
1130004026		AS-M6X100-DIN931/933-8.8-W3	0.70

Clamps

Manufactured to DIN3015.



Heavy Duty Polypropylene Clamps, Group 3S

Complete Clamps

Code	A10	Description	OD mm	Price
1110002493		SPAL 3006 PP-DPAL-AS M W12	6.0	9.75
1110002494		SPAL 3006,4 PP-DPAL-AS M W12	6.4	9.75
1110002495		SPAL 3008 PP-DPAL-AS M W12	8.0	9.75
1110002496		SPAL 3009,5 PP-DPAL-AS M W12	9.5	9.75
1110002497		SPAL 3010 PP-DPAL-AS M W12	10.0	9.75
1110002499		SPAL 3012 PP-DPAL-AS M W12	12.0	9.75
1110002500		SPAL 3012,7 PP-DPAL-AS M W12	12.7	9.75
1110002501		SPAL 3013,5 PP-DPAL-AS M W12	13.5	9.75
1110002502		SPAL 3014 PP-DPAL-AS M W12	14.0	9.75
1110002503		SPAL 3015 PP-DPAL-AS M W12	15.0	9.75
1110002504		SPAL 3016 PP-DPAL-AS M W12	16.0	9.75
1110002505		SPAL 3017,2 PP-DPAL-AS M W12	17.2	9.75
1110002506		SPAL 3018 PP-DPAL-AS M W12	18.0	9.75



Heavy Duty Polypropylene Clamps, Group 3S

Jaws x 2

Code	A10	Description	OD mm	Price
1130005430		3006 PP	6.0	2.65
1130005433		3006,4 PP	6.4	2.65
1130005436		3008 PP	8.0	2.65
1130005439		3009,5 PP	9.5	2.65
1130005442		3010 PP	10.0	2.65
1130005447		3012 PP	12.0	2.65
1130005453		3012,7 PP	12.7	2.65
1130005459		3013,5 PP	13.5	2.65
1130005466		3014 PP	14.0	2.65
1130005471		3015 PP	15.0	2.65
1130005479		3016 PP	16.0	2.65
1130005485		3017,2 PP	17.2	2.65
1130005491		3018 PP	18.0	2.65



Heavy Duty Polypropylene Clamps, Group 3S

Top Plate

Code	A10	Description	Price
1130000706		DPAL 3 S W2	1.75



Heavy Duty Polypropylene Clamps, Group 3S

Weld Plate

Code	A10	Description	Price
1120001947		M10 x 45	4.45



Heavy Duty Polypropylene Clamps, Group 3S

Bolt x 1

■ Requires 2 Bolts

Code	A10	Description	Price
1130004180		M10 x 45	0.50

Manufactured to DIN3015.



Heavy Duty Polypropylene Clamps, Group 4S

Complete Clamps

Code	A10	Description	OD mm	Price
1110002510		SPAL 4019 PP-DPAL-AS M W12	19.0	11.60
1110002511		SPAL 4020 PP-DPAL-AS M W12	20.0	11.60
1110002512		SPAL 4021,3 PP-DPAL-AS M W12	21.3	11.60
1110002513		SPAL 4022 PP-DPAL-AS M W12	22.0	11.60
1110002517		SPAL 4025 PP-DPAL-AS M W12	25.0	11.60
1110002518		SPAL 4025,4 PP-DPAL-AS M W12	25.4	9.30
1110002519		SPAL 4026,9 PP-DPAL-AS M W12	26.9	11.60
1110002520		SPAL 4028 PP-DPAL-AS M W12	28.0	11.60
1110002522		SPAL 4030 PP-DPAL-AS M W12	30.0	11.60



Heavy Duty Polypropylene Clamps, Group 4S

Jaws x 2

Code	A10	Description	OD mm	Price
1130005680		4019 PP	19.0	3.30
1130005688		4020 PP	20.0	3.30
1130005699		4021,3 PP	21.3	3.30
1130005707		4022 PP	22.0	3.30
1130005718		4025 PP	25.0	3.30
1130005726		4025,4 PP	25.4	3.30
1130005733		4026,9 PP	26.9	3.30
1130005741		4028 PP	28.0	3.30
1130005748		4030 PP	30.0	3.30



Heavy Duty Polypropylene Clamps, Group 4S

Top Plate

Code	A10	Description	Price
1130000710		DPAL 4 S W2	1.95



Heavy Duty Polypropylene Clamps, Group 4S

Weld Plate

Code	A10	Description	Price
1120001950		SPAL 4 S M W2	5.05



Heavy Duty Polypropylene Clamps, Group 4S

Bolt x 1

- Requires 2 Bolts

Code	A10	Description	Price
1130004181		M10 x 60	0.70

Clamps

Manufactured to DIN3015.

Heavy Duty Polypropylene Clamps, Group 5S

Complete Clamps



Code	A10	Description	OD mm	Price
1110002529		SPAL 5030 PP-DPAL-AS M W12	30.0	13.90
1110002531		SPAL 5032 PP-DPAL-AS M W12	32.0	13.90
1110002533		SPAL 5033,7 PP-DPAL-AS M W12	33.7	13.90
1110002535		SPAL 5035 PP-DPAL-AS M W12	35.0	13.90
1110002539		SPAL 5038 PP-DPAL-AS M W12	38.0	13.90
1110002540		SPAL 5040 PP-DPAL-AS M W12	40.0	13.90
1110002541		SPAL 5042 PP-DPAL-AS M W12	42.0	13.90

Heavy Duty Polypropylene Clamps, Group 5S

Jaws x 2



Code	A10	Description	OD mm	Price
1130005866		5030 PP	30.0	4.80
1130005875		5032 PP	32.0	4.80
1130005887		5033,7 PP	33.7	4.80
1130005897		5035 PP	35.0	4.80
1130005911		5038 PP	38.0	4.80
1130005925		5040 PP	40.0	4.80
1130005933		5042 PP	42.0	4.80

Heavy Duty Polypropylene Clamps, Group 5S

Top Plate



Code	A10	Description	Price
1130000714		DPAL 5 S W2	2.35

Heavy Duty Polypropylene Clamps, Group 5S

Weld Plate



Code	A10	Description	Price
1120000848		SPAL 5 S M W2	5.50

Heavy Duty Polypropylene Clamps, Group 5S

Bolt x 1



- Requires 2 Bolts

Code	A10	Description	Price
1130004183		AS-M10X70	0.70

Manufactured to DIN3015.



Heavy Duty Polypropylene Clamps, Group 6S

Complete Clamps

Code	A10	Description	OD mm	Price
1110002546		SPAL 6038 PP-DPAL-AS M W12	38.0	30.50
1110002548		SPAL 6042 PP-DPAL-AS M W12	42.0	30.50
1110002550		SPAL 6044,5 PP-DPAL-AS M W12	44.5	30.50
1110002553		SPAL 6048,3 PP-DPAL-AS M W12	48.3	30.50
1110002555		SPAL 6050,8 PP-DPAL-AS M W12	50.8	30.50
1110002560		SPAL 6055 PP-DPAL-AS M W12	55.0	30.50
1110002562		SPAL 6057 PP-DPAL-AS M W12	57.0	30.50
1110002564		SPAL 6060,3 PP-DPAL-AS M W12	60.3	30.50
1110002569		SPAL 6063,5 PP-DPAL-AS M W12	63.5	30.50
1110002571		SPAL 6065 PP-DPAL-AS M W12	65.0	30.50
1110002572		SPAL 6070 PP-DPAL-AS M W12	70.0	30.50



Heavy Duty Polypropylene Clamps, Group 6S

Jaws x 2

Code	A10	Description	OD mm	Price
1130003097		6038 PP	38.0	9.75
1130003101		6042 PP	42.0	9.75
1130003102		6044,5 PP	44.5	9.75
1130003103		6048,3 PP	48.3	9.75
1130003106		6050,8 PP	50.8	9.75
1130003108		6055 PP	55.0	9.75
1130003109		6057 PP	57.0	9.75
1130003113		6060,3 PP	60.3	9.75
1130003114		6063,5 PP	63.5	9.75
1130003115		6065 PP	65.0	9.75
1130003116		6070 PP	70.0	9.75



Heavy Duty Polypropylene Clamps, Group 6S

Top Plate

Code	A10	Description	Price
1130000718		DPAL 6 S W2	4.80



Heavy Duty Polypropylene Clamps, Group 6S

Weld Plate

Code	A10	Description	Price
1120001955		SPAL 6 S M W2	13.20



Heavy Duty Polypropylene Clamps, Group 6S

Bolt x 1

- Requires 2 Bolts

Code	A10	Description	Price
1130004184		M12 x 100	1.45

Clamps

Manufactured to DIN3015.



Heavy Duty Polypropylene Clamps, Group 7S

Complete Clamps

Code	A10	Description	OD mm	Price
1110002579		SPAL 7065 PP-DPAL-AS M W12	65.0	68.30
1110002580		SPAL 7070 PP-DPAL-AS M W12	70.0	68.30
1110002582		SPAL 7073 PP-DPAL-AS M W12	73.0	71.10
1110002583		SPAL 7075 PP-DPAL-AS M W12	75.0	68.30
1110002584		SPAL 7076,1 PP-DPAL-AS M W12	76.1	68.30
1110002587		SPAL 7080 PP-DPAL-AS M W12	80.0	69.25
1110002588		SPAL 7082,5 PP-DPAL-AS M W12	82.5	68.30
1110002589		SPAL 7088,9 PP-DPAL-AS M W12	88.9	48.65



Heavy Duty Polypropylene Clamps, Group 7S

Jaws x 2

Code	A10	Description	OD mm	Price
1130006183		7065 PP	65.0	28.95
1130006187		7070 PP	70.0	28.95
1130006191		7073 PP	73.0	31.80
1130006192		7075 PP	75.0	28.95
1130006196		7076,1 PP	76.1	28.95
1130006200		7080 PP	80.0	29.95
1130006203		7082,5 PP	82.5	28.95
1130006211		7088,9 PP	88.9	28.95



Heavy Duty Polypropylene Clamps, Group 7S

Top Plate

Code	A10	Description	Price
1130000722		DPAL 7 S W2	10.80



Heavy Duty Polypropylene Clamps, Group 7S

Weld Plate

Code	A10	Description	Price
1120001956		SPAL 7 S M W2	22.45



Heavy Duty Polypropylene Clamps, Group 7S

Bolt x 1

■ Requires 2 Bolts

Code	A10	Description	Price
1130004186		M16 x 130	3.10

Manufactured to DIN3015.

Twin Standard Polypropylene Clamps, Group 1D

Complete Clamps



Code	A10	Description	OD mm	Price
1110003996		SP 106/06 PP-GD-AS M W10	6.0	2.60
1110003997		SP 106,4/6,4 PP-GD-AS M W10	6.4	2.60
1110003998		SP 108/08 PP-GD-AS M W10	8.0	2.60
1110003999		SP 109,5/9,5 PP-GD-AS M W10	9.5	2.60
1110004001		SP 110/10 PP-GD-AS M W10	10.0	2.95
1110004005		SP 112/12 PP-GD-AS M W10	12.0	2.60

Twin Standard Polypropylene Clamps, Group 1D

Jaws x 2



Code	A10	Description	OD mm	Price
1130005070		106/06 PP	6.0	0.70
1130005062		106,4/6,4 PP	6.4	0.70
1130005092		108/08 PP	8.0	0.70
1130005113		109,5/9,5 PP	9.5	0.65
1130005139		110/10 PP	10.0	1.05
1130005173		112/12 PP	12.0	0.70

Twin Standard Polypropylene Clamps, Group 1D

Top Plate



Code	A10	Description	Price
1130000763		GD 1 D W3	0.85

Twin Standard Polypropylene Clamps, Group 1D

Weld Plate



Code	A10	Description	Price
1120002535		SP 1 D M W2	2.30

Twin Standard Polypropylene Clamps, Group 1D

Bolt x 1



Code	A10	Description	Price
1130004021		AS-M6X35-DIN931/933-8.8-W3	0.45

Manufactured to DIN3015.

Standard Polypropylene Clamps, Group 2D

Complete Clamps



Code	A10	Description	OD mm	Price
1110004010		SP 212,7/12,7 PP-GD-AS M W10	12.7	3.35
1110004011		SP 213,5/13,5 PP-GD-AS M W10	13.5	3.35
1110004012		SP 214/14 PP-GD-AS M W10	14.0	3.35
1110004015		SP 215/15 PP-GD-AS M W10	15.0	3.35
1110004017		SP 216/16 PP-GD-AS M W10	16.0	3.35
1110004019		SP 217,2/17,2 PP-GD-AS M W10	17.2	3.35
1110004022		SP 218/18 PP-GD-AS M W10	18.0	3.35

Standard Polypropylene Clamps, Group 2D

Jaws x 2



Code	A10	Description	OD mm	Price
1130005243		212,7/12,7 PP	12.7	0.85
1130005265		213,5/13,5 PP	13.5	0.85
1130005284		214/14 PP	14.0	0.85
1130005322		215/15 PP	15.0	0.85
1130005360		216/16 PP	16.0	0.85
1130005376		217,2/17,2 PP	17.2	0.85
1130005410		218/18 PP	18.0	0.85

Standard Polypropylene Clamps, Group 2D

Top Plate



Code	A10	Description	Price
1130000764		GD 2 D W3	0.60

Standard Polypropylene Clamps, Group 2D

Weld Plate



Code	A10	Description	Price
1120002537		SP 2 D M W2	1.60

Standard Polypropylene Clamps, Group 2D

Bolt x 1



Code	A10	Description	Price
1130004280		AS-M8X35-DIN931/933-8.8-W3	0.20

Clamps

Manufactured to DIN3015.

Twin Standard Polypropylene Clamps, Group 3D

Complete Clamps



Code	A10	Description	OD mm	Price
1110004023		SP 319/19 PP-GD-AS M W10	19.0	3.90
1110004026		SP 320/20 PP-GD-AS M W10	20.0	3.90
1110004027		SP 321,3/21,3 PP-GD-AS M W10	21.3	3.90
1110004033		SP 322/22 PP-GD-AS M W10	22.0	3.90
1110004039		SP 325/25 PP-GD-AS M W10	25.0	3.90
1110024580		SP 325,4/25,4 PP-GD-AS M W10	25.4	6.30

Twin Standard Polypropylene Clamps, Group 3D

Jaws x 2



Code	A10	Description	OD mm	Price
1130005526		319/19 PP	19.0	1.15
1130005554		320/20 PP	20.0	1.15
1130005570		321,3/21,3 PP	21.3	1.15
1130005603		322/22 PP	22.0	1.15
1130005659		325/25 PP	25.0	1.15
1130005644		325,4/25,4 PP	25.4	2.20

Twin Standard Polypropylene Clamps, Group 3D

Top Plate



Code	A10	Description	Price
1130000765		GD 3 D W3	0.65

Twin Standard Polypropylene Clamps, Group 3D

Weld Plate



Code	A10	Description	Price
1120002539		SP 3 D M W2	1.80

Twin Standard Polypropylene Clamps, Group 3D

Bolt x 1



Code	A10	Description	Price
1130004281		AS-M8X45-DIN931/933-8.8-W3	0.25

Mounting Rail and Hexagon Rail Nut

Mounting rail, type TS 11/14/30 is suitable for use with all twin series and standard series group sizes. The hexagon rail nut, type SM is to be used in conjunction with the mounting rail.

Channel Rail Adaptor

The channel rail adaptor, type CRA is suitable for use with various channel rails, including types from Halfen, Hilti, Unistrut® and Cushion Clamp series.

Materials

Unless otherwise stated, all metal parts (e.g. weld plates, cover plates, bolts, rail nuts, etc.) are made of carbon steel St37. All metal parts are available in stainless steel:

Stainless Steel V2A

- Material Code: W4

Stainless Steel V4A

- Material Code: W5

Surface Finishings

Unless otherwise stated, all metal parts made of carbon steel St37 are available with the following standard surface finishings:

Untreated

- Material Code: W1

Phosphated

- Material Code: W2

Zinc/Nickel-plated

- Material Code: W3

Individual combinations of alternative materials and surface finishes are available upon request.
Consult us for further information.

Manufactured to DIN3015.

Twin Standard Polypropylene Clamps, Group 5D

Complete Clamps



Code	A10	Description	OD mm	Price
1110004049		SP 532/32 PP-GD-AS M W10	32.0	6.00
1110007363		SP 533,7/33,7 PP-GD-AS M W10	33.7	6.70
1110004053		SP 535/35 PP-GD-AS M W10	35.0	6.00
1110004055		SP 538/38 PP-GD-AS M W10	38.0	6.00
1110004057		SP 540/40 PP-GD-AS M W10	40.0	6.00
1110004061		SP 542/42 PP-GD-AS M W10	42.0	6.65

Twin Standard Polypropylene Clamps, Group 5D

Jaws x 2



Code	A10	Description	OD mm	Price
1130005971		532/32 PP	32.0	2.15
1130005988		533,7/33,7 PP	33.7	3.00
1130006016		535/35 PP	35.0	2.30
1130006042		538/38 PP	38.0	2.30
1130006059		540/40 PP	40.0	2.30
1130006078		542/42 PP	42.0	2.85

Twin Standard Polypropylene Clamps, Group 5D

Top Plate



Code	A10	Description	Price
1130000763		GD 5 D W3	0.85

Twin Standard Polypropylene Clamps, Group 5D

Weld Plate



Code	A10	Description	Price
1120002535		SP 5 D M W2	2.30

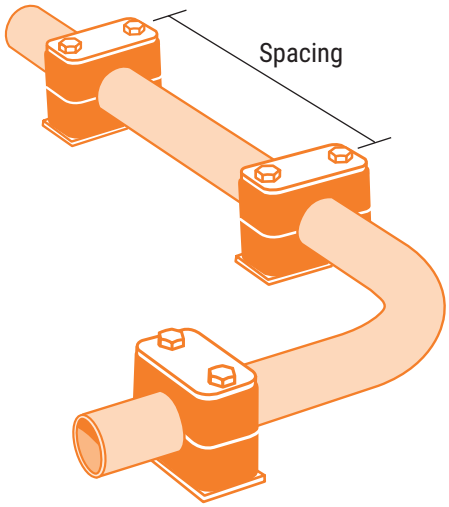
Twin Standard Polypropylene Clamps, Group 5D

Bolt x 1



Code	A10	Description	Price
1130004021		AS-M8X60-DIN931/933-8.8-W3	0.45

Clamp spacing



Please note the following information on the installation of clamps next to pipe bends, fittings and/or valves:

- Pipe bends should be supported by clamps positioned as close to the bends as possible
- If fittings and/or valves are incorporated in the pipeline system, it is recommended that support is provided by clamps located directly next to these components to protect them from vibrations

Pipe OD mm	Spacing metres
6 to 12.7	1
12.7 to 22	1.2
22 to 32	1.5
32 to 38	2
38 to 57	2.7
57 to 75	3
75 to 76.1	3.5
76.1 to 88.9	3.7
88.9 to 102	4
102 to 114	4.5

Pipe OD mm	Spacing metres
114 to 168	5
168 to 219	6
219 to 324	6.7
324 to 356	7
356 to 406	7.5
406 to 419	8.2
419 to 508	8.5
508 to 521	9
521 to 558	10
558 to 800	12.5

Hydraulic Tank Accessories

Thermoplastic level gauge made from high density, transparent polyamide resin, which provides good mechanical resistance and is impervious to oil, gasoline, lubricants, minerals, petroleum, solvents and most chemicals (technical tables of chemical resistance available on request).

Avoid contact with alcohol, ethanol, methanol and cooling agents with high concentration of glycol. Excellent dimensional stability at low and high temperatures. These level gauges are used in oil and fuel tanks of many types, due to their ability to remain clear in the majority of conditions.

Model SLVT is equipped with an inside thermometer, scaled in degrees Celsius (0°C to +100°C) and Fahrenheit (+50°F to +200°F).

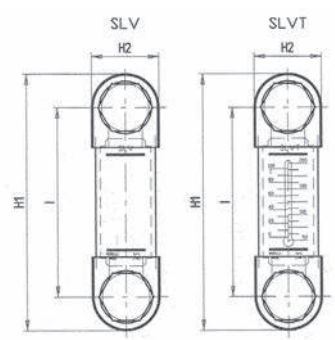
Model SLV/210 features three bolts, a flat rubber seal on the back and an adjustable min/max indicator.

- Maximum temperature: +100°C
- Maximum working pressure: 4 bar

Oil Level Indicator

Plastic Housing

Code	N16	l	H1	H2	Bolt	Price
SLV/76		76	103	27	M10	**18.05**
SLV/127		127	154	27	M12	**22.85**
SLVT/76		76	103	27	M10	**22.30**
SLVT/127		127	154	27	M12	**30.95**





Vertical level gauges made from thermoplastic body (polyamide resin) and protective metal case made from pressed steel, with a black painted finish. The transparent body provides good mechanical resistance and is impervious to oil, gasoline, solvents and most chemicals (technical table of chemical resistance available on request). Gauges are also UV resistant and retain transparency under most climatic conditions. Excellent dimensional stability at low and high temperatures.

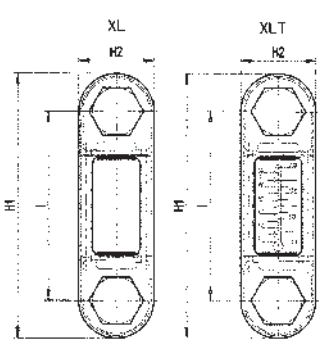
Model XLT is equipped with an inside thermometer, scaled in degrees Celsius (0°C to +100°C) and Fahrenheit (+50°F to +200°F).

- Maximum temperature: +100°C
- Maximum working pressure: 4 bar (58 psi)

Oil Level Indicator

Metal Housing

Code	N16	l	H1	H2	Bolt	Price
XL/03/M10		76	107	31	M10	**7.40**
XL/03/M12		76	107	31	M12	**7.75**
XL/05/M10		127	156	31	M10	**8.10**
XL/05/M12		127	156	31	M12	**8.10**
XL/10/M12		254	280	34	M12	**12.65**
XL/03T/M10		76	107	31	M10	**8.75**
XL/03T/M12		76	107	31	M12	**8.70**
XL/05T/M10		127	156	31	M10	**9.40**
XL/05T/M12		127	156	31	M12	**8.85**
XL/10T/M12		254	280	34	M12	**13.95**





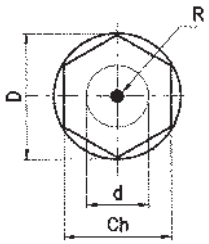
Hydraulic Tank Accessories

Threaded oil level indicators, hex head with shoulder. Utilised in oil tanks, gearboxes and general machinery. Made from high density, transparent polyamide resin, which provides good mechanical resistance and is impervious to oil, gasoline, lubricants, minerals, petroleum, solvents and most chemicals (technical tables of chemical resistance available on request). Avoid contact with alcohol, ethanol, methanol and cooling agents with high concentrations of glycol.

- Dimensional stability up temperatures of: +100°C
- Maximum working pressure: 3 bar (43 psi)

Oil Level Sight Glass

Transparent Polyamide





Code	N16	BSPP F	CH	D	d	Price
SLNS-14		G1/4"	17	20	15	1.20
SLNS-38		G3/8"	18	22	14	1.35
SLNS-12		G1/2"	24	28	16	1.50
SLNS-34		G3/4"	30	35	21	2.00
SLNS-1		G1"	35	43	32	2.75
SLNS-114		G1.1/4"	42	51	33	5.25
SLNS-112		G1.1/2"	50	58	40	6.40
SLNS-2		G2"	64	74	48	8.80

Threaded hex head level indicators manufactured from aluminium 115. Sight glass manufactured from transparent polyamide resin, which provides good mechanical resistance and is impervious to oil, gasoline, lubricants, minerals, petroleum, solvents and most chemicals (technical tables of chemical resistance available on request). Avoid contact with alcohol, ethanol, methanol and cooling agents with high concentration of glycol.

Back contrast screen made in white plastic or aluminium depending on size. Flat asbestos-free seal. Aluminium washer also available.

Special HP (High Pressure) version has sight glasses made in float clear glass, suggested to be utilised on screw air compressors (manufacturing drawing and testing certification available on request).

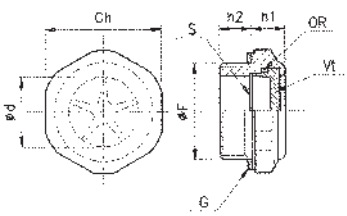
- Maximum operating temperature: +100°C
- Maximum working pressure: 10 bar (145 psi)

HP version:

- Maximum operating temperature: +150°C
- Maximum working pressure: 20 bar (290 psi)

Oil Level Sight Glass

Aluminium





Code	N16	Thread BSPP F	Ch	d	h1	h2	Price
SM-14		G1/4"	18	11	10.0	7	2.60
SM-38		G3/8"	22	12	8.0	9	3.80
SM-12		G1/2"	27	15	8.0	9	4.85
SM-12/HP		G1/2"	27	12	11.0	9	5.45
SM-34		G3/4"	34	19	9.0	11	4.80
SM-34/HP		G3/4"	34	16	10.0	11	6.35
SM-1		G1"	40	27	10.5	11	5.50
SM-1/HP		G1"	40	24	11.0	11	12.10
SM-114		G1.1/4"	50	35	12.0	12	6.75
SM-22.15		M22 x 1.5	27	15	8.0	9	3.30

Hydraulic Tank Accessories

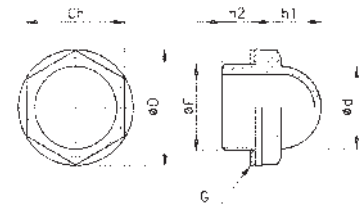
Threaded oil level indicators, hex head with shoulder. Utilised in oil tanks, gearboxes and general machinery. Made from high density transparent polyamide resin, which provides good mechanical resistance and is impervious to oil, gasoline, lubricants, minerals, petroleum, solvents and most chemicals (technical tables of chemical resistance available on request). Avoid contact with alcohol, ethanol, methanol and cooling agents with high concentration of glycol.

- Dimensional stability up to temperatures of: +100°C
- Maximum working pressure: 3 bar (43 psi)

Oil Level Sight Glass

Dome Shaped, Transparent Polyamide

Code	N16	Thread BSPP F	Ch	D	d1	h1	d2	Price
LSB/38		G3/8"	19	22	15	16	10.0	**1.35**
LSB/12		G1/2"	24	28	20	17	10.0	**1.35**
LSB/34		G3/4"	30	35	25	20	10.0	**2.00**
LSB/1		G1"	36	42	31	24	10.5	**2.50**



G – fiber gasket



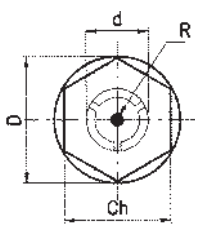
Threaded oil level indicators, hex head with shoulder. Utilised in oil tanks, gearboxes and general machinery. Made from high density, transparent polyamide resin, which provides good mechanical resistance and is impervious to oil, gasoline, lubricants, minerals, petroleum, solvents and most chemicals (technical tables of chemical resistance available on request). Avoid contact with alcohol, ethanol, methanol and cooling agents with high concentration of glycol.

- Dimensional stability up to temperatures of: +100°C
- Maximum working pressure: 3 bar (43 psi)

Oil Level Sight Glass

Transparent Polyamide

Code	N16	Thread BSPP F	Ch	D	d	Price
SLNT-38		G3/8"	18	22	14	**1.65**
SLNT-12		G1/2"	24	28	16	**1.80**
SLNT-34		G3/4"	30	35	21	**2.50**
SLNT-1		G1"	35	43	32	**3.25**
SLNT-114		G1.1/4"	42	51	33	**5.20**
SLNT-112		G1.1/2"	50	58	40	**6.35**
SLNT-2		G2"	64	74	48	**8.95**





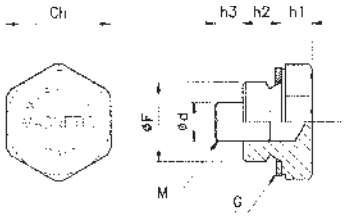
Hydraulic Tank Accessories

Hex plug manufactured from aluminium 11S, complete with asbestos-free flat seal (aluminium washer available as an option). Equipped with a pressed-in cylindrical magnet located in the base of the plug.

These plugs are fitted to the bottom of the reservoir/tank and will collect ferrous particles floating in the oil, helping to protect pumps, valves and cylinders. The plug comes with the text 'magnetic' on the hex surface.

Aluminium Drain Plug

Magnetic





Code	N16	Thread BSPP F	Ch	d	h2	h1	h3	Price
TMA-14		G1/4"	18	5	7	10	6	3.85
TMA-38		G3/8"	22	8	7	10	7	5.30
TMA-12		G1/2"	27	10	8	10	7	5.60
TMA-34		G3/4"	34	13	8	10	7	9.45
TMA-1		G1"	40	13	8	14	7	11.95

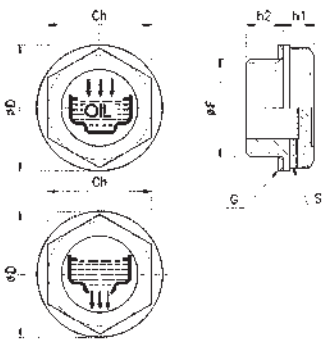
Hex threaded oil fill plugs in thermoplastic material (polyamide 66) ensuring high mechanical resistance at both low and higher temperatures, dimensional stability and shock resistance. Flat asbestos free oil resistant seal (rubber seal available on request).

Plugs have the UNI fill symbol, the UNI drain symbol and the word 'oil' moulded on the top.

- Maximum operating temperature: +100°C

Oil Drain Plug

Thermoplastic



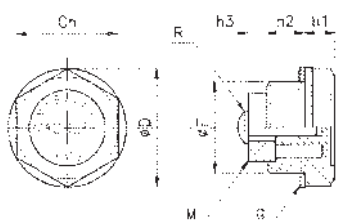


Code	N16	BSPP F	CH	D	h2	h1	Price
TSN-14		G1/4"	17	19.5	9	7.0	0.45
TSN-38		G3/8"	18	22	10	7.5	0.50
TSN-12		G1/2"	24	28	11	7.5	0.60
TSN-34		G3/4"	30	34	11	9.0	0.80
TSN-1		G1"	35	42	12	10.5	1.10
TSN-114		G1.1/4"	42	51	13.5	12.0	1.65
TSN-112		G1.1/2"	50	58	16	10.0	1.80
TSN-2		G2"	64	74	16	12.0	3.05

Thermoplastic hex plug with magnet. The plug is fitted to the bottom of the transmission or tank to be used as drain plug and will attract ferrous metal parts, preventing damage to gears and other moving components. Black material with 'magnetic' marked on the hex surface. Oil resistant asbestos-free seal.

Oil Drain Plug

Magnetic





Code	N16	Thread BSPP F	Ch	D	h2	h1	h3	Price
TM-14		G1/4"	17	20	9	7.0	5.0	1.75
TM-38		G3/8"	18	22	10	7.5	10.0	2.25
TM-12		G1/2"	24	27	11	8.0	9.0	2.55
TM-34		G3/4"	30	34	11	9.0	6.5	3.40
TM-1		G1"	35	42	12	10.5	14.0	4.45

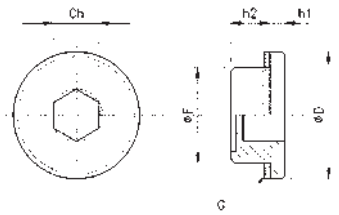
Hydraulic Tank Accessories

Socket style low profile threaded plugs, made from reinforced thermoplastic material with 30% fibreglass providing an excellent mechanical resistance at both low and high temperatures. Flat asbestos-free seal (optional flat rubber seal or o-ring available on request). For tightening torques (Nm) contact us.

- Maximum operating temperature: +100°C

Low Profile Plug

Thermoplastic





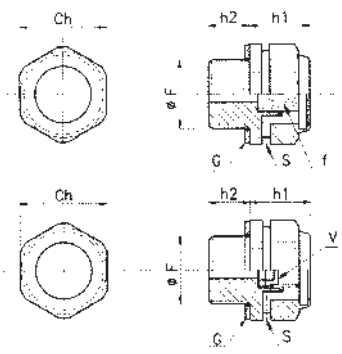
Code	N16	Thread BSPP F	Ch	D	h2	h1	Price
TCNB-14		G1/4"	6	18.0	8.0	2.5	**0.65**
TCNB-38		G3/8"	8	22.5	10.5	3.5	**0.50**
TCNB-12		G1/2"	10	28.5	10.5	3.5	**0.60**
TCNB-34		G3/4"	12	35.0	10.5	4.0	**0.80**

Threaded metal plugs made from brass with asbestos-free flat seal (aluminium washers available). Two breather holes are located under the hex head providing an adequate airflow capacity.
Plug equipped with metal filter inside (filtration degree 50µ) to avoid pollution of the oil.

Plug is used when venting of the reservoir is required, in case of over-pressurisation. The pre-tensioned spring of the valve will allow the valve disc to be lifted from its seat at a pressure of 0.20 to 0.25 bar (3 to 3.6 psi) thus allowing the air to escape. When the pressure is reduced after venting, the valve will close and stop air entering the reservoir. It will also prevent oil overflow through the plug's valve due to oil movement whilst in the closed position. These plugs are applied in gear reducers, gearboxes, bearing housings and transmissions of all kinds.

Brass Filler Plug

Vent Valve





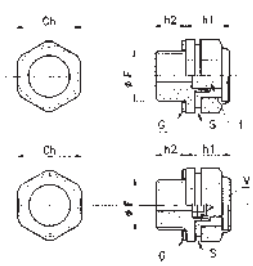
Code	N16	Thread BSPP F	Ch	h1	h2	Price
KMV-14		G1/4"	18	13	9	**4.60**
KMV-38		G3/8"	22	14	10	**5.40**
KMV-12		G1/2"	27	14	10	**5.90**

Threaded metal plugs made from brass with asbestos-free flat seal (aluminium washers available). Two breather holes are located under the hex head, providing an adequate airflow capacity.

Plug has metal filter inside (filtration degree 50µ) to avoid pollution of the oil. Plug is used when venting of the reservoir is required, in case of over-pressurisation. The pre-tensioned spring of the valve will allow the valve disc to be lifted from its seat at a pressure of 0.20 to 0.25 bar (3 to 3.6 psi) thus allowing the air to escape. When the pressure is reduced after venting, the valve will close and stop air entering the reservoir. It will also prevent oil overflow through the plug's valve due to oil movement whilst in the closed position. The plugs are applied in gear reducers, gearboxes, bearing housings and transmissions of all kinds.

Brass Filter Plug

Filter





Code	N16	Thread BSPP F	Ch	h1	h2	Price
KMF-14		G1/4"	18	13	9	**4.60**
KMF-38		G3/8"	22	14	10	**5.55**
KMF-12		G1/2"	27	14	10	**6.30**

Hydraulic Tank Accessories

Hex threaded black plug made from polyamide 66, with white zinc-plated dipstick. Asbestos-free flat oil resistant seal. UNI fill symbol and word 'oil' moulded in plug. Breather hole located in the side of the knurled head, with a diameter from 2 to 3.5mm, depending on the size of the plug.

The standard dipstick is 200mm in length. On a quantity of at least 250 pieces, they can be manufactured to the customer's specific length, and min/max notches can be placed in the desired position.

Maximum Working Temperature:

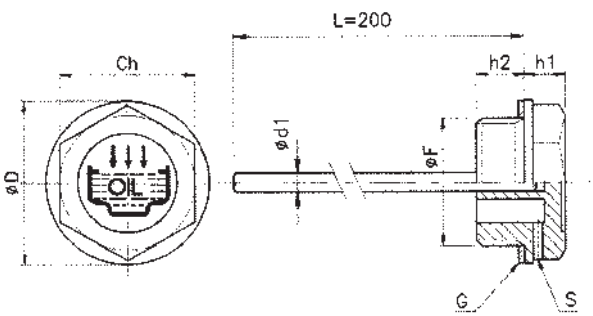
- +100°C



Hex Plug

Dipstick and Breather Hole

Code N16	Thread BSPP F	Ch	D	H1	H2	d1	Price
TCAS-14	G1/4"	17	19	7	9.0	4	**1.15**
TCAS-38	G3/8"	18	22	7.5	10.0	4	**1.20**
TCAS-12	G1/2"	24	28	7.5	11.0	4	**1.30**
TCAS-34	G3/4"	30	34	9	11.0	5	**1.55**
TCAS-1	G1"	35	42	10.5	12.0	5	**2.00**
TCAS-114	G1.1/4"	42	51	12	13.5	5	**2.60**
TCAS-2	G1.1/4"	42	51	12	13.5	5	**3.90**



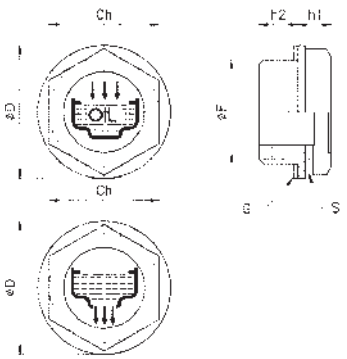
Hydraulic Tank Accessories

Hex threaded oil fill plugs in thermoplastic material (polyamide 66) ensuring high mechanical resistance at both low and higher temperatures, dimensional stability and shock resistance. Flat asbestos free oil resistant seal (rubber seal available on request). UNI fill symbol, UNI drain symbol and the word 'oil' moulded on the top.

- Maximum operating temperature: +100°C

Oil Filler Plug

Thermoplastic





Code	N16	Thread BSPP F	Ch	D	h2	h1	Price
TCN-14		G1/4"	17	19.5	9.0	7.0	**0.45**
TCN-38		G3/8"	18	22	10.0	7.5	**0.50**
TCN-12		G1/2"	24	28	11.0	7.5	**0.60**
TCN-34		G3/4"	30	34	11.0	9.0	**0.80**
TCN-1		G1"	35	42	12.0	10.5	**1.10**
TCN-114		G1.1/4"	42	51	13.5	12.0	**1.65**
TCN-112		G1.1/2"	50	58	16.0	10.0	**1.80**
TCN-2		G2"	64	74	16.0	12.0	**3.05**

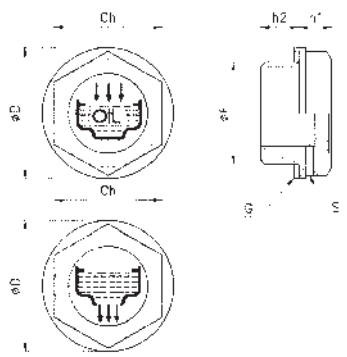
Hex threaded oil fill plugs in thermoplastic material (polyamide 66) ensuring high mechanical resistance at both low and higher temperatures, dimensional stability and shock resistance. Flat asbestos free oil resistant seal (rubber seal available on request).

UNI fill symbol and the word 'oil' moulded on the top. Plug has a breather hole located in the side of the hex with a diameter from 2 to 3.5mm, depending on the plug size.

- Maximum operating temperature: +100°C

Oil Filler Plug

Breather Hole





Code	N16	Thread BSPP F	Ch	D	h2	h1	Price
TCNS-14		G1/4"	17	19.5	9.0	7.0	**0.50**
TCNS-38		G3/8"	18	22.0	10.0	7.5	**0.55**
TCNS-12		G1/2"	24	28.0	11.0	7.5	**0.65**
TCNS-34		G3/4"	30	34.0	11.0	9.0	**0.90**
TCNS-1		G1"	35	42.0	12.0	10.5	**1.15**
TCNS-114		G1.1/4"	42	51.0	13.5	12.0	**1.70**
TCNS-112		G1.1/2"	50	58.0	16.0	10.0	**2.20**
TCNS-2		G2"	64	74.0	16.0	12.0	**3.15**

Hydraulic Tank Accessories

Filler breather with strainer basket for tank top installation.

Assembly contains three parts: top cap, main body and strainer basket.

Top cap with breather made from polyamide 66, black colour. Inside the cap is the polyurethane filter with a Micron rating of 50 microns. The cap has an internal thread and screws onto the main body, located in the tank.

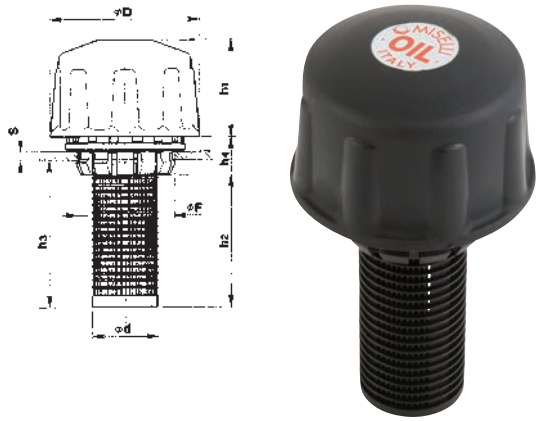
Main body, manufactured from black technopolymer, contains threaded locking ring and inside locking ring. The main body is placed in a pre-drilled hole (minimum 55mm, maximum 55.3mm diameter) in the top of the reservoir. The wall thickness must not exceed 8mm and not be less than 2mm. Drilling and tapping of mounting holes is not needed. A safety chain is available, which connects the cap to the body, preventing misplacement of cap when removed.

- Strainer basket material: polypropylene (black)
- Maximum operating temperature: +80°C to +90°C
- Seal between tank and main body: o-ring 70 shore
- Airflow capacity: 50 mbar (0.73 psi) = 300 litres/minute

Filler Breather

Strainer, Tank Top Mount

Code	N16	Description	Price
CTR		55mm Hole	14.25
CTR/C		55mm Hole with Safety Chain	15.65



Filler breather for tank-top installation, with strainer basket.

Assembly contains three parts: top cap, main body and strainer basket.

Breather cap with vertical ribs for easy tightening. Made from polyamide 66 with built-in polyurethane foam filter element (50 microns). The cap is female threaded and threads onto the main body located in the tank top. Red lid available with or without inscription: 'oil' or 'gasoil'. A safety chain is available on the CTR-2/C model, which connects the cap to the body.

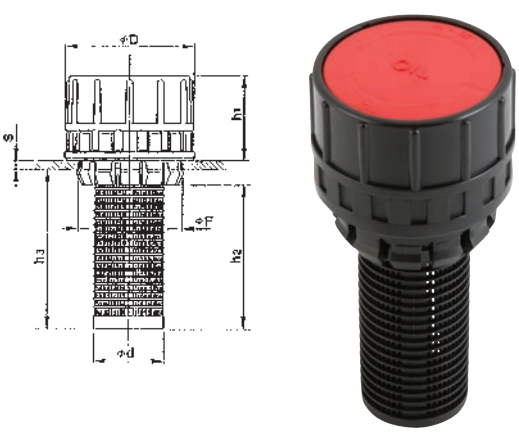
Main body manufactured from black technopolymer. The inside locking ring has to be removed to insert the main body into a pre-drilled hole in the tank-top (0.55mm ±0.3mm). Once inserted, the inside locking ring has to be installed and the external locking ring can be tightened. Tank top thickness should be a minimum 2mm, maximum 8mm.

- Strainer basket material: polypropylene (black)
- Maximum operating temperature: +90°C
- Seal between tank and main body: o-ring 70 shore
- Airflow capacity: 50 mbar (0.73 psi) = 100 litres/minute

Filler Breather

Strainer, Tank Top Mount

Code	N16	Description	Price
CTR-2		55mm Hole	11.00
CTR-2/C		55mm Hole with Safety Chain	11.45



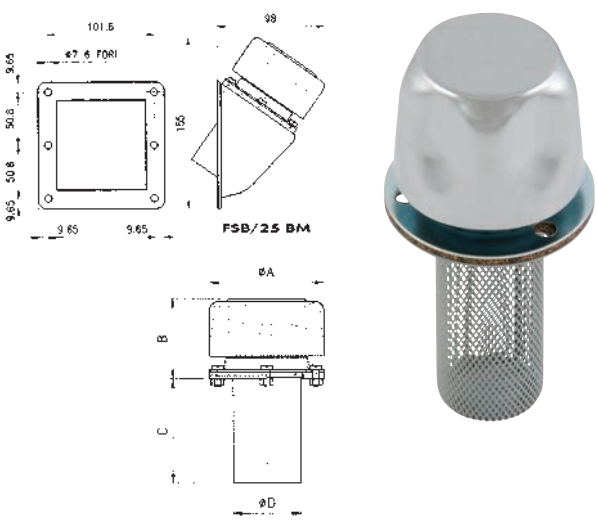
Chrome-plated steel ventilated cap. Polyurethane filter element (40 microns). Base is flange mounted with six bolts, cap has a bayonet fitting. Version FSB/SD for welding to tank surface. Rugged cast aluminium housing (model FSB/BM). Standard metal strainer. Supplied with gasket and M5 fixing bolts.

- Maximum airflow capacity: 720 litres/minute

Metal Filler Breather

Filter

Code	N16	Airflow L/min	A	B	C	D	Price
FSB/05		150	43	44	65	28	5.05
FSB/25		720	80	54	82	49	8.85
FSB/25SD		720	80	54	105	38	13.00
FSB/25BM		720	80	54	105	38	16.50





Hydraulic Hose Assemblies

Now Available



Looking for a specific hydraulic hose assembly?

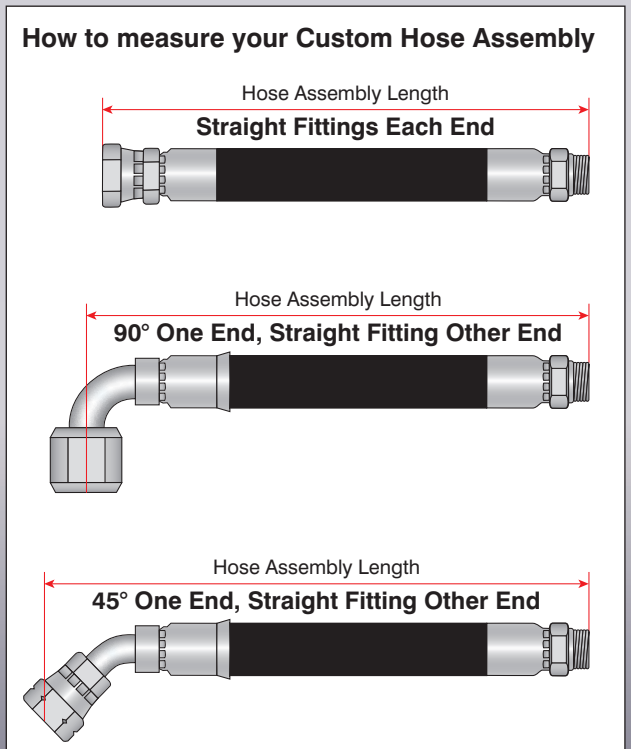
Our team of professional hose specialists are able to help create a custom hydraulic hose assembly to suit your specification.

For more information contact the sales team.



APPROVED HOSE ASSEMBLIES
THE BRITISH FLUID POWER DISTRIBUTORS ASSOCIATION

How to measure your Custom Hose Assembly




TECHNATIC™
FM22
ANAEROBIC ADHESIVE
Screwlock
& Seal
For Fine Threaded Components
Prevents Loosening
Low Strength
50ml e



818-822 Toggle Clamps



825 Circlips, O-Ring Kits & Cable Ties



826 Greasing & Lubrication



827-829 Adhesives, PTFE Tape & Pneumatic Oil



830-831 Professional Lubricants



833-835 Cleaners Range



836-841 Specialist Applications & Lubricants



842-843 Corrosion Inhibitors



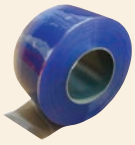
844-845 Metal Cutting & Working



845 Wipes & Hand Cleaners



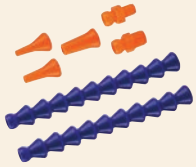
846-850 Food Group Cleaners & Lubricants



851-853 PVC Door Curtains



854 Calipers , Micrometers & Magnifying Glasses



855-858 Modular Coolant Hose System



859-862 Castors



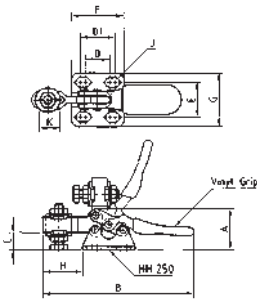
863-864 Enclosures

Toggle Clamps, Horizontal

Dimensions

Model No.	A	B	C	D	D1	E	F	G	H	J/Slot	K	Weight
HH250	19mm	69mm	7.9mm	11.1mm	15.9mm	15.9mm	24.3mm	24.3mm	19mm	4.4 x 6.7mm	9.6mm	27g
HH300	35.5mm	111mm	18.5mm	13.5mm	17.6mm	17.6mm	25.4mm	27mm	43.4mm	4.4 x 5.2mm	27.5mm	80g
HH400	49.4mm	160.5mm	24mm	26mm	–	28mm	37.4mm	38.6mm	61.8mm	5.5 x 8.5mm	40mm	205g
HH500	61.8mm	195mm	34mm	26mm	–	31mm	40mm	43.6mm	67.3mm	6.6 x 9.1mm	33mm	322g
HH600	80.8mm	270mm	44.5mm	41mm	–	43mm	57mm	58mm	103mm	8 x 10mm	70mm	725g
HH350	38.1mm	139.6mm	25.4mm	25.4mm	27mm	22.2mm	36.6mm	35.7mm	56.5mm	5.2 x 6mm	31mm	125g
HH550	63.5mm	265mm	44.5mm	41.2mm	–	41.2mm	57.2mm	57.2mm	108mm	8.3mm	54.5mm	686g

The smallest horizontal handle hold-down U-bar clamp, supplied with M4 nylon hex head spindle (adjustable) and two flange washers. Red vinyl handle grip provided for handle comfort. Stainless steel models are supplied with stainless hex head spindle assemblies.



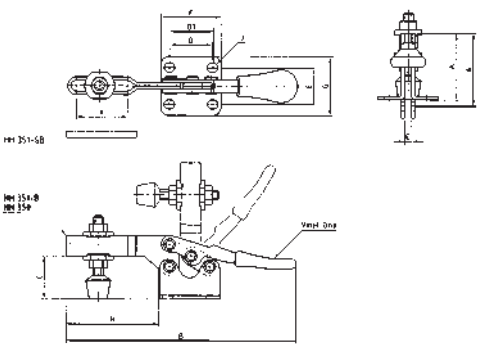
Miniature Toggle Clamp

With Horizontal Handle



Code	E19	Holding Capacity kg	Material	Price
HH250		27	Steel	15.35
HH250-2S		27	Stainless Steel	28.05

Red vinyl handle grips are provided for handle comfort. Stainless steel models are provided with stainless steel hex head spindle assemblies.



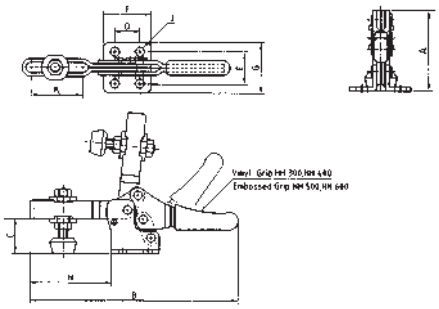
Toggle Clamp

With Horizontal Handle, Flat Type



Code	E19	Holding Capacity kg	Material	Price
HH350		90	Steel	21.20
HH350-2S		90	Stainless Steel	61.10

This series offers four standard sizes, designed to provide more hand clearance when clamps are in full open position. Each model is equipped with red vinyl handle grip. Stainless Steel models are supplied with stainless steel hex head spindle assemblies.



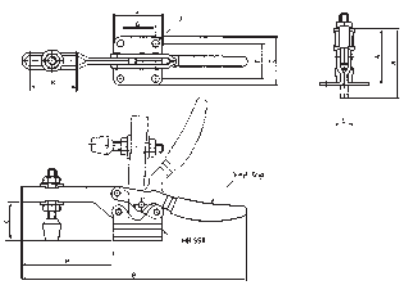
Toggle Clamp

With Horizontal Handle



Code	E19	Holding Capacity kg	Material	Price
HH300		68	Steel	21.35
HH300-2S		68	Stainless Steel	42.00
HH400		90	Steel	24.30
HH400-2S		90	Stainless Steel	42.90
HH500		227	Steel	32.90
HH600		340	Steel	35.85

One of the largest horizontal U-bar clamps, equipped with red vinyl handle grip.



Large Toggle Clamp

With Horizontal Handle



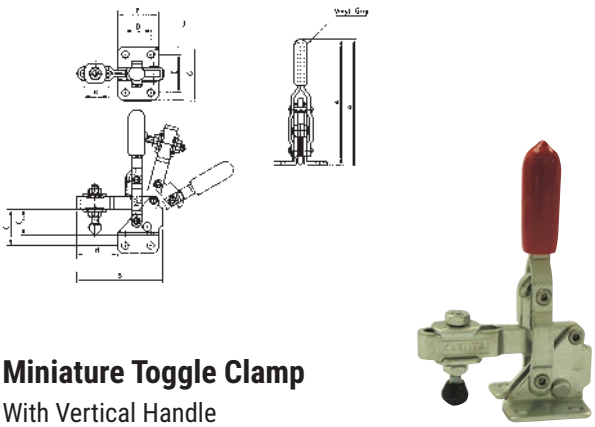
Code	E19	Holding Capacity kg	Material	Price
HH550		340	Steel	33.85

Toggle Clamps, Vertical

Dimensions

Model No.	A	B	C	D	E	F	G	H	J	K	L	Weight
HV150	78.5mm	53.9mm	15.9mm	15.9mm	23.8mm	25.5mm	33.4mm	25.5mm	4.4mm	15.5mm	–	66g
HV200	38.1mm	57.1mm	13mm	13.5mm	16mm	26.5mm	26mm	30.6mm	4.5mm	12.7mm	27mm	58g
HV300	62.5mm	93.5mm	22mm	23mm	29mm	44mm	46mm	49.5mm	6.5mm	19mm	50mm	220g
HV400	93.5mm	130.5mm	33mm	35mm	38mm	64mm	63mm	66.5mm	8.5mm	27mm	70mm	630g
HV250-U	100mm	75.6mm	23.8mm	12.7mm	27mm	25.5mm	39.8mm	45.6mm	5.2mm	27.5mm	–	167g
HV450	149mm	99.7mm	31.8mm	19mm	31.8mm	35mm	44.6mm	57.2mm	7.1mm	33.5mm	–	350g

The smallest vertical handle clamp is applicable for light duty. Supplied with vinyl coated hex head spindle assemblies and two flanged washers. Red vinyl handle grips are provided. Stainless steel models are supplied with stainless steel hex head spindle assemblies.

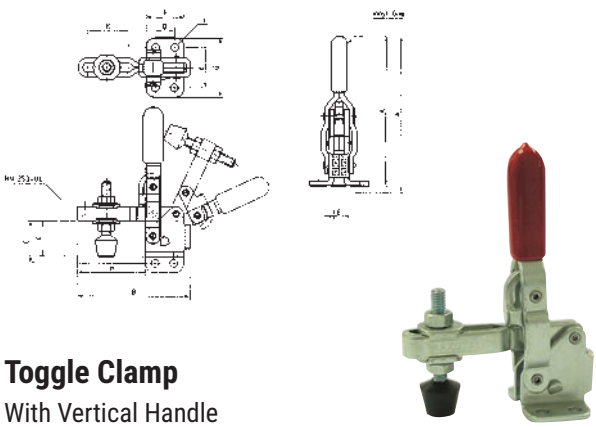


Miniature Toggle Clamp

With Vertical Handle

Code	E19	Holding Capacity kg	Material	Price
HV150		45	Steel	16.80
HV150-2S		45	Stainless Steel	36.80

Each model is equipped with red vinyl handle grip except T-Handle model. Stainless steel models are provided with stainless steel hex head spindle assemblies.

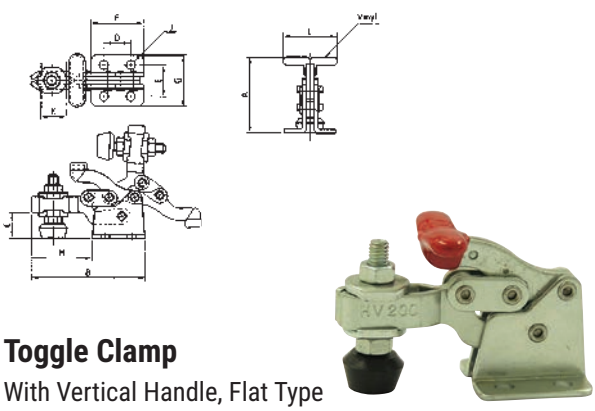


Toggle Clamp

With Vertical Handle

Code	E19	Holding Capacity kg	Material	Price
HV250-U		90	Steel	21.10
HV250-U2S		90	Stainless Steel	46.05

The unique handle is specially designed to be operated from behind. Each model is provided with red vinyl handle grip and furnished with spindle assemblies and two flanged washers. Stainless steel models are also supplied with stainless steel hex head spindle assemblies.

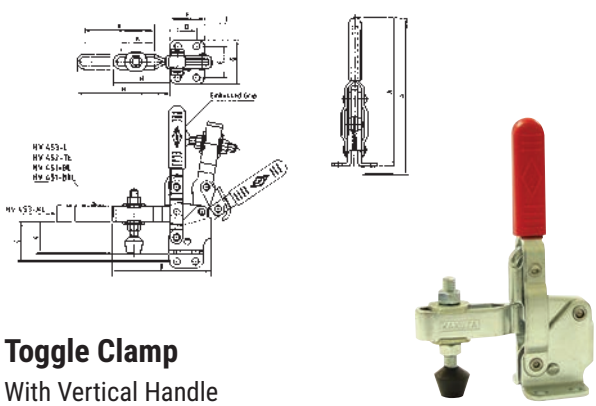


Toggle Clamp

With Vertical Handle, Flat Type

Code	E19	Holding Capacity kg	Material	Price
HV200		68	Steel	22.25
HV200-2S		68	Stainless Steel	34.75
HV300		150	Steel	34.70
HV300-2S		150	Stainless Steel	37.10

Embossed grip and furnished with spindle assemblies/flange washers. Stainless steel model supplied with stainless steel hex head spindle assemblies.



Toggle Clamp

With Vertical Handle

Code	E19	Holding Capacity kg	Material	Price
HV450		225	Steel	25.80
HV450-2S		225	Stainless Steel	62.50

Toggle Clamps, Vertical

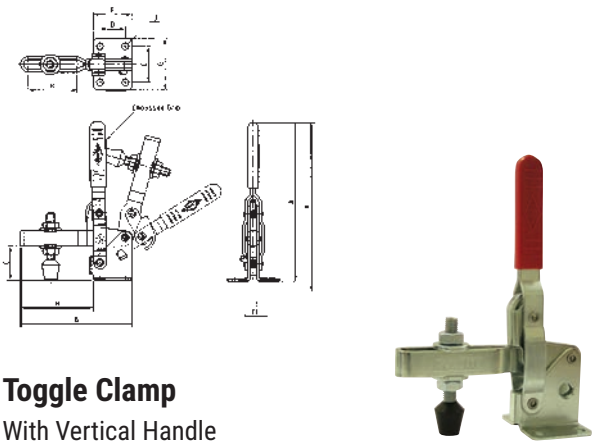
Dimensions

Model No.	A	B	C	D	E	F	G	H	J	K	L	Weight
HV650	199mm	139.4mm	42.9mm	31.8mm	45.2mm	48.2mm	65.2mm	91mm	8.4mm	61mm	–	660g
HV850	221.3mm	177.8mm	50.8mm	31.8mm	45.3mm	50.8mm	64.3mm	127mm	8.7mm	82mm	–	1020g
HV1050	308mm	225.2mm	82.5mm	50.8mm	69.8mm	76.2mm	95mm	149mm	12.7mm	95mm	–	2060g

Model No.	A	B	C	D	D1	D2	E	F	G	H	J	K	Weight
UF450	187.2mm	96.7mm	70mm	16mm	16mm	11mm	25.4mm	35mm	39mm	49.7mm	6.7mm	33.5mm	398g

Model No.	A	B	C	D	E	F	G	H	Weight	Plunger Travel	Plunger Thread
SA2	216.7mm	63mm	45mm	19mm	76.5mm	33mm	13mm	6.7mm	518g	90˚	50˚

U-bar model equipped with two flange washers and spindle assemblies. Embossed red handle grip also provided.

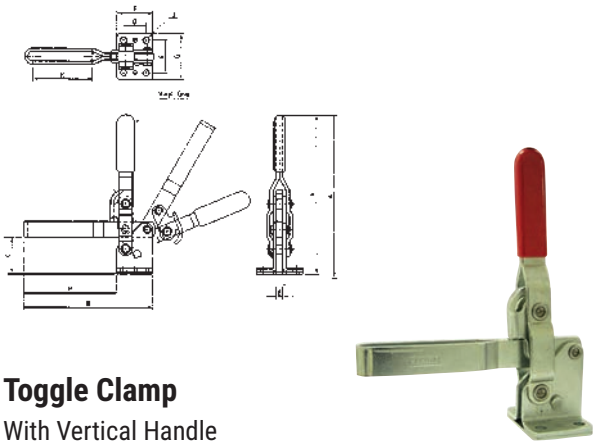


Toggle Clamp

With Vertical Handle

Code	E19	Holding Capacity kg	Material	Price
HV650		340	Steel	36.55

U-bar model equipped with two flange washers and spindle assemblies. Embossed red handle grip also provided.

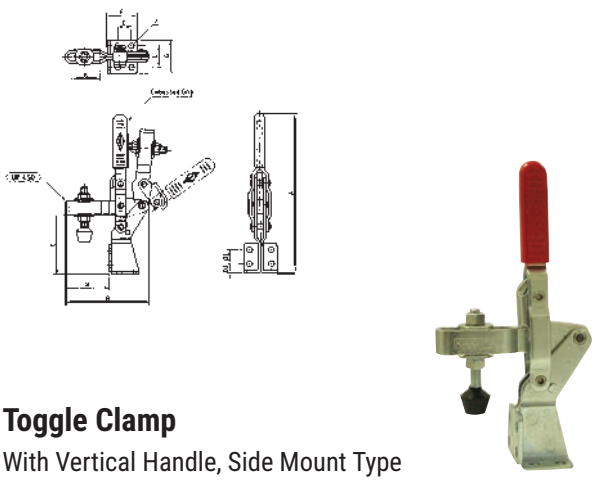


Toggle Clamp

With Vertical Handle

Code	E19	Holding Capacity kg	Material	Price
HV850		354	Steel	67.00
HV1050		545	Steel	81.40

Two mounting areas for horizontal and vertical surfaces. Embossed handle grips are included for firm handle comfort. Furnished with flange washers and spindle assembly.

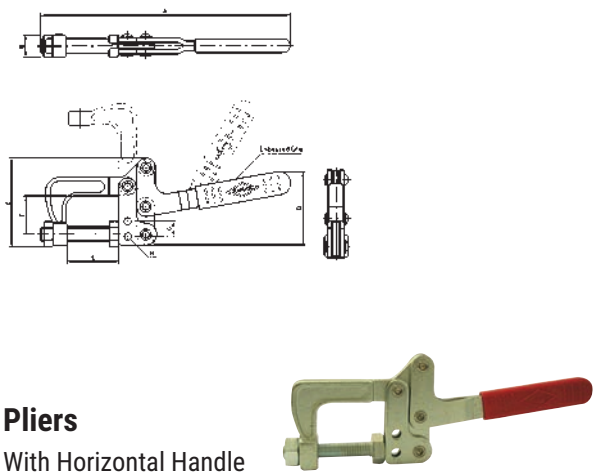


Toggle Clamp

With Vertical Handle, Side Mount Type

Code	E19	Holding Capacity kg	Material	Price
UF450		170	Steel	24.55

Forged high carbon steel jaw moves 90˚. Equipped with red embossed handle grip and hex head spindle.



Pliers

With Horizontal Handle

Code	E19	Holding Capacity kg	Material	Price
SA2-PLIERS		400	Steel	48.30

Toggle Clamps, Latch Type

Dimensions

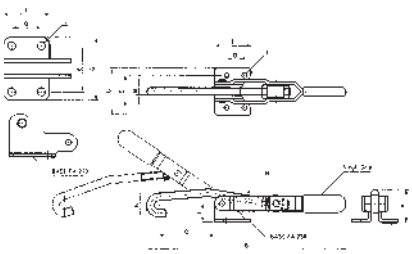
Model No.	A	B	D	E	F	G	H	J	K	N	Weight
PA150	41.3mm	223mm	19mm	31.8mm	35mm	45mm	78mm	7.1mm	14.2mm	3.2mm	340g

Model No.	A	B	C	D	E	F	G	J	K	M	N	Q Min	Q Max
PA250	35mm	214mm	20mm	19mm	35mm	39mm	50mm	5.2mm	9.5mm	M8 x 1.25Pmm	7.9mm	52.1mm	60mm
PA270	54.6mm	319mm	36mm	32mm	49.2mm	50mm	67.2mm	8.7mm	12.7mm	M8 x 1.5Pmm	9.9mm	7.2mm	89.7mm

Model No.	A	B	C	D	E	F	G	H	J1	J2	K	L	M	N	O	Q Min	Q Max
FA100	29mm	101mm	10mm	16mm	19mm	26mm	27.8mm	20mm	4.2mm	4.2mm	19mm	mm13	M4 x 0.7Pmm	3.5mm	12mm	96mm	108.5mm
FA200	49.8mm	148.4mm	143mm	19mm	32mm	41mm	44.5mm	26mm	6.8mm	6.8mm	25.4mm	17.5mm	M5 x 0.8Pmm	4.8mm	16mm	144.4mm	159.4mm
FA300	75mm	215mm	19mm	41.3mm	38mm	60.5mm	54mm	38mm	8.5mm	8.5mm	44.5mm	30.2mm	M8 x 1.25Pmm	7.9	23.4	211	230

Model No.	A	B	C	D	E	E1	F	G	H	J1/SLOT	J2	K	L	M	N	O	Q Min	Q Max
FA102	41.3mm	132.4mm	11mm	13mm	19mm	24mm	26mm	36mm	26mm	5.2 x 7.7mm	5.2mm	24mm	16.2mm	M4 x 0.7mm	3.5mm	12mm	38mm	70mm
FA202	66.4mm	185.2mm	14mm	19mm	25mm	32mm	35mm	48mm	35.2mm	6.5 x 10mm	6.5mm	31mm	17.5mm	M6 x 1.0mm	5.8mm	19mm	48mm	90mm

Hook type clamp hangs a fixture and clamps by pulling. Length of bar can be adjusted. Red vinyl handle grip provided for handle comfort.



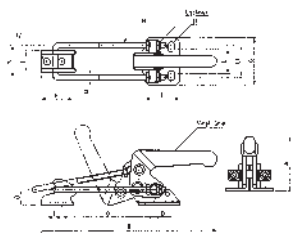
Latch Type Clamp

With Horizontal Handle



Code	E19	Holding Capacity kg	Material	Price
PA250		170	Steel	31.50
PA250-2S		170	Stainless Steel	61.50
PA270		340	Steel	51.00

Designed in three different sizes similar to FA100-200-300. Supplied with latch plate. Red vinyl handle grip is included.

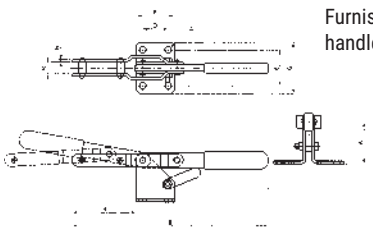


Latch Type Clamp

With Horizontal Handle



Code	E19	Holding Capacity kg	Material	Price
FA102		140	Steel	28.75
FA102-2S		140	Stainless Steel	51.95
FA202		250	Steel	47.25
FA202-2S		250	Stainless Steel	88.40



Furnished with embossed red handle grip.

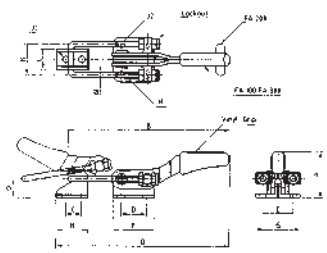
Latch Type Clamp

With Horizontal Handle



Code	E19	Holding Capacity kg	Material	Price
PA150		170	Steel	43.30
PA150-2S		170	Stainless Steel	69.50

Ideal for light and medium duty application. Red vinyl handle grip and latch plate provided.



Latch Type Clamp

With Horizontal Handle

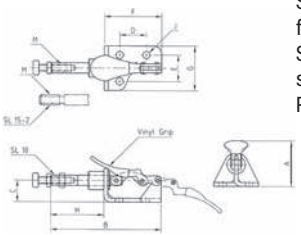


Code	E19	Holding Capacity kg	Material	Price
FA100		106	Steel	22.40
FA100-2S		106	Stainless Steel	44.95
FA200		320	Steel	33.20
FA200-2S		320	Stainless Steel	63.35
FA300		900	Steel	63.95
FA300-2S		900	Stainless Steel	91.20

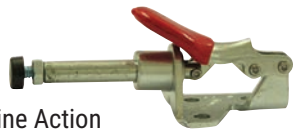
Toggle Clamps, Push Type

Dimensions

Model No.	A	B	C	D	E	F	G	H	J	K	L	M	Weight	Plunger Travel	Plunger Thread
SL10	27.5mm	66.5mm	13mm	16mm	16mm	33.5mm	27mm	32mm	4.4mm	–	–	M4mm	40g	16mm	M4 x 0.70mm
SL150	88.6mm	138.2mm	24.6mm	34.9mm	41.3mm	85.8mm	56.3mm	49.2mm	5.6mm	–	–	11mm	285g	31.7mm	M8 x 1.25mm
SL250	108.6mm	172.4mm	42.3mm	41.3mm	41.3mm	57.3mm	57.3mm	106.3mm	8.7mm	–	–	16mm	760g	41.3mm	M10 x 1.5mm
SL350	108.6	172.4	42.3	35	41.3	130	57.3	106.3	8.7	–	–	16	760g	41.3	M10 x 1.5mm
FM50	78	62	12.6	26.5	–	9.5	–	20.5	M16 x 1.50	6	22	–	103g	19	M6 x 1.00mm
FM150	107.8	107.3	15.9	31.6	–	11	–	38.4	M20 x 1.50	6	25.4	–	260g	38.1	M8 x 1.25
FM250	142	170.7	22.2	48.1	–	16	–	69.8	M27 x 2.00	6.4	38	–	757g	66.7	M10 x 1.50



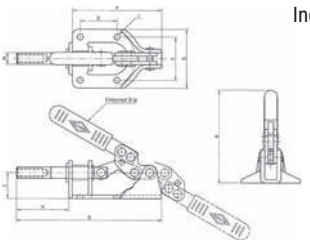
Suitable for light duty. SL10 furnished with spindle assemblies. Stainless steel model supplied with stainless steel hex head spindle. Red vinyl handle grip is supplied.



Push Type Clamp

Base Mount Type, Straight Line Action

Code	E19	Holding Capacity kg	Material	Price
SL10		45	Steel	17.90
SL10-2S		45	Stainless Steel	39.55



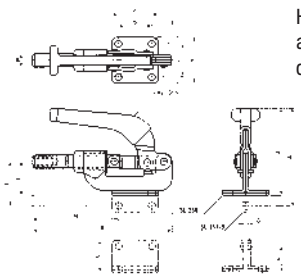
Includes red embossed handle grip.



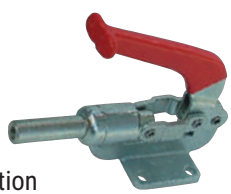
Push Type Clamp

Base Mount Type, Straight Line Action

Code	E19	Holding Capacity kg	Material	Price
SL150		135	Steel	35.80



Handle in backward when clamps are in full open position. Red vinyl-dipped grips are included.

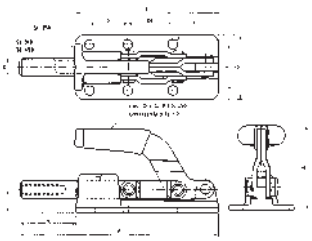


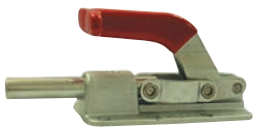
Push Type Clamp

Base Mount Type, Straight Line Action

Code	E19	Holding Capacity kg	Material	Price
SL250		360	Steel	61.20

Forged alloy steel in white zinc plate. Red vinyl-dipped handle included.



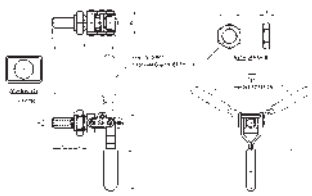


Push Type Clamp

Long Base Mount Type, Straight Line Action

Code	E19	Holding Capacity kg	Material	Price
SL350		360	Steel	92.30

As these flush mounted action clamps have free handle, clamping can be made at free position. Widely applicable and workable for push and pull action. Equipped with red vinyl grip for FM50 and red embossed handle grips for FM150 and FM250.





Push Type Clamp

Flush Mounted

Code	E19	Holding Capacity kg	Material	Price
FM50		90	Steel	31.00
FM50-2S		90	Stainless Steel	65.50
FM150		150	Steel	35.00
FM150-2S		150	Stainless Steel	76.45
FM250		320	Steel	47.45
FM250-2S		320	Stainless Steel	149.30

Competitor Cross-reference List

Our Model	Destaco	AMF	Brauer
HH150	205-S	–	–
HH150-2S	205-SSS	–	–
HH151-B	205-SB	–	–
HH151-B2S	205-SBSS	–	–
HH154-LE	205-SL	–	–
HH155-R	205-SR	–	–
HH250	205-U	93005	H50/2B
HH250-2S	205-USS	95141	H50/2BSS
HH251-B	205-UB	93203	H50/1B
HH251-B2S	205-UBSS	–	–
HH254-LE	205-UL	–	H50/2BL
HH255-R	205-UR	–	H50/2BR
HH300	213-U	93013	H75/2B
HH300-2S	213-USS	95166	H75/2BSS
HH301-B	213-UB	93211	–
HH350	215-U	–	–
HH350-2S	215-USS	–	–
HH351-B	215-UB	–	–
HH351-B2S	215-UBSS	–	–
HH350-S	215-S	–	–
HH351-SB	215-SB	–	–
HH400	217-U	93021	H150/2B
HH400-2S	217-USS	95182	H150/2BSS
HH401-B	217-UB	93229	H150/1B
HH450	225-U	–	–
HH450-2S	255-USS	–	–
HH451-B	225-UB	–	–
HH451-B2S	255-UBSS	–	–
HH500	227-U	93039	H250/2B
HH500-2S	227-USS	95208	–
HH501-B	227-UB	93237	H250/IB
HH550	235-U	93054	H350/2B
HH550-2S	235-USS	–	–
HH551-B	–	93252	–
HH551-BN-2S	235-UBSS	–	–
HH551-BN	235-UB	–	H350/1B
HH600	237-U	93047	H450/2B
HH600-2S	237-USS	95224	–
HH601-B	237-B	93245	H450/1B
HV150	201-U	90019	V75/2B
HV150-2S	201-USS	95026	V75/2BTSS
HV151-B	201-UB	90217	V75/1B
HV151-B2S	201-UBSS	–	–
HV151-BT	201-TUB	–	–
HV152-T	201-TU	–	–
HV200	305-U	–	V70/2BT
HV200-2S	305-USS	–	V70/2BTSS
HV250	202	90514	V150/2C
HV250-2S	202-SS	–	–
HV251-B	202-B	–	V150/1C
HV251-B2S	202-BSS	–	–

Our Model	Destaco	AMF	Brauer
HV251-BT	202-TB	–	–
HV252-T	202-T	–	–
HV250-U	202-U	90027	V150/2B
HV250-U2S	202-USS	95042	V150/2BSS
HV251-UB	202-UB	90225	V150/1B
HV251-UBT	202-TUB	–	–
HV252-UT	202-TU	–	–
HV252-UT	202-TU	–	–
HV252-UT	202-TU	–	–
HV253-UL	202-UL	–	V150/2BL
HV300	300-U	–	–
HV300-2S	307-USS	–	–
HV350	207-S	90431	V250/2A
HV351-B	207-SB	90555	V250/1A
HV351-BT	207-TSB	–	–
HV351-BL	207-LB	–	V250/1AS
HV351-BTL	207-TLB	–	–
HV352-T	207-TS	–	–
HV352-TL	207-TL	–	–
HV353-L	207-L	–	V250/2AS
HV400	309-U	–	–
HV400-2S	309-USS	–	–
HV450	207-U	90A035	V250/2B
HV450-2S	207-USS	95067	V250/2BSS
HV451-B	207-UB	90233	V250/1B
HV451-B2S	207-UBSS	–	–
HV451-BT	207-TUB	–	–
HV451-BL	207-ULB	–	–
HV451-BTL	207-TULB	–	–
HV452-T	207-T	–	–
HV452-TL	207-TUL	–	–
HV453-L	207-UL	–	–
HV550	210-S	90449	V350/2A
HV551-B	210-SB	90563	V350/1A
HV551-BT	210-TSB	–	–
HV552-T	210-TS	–	–
HV650	210-U	90043	V350/2B
HV651-B	210-UB	90241	V350/1B
HV651-BT	210-TUB	–	–
HV652-T	210TU	–	–
HV750	247-S	90456	V450/2A
HV751-B	247-SB	–	V450/1A
HV850	247-U	90050	V450/2B
HV850-B	247-UB	–	V450/1B
HV950	267-S	90464	V550/2A
HV951-B	267-SB	–	V550/1A
HV1050	267-U	90068	V550/2B
HV1051-B	267-UB	–	V550/1B
SF350	207-SF	–	–
UF450	207-UF	–	–
NO.82	317-U	–	–
NO.82-S	317-S	–	–

Competitor Cross-reference List

Our Model	Destaco	AMF	Brauer
PA150	301	–	–
PA150-2S	301-SS	–	–
PA170	311	–	–
PA250	3351	94540	LH400
PA250-2S	351-SS	95422	LH400SS
PA251-B	351-B	94680	–
PA251-B2S	351-BSS	95455	–
PA270	371	–	LH700
PA270-2S	371-SS	–	LH700SS
PA350	381	–	–
FA100	323	–	–
FA100-2S	323-MSS	–	–
FA200	331	–	–
FA200-2S	331-SS	–	–
FA300	341	–	–
FA300-2S	341-SS	–	–
FA102	–	94698	LU200H
FA102-2S	–	95521	LU200HSS
FA202	–	94706	LU400H
FA202-2S	–	95547	LU400HSS
FA302	–	94714	LU700H
FA130	324	–	–
FA132-2S	324-SS	–	–
FA230	334	–	–
FA230-2S	334-SS	–	–
FA330	344	–	–
FA330-2S	344-SS	–	–
FA140	–	94755	–
FA140-2S	–	95588	–
FA240	–	94763	–
FA240-2S	–	95604	–
FA340	–	94771	–
FA340-2S	–	95620	–
FA600	375	–	–
FA601-B	375-B	–	–
FA700	385	93856	–
SL10	601	–	–
SL10-2S	601-SS	–	–
SL15-2	601-0	–	–
SL15-22S	601-OSS	–	–
SL105-2	603	–	–
SL110	609	–	–
SL111-B	609-B	–	–
SL150	605	–	–
SL250	610	–	–
SL251-B	618	–	–
SL350	630	–	–
SL160	615	–	–
SL210	608	–	–

Our Model	Destaco	AMF	Brauer
SL240	620	–	–
SL241-B	628	–	–
SL310	607	–	–
SL450	640	–	–
FM50	602	94300	P100
FM50-2S	602-SS	95349	P100SS
FM150	604	94318	P200
FM150-2S	604-SS	95364	P200SS
FM250	624	94334	P400
FM250-2SS	624-SS	95380	P400SS
SA2	325	–	TC79
SA150	424	–	P0
SA155-2	424-2	–	–
SA250	441	–	P1A
SA255-2	441-2	–	–
SA350	461	–	–
SA450	462	–	P1B
SA455-2	462-2	–	–
SA550	463	–	P3B
V.1X	501-MB	90738	V300/S
V.1X-B	501-MLB	90803	V300/T
V.2X	503-MB	90746	V700/S
V.2X-B	503-MLB	90811	V700/T
V.3X	505-MB	90753	VA1200S
V.3X-B	505-MLB	90829	VA1200T
AC250	802	91975	V150X
AC350	807-L	–	–
AC353-L	–	–	V250X
AC450	807-UL	–	–
AC453-L	–	91983	–
AC550	810-S	–	–
AC650	810-U	91991	V450X
AC650	810-U	91991	V450X

Circlips, O-Ring Kits & Cable Ties

MIKALOR



Circlip Kits

Assorted, 140 Pieces

Code N40	Description	Price
0350003-8	External Circlips	161.95
0350004-6	Internal Circlips	182.25

Ref 0350003-8

Ø Nominal	Quantity	Ø Nominal	Quantity	Ø Nominal	Quantity
–	–	–	–	24	20
5	200	15	100	25	20
8	200	16	100	28	20
9	200	17	50	30	20
10	200	18	50	30	20
11	100	19	50	38	10
12	100	20	50	40	10
13	100	21	50	42	10
14	100	22	20	45	10

Ref 0350004-6

Ø Nominal	Quantity	Ø Nominal	Quantity	Ø Nominal	Quantity
–	–	–	–	30	20
8	200	17	100	32	20
9	200	19	100	35	20
10	200	20	50	40	20
12	200	21	50	40	20
13	200	21	50	42	10
14	100	24	50	47	10
15	100	26	50	58	10
16	100	28	20	60	10

- NBR 70 material
- 385 pieces in 30 different sizes
- Viton version also available



Standard O-Ring Kits

Nitrile

Code M12	Description	Price
ORK1	Imperial	20.00
ORK2	Metric	20.00

- NBR 70 material
- 1mtr lengths various sizes
- Cutting and bonding accessories included



Splicing Kits

Nitrile

Code M12	Description	Price
ORK5	Metric	79.95

Cable Ties

Black, Pack of 100



Code L03	Width mm	Length mm	Price 1-9	Price 10+
CT100X2.5BLK-100	2.5	100	0.70	0.66
CT200X2.5BLK-100	2.5	200	1.55	1.50
CT140X3.6BLK-100	3.6	140	1.85	1.80
CT200X3.6BLK-100	3.6	200	3.20	3.05
CT300X3.6BLK-100	3.6	295	3.90	3.75
CT160X4.8BLK-100	4.8	160	2.95	2.85
CT200X4.8BLK-100	4.8	200	3.55	3.40
CT300X4.8BLK-100	4.8	295	5.35	5.10
CT370X4.8BLK-100	4.8	370	6.60	6.30
CT300X7.6BLK-100	7.6	290	12.25	11.65
CT370X7.6BLK-100	7.6	370	12.25	11.65
CT540X7.8BLK-100	7.8	540	46.50	44.20
CT750X7.8BLK-100	7.8	750	101.45	96.40

Cable Ties

White, Pack of 100



Code L03	Width mm	Length mm	Price 1-9	Price 10+
CT100X2.5NAT-100	2.5	100	0.70	0.66
CT200X2.5NAT-100	2.5	200	1.55	1.50
CT140X3.6NAT-100	3.6	140	1.85	1.80
CT200X3.6NAT-100	3.6	200	2.55	2.45
CT300X3.6NAT-100	3.6	295	3.90	3.75
CT160X4.8NAT-100	4.8	160	2.95	2.85
CT200X4.8NAT-100	4.8	200	3.55	3.40
CT300X4.8NAT-100	4.8	295	6.70	6.40
CT370X4.8NAT-100	4.8	370	6.60	6.30
CT300X7.6NAT-100	7.6	290	12.25	11.65
CT370X7.6NAT-100	7.6	370	12.25	11.65
CT540X7.8NAT-100	7.8	540	47.75	45.40
CT750X7.8NAT-100	7.8	750	101.45	96.40

Angled Male Thread

BSPT



Code	D03	Angle	Thread BSPT	Price
GN45-18		45°	R1/8"	0.30
GN45-14		45°	R1/4"	0.65
GN65-18		65°	R1/8"	0.85
GN90-18		90°	R1/8"	0.30
GN90-14		90°	R1/4"	0.80

16mm Double Hexagon Head (15mm A/F) Male Thread, BSPP

BSPP



Code	D03	Thread BSPP	Price
GN-D-HEX-18		G1/8"	0.65
GN-D-HEX-14		G1/4"	0.70

Grease Nipples

Straight Male Thread, BSPT



Code	D03	Thread BSPT	Price
GN-18		1/8"	0.15
GN-14		1/4"	0.30

Grease Nipples

16mm Round Head, Male Thread, BSPP



Code	D03	Thread BSPP	Price
GN-RH16-18		G1/8"	0.70
GN-RH16-14		G1/4"	0.70

- Imperial contains BSP/BSF/UNF
- Metric contains M6/M8/M10

80 Piece Assorted Straight & Angled Grease Nipples

Box of Assorted Grease Nipples



Code	D03	Thread	Price
GN-BOX-1		BSP/BSF/UNF	31.45
GN-BOX-2		M6/M8/M10	31.45

Adhesives

- Grade: 23 - General purpose, medium setting speed
- Chemical composition: Ethyl
- Specific gravity (20°C g/ml): 1.06
- Viscosity (20°C mPa.s): 40 - 80
- Gap filling (microns): 10 - 60
- Speed of bonding (*): 3
- Tensile strength Din 53288 (N/mm²): 18 - 25
- Shear strength Din 53283 (N/mm²): 13 - 18
- Impact strength ASTM D 950 (N.mm/mm²): 13 - 18



General Purpose Cyanoacrylate Adhesive

Equivalent to Loctite 495

Code	R11	Size	Price 1-9	Price 10+
FM95-20		20g Bottle	12.30	11.70
FM95-100		100g Bottle	61.25	58.20

- Grade: Surface insensitive, for acidic & porous surfaces, cork, leather, wood, metal
- Chemical composition: Ethyl
- Specific gravity (20°C g/ml): 1.06
- Viscosity (20°C mPa.s): 80 - 150
- Gap filling (microns): 10 - 150
- Speed of bonding (*): 4
- Tensile strength Din 53288 (N/mm²): 22 - 25
- Shear strength Din 53283 (N/mm²): 15 - 20
- Impact strength ASTM D 950 (N.mm/mm²): 15 - 20



Cyanoacrylate Adhesive

Equivalent to Loctite 401

Code	R11	Size	Price 1-9	Price 10+
FM01-20		20g Bottle	12.30	11.70
FM01-100		100g Bottle	61.25	58.20

- Grade: 14 - Metal to metal, to rubber & plastics, slow setting
- Chemical composition: Methyl
- Specific gravity (20°C g/ml): 1.15
- Viscosity (20°C mPa.s): 80 - 150
- Gap filling (microns): 10 - 100
- Speed of bonding (*): 2
- Tensile strength Din 53288 (N/mm²): 25 - 30
- Shear strength Din 53283 (N/mm²): 20- 25
- Impact strength ASTM D 950 (N.mm/mm²): 10 - 15



High Performance Cyanoacrylate Adhesive

Equivalent to Loctite 496

Code	R11	Size	Price 1-9	Price 10+
FM96-20		20g Bottle	13.55	12.90
FM96-100		100g Bottle	66.15	62.85

- Suggested application: High strength studlocking, general purpose, high strength, locking of studs, nuts.
- Max dia. of thread max gap filling: M 20 0.15mm
- Viscosity (20°C mPa.s): 500 Low thixotropy
- Colour: Green/ fluorescent under blue light
- Curing time: Handling mins: 10 - 20 Functional Hrs: 1 - 3
- Locking torque N.m Breakaway: 10 - 20
- (ISO 10964) Prevailing: 1 - 3
- Shear strength N/mm²: 15 - 20
- Temperature range °C: -55 +150



Stud Grade Threadlocking

Equivalent to Loctite 270

Code	R11	Size	Price 1-9	Price 10+
FM70-50		50ml Bottle	18.40	17.50
FM70-250		250ml Bottle	63.70	60.55

- Grade: 17- High viscosity, large gaps filling, for hard materials, longer setting time, high bonding strength
- Chemical composition: Methyl
- Specific gravity (20°C g/ml): 1.19
- Viscosity (20°C mPa.s): 1100 - 1600
- Gap filling (microns): 10 - 200
- Speed of bonding (*): 1
- Tensile strength Din 53288 (N/mm²): 25 - 30
- Shear strength Din 53283 (N/mm²): 110 - 15
- Impact strength ASTM D 950 (N.mm/mm²): 10 - 15



High Viscosity Cyanoacrylate Adhesive

Equivalent to Loctite 415

Code	R11	Size	Price 1-9	Price 10+
FM15-20		20g Bottle	13.55	12.90
FM15-100		100g Bottle	66.15	62.85

- Suggested application: Medium strength nut-locking. Larger gap filing suitable on oily surfaces. DVGW approved for potablewater.
- Max dia. of thread max gap filling: M 36 0.25mm
- Viscosity (20°C mPa.s): 2000 - 7500 medium thixothropy
- Colour: Blue/ fluorescent under blue light
- Curing time: Handling mins: 10 - 20 Functional Hrs: 1 - 3
- Locking torque N.m Breakaway: 17 - 22
- (ISO 10964) Prevailing: 8 - 12
- Shear strength N/mm²: 9 - 13
- Temperature range °C: -55 +150



Nut Grade Threadlocking

Equivalent to Loctite 243

Code	R11	Size	Price 1-9	Price 10+
FM43-50		50ml Bottle	19.75	18.80
FM43-250		250ml Bottle	63.70	60.55

* Relative Setting Time: 5 = Highest Speed, 1 = Lowest Speed

- Suggested application: Low strength, screw locking general purpose.
- Max dia. of thread max gap filling: M 24 0.20mm
- Viscosity (20°C mPa.s): 1000 medium thixotropy
- Colour: Purple/ fluorescent under blue light
- Curing time: Handling mins: 15 - 30
  Functional Hrs: 1 - 3
- Locking torque N.m Breakaway: 4 - 8
- (ISO 10964) Prevailing: 2 - 4
- Shear strength N/mm²: 3 - 5
- Temperature range °C: -55 +150



Screw Grade Nutlocking

Equivalent to Loctite 222

Code	R11	Size	Price 1-9	Price 10+
FM22-50		50ml Bottle	18.40	17.50
FM22-250		250ml Bottle	63.70	60.55

- Suggested application: Bearing mounting general purpose.
- Max dia. of thread max gap filling: M20 0.12mm
- Viscosity (20°C mPa.s): 500 medium thixothropy
- Colour: Yellow/ fluorescent under blue light
- Curing time: Handling mins: 10 - 20
  Functional Hrs: 1 - 3
- Locking torque N.m Breakaway: 12 - 15
- (ISO 10964) Prevailing: 16 - 22
- Shear strength N/mm²: 8 - 12
- Temperature range °C: -55 +150



Bearing Grade Retaining

Equivalent to Loctite 641

Code	R11	Size	Price 1-9	Price 10+
FM41-50		50ml Bottle	18.40	17.50
FM41-250		250ml Bottle	63.70	60.55

- Suggested application: High strength paste retainer to repair damaged shafts & threads.
- Max dia. of thread max gap filling: 2" 0.30mm
- Viscosity (20°C mPa.s): 150,000 medium thixothropy
- Colour: Siliver
- Curing time: Handling mins: 15 - 30
  Functional Hrs: 3 - 6
- Locking torque N.m Breakaway: 35 - 45
- (ISO 10964) Prevailing: 10 - 20
- Shear strength N/mm²: 25 - 30
- Temperature range °C: -55 +150



Shaft Grade Retaining

Equivalent to Loctite 660

Code	R11	Size	Price 1-9	Price 10+
FM66-50		50ml Tube	19.60	18.65

- Suggested application: High viscosity PTFE pipesealant for liquids and gas. Approved for gas and potable water.
- Max gap filling: M 80 3" 0.30mm
- Viscosity (20°C mPa.s): 17000-50000 High thixotropy
- Colour: White ivory
- Curing time: Handling mins: 20 - 40
  Functional Hrs: 1 - 3
- Locking torque N.m Breakaway: 17 - 10
- (ISO 10964) Prevailing: 2 - 4
- Shear strength N/mm²: 4 - 6
- Temperature range °C: -55 +150



Liquid Teflon Threadsealing

Equivalent to Loctite 572

Code	R11	Size	Price 1-9	Price 10+
FM72-250		250ml Bottle	65.65	62.40

- Suggested application: Hydraulic sealant. General purpose for pneumatic and hydraulic connectors up to 3/4. Approved for gas (DVGW)
- Max gap filling: M 20 3/4 0.15mm
- Viscosity (20°C mPa.s): 500 Low thixotropy
- Colour: Brown/ fluorescent under blue light
- Curing time: Handling mins: 10 - 20
  Functional Hrs: 1 - 3
- Locking torque N.m Breakaway: 12 - 16
- (ISO 10964) Prevailing: 18 - 24
- Shear strength N/mm²: 8 - 12
- Temperature range °C: -55 +150



Hydraulic & Pneumatic Threadsealing

Equivalent to Loctite 542

Code	R11	Size	Price 1-9	Price 10+
FM42-50		50ml Bottle	19.75	18.80
FM42-250		250ml Bottle	63.70	60.55

- Suggested application: Oil resistant orderless silicone based gasket, motors gearbox.
- Max gap filling: 3mm
- Viscosity (20°C mPa.s): Paste
- Colour: White
- Curing time: Handling mins: 1 - 2 hrs
  Functional Hrs: 3 - 6
- Adhesive strength tensile: 2.3
- ASTM-D2095 N/mm³
  Temperature range °C: -55 +180



Large Gap Liquid Gasketing

Oil Resistant

Code	R11	Size	Price 1-9	Price 10+
FM-RTV-310		310ml Cartridge	22.30	21.20

Adhesives

- Suggested applications: General gasketing application. Electrical motors gearboxes.
- Max gap filling: 0.30mm
- Viscosity (20°C mPa.s): 50 - 250 high thixotropy
- Colour: Red fluorescent light
- Curing time: Handling mins: 10 - 20
  Functional Hrs: 1 - 3
- Adhesive strength: Shear ASTM-D 1002 N/mm^2: 8 - 13
- Tensile ASTM-D 12095 N/mm^2: 7 - 10
- Impact ASTM-D 905 N.mm/mm^2: 8 - 15
- Temperature range ºC: -55 +150



Medium Gap Liquid Gasketing

Equivalent to Loctite 504

Code	R11	Size	Price 1-9	Price 10+
FM18-50		50ml Bottle	16.00	15.20
FM18-250		250ml Bottle	61.25	58.20

- Suggested applications: General gasketing application. Electrical motors gearboxes.
- Max gap filling: 0.5mm
- Viscosity (20°C mPa.s): 30 - 100 high thixotropy
- Colour: Orange/Blue fluorescent light
- Curing time: Handling mins: 15 - 30
  Functional Hrs: 3 - 6
- Adhesive strength: Shear ASTM-D 1002 N/mm^2: 5 - 130
- Tensile ASTM-D 12095 N/mm^2: 5 - 8
- Impact ASTM-D 905 N.mm/mm^2: 5 - 10
- Temperature range ºC: -55 +150



High Gap Liquid Gasketing

General Use

Code	R11	Size	Price 1-9	Price 10+
FM74-50		50ml Bottle	16.00	15.20
FM74-250		250ml Bottle	61.25	58.20



PTFE Thread Sealing Tape

12mm x 12 Metres

Code	W01	Size	Price 1-49	Price 50+
PTFEIQ		12mm x 12m	0.55	0.52



Pneumatic Oil

Viscosity ISO 22

Code	M10	Size	Price
PNEU-OIL		1 Litre Bottle	11.25
PNEU-OIL-5		5 Litre Bottle	37.25

Professional Lubricants

- Cleans – WD-40's ultra-high surface attraction enables it to get under dirt, grime and grease to clean and dissolve adhesive
- Displaces moisture – WD-40 covers surfaces and microscopic irregularities to eliminate moisture and dry out electrical systems
- Penetrates – WD-40's super penetrating action loosens stuck, frozen or rusted metal parts
- Lubricates – WD-40 contains no silicone or other additives that attract dust and dirt which means it clings to moving parts preventing them from jamming
- Protects – WD-40 deposits corrosion resistant ingredients to shield metal surfaces against moisture and rust



44201



44037



44116



44506



44025

Lubricant

WD-40

Code	E22	Description	Price 1-11	Price 12+
44201		100ml Can	3.05	2.90
44037		450ml Can with Smart Straw	8.05	7.65
44116		600ml Can	9.15	8.70
44506		5ltr with Spray Applicator	38.70	36.80
44025		25ltr Plastic Drum	166.65	158.35

WD-40 – the first choice tool for any job

- Trade awareness 98%
- Trade usage 88%



Professional Lubricants

It's a toolkit in a can

- Plastic spout enables precision and control
- Allows access into hard-to-reach places with no overspray or splatter



Lubricant

3-in-1

Code	E22	Description	Price 1-11	Price 12+
44007		200ml Flexi Can	4.85	4.65



Professional Lubricant

3-in-1, High Performance

Code	E22	Description	Price 1-11	Price 12+
44613		400ml Aerosol Can	9.60	9.15



Lubricant

3-in-1, PTFE

Code	E22	Description	Price 1-11	Price 12+
44008		250ml Aerosol Can	4.50	4.30



Professional Silicone Lubricant

3-in-1

Code	E22	Description	Price 1-11	Price 12+
44015		400ml Aerosol Can	6.85	6.55



Professional Cleaner Degreaser

3-in-1, Heavy-duty

Code	E22	Description	Price 1-11	Price 12+
44615		500ml Aerosol Can	7.40	7.05



Professional White Lithium Grease

3-in-1

Code	E22	Description	Price 1-11	Price 12+
44016		400ml Aerosol Can	6.80	6.50



Professional Anti-seize

3-in-1, Copper Grease

Code	E22	Description	Price 1-11	Price 12+
44617		300ml Aerosol Can	7.30	6.95



Professional Penetrant

3-in-1, High Performance

Code	E22	Description	Price 1-11	Price 12+
44014		400ml Aerosol Can	8.90	8.50

65 years ago Ambersil began manufacturing products developed to meet the most exacting standards of industry.

Ambersil has grown to become a true 'single source' supplier for industrial aerosols and chemicals. We provide maintenance professionals with exceptional product quality and performance, whilst maximising value for money. The Ambersil MRO product range is your strategic maintenance chemical partner.



Cleaners Range, Water Based



A multipurpose, anti-static foaming cleaner. Ideal for general cleaning on a wide variety of electronic, industrial, aerospace and commercial equipment.

- Removes tough, stubborn stains such as grease, grime, dirt and nicotine
- Safe for use on plastics, metals, painted and glazed surfaces
- Anti-static formulation, reduces the attraction of airborne dust
- Foaming action limits over-application
- Meets military, rail and automotive specifications: NATO catalogue no. 6550- 99-2125987; rail approved product cat. no. 7/7056; Ford Motor Company Tax no. 14849; British Coal Cat No. CF235
- Fitted with 360° spray system for all angle use
- Quick and easy to use – spray on, wipe off



Amberclens

Anti-static Foaming Cleaner

Code	P42	Size ml	Price 1-5	Price 6+
6160001000		400	7.30	6.95

Water-based, biodegradable multi-surface cleaner. Presented in a convenient to use trigger spray. Ideal for use in industrial, aerospace, engineering and commercial cleaning/degreasing applications.

- Water-based cleaner/degreaser
- Ready to use, no need for mixing or diluting
- Non-flammable
- Ideal for use on all hard surfaces and fabrics
- Aerospace approved: meets AMS 1550b Cathay Pacific specification MAR 26/01
- Safe on delicate plastics such as polycarbonate
- Viscous formulation allows application to vertical surfaces without wasteful run-off



Amberclens Trigger

High Performance Cleaner

Code	P42	Size ml	Price 1-5	Price 6+
6160001200		750	10.20	9.70

Formulated from a blend of high-grade citrus oils and surfactants.

An ideal alternative to traditional solvents and highly alkaline cleaners.

Suitable for use in aerospace and general industrial applications.



- Biodegradable, water-based formulation
- Non-flammable
- Does not contain chlorinated solvents, bleaching agents or abrasives
- Removes tough, stubborn soiling such as oil, grease, tar, bitumen, dirt and grime, silicone, water-based paints, inks and dyes
- Industrial strength, can be diluted 1:2 with water
- Meets many specifications: Boeing D6-17487; McDonnell Douglas CSD# 1; AMS 1526B; Core laboratories EPA; classified as non-hazardous
- Safe on metals and most plastics
- Multi-use by spraying, soaking, immersion, wiping or ultrasonic
- Mild pH 9.3



Ambersolv AB1

Water Based Micro Emulsion Cleaner

Code	P42	Size ltr	Price 1-5	Price 6+
6330061005		5	54.20	51.50

Water-based detergent cleaner that exhibits high solvency power.

An ideal alternative to traditional solvents, suitable for use in Industrial, automotive, engineering, transport, aviation, marine and electronics applications.

- Non-flammable water-based cleaner/degreaser
- Removes tough and stubborn soiling such as oil, grease, grime, silicone, wax, nicotine, soot, ink and coffee
- Super industrial strength, can be diluted 1:4 with water
- Safe on most plastics, rubber and painted surfaces
- Contains a highly effective corrosion inhibitor to help prevent flash rusting
- Multi-use by spraying, soaking, brushing, immersion, wiping or ultrasonic



Aquasafe RTU

Biodegradable Cleaner Degreaser

Code	P42	Size ml	Price 1-5	Price 6+
6060001570		750	14.55	13.85

Cleaners Range, Solvent Based



A powerful, fast evaporating solvent cleaner/degreaser.

Suitable for use in industrial, aviation, automotive, polymer processing, general engineering and textile applications.

- A fast and effective cleaner/degreaser
- Powerful flushing action, rapidly removes contaminants
- Evaporates to leave a clean, dry surface
- Safe for use on ferrous and non-ferrous metals and most plastics
- Meets military specification: NATO cat. no. 6850-99-6636478



Amberklene FE10

Fast Drying Solvent

Code	P42	Size ml	Price 1-5	Price 6+
6130002500		400	11.35	10.80



A highly effective, heavy-duty cleaner/degreaser. Suitable for use in all industrial, aviation, automotive and engineering applications that require a stronger degreaser with a longer contact time.

- Heavy-duty cleaner for extra stubborn stains and soiling
- Removes heavy deposits of oil and grease waxes and silicones
- Controlled evaporation
- Superior wetting properties ensure extended contact time with soiling
- Leaves a clean, dry surface
- Safe for use on ferrous and non-ferrous metals and some plastics
- High flash point: +41°C



Amberklene ME20

Heavy-duty Solvent

Code	P42	Size ml	Price 1-5	Price 6+
6130002600		400	11.60	11.05



A powerful, fast drying, low odour cleaner/degreaser which benefits from good compatibility with a wide variety of materials. Ideal for use on industrial, aerospace, general engineering and precision cleaning.

- Highly effective cleaner/degreaser
- Fast evaporating, leaves surfaces clean and dry
- Outstanding compatibilty with plastics
- Meets aerospace specifications: US Federal Specification TT-N-95B; listed in British Airways standard practice manual
- Safe for use on metals and painted surfaces
- Ultra low conductivity
- Low odour, ideal for use in enclosed areas



Amberklene LO30

Low Odour Solvent

Code	P42	Size ml	Price 1-5	Price 6+
6130002700		400	11.85	11.30



High performance citrus-based cleaning solvent. An ideal alternative to traditional chlorinated or highly volatile solvent cleaners, suitable for use in aerospace, industrial and general engineering.

- Natural-based, high performance cleaner/degreaser
- Biodegradable
- Deep penetrating action
- Effective on a wide range of soiling such as oil, grease, tar, bitumen, silicone, rubber-based adhesives, oil-based paints, inks and dyes
- Meets many aerospace and industry approvals: Boeing D6-17487; McDonnel Douglas CSD#1; Pratt & Whitney PMC 1409/1/2/3/4 practice manual
- Safe on metals and most plastics



Ambersolv SB1

Critus-based Solvent Cleaner

Code	P42	Size ml	Price 1-5	Price 6+
6160006000		400	10.20	9.70

Cleaners Range, Solvent Based



An ultra pure, extremely fast evaporating contact cleaner. Ideal for use on electrical contacts, switches, electrical assemblies, PCBs, relays and precision equipment.

- Excellent material compatibility, safe for use on metals, glass, plastics and rubbers
- Non conductive
- Low odour
- Quick and efficient cleaning
- Very fast evaporation
- Leaves no residue
- Rail approved product: Cat. no. 07/07224
- Effective light duty degreaser, will remove grease, oils, waxes and silicone



Ambertron

Contact Cleaner

Code	P42	Size ml	Price 1-5	Price 6+
6130001500		400	14.65	13.95



Non-flammable precision cleaner is a true non-flammable alternative to commonly used solvent cleaners.

Demonstrates highly efficient and powerful cleaning with a fast cleaning action.

- Chlorinated and hydrocarbon solvent free
- CFC and HCFC free
- Non-flammable
- No flame extension: FEA 607 E, passes drum test: FEA 610 E
- High dielectric strength: 17kV
- Fast evaporation rate
- Plastics safe



NF Precision Cleaner

Non-flammable Precision Cleaner

Code	P42	Size ml	Price 1-5	Price 6+
6130001560		400	28.70	27.30

Universally accepted 'safe' solvent for the quick and efficient cleaning of delicate electrical and electronic components, in a wide variety of electronic, computing, aerospace and industrial applications.

- Gentle yet highly effective alcohol-based cleaner
- Excellent material compatibility, safe to use on plastics and rubber
- Can be used to remove moisture by forming an azeotrope – a mixture of IPA and water that evaporates quicker than water
- Conforms to BS1595, ASTMD770 and DIN53245
- Evaporates to leave a clean, dry surface



IPA

Isopropyl Alcohol Electronic Cleaning Solvent

Code	P42	Size ml	Price 1-5	Price 6+
6130015080		250	7.40	7.05
6130012000		400	11.40	10.85

A powerful water rinsable, solvent-based degreaser. Designed to quickly penetrate and emulsify even the heaviest oil and grease. Ideal for use in the most demanding of industrial, automotive and engineering applications.

- Powerful solvent blend which cuts through oil-based soiling
- High flash point: +39°C
- Fast penetrating action
- Contains a highly effective emulsifier that enables dissolved oil/grease residues to mix with water for easy wash-off
- Safe on metals, painted surfaces and most plastics
- Multi-use by spraying, soaking, immersion, brushing and wiping



Solvent Degreaser

Water Rinsable Degreaser

Code	P42	Size ml	Price 1-5	Price 6+
6130003100		500	7.75	7.40

Specialist Applications

An alcohol/water-based formulation for reducing electrostatic charges generated by friction and atmospheric charges generated by friction, atmospheric conditions or by dirt and dust build up. Particularly useful for textile/paper machinery and VDUs. Anti-static spray reduces airborne dust accumulation and is safe to use on most substrates.

- Rapidly reduces electrostatic charges
- Quick and easy to use
- Inhibits airborne dust accumulation
- Allows longer periods between cleaning
- Non-toxic and soluble in water



Anti-static Spray

Inhibits Static Build-Up

Code	P42	Size ml	Price 1-5	Price 6+
6130004020		400	8.45	8.05

A liquefied propellant which provides a powerful blast for the easy removal of dust and loose contamination from precision equipment such as cameras and printed circuit boards to general cleaning in areas where the use of a liquid cleaner may be undesirable.



- Non-flammable
- Powerful yet economical in use
- Extension tube helps to reach inaccessible/remote areas
- Non-ozone depleting, does not contain CFCs or HCFCs
- Meets military specification: NATO catalogue No. 6830-99-3826112
- Safe on plastics, rubbers and painted surfaces



Air Duster

Powerful, Dry, Inert Gas

Code	P42	Size ml	Price 1-5	Price 6+
6130012100		400	27.45	26.10

Universal screen cleaner is a highly effective screen cleaner formulated specifically for the removal of fingerprints, smudges, grime and other contaminants from delicate screens. The stable active foam clings to vertical surfaces preventing run-off and increasing contact time. The gentle foam helps penetrate grime on the screen to ensure exceptional first-time results.

- TFT computer screens
- Does not contain alcohol or ammonia
- Plasma screens and televisions
- LCD computer and television screens
- Industrial computer terminals
- Digital camera screens
- Static, mobile and portable electronic devices



Universal Screen Cleaner

For TFT, LCD, Plasma & All VDU Screens

Code	P42	Size ml	Price 1-5	Price 6+
6130004050		400	8.85	8.45

Invertible air duster works at any angle, even upside down, allowing servicing of intricate or immovable components. The powerful, dry blast of inert gas removes loose contamination from precision electrical equipment. Ideal for use by field/service engineers for difficult to reach or inaccessible areas where a conventional air duster cannot be used in an upright position.



- Removal of dust from PCBs and electrical components
- Cleaning of keyboards
- Removes dust from factory floor computers and electrical equipment
- Can be used safely and efficiently on: keyboards, computers, cameras, photocopiers, fax machines, microscopes, lenses, laboratory equipment, oscilloscopes and scanners



Invertible Air Duster

Powerful, Dry, Inert Gas

Code	P42	Size ml	Price 1-5	Price 6+
6130004000		200	19.10	18.15

Specialist Applications

A non-running, fast acting, foaming gasket remover. Works on vertical surfaces. Reduces scraping and sanding. Prevents damage to flanges. Also removes other difficult to shift contaminants.

- Prepares surfaces for new assemblies
- Removes old gaskets (including silicones and mastics)
- Removes two part paints
- Fast acting: works in less than 20 minutes at +25ºC
- Excellent temperature tolerance: -35°C to +35ºC
- Non-flammable



GS5 Gasket Stripper

Universal Gasket Stripper

Code	P42	Size ml	Price 1-5	Price 6+
63700M7028		400	14.90	14.20

Unique, speciality product that provides the instant answer to the problem of removing old labels and unsightly label residues form a wide variety of surfaces.



- Fast and effective removal of self-adhesive paper labels
- Quickly breaks down adhesive residues
- Controlled evaporation enables time for solvent to penetrate label
- Pleasant citrus smell
- No need to scratch and scrape
- Safe on most surfaces
- Also an effective cleaner for the removal of some inks and dyes



Label Remover

For Self-adhesive Labels & Stickers

Code	P42	Size ml	Price 1-5	Price 6+
6190012000		200	9.40	8.95

A concentrated water-based, highly alkaline detergent cleaner. Suitable for hot and cold use, when diluted with water it will quickly remove numerous different types of soiling and contamination.



- Removes a wide variety of soiling including: grease, oil, wax and polish
- Can be used on almost any hard surface: concrete floors, walls, doors, marble, duct, work, signs, terrazzo and more
- High foam action helps break down soiling
- Non-flammable
- Very economical: dilute from 6:1 up to 4:1
- Safe on plastics, rubber and painted surfaces

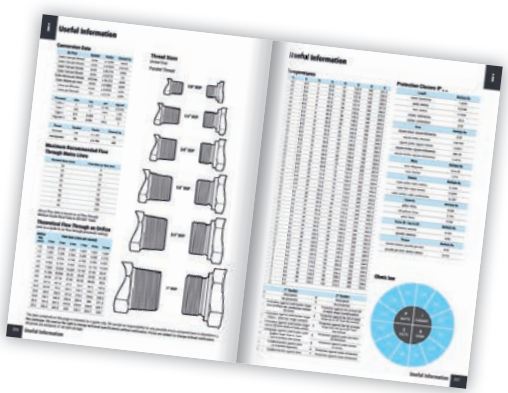


Hard Surface Cleaner

Multi-surface Detergent Cleaner

Code	P42	Size ltr	Price 1-5	Price 6+
6330007005		5	26.45	25.15
6330007025		25	109.95	104.50

For Useful Information



See pages 886-887



The complete maintenance treatment for protection against corrosion, water displacement, lubrication and flash rust removal. Too many applications to list, but more than 40! The engineer's essential cure all.

- Quickly frees seized nuts, bolts and bearings
- High corrosion protection and water displacement properties
- Remains operational at sub-zero temperatures
- Non-conductive film
- Safe on most paints, rubbers and plastics
- Rolls Royce and Rail approved: 1036J
- Rail approved product: Catalogue No. 27/29302
- Treated metals resist finger printing and remain bright even in highly corrosive conditions
- Operational temperature: -20°C to +115°C



40+

Protective Lubricant

Code	P42	Size ml	Price 1-5	Price 6+
6130007000		400	6.90	6.60



A multipurpose, greaseless lubricant preventing electrical and electronic malfunction caused by water penetration, humidity, condensation or corrosion. The stable, low surface tension, high capillary action formula provides great penetrating and wetting power.

- Provides precision lubrication by its thin, high dielectric strength, lubricating film
- Cleans, lubricates, protects, penetrates and loosens corrosion
- Restores resistance value by reducing current leakage
- Temperature range: -20°C to +115°C
- Can be used on all metal and alloys, plastics, painted surfaces, coatings and rubbers



AGL1

Multipurpose Greaseless Lubricant for Electrical Equipment

Code	P42	Size ml	Price 1-5	Price 6+
6130009000		400	9.75	9.30



XG 250 silicone grease in easy to apply aerosol form. Provides a smooth non-melting coating that insulates, lubricates, seals, preserves and waterproofs.

- Insulates high voltage parts against leaking or arcing
- Waterproofs electronics in damp or humid conditions
- Seals against moisture ingress and prevents ice build-up
- Meets military, rail and aviation specifications
- Preserves rubber against hardening or cracking
- Assists assembly of close tolerance components



AMS4

Multipurpose Silicone Grease

Code	P42	Size ml	Price 1-5	Price 6+
6130008500		400	17.85	17.00



A high solids content, heat dissipating lubricant specifically developed for mechanical handling and drive chain lubrication. Penetrates deeply into links ensuring total lubrication; can be applied to moving chains.

- Offers maximum adhesion to chain links
- Resists 'water wash off' and dust absorption
- Resists 'throw off' and can be applied to running chains
- High temperature resistance up to +200°C (300°C intermittent)
- Meets military specifications
- Pencil jet spray pattern to facilitate accurate application



Chainspray

Chain & Drive Lubricant

Code	P42	Size ml	Price 1-5	Price 6+
6150001100		400	15.85	15.10

Lubricants



A clear liquid formulated specifically for use on all types of belts to increase pulling power, prevent belt slippage due to heat, cold, dampness or dust, and eliminate belt squeak.

- Works on all type of belts: vee, flat, toothed, rubber, leather, and fabric
- Keeps belts 'soft' and glaze free
- Protects belts from deterioration through oxidation and heat
- Waterproofs



Belt Dressing

Adhesive Belt Lubricant

Code	P42	Size ml	Price 1-5	Price 6+
6190014000		400	12.20	11.60



A fast drying, high solids, high penetrating lubricant that forms a tough, durable barrier against corrosion, abrasion, dust absorption, water wash-off and extremes of temperature.

- Deep penetration for internal protection of wire ropes
- Forms a dry, non-peeling film that overcomes the limitations of grease lubrication and pressure cushions
- Pencil jet spray pattern to facilitate accurate application
- Suitable for use on gears in motion and at all speeds



Gear & Wire Rope Lubricant

Heavy-duty Lubricant

Code	P42	Size ml	Price 1-5	Price 6+
6150007000		400	17.45	16.60



An advanced formulation based on laws of thermodynamics which rapidly freezes rust down to -40°C, causing micro-fissures to form in the rust layer. This enables deeper penetration and faster removal.

- Freezes metal parts seized by dirt, rust, etc.
- Ensures quick disassembly of mechanical components, fittings, assemblies, nuts and bolts, and other close tolerance fasteners
- Reduces maintenance costs through time saving
- Reduces scrap rate of seized parts
- Does not contain silicones
- Safe for use on all metals and for most plastics and rubbers (users should conduct their own testing prior to use)
- Fitted with the 360° spray system for all angle use



Rust Flash

Rust Loosener with Freeze Shock Effect

Code	P42	Size ml	Price 1-5	Price 6+
6150003601		500	9.10	8.65



An extreme low surface tension lubricant that wets out and penetrates deeply and quickly to aid the swift removal of seized and rusted components. The industrial formulation ensures even the most heavily corroded fasteners may be freed easily.

- Freeze seized components rapidly
- Lubricates fine and close tolerance threads
- Corrosion inhibiting lubricant facilities re-assembly
- Removes light surface rust
- Contains MoS2
- Softens and removes carbon deposits
- Safe on metals, alloys and most paints, rubbers, plastics and protection.



Penetrating Oil

Penetrant for Seized Parts

Code	P42	Size ml	Price 1-5	Price 6+
6150003600		400	9.60	9.15



Protects against fretting, seizing and corrosion. Enables easy assembly and dismantling of threaded fasteners even after exposure to high temperatures, providing anti-seize protection to 1100°C.

- Formulated with micro-ionised copper and anti-oxidant additives
- Reduces friction and wear
- Assists easy disassembly of threaded components
- Good corrosion protection even in highly corrosive environments
- Lead and nickel free
- Anti-seize protection: -30°C to +1100°C
- Lubricates to 300°C



Copper & Anti-seize Paste

High Temperature Anti-seize

Code	P42	Size ml	Price 1-5	Price 6+
6190014010		400	11.95	11.40



A dry PTFE based lubricating film that is unaffected by water, oil or solvents and is suitable where the use of wet or silicone lubricants is undesirable.

- Forms a dry non-staining film
- Exhibits excellent friction retardant properties
- Ideal for the textile and paper industries where direct contact is involved with surfaces that would be contaminated by wet or silicone based lubricants
- Wide operational temperature range: -100°C to +200°C



Dry Film Anti-stick

Dry PTFE Lubricant

Code	P42	Size ml	Price 1-5	Price 6+
6140003500		400	22.05	20.95



A resin bonded, high pressure resistant, dry film lubricant containing molybdenum disulphide (MoS2) for metal-to-metal lubrication where a wet film cannot be tolerated. Once applied, the MoS2 lubricant prevents seizing, fretting, scuffing and reduces friction.

- Tough and long lasting
- Repels water
- Dry film will not attract dust, dirt and contaminants
- Assists assembly and running-in
- Highly effective in high-load applications
- Performance can be enhanced by polishing the dry film with a soft, dry cloth
- Operational temperature range: -150°C to +400°C



Dry Moly

Dry Molybdenum Disulphide Lubricant

Code	P42	Size ml	Price 1-5	Price 6+
6150002000		400	20.55	19.55



A general purpose, medium duty silicone lubricant. Suitable for use in a wide variety of applications where reduced friction is required. WRAS approved for use in the water industry where contact with potable water may occur, e.g. lubrication of pipe push fittings.

- Odourless, colourless
- Non-toxic, safe for use with potable water systems
- Inhibits adhesion of adhesives inks and dyes
- Exhibits excellent slip properties on blades, tables, chutes and conveyors
- Safe on wood, glass, fabrics, metals, most plastics, rubbers and most hard surfaces
- Eliminates friction and fabric drag
- Can be used as a mould release agent on plastics and rubbers
- WRAP approved product: 0311522
- Temperature range: -50°C to +200°C



Silicone Lubricant

General Purpose

Code	P42	Size ml	Price 1-5	Price 6+
6190015000		500	6.15	5.85

Lubricants



A high purity, highly concentrated silicone lubricant which provides extended lubrication intervals. Based upon silicones approved by the FDA and considered safe for use in potable water systems.

- Odourless, tasteless, colourless and chemically inert
- Ideal for use where high standards of purity are essential
- Suitable as anti-stick agent on conveyors, labellers, heat sealers and packaging applications
- Helps prevent line jams, inhibits adhesives build up on blades and sealers
- WRAS approved product: 0311522
- Non-toxic



Silicone Anti-stick

Concentrated Silicone Lubricant

Code	P42	Size ml	Price 1-5	Price 6+
6140001500		400	19.05	18.10



High quality, pure, silicone grease which is water repellent and non-melting. As an anti-tracking, anti-arcing coating, it will protect electrical systems. It can also be used as a multipurpose lubricating agent in a wide variety of industries.

- Freezes seized components rapidly
- Lubricates fine and close tolerance threads
- Corrosion inhibiting lubricant facilities re-assembly
- Removes light surface rust
- Contains MoS2
- Softens and removes carbon deposits
- Safe on metals, alloys and most paints, rubbers, plastics and protection



Greasil 4000

Pure Silicone Grease

Code	P42	Size ml	Price 1-5	Price 6+
63700L0017		100	10.75	10.25



A premium quality, extremely stable, lithium-calcium, multi-complex soap thickened grease, which extends re-lubrication intervals in a wide range of working conditions.

- Suitable for use in all types of anti-friction sliding surfaces and plain bearings
- Exceptional load carrying capacity: Timken OK load (IP236) 25kg; Mean Hertz load 125kg
- Exceptional EP resistance: Shell 4 ball weld load (IP239) > 800kg
- Highly visible red standard grease classified NLGI 2 type
- Extends lubrication intervals by at least three times
- Compatible with most other greases
- Temperature range: -30°C to +150°C



Ambergrease EXL

Extended Life, High Performance Bearing Grease

Code	P42	Size ml	Price 1-5	Price 6+
6150001010		400	11.25	10.70

Corrosion Inhibitors



A zinc-rich acrylic coating that offers excellent cathodican to steel fabrications and all exposed ferrous metalwork.

- Sacrificial coating protects metalwork and steels from corrosion
- For use on bare non-rusted steel and seams
- Zinc 99% pure, content 88% cured film
- Suitable for use as renovation media as specified in BS EN ISO 1461: 1999
- Suitable as primer, can be over-coated with acrylic, cellulose, alkyd, polyurethane-alkyd and epoxy paint systems
- Matt, dark grey, weathered appearance
- Fast drying and xylene free



Cold Galvanised Spray

Zinc-rich Protective Coating

Code	P42	Size ml	Price 1-5	Price 6+
6190011001		400	13.90	13.25



Protective coating with a finishing appearance of freshly hot dipped galvanised parts.

- Resists weathering, retaining a super bright finish
- Adheres strongly to metal, offering a long-term barrier-protective coating
- Free from lead, chromate and chlorinated solvents
- Applications: any metal structure requiring corrosion protection whilst maintaining the look of the freshly, hot-dipped galvanised shine



Galva Shine

Aesthetic Protective Coating

Code	P42	Size ml	Price 1-5	Price 6+
6190011510		400	11.75	11.20



A zinc-rich acrylic coating blended with aluminium flakes to produce a bright freshly galvanised-looking, aesthetic coating.

- Barrier coating protects metalwork and steels from corrosion
- For use on bare non-rusted steel and seams
- 99% pure zinc, contains non-leafing aluminium
- Suitable as primer, can be over-coated with acrylic, cellulose, alkyd, polyurethane-alkyd and epoxy paint systems
- Suitable as top coat for Cold Galvanise
- Fast drying
- Weathers naturally to match the appearance of hot-dip galvanised metal
- Xylene free



Bright Cold Galvanise

Zinc-rich Bright Protective Coating

Code	P42	Size ml	Price 1-5	Price 6+
6190011501		400	15.65	14.90



ZR99 is recommended for the cold galvanising and durable protection of all metallic parts, whether iron or alloy. The zinc in ZR99 is exceptionally pure (99.9% pure); it dries quickly to an even thickness with a glossy finish.

- Fast drying: touch dry 15 minutes, complete cure 24 hours
- Gloss finish/hammered
- Can be over-painted
- The dry film can be welded (except argon welding)
- Temperature range: -50°C to +550°C
- Formulation guaranteed free from chlorines, hydrocarbons and aromatics



ZR99

Zinc Corrosion Inhibitor

Code	P42	Size ml	Price 1-5	Price 6+
63700M8668		400	9.70	9.25

Corrosion Inhibitors



A clear protective coating that provides long lasting protection against rust and corrosion on internal and external metallic components.

- Film will not harden or crack
- Suitable for protection of ferrous metals in conditions of high humidity
- Film allows for subsequent handling and resists acid finger painting
- Forms a continuous homogenous film
- Will not stain or mark components
- Removes surface moisture on application
- Suitable as anti-seize coating on bolts, hinges, fixings and moving parts
- Passes MIL-PRF-16173E
- Over 250 hours continuous protection in salt spray tests



Corrosion Inhibitor

Waxy Anti-corrosion Treatment

Code P42	Size ml	Price 1-5	Price 6+
6190011600	400	13.00	12.35

TECHMATIC™

Quality is our No.1 Responsibility

The Techmatic™ range has been developed based on our extensive industry knowledge and experience.

Each product has been carefully selected with these three fundamentals:

Quality, Price and Availability



Metal Cutting



A ready-to-use metal cutting spray for the precision application of metal working lubricant, providing faster production times and improved surface finish. A must use product where 'right first time' results are essential.

- Suitable for a wide range of metals, including stainless and high carbon steels
- Improves heat dissipation
- Prevents chip welding
- Allows heavier close tolerance cuts
- Ideal for reaming, tapping and drilling
- Economical in use



Tufcut Spray

Metal Cutting Lubricant

Code	P42	Size ml	Price 1-5	Price 6+
6150005500		400	18.90	18.00



Foaming metal working lubricant for use on vertical surfaces or where longer contact time is required. The foam controls the rate at which the lubricant is released to the work area, providing deeper penetration for close tolerance gaps and even coverage.

- Proven Tufcut liquid in a foam
- Clings to vertical surfaces
- Dissipates heat and allows heavier, close tolerance cuts
- Excellent results across a wide range of metals including high carbon, high speed and high tensile steels
- Particularly effective for in-place maintenance of turbine blades



Tufut Foam

Foaming Metal Cutting Lubricant

Code	P42	Size ml	Price 1-5	Price 6+
6150006500		300	19.70	18.75



Tufcut liquid is a ready-to-use metal cutting lubricant for use in machining metal and some composite materials. The advanced formulation of this concentrated liquid provides exceptional lubricating and heat dispersant properties with improved finish to machined surfaces.

- Handy pack size allows application direct to the work piece
- Helps prevent chip welding and increases tool life
- Approved by Augusta Westland for machining composite materials (Nº LIS 6045)
- Suitable for a wide range of metals, including stainless and high carbon steels
- Improves heat dissipation
- Bulk pack suitable for automated applications



Tufcut Liquid

Metal Cutting Lubricant

Code	P42	Size	Price 1-5	Price 6+
6150006000		350ml	20.75	19.75
6250007000		5ltr	112.55	106.95



A thick paste-like compound with all the performance of Tufcut in a thick, tenacious lubricating film. The high-cling compound adheres to tool pieces, preventing throw-off and wastage, whilst delivering excellent lubricating and heat reduction properties.

- Very economical in use
- Pleasant, mild pine perfume
- Eliminates chip weld and prolongs tool life
- Ready-to-use straight out of the tin
- Can be used on most metals, particularly effective on steel



Tufcut Compound

Metal Cutting Lubricant

Code	P42	Size gm	Price 1-5	Price 6+
6150006100		500	16.35	15.55

Metal Working, Wipes & Hand Cleaners



A water-based spatter release agent which gives exceptional results without the use of harmful solvents, silicones or mineral oils.

- Odourless, non-flammable and safe in use
- Fine spray pattern ensures total control and economical coverage
- Prevents spatter adhesion on welding equipment, work pieces, surfaces, jigs and surrounding areas
- Film is easily wiped away and leaves no residues
- Allows post welding operations: painting, plating, galvanising, etc, to be undertaken
- Contains rust inhibiting agent



Bioweld

Weld Anti-spatter, Water-based

Code	P42	Size ml	Price 1-5	Price 6+
6190004600		400	5.75	5.50



Traditional solvent-based spatter release formulation.

- No silicones or flammable solvents
- Prevents spatter adhesion on welding equipment, workpieces, surfaces, jigs and surrounding areas
- Does not affect post-welding operations
- Post-welding film is easily wiped away



Spatter Release

Weld Anti-spatter, Non-flammable

Code	P42	Size ml	Price 1-5	Price 6+
6190004150		400	4.50	4.30



Super high absorbency hand wipes overlayered with an effective polymer web to give all the cleaning power of pumice without the scratching.

- Cleaner and towel together in one convenient wipe
- Leaves hands deep clean
- Hands dry without stickiness normally associated with waterless cleaners
- No contamination from heavy perfumes
- Highly effective on a range of soiling types: grease, oils, petrochemicals, paints, adhesives, tar, bitumen, resins, silicone
- Contains skin conditioner to replace natural oils removed in cleaning
- Contains a bactericide effective against leptospira (Weil's disease)



Tough Wipes, 100 Wipe Tub

High Absorbency Cleaning Wipes

Code	P42	Quantity	Price 1-5	Price 6+
6330272100		100	29.65	28.20



Super high absorbency hand wipes overlayered with an effective polymer web to give all the cleaning power of pumice without the scratching.

- Cleaner and towel together in one convenient wipe
- Leaves hands deep clean
- Hands dry without stickiness normally associated with waterless cleaners
- No contamination from heavy perfumes
- Highly effective on a range of soiling type: grease, oils, petrochemicals, paints, adhesives, tar, bitumen, resins and silicone
- Contains skin conditioner to replace natural oils removed in cleaning
- Contains a bactericide effective against leptospira (Weil's disease)



Tough Wipes, 30 Wipe Pouch

High Absorbency Cleaning Wipes

Code	P42	Quantity	Price 1-5	Price 6+
6330272030		30	7.15	6.80

Food Group Cleaners

A heavy-duty, biodegradable, water-based all-purpose foam cleaner/degreaser. Specially formulated, it contains a blend of synthetic and natural surface-active components, for use in food processing and packaging areas. Suitable for use in many different types of cleaning applications in the food and drinks industry. The stable, non-dripping foam ensures longer contact time and improved performance, especially on vertical surfaces.

- NSF A1 registered (Nº 137995), meets USDA 1998 A1 for use in food industry
- Readily biodegradable as per OECD 301B
- Quickly penetrates, removes grease, oil, grime and tough stains from any washable surface
- Foam formula limits over-application
- No ammonia, chlorinated or petroleum solvents
- Free from phosphates, EDTA and nonylphenolethoxylates
- Safe on all metals, safe on plastics if rinsed after application



Amberclens FG

NSF A1 Foam Cleaner

Code	P42	Size ml	Price 1-5	Price 6+
6150009300		500	9.05	8.60

A concentrated, biodegradable, industrial strength, water-based cleaner/degreaser. Contains a blend of synthetic and natural surface active components. Authorised for use in food processing and packaging areas and as a floor and wall cleaner. A non-flammable, non-abrasive formula for use in a multitude of cleaning applications.



- NSF A1 registed (Nº 137997), meets USDA 1998 A1 for use in food industry
- Readily biodegradable as per OECD 301B
- Quickly penetrates removing grease, oil, grime and tough stains from any washable surface
- Effective in both cold and warm water, can be diluted up to 1:100
- Contains no ammonia, chlorinated, or petroleum solvents
- Safe on all metals and plastics if rinsed



Aquasafe FG

NSF A1 Water Based Cleaner/Degreaser

Code	P42	Size ml	Price 1-5	Price 6+
6150009320		750	16.20	15.40

A heavy-duty biodegradable, industrial cleaner/degreaser. An innovative solvent blend without chlorinated solvents or ozone-depleting components, specially designed for use in inedible product processing, non-processing and exterior areas.



- NSF A8 & C1 registered (Nº 137996 & 140261), meets guidelines for use in food industry
- High flash point of +40ºC for application safety
- Dissolves grease, oil, lubricants, tar and adhesives
- Penetrates quickly and removes dirt and moisture
- Cleans and degreases equipment, metal parts and machinery
- Neutral product, non-staining
- Does not contain water or chlorinated solvents
- Non-corrosive to metal
- Test on plastic and some paints prior to use
- Fitted with 360º spray system for all angle use, even upside down



Amberklene FG

NSF A8 & C1 Biodegradable Cleaner/Degreaser

Code	P42	Size	Price 1-5	Price 6+
6150009310		500ml	13.40	12.75
6150009410		5ltr	74.00	70.30

An innovative solvent blend that is excellent for use where rapid turnaround is necessary and low flash point solvents can be used. Dissolves and removes greases, oil, lubricants, adhesives and contaminations from equipment, machinery, motors and metal parts. Specially formulated for degreasing electric motors.

- NSF A8 and K1 registered (Nº 140255 and 140250) for use in food industry
- Cuts through dirt and grease
- Fast evaporation to minimise downtime, leaves no residue
- Easy 'in place' cleaning with minimal odour
- Non-corrosive and non-staining
- Safe on most plastics, coating and rubbers (always test prior to use)
- Fitted with 360º spray system for all angle use, even upside down



Industrial Degreaser FG

NSF A8 & K1 Heavy-duty Degreaser

Code	P42	Size	Price 1-5	Price 6+
6150009420		500ml	12.40	11.80
6150009430		5ltr	76.95	73.15

Food Group Cleaners



A liquified propellant which provides a powerful blast for easy removal of dust and loose contamination from precision equipment such as cameras and printed circuit boards to general cleaning in areas where the use of a liquid cleaner may be undesirable.

- Non-flammable
- Powerful yet economical in use
- Extension tube helps to reach inaccessible/remote areas
- Non-ozone depleting, no CFCs or HCFCs
- Meets military specification: NATO Cat. No. 6830-99-3826112
- Safe on plastics, rubbers and painted surfaces
- NSF K2 registered (Nº 140256) for use in the food processing industry



Air Duster FG

Powerful, Dry, Inert Gas

Code	P42	Size ml	Price 1-5	Price 6+
6150009440		400	20.30	19.30

A highly effective precision cleaning solvent which does not contain chlorinated, alcohol or glycol ether components. Improves the performance and reliability of electrical/electronic equipment in the food industry by preventing contact failures or malfunctions through dissolving and/or rinsing away contaminations, which may hold moisture and cause corrosion or arcing.

- NSF K2 registered (Nº 139627) for use in the food industry
- Fast cleaning action
- Removes flux traces, light oils and other components
- Prolongs the life expectancy of components
- Non-conductive and non-corrosive
- Evaporates completely, leaves no residue
- Safe for all metal surfaces, most rubbers, plastics and coatings
- Fitted with 360º spray system for all angle use, even upside down



Contact Cleaner FG

NSF Registered Electrical Contact

Code	P42	Size ml	Price 1-5	Price 6+
6150009510		400	11.20	10.65



A unique blend of citrus and hydrocarbon oils which quickly releases self-adhesive labels and stickers by loosening the adhesive, thereby assisting in the clean and easy removal of all residues. Specifically formulated for use in the food industry.

- NSF K3 registered (Nº 140259) for use in the food industry
- Removes adhesives and paper labels in three minutes
- Particularly effective in removing shipping labels on pallets
- Good material compatibility (always test prior to use)
- Improves packaging line efficiency by reducing jamming caused by label and adhesive build-up



Label & Adhesive Remover FG

NSF Reg. Label & Adhesive Remover

Code	P42	Size ml	Price 1-5	Price 6+
6150009450		200	9.25	8.80



A water-based, foaming cleaner for the degreasing and cleaning of stainless steel surfaces. The product combines tough cleaning power with a durable protective coating all in one application.

- NSF A7 and C1 registered (Nº 138212), meets guidelines for use in food industry
- Eliminates fingerprints, watermarks, dust and dirt from stainless steel
- Leaves a protective non-greasy barrier for a long-term shine
- Provides metal surfaces with a long-term protective coating which inhibits staining and contamination
- Also suitable for aluminium, chrome and most plastics (test prior to use)
- Non-corrosive
- Fitted with a 360º spray system for all angle use, even upside down



Stainless Steel Cleaner FG

NSF A7 & C1 S/S Cleaner

Code	P42	Size ml	Price 1-5	Price 6+
6150009360		500	12.45	11.85

Food Group Cleaners



A high performance, foaming chain lubricant based on stable vegetable oils with added PTFE. Specially designed to provide convenient, effective lubrication and protection in applications where a clean lubricant is preferred.

- NSF H1 registered (Nº 137998), meets USDA 1998 H1 guidelines for use as a lubricant with possible incidental food contact
- Formulated using only food industry acceptable components
- Good adhesion on metal surfaces, even at elevated temperatures and high rpm
- Excellent penetration and lubrication properties
- Leaves a tenacious, long lasting lubrication film
- Good load carrying properties
- Prevents corrosion and resists water wash-off
- Operating temperature from -15ºC to +175ºC



Chain Lube FG

NSF H1 Chain Lubricant with PTFE

Code	P42	Size ml	Price 1-5	Price 6+
6150009330		400	20.45	19.45



A general purpose lubricant and penetrating oil, based on pharmaceutical grade, highly refined white oils. An extremely efficient and effective general purpose lubricant for use on food processing equipment where incidental food contact may occur.

- NSF H1 registered (Nº 137999), meets USDA 1998 H1 guidelines, to be used as a lubricant with possible incidental food contact
- Formulated using only food industry acceptable components
- Does not resinify, allowing longer lubrication intervals
- Creates an effective water-repellent film
- Prevents corrosion and extends machine and equipment life
- Reduces friction and wear efficiently over a wide temperature range: -18ºC to +120ºC
- Safe for use on metals and most plastics



Machine Oil FG

NSF H1 General Purpose Lubricant

Code	P42	Size	Price 1-5	Price 6+
6150009340		400ml	14.90	14.20
6150009460		5ltr	94.55	89.85



A clear liquid formulated specifically for use on all types of belts to increase pulling power, prevent belt slippage due to heat, cold, dampness or dust, and eliminate belt squeak.

- Works on all types of belt: vee, flat, toothed, rubber, leather and fabric
- Keeps belts 'soft' and glaze free
- Protects belts from deterioration through oxidation and heat
- Waterproofs
- NSF H1 registered (Nº 140257) and has been formulated for use in the food industry where direct contact with food may occur



Belt Dressing FG

Adhesive Belt Lubricant

Code	P42	Size ml	Price 1-5	Price 6+
6150009480		400	12.20	11.60



Specifically developed for the food industry, rapidly penetrates to loosen rust and scale to free corroded fasteners and mechanical components. Eases disassembly of mechanical equipment, fittings and assemblies.

- NSF H1 registered (Nº 140260) for use in the food industry
- Quickly penetrates deep into threads
- Frees metal parts seized by dirt, rust, corrosion or dried-up greasy deposits
- Assists quick disassembly of mechanical components, fittings, assemblies, nuts and bolts, and other close tolerance fasteners
- Reduces scrap rate of seized parts
- Does not contain silicones
- Safe for use on all metals and for most plastics and rubbers



Penetrating Oil FG

NSF Registered Penetrant for Seized Parts

Code	P42	Size ml	Price 1-5	Price 6+
6150009470		400	10.35	9.85

Food Group Cleaners

Silicone FG

NSF H1 Registered Silicone Lubricant

For use in the food industry where incidental food contact may occur. Excellent, versatile lubricant – odourless, colourless and tasteless. A blend of high quality, stable silicone oils, the highly versatile, non-corrosive formula lubricates, protects, waterproofs and restores a wide range of parts and equipment. Ensures superior lubrication of plastics and provides excellent anti-friction properties.

- NSF H1 registered (Nº 138000), meets USDA 1998 H1, to be used as a lubricant with possible incidental food contact
- Excellent general lubricating properties
- Forms a colourless, non-staining film
- Highly water-resistant and repels water from treated areas
- Eliminates squeaking, binding and sticking
- Protects metals, plastics, rubbers and other surfaces
- Effective over a wide temperature range: (-40ºC to +200ºC)
- Fitted with 360º spray system for all angle use, even upside down



Code	P42	Size ml	Price 1-5	Price 6+
6150009350		400	12.10	11.50

Ambergrease FG1

General Purpose Grease for Food Processing Equipment

Designed to cover a wide range of food safe applications, where extremes of temperature, wet and saturated environments, heavily loaded applications, or where dust and other contaminants are present. It contains extreme pressure (EP) additives and PTFE to provide a high degree of anti-wear performance. All ingredients are FDA listed. Suitable for all plain and anti-friction bearings as well as sliding surfaces.

- NSF H1 registered (Nº 138264), meets USDA 1998 H1 guidelines, to be use as a lubricant with possible incidental food contact
- Provides long-term lubrication on all processing equipment
- Protects against corrosion in wet or saturated environments
- Excellent extreme pressure performance
- Extends lubrication intervals and working life of components
- Operational temperature from -50ºC to +165ºC
- This product contains no genetically modified ingredients



Code	P42	Size gr	Price 1-5	Price 6+
6150009370		400	22.80	21.70

Ambergrease FG2

High Temperature Bearing Grease

Designed as a high temperature-resistant food industry grease, containing PTFE and other additives, all of which are FDA listed. Suitable for all plain and anti-friction bearings as well as sliding surfaces. Resistant to a wide range of chemical cleaning solutions used in the food and drink industries. It provides long term lubrication at high temperatures, greatly extending lubrication intervals and reducing the formation of carbon deposits associated with many high temperature greases.

- NSF H1 registered (Nº 138265), meets USDA 1998 H1 guidelines, to be use as a lubricant with possible incidental food contact
- Cooper corrosion (IP112), negative
- Water washout (ASTM D1264) @ +38ºC <2% max
- Operating temperature range: -20ºC to +220ºC
- Mean Hertz load: 30kg
- Does not affect most rubber type sealing materials
- This product contains no genetically modified ingredients



Code	P42	Size gr	Price 1-5	Price 6+
6150009380		400	38.15	36.25

Ambergrease FG3

NSF H1 Multipurpose Bearing Grease

Multipurpose grease which provides long-term lubrication where incidental food contact may occur in food processing areas. The presence of EP (extreme pressure) additives results in a long-lasting grease which offers many of the benefits of higher priced greases.

- NSF H1 registered (Nº 140248) for use in the food industry
- Provides stable, long-term lubrication
- Resistant to water and steam
- Protects against corrosion
- Operational temperature: -20ºC to +140ºC (180ºC intermittent)

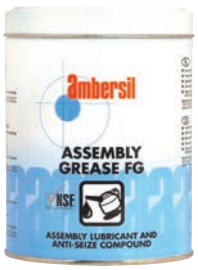


Code	P42	Size gr	Price 1-5	Price 6+
6150009490		400	16.05	15.25

Food Group Lubricants

A white, non-toxic grease-like compound with a high solids content designed for use as an assembly lubricant for bushes, sliding surfaces and small open plastic or metal gears and as an anti-seize compound for threaded fasteners. The compound is designed to prevent damage during start up and protect against premature wear during the running-in period.

- NSF H1 registered (Nº 138266), meets USDA 1998 H1 guidelines, to be used as a lubricant with possible incidental food contact
- Low friction coefficient provides protection during running-in, prolonging component life
- Provides protection against scuffing during assembly
- Prevents seizure of threaded components enabling easy and quick dismantling
- Effective from -30ºC to +150ºC as a lubricant and to +1100ºC as anti-seize



Assembly Grease FG

Assembly Lubricant & Anti-seize Compound

Code	P42	Size gr	Price 1-5	Price 6+
6150009390		500	31.05	29.50

Tenacious white paste formulated specifically for use in the food industry as a start-up lubricant, reducing wear to moving components during the running-in period. Has a high solids content which provides instant lubrication to bearings and sliding surfaces whilst the bearing grease is worked to release its lubricating oils.

- NSF H1 registered (Nº 139900) for use in the food industry
- Compatible with most grease types
- Prevents galling and metal-on-metal damage
- Operational temperature: -30ºC to +150ºC as a lubricant and +1100ºC as an anti-seize
- Allows moving components to be run at full operating speed sooner without the risk of friction build-up



Assembly Paste FG

Assists Assembly of Components

Code	P42	Size ml	Price 1-5	Price 6+
6150009400		400	13.45	12.80

Multipurpose grease for the lubrication of a wide variety of parts, hinges, and bearings. Formulated from food processing safe grease and solvents, this NLGI2 grease benefits from a controlled spray pattern combined with a temporary, semi-liquid state upon application, allowing the grease to penetrate moving parts and deliver superior lubricant coverage.



- NSF H1 registered (Nº 140258) for use in the food industry
- NLGI grade 2 grease in an aerosol
- Good penetration before thickening rapidly
- Medium duty grease
- Operational temperature: -20ºC to +140ºC (+180ºC intermittent)



Food Grease FG

NSF Registered Spray Grease

Code	P42	Size ml	Price 1-5	Price 6+
6150009500		400	12.50	11.90

PVC Door Curtains

PVC Curtain Benefits

- Reduces hot and cold air loss
- Restricts movement of air pollutants
- Easy to install
- Choice of grades and colours
- A self-extinguishing product
- Strong and durable
- Provides control for birds and flying pests
- Minimal maintenance
- Allows easy access for pedestrians
- Bolt-on system
- Hook-on system
- Sliding system

Contact Us for a Quote

Let us quote for your door strip application. We will cut and supply the strip, fitted with all necessary components, ready to install by you.

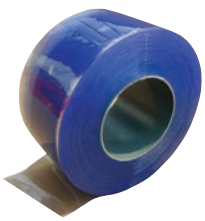
For a quotation we require the following basic information:

- Door way width (A)
- Door way height (B)
- Fixing on face or soffit?
- Your choice of grades and colours
- Bolt-on, hook-on or sliding system?





- Suitable for temperature: -10°C

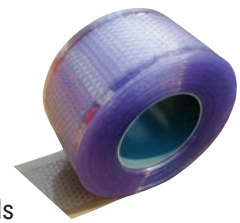


Standard PVC Insulation & Door Strip

Clear with Blue Tint, 50 Metre Coils

Code P32	Width mm	Thickness mm	Price
CS100/1CL-50M	100	1	46.00
CS100/2CL-50M	100	2	79.85
CS150/3CL-50M	150	3	223.50
CS200/2CL-50M	200	2	166.55
CS300/2CL-50M	300	2	249.85
CS300/3CL-50M	300	3	366.60
CS400/4CL-50M	400	4	499.85

- Suitable for temperature: -10°C



Perforated PVC Insulation & Door Strip

Clear with Blue Tint, 50 Metre Coils

Code P32	Width mm	Thickness mm	Price
CSP200/2CL-50M	200	2	191.20
CSP300/3CL-50M	300	3	428.45

- Suitable for temperature: -10°C

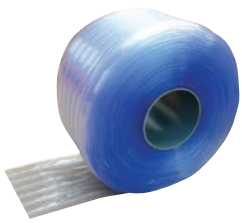


Standard PVC Insulation & Door Strip

Various Colours, 50 Metre Coils

Code P32	Colour	Width mm	Thickness mm	Price
CS200/2RD-50M	Solid Red	200	2	191.55
CS300/2RD-50M	Solid Red	300	2	287.30
CS300/3RD-50M	Solid Red	300	3	421.55
CS400/4RD-50M	Solid Red	400	4	574.80
CS300/2BK-50M	Solid Black	300	2	191.55
CS200/2OR-50M	Translucent Orange	200	2	191.55

- Suitable for temperature: -10°C



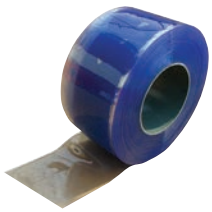
Double Ribbed Buffer Door Strip

Clear with Blue Tint, 50 Metre Coils

Code P32	Width mm	Thickness mm	Price
BSL200/2CL-50M	200	2	182.90
BSL300/3CL-50M	300	3	428.45
BSL400/4CL-50M	400	4	761.80

PVC Door Curtains

- Suitable for temperature: -35°C



Polar Coldstore Quality Door Strip

Clear with Blue Tint, 50 Metre Coils

Code P32	Width mm	Thickness mm	Price
CF100/2CL-50M	100	2	91.90
CF150/3CL-50M	150	3	238.00
CF200/2CL-50M	200	2	191.55
CF300/2CL-50M	300	2	287.40
CF300/3CL-50M	300	3	421.60
CF400/4CL-50M	400	4	764.10

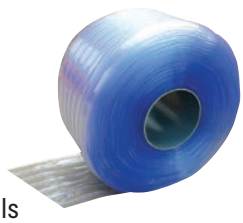


Fixing Plates

Stainless Steel, Hook on

Code P32	Size mm	Price
SSCL100	100	3.55
SSCL200	200	5.25
SSCL300	300	7.60
SSCL400	400	10.50

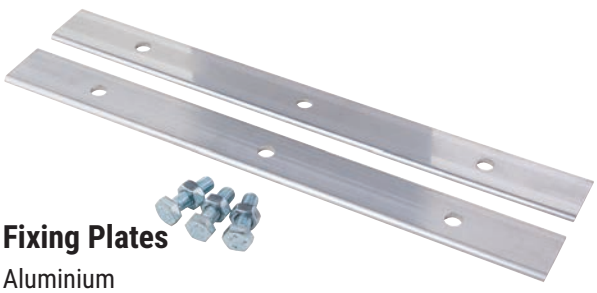
- Suitable for temperature: -35°C



Double Ribbed Polar Quality Door Strip

Clear with Blue Tint, 50 Metre Coils

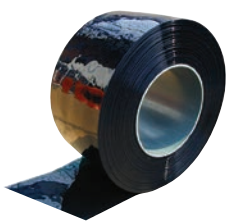
Code P32	Width mm	Thickness mm	Price
BCF200/2CL-50M	200	2	182.90
BCF300/3CL-50M	300	3	428.45



Fixing Plates

Aluminium

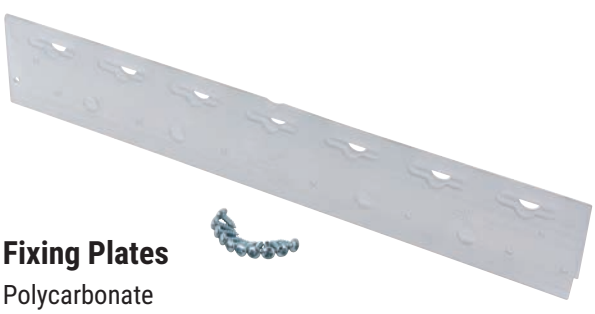
Code P32	Size mm	Price
AACL200	200	1.75
AACL300	300	2.70
AACL400	400	3.60



PVC Welding Strip

Various Colours, 50 Metre Coils

Code P32	Colour	Width mm	Thickness mm	Price
GS300/2GN-50M	Green	300	2	301.70
BRS300/2BZ-50M	Bronze	300	2	301.70



Fixing Plates

Polycarbonate

Code P32	Size mm	Price
PCCL200	200	2.10
PCCL300	300	2.70
PCCL400	400	3.60

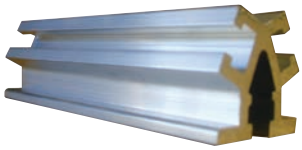
PVC Door Curtains



Track

Light Duty, Hook-on, Stainless Steel

Code	P32	Size mm	Price
SSRL984		985	38.00
SSRL1968		1968	65.30



Track

Heavy Duty, Bolt-on

Code	P32	Description	Price
BOT1M		Bolt-on Track (price per metre)	48.00
BOT-LB		L Brackets to suit	7.20



Track

Sliding Track

Code	P32	Description	Price
ST1M		Price per Metre	37.50



Track

Sliding Track Roller

Code	P32	Price
STRL		64.80



Bracket

Sliding Bracket, Face Fix

Code	P32	Type	Price
SBFF1		Single	19.10
SBFF2		Double	52.60



Bracket

Sliding Bracket, Soffit Fix

Code	P32	Price
SBSF1		22.00

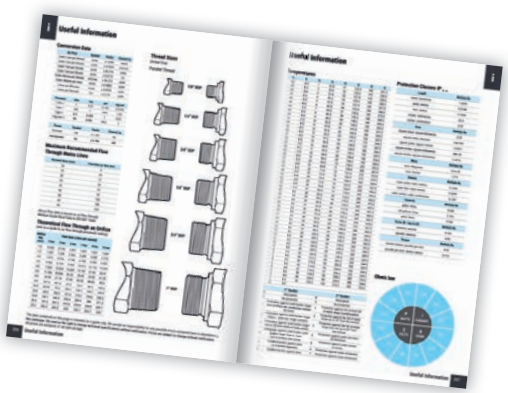


Bracket

Sliding Bracket, Jointing Sleeve

Code	P32	Price
JSSB1		48.60

For Useful Information



See pages 886-887

Calipers, Micrometers & Magnifying Glasses



Stainless Steel Rule

Semi-rigid, Satin Chrome Finish

Code	L07	Length mm	Width mm	Thickness mm	Price
1056-01		300	30	0.8	5.95
1056-02		500	30	0.8	14.30
1056-03		1000	30	0.8	17.60



Calipers

Carbon Steel, Satin Chrome Finish

Code	L07	Accuracy mm	Range mm	Overall Length mm	Price
2016		1/20	0-150	230	22.40



Calipers

Stainless Steel, Satin Chrome Finish

Code	L07	Accuracy mm	Range mm	Overall Length mm	Price
N2217		1/20	0-150	230	36.35
N2217T		1/20	0-150	230	34.20
N2220		1/20	0-200	290	51.25
N2350		1/20	0-300	410	88.25

N2217T comes with set-screw lock.



Calipers

Digital, Carbon Steel, Satin Chrome Finish

Code	L07	Accuracy mm	Range mm	Jaw Depth	Price
CDE		0.02	0-150	0-40	29.55



Outside Micrometer

Carbon Steel, Satin Chrome Finish

Code	L07	Accuracy mm	Range mm	Diameter mm	Price
M100/A		0.01	0-25	6.5	44.40
M100/B		0.01	25-50	6.5	49.70
M100/C		0.01	50-75	6.5	56.35
M100/D		0.01	75-100	6.5	59.90



Outside Micrometer

Digital, Carbon Steel, Satin Chrome Finish

Code	L07	Accuracy mm	Range mm	Diameter mm	Price
DM100/A		0.01	0-25	6.5	184.75
DM100/B		0.01	25-50	6.5	219.00
DM100/C		0.01	50-75	6.5	240.50
DM100/D		0.01	75-100	6.5	262.60



Magnifying Glass

Pocket Type

Code	L07	Size mm	Magnification	Price
9271		15 x 15	x7	26.40
9273		25 x 25	x6	25.75



Magnifying Glass

With Plastic Handle

Code	L07	Ø mm	Magnification	Price
MD-9205		90	x2	8.40

Modular Coolant Hose System

new

Compatibility

- Suitable for use with acetone, alcohol, ethyl, greases, oils, commercial dish detergents, gasoline, lacquer solvents and sodium hydroxide
- Not for use with chlorine, acids, ammonium hydroxide, bases (strong) or hypochlorite
- Material: polyoxymethylene (POM)
- Recommended maximum line pressure: 20-30 psi
- Recommended maximum flow rate: 1,800 litres per hour
- Interchangeable with: Loc-Line
- Maximum operating temperature: +76°C (repeated exposure to this temperature will cause fatigue)

Features

- Unique ball and socket design, fully hand adjustable in both position and length
- Will not kink or fatigue; bending does not decrease the inside diameter
- Will not damage machine tool cutters if contact occurs, unlike metal hoses
- Electrically non-conductive; ideal for EDM flushing
- No internal positioning rod that can break or restrict fluid flow
- Stays in position; repeated positioning is easy
- Creep due to machine vibration is eliminated



1/4" Series
Round Nozzles

Code	Z01	Nozzle Hose Size	Price
28015		1/16"	1.15
28016		1/8"	1.15
28017		1/4"	1.15



1/4" Series
Flat Nozzle

Code	Z01	Nozzle Hose Size	Price
28027		60	1.15



1/4" Series
Y Connector

Code	Z01	Price
28034		1.40



1/4" Series
90° Round Nozzles

Code	Z01	Nozzle Hose Size	Price
28019		1/16"	1.40
28020		1/8"	1.40
28021		1/4"	1.40



1/4" Series
Flare Nozzle

Code	Z01	Nozzle Hose Size	Price
28028		1"	1.15



1/4" Series
T Connector

Code	Z01	Price
28036		1.40



1/4" Series
Swivel Nozzle

Code	Z01	Nozzle Hose Size	Price
28029		40	8.80



1/4" Series
End Cap

Code	Z01	Price
28038		1.15



1/4" Series
90° Spray Bar Nozzle

Code	Z01	Nozzle Hose Size	Price
28022		60	1.40



1/4" Series
Male Connectors, NPT

Code	Z01	Nozzle Hose Size	Price
28032		1/8"	1.15
28033		1/4"	1.15



1/4" Series
90° Elbow Connector

Code	Z01	Price
28035		1.40

Modular Coolant Hose System

new



1/4" Series
Valve, Tube x Male, NPT

Code	Z01	Thread NPT	Price
28049		1/4"	4.30



1/4" Series
Valve, Tube x Female, NPT

Code	Z01	Thread NPT	Price
28050		1/4"	4.25



1/4" Series
Valve, In-line

Code	Z01	Price
28043		4.25



1/4" Series
Check Valve, In-line

Code	Z01	Price
28051		4.25



1/4" Series
Extended Elements

Code	Z01	Length mm	Price
28011		90	2.20



1/4" Series
Extended Element Clamp

Code	Z01	Price
28042		1.40



1/4" Series
Hose Coil

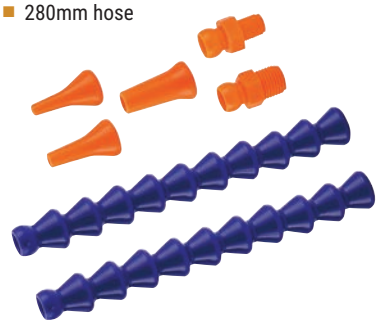
Code	Z01	Length m	Price
28012		15.24	218.75



1/4" Series
Hose Only Kit

Code	Z01	Qty	Length mm	Price
XS2001		4	150	10.30

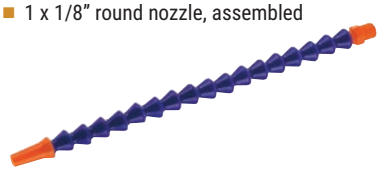
Contents
- 1 x 1/8" NPT male connector
- 1 x 1/4" NPT female connector
- 1 x 1/16", 1/8" and 1/4" round nozzles
- 280mm hose



1/4" Series
Hose Kit

Code	Z01	Price
28003		10.25

Contents:
- 1 x 1/4" NPT connector
- 1 x 1/8" round nozzle, assembled



1/4" Series
Hose Kit Assembly

Code	Z01	Length mm	Price
28002		300	6.70



1/4" Series
Hose Assembly Pliers

Code	Z01	Price
28008		26.65



1/4" Series
Circle Flow Nozzle Kit

Code	Z01	Price
28013		22.75

Modular Coolant Hose System

new

Compatibility

- Suitable for use with acetone, alcohol, ethyl, greases, oils, commercial dish detergents, gasoline, lacquer solvents and sodium hydroxide
- Not for use with chlorine, acids, ammonium hydroxide, bases (strong) or hypochlorite
- Material: polyoxymethylene (POM)
- Recommended maximum line pressure: 30 psi
- Recommended maximum flow rate: 2,150 litres per hour
- Interchangeable with: Loc-Line
- Maximum operating temperature: +76°C (repeated exposure to this temperature will cause fatigue)

Features

- Unique ball and socket design, fully hand adjustable in both position and length
- Will not kink or fatigue; bending does not decrease the inside diameter
- Will not damage machine tool cutters if contact occurs, unlike metal hoses
- Electrically non-conductive; ideal for EDM flushing
- No internal positioning rod that can break or restrict fluid flow
- Stays in position; repeated positioning is easy
- Creep due to machine vibration is eliminated



1/2" Series

Round Nozzles

Code	Z01	Nozzle Hose Size	Price
48013		1/4"	1.40
48014		3/8"	1.40
48015		1/2"	1.40



1/2" Series

Flat Nozzle

Code	Z01	Nozzle Hole Size	Price
48024		80	2.15



1/2" Series

90° Elbow Connector

Code	Z01	Price
48034		2.15



1/2" Series

Flat Holed Nozzles

Code	Z01	Nozzle	Price
48022		5 Holes	2.15
48023		7 Holes	2.15



1/2" Series

Y Connector

Code	Z01	Price
48032		2.15



1/2" Series

Male Connector, NPT

Code	Z01	Male Connectors, NPT	Price
48030		3/8"	1.40
48031		1/2"	1.45



1/2" Series

Flare Nozzles

Code	Z01	Nozzle Hole Size	Price
48026		1.1/4"	2.80
48027		2.1/2"	2.85

Modular Coolant Hose System

new



1/2" Series
Valve, Tube x Male, NPT

Code	Z01	Thread NPT	Price
48041		1/2"	5.75



1/2" Series
Valve, Tube x Female, NPT

Code	Z01	Thread NPT	Price
48042		1/2"	5.75



1/2" Series
Valve, In-line

Code	Z01	Price
48043		5.75



1/2" Series
Hose Only Kit

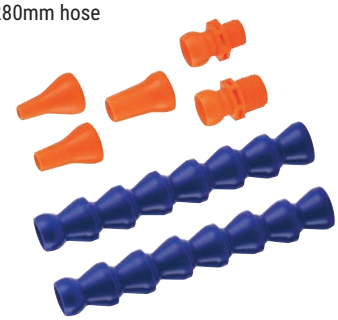
Code	Z01	Qty	Length mm	Price
XS4001		4	150	15.75



1/2" Series
Hose Coil

Code	Z01	Length m	Price
48010		15.24	310.55

Contents:
- 1 x 3/8" NPT male connector
- 1 x 1/2" NPT female connector
- 1 x 1/4", 3/8" and 1/2" round nozzles
- 280mm hose



1/2" Series
Hose Kit

Code	Z01	Price
48003		15.30

Contents:
- 1 x 1/2" NPT connector
- 1 x 3/8" round nozzle, assembled



1/2" Series
Hose Kit Assembly

Code	Z01	Length mm	Price
48002		300	11.15



1/2" Series
Hose Assembly Pliers

Code	Z01	Price
48006		30.65



1/2" Series
Extended Element Kit

Code	Z01	Price
48008		9.60

Castors

Medium/Heavy-duty castors. Easy-roll wheel bearing. Loads up to 500kgs each.

22 Series Swivel Plate Fitting Castors



Polyurethane Tyre
with Bearing, No Brake

Code W03	Internal Diameter mm	Hole Centres mm	Max. S.W.L. kg	Price
CPNBS-100	100	80 x 60	250	**65.40**
CPNBS-125	125	80 x 60	250	**91.60**
CPNBS-150	150	105 X 80	500	**106.45**

22 Series Swivel Plate Fitting Castors



Elastic Rubber Tyre
with Bearing, No Brake

Code W03	Internal Diameter mm	Hole Centres mm	Max. S.W.L. kg	Price
CERNBS-100	100	80 x 60	160	**78.85**
CERNBS-125	125	80 x 60	180	**88.60**
CERNBS-150	150	105 x 80	300	**103.65**

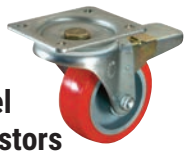
LFV Series Fixed Plate Fitting Castors



White Polypropylene Tyre

Code W03	Internal Diameter mm	Hole Centres mm	Max. S.W.L. kg	Price
CPWFP-75	75	55 x 42	70	**6.20**
CPWFP-100	100	80 x 60	125	**8.00**
CPWFP-125	125	80 x 60	160	**10.45**
CPWFP-160	160	105 x 80	200	**23.20**
CPWFP-200	200	105 x 80	250	**27.40**

22 Series Swivel Plate Fitting Castors



Polyurethane Tyre
with Bearing, with Total Stop Brake

Code W03	Internal Diameter mm	Hole Centres mm	Max. S.W.L. kg	Price
CPSBS-100	100	80 x 60	250	**93.00**
CPSBS-125	125	80 x 60	250	**126.25**
CPSBS-150	150	105 x 80	500	**161.10**

22 Series Swivel Plate Fitting Castors



Elastic Rubber Tyre
with Bearing, with Total Stop Brake

Code W03	Internal Diameter mm	Hole Centres mm	Max. S.W.L. kg	Price
CERSBS-100	100	80 x 60	160	**113.50**
CERSBS-125	125	80 x 60	180	**123.20**
CERSBS-150	150	105 x 80	300	**148.40**

LFV Series Fixed Plate Fitting Castors



Grey Rubber Tyre

Code W03	Internal Diameter mm	Hole Centres mm	Max. S.W.L. kg	Price
CRGFP-75	75	55 x 42	50	**8.90**
CRGFP-100	100	80 x 60	70	**11.10**
CRGFP-125	125	80 x 60	100	**15.15**
CRGFP-160	160	105 x 80	160	**34.90**
CRGFP-200	200	105 x 80	205	**44.60**

22 Series Swivel Plate Fitting Castors



Nylon Tyre with Bearing, No Brake

Code W03	Internal Diameter mm	Hole Centres mm	Max. S.W.L. kg	Price
CNNBS-100	100	80 x 60	250	**51.85**
CNNBS-125	125	80 x 60	250	**74.90**
CNNBS-150	150	105 x 80	500	**110.30**

22 Series Swivel Plate Fitting Castors



Nylon Tyre with Bearing,
with Total Stop Brake

Code W03	Internal Diameter mm	Hole Centres mm	Max. S.W.L. kg	Price
CNSPS-100	100	80 x 60	250	**79.45**
CNSPS-125	125	80 x 60	250	**87.40**
CNSPS-150	150	105 x 80	500	**169.30**

Medium/heavy-duty castors. Easy-roll wheel bearing. Loads up to 500kgs each.

22 Series Fixed Plate Fitting Castors



Polyurethane Tyre

Code W03	Internal Diameter mm	Hole Centres mm	Max. S.W.L. kg	Price
CPFP-100	100	80 x 60	250	**64.95**
CPFP-125	125	80 x 60	250	**74.35**
CPFP-150	150	105 x 80	500	**87.90**

22 Series Fixed Plate Fitting Castors



Nylon Tyre

Code W03	Internal Diameter mm	Hole Centres mm	Max. S.W.L. kg	Price
CNFP-100	100	80 x 60	250	**41.70**
CNFP-125	125	80 x 60	250	**45.50**
CNFP-150	150	105 x 80	500	**71.90**

LFV Series Fixed Plate Fitting Castors



Black Rubber Tyre

Code W03	Internal Diameter mm	Hole Centres mm	Max. S.W.L. kg	Price
CRBFP-75	75	55 x 42	50	**5.55**
CRBFP-100	100	80 x 60	70	**7.70**
CRBFP-125	125	80 x 60	100	**9.35**
CRBFP-160	160	105 x 80	160	**25.55**
CRBFP-200	200	105 x 80	205	**34.90**

Castors

Heavy-duty fabricated castors. More robust than pressed metal. Loads up to 600kgs each.

SL Series Swivel Plate Fitting Castors



Polyurethane Tyre with Bearing, No Brake

Code W03	Internal Diameter mm	Hole Centres mm	Max. S.W.L. kg	Price
CSLPNBS-100	100	105 x 80	250	**98.30**
CSLPNBS-125	125	105 x 80	300	**106.25**
CSLPNBS-150	150	105 x 80	600	**132.00**

SL Series Swivel Plate Fitting Castors



Polyurethane Tyre with Bearing, with Brake

Code W03	Internal Diameter mm	Hole Centres mm	Max. S.W.L. kg	Price
CSLPBS-100	100	105 x 80	250	**129.75**
CSLPBS-125	125	105 x 80	300	**167.55**
CSLPBS-150	150	105 x 80	600	**170.70**

SL Series Swivel Plate Fitting Castors



Nylon Tyre with Bearing, No Brake

Code W03	Internal Diameter mm	Hole Centres mm	Max. S.W.L. kg	Price
CSLNNBS-100	100	105 x 80	270	**84.75**
CSLNNBS-125	125	105 x 80	365	**93.20**
CSLNNBS-150	150	105 x 80	520	**141.40**

SL Series Swivel Plate Fitting Castors



Nylon Tyre with Bearing, with Brake

Code W03	Internal Diameter mm	Hole Centres mm	Max. S.W.L. kg	Price
CSLNBS-100	100	105 x 80	270	**116.20**
CSLNBS-125	125	105 x 80	365	**124.65**
CSLNBS-150	150	105 x 80	520	**199.85**

Stainless Steel Swivel Plate Fitting Castors



Nylon Tyre, No Brake

Code W03	Internal Diameter mm	Hole Centres mm	Max. S.W.L. kg	Price
SSCNNBS-80	80	80 x 60	100	**63.45**
SSCNNBS-100	100	80 x 60	150	**51.00**
SSCNNBS-125	125	80 x 60	300	**62.00**

Stainless Steel Swivel Plate Fitting Castors



Nylon Tyre with Total Stop Brake

Code W03	Internal Diameter mm	Hole Centres mm	Max. S.W.L. kg	Price
SSCNSBS-80	80	80 x 60	100	**76.80**
SSCNSBS-100	100	80 x 60	150	**79.15**
SSCNSBS-125	125	80 x 60	300	**87.55**

Stainless Steel Swivel Plate Fitting Castors



Polyurethane Tyre with Bearing, No Brake

Code W03	Internal Diameter mm	Hole Centres mm	Max. S.W.L. kg	Price
SSCPNBS-80	80	80 x 60	150	**85.30**
SSCPNBS-100	100	80 x 60	150	**89.45**
SSCPNBS-125	125	80 x 60	200	**94.80**

Stainless Steel Swivel Plate Fitting Castors



Polyurethane Tyre with Bearing, with Total Stop Brake

Code W03	Internal Diameter mm	Hole Centres mm	Max. S.W.L. kg	Price
SSCPSBS-80	80	80 x 60	150	**103.85**
SSCPSBS-125	125	80 x 60	200	**152.50**

Heavy-duty fabricated castors. More robust than pressed metal. Easy-roll wheel bearing. Loads up to 600kgs each.

SL Series Fixed Plate Fitting Castors



Nylon Tyre

Code W03	Internal Diameter mm	Hole Centres mm	Max. S.W.L. kg	Price
CSLNFP-100	100	105 x 80	270	**61.55**
CSLNFP-125	125	105 x 80	365	**70.20**
CSLNFP-150	150	105 x 80	520	**117.85**

SL Series Fixed Plate Fitting Castors



Polyurethane Tyre

Code W03	Internal Diameter mm	Hole Centres mm	Max. S.W.L. kg	Price
CSLPFP-100	100	105 x 80	250	**75.05**
CSLPFP-125	125	105 x 80	300	**101.60**
CSLPFP-150	150	105 x 80	600	**109.70**

304 stainless steel suitable for food and pharmaceutical industries. Loads up to 300kgs each.

Stainless Steel Fixed Plate Fitting Castors



Nylon Tyre

Code W03	Internal Diameter mm	Hole Centres mm	Max. S.W.L. kg	Price
SSCNFP-80	80	80 x 60	100	**49.10**
SSCNFP-100	100	80 x 60	150	**35.75**
SSCNFP-125	125	80 x 60	300	**41.10**

Stainless Steel Fixed Plate Fitting Castors



Polyurethane Tyre

Code W03	Internal Diameter mm	Hole Centres mm	Max. S.W.L. kg	Price
SSCPFP-80	80	80 x 60	150	**69.15**
SSCPFP-100	100	80 x 60	150	**71.20**
SSCPFP-125	125	80 x 60	200	**73.90**

Castors



LSV Series Swivel Plate Fitting Castors

White Polypropylene Tyre, No Brake

Code W03	Internal Diameter mm	Hole Centres mm	Max. S.W.L. kg	Price
CLSVPPNBS-50	50	36 x 36	50	7.30
CLSVPPNBS-75	75	55 x 42	70	8.00
CLSVPPNBS-100	100	80 x 60	125	9.50
CLSVPPNBS-125	125	80 x 60	160	12.20
CLSVPPNBS-160	160	105 x 80	200	29.50
CLSVPPNBS-200	200	105 x 80	250	34.50



LSV Series Swivel Plate Fitting Castors

Black Rubber Tyre, with Brake

Code W03	Internal Diameter mm	Hole Centres mm	Max. S.W.L. kg	Price
CLSVNBRBS-75	75	55 x 42	50	10.40
CLSVNBRBS-100	100	80 x 60	70	14.65
CLSVNBRBS-125	125	80 x 60	100	17.35
CLSVNBRBS-160	160	105 x 80	160	38.20
CLSVNBRBS-200	200	105 x 80	205	45.95



LSV Series Swivel Plate Fitting Castors

White Polypropylene Tyre, with Brake

Code W03	Internal Diameter mm	Hole Centres mm	Max. S.W.L. kg	Price
CLSVPPBS-50	50	36 x 36	50	9.20
CLSVPPBS-75	75	55 x 42	70	10.15
CLSVPPBS-100	100	80 x 60	125	15.70
CLSVPPBS-125	125	80 x 60	160	17.90
CLSVPPBS-160	160	105 x 80	200	36.95
CLSVPPBS-200	200	105 x 80	250	43.55



LSV Series Swivel Plate Fitting Castors

Grey Rubber Tyre, No Brake

Code W03	Internal Diameter mm	Hole Centres mm	Max. S.W.L. kg	Price
CLSVGNBS-50	50	36 x 36	50	7.60
CLSVGNBS-75	75	55 x 42	50	10.10
CLSVGNBS-100	100	80 x 60	70	13.60
CLSVGNBS-125	125	80 x 60	100	17.15
CLSVGNBS-160	160	105 x 80	160	42.65
CLSVGNBS-200	200	105 x 80	205	50.25



LSV Series Swivel Plate Fitting Castors

Black Rubber Tyre, No Brake

Code W03	Internal Diameter mm	Hole Centres mm	Max. S.W.L. kg	Price
CLSVNBRNBS-75	75	55 x 42	50	10.05
CLSVNBRNBS-100	100	80 x 60	70	10.75
CLSVNBRNBS-125	125	80 x 60	100	15.90
CLSVNBRNBS-160	160	105 x 80	160	30.50
CLSVNBRNBS-200	200	105 x 80	205	37.05



LSV Series Swivel Plate Fitting Castors

Grey Rubber Tyre, with Brake

Code W03	Internal Diameter mm	Hole Centres mm	Max. S.W.L. kg	Price
CLSVGRBS-50	50	36 x 36	50	9.20
CLSVGRBS-75	75	55 x 42	50	11.80
CLSVGRBS-100	100	80 x 60	70	16.95
CLSVGRBS-125	125	80 x 60	100	23.20
CLSVGRBS-160	160	105 x 80	160	50.70
CLSVGRBS-200	200	105 x 80	205	66.50



Expanding Plugs for Bolt Hole Fitting Castors

Round Expanders

Code W03	Internal Diameter mm	Price
CEPR-19/21.5	19-21.5	8.65
CEPR-21.5/24	21.5-24	8.65
CEPR-27/30	27-30	11.65
CEPR-31/35	31-35	15.35



LSV Series Swivel Bolt Hole Fitting Castors

White Polypropylene Tyre, with Brake

Code W03	Internal Diameter mm	Thread Size mm	Max. S.W.L. kg	Price
CLSVPPBBH-50	50	10	55	9.45
CLSVPPBBH-75	75	10	75	11.65
CLSVPPBBH-100	100	12	80	13.85
CLSVPPBBH-125	125	12	125	15.60



Expanding Plugs for Bolt Hole Fitting Castors

Square Expanders

Code W03	Internal Diameter mm	Price
CEPS-21.5/24	21.5-24	8.65
CEPS-24/27	24-27	8.65
CEPS-27/30	27-30	8.65
CEPS-32/35	32-35	15.35
CEPS-36/40	36-40	17.60



LSV Series Swivel Bolt Hole Fitting Castors

Grey Rubber Tyre, No Brake

Code W03	Internal Diameter mm	Thread Size mm	Max. S.W.L. kg	Price
CLSVGRNBBH-50	50	10	50	8.10
CLSVGRNBBH-75	75	10	70	11.15
CLSVGRNBBH-100	100	12	80	13.80
CLSVGRNBBH-125	125	12	100	14.35



LSV Series Swivel Bolt Hole Fitting Castors

White Polypropylene Tyre, No Brake

Code W03	Internal Diameter mm	Thread Size mm	Max. S.W.L. kg	Price
CLSVPPNBBH-50	50	10	55	7.45
CLSVPPNBBH-75	75	10	75	10.05
CLSVPPNBBH-100	100	12	80	12.55
CLSVPPNBBH-125	125	12	125	14.00



LSV Series Swivel Bolt Hole Fitting Castors

Grey Rubber Tyre, with Brake

Code W03	Internal Diameter mm	Thread Size mm	Max. S.W.L. kg	Price
CLSVGRBBH-50	50	10	50	10.35
CLSVGRBBH-75	75	10	70	12.80
CLSVGRBBH-100	100	12	80	15.15
CLSVGRBBH-125	125	12	100	14.90

Enclosures



Rittal enclosures are ideal for global use across a variety of industries. Internationally recognised approvals make it much easier to put the AX Enclosure to quick and flexible use in any country the world over. The highest quality standards ensure reliability and a long service life, even under extreme conditions. Compliance with global standards, and thus excellent future-proof credentials, are ensured by stringent testing according to international regulations and regular production inspections by external test institutes.

Modular designs help to better utilise the space inside the enclosure.

Integrated locators throughout the housing simplify the interior installation of accessory rails, etc, which can be precisely positioned and securely fastened – even under dynamic loads.

Equipment installation is made easier as the mounting panel is supplied loose and can be machined immediately. Doors are installed without the need for tools.

Protection classes and various approvals ensure reliability.

Enclosures include:

- Enclosure with door(s)
- Interior mounting plate
- Gland plate(s) in base
- Perforated door strip and lock(s)

Other options including Stainless Steel and Polycarbonate available on request

Material:

- Sheet steel enclosure with sheet steel door (all-round foamed-in PU seal)



Sheet Steel Enclosure, Single Door

Two Cam Locks

Code E27	Width mm	Height mm	Depth mm	Protection Class	Price
1045.000	380	600	210	IP 66	168.55
1037.000	380	600	350	IP 66	336.20
1050.000	400	500	210	IP 66	206.25
1350.000	400	800	300	IP 66	266.10
1057.000	500	500	210	IP 66	294.40
1039.000	500	500	300	IP 66	192.45
1339.000	500	700	250	IP 66	316.40
1060.000	600	600	210	IP 66	231.10
1054.000	600	600	250	IP 66	292.00
1360.000	600	600	350	IP 66	344.60
1076.000	600	760	210	IP 66	280.75
1376.000	600	760	350	IP 66	407.45
1058.000	600	800	250	IP 66	354.70
1059.000	600	800	400	IP 66	457.75
1090.000	600	1000	250	IP 66	399.65
1091.000	600	1000	400	IP 66	554.50
1260.000	760	760	210	IP 66	484.35
1261.000	760	760	300	IP 66	621.55
1077.000	800	600	300	IP 66	368.20
1073.000	800	1000	300	IP 66	431.75
1055.000	800	1000	400	IP 66	406.95



Sheet Steel Enclosure, Single Door

One Cam Lock

Code E27	Width mm	Height mm	Depth mm	Protection Class	Price
1033.000	300	300	210	IP 66	130.80
1034.000	300	400	210	IP 66	142.55
1031.000	380	300	210	IP 66	135.55
1380.000	380	380	210	IP 66	145.40
1038.000	600	380	210	IP 66	171.95
1338.000	600	380	350	IP 66	286.60



Sheet Steel Enclosure, Single Door

Three Point Lock System

Code E27	Width mm	Height mm	Depth mm	Protection Class	Price
1281.000	600	1200	300	IP 66	771.95
1100.000	600	1200	400	IP 66	545.05
1130.000	800	1200	300	IP 66	565.65
1110.000	800	1200	400	IP 66	622.45





Sheet Steel Enclosure, Double Doors

Two Cam Locks

Code E27	Width mm	Height mm	Depth mm	Protection Class	Price
1180.000	1000	760	210	IP 55	475.90
1181.000	1000	760	300	IP 55	657.75
1280.000	1000	1000	300	IP 55	555.25



Sheet Steel Enclosure, Double Doors

Three Point Lock System

Code E27	Width mm	Height mm	Depth mm	Protection Class	Price
1213.000	1000	1200	300	IP 55	736.05
1214.000	1000	1200	400	IP 55	919.05
1114.000	1000	1400	300	IP 55	935.25
1115.000	1000	1400	400	IP 55	1167.05
1116.000	1200	1200	400	IP 55	1022.05

Numerous accessories are available on request including:

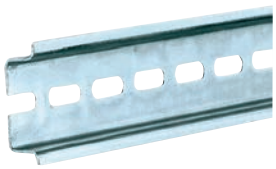
- Support strips
- Lighting
- Door stays
- Earth straps
- Base/plinths
- Pole clamps, etc.



Side Rail

For Side, Base or Roof Mounting, Four Pack

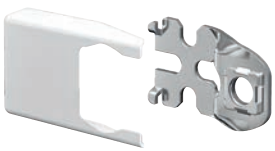
Code E27	For Enclosure Depth mm	Price
2393.210	210	58.05
2393.250	250	69.45
2393.300	300	64.40
2393.350	350	89.70
2393.400	400	70.50



DIN Support Rail

For Back Mounting Plate, Ten Pack

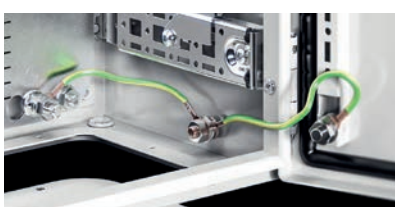
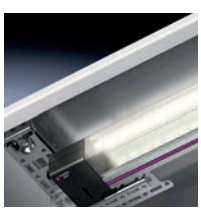
Code E27	For Enclosure Width mm	Rail Length mm	DIN	Price
2314.000	150	137	TS 35/7.5	59.20
2315.000	200	187	TS 35/7.5	66.20
2316.000	300	287	TS 35/7.5	86.60
2317.000	400	387	TS 35/7.5	85.90
2318.000	500	487	TS 35/15	115.45
2319.000	600	587	TS 35/15	132.25



Easy Fit Wall Mounting Brackets

Four Pack with Cover Caps

Code E27	Price
2508.020	28.20



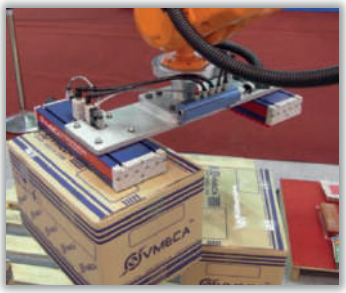


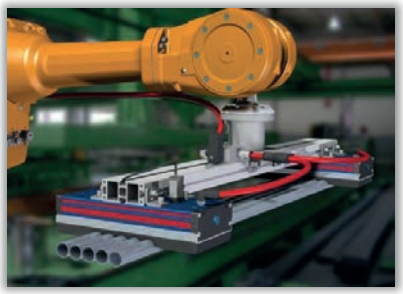
VMECA™

Tomorrow's Vacuum Technology Today

V-Grip System









See section 3 Vacuum





868-869 Storage Bin System



869 Storage Bin Accessories



870 Free Standing Shop Floor Stands



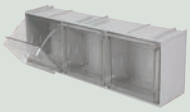
870 Mobile Shop Floor Stands



871 Poly Bins & Rails



871 Louvred Wall Panels



872 Tilt-bin System



873 Tilt-bin Mounting Frames



874 Kit Cases Compartments



875 Kit Cases Cassettes

Storage Bin System

new



- Impact resistant
- Strong rear lip for use with louvred panels
- Integral label holder
- Clear access to contents
- Manufactured from high density polypropylene
- High and low temperature tolerant
- Resistant to most industrial solvents
- Easy to stack on top of each other
- Incorporates a safety stop feature at the back for use in shelves (sizes 4, 5 and 6 only)

Other colours available.



Bin Size 1

Red, Blue, Yellow or Grey

Code D06	Length mm	Width mm	Height mm	Price 1-9	Price 10+
BIN-1-RED	125	100	60	**0.80**	**0.75**
BIN-1-BLUE	125	100	60	**0.80**	**0.75**
BIN-1-YELLOW	125	100	60	**0.75**	**0.70**
BIN-1-GREY	125	100	60	**0.75**	**0.70**

Other colours available.



Bin Size 2

Red, Blue, Yellow or Grey

Code D06	Length mm	Width mm	Height mm	Price 1-9	Price 10+
BIN-2-RED	170	100	85	**1.15**	**1.10**
BIN-2-BLUE	170	100	85	**1.15**	**1.10**
BIN-2-YELLOW	170	100	85	**1.15**	**1.10**
BIN-2-GREY	170	100	85	**1.15**	**1.10**

Other colours available.



Bin Size 3

Red, Blue, Yellow or Grey

Code D06	Length mm	Width mm	Height mm	Price 1-9	Price 10+
BIN-3-RED	220	130	125	**2.20**	**2.10**
BIN-3-BLUE	220	130	125	**2.30**	**2.20**
BIN-3-YELLOW	220	130	125	**2.30**	**2.20**
BIN-3-GREY	220	130	125	**2.20**	**2.10**

Other colours available.



Bin Size 4

Red, Blue, Yellow or Grey

Code D06	Length mm	Width mm	Height mm	Price 1-9	Price 10+
BIN-4-RED	290	178	143	**4.30**	**4.10**
BIN-4-BLUE	290	178	143	**4.30**	**4.15**
BIN-4-YELLOW	290	178	143	**4.30**	**4.15**
BIN-4-GREY	290	178	143	**4.30**	**4.10**

Storage Bin System

new

Other colours available.



Bin Size 5

Red, Blue, Yellow or Grey

Code D06	Length mm	Width mm	Height mm	Price 1-9	Price 10+
BIN-5-RED	290	363	145	7.45	7.10
BIN-5-BLUE	290	363	145	7.45	7.10
BIN-5-YELLOW	290	363	145	7.35	7.00
BIN-5-GREY	290	363	145	7.35	7.00

Other colours available.



Bin Size 7

Red, Blue or Grey

Code D06	Length mm	Width mm	Height mm	Price 1-9	Price 10+
BIN-7-RED	435	400	215	16.80	16.00
BIN-7-BLUE	435	400	215	16.80	16.00
BIN-7-GREY	435	400	215	16.55	15.75

Other colours available.



Bin Size 6

Red, Blue, Yellow or Grey

Code D06	Length mm	Width mm	Height mm	Price 1-9	Price 10+
BIN-6-RED	440	180	145	6.85	6.55
BIN-6-BLUE	440	180	145	6.50	6.20
BIN-6-YELLOW	440	180	145	6.85	6.55
BIN-6-GREY	440	180	145	6.50	6.20

Other colours available.



Bin Size 8

Red, Blue or Grey

Code D06	Length mm	Width mm	Height mm	Price 1-9	Price 10+
BIN-8-RED	600	425	300	25.80	24.55
BIN-8-BLUE	600	425	300	25.80	24.55
BIN-8-GREY	600	425	300	25.45	24.20

Accessories

Bin Partitions

Code D06	Description	Price 1-9	Price 10+
BIN/HP/SB4/6	Horizontal Partition for SB-4 & SB-6	0.80	0.75
BIN/VP/SB4/5	Vertical Partition for SB-4 & SB-5	0.90	0.85
BIN/VP/SB7	Vertical Partition for SB-7	2.20	2.10
BIN/VP/SB8	Vertical Partition for SB-8	3.60	3.45



Vertical



Horizontal

Bins not included

Storage Bin System

new

- Free standing stands come complete with louvred panels on one side
- Easy to assemble



Shop Floor Stands

Free Standing Louvred Panel Stands

Code D06	Length mm	Width mm	Height mm	Type	Price
BIN/FSS/L/1	457	630	1560	Single Span	171.55
BIN/FSS/L/2	914	630	1560	Double Span	343.10
BIN/FSS/L/3	1371	630	1560	Triple Span	532.60

Storage bins to be ordered separately.

Ideal for component storage and transfer to assembly or production areas.

Unit comprises of base unit with aluminium chequered top plate fitted with castors and a frame on which four louvre panels can be fitted (supplied).

- Robust construction
- Epoxy powder coated
- Easy assembly

Example:
Trolley can hold:
16 x size 1, 32 x size 2,
12 x size 3, or 10 x size 4 on the panels, with the base free for different sizes of bins, as per our requirement.



Shop Floor Stands

Mobile Louvred Panel Stand

Code D06	Length mm	Width mm	Height mm	Price
BIN/SFT	970	600	1100	496.65

Storage bins to be ordered separately.

These stands enable you to use louvre panels on table tops.



Shop Floor Stands

Stand for Louvre Panel

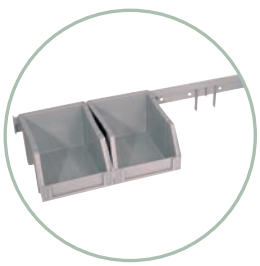
Code D06	Price
BIN/SPS	6.00

Louvre panel and bins not included.

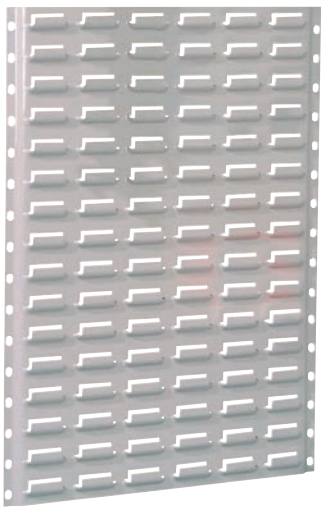
Storage Bin System

Each bin is 5" x 4" x 3".





The louvred panels are made from powder coated 1.5mm CRCA steel, and come in four sizes. These louvre panels can be easily fitted on walls or on a stand.



Storage bins to be ordered separately.

Poly Bins & Rails

Set of 20 Bins & 5 Rails

Code	D06	Price
BIN/PBR205		18.40

Louvred Wall Panels

Wall or Stand Mountable

Code	D06	Width mm	Height mm	Price
BIN/LP1		457	457	25.45
BIN/LP2		457	610	33.80
BIN/LP3		457	915	51.00
BIN/LP6		457	1830	103.40



Crystal Box 1

1 Drawer

Code	D06	Height mm	Width mm	Depth mm	Colour	Price
CB1-LG		175	300	155	Light Grey	12.80



Crystal Box 4

2 Drawers

Code	D06	Height mm	Width mm	Depth mm	Colour	Price
CB4-LG		300	600	240	Light Grey	48.95



Crystal Box 2

3 Drawers

Code	D06	Height mm	Width mm	Depth mm	Colour	Price
CB2-LG		175	600	155	Light Grey	25.70



Dividers

To suit Crystal Boxes

Code	D06	To Suit	Price
CRYSTALBOX		CB2-LG	1.70



Crystal Box 3

3 Drawers

Code	D06	Height mm	Width mm	Depth mm	Colour	Price
CB3-LG		215	600	200	Light Grey	36.00



Retaining Bars

Clip-in

Code	D06	To Suit	Price
CB1-BAR		CB1-LG	3.50
CB2-BAR		CB2-LG	3.50
CB3-BAR		CB3-LG	3.50
CB4-BAR		CB4-LG	3.50

Tilt-bin Mounting Frames





- Strong and practical for mobile storage.
- Electro-welded plate and oven-painted with grey epoxy powder.
- Equipped with four gummed wheels, two of which pirouette (one with brake).
- Supplied disassembled with a handbook, screws and bolts for assembly.
- Tilt bins to be ordered separately.

Bench Mounted Frame

Single Sided

*Supplied empty.

Code	D06	Height mm	Width mm	Price
MP100		500	610	85.10





Wall Mounted Frame

Single Sided

*Supplied empty.

Code	D06	Height mm	Width mm	Price
MP125		1000	600	91.70



Mobile Unit

Double Sided

*Supplied empty.

Code	D06	Height mm	Width mm	Price
CB30-LG*		1300	610	374.40





Free-standing Frame

Single Sided

*Supplied empty.

Code	D06	Height mm	Width mm	Price
MP150		1500	600	174.80
MP175		1750	600	177.90
MP195		1950	600	185.60

Kit Cases



Class 30

5 Compartments

Code	D06	Height mm	Width mm	Depth mm	Price 1-9	Price 10+
CLASS30		55	325	260	12.80	12.20



Class 41

Adjustable Compartments

Code	D06	Height mm	Width mm	Depth mm	Price 1-9	Price 10+
CLASS41		70	400	340	26.90	25.60



Class 31

15 Compartments

Code	D06	Height mm	Width mm	Depth mm	Price 1-9	Price 10+
CLASS31		55	325	260	14.00	13.30



Class 42

10 Compartments

Code	D06	Height mm	Width mm	Depth mm	Price 1-9	Price 10+
CLASS42		70	400	340	25.60	24.35



Class 32

16 Compartments

Code	D06	Height mm	Width mm	Depth mm	Price 1-9	Price 10+
CLASS32		55	325	260	19.05	18.10

For Pneumatic Fittings Kits



See section 6

Kit Cases



Class Cassette 1

To Suit CLASS30 Type

Code	D06	Height mm	Width mm	Depth mm	Price 1-9	Price 10+
CLASS1		45	55	50	0.40	0.37



Class Cassette 2

To Suit CLASS30 Type

Code	D06	Height mm	Width mm	Depth mm	Price 1-9	Price 10+
CLASS2		45	110	50	0.80	0.75



Class Cassette 3

To Suit CLASS30 Type

Code	D06	Height mm	Width mm	Depth mm	Price 1-9	Price 10+
CLASS3		45	165	50	1.05	1.00



Class Cassette 5

To Suit CLASS40 Type

Code	D06	Height mm	Width mm	Depth mm	Price 1-9	Price 10+
CLASS5		57	76	76	0.70	0.66



Class Cassette 6

To Suit CLASS40 Type

Code	D06	Height mm	Width mm	Depth mm	Price 1-9	Price 10+
CLASS6		57	152	76	1.30	1.25



Class Cassette 7

To Suit CLASS40 Type

Code	D06	Height mm	Width mm	Depth mm	Price 1-9	Price 10+
CLASS7		57	228	76	2.00	1.90



Class Cassette 8

To Suit CLASS40 Type

Code	D06	Height mm	Width mm	Depth mm	Price 1-9	Price 10+
CLASS8		57	152	152	2.60	2.50

Spill Absorbents





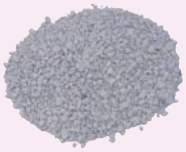
878 Oil & Fuel Spill Absorbents



879 General Purpose Spill Absorbents



880 Chemical Spill Absorbents



880 Loose Absorbents



881 Shoulder Bag Spill Kits



881 Carry Bag Spill Kits



881 Refill Kits



882 Plastic Drum Kits



882 Wheeled Bin Kits



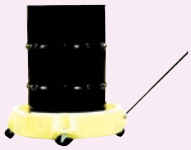
882 Drain Covers



882 Absorbent Dispensing Stations



883 Trays



883 Drum Trolley



883 Drum Funnel



883-884 Drum Pallets



884 IBC Pallets

Spill Absorbents & Spill Prevention

Oil only absorbents are best used outdoors to recover oil based spills such as petroleum, diesel and solvents.



Oil Only Heavy Duty Spill Pads

100 Pads Per Pack

Code E24	Size	Capacity	Price
HDOP-100	40cm x 50cm	108 Litres	44.10



Oil Only Folded Perforated Dimple Rolls

18 Metre Rolls Per Pack

Code E24	Size	Capacity	Packs	Price
FOR-1-18	11cm x 18m	35 Litres	1	21.45
FOR-3-18	11cm x 18m	105 Litres	3	64.40



Oil Only Spill Dimple Pads

200 Pads Per Pack

Code E24	Size	Capacity	Price
SOP-200	40cm x 50cm	128 Litres	63.75



Oil Only Spill Socks

12 Socks Per Pack

Code E24	Size	Capacity	Price
SOS-12	7.6cm x 120cm	51 Litres	30.60



Oil Spill Perforated Dimple Roll

2 x 40 Metre Rolls Per Pack

Code E24	Size	Capacity	Price
OR-2-40	40cm x 40m	113 Litres	69.35

Spill Absorbents & Spill Prevention

new

As a general rule of thumb, if the spill happens indoors use a general purpose product to absorb both oil and water-based substances.



General Purpose Spill Dimple Pads

200 Pads Per Pack

Code E24	Size	Capacity	Price
SGP-200	40cm x 50cm	128 Litres	69.55



General Purpose Spill Folded Perforated Dimple Rolls

18 Metre Rolls Per Pack

Code E24	Size	Capacity	Packs	Price
FGR-1-18	11cm x 18m	35 Litres	1	26.25
FGR-3-18	11cm x 18m	105 Litres	3	78.70



General Purpose Spill Perforated Dimple Rolls

2 x 40 Metre Rolls Per Pack

Code E24	Size	Capacity	Price
SGR-2-40	40cm x 40m	153 Litres	72.75



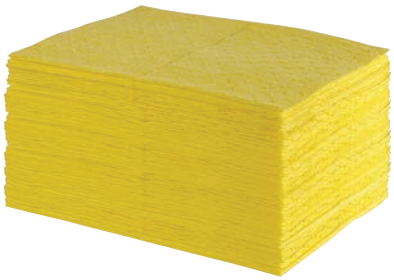
General Purpose Spill Socks

12 Socks Per Pack

Code E24	Size	Capacity	Price
SGS-12	7.6cm x 120cm	35 Litres	30.60

Spill Absorbents & Spill Prevention

- Suitable for toxic, flammable, corrosive and aggressive liquids
- Fire retardant as per ASTM 726
- Low slip base layer, great for foot traffic



Chemical Spill Pads

100 Pads Per Pack

Code	E24	Size	Capacity	Price
COP-100		40cm x 50cm	78 Litres	62.75

- Suitable for toxic, flammable, corrosive and aggressive liquids
- Fire retardant as per ASTM 726
- Low slip base layer, great for foot traffic



Chemical Spill Perforated Dimple Roll

2 x 40 Metre Rolls Per Pack

Code	E24	Size	Capacity	Price
CSR-2-40		40cm x 40m	114 Litres	87.55

- Suitable for small hazardous, toxic or unknown based spills
- Absorbs both oil and water based fluids
- Once saturated, will not become slippery



Chemical Spill Sock

12 Socks Per Pack

Code	E24	Size	Capacity	Price
CSS-12		8cm x 120cm	39.6 Litres	25.05



Loose Absorbents

16kg Bag

Code	E24	Price
CG16		13.00

Spill Absorbents & Spill Prevention

new

Kit includes:
1 x reusable carry bag.
50 metres of barrier tape.
2 x cable ties.
2 x disposal sacks.
2 x pair of disposable Dura-Touch gloves.
1 x vented safety goggles.
55 x oil only dimple pads.
6 x 1.2 metre oil only socks.



Shoulder Bag Spill Kit

Oil Only, 50 Litres

Code	E24	Capacity	Price
SOK-50		50 Litres	83.50

Kit includes:
1 x reusable carry bag.
50 metres of barrier tape.
2 x cable ties.
2 x disposal sacks.
2 x pair of disposable Dura-Touch gloves.
1 x vented safety goggles.
55 x general purpose dimple pads.
6 x 1.2 metre general purpose socks.



Shoulder Bag Spill Kit

General Purpose, 50 Litres

Code	E24	Capacity	Price
SGK-50		50 Litres	77.50

Kit includes:
1 x reusable carry bag.
50 metres of barrier tape.
2 x cable ties.
2 x disposal sacks.
2 x pair of disposable Dura-Touch gloves.
1 x vented safety goggles.
30 x oil only dimple pads.
4 x 1.2 metre oil only socks.



Carry Bag Spill Kit

Oil Only, 30 Litres

Code	E24	Capacity	Price
SOK-30		30 Litres	47.50

Kit includes:
1 x reusable carry bag.
50 metres of barrier tape.
2 x cable ties.
2 x disposal sacks.
2 x pair of disposable Dura-Touch gloves.
1 x vented safety goggles.
30 x general purpose dimple pads.
4 x 1.2 metre general purpose socks.



Carry Bag Spill Kit

General Purpose, 30 Litres

Code	E24	Capacity	Price
SGK-30		30 Litres	59.25

Kit includes:
50 metres of barrier tape.
2 x cable ties.
2 x disposal sacks.
2 x pair of disposable Dura-Touch gloves.
1 x vented safety goggles.
30 x oil only dimple pads.
4 x 1.2 metre oil only socks.



Refill Kit

Oil Only, 30 Litres

Code	E24	Capacity	Price
SOK-30-REFILL		30 Litres	45.25

Kit includes:
50 metres of barrier tape.
2 x cable ties.
2 x disposal sacks.
2 x pair of disposable Dura-Touch gloves.
1 x vented safety goggles.
55 x oil only dimple pads.
6 x 1.2 metre oil only socks.



Refill Kit

Oil Only, 50 Litres

Code	E24	Capacity	Price
SOK-50-REFILL		50 Litres	57.50

Kit includes:
50 metres of barrier tape.
2 x cable ties.
2 x disposal sacks.
2 x pair of disposable Dura-Touch gloves.
1 x vented safety goggles.
30 x general purpose dimple pads.
4 x 1.2 metre general purpose socks.



Refill Kit

General Purpose, 30 Litres

Code	E24	Capacity	Price
SGK-30-REFILL		30 Litres	35.00

Kit includes:
50 metres of barrier tape.
2 x cable ties.
2 x disposal sacks.
2 x pair of disposable Dura-Touch gloves.
1 x vented safety goggles.
55 x general purpose dimple pads.
6 x 1.2 metre general purpose socks.



Refill Kit

General Purpose, 50 Litres

Code	E24	Capacity	Price
SGK-50-REFILL		50 Litres	43.05

Spill Absorbents & Spill Prevention



Plastic Drum

90 Litre Capacity

Code	E24	Application	Price
GSK9		General Purpose	100.70
OSK9		Oil & Fuel	105.75
CSK9		Chemical	112.00



Wheeled Bin

125 Litre Capacity

Code	E24	Application	Price
GSKS		General Purpose	173.70
OSKS		Oil & Fuel	182.40
CSKS		Chemical	192.50

An integral part of any spill response plan, drain covers go hand-in-hand with spill response kits. They can also be used pro-actively to seal off drains prior to deliveries or refuelling taking place to ensure leaks and spills are kept out of the drainage system.



new

Drain Covers

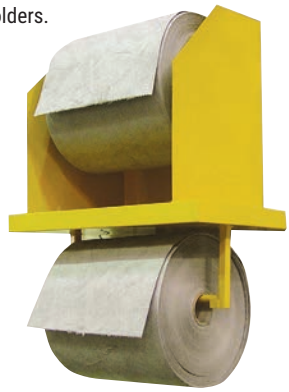
Magnetic Drain Cover

Code	E24	Height mm	Length mm	Thickness mm	Price
MDC03		600	600	0.9	185.30

Twin wall mounted absorbent roll holders.

Weight: 10.5kg.

Absorbents not included.



new

Absorbent Dispensing Station

Wall Mountable Twin Roll Holder, Steel

Code	E24	Dimensions cm	Price
WALL-STATION		66 x 42 x 89	238.85

Ideal for day to day housekeeping or responding to minor spills, these polyethylene cabinets are specifically designed for dispensing absorbents and will accept rolls up to 550mm diameter x 520mm wide.

Weight: 20kg.

Absorbents not included.



new

Absorbent Dispensing Station

Open Front Absorbent Centre, Polyethylene

Code	E24	Dimensions cm	Price
POLY-STATION		66 x 42 x 89	304.85

Floor standing workstation with single roll holder and cabinet, welded together to provide a safe and secure fixing.

Weight: 29kg.

Absorbents not included.



new

Absorbent Dispensing Station

Combined Absorbent Centre, Steel

Code	E24	Dimensions cm	Price
WSHOP-STATION		66 x 42 x 150.5	411.05

Drum & Pallet Bunding

Made from 100% polyethylene, these spill trays come with a removable grid which is ideal for ensure drips and spills are contained correctly.

Applications mainly used are: truck and machinery leaks, machine part cleaning, ink solvent storage, battery storage and chemical dosing points.



Trays

Bunded Spill Trays

Code	E24	Capacity Litres	Weight Kg	Height mm	Length mm	Width mm	Maximum Load Kg	Price
ST20		22	3.5	175	595	395	55	86.85
ST30		31	4.5	170	805	405	55	92.65
ST40		43	7	170	800	605	105	118.70
ST60		63	10	200	1000	605	205	153.45
ST100		104	14	185	1195	795	205	211.35





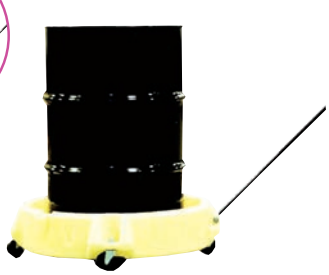
Drum Tray*

50 Litre Capacity

Code	E24	Dimensions cm	Capacity	Price
BT50		87 Diameter x 19	50 Litres	101.35

*Drum not included





Drum Trolley*

38 Litre Capacity

Code	E24	Dimensions cm	Price
5205		88 Diameter x 23	356.05

*Drum not included



Drum Funnel with Lid*

50 Litre Capacity

Code	E24	Dimensions cm	Price
DF1		61 Diameter x 23	92.65

*Tray not included



Drum Pallet, 1 Drum*

225 Litre Capacity

Code	E24	Dimensions cm	Price
BP1		90 x 70 x 53	354.10

*Drum not included

Manufactured from medium density polyethylene, these items comply with the guidelines issued by the Environment Agencies. They are robust, resistant to most chemicals and come with a removable grid.



Drum Spill Containment*

Bunded Drum Pallets

Code	E24	Capacity Litres	Weight Kg	Height mm	Length mm	Width mm	Maximum Load Kg	Price
BP2-205		240	24	330	1220	820	650	335.80
BP4-205		410	40	370	1310	1310	1250	492.10

*Drum not included

Drum & Pallet Bunding

new



Drum Pallet, 4 Drums, In-line Type

250 Litre Capacity

Code	E24	Dimensions cm	Price
5102		249 x 64 x 30	469.50



Double IBC Pallet

1,100 Litre Capacity

Code	E24	Dimensions cm	Price
BB2		245 x 145 x 58	1884.95



IBC Pallet with Integral Dispenser

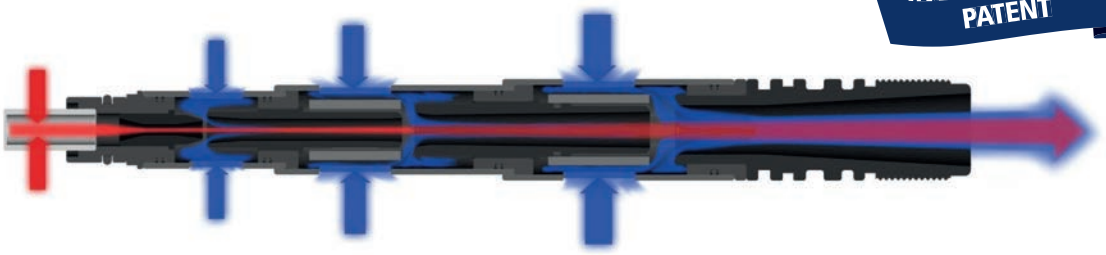
1,100 Litre Capacity

Code	E24	Dimensions cm	Price
BB1D		149 x 200 x 77	1253.55



VMECA Innovative Vacuum Cartridge Technology

INTERNATIONAL PATENT



Vacuum Pumps



See section 3 Vacuum

Useful Information

Conversion Data

Air Flow	Symbol	Factor	Convert to
Cubic Feet per Minute	scfm	x 1.699	m3/h
Cubic Feet per Minute	scfm	x 0.0283	m3/min
Cubic Feet per Minute	scfm	x 28.316	l/min
Cubic Feet per Minute	scfm	x 0.4719	l/s
Cubic Metres per Minute	m3/min	x 35.315	scfm
Cubic Metres per Hour	m3/h	x 0.5885	scfm
Litres per Minutes	l/min	x 0.0353	scfm
Litres per Second	l/s	x 2.119	scfm

Pressure	kPa	bar	psi	kg/cm²
1 kPa =	1	0.01	0.145	0.0102
1 bar =	100	1	14.5	1.02
1 psi =	6.9	0.069	1	0.07
1 kg/cm² =	98	0.981	14.2	1

Power	Symbol	Factor	Convert to
Kilowatt	kW	x 1.341	hp
Horsepower	hp	x 0.746	kW

Maximum Recommended Flow Through Mains Lines

Nominal Bore (mm)	Flow Rate @ 7bar (l/s)
10	5
15	10
20	17
25	25
32	50
40	65
50	100
65	180
80	240

Above flow data is based on air flow through Medium Grade Steel Tube to BS1387: Table

Theoretical Flow Through an Orifice

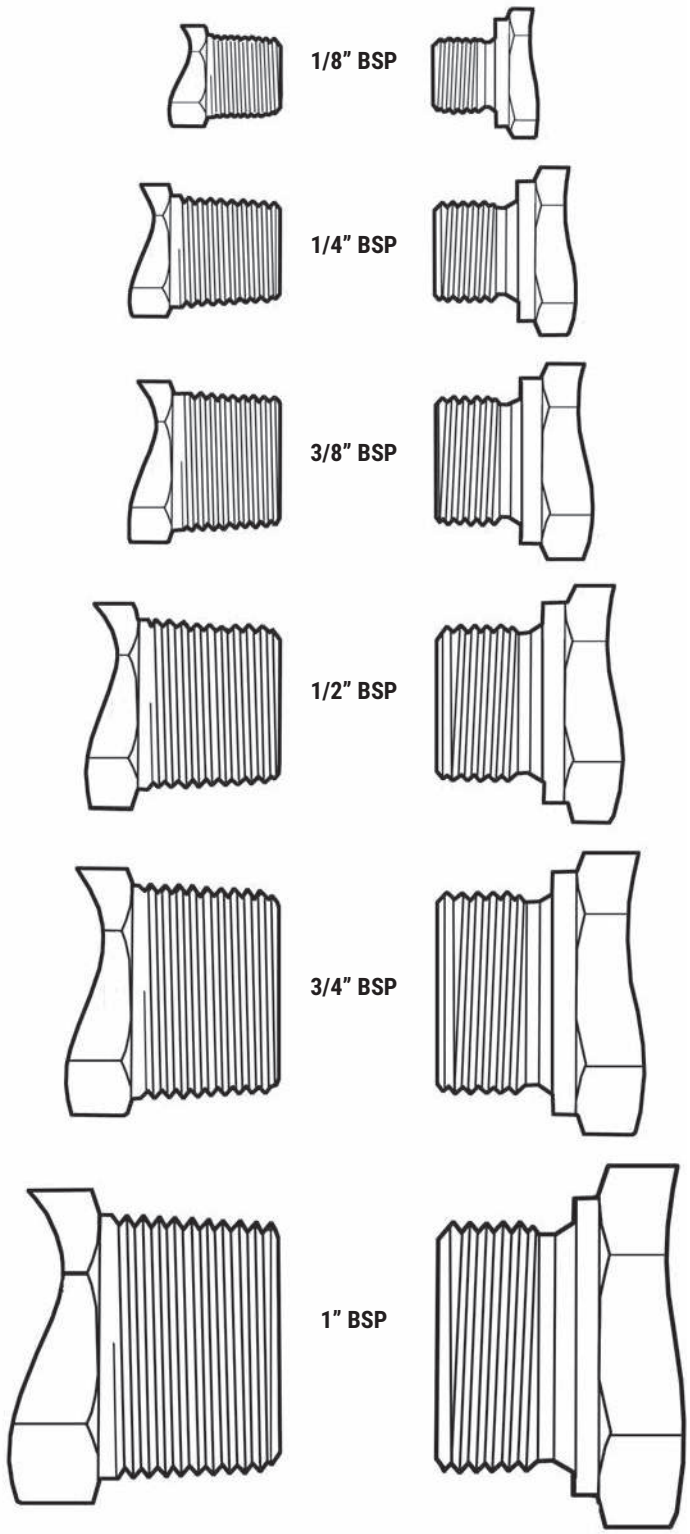
(use as a guide to air flow through pneumatic tubing)

Orifice Dia. (mm)	Flow Rate (Litres per second)					
	2 bar	4 bar	6 bar	7 bar	8 bar	10 bar
1.0	0.453	0.733	1.051	1.201	1.351	1.649
1.5	1.021	1.699	2.366	2.689	3.049	3.715
2.0	1.815	3.016	4.198	4.798	5.398	6.597
3.0	4.082	6.764	9.463	10.812	12.162	14.844
4.0	7.264	12.045	16.823	19.159	21.66	26.41
5.0	11.346	18.826	26.32	29.99	33.82	41.32
6.0	16.34	27.16	37.82	43.32	48.65	59.5
8.0	29.16	48.15	67.3	76.9	86.5	105.6
10.0	43.32	75.3	105.1	120.1	135.1	164.9
12.0	65.3	108.3	151.4	173.3	194.6	238.2
15.0	102.1	169.9	236.6	269.9	304	371.5
20.0	181.6	301.5	419.8	479.8	539.8	659.7
25.0	283.2	469.8	658	749.7	844.7	1031

Thread Sizes

(Actual Size)

Parallel Thread



The data contained on this page is intended as a guide only. We accept no responsibility for any possible errors contained here or elsewhere in the catalogue. We reserve the right to change technical specifications without notification. Prices are subject to change without notification. All prices are exclusive of vat and carriage.

Useful Information

Temperatures

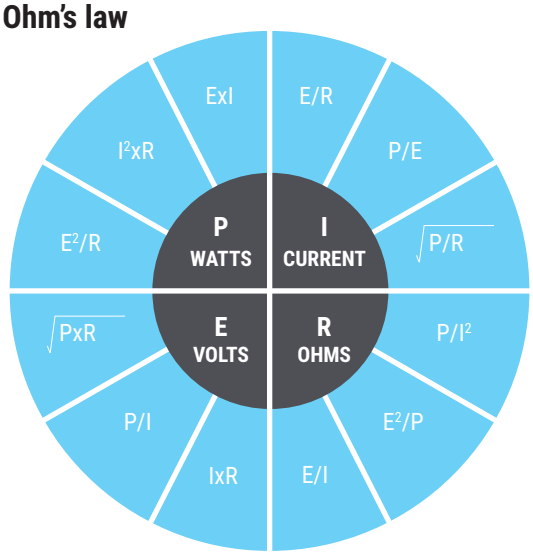
°C	°F	°C	°F	°C	°F	°C	°F
-50	-58.0	1	33.8	51	123.8	105	221.0
-49	-56.2	2	35.6	52	125.6	110	230.0
-48	-54.4	3	37.4	53	127.4	115	239.0
-47	-52.6	4	39.2	54	129.2	120	248.0
-46	-50.8	5	41.0	55	131.9	125	257.0
-45	-49.0	6	42.8	56	132.8	130	266.0
-44	-47.2	7	44.6	57	134.6	135	275.0
-43	-45.4	8	46.4	58	136.4	140	284.0
-42	-43.6	9	48.2	59	138.2	145	293.0
-41	-41.8	10	50.0	60	140.0	150	303.0
-40	-40.0	11	51.8	61	141.8	155	311.0
-39	-38.2	12	53.6	62	143.6	160	320.0
-38	-36.4	13	55.4	63	145.4	165	329.0
-37	-34.6	14	57.2	64	147.2	170	338.0
-36	-32.8	15	59.0	65	149.0	175	347.0
-35	-31.0	16	60.8	66	150.8	180	356.0
-34	-29.2	17	62.6	67	152.6	185	365.0
-33	-27.4	18	64.4	68	154.4	190	374.0
-32	-25.6	19	66.2	69	156.2	195	383.0
-31	-23.8	20	68.0	70	158.0	200	392.0
-30	-22.0	21	69.8	71	159.8	205	401.0
-29	-20.2	22	71.6	72	161.6	210	410.0
-28	-18.4	23	73.4	73	163.4	215	419.0
-27	-16.6	24	75.2	74	165.2	220	428.0
-26	-14.8	25	77.0	75	167.0	225	437.0
-25	-13.0	26	78.8	76	168.8	230	446.0
-24	-11.2	27	80.6	77	170.6	235	455.0
-23	-9.4	28	82.4	78	172.4	240	464.0
-22	-7.6	29	84.2	79	174.2	245	473.0
-21	-5.8	30	86.0	80	176.0	250	482.0
-20	-4.0	31	87.8	81	177.8	255	491.0
-19	-2.2	32	89.6	82	179.6	260	500.0
-18	-0.4	33	91.4	83	181.4	265	509.0
-17	1.4	34	93.2	84	183.2	270	518.0
-16	3.2	35	95.0	85	185.0	275	527.0
-15	5.0	36	96.8	86	186.8	280	536.0
-14	6.8	37	98.6	87	188.6	285	545.0
-13	8.6	38	100.4	88	190.4	290	554.0
-12	10.4	39	102.2	89	192.2	295	563.0
-11	12.2	40	104.0	90	194.0	300	572.0
-10	14.0	41	105.8	91	195.8	310	590.0
-9	15.8	42	107.6	92	197.6	320	608.0
-8	17.6	43	109.4	93	199.4	330	626.0
-7	19.4	44	111.2	94	201.2	340	644.0
-6	12.2	45	113.0	95	203.0	350	662.0
-5	23.0	46	114.8	96	204.8	360	680.0
-4	24.8	47	116.6	97	206.6	370	698.0
-3	26.6	48	118.4	98	208.4	380	716.0
-2	28.4	49	120.2	99	210.2	390	734.0
-1	30.2	50	122.0	100	212.0	400	752.0
-0	32.0						

Protection Classes IP _ _

1ST Number		2nd Number	
IP	Description	IP	Description
0	No protection	0	No protection
1	Protection against solid bodies larger than d.50mm (ex. involuntary contact by hand)	1	Protection against the vertical fall of water drops (condensation)
2	Protection against solid bodies larger than d. 12mm (ex. finger contact)	2	Protection against the fall of water drops up to 15° from the vertical
3	Protection against solid bodies larger than d. 2.5mm (ends of tools, wires)	3	Protection against the fall of water drops and rain up to 60° from the vertical
4	Protection against solid bodies solid bodies larger than d. 1mm (ends of tools, thin wires)	4	Protection against water jets from all directions
5	Total protection against dust (no harmful deposits)	5	Protection against water similar to waves
6	Total protection against dust	6	Protection against water immersion
		7	Protection against water immersion

Length	Multiply By
miles: kilometres	1.6093
yards: metres	0.9144
feet: metres	0.3048
inches: millimetres	25.4
inches: centimetres	2.54
Area	**Multiply By**
square miles: square kilometres	2.59
square miles: hectares	258.999
square yards: square metres	0.8361
square inches: square millimetres	645.16
square inches: square centimetres	6.4516
Mass	**Multiply By**
tons: kilograms	1016.05
tons: tonnes	1.016
Volume	**Multiply By**
cubic yards: cubic metres	0.7646
cubic feet: cubic metres	0.0283
cubic inches: cubic centimetres	16.387
Capacity	**Multiply By**
gallon: litres	4.546
US gallons: litres	3.785
pints: litres	0.568
Force (N = kg•m/s2)	**Multiply By**
newtons: pounds	0.225
pounds: newtons	4.45
Torque	**Multiply By**
newton metres: pounds per inch	8.85
pounds per inch: newton metres	0.113

Ohm's law



0

Part Code	Page
0	
00.008.3	80
00.028.0	81
00.029.0	81
00.030.0	81
00.031.0	81
00.047.4	80
00.074.4	81
0090320502	15
0090400502	15
0090500502	15
0090630502	15
0090800502	15
0091000502	15
0091250502	15
01.008.3	79
01.028.3	79
01.044.4	79
01.046.4	79
01.087.0	50
01.088.0	50
0121000	431
0121001	431
0121002	431
0121005	431
0121007	431
0121010	431
0121012	431
0121015	431
0121020	431
0121030	431
0121040	431
0121060	431
0152018	430
0152028	430
0152038	430
0152048	430
0152068	430
0152088	430
0153018	430
0153028	430
0153038	430
0153048	430
0153068	430
0153088	430
0153108	430
0153128	430
0153168	430
016120004	687
016120012	687
0216501-3	560
0216502-1	560
0216503-0	560
0216504-8	560
0216505-6	560
0216506-4	560
0216507-2	560
0216508-0	560
0216509-9	560
0216510-1	560
0216511-0	560
0216512-8	560
0216513-6	560
0216514-4	560
0216515-2	560
0216516-0	560
0216517-9	560
0216518-7	560
0216519-5	560
0216520-8	560
0216521-6	561
0216522-4	561
0216523-2	561
0216524-0	561
0216525-9	561
0216526-7	561
0216527-5	561
0216528-3	561
0216529-1	561
0216530-4	561
0216531-2	561
0216532-0	561
0216533-9	561
0216534-7	561
0216535-5	561
0216536-3	561
0216537-1	561
0216538-0	561
0216539-8	561
0216540-0	561
0216541-9	561
0223000201	61
0223000301	61
0223000401	61
0223000501	61
0223000601	61
0223000701	61
0224000201	61
0224000401	61
0224000501	61
0224000601	61
0224000701	61
0226005500	61
0227700000	82
0228000100	65
0228000150	65
0228000155	65
0228000200	65
0228000210	65
0228000300	65
0228000301	65
0228000400	65
0228000500	65
0228000700	65
0228001100	65
0228001150	65
0228001155	65
0228001200	65
0228001210	65
0228001300	65
0228001301	65
0228001400	65
0228001500	65
0228001700	65
0300900-1	550
0300900-2	550
0300900-3	550
0300900-4	550
0300900-5	550
0300900-6	550
0300900-7	550
0300900-8	550
0300900-9	550
0300901-0	550
0300901-1	550
0300901-2	550
0300901-3	550
0300901-4	550
0300901-5	550
0300901-6	550
0300901-7	550
0300901-8	550
0300901-9	550
0300902-0	550
0300902-1	550
0300902-3	550
0300902-4	550
0301201-3	553
0301202-1	553
0301203-0	553
0301204-8	553
0301205-6	553
0301206-4	553
0301207-2	553
0301210-1	553
0301211-0	553
0301212-8	553
0301213-6	553
0301214-4	553
0301215-2	553
0301216-0	553
0301217-9	553
0301218-7	553
0301219-5	553
0301220-8	553
0301221-6	553
0301222-4	553
0301223-2	553
0301224-0	553
0301225-9	553
0301226-7	553
0301227-5	553
0301228-3	553
0301301-6	555
0301302-4	555
0301303-2	555
0301304-0	555
0301305-9	555
0301306-7	555
0301307-5	555
0301308-3	555
0301309-1	555
0301310-4	555
0301311-2	555
0301312-0	555
0301313-9	555
0301314-7	555
0301315-5	555
0301316-3	555
0301317-1	555
0301318-0	555
0301319-8	555
0301320-0	555
0301321-9	555
0301322-7	555
0301323-5	555
0301324-3	555
0301325-1	555
0301326-0	555
0301327-8	555
0301328-6	555
0301329-4	555
0301330-7	555
0301331-5	555
0301332-3	555
0301333-1	555
0301334-0	555
0301335-8	555

0

Part Code	Page
0301336-6	555
0301401-9	551
0301402-7	551
0301403-5	551
0301404-3	551
0301405-1	551
0301406-0	551
0301407-8	551
0301408-6	551
0301409-4	551
0301410-7	551
0301411-5	551
0301412-3	551
0301414-0	551
0301415-8	551
0301416-6	551
0301417-4	551
0301418-2	551
0301419-0	551
0301451-0	552
0301452-9	552
0301453-7	552
0301454-5	552
0301455-3	552
0301456-1	552
0301457-0	552
0301458-8	552
0301459-6	552
0301460-9	552
0301461-7	552
0301462-5	552
0301463-3	552
0301464-1	552
0301465-0	552
0301466-8	552
0301467-6	552
0301468-4	552
0301469-2	552
0301470-5	552
0301471-3	552
0301472-1	552
0301473-0	552
0301474-8	552
0301575-9	551
0301576-7	551
0301650-8	549
0301651-6	549
0301652-4	549
0301653-2	549
0301654-0	549
0301655-9	549
0301656-7	549
0301657-5	549
0301658-3	549
0301659-1	549
0301660-4	549
0301661-2	549
0301662-0	549
0301663-9	549
0301664-7	549
0301665-5	549
0301666-3	549
0301667-1	549
0301668-0	549
0301750-0	551
0301751-9	551
0301752-7	551
0301753-5	551
0301754-3	551
0301755-1	551
0301756-0	551
0301757-8	551
0301758-6	551
0301759-4	551
0301760-7	551
0301761-5	551
0301762-3	551
0301763-1	551
0301764-0	551
0301765-8	551
0301766-6	551
0301767-4	551
0301768-2	551
0301769-0	551
0301770-3	551
0301771-1	551
0301772-0	551
0301773-8	551
0301901-2	556
0301902-0	556
0301903-9	556
0301904-7	556
0301905-5	556
0301906-3	556
0301907-1	556
0301908-0	556
0301909-8	556
0301910-0	556
0301911-9	556
0301912-7	556
0301913-5	556
0301914-3	556
0301915-1	556
0301916-0	556
0301917-8	556
0301918-6	556
0301919-4	556
0301920-7	556
0301921-5	556
0301922-3	556
0301923-1	556
0301924-0	556
0301925-8	556
0301926-6	556
0301927-4	556
0301928-2	556
0301929-0	556
0301930-3	556
0301931-1	556
0301932-0	556
0301933-8	556
0301934-6	556
0301935-4	556
0301936-2	556
0309103-6	552
0350003-8	825
0350004-6	825
0417.022	574
0503018	429
0503028	429
0503038	429
0503048	429
0503068	429
0503088	429
0554018	429
0554028	429
0554038	429
0554048	429
0554068	429
0554088	429
0554108	429
0554128	429
0554168	429
0770.022	650
0772.032	650
0774.032	650
0775.110	650
0775.210	650
0776.063	650
0776.110	650
0776.210	650
0776.310	650
0782.002	650
0782.110	650
0782.210	650
0786.042	650
0790.042	650
0792.042	650
0792.142	650
0794.063	650
0794.163	650
0799.010	650
08.015.2	42
08.017.2	42
0820058126	113
0820058601	113
0820059101	113
0820059111	113
0820059121	113
0820060126	112
0820060601	112
0820061101	112
0820061111	112
0820061121	112
0820258002	111
0820258003	111
0820259001	111
0820259002	111
0820259003	111
0820260002	110
0820260003	110
0820261001	110
0820261002	110
0820261003	110
0822120001	105
0822120002	105
0822120003	105
0822120004	105
0822120005	105
0822120006	105
0822120007	105
0822120008	105
0822120009	105
0822120010	105
0822120011	105
0822121001	105
0822121002	105
0822121003	105
0822121004	105
0822121005	105
0822121006	105
0822121007	105
0822121008	105
0822121009	105
0822121010	105
0822121011	105
0822122001	105
0822122002	105
0822122003	105
0822122004	105
0822122005	105
0822122006	105

Part Code	Page
0822122007	105
0822122008	105
0822122009	105
0822122010	105
0822122011	105
0822123001	105
0822123002	105
0822123003	105
0822123004	105
0822123005	105
0822123006	105
0822123007	105
0822123008	105
0822123009	105
0822123010	105
0822123011	105
0822124001	105
0822124002	105
0822124003	105
0822124004	105
0822124005	105
0822124006	105
0822124007	105
0822124008	105
0822124009	105
0822124010	105
0822124011	105
0822125001	105
0822125002	105
0822125003	105
0822125004	105
0822125005	105
0822125006	105
0822125007	105
0822125008	105
0822125009	105
0822125010	105
0822125011	105
0822332501	102
0822332502	102
0822332503	102
0822332504	102
0822332505	102
0822332506	102
0822332507	102
0822332508	102
0822333501	102
0822333502	102
0822333503	102
0822333504	102
0822333505	102
0822333506	102
0822333507	102
0822333508	102
0822333509	102
0822333510	102
0822334501	102
0822334502	102
0822334503	102
0822334504	102
0822334505	102
0822334506	102
0822334507	102
0822334508	102
0822334509	102
0822334510	102
0822334511	102
0822334512	102
0822391000	108
0822391001	108
0822391002	108
0822391003	108
0822391004	108
0822391006	108
0822391007	108
0822391600	109
0822391601	109
0822391602	109
0822391603	109
0822391604	109
0822391605	109
0822391606	109
0822391607	109
0822392000	108
0822392001	108
0822392002	108
0822392003	108
0822392004	108
0822392006	108
0822392007	108
0822392600	109
0822392601	109
0822392602	109
0822392603	109
0822392604	109
0822392605	109
0822392606	109
0822392607	109
0822393000	108
0822393001	108
0822393002	108
0822393003	108
0822393004	108
0822393006	108
0822393007	108
0822393600	109
0822393601	109
0822393602	109
0822393603	109
0822393604	109
0822393605	109
0822393606	109
0822393607	109
0822393609	109
0822393610	109
0822394001	108
0822394004	108
0822394007	108
0822394601	109
0822394602	109
0822394603	109
0822394604	109
0822394605	109
0822394606	109
0822394607	109
0822394609	109
0822394610	109
0822395001	108
0822395004	108
0822395007	108
0822395602	109
0822395603	109
0822395604	109
0822395605	109
0822395606	109
0822395607	109
0822395609	109
0822395610	109
0822396001	108
0822396004	108
0822396007	108
0830100365	103
0830100368	103
0830100371	103
0830100488	107
0830100629	107
08FA3A1Z	253
08FA3C1Z	254
08FA4A1Z	253
08FA4C1Z	254
08FD3A1Z	253
08FD3C1Z	254
08FD4A1Z	253
08FD4C1Z	254
08MA3A1Z	253
08MA3C1Z	254
08MA4A1Z	253
08MA4C1Z	254
08MD3A1Z	253
08MD3C1Z	254
08MD4A1Z	253
08MD4C1Z	254
08SC006016	559
08SC008022	559
08SC010025	559
08SC010027	559
08SC013038	559
08SC014032	559
08SC019044	559
08SC026051	559
08SC032057	559
08SC038063	559
08SC045070	559
08SC064089	559
0951602093	15
1	
10.001.4	80
10.003.3	82
10.035.4	79
100CV1	236
100CV112	236
100CV114	236
100CV12	236
100CV2	236
100CV212	236
100CV3	236
100CV34	236
100CV38	236
100CV4	236
10109	662
1020	401
1021	401
1023	401
10252	661
1026	401
1028	401
102CVF1	236
102CVF112	236
102CVF114	236
102CVF12	236
102CVF2	236
102CVF212	236
102CVF3	236
102CVF34	236
102CVF38	236
102CVF4	236
1037.000	863
1038.000	863

Part Code	Page
1039.000	863
1040	400
1040/L4	400
1041	400
1041/L6	400
1043	400
1043/L6	400
1045/L6	400
1048	400
1048/L6	400
105-6	726
1050.000	863
1051	400
1053	400
1055.000	863
1056-01	854
1056-02	854
1056-03	854
1056-04	854
1057.000	863
1058.000	863
1059.000	863
1060.000	863
1073.000	863
1076.000	863
1077.000	863
1090.000	863
1091.000	863
10BPEX-25C	625
10BV	624
10HSV	624
10SBCX4	352
1100.000	863
1110.000	863
1110000765	795
1110000766	795
1110000767	795
1110000768	795
1110000769	795
1110000771	795
1110000774	795
1110000775	795
1110000776	795
1110000777	795
1110000778	795
1110000780	795
1110000784	796
1110000785	796
1110000786	796
1110000787	796
1110000788	796
1110000789	796
1110000790	796
1110000794	796
1110000795	796
1110000796	796
1110000797	796
1110000799	796
1110000800	796
1110000802	797
1110000803	797
1110000804	797
1110000807	797
1110000808	797
1110000809	797
1110000811	797
1110000812	797
1110000813	797
1110000817	798
1110000819	798
1110000821	798
1110000823	798
1110000826	798
1110000827	798
1110000828	798
1110000829	798
1110000830	798
1110002493	799
1110002494	799
1110002495	799
1110002496	799
1110002497	799
1110002499	799
1110002500	799
1110002501	799
1110002502	799
1110002503	799
1110002504	799
1110002505	799
1110002506	799
1110002510	800
1110002511	800
1110002512	800
1110002513	800
1110002517	800
1110002518	800
1110002519	800
1110002520	800
1110002522	800
1110002529	801
1110002531	801
1110002533	801
1110002535	801
1110002539	801
1110002540	801
1110002541	801
1110002546	802
1110002548	802
1110002550	802
1110002553	802
1110002555	802
1110002560	802
1110002562	802
1110002564	802
1110002569	802
1110002571	802
1110002572	802
1110002579	803
1110002580	803
1110002582	803
1110002583	803
1110002584	803
1110002587	803
1110002588	803
1110002589	803
1110003996	804
1110003997	804
1110003998	804
1110003999	804
1110004001	804
1110004005	804
1110004010	804
1110004011	804
1110004012	804
1110004015	804
1110004017	804
1110004019	804
1110004022	804
1110004023	805
1110004026	805
1110004027	805
1110004033	805
1110004039	805
1110004049	806
1110004053	806
1110004055	806
1110004057	806
1110004061	806
1110007156	798
1110007363	806
1110024580	805
1110100010XN	5
1110100025XN	5
1110100050XN	5
1110120010CN	5
1110120025CN	5
1110120050CN	5
1110160010CN	5
1110160025CN	5
1110160050CN	5
1110200010CN	5
1110200025CN	5
1110200050CN	5
1110250010CN	5
1110250025CN	5
1110250050CN	5
1114.000	864
1115.000	864
1116.000	864
1120000848	801
1120001151	795
1120001153	795
1120001156	796
1120001161	796
1120001167	797
1120001171	797
1120001175	798
1120001180	798
1120001947	799
1120001950	800
1120001955	802
1120001956	803
1120002537	804
1120002539	805
1120160010CN	6
1120160025CN	6
1120160050CN	6
1120160080CN	6
1120160100CN	6
1120160125CN	6
1120160160CN	6
1120160200CN	6
1120200010CN	6
1120200025CN	6
1120200050CN	6
1120200080CN	6
1120200100CN	6
1120200125CN	6
1120200160CN	6
1120200200CN	6
1120200250CN	6
1120250010CN	6
1120250025CN	6
1120250050CN	6
1120250080CN	6
1120250100CN	6
1120250125CN	6
1120250160CN	6
1120250200CN	6
1120250250CN	6
1120250320CN	6
1120320025CN	16

Part Code	Page
1120320050CN	16
1120320080CN	16
1120320100CN	16
1120320125CN	16
1120320160CN	16
1120320200CN	16
1120320250CN	16
1120400025CN	16
1120400050CN	16
1120400080CN	16
1120400100CN	16
1120400125CN	16
1120400160CN	16
1120400200CN	16
1120400250CN	16
1120500025CN	16
1120500050CN	16
1120500080CN	16
1120500100CN	16
1120500125CN	16
1120500160CN	16
1120500200CN	16
1120500250CN	16
1130.000	863
1130000255	795
1130000258	795
1130000261	796
1130000264	796
1130000267	797
1130000269	797
1130000273	798
1130000706	799
1130000710	800
1130000714	801
1130000718	802
1130000722	803
1130000764	804
1130000765	805
1130001501	798
1130002984	795
1130002987	795
1130002990	795
1130002993	795
1130002996	795
1130003000	795
1130003097	802
1130003101	802
1130003102	802
1130003103	802
1130003106	802
1130003108	802
1130003109	802
1130003113	802
1130003114	802
1130003115	802
1130003116	802
1130003551	798
1130003554	798
1130003560	798
1130003563	798
1130003765	797
1130003768	797
1130003771	797
1130004020	795
1130004022	796
1130004023	797
1130004024	797
1130004025	798
1130004026	798
1130004180	799
1130004181	800
1130004183	801
1130004184	802
1130004186	803
1130004280	804
1130004281	805
1130005062	804
1130005065	795
1130005070	804
1130005074	795
1130005092	804
1130005104	795
1130005113	804
1130005118	795
1130005139	804
1130005148	795
1130005173	804
1130005192	795
1130005237	796
1130005243	804
1130005259	796
1130005265	804
1130005274	796
1130005284	804
1130005294	796
1130005322	804
1130005333	796
1130005360	804
1130005368	796
1130005376	804
1130005386	796
1130005410	804
1130005430	799
1130005433	799
1130005436	799
1130005439	799
1130005442	799
1130005447	799
1130005453	799
1130005459	799
1130005466	799
1130005471	799
1130005479	799
1130005485	799
1130005491	799
1130005518	796
1130005526	805
1130005534	796
1130005554	805
1130005562	796
1130005570	805
1130005579	796
1130005603	805
1130005630	796
1130005639	796
1130005644	805
1130005659	805
1130005680	800
1130005688	800
1130005699	800
1130005707	800
1130005718	800
1130005726	800
1130005733	800
1130005741	800
1130005748	800
1130005866	801
1130005875	801
1130005887	801
1130005897	801
1130005911	801
1130005925	801
1130005933	801
1130005953	797
1130005971	806
1130005980	797
1130005988	806
1130005997	797
1130006016	806
1130006026	797
1130006042	806
1130006051	797
1130006059	806
1130006069	797
1130006078	806
1130006183	803
1130006187	803
1130006191	803
1130006192	803
1130006196	803
1130006200	803
1130006203	803
1130006211	803
1130006216	798
1130006221	798
1130006226	798
1130006230	798
1130006234	798
1130008666	798
114124	723
1180.000	864
1181.000	864
11SL	433
1202002	295
1202003	295
121/34	423
121/35	423
121/50	423
121/54	423
1210013	295
1210014	295
1213.000	864
1213320025BL	12
1213320025CN	8
1213320050BL	12
1213320050CN	8
1213320080BL	12
1213320080CN	8
1213320100BL	12
1213320100CN	8
1213320125BL	12
1213320125CN	8
1213320160BL	12
1213320160CN	8
1213320200BL	12
1213320200CN	8
1213320250BL	12
1213320250CN	8
1213320320BL	12
1213320320CN	8
1213320400BL	12
1213320400CN	8
1213320500BL	12
1213320500CN	8
1213400025BL	12
1213400025CN	8
1213400050BL	12
1213400050CN	8
1213400080BL	12
1213400080CN	8
1213400100BL	12
1213400100CN	8

Part Code	Page
1213400125BL	12
1213400125CN	8
1213400160BL	12
1213400160CN	8
1213400200BL	12
1213400200CN	8
1213400250BL	12
1213400250CN	8
1213400320BL	12
1213400320CN	8
1213400400BL	12
1213400400CN	8
1213400500BL	12
1213400500CN	8
1213500025BL	12
1213500025CN	8
1213500050BL	12
1213500050CN	8
1213500080BL	12
1213500080CN	8
1213500100BL	12
1213500100CN	8
1213500125BL	12
1213500125CN	8
1213500160BL	12
1213500160CN	8
1213500200BL	12
1213500200CN	8
1213500250BL	12
1213500250CN	8
1213500320BL	12
1213500320CN	8
1213500400BL	12
1213500400CN	8
1213500500BL	12
1213500500CN	8
1213630025BL	12
1213630025CN	9
1213630050BL	12
1213630050CN	9
1213630080BL	12
1213630080CN	9
1213630100BL	12
1213630100CN	9
1213630125BL	12
1213630125CN	9
1213630160BL	12
1213630160CN	9
1213630200BL	12
1213630200CN	9
1213630250BL	12
1213630250CN	9
1213630320BL	12
1213630320CN	9
1213630400BL	12
1213630400CN	9
1213630500BL	12
1213630500CN	9
1213800025AN	9
1213800025WL	12
1213800050AN	9
1213800050WL	12
1213800080AN	9
1213800080WL	12
1213800100AN	9
1213800100WL	12
1213800125AN	9
1213800125WL	12
1213800160AN	9
1213800160WL	12
1213800200AN	9
1213800200WL	12
1213800250AN	9
1213800250WL	12
1213800320AN	9
1213800320WL	12
1213800400AN	9
1213800400WL	12
1213800500AN	9
1213800500WL	12
1213A10025AN	9
1213A10025WL	12
1213A10050AN	9
1213A10050WL	12
1213A10080AN	9
1213A10080WL	12
1213A10100AN	9
1213A10100WL	12
1213A10125AN	9
1213A10125WL	12
1213A10160AN	9
1213A10160WL	12
1213A10200AN	9
1213A10200WL	12
1213A10250AN	9
1213A10250WL	12
1213A10320AN	9
1213A10320WL	12
1213A10400AN	9
1213A10400WL	12
1213A10500AN	9
1213A10500WL	12
1213A20100AN	9
1213A20100WL	12
1213A20125AN	9
1213A20125WL	12
1213A20160AN	9
1213A20160WL	12
1213A20200AN	9
1213A20200WL	12
1213A20250AN	9
1213A20250WL	12
1213A20320AN	9
1213A20320WL	12
1213A20400AN	9
1213A20400WL	12
1213A20500AN	9
1213A20500WL	12
1214.000	864
1221006	294
1223001	296
1224030	297
1224054	297
1225030	296
1225054	296
1226030	297
1226054	297
12445645448	411
12445646458	411
12445648468	411
12445650488	411
12445652508	411
12445656528	411
12445659568	411
12446244008	411
12446245008	411
12446246008	411
12446248008	411
12446250008	411
12446252008	411
12446256008	411
12446259008	411
12446344448	410
12446346468	410
12446348488	410
12446444448	411
12446445458	411
12446446468	411
12446448488	411
12446450508	411
12446452528	411
12446456568	411
12446459598	411
12446544008	410
12446545008	410
12446546008	410
12446548008	410
12446550008	410
12446552008	410
12446556008	410
12446559008	410
12446645448	410
12446646458	410
12446648468	410
12446650488	410
12446652508	410
12446659568	410
12446844028	410
12446844048	410
12446845028	410
12446845048	410
12446846028	410
12446846048	410
12446846068	410
12446846088	410
12446848028	410
12446848048	410
12446848068	410
12446848088	410
12446850048	410
12446850068	410
12446850088	410
12446850128	410
12446852048	410
12446852068	410
12446852088	410
12446852128	410
12446856088	410
12446856128	410
12446859088	410
12446859128	410
12446859168	410
12446944028	410
12446944048	410
12446945028	410
12446945048	410
12446946028	410
12446946048	410
12446946068	410
12446946088	410
12446948028	410
12446948048	410
12446948068	410
12446948088	410
12446950048	410
12446950068	410
12446950088	410
12446950128	410
12446952048	410
12446952068	410
12446952088	410
12446952128	410

Part Code	Page
12446956088	410
12446956128	410
12446959088	410
12446959128	410
12447144028	411
12447144048	411
12447145028	411
12447145048	411
12447146028	411
12447146048	411
12447146068	411
12447146088	411
12447148028	411
12447148048	411
12447148068	411
12447148088	411
12447150048	411
12447150068	411
12447150088	411
12447150128	411
12447152048	411
12447152068	411
12447152088	411
12447152128	411
12447156088	411
12447156128	411
12447159088	411
12447159128	411
12447245448	411
12447246458	411
12447248468	411
12447250488	411
12447252508	411
12447259568	411
1260.000	863
1261.000	863
1270001	298
1280.000	864
1281.000	863
12PA.BARE	597
12PA.KIT1B	597
12PL422-1	465
12PL425-1	465
12PL425-2	465
12PL522-1	465
12PL522-2	465
12PL523BL	465
12PL523RO	465
12SBCV4	352
12SL	433
12SP18A.KIT	597
13012	595
1302002	295

Part Code	Page
1302003	295
130CVR1	236
130CVR112	236
130CVR114	236
130CVR12	236
130CVR2	236
130CVR212	236
130CVR3	236
130CVR34	236
130CVR4	236
1310013	295
1310014	295
1321006	294
1323001	296
1324030	297
1324054	297
1325030	296
1325054	296
1326030	297
1326054	297
1338.000	863
1339.000	863
1350.000	863
1360.000	863
1370001	298
1376.000	863
1380.000	863
13MHH-0.5	713
13MHH-1	713
13MHH-2	713
13MHH-2.5	713
13MHH-3	713
13MHH-4	713
13MHHM-1	713
13MHHM-2	713
13MHHM-2.5	713
13MHHM-3	713
13MHHM-4	713
13PG-0.5	713
13PG-0.75	713
13PG-1	713
13PG-1.5	713
13PG-2	713
13PG-2.5	713
13PG-3	713
13PG-4	713
13SC010022	559
13SC011025	559
13SC013027	559
13SC013032	559
13SC018038	559
13SC019044	559
13SC026051	559

Part Code	Page
13SC032057	559
13SC038063	559
13SC044070	559
13SC051076	559
13SC057083	559
13SC064089	559
13SC064114	559
13SC070095	559
13SC076101	559
13SC076127	559
13SC083108	559
13SC089140	559
13SC095146	559
13SC102152	559
13SC114165	559
13SC127178	559
13SC165216	559
13SL	433
140026-134	720
140027-134	720
140101-000	717
140103-000	717
140106-000	719
140108-000	722
140111-000	718
140112-000	718
140113-000	718
140114-000	718
140118-000	722
140120-000	718
140125-000	717
140141-000	720
140161-000	720
140171-000	720
140183-000	718
1402002	295
1402003	295
141000-000	722
141001-000	722
1410013	295
1410014	295
1421006	294
142130-000	721
142131-000	721
142135-000	721
142180-000	721
1422002	294
1423001	296
1424030	297
1424054	297
1425030	296
1425054	296
1426030	297

Part Code	Page
1426054	297
143300	721
144180	723
145110-000	723
145154-000	723
145950-000	723
145955-000	723
1470001	298
14MMP-0.5	713
14MMP-0.75	713
14MMP-1	713
14MMP-1.5	713
14MMP-2	713
14MMP-2.5	713
14MMP-3	713
14MMP-4	713
150123-134	722
1502003	295
1521006	294
1523001	296
1524030	297
15APT-B	624
15BDC	624
15BPB-100C	625
15BPB-25C	625
15BPB-50C	625
15BPEX-100C	625
15BPEX-20X2L	625
15BPEX-20X3L	625
15BPEX-50C	625
15BSC	624
15BV	624
15DCV	624
15ESOT	624
15HSV	624
15ISV	624
15MC	623
15PTSV	624
15RA	622
15STV	624
15WB	623
1601	571
1602	571
1602003	295
1603	571
1621006	294
1623001	296
1624030	297
16AMP-0.5	713
16AMP-1	713
16AMP-2	713
16AMP-2.5	713
16AMP-3	713

1, 2

Part Code	Page
16AMP-4	713
1701	571
1702	571
1704	571
1705	571
1706	571
1708	571
1801001	223
1801006	223
1801021	223
1801047	223
1802	571
1802003	223
1802011	223
1803	571
1803002	223
1804	571
1805	571
1806	571
1821036010	103
1821036011	103
1821036012	103
1821332027	103
1821332028	103
1821332029	103
1822122004	107
1822122005	107
1822122009	103
1822122010	103
1822122025	107
1822122028	103
1822124000	103
1822124001	103
1822124002	103
1822124004	107
1822124005	107
1822124006	107
1822124013	107
1823120020	106
1823120021	106
1823120022	106
1823120023	106
1823120024	106
1823120025	106
1823300021	107
1823300024	103
1823300033	103
1823300034	103
1823390045	421
1823390046	421
1823390047	421
1823391037	388
1823391038	388
1823391039	388
1823391044	388
1823391102	388
1823391103	388
1823391104	388
1823391105	388
1823391106	388
1823391107	388
1823391108	388
1823391109	388
1823391118	388
1823391119	388
1823391263	388
1823391267	388
1823391268	388
1823391269	388
1823391270	388
1823391271	388
1823391272	388
1823391273	388
1823391275	388
1823391277	388
1823391278	388
1823391279	388
1823A00029	107
1824431000	574
1824431001	574
1824431002	574
1825805275	106
1825805276	106
1825805277	106
1825805278	106
1825805279	106
1825805280	106
1825805281	106
1827001271	106
1827001272	106
1827001273	106
1827001275	106
1827001276	106
1827001277	106
1827001278	106
1827001279	106
1827001281	106
1827001282	106
1827001283	106
1827001284	106
1827001285	106
1827001287	106
1827001288	106
1827001289	106
1827001290	106
1827001291	106
1827001293	106
1827001294	106
1827001310	106
1827001445	103
1827001446	103
1827001447	103
1827001493	107
1827001498	106
1827001499	106
1827001500	106
1827004861	106
1827004862	106
1827004866	106
1827009352	125
1827020065	103
1827020066	103
1827020067	103
1827020068	103
1827020069	103
1827020086	106
1827231009	125
1827231010	125
1827231011	125
1827231012	125
1827231015	125
1827231016	125
1827231018	125
1827231023	125
1827231024	125
1827231047	125
1827231048	125
1827231059	125
1827231060	125
18413ZBO	687
1HNV12FF	748
1HNV14FF	748
1HNV34FF	748
1HNV38FF	748
1J-013-01	506
1J-013-10	506
1J-013-26	506
1J-013-27	506
1J-013-28	506
1J-025-01	506
1J-025-10	506
1J-025-26	506
1J-025-27	506
1J-025-28	506
1PES	432
1SE	432
1SEP	432
1SL	433
1SP	432
1SPL-F	433
1SPL-P	433
1SPX	432
1SSE	432
1SVEX	433
1TP	433
1TPF	433
2	
2.304MBCU	42
200	247
2000	400
2001	400
2001005	380
2001006	380
2001014	380
2001015	380
2001016	380
2001017	380
2001019	380
2002003	380
2002004	380
2003	400
2003002	380
2003006	380
2003007	380
2004002	380
2004006	380
2004007	380
2005	400
2005002	380
2005006	380
2005007	380
2006000	381
2006001	381
2006002	381
2006003	381
2006004	381
2006005	381
2006006	381
2006007	381
2006008	381
2006009	381
2006010	381
2006011	381
2006012	381
2006013	381
2006014	381
2006015	381
2006016	381
2006017	381
2006019	381
2007001	381
2007002	381

Part Code	Page
2007003	381
2007005	381
2007006	381
2007007	381
2008	400
2008001	381
2008003	381
2008005	381
2008009	381
2008010	381
2008011	381
2008014	381
2008015	381
2008017	381
2008018	381
201	247
2010002	382
2010007	382
2011	400
2011002	380
2011006	380
2011007	380
2011021185	756
2011021187	756
2011021189	756
2011021190	756
2011024098	757
2011024099	757
2011024304	756
2011026579	758
2011026614	756
2011026616	757
2011026617	757
2011029884	758
2011030000	756
2011623137	757
2011623138	757
2011623140	757
2011623877	756
2011623887	756
2011623894	756
2011623895	756
2011623896	756
2011623912	756
2011623913	756
2011623927	756
2011623928	756
2011623935	756
2011623936	756
2011623947	756
2011624003	758
2011624004	758
2011624005	758
2011624006	758
2011624007	758
2016	854
2017001	383
2019001	382
2019002	382
2019003	382
2019004	382
2019005	382
2019006	382
2021002	382
2021005	382
2021006	382
2022002	382
2022005	382
2022006	382
2023001	382
2023002	382
2023003	382
2023004	382
2024001	383
2024003	383
2031004	381
2031005	381
2031006	381
2031016	381
2031017	381
2031018	381
2031019	381
2031C15	381
2031C16	381
2032005	381
2032017	381
2032018	381
2032019	381
2040	400
2041	400
2043	400
2045	400
2048	400
2051	400
2054	400
20B	247
20D	247
20E	247
21MPB-0.5	713
21MPB-0.75	713
21MPB-1	713
21MPB-1.5	713
21MPB-2	713
220	247
2201001	389
2201002	389
2201003	389
2201004	389
2201005	389
2202001	389
2202002	389
2202003	389
2202004	389
2202005	389
2202006	389
2202007	389
2203001	389
2203002	389
2203003	389
2203004	389
2203005	389
2203006	389
2204001	389
2204002	389
2204003	389
2204004	389
2205001	389
2205002	389
2205003	389
2205004	389
2205005	389
2205006	389
2205007	389
2205008	389
2205009	389
2205010	389
2205011	389
2205012	389
2206001	389
2206002	389
2206003	389
2206004	389
2206005	389
2206006	389
2207001	389
2207002	389
2207003	389
2207004	389
2207005	389
2207006	389
2207007	389
2207008	389
2207010	389
2207011	389
2207012	389
2208001	389
2208002	389
2208003	389
2208004	389
2208005	389
2208006	389
2208007	389
2208009	389
2208010	389
2208011	389
2209001	389
2209002	389
2209003	389
2209004	389
2209005	389
2209006	389
221	247
2211001	389
2211002	389
2211003	389
2211004	389
2211005	389
2211006	389
2212001	389
2212002	389
2212003	389
2212004	389
2212005	389
22B	247
22BPB-25C	625
22BPB-50C	625
22BPEX-20X2L	625
22BPEX-20X3L	625
22BPEX-25C	625
22BPEX-50C	625
22BV	624
22CFA	625
22CMA	625
22D	247
22E	247
22HSV	624
22MC	623
22MPB-0.5	713
22MPB-0.75	713
22MPB-1	713
22MPB-1.5	713
22MPB-2	713
22PTSV	624
22RA	622
22STV	624
2301001	387
2301002	387
2301003	387

2

Part Code	Page
2301004	387
2301005	387
2301006	387
2301007	387
2301008	387
2301009	387
2301010	387
2301017	387
2301201-0	553
2301202-8	553
2301203-6	553
2301204-4	553
2301205-2	553
2301206-0	553
2301207-9	553
2301208-7	553
2301210-8	553
2301211-6	553
2301212-4	553
2301213-2	553
2301214-0	553
2301215-9	553
2301216-7	553
2301217-5	553
2301218-3	553
2301219-1	553
2301220-4	553
2301242-3	553
2301243-1	553
2301244-0	553
2301245-8	553
2302001	387
2302002	387
2302003	387
2302004	387
2302005	387
2302006	387
2302007	387
2302008	387
2303001	387
2303002	387
2303003	387
2303004	387
2304001	387
2304002	387
2304003	387
2304004	387
2305001	387
2305002	387
2305003	387
2305004	387
2305005	387
2305006	387
2305007	387
2305008	387
2305009	387
2305010	387
2305016	387
2306001	387
2306002	387
2306003	387
2306004	387
2307001	387
2307002	387
2307003	387
2307004	387
2307005	387
2307006	387
2307007	387
2307008	387
2307009	387
2307010	387
2307015	387
2308001	388
2308002	388
2308003	388
2308004	388
2308005	388
2308006	388
2308007	388
2308008	388
2308009	388
2308010	388
2308012	388
2309001	387
2309002	387
2309003	387
2309004	387
2311001	388
2311002	388
2311003	388
2314.000	864
2315.000	864
2316.000	864
2317.000	864
2318.000	864
2319.000	864
233LGE06	686
233NGE06	686
233PGE06	686
233QGE06	686
2351001	387
2351002	387
2351003	387
2351004	387
2351005	387
2351006	387
2351007	387
2351008	387
2351009	387
2351010	387
2351011	387
2351012	387
2352001	387
2352002	387
2356001	387
2393.210	864
2393.250	864
2393.300	864
2393.350	864
2393.400	864
243MGE06	686
243NGE06	686
24SBCX4	352
2501010	388
2501011	388
2501012	388
2501013	388
2508.020	864
269-15	726
269-27	726
269-33	726
269-45	726
269-59	726
269.11	726
269.17	726
269.18	726
269.41	726
271.41	726
273QGE06	686
273RGE06	686
2800100005AP	19
2800100010AP	19
2800100015AP	19
2800100020AP	19
2800100025AP	19
2800100040AP	19
2800100050AP	19
28002	856
2800200005XP	19
2800200010XP	19
2800200015XP	19
2800200020XP	19
2800200025XP	19
2800200040XP	19
2800200050XP	19
2800250005XP	19
2800250010XP	19
2800250015XP	19
2800250020XP	19
2800250025XP	19
2800250040XP	19
2800250050XP	19
28003	856
2800320005CP	19
2800320010CP	19
2800320015CP	19
2800320020CP	19
2800320025CP	19
2800320040CP	19
2800320050CP	19
2800400005CP	19
2800400010CP	19
2800400015CP	19
2800400020CP	19
2800400025CP	19
2800400040CP	19
2800400050CP	19
2800500005CP	19
2800500010CP	19
2800500015CP	19
2800500020CP	19
2800500025CP	19
2800500040CP	19
2800500050CP	19
2800630005CP	19
2800630010CP	19
2800630015CP	19
2800630020CP	19
2800630025CP	19
2800630040CP	19
2800630050CP	19
28008	856
2800800005AP	19
2800800010AP	19
2800800015AP	19
2800800020AP	19
2800800025AP	19
2800800040AP	19
2800800050AP	19
28011	856
28012	856
28013	856
28015	855
28016	855
28017	855
28019	855
28020	855

Part Code	Page
28021	855
28022	855
28027	855
28028	855
28029	855
28032	855
28033	855
28034	855
28035	855
28036	855
28038	855
28042	856
28043	856
28049	856
28050	856
28051	856
28BPEX-10X3L	625
28RA	622
2900100005AP	20
2900100010AP	20
2900100015AP	20
2900100020AP	20
2900100025AP	20
2900100040AP	20
2900100050AP	20
2900200005XP	20
2900200010XP	20
2900200015XP	20
2900200020XP	20
2900200025XP	20
2900200040XP	20
2900200050XP	20
2900250005XP	20
2900250010XP	20
2900250015XP	20
2900250020XP	20
2900250025XP	20
2900250040XP	20
2900250050XP	20
2900320005CP	20
2900320010CP	20
2900320015CP	20
2900320020CP	20
2900320025CP	20
2900320040CP	20
2900320050CP	20
2900400005CP	20
2900400010CP	20
2900400015CP	20
2900400020CP	20
2900400025CP	20
2900400040CP	20
2900400050CP	20
2900500005CP	20
2900500010CP	20
2900500015CP	20
2900500020CP	20
2900500025CP	20
2900500040CP	20
2900500050CP	20
2900630005CP	20
2900630010CP	20
2900630015CP	20
2900630020CP	20
2900630025CP	20
2900630040CP	20
2900630050CP	20
2900800005AP	20
2900800010AP	20
2900800015AP	20
2900800020AP	20
2900800025AP	20
2900800040AP	20
2900800050AP	20
2915051207	103
2915A51204	103
2F01000	385
2F01001	385
2F01002	385
2F01003	385
2F01007	385
2F01008	385
2F01009	385
2F01010	385
2F01011	385
2F01012	385
2F01013	385
2F01022	385
2F01C02	385
2F01C07	385
2F01C08	385
2F01C09	385
2F01C10	385
2F01C11	385
2F01C13	385
2F01C14	385
2F02001	386
2F02005	386
2F02006	386
2F02007	386
2F02008	386
2F02011	386
2F03001	385
2F03003	385
2F03004	385
2F03005	385
2F04001	386
2F04003	386
2F04004	386
2F04005	386
2F05001	385
2F05003	385
2F05004	385
2F05005	385
2F06000	386
2F06001	386
2F06002	386
2F06003	386
2F06007	386
2F06008	386
2F06009	386
2F06010	386
2F06011	386
2F06012	386
2F06013	386
2F11001	386
2F11003	386
2F11004	386
2F11005	386
2F31001	386
2F31002	386
2F31003	386
2F31007	386
2F31008	386
2F31009	386
2F31010	386
2F31011	386
2F31012	386
2F31013	386
2F31014	386
2F31015	386
2F31C02	386
2F31C03	386
2F31C08	386
2F31C09	386
2F31C10	386
2F31C11	386
2F31C12	386
2F31C13	386
2F31C14	386
2F32002	386
2F32008	386
2F32009	386
2F32010	386
2F32011	386
2F32012	386
2F32013	386
2F32014	386
2F39C02	386
2F39C08	386
2F39C09	386
2F39C10	386
2F39C11	386
2F39C12	386
2F39C13	386
2HBV112FF	748
2HBV114FF	748
2HBV12FF	748
2HBV14FF	748
2HBV1FF	748
2HBV34FF	748
2HBV38FF	748
2HDM	433
2HNV12FF	748
2HNV14FF	748
2HNV34FF	748
2HNV38FF	748
2L01000	380
2L01001	380
2L01002	380
2L01003	380
2L01007	380
2L01008	380
2L01009	380
2L01010	380
2L01011	380
2L01012	380
2L01013	380
2L01018	380
2L01C02	380
2L01C07	380
2L01C08	380
2L01C09	380
2L01C10	380
2L01C11	380
2L02001	380
2L02002	380
2L02005	380
2L02006	380
2L02007	380
2L02008	380
2L02009	380
2L02010	380
2L02011	380
2L02012	380
2L03001	380
2L03003	380
2L03004	380

2, 3

Part Code	Page
2L03005	380
2L03301	380
2L03302	380
2L03303	380
2L03304	380
2L03305	380
2L03306	380
2L03307	380
2L03308	380
2L04001	380
2L04003	380
2L04004	380
2L04005	380
2L05001	380
2L05003	380
2L05004	380
2L05005	380
2L07004	381
2L08002	381
2L08004	381
2L08006	381
2L08007	381
2L08008	381
2L10001	382
2L10003	382
2L10004	382
2L10005	382
2L10006	382
2L11001	380
2L11003	380
2L11004	380
2L11005	380
2L11301	380
2L11302	380
2L11303	380
2L11304	380
2L11305	380
2L11306	380
2L11307	380
2L11308	380
2L21001	382
2L21003	382
2L21004	382
2L22001	382
2L22003	382
2L22004	382
2L23005	382
2L23006	382
2L23402	382
2L23403	382
2L23406	382
2L23407	382
2L23409	382
2L23410	382
2L23412	382
2L24004	383
2L24005	383
2L24006	383
2L25003	383
2L25004	383
2L25005	383
2L25008	383
2L25009	383
2L31001	381
2L31002	381
2L31003	381
2L31007	381
2L31008	381
2L31009	381
2L31010	381
2L31011	381
2L31012	381
2L31013	381
2L31014	381
2L31C02	381
2L31C03	381
2L31C08	381
2L31C09	381
2L31C10	381
2L31C11	381
2L31C12	381
2L31C13	381
2L31C14	381
2L32002	381
2L32003	381
2L32008	381
2L32009	381
2L32010	381
2L32011	381
2L32012	381
2L32013	381
2L32014	381
2L34001	382
2L34002	382
2L34003	382
2L34006	382
2L34007	382
2L34008	382
2L34009	382
2L34010	382
2L34011	382
2L34013	382
2L34014	382
2L34016	382
2L34017	382
2L34F01	382
2L34F05	382
2L34F06	382
2L34F07	382
2L34F08	382
2L34F09	382
2L34F10	382
2L35001	382
2L35002	382
2L35003	382
2L35006	382
2L35007	382
2L35008	382
2L35009	382
2L35010	382
2L35011	382
2L35013	382
2L35014	382
2L35016	382
2L35017	382
2L39C02	381
2L39C08	381
2L39C09	381
2L39C10	381
2L39C11	381
2L39C13	381
2L40003	380
2L40004	380
2L42001	383
2L42002	383
2L42004	383
2L42005	383
2L43001	383
2L43002	383
2L43003	383
2L43008	383
2L43009	383
2L46001	383
2L46002	383
2L46003	383
2L46004	383
2PES	432
2SBCV4	352
2SE	432
2SEP	432
2SL	433
2SP	432
2SPL-F	433
2SPL-P	433
2SPX	432
2SSE	432
2SVEX	433
2TP	433
2TPF	433
3	
300	247
3001-04-02	760
3001-04-04	760
3001-04-06	760
3001-04-08	760
3001-05-04	760
3001-05-06	760
3001-05-08	760
3001-06-04	760
3001-06-06	760
3001-06-08	760
3001-08-06	760
3001-08-08	760
3001-08-10	760
3001-08-12	760
3001-10-08	760
3001-10-10	760
3001-10-12	760
3001-12-08	760
3001-12-12	760
3001-12-16	760
3001-16-12	760
3001-16-16	760
3001-16-20	760
3001-20-20	760
3001-20-24	760
3001-24-24	760
3001-24-32	760
3001-32-32	760
3002-04-02	760
3002-04-04	760
3002-04-06	760
3002-04-08	760
3002-05-04	760
3002-05-06	760
3002-05-08	760
3002-06-04	760
3002-06-06	760
3002-06-08	760
3002-08-06	760
3002-08-08	760
3002-08-10	760
3002-08-12	760
3002-10-08	760
3002-10-10	760
3002-10-12	760
3002-12-08	760
3002-12-10	760

Part Code	Page
3002-12-12	760
3002-12-16	760
3002-16-12	760
3002-16-16	760
3002-16-20	760
3002-20-20	760
3002-20-24	760
3002-24-24	760
3002-24-32	760
3002-32-32	760
3003-04-02	761
3003-04-04	761
3003-04-06	761
3003-04-08	761
3003-05-04	761
3003-05-06	761
3003-05-08	761
3003-06-04	761
3003-06-06	761
3003-06-08	761
3003-08-06	761
3003-08-08	761
3003-08-10	761
3003-08-12	761
3003-10-08	761
3003-10-10	761
3003-10-12	761
3003-12-08	761
3003-12-10	761
3003-12-12	761
3003-12-16	761
3003-16-12	761
3003-16-16	761
3003-16-20	761
3003-20-20	761
3003-20-24	761
3003-24-24	761
3003-24-32	761
3004-04-02	761
3004-04-04	761
3004-04-06	761
3004-04-08	761
3004-05-04	761
3004-05-06	761
3004-05-08	761
3004-06-04	761
3004-06-06	761
3004-06-08	761
3004-08-06	761
3004-08-08	761
3004-08-10	761
3004-08-12	761
3004-10-08	761
3004-10-10	761
3004-10-12	761
3004-12-08	761
3004-12-10	761
3004-12-12	761
3004-12-16	761
3004-16-12	761
3004-16-16	761
3004-16-20	761
3004-20-20	761
3004-20-24	761
3004-24-24	761
3004-24-32	761
3004-32-32	761
3005-04-04	762
3005-05-06	762
3005-06-06	762
3005-08-08	762
3005-12-12	762
3005-16-16	762
3006-04-02	762
3006-04-04	762
3006-04-06	762
3006-04-08	762
3006-05-04	762
3006-05-06	762
3006-06-04	762
3006-06-06	762
3006-06-08	762
3006-08-06	762
3006-08-08	762
3006-08-12	762
3006-10-10	762
3006-10-12	762
3006-10-16	762
3006-12-12	762
3006-12-16	762
3007-02	762
3007-04	762
3007-06	762
3007-08	762
3007-10	762
3007-12	762
3007-16	762
3008-04-07	762
3008-04-08	762
3008-04-09	762
3008-05-08	762
3008-05-09	762
3008-05-12	762
3008-06-09	762
3008-06-12	762
3008-06-14	762
3008-08-12	762
3008-08-14	762
3008-08-17	762
3008-10-14	762
3008-10-17	762
3008-12-14	762
3008-12-17	762
3008-12-19	762
3008-12-21	762
3008-16-17	762
3008-16-21	762
3008-16-26	762
3008-20-26	762
3008-20-30	762
3008-24-30	762
3008-32-40	762
3009-04-07	763
3009-04-08	763
3009-04-09	763
3009-05-08	763
3009-05-09	763
3009-05-12	763
3009-06-09	763
3009-06-12	763
3009-06-14	763
3009-08-12	763
3009-08-14	763
3009-08-17	763
3009-10-14	763
3009-10-17	763
3009-12-14	763
3009-12-17	763
3009-12-19	763
3009-12-21	763
3009-16-17	763
3009-16-21	763
3009-16-26	763
3009-20-26	763
3009-20-30	763
3009-24-30	763
3009-32-40	763
301	247
3010-04-07	763
3010-04-08	763
3010-04-09	763
3010-05-08	763
3010-05-09	763
3010-05-12	763
3010-06-09	763
3010-06-12	763
3010-06-14	763
3010-08-12	763
3010-08-14	763
3010-08-17	763
3010-10-14	763
3010-10-17	763
3010-12-14	763
3010-12-17	763
3010-12-19	763
3010-12-21	763
3010-16-17	763
3010-16-21	763
3010-16-26	763
3010-20-26	763
3010-20-30	763
3010-24-30	763
3010-32-40	763
3011-04-07	764
3011-04-08	764
3011-04-09	764
3011-05-08	764
3011-05-09	764
3011-06-09	764
3011-06-12	764
3011-08-12	764
3011-08-14	764
3011-10-14	764
3011-10-17	764
3011-12-14	764
3011-12-17	764
3011-12-19	764
3011-12-21	764
3011-16-21	764
3011-16-26	764
3011-20-26	764
3011-20-30	764
3011-24-30	764
3011-32-40	764
3011/C	548
3012-04-04	764
3012-04-12	764
3012-05-12	764
3012-06-10	764
3012-06-12	764
3012-08-10	764
3012-08-12	764
3012-10-10	764
3012-12-12	764
3012-12-16	764
3012-16-16	764
3012-20-20	764
3012-24-24	764
3013-04-04	764
3013-04-12	764
3013-05-12	764
3013-06-12	764

Part Code	Page
3013-08-10	764
3013-08-12	764
3013-10-10	764
3013-12-12	764
3013-12-16	764
3013-16-16	764
3013-20-20	764
3013-24-24	764
3013/C	548
3014-04-04	765
3014-04-12	765
3014-05-12	765
3014-06-12	765
3014-08-10	765
3014-08-12	765
3014-10-10	765
3014-10-12	765
3014-12-16	765
3014-16-16	765
3014-20-20	765
3014-24-24	765
3015-04-M12	765
3015-04-M14	765
3015-04-M16	765
3015-04-M18	765
3015-05-M16	765
3015-05-M18	765
3015-06-M16	765
3015-06-M18	765
3015-06-M22	765
3015-08-M22	765
3015-08-M26	765
3015-10-M26	765
3015-10-M30	765
3015-12-M26	765
3015-12-M30	765
3015-16-M36	765
3015-20-M45	765
3015-24-M52	765
3016-04-M14	765
3016-04-M16	765
3016-04-M18	765
3016-04-M20	765
3016-05-M18	765
3016-05-M20	765
3016-06-M18	765
3016-06-M20	765
3016-06-M22	765
3016-08-M22	765
3016-08-M24	765
3016-10-M30	765
3016-12-M30	765
3016-12-M36	765
3016-16-M36	765
3016-16-M42	765
3016-20-M42	765
3016-20-M52	765
3016-24-M52	765
3016/C	548
3017-04-M12	766
3017-04-M14	766
3017-04-M16	766
3017-04-M18	766
3017-05-M16	766
3017-05-M18	766
3017-06-M16	766
3017-06-M18	766
3017-06-M22	766
3017-08-M22	766
3017-08-M26	766
3017-10-M26	766
3017-10-M30	766
3017-12-M26	766
3017-12-M30	766
3017-16-M36	766
3017-20-M45	766
3017-24-M52	766
3018-04-M14	766
3018-04-M16	766
3018-04-M18	766
3018-04-M20	766
3018-05-M18	766
3018-05-M20	766
3018-06-M18	766
3018-06-M20	766
3018-06-M22	766
3018-08-M22	766
3018-08-M24	766
3018-10-M30	766
3018-12-M30	766
3018-12-M36	766
3018-16-M36	766
3018-16-M42	766
3018-20-M42	766
3018-20-M52	766
3018-24-M52	766
3018/B	548
3019-04-M12	766
3019-04-M14	766
3019-04-M16	766
3019-04-M18	766
3019-05-M16	766
3019-05-M18	766
3019-06-M16	766
3019-06-M18	766
3019-06-M22	766
3019-08-M22	766
3019-08-M26	766
3019-10-M26	766
3019-10-M30	766
3019-12-M26	766
3019-12-M30	766
3019-16-M36	766
3019-20-M45	766
3019-24-M52	766
3020-04-M14	766
3020-04-M16	766
3020-04-M18	766
3020-04-M20	766
3020-05-M18	766
3020-05-M20	766
3020-06-M18	766
3020-06-M20	766
3020-06-M22	766
3020-08-M22	766
3020-08-M24	766
3020-10-M30	766
3020-12-M30	766
3020-12-M36	766
3020-16-M36	766
3020-16-M42	766
3020-20-M42	766
3020-20-M52	766
3020-24-M52	766
3021-04-06	767
3021-04-08	767
3021-04-10	767
3021-04-12	767
3021-05-10	767
3021-05-12	767
3021-06-10	767
3021-06-12	767
3021-06-14	767
3021-06-15	767
3021-08-14	767
3021-08-15	767
3021-08-18	767
3021-10-18	767
3021-10-20	767
3021-10-22	767
3021-12-18	767
3021-12-20	767
3021-12-22	767
3021-12-25	767
3021-16-25	767
3021-16-28	767
3021-16-30	767
3021-20-30	767
3021-20-35	767
3021-20-38	767
3021-24-38	767
3021-24-42	767
3021/B	548
3022-04-06	767
3022-04-10	767
3022-04-12	767
3022-05-10	767
3022-05-12	767
3022-06-10	767
3022-06-12	767
3022-06-14	767
3022-06-15	767
3022-08-14	767
3022-08-15	767
3022-08-16	767
3022-08-18	767
3022-10-18	767
3022-10-20	767
3022-10-22	767
3022-12-18	767
3022-12-20	767
3022-12-22	767
3022-12-25	767
3022-16-25	767
3022-16-28	767
3022-16-30	767
3022-20-30	767
3022-20-35	767
3022-20-38	767
3022-24-32	767
3022-24-38	767
3035-04	768
3035-05	768
3035-06	768
3035-08	768
3035-10	768
3035-12	768
3035-16	768
3035-20	768
3035-24	768
3035-32	768
3036-04	768
3036-05	768
3036-06	768
3036-08	768
3036-10	768
3036-12	768
3036-16	768
3036-20	768
3036-24	768
3036-32	768
3037-04	768

Part Code	Page
3037-06	768
3037-08	768
3037-10	768
3037-12	768
3037-16	768
3037-20	768
3037-24	768
3037-32	768
304MA	42
304MB	42
304MR	42
304MS	42
304MV	42
305LL	42
305MA	42
305MB	42
305MR	42
305MS	42
305MV	42
30B	247
30D	247
30E	247
31060-RC	84
310R2-1	688
310R2-112	688
310R2-114	688
310R2-34	688
314MA	42
314MB	42
314MR	42
314MS	42
314MV	42
315MA	42
315MB	42
315MR	42
315MS	42
315MV	42
319.11	726
319.17	726
320103-000	723
3206001	302
3206002	302
3206003	302
3206004	302
333L23	686
333N23	686
333P23	686
333Q23	686
3402003	301
343M21	686
343N21	686
3470001	304
3480002	301
3481001	303
3482008	304
3483008	302
3484008	305
350 000 1109	200
350 000 1209	200
350 000 1312	200
350 000 1405	200
350 000 2304	200
350 000 2311	200
350 000 3000	200
350 000 3100	200
350 000 3101	200
350 000 3102	200
350 000 3209	200
350 000 3239	200
350 000 3310	200
350 000 3311	200
350 000 3312	200
350 000 3321	200
350 000 3323	200
350 000 3331	200
350 000 3341	200
350 000 3342	200
350 000 3404	200
350 000 3405	200
350 000 3423	200
350 000 3441	200
350 000 3443	200
350 000 3504	200
350 000 3505	200
350 000 3523	200
350 000 3543	200
350 000 3614	200
350 000 3615	200
350 000 3616	200
350 000 3623	200
350 000 3660	201
350 000 3804	200
350 000 3805	200
350 000 3823	200
350 000 3841	200
350 000 3843	200
350 000 3904	200
350 000 3905	200
350 000 3923	200
350 000 3943	200
350 000 4014	200
350 000 4015	200
350 000 4016	200
350 000 4023	200
350 000 4304	200
350 000 4310	200
350 000 4311	200
350 000 4312	200
350 000 4323	200
350 000 4341	200
350 000 4811	200
350 000 4912	200
350 000 5209	200
350 002 1012	201
350 002 1112	201
350 002 3021	201
350 002 3022	201
350 002 3121	201
350 002 3122	201
350 005 0101	201
350 005 0103	201
350 005 0202	201
350 005 0204	201
350 005 0302	201
350 005 0304	201
350 007 0101	201
350 007 0102	201
350 007 0103	201
350 010 1209	200
350 010 1312	200
350 010 2304	200
350 010 3102	200
350 010 3310	200
350 010 3311	200
350 010 3312	200
350 010 3341	200
350 010 3342	200
350 010 3404	200
350 010 3405	200
350 010 3441	200
350 010 3504	200
350 010 3505	200
350 010 3543	200
350 010 4209	200
350 020 3310	200
350 020 3311	200
350 020 3323	200
350 020 3614	200
350 020 3615	200
350 020 4209	200
3502003	301
3570001	304
3580002	301
3581001	303
3582008	304
3583008	302
3584008	305
3602003	301
3670001	304
3680002	301
3681001	303
3682008	304
3683008	302
3684008	305
373Q23	686
373R23	686
391.106	433
391.108	433
391.109	433
391.110	433
391.111	433
391.112	433
392.022	236
392.023	236
392.024	236
392.025	236
392.026	236
3HBV12FF	748
3HBV14FF	748
3HBV1FF	748
3HBV34FF	748
3HBV38FF	748
3HDM	433
3PES	432
3SE	432
3SEP	432
3SL	433
3SP	432
3SPL-F	433
3SPL-P	433
3SPX	432
3SSE	432
3TP	433
3TPF	433
4	
404.30	727
4043/0	400
4043/1	400
4045/1	400
4045/3	400
4048/3	400
4048/5	400
4051/3	400
4051/5	400
4051/8	400
412.30	727
433LDG26	687
433NDG26	687
433PDG26	687
433QDG26	687
44007	831
44008	831

Part Code	Page
44014	831
44015	831
44016	831
4402002	302
44025	830
44037	830
44116	830
44201	830
4435-OLP118	589
443MDG35	687
443NDG35	687
44506	830
44613	831
44615	831
44617	831
4470001	304
4480002	301
4481001	303
4482005	304
4483005	303
4484005	305
4502002	302
4570001	304
4580002	301
4581001	303
4582005	304
4583005	303
4584005	305
4589003	298
4602002	302
4625-OLP118	589
4670001	304
4680002	301
4681001	303
4682005	304
4683005	303
4684005	305
469.23-5.0BAR	238
469.24-7.0BAR	238
469.24-9.0BAR	238
469.25-11.0BAR	238
469.26-16.0BAR	238
469.27-20.0BAR	238
469.33-5.0BAR	238
469.34-7.0BAR	238
469.34-9.0BAR	238
469.35-11.0BAR	238
469.36-16.0BAR	238
469.37-20.0BAR	238
470-12	726
470-39	726
470-43	726
470-60	726
470-61	726
470-72	726
470-76	726
470-79	726
470.140	726
470.40	726
473QDG26	687
473RDG26	687
48002	858
48003	858
48006	858
48008	858
48010	858
48013	857
48014	857
48015	857
48022	857
48023	857
48024	857
48026	857
48027	857
48030	857
48031	857
48032	857
48034	857
48041	858
48042	858
48043	858
499/0	401
499/1	401
499/11	401
499/13	401
499/14	401
499/3	401
499/5	401
499/8	401
4HDM	433
4PES	432
4SE	432
4SEP	432
4SL	433
4SP	432
4SPL-F	433
4SPL-P	433
4SPX	432
4SSE	432
4TP	433
4TPF	433
5	
50.13.00.04	759
50.13.00.05	759
50.13.00.06	759
50.13.00.08	759
50.13.00.10	759
50.13.00.12	759
50.13.00.16	759
50.13.00.20	759
50.13.00.24	759
50.15.00.04	759
50.15.00.05	759
50.15.00.06	759
50.15.00.08	759
50.15.00.10	759
50.15.00.12	759
50.15.00.16	759
50.15.00.20	759
50.15.00.24	759
50.17.00.04	757
50.17.00.05	757
50.17.00.06	757
50.17.00.08	757
50.17.00.10	757
50.17.00.12	757
50.17.00.16	757
50.17.00.20	757
50.17.00.24	757
50.17.04.05	757
50.17.04.06	757
50.17.04.08	757
50.17.04.10	757
50.17.05.06	757
50.17.05.08	757
50.17.05.10	757
50.17.06.08	757
50.17.06.10	757
50.17.08.10	757
50.17.08.12	757
50.17.10.12	757
50.17.10.16	757
50.19.04.02	755
50.19.04.04	755
50.19.04.06	755
50.19.04.08	755
50.19.04.12	755
50.19.05.04	755
50.19.05.06	755
50.19.05.08	755
50.19.05.12	755
50.19.06.04	755
50.19.06.06	755
50.19.06.08	755
50.19.06.12	755
50.19.08.04	755
50.19.08.06	755
50.19.08.08	755
50.19.08.12	755
50.19.08.16	755
50.19.10.04	755
50.19.10.06	755
50.19.10.08	755
50.19.10.12	755
50.19.10.16	755
50.19.12.06	755
50.19.12.08	755
50.19.12.12	755
50.19.12.16	755
50.19.16.12	755
50.19.16.16	755
50.19.16.20	755
50.19.16.24	755
50.19.20.12	755
50.19.20.16	755
50.19.20.20	755
50.19.24.20	755
50.19.24.24	755
50.26.04.02	755
50.26.04.04	755
50.26.05.02	755
50.26.05.04	755
50.26.06.04	755
50.26.06.06	755
50.26.06.08	755
50.26.08.04	755
50.26.08.06	755
50.26.08.08	755
50.26.10.06	755
50.26.10.08	755
50.26.10.12	755
50.26.12.08	755
50.26.12.12	755
50.26.12.16	755
50.26.16.08	755
50.26.16.12	755
50.26.16.16	755
50.26.20.16	755
50.26.20.20	755
50.26.24.24	755
50.29.04.02	756
50.29.04.04	756
50.29.05.02	756
50.29.05.04	756
50.29.06.04	756
50.29.06.06	756
50.29.08.06	756
50.29.08.08	756
50.29.10.08	756
50.29.12.08	756
50.29.12.12	756
50.29.16.16	756

Part Code	Page
50.29.20.20	756
50.29.24.24	756
50.42.04.04	758
50.42.04.06	758
50.42.05.05	758
50.42.05.06	758
50.42.06.04	758
50.42.06.05	758
50.42.06.06	758
50.42.06.08	758
50.42.06.10	758
50.42.08.06	758
50.42.08.08	758
50.42.08.10	758
50.42.08.12	758
50.42.10.10	758
50.42.10.12	758
50.42.12.12	758
50.42.12.16	758
50.42.12.20	758
50.42.16.12	758
50.42.16.16	758
50.42.16.20	758
50.42.20.24	758
50.43.00.04	759
50.43.00.05	759
50.43.00.06	759
50.43.00.08	759
50.43.00.10	759
50.43.00.12	759
50.43.00.16	759
50.43.00.20	759
50.43.00.24	759
50.45.00.04	759
50.45.00.05	759
50.45.00.06	759
50.45.00.08	759
50.45.00.10	759
50.45.00.12	759
50.45.00.16	759
50.45.00.20	759
50.45.00.24	759
50.49.04.02	756
50.49.04.04	756
50.49.04.06	756
50.49.04.08	756
50.49.05.04	756
50.49.05.06	756
50.49.05.08	756
50.49.06.04	756
50.49.06.06	756
50.49.06.08	756
50.49.06.12	756
50.49.08.04	756
50.49.08.06	756
50.49.08.08	756
50.49.08.12	756
50.49.10.04	756
50.49.10.06	756
50.49.10.08	756
50.49.10.12	756
50.49.12.08	756
50.49.12.12	756
50.49.12.16	756
50.49.16.12	756
50.49.16.16	756
50.49.20.20	756
50.49.24.20	756
50.49.24.24	756
50.57.00.04	758
50.57.00.05	758
50.57.00.06	758
50.57.00.08	758
50.57.00.10	758
50.57.00.12	758
50.57.00.16	758
50.57.00.20	758
50.57.00.24	758
50.57.04.06	758
50.57.05.06	758
50.57.06.08	758
50.57.06.10	758
50.57.08.10	758
50.57.10.12	758
50.57.12.16	758
50.83.00.06	759
50.83.00.08	759
50.83.00.10	759
50.83.00.12	759
50.83.00.14	759
50.83.00.15	759
50.83.00.16	759
50.83.00.18	759
50.83.00.20	759
50.83.00.25	759
50.83.00.30	759
50.83.00.32	759
50.83.00.38	759
50.90.04.04	756
50.90.04.08	756
50.90.05.04	756
50.90.05.08	756
50.90.06.04	756
50.90.06.08	756
50.90.08.04	756
50.90.08.08	756
500-05	565
500-06	565
500-08	565
500-09	565
500-10	565
500-10SS	565
500-12	565
500-13	565
500-13SS	565
500-16	565
500-16SS	565
500-19	565
500-19SS	565
500-21	565
500-21SS	565
500-22	565
500-22SS	565
500-25	565
500-25SS	565
500-28	565
500-28SS	565
500-29	565
500-29SS	565
500-32	565
500-32SS	565
500-35	565
500-35SS	565
500-40	565
500-40SS	565
500-44	565
500-44SS	565
500-48	565
500-48SS	565
500-52	565
500-52SS	565
500-56	565
500-56SS	565
500-5SS	565
500-60	565
500-60SS	565
500-6SS	565
500-8SS	565
501-10	565
501-10SS	566
501-12	565
501-12SS	566
501-13	565
501-13SS	566
501-16	565
501-16SS	566
501-19	565
501-19SS	566
501-21	565
501-21SS	566
501-22	565
501-22SS	566
501-25	565
501-25SS	566
501-28	565
501-28SS	566
501-29	565
501-29SS	566
501-32	565
501-32SS	566
501-35	565
501-35SS	566
501-40	565
501-40SS	566
501-44	565
501-44SS	566
501-48	565
501-48SS	566
501-5	565
501-52	565
501-52SS	566
501-56	565
501-56SS	566
501-5SS	566
501-6	565
501-60	565
501-60SS	566
501-6SS	566
501-8	565
501-8SS	566
501-9	565
501-9SS	566
504MBCU	42
510-12	564
510-16	564
510-20	564
510-22	564
510-25	564
510-30	564
510-35	564
510-40	564
510-45	564
510-50	564
510-55	564
510-60	564
5101001	278
5101002	278
5101002F	281
5102	884
5103001	278
5104008	279
5104011	279

Part Code	Page
5105008	279
5105011	279
5105102F	282
5105105F	282
5105108F	282
5105111F	282
5106008	280
5106011	280
5107003	278
5107004	278
5108001F	281
5108002F	281
5108003F	281
5108004F	281
5110003	278
5110004	278
520	247
5201001	278
5201002	278
5201002F	281
5203001	278
5204008	279
5204011	279
5205	883
5205008	279
5205011	279
5205102F	282
5205105F	282
5205108F	282
5205111F	282
5206008	280
5206011	280
5207003	278
5207004	278
5208001F	281
5208002F	281
5208003F	281
5208004F	281
521	247
5210003	278
5210004	278
5212001	279
5228001F	281
5228002F	281
5228003F	281
5228004F	281
5236000092	106
5269.00	726
52B	247
52D	247
52E	247
533LDD1	686
533NDD1	686
533PDD1	686
533QDD1	686
53500A3	476
5350SA3	476
5351SA3	476
53520A3	476
5352GA3	476
53530A3	476
5353SA3	476
53600A3	476
5360AA3	476
53610A3	476
5361AA3	476
5361GA3	476
53640A3	476
5364AA3	476
5364TA3	476
53650A3	476
53760A3	476
54.01.00.04	757
54.01.00.05	757
54.01.00.06	757
54.01.00.08	757
54.01.00.10	757
54.01.00.12	757
54.01.00.16	757
54.01.00.20	757
54.01.00.24	757
54.05.04.02	757
54.05.04.04	757
54.05.05.04	757
54.05.06.04	757
54.05.06.06	757
54.05.08.04	757
54.05.08.06	757
54.05.08.08	757
54.05.10.06	757
54.05.10.08	757
54.05.10.12	757
54.05.12.08	757
54.05.12.12	757
54.05.16.12	757
54.05.16.16	757
54.05.16.20	757
54.05.20.20	757
54.05.24.24	757
54.09.00.04	757
54.09.00.05	757
54.09.00.06	757
54.09.00.08	757
54.09.00.10	757
54.09.00.12	757
54.09.00.16	757
54.09.00.20	757
54.09.00.24	757
54.12.04.02	757
54.12.04.04	757
54.12.05.02	757
54.12.05.04	757
54.12.06.04	757
54.12.06.06	757
54.12.06.08	757
54.12.08.04	757
54.12.08.06	757
54.12.08.08	757
54.12.10.06	757
54.12.10.08	757
54.12.10.12	757
54.12.12.08	757
54.12.12.12	757
54.12.16.12	757
54.12.16.16	757
54.12.20.16	757
54.12.20.20	757
54.12.24.24	757
54.51.00.04	758
54.51.00.05	758
54.51.00.06	758
54.51.00.08	758
54.51.00.10	758
54.51.00.12	758
54.51.00.16	758
54.51.00.20	758
54.51.00.24	758
54.55.00.04	758
54.55.00.05	758
54.55.00.06	758
54.55.00.08	758
54.55.00.10	758
54.55.00.12	758
54.55.00.16	758
54.55.00.20	758
54.55.00.24	758
54.59.00.04	759
54.59.00.05	759
54.59.00.06	759
54.59.00.08	759
54.59.00.10	759
54.59.00.12	759
54.59.00.16	759
54.59.00.20	759
54.59.00.24	759
54.61.04.02	759
54.61.05.02	759
54.61.06.04	759
54.61.06.06	759
54.61.08.06	759
54.61.10.08	759
54.61.12.08	759
54.61.12.12	759
54.61.16.16	759
5420897022	115
5428117022	115
5428117072	115
5428117082	115
543211881300	306
543MDD1	686
543NDD1	686
5611A701	291
5611B241	288
5611B24L101	292
5611B261	288
5611B541	288
5611B54L101	292
5611B561	288
5611C101	285
5611D101	285
5611F201	284
5611F501	284
5611L101	289
5611R141	286
5611R161	286
5611R241	287
5611R261	287
5611S201	291
5611V101	290
5611V201	290
5611V701	290
5612A702	291
5612B242	288
5612B24L102	292
5612B262	288
5612B542	288
5612B54L102	292
5612B562	288
5612C102	285
5612D102	285
5612F202	284
5612F502	284
5612L102	289
5612R142	286
5612R162	286
5612R242	287
5612R262	287
5612S202	291
5612V102	290
5612V202	290
5612V702	290
5613A703	291

Part Code	Page
5613B243	288
5613B24L103	292
5613B263	288
5613B543	288
5613B54L103	292
5613B563	288
5613C103	285
5613D103	285
5613F203	284
5613F503	284
5613L103	289
5613R143	286
5613R163	286
5613R243	287
5613R263	287
5613S203	291
5613V103	290
5613V203	290
5613V703	290
5623A703	291
5623B243	288
5623B24L103	292
5623B263	288
5623B543	288
5623B54L103	292
5623B563	288
5623C103	285
5623D103	285
5623F203	284
5623F503	284
5623L103	289
5623R143	286
5623R163	286
5623R243	287
5623R263	287
5623S203	291
5623V103	290
5623V203	290
5623V703	290
5624A704	291
5624B244	288
5624B24L104	292
5624B264	288
5624B544	288
5624B54L104	292
5624B564	288
5624C104	285
5624D104	285
5624F204	284
5624F504	284
5624L104	289
5624R144	286
5624R164	286
5624R244	287
5624R264	287
5624S204	291
5624V104	290
5624V204	290
5624V704	290
5625A705	291
5625B245	288
5625B24L105	292
5625B265	288
5625B545	288
5625B54L105	292
5625B565	288
5625C105	285
5625D105	285
5625F205	284
5625F505	284
5625L105	289
5625R145	286
5625R165	286
5625R245	287
5625R265	287
5625S205	291
5625V105	290
5625V205	290
5625V705	290
5626A706	291
5626B246	288
5626B24L106	292
5626B266	288
5626B546	288
5626B54L106	292
5626B566	288
5626C106	285
5626D106	285
5626F206	284
5626F506	284
5626L106	289
5626R146	286
5626R166	286
5626R246	287
5626R266	287
5626S206	291
5626V106	290
5626V206	290
5626V706	290
5650-OLP118	589
57078A5	477
57079A5	477
5724555202	115
5725475202	115
5725555202	115
5725655202	115
5727405302	116
5727415302	116
5727455302	116
5727465302	116
5728400420	116
5728405420	116
5728405470	116
5728405480	116
5728410420	116
5728415420	116
5728415470	116
5728415480	116
573RDD1	686
5772075302	114
5776075302	114
5776275302	114
5777755302	114
5777765302	114
5777775302	114
58.1034	592
58.1056	592
5HDM	433
5SBCV4	352
5SBCX4	352
5SE	432
5SEP	432
5SL	433
5SP	432
5SPL-F	433
5SPL-P	433
5SSE	432
5TP	433
5TPF	433
6	
600S-DL	724
601-10	566
601-10SS	566
601-13	566
601-13SS	566
601-16	566
601-16SS	566
601-19	566
601-19SS	566
601-22	566
601-22SS	566
601-25	566
601-25SS	566
601-28	566
601-28SS	566
601-32	566
601-32SS	566
601-36	566
601-36SS	566
601-40	566
601-40SS	566
601-44	566
601-44SS	566
601-48	566
601-48SS	566
601-52	566
601-52SS	566
601-6	566
601-6SS	566
601-8	566
601-8SS	566
6060001570	833
6130001500	835
6130001560	835
6130002500	834
6130002600	834
6130002700	834
6130003100	835
6130004000	836
6130004020	836
6130004050	836
6130007000	838
6130008500	838
6130009000	838
6130012000	835
6130012100	836
6130015080	835
6140001500	841
6140003500	840
6150001010	841
6150001100	838
6150002000	840
6150003600	839
6150003601	839
6150005500	844
6150006000	844
6150006100	844
6150006500	844
6150007000	839
6150009300	846
6150009310	846
6150009320	846
6150009330	848
6150009340	848
6150009350	849
6150009360	847
6150009370	849
6150009380	849
6150009390	850
6150009400	850
6150009410	846
6150009420	846

6, 7

Part Code	Page
6150009430	846
6150009440	847
6150009450	847
6150009460	848
6150009470	848
6150009480	848
6150009490	849
6150009500	850
6150009510	847
6150SA8	477
6151SA8	477
6160001000	833
6160001200	833
6160006000	834
61640A8	477
61650A3	477
6190004150	845
6190004600	845
6190011001	842
6190011501	842
6190011510	842
6190011600	843
6190012000	837
6190014000	839
6190014010	840
6190015000	840
6250007000	844
6302001	302
6330007005	837
6330007025	837
6330061005	833
6330272030	845
6330272100	845
63500A3	477
6350SA3	477
63530A3	477
6353SA3	477
63600A3	477
6360BA3	477
63610A3	477
6361AA3	477
63640A3	477
6364AA3	477
63700L0017	841
63700M7028	837
63700M8668	842
6380002	301
6381001	303
6402001	302
6480002	301
6481001	303
66NM4/15NA100	502
66NM4/25NA100	502
66NM4/2NA100	502
66NM6/36NA100	502
66NM6/4NA100	502
66NM8/5NA100	502
66NM8/6NA100	502
674323	458
674324	458
674325	458
674326	458
674327	458
6HDM	433
6SE	432
6SEP	432
6SL	433
6SP	432
6SPL-F	433
6SPL-P	433
6SSE	432
6TP	433
6TPF	433
7	
7001000100	43
7001000110	43
7001000200	44
7001000210	44
7001000400	44
7001000410	44
7001000500	43
7001000510	43
7001000600	43
7001000610	43
7001000700	44
7001000710	44
7001000900	45
7001000910	45
7010000100	48
7010000200	48
7010000300	48
7010000400	48
7010001200	47
7010001300	47
7010001400	47
7010001500	47
7010001600	47
7010001700	47
7010001800	45
7010001900	45
7010010100	51
7010010200	51
7010011100	52
7010011200	52
7010012100	53
7010012200	53
7010012300	54
7010020200	56
7010020400	55
7010021100	57
7010021200	58
7010022100	59
7010022200	60
7010022300	59
7020000100	48
7020000200	48
7020000300	48
7020000400	48
7020000500	49
7020000600	49
7020000700	49
7020000900	49
7020001000	49
7020001100	49
7020001400	47
7020001700	47
7020010100	51
7020010200	51
7020011100	52
7020011200	52
7020012100	53
7020012200	53
7020012300	54
7020020200	56
7020020400	55
7020021100	57
7020021200	58
7020022100	59
7020022200	60
7020022300	59
7021020100	55
7021020200	55
7030000100	48
7030000200	48
7030000300	48
7030000400	48
7030000500	49
7030000600	49
7030000700	49
7030000900	49
7030001000	49
7030001100	49
7030011100	52
7030011200	52
7030012100	53
7030012200	53
7030012300	54
7030020200	56
7030020400	55
7030021100	57
7030021200	58
7030022100	59
7030022200	60
7030022300	59
7040010100	51
7040010200	51
7040010400	51
7040011100	52
7040011200	52
7040011300	52
7040012100	53
7040012200	53
7040012300	54
7040020100	56
7040020200	56
7040020300	56
7040020400	55
7040020500	56
7040020600	56
7040021100	57
7040021200	58
7040021300	58
7040021500	57
7040021600	58
7040022100	59
7040022200	60
7040022300	59
7040022400	60
7040022500	60
7040022600	60
7051011100	62
7051011200	62
7051012100	62
7051012200	62
7051012300	62
7051021100	63
7051021200	63
7051022100	63
7051022200	63
7051022300	63
7052011100	62
7052011200	62
7052012100	62
7052012200	62
7052012300	62
7052021100	63
7052021200	63
7052022100	63
7052022200	63
7052022300	63
7057021100	64
7057021400	64

Part Code	Page
7058021100	64
7058021400	64
7059021100	64
7059021400	64
7060	400
7060/3	400
7061	400
7061/3	400
7063	400
7063/1	400
7063/8	400
7065	400
7065/1	400
7065/11	400
7065/8	400
7068	400
7068/1	400
7068/3	400
7071	400
7071/3	400
7071/8	400
7073/11	400
7074	400
7074/11	400
7083	400
7085	400
7088	400
7088/3	400
7091	400
7100215	655
7120215	655
720-01-000	247
7200215	655
7304106	383
7304112	383
7306206	383
7306212	383
7308306	383
7308312	383
7400215	655
7650-OLP118	589
7670-OLP118	589
7800215	655
7850-OLP118	589
7C20215	654
7C30215	654
7C40215	654
7C50215	654
7C60215	654
7C70215	654
7C80215	654
7C90215	654
7N20215	654
7N30215	654
7N40215	654
7N50215	654
7N60215	654
7N70215	654
7N80215	654
7N90215	654
7S20215	654
7S30215	654
7S40215	654
7S50215	654
7S60215	654
7S70215	654
7S80215	654
7S90215	654
7SBCV4	352
7SE	432
7SEP	432
7SPL-P	433
8	
8020	400
8020/3	400
8021	400
8023	400
8023/1	400
8023/8	400
8025	400
8025/1	400
8025/8	400
8028	400
8028/1	400
8028/11	400
8028/3	400
8031	400
8031/8	400
80450	660
8100215	655
8103040114	103
8103040314	107
8103040344	107
8200215	655
8300215	655
83050-OLP118	589
8400215	655
8700215	655
8C20215	653
8C30215	653
8C40215	653
8C50215	653
8C60215	653
8C70215	653
8C80215	653
8C90215	653
8N20215	653
8N30215	653
8N40215	653
8N50215	653
8N60215	653
8N70215	653
8N80215	653
8N90215	653
8PL412-1	464
8PL415-1	464
8PL415-2	464
8PL415-3	464
8PL416-1	464
8PL416-2	464
8PL416-3	464
8PL418-1	464
8PL418-2	464
8PL418-3	464
8PL512-1NU	464
8PL512-1NV	464
8PL512-1NW	464
8PL512-1NY	464
8PL512-1NZ	464
8PL512-1PA	464
8PL512-1PB	464
8PL513BL	464
8PL513RO	464
8PL514-1	464
8PL514-2	464
8PL514-3	464
8S20215	653
8S30215	653
8S40215	653
8S50215	653
8S60215	653
8S70215	653
8S80215	653
8S90215	653
9	
9000401	83
9000402	83
9000600	83
9001001C	24
9001002C	24
9001003	223
9001003C	24
9001004	223
9001004/0	223
9001004C	24
9001006C	24
9001007C	24
9001008	223
9001008C	24
9001009	223
9001009C	24
9001010	223
9001010C	24
9001011C	24
9001012C	24
9001014C	24
9001015C	24
9001016	223
9001016C	24
9001020C	25
9001021C	25
9001022C	25
9001030	223
9001069	223
9001070	223
9001101V	24
9001102V	24
9001103V	24
9001104V	24
9001105V	24
9001106V	24
9001110V	24
9001111V	24
9001112V	24
9001113V	24
9001114V	24
9001115V	24
9001120V	25
9001121V	25
9001122V	25
9001123V	24
9001124V	24
9001125V	24
9001601B	24
9001602B	24
9001603B	24
9001604B	24
9001605B	24
9001607B	24
9001608B	24
9001609B	24
9001610B	24
9001611B	24
9001612B	24
9001620B	25
9001621B	25
9001622B	25
9001623B	24

Part Code	Page
9001624B	24
9001625B	24
9002100	37
9002180	37
9002300	37
9002380	37
9011001C	25
9011003C	25
9011004C	25
9011005C	25
9011006C	25
9011007C	25
9011008C	25
9011009C	25
9011011C	25
9011014C	25
9011015C	25
9011016C	25
9011101V	25
9011102V	25
9011103V	25
9011104V	25
9011105V	25
9011106V	25
9011107V	26
9011110V	25
9011111V	25
9011114V	25
9011123V	25
9011124V	25
9011125V	25
9011601B	25
9011602B	25
9011605B	25
9011606B	25
9011607B	25
9011608B	25
9011609B	25
9011610B	25
9011612B	25
9011623B	25
9011624B	25
9011625B	25
9021001C	26
9021002C	26
9021005C	26
9021006C	26
9021007C	26
9021008C	26
9021009C	26
9021011C	26
9021012C	26
9021014C	26
9021015C	26
9021016C	26
9021101V	26
9021102V	26
9021105V	26
9021106V	26
9021108V	26
9021109V	26
9021111V	26
9021112V	26
9021114V	26
9021115V	26
9021116V	26
9021201B	26
9021202B	26
9021205B	26
9021206B	26
9021207B	26
9021208B	26
9021209B	26
9021211B	26
9021212C	26
9021214B	26
9021215B	26
9021216B	26
9031001C	26
9031002C	26
9031003C	26
9031004C	26
9031005C	26
9031006C	26
9031007C	26
9031008C	26
9031009C	26
9031010C	26
9031011C	26
9031012C	26
9031014C	26
9031015C	26
9031016C	26
9031101V	26
9031102V	26
9031103V	26
9031104V	26
9031105V	26
9031106V	26
9031107V	26
9031108V	26
9031109V	26
9031110V	26
9031111V	26
9031112V	26
9031114V	26
9031115V	26
9031116V	26
9031201B	26
9031202B	26
9031203B	26
9031204B	26
9031205B	26
9031206B	26
9031207B	26
9031208B	26
9031209B	26
9031210B	26
9031211B	26
9031212B	26
9031214B	26
9031215B	26
9031216B	26
9031301C	26
9031302C	26
9031303C	26
9031401V	26
9031402V	26
9031403V	26
9031501B	26
9031502B	26
9031503B	26
9041001	27
9041002	27
9041003	27
9041004	27
9041005	27
9041201	27
9041202	27
9041203	27
9041204	27
9041205	27
9041301	27
9041316	27
9041324	27
9041401	27
9041402	27
9041408	27
9041409	27
9041410	27
9041411	27
9041412	27
9041501	27
9041502	27
9041508	27
9041509	27
9041510	27
9041511	27
9041512	27
9061316	31
9061324	31
9062110	35
9062216	35
9062224	35
9063016	31
9063024	31
9063116	31
9063124	31
9063308	31
9063309	31
9063310	31
9063311	31
9064016	32
9064024	32
9065016	32
9065024	32
9065116	32
9065124	32
9066016	32
9066024	32
9066116	32
9066124	32
9067016	33
9067024	33
9067108	33
9067109	33
9067110	33
9067111	33
9068016	33
9068024	33
9068216	33
9068224	33
9069016	34
9069024	34
9069224	34
9069408	34
9069409	34
9069410	34
9069411	34
9069610	35
9069611	35
9090001	25
9090002	25
9090003	25
9101201	27
9170301	280
9200401	298
9200601	299

9, A

Part Code	Page
9201001	299
9201201	27
92100	661
9210000	293
9210001	293
9210002	293
9210003	293
9210010	293
9210011	293
9210012	293
9210013	293
9210014	293
9210150	293
9210151	293
9210155	293
9210156	293
9210160	293
9210161	293
9210165	293
9210166	293
9250102	299
9250103	299
9251708	280
9251712	280
92519	661
92520	661
9255101	280
9255201	299
92603	662
92608	662
92609	662
92611	662
92612	662
92613	662
92630	659
92702	659
92703	659
92704	659
92706	659
92707	659
9271	854
92711	659
92712	659
9273	854
92788	661
92808	661
92906	663
92908	663
92909	663
92910	663
92923	659
93000-12VDC	657
93019	661
93039	662
93354	661
93501	661
93503	661
93505	661
93508	660
93512	660
93520	660
93597	661
93598	661
93613	662
93614	662
93820	656
9400401	298
9400601	299
9400702	305
9401001	299
9401002	299
9401201	27
94160	663
94169	657
94320.20	663
9450102	299
9450103	299
9450105	299
94506	661
94512	661
9455201	299
94630	659
94706	659
94820	656
94853	659
95022	662
95024	662
95030	656
95031	660
95032	660
95033	660
95034	660
95035	660
95036	660
95037	660
95038	660
95039	660
95040	660
95041	661
95062	662
95820	656
9600401	298
9600601	299
96080	658
96081	658
96100	658
9650102	299
9650103	299
A	
A028AC	330
A028MS	331
A028X1	328
A028X25	326
A028X5	327
A028XA	329
A038AC	330
A038MS	331
A038X1	328
A038X25	326
A038X5	327
A038XA	329
A058AC	330
A058MS	331
A058X1	328
A058X25	326
A058X5	327
A058XA	329
A059AC	330
A059MS	331
A059X1	328
A059X25	326
A059X5	327
A059XA	329
A078AC	330
A078MS	331
A078X1	328
A078X25	326
A078X5	327
A078XA	329
A079AC	330
A079X1	328
A079X25	326
A079X5	327
A079XA	329
A108AC	330
A108X1	328
A108X25	326
A108X5	327
A108XA	329
A109AC	330
A109MS	331
A109X1	328
A109X25	326
A109X5	327
A109XA	329
A128AC	330
A128MS	331
A128X1	328
A128X25	326
A128X5	327
A128XA	329
A158AC	330
A158MS	331
A158X1	328
A158X25	326
A158X5	327
A158XA	329
A159AC	330
A159MS	331
A159X1	328
A159X25	326
A159X5	327
A159XA	329
A180810	582
A180815	582
A180820	582
A181010	582
A181015	582
A181020	582
A181310	582
A181315	582
A208AC	330
A208MS	331
A208X1	328
A208X25	326
A208X5	327
A208XA	329
A209AC	330
A209MS	331
A209X1	328
A209X25	326
A209X5	327
A209XA	329
A254AC	330
A254MS	331
A254X1	328
A254X25	326
A254X5	327
A254XA	329
A340AC	330
A340MS	331
A340X1	328
A340X25	326
A340X5	327
A340XA	329
A360AC	330
A360MS	331
A360X1	328

A

Part Code	Page
A360X25	326
A360X5	327
A360XA	329
A390AC	330
A390MS	331
A390X1	328
A390X25	326
A390X5	327
A390XA	329
AA5102	470
AA5103	470
AA5106	470
AA5107	470
AA5110	470
AA5111	470
AA5112	470
AA5302	470
AA5303	470
AA5306	470
AA5307	470
AA5310	470
AA5311	470
AA5312	470
AA7101	468
AA7102	468
AA7103	468
AA7104	468
AA7105	468
AA7106	468
AA7107	468
AA7108	468
AA7109	468
AA7110	468
AA7111	468
AA7112	468
AA7113	468
AA7114	468
AA7702	469
AA7703	469
AA7706	469
AA7707	469
AA7710	469
AA7711	469
AA7712	469
AACL200	852
AACL300	852
AACL400	852
ABSBSR90-1	634
ABSBSR90-112	634
ABSBSR90-114	634
ABSBSR90-12	634
ABSBSR90-2	634
ABSBSR90-212	634
ABSBSR90-3	634
ABSBSR90-34	634
ABSBSR90-4	634
ABSCAP-1	636
ABSCAP-112	636
ABSCAP-114	636
ABSCAP-12	636
ABSCAP-2	636
ABSCAP-212	636
ABSCAP-3	636
ABSCAP-34	636
ABSCAP-4	636
ABSCV-1	640
ABSCV-112	640
ABSCV-114	640
ABSCV-12	640
ABSCV-2	640
ABSCV-34	640
ABSEBN-1	637
ABSEBN-112	637
ABSEBN-11288	637
ABSEBN-114	637
ABSEBN-11475	637
ABSEBN-12	637
ABSEBN-1250	637
ABSEBN-163	637
ABSEBN-2	637
ABSEBN-212	637
ABSEBN-212106	637
ABSEBN-288	637
ABSEBN-3	637
ABSEBN-3128	637
ABSEBN-34	637
ABSEBN-3456	637
ABSEBN-4	637
ABSEBN-4153	637
ABSEC-1	636
ABSEC-12	636
ABSEC-2	636
ABSEC-34	636
ABSEE45-1	635
ABSEE45-112	635
ABSEE45-114	635
ABSEE45-12	635
ABSEE45-2	635
ABSEE45-212	635
ABSEE45-3	635
ABSEE45-34	635
ABSEE45-4	635
ABSEE45-6	635
ABSEE90-1	634
ABSEE90-112	634
ABSEE90-114	634
ABSEE90-12	634
ABSEE90-2	634
ABSEE90-212	634
ABSEE90-3	634
ABSEE90-34	634
ABSEE90-4	634
ABSEE90-5	634
ABSEE90-6	634
ABSES-1	633
ABSES-112	633
ABSES-114	633
ABSES-12	633
ABSES-2	633
ABSES-212	633
ABSES-3	633
ABSES-34	633
ABSES-4	633
ABSET-1	635
ABSET-112	635
ABSET-114	635
ABSET-12	635
ABSET-2	635
ABSET-212	635
ABSET-3	635
ABSET-34	635
ABSET-4	635
ABSET-5	635
ABSET-6	635
ABSETC-1	638
ABSETC-112	638
ABSETC-114	638
ABSETC-12	638
ABSETC-2	638
ABSETC-212	638
ABSETC-3	638
ABSETC-34	638
ABSETC-4	638
ABSEU-1	636
ABSEU-112	636
ABSEU-114	636
ABSEU-12	636
ABSEU-2	636
ABSEU-212	636
ABSEU-3	636
ABSEU-34	636
ABSEU-4	636
ABSFF-1	638
ABSFF-112	638
ABSFF-114	638
ABSFF-12	638
ABSFF-2	638
ABSFF-3	638
ABSFF-34	638
ABSFF-4	638
ABSIDUBV-1	640
ABSIDUBV-112	640
ABSIDUBV-114	640
ABSIDUBV-12	640
ABSIDUBV-2	640
ABSIDUBV-212	640
ABSIDUBV-3	640
ABSIDUBV-34	640
ABSIDUBV-4	640
ABSRB-112	634
ABSRB-1121	634
ABSRB-112114	634
ABSRB-11234	634
ABSRB-1141	634
ABSRB-11412	634
ABSRB-11434	634
ABSRB-134	634
ABSRB-21	634
ABSRB-2112	634
ABSRB-2114	634
ABSRB-2122	634
ABSRB-3112	634
ABSRB-32	634
ABSRB-3212	634
ABSRB-3412	634
ABSRB-42	634
ABSRB-4212	634
ABSRB-43	634
ABSRB-54	634
ABSRS-112114	633
ABSRS-1141	633
ABSRS-134	633
ABSRS-2112	633
ABSRS-3212	633
ABSRS-3412	633
ABSRS-43	633
ABSSF-1	638
ABSSF-112	638
ABSSF-12	638
ABSSF-2	638
ABSSF-212	638
ABSSF-3	638
ABSSF-34	638
ABSSF-4	638
ABSSF-5	638
ABSSF-6	638
ABST45-1	635
ABST45-114	635

A

Part Code	Page
ABST45-12	635
ABST45-2	635
ABST45-34	635
ABSTUBEC-3-1	641
ABSTUBEC-3-112	641
ABSTUBEC-3-114	641
ABSTUBEC-3-2	641
ABSTUBEC-3-212	641
ABSTUBEC-3-3	641
ABSTUBEC-3-4	641
ABSTUBEC-3-5	641
ABSTUBEC-3-6	641
ABSTUBEC-3-8	641
ABSTUBEC-6-1	641
ABSTUBEC-6-112	641
ABSTUBEC-6-114	641
ABSTUBEC-6-2	641
ABSTUBEC-6-212	641
ABSTUBEC-6-3	641
ABSTUBEC-6-4	641
ABSTUBEE-3-1	641
ABSTUBEE-3-112	641
ABSTUBEE-3-114	641
ABSTUBEE-3-12	641
ABSTUBEE-3-2	641
ABSTUBEE-3-3	641
ABSTUBEE-3-34	641
ABSTUBEE-3-4	641
ABSTUBEE-6-1	641
ABSTUBEE-6-112	641
ABSTUBEE-6-114	641
ABSTUBEE-6-12	641
ABSTUBEE-6-2	641
ABSTUBEE-6-3	641
ABSTUBEE-6-34	641
ABT10-7-30M	520
ABT10-8-30M	520
ABT12-9-30M	520
ABT16-12-30M	520
ABT18-14-30M	520
ABT4-2-30M	520
ABT6-4-30M	520
ABT8-6-30M	520
AC2000-02-ESG	310
AC2010-02-ESG	310
AC21CF02	466
AC21CM02	466
AC21EF02	466
AC21EM02	466
AC21JF02	466
AC21JM02	466
AC21R02	466
AC21S02	466
AC21T02	466
AC3000-02-ASG	310
AC3000-02-ESG	310
AC3000-03-ASG	310
AC3000-03-ESG	310
AC3010-02-ASG	310
AC3010-02-ESG	310
AC3010-03-ASG	310
AC3010-03-ESG	310
AC4000-04-ASG	310
AC4000-04-ESG	310
AC4010-04-ASG	310
AC4010-04-ESG	310
AC4CF02	467
AC4CM02	467
AC4EF02	467
AC4EM02	467
AC4JF02	467
AC4JM02	467
AC5000-06-ASG	311
AC5000-10-ASG	311
AC5010-06-ASG	311
AC5010-10-ASG	311
AC51CF	470
AC51CM	470
AC51EF	470
AC51EM	470
AC51JF	470
AC51JM	470
AC51R	470
AC51S	470
AC51T	470
AC5EF02	467
AC5EM02	467
AC5JF02	467
AC5JM02	467
AC6103	466
AC7106	468
AC7108	468
AC7109	468
AC7110	468
AC7113	468
AC71CF	468
AC71CM	468
AC71EF	468
AC71EM	468
AC71JF	468
AC71JM	468
AC7706	469
AC7708	469
AC7710	469
AC7713	469
AC77CF	469
AC77CM	469
AC77EF	469
AC77EM	469
AC77JF	469
AC77JM	469
ACA1793	466
ACA2486	466
ACA2487	466
ACA2488	466
ACA2593	466
ACA2653	467
ACA2654	467
ACA2657	467
ACA2658	467
ACA2659	467
ACA2660	467
ACA2661	467
ACA2746	466
ACA2994	467
ACA2999	467
ACA3035	467
ACA3036	467
ACA3037	467
ACA6582	466
ACA6583	466
ACA6584	466
ACA6909	466
ACA9438	466
ACAS101	471
ACAS102	471
ACAS103	471
ACAS104	471
ACAS105	471
ACAS201	471
ACAS202	471
ACAS203	471
ACAS204	471
ACAS205	471
ACS101	471
ACS102	471
ACS103	471
ACS201	471
AD3000	312
AD950T	335
ADSCV1414	535
ADSCV1438	535
ADSCV3838	535
ADSCV51638	535
AE010AC	345
AE010X1	345
AE010X5	345
AE010XA	345
AE015AC	345
AE015X1	345
AE015X5	345
AE015XA	345
AE020AC	345
AE020X1	345
AE020X5	345
AE020XA	345
AE030AC	345
AE030X1	345
AE030X5	345
AE030XA	345
AE055AC	345
AE055X1	345
AE055X5	345
AE055XA	345
AE095AC	345
AE095X1	345
AE095X5	345
AE095XA	345
AE150AC	345
AE150X1	345
AE150X5	345
AE150XA	345
AE220AC	345
AE220X1	345
AE220X5	345
AE220XA	345
AE290AC	345
AE290X1	345
AE290X5	345
AE290XA	345
AE430AC	345
AE430X1	345
AE430X5	345
AE430XA	345
AE625AC	345
AE625X1	345
AE625X5	345
AE625XA	345
AE775AC	345
AE775X1	345
AE775X5	345
AE775XA	345
AEMC14	535
AEMC38	535
AEMC3814	535
AF2000-02-ESG	308
AF3000-02-ASG	308
AF3000-02-ESG	308
AF3000-03-ASG	308
AF3000-03-ESG	308
AF4000-04-ASG	308
AF4000-04-ESG	308

A

Part Code	Page
AF5000-06-ASG	311
AF5000-10-ASG	311
AFG1H03	593
AFG4H03	593
AFG4H04	593
AFG4H05	593
AFG4H06	593
AFG4H061	593
AFG6H04	593
AHVFF-06-06	360
AHVFF-06-06B	360
AHVFF-08-08	360
AHVFF-08-08B	360
AHVFF-10-10	360
AHVFF-10-10B	360
AHVFF-12-12	360
AHVFF-12-12B	360
AIRTU020	605
AIRTU025	605
AIRTU032	605
AIRTU040	605
AIRTU050	605
AIRTU063	605
AKMN001-B	727
AKRN001-W	727
AL-RM1513-3M	620
AL-RM1816-3M	620
AL-RM2220-3M	620
AL-RM2826-3M	620
AL2000-02-G	309
AL3000-02-G	309
AL3000-03-G	309
AL4000-04-G	309
AL5000-06-G	311
AL5000-10-G	311
ALX101320K	581
ALX4H3820	581
ALXSG20	582
AN14	535
AN38	535
ANGSV-1	234
ANGSV-12	234
ANGSV-2	234
ANGSV-34	234
AP17101	735
AP17107	735
AP17111	735
AP17313	738
AP17315	738
AP17411-1/2	737
AP17411-3/8	737
AP17621	737
AP17803-A	738
AP17808	736
AP7225	737
AP7319	738
AP7451	736
AP7460	736
AP7495	736
AP7636	739
AP8031K5G	739
APB10-01	357
APB10-02	357
APB10-03	357
APB10-04	357
APB10-G01	357
APB10-G02	357
APB10-G03	357
APB10-G04	357
APB12-02	357
APB12-03	357
APB12-04	357
APB12-G02	357
APB12-G03	357
APB12-G04	357
APB4-01	357
APB4-02	357
APB4-G01	357
APB4-G02	357
APB4-M5	357
APB6-01	357
APB6-02	357
APB6-03	357
APB6-04	357
APB6-G01	357
APB6-G02	357
APB6-G03	357
APB6-G04	357
APB6-M5	357
APB8-01	357
APB8-02	357
APB8-03	357
APB8-04	357
APB8-G01	357
APB8-G02	357
APB8-G03	357
APB8-G04	357
APC10-01	356
APC10-02	356
APC10-03	356
APC10-04	356
APC10-G01	356
APC10-G02	356
APC10-G03	356
APC10-G04	356
APC12-02	356
APC12-03	356
APC12-04	356
APC12-G02	356
APC12-G03	356
APC12-G04	356
APC16-03	356
APC16-04	356
APC16-G03	356
APC16-G04	356
APC4-01	356
APC4-02	356
APC4-G01	356
APC4-G02	356
APC4-M5	356
APC6-01	356
APC6-02	356
APC6-03	356
APC6-04	356
APC6-G01	356
APC6-G02	356
APC6-G03	356
APC6-G04	356
APC6-M5	356
APC8-01	356
APC8-02	356
APC8-03	356
APC8-04	356
APC8-G01	356
APC8-G02	356
APC8-G03	356
APC8-G04	356
APCF10-G01	357
APCF10-G02	357
APCF10-G03	357
APCF10-G04	357
APCF12-G02	357
APCF12-G03	357
APCF12-G04	357
APCF16-G03	357
APCF16-G04	357
APCF4-G01	357
APCF4-G02	357
APCF6-G01	357
APCF6-G02	357
APCF6-G03	357
APCF6-G04	357
APCF8-G01	357
APCF8-G02	357
APCF8-G03	357
APCF8-G04	357
APD10-01	357
APD10-02	357
APD10-03	357
APD10-04	357
APD12-02	357
APD12-03	357
APD12-04	357
APD4-01	357
APD4-02	357
APD4-M5	357
APD6-01	357
APD6-02	357
APD6-03	357
APD6-04	357
APD6-M5	357
APD8-01	357
APD8-02	357
APD8-03	357
APD8-04	357
APE10	358
APE12	358
APE16	358
APE4	358
APE6	358
APE8	358
APEG10-8	359
APEG12-10	359
APEG6-4	359
APEG8-6	359
APG10-8	358
APG12-10	358
APG16-12	358
APG6-4	358
APG8-6	358
APGJ10-6	359
APGJ10-8	359
APGJ12-10	359
APGJ12-8	359
APGJ6-4	359
APGJ8-4	359
APGJ8-6	359
APH10-G01	358
APH10-G02	358
APH10-G03	358
APH10-G04	358
APH12-G02	358
APH12-G03	358
APH12-G04	358
APH4-G01	358
APH4-G02	358
APH6-G01	358
APH6-G02	358
APH6-G03	358
APH6-G04	358
APH8-G01	358
APH8-G02	358

A

Part Code	Page
APH8-G03	358
APH8-G04	358
APK4	359
APK6	359
APK8	359
APKB4-G01	359
APKB4-G02	359
APKB6-G01	359
APKB6-G02	359
APKB6-G03	359
APKB8-G01	359
APKB8-G02	359
APKB8-G03	359
APKG10-6	359
APKG10-8	359
APKG8-4	359
APKG8-6	359
APL10-01	356
APL10-02	356
APL10-03	356
APL10-04	356
APL10-G01	357
APL10-G02	357
APL10-G03	357
APL10-G04	357
APL12-02	356
APL12-03	356
APL12-04	356
APL12-G02	357
APL12-G03	357
APL12-G04	357
APL16-03	356
APL16-04	356
APL16-G03	357
APL16-G04	357
APL4-01	356
APL4-02	356
APL4-G01	357
APL4-G02	357
APL4-M5	356
APL6-01	356
APL6-02	356
APL6-03	356
APL6-04	356
APL6-G01	357
APL6-G02	357
APL6-G03	357
APL6-G04	357
APL6-M5	356
APL8-01	356
APL8-02	356
APL8-03	356
APL8-04	356
APL8-G01	357
APL8-G02	357
APL8-G03	357
APL8-G04	357
APLALL048	614
APLALL068	614
APLF10-G01	358
APLF10-G02	358
APLF10-G03	358
APLF10-G04	358
APLF12-G02	358
APLF12-G03	358
APLF12-G04	358
APLF4-G01	358
APLF4-G02	358
APLF6-G01	358
APLF6-G02	358
APLF6-G03	358
APLF6-G04	358
APLF8-G01	358
APLF8-G02	358
APLF8-G03	358
APLF8-G04	358
APM10	359
APM12	359
APM16	359
APM4	359
APM6	359
APM8	359
APP10	359
APP12	359
APP4	359
APP6	359
APP8	359
APSF5040RC	739
APU10	358
APU12	358
APU16	358
APU4	358
APU6	358
APU8	358
APV10	358
APV12	358
APV16	358
APV4	358
APV6	358
APV8	358
APW10-8	359
APW12-10	359
APW6-4	359
APW8-6	359
APX10-01	358
APX10-02	358
APX10-03	358
APX10-04	358
APX10-G01	358
APX10-G02	358
APX10-G03	358
APX10-G04	358
APX12-02	358
APX12-03	358
APX12-04	358
APX12-G02	358
APX12-G03	358
APX12-G04	358
APX4-01	358
APX4-02	358
APX4-G01	358
APX4-G02	358
APX4-M5	358
APX6-01	358
APX6-02	358
APX6-03	358
APX6-04	358
APX6-G01	358
APX6-G02	358
APX6-G03	358
APX6-G04	358
APX6-M5	358
APX8-01	358
APX8-02	358
APX8-03	358
APX8-04	358
APX8-G01	358
APX8-G02	358
APX8-G03	358
APX8-G04	358
APY10	359
APY12	359
APY16	359
APY4	359
APY6	359
APY8	359
APZA10	359
APZA12	359
APZA4	359
APZA6	359
APZA8	359
AR100	584
AR200	584
AR2000-02-G	308
AR3000-02-G	308
AR3000-03-G	308
AR4000-04-G	308
AR5000-06-G	311
AR5000-10-G	311
ARH100	351
ARH25	351
ARH270	351
ARH50	351
ARV100	351
ARV1000	351
ARV1000G	351
ARV150	351
ARV1500	351
ARV1500G	351
ARV200	351
ARV2000	351
ARV2000G	351
ARV200G	351
ARV270	351
ARV270G	351
ARV500	351
ARV500G	351
ARV725	351
ARV725G	351
ARV900	351
ARV900G	351
AS71CF	468
AS71CM	468
AS71EF	468
AS71EM	468
AS71JF	468
AS71JM	468
ASA10	360
ASA12	360
ASA4	360
ASA6	360
ASA8	360
ASAFG-110	631
ASAFG-20	631
ASAFG-25	631
ASAFG-32	631
ASAFG-40	631
ASAFG-50	631
ASAFG-63	631
ASAFG-75	631
ASAFG-90	631
ASG15	582
ASL10-01	360
ASL10-02	360
ASL10-03	360
ASL10-04	360
ASL12-02	360
ASL12-03	360

A, B

Part Code	Page
ASL12-04	360
ASL4-01	360
ASL4-02	360
ASL4-M5	360
ASL6-01	360
ASL6-02	360
ASL6-03	360
ASL6-04	360
ASL6-M5	360
ASL8-01	360
ASL8-02	360
ASL8-03	360
ASL8-04	360
ASR12	432
ASR14	432
ASR18	432
ASR38	432
AW1	428
AW112	428
AW114	428
AW12	428
AW14	428
AW18	428
AW2	428
AW2000-02-ESG	309
AW3000-02-ASG	309
AW3000-02-ESG	309
AW3000-03-ASG	309
AW3000-03-ESG	309
AW34	428
AW38	428
AW4000-04-ASG	309
AW4000-04-ESG	309
AW5000-06-ASG	311
AW5000-10-ASG	311
AWM5	428
AX101310K	581
AX101315K	581
AX4H3810	581
AX4H3815	581
AXSG15	582
B	
B100	312
B1000	312
B300	312
B3000	312
B3100	312
B3300	312
B3400	312
B3500	312
B400	312
B4000	312

Part Code	Page
B5000	312
BAMBH	94
BAMBHSS	94
BAMSA	94
BAMSASS	94
BASA150-110-UPVC	630
BASA150-32-UPVC	630
BASA150-40-UPVC	630
BASA150-50-UPVC	630
BASA150-63-UPVC	630
BASA150-75-UPVC	630
BASA150-90-UPVC	630
BB1D	884
BB2	884
BBHC12M28	417
BBHC14M20	417
BBHC18M16	417
BBHC38M26	417
BBHCM5M10	417
BBN1	668
BBN1-0100	668
BBN1-0200	668
BBN112	668
BBN112-0150	668
BBN112-0200	668
BBN114	668
BBN114-0150	668
BBN114-0200	668
BBN12	668
BBN12-0100	668
BBN12-0200	668
BBN2	668
BBN2-0150	668
BBN2-0200	668
BBN34	668
BBN34-0100	668
BBN34-0200	668
BBNT1	672
BBNT112	672
BBNT114	672
BBNT12	672
BBNT2	672
BBNT34	672
BBP-M10	672
BC-110-UPVC	629
BC-125-UPVC	629
BC-140-UPVC	629
BC-16-UPVC	629
BC-160-UPVC	629
BC-20-UPVC	629
BC-200-UPVC	629
BC-225-UPVC	629

Part Code	Page
BC-25-UPVC	629
BC-32-UPVC	629
BC-40-UPVC	629
BC-50-UPVC	629
BC-63-UPVC	629
BC-75-UPVC	629
BC-90-UPVC	629
BCF200/2CL-50M	852
BCF300/3CL-50M	852
BCJ1250	96
BCJ425	96
BCJ620	96
BCJ825	96
BDH10-1M	521
BDH8-1M	521
BEJA10	366
BEJA12	366
BEJA4	366
BEJA6	366
BEJA8	366
BETS10-10	366
BETS12-12	366
BETS4-4	366
BETS6-6	366
BETS8-8	366
BFBC1	672
BFBC112	672
BFBC114	672
BFBC12	672
BFBC2	672
BFBC34	672
BFEC1	671
BFEC112	671
BFEC114	671
BFEC12	671
BFEC2	671
BFEC34	671
BFET1	670
BFET112	670
BFET114	670
BFET12	670
BFET2	670
BFET34	670
BFEU1	671
BFEU112	671
BFEU114	671
BFEU12	671
BFEU2	671
BFEU34	671
BFFEB901	670
BFFEB90112	670
BFFEB90114	670

Part Code	Page
BFFEB9012	670
BFFEB902	670
BFFEB9034	670
BFFEE1	669
BFFEE112	669
BFFEE114	669
BFFEE12	669
BFFEE2	669
BFFEE34	669
BFRT112	670
BFRT1121	670
BFRT112114	670
BFRT11234	670
BFRT11412	670
BFRT11434	670
BFRT1238	670
BFRT134	670
BFRT21	670
BFRT2114	670
BFRT234	670
BFRT3412	670
BFS1	669
BFS112	669
BFS114	669
BFS12	669
BFS2	669
BFS34	669
BFVW910-NBR	264
BFVW9112-NBR	264
BFVW912-NBR	264
BFVW914-NBR	264
BFVW916-NBR	264
BFVW918-NBR	264
BFVW92-NBR	264
BFVW920-NBR	264
BFVW9212-NBR	264
BFVW924-NBR	264
BFVW93-NBR	264
BFVW94-NBR	264
BFVW95-NBR	264
BFVW96-NBR	264
BFVW98-NBR	264
BFVWA10-NBR	265
BFVWA112-NBR	265
BFVWA12-NBR	265
BFVWA2-NBR	265
BFVWA212-NBR	265
BFVWA3-NBR	265
BFVWA4-NBR	265
BFVWA5-NBR	265
BFVWA6-NBR	265
BFVWA8-NBR	265

B

Part Code	Page
BFVWDA10-EPDM	267
BFVWDA112-EPDM	267
BFVWDA12-EPDM	267
BFVWDA2-EPDM	267
BFVWDA212-EPDM	267
BFVWDA3-EPDM	267
BFVWDA4-EPDM	267
BFVWDA5-EPDM	267
BFVWDA6-EPDM	267
BFVWDA8-EPDM	267
BFVWEA112-EPDMMV	267
BFVWEA112-NBRMV	265
BFVWEA2-EPDMMV	267
BFVWEA2-NBRMV	265
BFVWEA212-EPDMMV	267
BFVWEA212-NBRMV	265
BFVWEA3-EPDMMV	267
BFVWEA3-NBRMV	265
BFVWEA4-EPDMMV	267
BFVWEA4-NBRMV	265
BFVWEA5-EPDMMV	267
BFVWEA5-NBRMV	265
BFVWEA6-EPDMHV	267
BFVWEA6-EPDMLV	267
BFVWEA6-NBRHV	265
BFVWEA6-NBRLV	265
BFVWEA8-EPDMHV	267
BFVWEA8-EPDMLV	267
BFVWEA8-NBRHV	265
BFVWEA8-NBRLV	265
BFVWG10-EPDM	266
BFVWG112-EPDM	266
BFVWG12-EPDM	266
BFVWG14-EPDM	266
BFVWG16-EPDM	266
BFVWG18-EPDM	266
BFVWG2-EPDM	266
BFVWG212-EPDM	266
BFVWG3-EPDM	266
BFVWG4-EPDM	266
BFVWG5-EPDM	266
BFVWG6-EPDM	266
BFVWG8-EPDM	266
BFVWL10-EPDM	266
BFVWL112-EPDM	266
BFVWL2-EPDM	266
BFVWL212-EPDM	266
BFVWL3-EPDM	266
BFVWL4-EPDM	266
BFVWL5-EPDM	266
BFVWL6-EPDM	266
BFVWL8-EPDM	266

Part Code	Page
BFVWSA10-EPDM	267
BFVWSA10-NBR	265
BFVWSA112-EPDM	267
BFVWSA112-NBR	265
BFVWSA12-EPDM	267
BFVWSA12-NBR	265
BFVWSA2-EPDM	267
BFVWSA2-NBR	265
BFVWSA212-EPDM	267
BFVWSA212-NBR	265
BFVWSA3-EPDM	267
BFVWSA3-NBR	265
BFVWSA4-EPDM	267
BFVWSA4-NBR	265
BFVWSA5-EPDM	267
BFVWSA5-NBR	265
BFVWSA6-EPDM	267
BFVWSA6-NBR	265
BFVWSA8-EPDM	267
BFVWSA8-NBR	265
BFWL10-NBR	264
BFWL112-NBR	264
BFWL2-NBR	264
BFWL212-NBR	264
BFWL3-NBR	264
BFWL4-NBR	264
BFWL5-NBR	264
BFWL6-NBR	264
BFWL8-NBR	264
BG-1	725
BG-10N	725
BG-4N	725
BG181325	582
BG181330	582
BG181625	582
BG181920	582
BG182515	582
BGLFB-1	230
BGLFB-11.1/2	230
BGLFB-2	230
BGLOCKBV-1	230
BGLOCKBV-12	230
BGLOCKBV-34	230
BH100	584
BHEN1	668
BHEN112	668
BHEN114	668
BHEN12	668
BHEN2	668
BHEN34	668
BHJ1	408
BHJ112	408

Part Code	Page
BHJ114	408
BHJ12	408
BHJ14	408
BHJ2	408
BHJ316	408
BHJ34	408
BHJ38	408
BHJ516	408
BHJ58	408
BHRN112	671
BHRN112114	671
BHRN1141	671
BHRN134	671
BHRN2112	671
BHRN3412	671
BHTT12	408
BHTT14	408
BHTT38	408
BHTT516	408
BHUP1	422
BHUP12	422
BHUP14	422
BHUP18	422
BHUP34	422
BHUP38	422
BHVFF-06-06	366
BHVFF-08-06	366
BHVFF-08-08	366
BHVFF-10-10	366
BHVFF-12-10	366
BHVFF-12-12	366
BHVMF-6-01	365
BHVMF-6-02	365
BHVMF-8-03	365
BHVMM-02-02	365
BHVMM-03-03	365
BHVMM-04-04	365
BIN-1-BLUE	868
BIN-1-GREY	868
BIN-1-RED	868
BIN-1-YELLOW	868
BIN-2-BLUE	868
BIN-2-GREY	868
BIN-2-RED	868
BIN-2-YELLOW	868
BIN-3-BLUE	868
BIN-3-GREY	868
BIN-3-RED	868
BIN-3-YELLOW	868
BIN-4-BLUE	868
BIN-4-GREY	868
BIN-4-RED	868

Part Code	Page
BIN-4-YELLOW	868
BIN-5-BLUE	868
BIN-5-GREY	868
BIN-5-RED	868
BIN-5-YELLOW	868
BIN-6-BLUE	868
BIN-6-GREY	868
BIN-6-RED	868
BIN-6-YELLOW	868
BIN-7-BLUE	868
BIN-7-GREY	868
BIN-7-RED	868
BIN-8-BLUE	868
BIN-8-GREY	868
BIN-8-RED	868
BIN/FSS/L/1	870
BIN/FSS/L/2	870
BIN/FSS/L/3	870
BIN/HP/SB4/6	869
BIN/LP1	871
BIN/LP2	871
BIN/LP3	871
BIN/LP6	871
BIN/PBR205	871
BIN/SFT	870
BIN/SPS	870
BIN/VP/SB4/5	869
BIN/VP/SB7	869
BIN/VP/SB8	869
BL5040-N	161
BL5040-S3	161
BL5040-S5	161
BL5040-WS3	161
BL5040-WS3-FDA	161
BL5040-WS5	161
BL5040-WS5-FDA	161
BLADEHDC	622
BLSSAF-1	710
BLSSAF-12	710
BLSSAF-2	710
BLSSAF-3	710
BLSSAF-34	710
BLSSPN16F-1	710
BLSSPN16F-12	710
BLSSPN16F-2	710
BLSSPN16F-3	710
BLSSPN16F-34	710
BMBP1	671
BMBP112	671
BMBP114	671
BMBP12	671
BMBP2	671

B

Part Code	Page
BMBP34	671
BMFEE1	669
BMFEE112	669
BMFEE114	669
BMFEE12	669
BMFEE2	669
BMFEE34	669
BMFEU1	671
BMFEU112	671
BMFEU114	671
BMFEU12	671
BMFEU2	671
BMFEU34	671
BNEUBLADE/1000	91
BNEUBLADE/1200	91
BNEUBLADE/150	91
BNEUBLADE/300	91
BNEUBLADE/450	91
BNEUBLADE/600	91
BNEUBLADE/750	91
BNEUBLADE/80	91
BNEUBLADE/900	91
BNEUPOWERA	95
BNEUPOWERB	95
BOSS4G	675
BOSS4W	675
BOT-LB	853
BOT1M	853
BP1	883
BP2-205	883
BP4-205	883
BPB10-01	363
BPB10-02	363
BPB10-03	363
BPB10-04	363
BPB10-G01	363
BPB10-G02	363
BPB10-G03	363
BPB12-02	363
BPB12-03	363
BPB12-04	363
BPB12-G02	363
BPB12-G03	363
BPB12-G04	363
BPB4-01	363
BPB4-02	363
BPB4-G01	363
BPB4-G02	363
BPB4-M5	363
BPB6-01	363
BPB6-02	363
BPB6-03	363
BPB6-04	363
BPB6-G01	363
BPB6-G02	363
BPB6-G03	363
BPB6-M5	363
BPB8-01	363
BPB8-02	363
BPB8-03	363
BPB8-04	363
BPB8-G01	363
BPB8-G02	363
BPB8-G03	363
BPB8-G04	363
BPBT1	672
BPBT112	672
BPBT12	672
BPBT2	672
BPBT34	672
BPC10-01	361
BPC10-02	361
BPC10-03	361
BPC10-04	361
BPC10-G01	361
BPC10-G02	361
BPC10-G03	361
BPC10-G04	361
BPC12-02	361
BPC12-03	361
BPC12-04	361
BPC12-G02	361
BPC12-G03	361
BPC12-G04	361
BPC4-01	361
BPC4-02	361
BPC4-03	361
BPC4-G01	361
BPC4-G02	361
BPC4-M5	361
BPC4-M6	361
BPC6-01	361
BPC6-02	361
BPC6-03	361
BPC6-04	361
BPC6-G01	361
BPC6-G02	361
BPC6-G03	361
BPC6-M5	361
BPC6-M6	361
BPC8-01	361
BPC8-02	361
BPC8-03	361
BPC8-04	361
BPC8-G01	361
BPC8-G02	361
BPC8-G03	361
BPC8-G04	361
BPCF10-G01	362
BPCF10-G02	362
BPCF10-G03	362
BPCF10-G04	362
BPCF12-G03	362
BPCF12-G04	362
BPCF4-G01	362
BPCF4-G02	362
BPCF6-G01	362
BPCF6-G02	362
BPCF6-G03	362
BPCF8-G01	362
BPCF8-G02	362
BPCF8-G03	362
BPCF8-G04	362
BPCFB10-G01-M20	362
BPCFB10-G02-M20	362
BPCFB10-G03-M20	362
BPCFB10-G04-M20	362
BPCFB12-G02-M22	362
BPCFB12-G03-M22	362
BPCFB12-G04-M22	362
BPCFB4-G01-M12	362
BPCFB4-G02-M12	362
BPCFB4-M5-M12	362
BPCFB6-G01-M14	362
BPCFB6-G02-M14	362
BPCFB6-G03-M14	362
BPCFB6-G04-M14	362
BPCFB6-M5-M14	362
BPCFB6-M6-M14	362
BPCFB8-G01-M16	362
BPCFB8-G02-M16	362
BPCFB8-G03-M16	362
BPCFB8-G04-M16	362
BPCFF01-01	367
BPCFF02-02	367
BPCFF03-03	367
BPCFF04-04	367
BPCVC10-02	367
BPCVC10-03	367
BPCVC12-02	367
BPCVC12-03	367
BPCVC4-01	367
BPCVC4-02	367
BPCVC6-01	367
BPCVC6-02	367
BPCVC8-01	367
BPCVC8-02	367
BPCVF01-01	367
BPCVF02-02	367
BPCVF03-03	367
BPCVF04-04	367
BPCVU10	367
BPCVU4	367
BPCVU6	367
BPCVU8	367
BPD10-01	363
BPD10-02	363
BPD10-03	363
BPD12-03	363
BPD12-04	363
BPD4-01	363
BPD4-M5	363
BPD6-01	363
BPD6-02	363
BPD6-03	363
BPD6-G01	364
BPD6-G02	364
BPD8-01	363
BPD8-02	363
BPD8-03	363
BPD8-G02	364
BPE10	365
BPE12	365
BPE4	365
BPE6	365
BPE8	365
BPG10-8	365
BPG12-10	365
BPG6-4	365
BPG8-6	365
BPGJ10-6	366
BPGJ10-8	366
BPGJ12-10	366
BPGJ12-8	366
BPGJ6-4	366
BPGJ8-4	366
BPGJ8-6	366
BPH10-02	364
BPH10-03	364
BPH10-04	364
BPH12-02	364
BPH12-03	364
BPH12-04	364
BPH4-01	364
BPH4-M5	364
BPH4-M6	364
BPH6-01	364
BPH6-02	364

B

Part Code	Page
BPH6-03	364
BPH6-M5	364
BPH6-M6	364
BPH8-01	364
BPH8-02	364
BPH8-03	364
BPK10-8-03	364
BPK6-4-01	364
BPK8-6-02	364
BPKG10-6	365
BPKG10-8	365
BPKG6-1	365
BPKG8-4	365
BPKG8-6	365
BPL10-01	362
BPL10-02	362
BPL10-03	362
BPL10-04	362
BPL10-G01	363
BPL10-G02	363
BPL10-G03	363
BPL10-G04	363
BPL12-02	362
BPL12-03	362
BPL12-04	362
BPL12-G02	363
BPL12-G03	363
BPL12-G04	363
BPL4-01	362
BPL4-02	362
BPL4-G01	363
BPL4-G02	363
BPL4-M5	362
BPL4-M6	362
BPL6-01	362
BPL6-02	362
BPL6-03	362
BPL6-04	362
BPL6-G01	363
BPL6-G02	363
BPL6-G03	363
BPL6-M5	362
BPL6-M6	362
BPL8-01	362
BPL8-02	362
BPL8-03	362
BPL8-04	362
BPL8-G01	363
BPL8-G02	363
BPL8-G03	363
BPL8-G04	363
BPLE12-02	363
BPLE4-01	363
BPLE4-G01	363
BPLE4-G02	363
BPLE4-M5	363
BPLE6-01	363
BPLE6-02	363
BPLE6-G01	363
BPLE6-G02	363
BPLE6-G03	363
BPLE6-M5	363
BPLE6-M6	363
BPLE8-01	363
BPLE8-02	363
BPLE8-G01	363
BPLE8-G02	363
BPLE8-G03	363
BPM10	365
BPM12	365
BPM4	365
BPM6	365
BPM8	365
BPN16-110-UPVC	630
BPN16-20-UPVC	630
BPN16-25-UPVC	630
BPN16-32-UPVC	630
BPN16-40-UPVC	630
BPN16-50-UPVC	630
BPN16-63-UPVC	630
BPN16-75-UPVC	630
BPN16-90-UPVC	630
BPP10	366
BPP12	366
BPP4	366
BPP6	366
BPP8	366
BPU10	365
BPU12	365
BPU4	365
BPU6	365
BPU8	365
BPV10	365
BPV12	365
BPV4	365
BPV6	365
BPV8	365
BPVC1-100M	494
BPVC1-30M	494
BPVC1/2-100M	494
BPVC1/2-30M	494
BPVC1/2BK-30M	495
BPVC1/2BL-30M	495
BPVC1/2RD-30M	495
BPVC1/4-100M	494
BPVC1/4-30M	494
BPVC1/4BK-30M	495
BPVC1/4BL-30M	495
BPVC1/4RD-30M	495
BPVC1/8-30M	494
BPVC11/2-30M	494
BPVC11/4-30M	494
BPVC1BK-30M	495
BPVC2-30M	494
BPVC3/16-30M	494
BPVC3/4-100M	494
BPVC3/4-30M	494
BPVC3/4BK-30M	495
BPVC3/4BL-30M	495
BPVC3/8-100M	494
BPVC3/8-30M	494
BPVC3/8BK-30M	495
BPVC3/8BL-30M	495
BPVC3/8RD-30M	495
BPVC5/16-100M	494
BPVC5/16-30M	494
BPVC5/16BK-30M	495
BPVC5/16BL-30M	495
BPVC5/16RD-30M	495
BPVC5/8-30M	494
BPVCL1-30M	495
BPVCL1/2-30M	495
BPVCL1/4-30M	495
BPVCL3/4-30M	495
BPVCL3/8-30M	495
BPVCL5/16-30M	495
BPW10-8	365
BPW12-10	365
BPW6-4	365
BPW8-6	365
BPX10-01	364
BPX10-02	364
BPX10-03	364
BPX10-04	364
BPX12-02	364
BPX12-03	364
BPX12-04	364
BPX4-01	364
BPX6-01	364
BPX6-02	364
BPX6-03	364
BPX8-01	364
BPX8-02	364
BPX8-03	364
BPX8-04	364
BPY10	365
BPY12	365
BPY4	365
BPY6	365
BPY8	365
BPZA10	365
BPZA12	365
BPZA4	365
BPZA6	365
BPZA8	365
BRB112	669
BRB1121	669
BRB112114	669
BRB11212	669
BRB11234	669
BRB1141	669
BRB11412	669
BRB11434	669
BRB1238	669
BRB134	669
BRB21	669
BRB2112	669
BRB2114	669
BRB212	669
BRB234	669
BRB3412	669
BRFS112	671
BRFS1121	671
BRFS112114	671
BRFS11212	671
BRFS11234	671
BRFS1141	671
BRFS11412	671
BRFS11434	671
BRFS1238	671
BRFS134	671
BRFS21	671
BRFS2112	671
BRFS2114	671
BRFS212	671
BRFS234	671
BRFS3412	671
BRJ12A	92
BRJ12C	93
BRJ12S/S	92
BRJ20A	92
BRJ20C	93
BRJ20CS/S	93
BRJ20S/S	92
BRJ25A	92
BRJ25C	93
BRJ25S/S	92
BRJ40A	92
BRJ40C	93
BRJ40S/S	92
BRJ50A	92
BRJ50C	93

B

Part Code	Page
BRJ50CS/S	93
BRJ50S/S	92
BRJ75A	92
BRJ75C	93
BRS300/2BZ-50M	852
BS1	749
BS112	749
BS112SS	749
BS114	749
BS114SS	749
BS12	749
BS12SS	749
BS14	749
BS14SS	749
BS18	749
BS18SS	749
BS1SS	749
BS2	749
BS2SS	749
BS2WCL-316-1	711
BS2WCL-316-1.5	711
BS2WCL-316-2	711
BS2WCL-316-2.5	711
BS2WCL-316-3	711
BS2WCL-316-4	711
BS34	749
BS34SS	749
BS38	749
BS38SS	749
BS400/4CL-50M	851
BS58	749
BS58SS	749
BS7WWO-316-1	711
BS7WWO-316-1.5	711
BS7WWO-316-2	711
BS7WWO-316-2.5	711
BS7WWO-316-3	711
BS7WWO-316-4	711
BS7WWW-316-1	711
BS7WWW-316-1.5	711
BS7WWW-316-2	711
BS7WWW-316-2.5	711
BS7WWW-316-3	711
BS7WWW-316-4	711
BSA10	366
BSA12	366
BSA4	366
BSA6	366
BSA8	366
BSIDF-13H-1	712
BSIDF-13H-1.5	712
BSIDF-13H-2	712
BSIDF-13H-2.5	712
BSIDF-13H-3	712
BSIDF-13H-4	712
BSIDF-14-1	712
BSIDF-14-1.5	712
BSIDF-14-2	712
BSIDF-14-2.5	712
BSIDF-14-3	712
BSIDF-14-4	712
BSIDF-15-1	712
BSIDF-15-1.5	712
BSIDF-15-2	712
BSIDF-15-2.5	712
BSIDF-15-3	712
BSIDF-15-4	712
BSIDF-SEAL-1	712
BSIDF-SEAL-1.5	712
BSIDF-SEAL-2	712
BSIDF-SEAL-2.5	712
BSIDF-SEAL-3	712
BSIDF-SEAL-4	712
BSL10-02	364
BSL10-03	364
BSL10-04	364
BSL12-02	364
BSL12-03	364
BSL12-04	364
BSL200/2CL-50M	851
BSL2KS-316-1	711
BSL2KS-316-1.5	711
BSL2KS-316-2	711
BSL2KS-316-2.5	711
BSL2KS-316-3	711
BSL2KS-316-4	711
BSL2S-316-1	711
BSL2S-316-1.5	711
BSL2S-316-2	711
BSL2S-316-2.5	711
BSL2S-316-3	711
BSL2S-316-4	711
BSL300/3CL-50M	851
BSL31-316-1.5X1	711
BSL31-316-2.5X1	711
BSL31-316-2.5X15	711
BSL31-316-2.5X2	711
BSL31-316-2X1	711
BSL31-316-2X1.5	711
BSL31-316-3X1	711
BSL31-316-3X1.5	711
BSL31-316-3X2	711
BSL31-316-3X2.5	711
BSL31-316-4X1.5	711
BSL31-316-4X2	711
BSL31-316-4X2.5	711
BSL31-316-4X3	711
BSL32-316-1.5X1	711
BSL32-316-2.5X1	711
BSL32-316-2.5X15	711
BSL32-316-2.5X2	711
BSL32-316-2X1	711
BSL32-316-2X1.5	711
BSL32-316-3X1	711
BSL32-316-3X1.5	711
BSL32-316-3X2	711
BSL32-316-3X2.5	711
BSL32-316-4X1.5	711
BSL32-316-4X2	711
BSL32-316-4X2.5	711
BSL32-316-4X3	711
BSL4-01	364
BSL4-02	364
BSL4-M5	364
BSL6-01	364
BSL6-02	364
BSL6-03	364
BSL6-M5	364
BSL6-M6	364
BSL8-01	364
BSL8-02	364
BSL8-03	364
BSL8-04	364
BSM08	749
BSM10	749
BSM12	749
BSM14	749
BSM16	749
BSM18	749
BSM20	749
BSM22	749
BSM24	749
BSPC10-02	367
BSPC10-03	367
BSPC10-04	367
BSPC12-03	367
BSPC12-04	367
BSPC6-02	367
BSPC8-02	367
BSPC8-03	367
BSPR1	672
BSPR112	672
BSPR12	672
BSPR2	672
BSPR34	672
BSPU10	367
BSPU12	367
BSPU6	367
BSPU8	367
BSRJT-13H-1	712
BSRJT-13H-1.5	712
BSRJT-13H-2	712
BSRJT-13H-2.5	712
BSRJT-13H-3	712
BSRJT-13H-4	712
BSRJT-13HBN-1	712
BSRJT-13HBN-1.5	712
BSRJT-13HBN-2	712
BSRJT-13HBN-2.5	712
BSRJT-13HBN-3	712
BSRJT-13HBN-4	712
BSRJT-14-1	712
BSRJT-14-1.5	712
BSRJT-14-2	712
BSRJT-14-2.5	712
BSRJT-14-3	712
BSRJT-14-4	712
BSRJT-15-1	712
BSRJT-15-1.5	712
BSRJT-15-2	712
BSRJT-15-2.5	712
BSRJT-15-3	712
BSRJT-15-4	712
BSRJT-SEAL-1	712
BSRJT-SEAL-1.5	712
BSRJT-SEAL-2	712
BSRJT-SEAL-2.5	712
BSRJT-SEAL-3	712
BSRJT-SEAL-4	712
BT50	883
BTP10	366
BTP12	366
BTP4	366
BTP6	366
BTP8	366
BTR10-6	366
BTR10-8	366
BTR12-10	366
BTR12-8	366
BTR6-4	366
BTR8-4	366
BTR8-6	366
BV1.1/2FF-ISOP	231
BV1.1/4FF-ISOP	231
BV112FF	228
BV112FF-S	228
BV112MF	228
BV114FF	228
BV114FF-S	228
BV114MF	228
BV12FF	228
BV12FF-ISOP	231

Part Code	Page
BV12FF-S	228
BV12FFL	229
BV12FFNPT	234
BV12FFV	231
BV12MF	228
BV14FF	228
BV14FF-S	228
BV14FFL	229
BV14FFV	231
BV1FF	228
BV1FF-ISOP	231
BV1FF-S	228
BV1FFL	229
BV1FFV	231
BV1MF	228
BV2.1/2IFF SOP	231
BV212FF	228
BV2FF	228
BV2FF-ISOP	231
BV2FF-S	228
BV2MF	228
BV2SS1	696
BV2SS112	696
BV2SS112P	697
BV2SS114	696
BV2SS114P	697
BV2SS12	696
BV2SS12DM	699
BV2SS12P	697
BV2SS14	696
BV2SS14DM	699
BV2SS1DM	699
BV2SS1P	697
BV2SS2	696
BV2SS212	696
BV2SS2P	697
BV2SS3	696
BV2SS34	696
BV2SS34DM	699
BV2SS34P	697
BV2SS38	696
BV2SS38DM	699
BV34FF	228
BV34FF-ISOP	231
BV34FF-S	228
BV34FFL	229
BV34FFNPT	234
BV34FFV	231
BV34MF	228
BV38FF	228
BV38FF-S	228
BV38FFL	229
BV38FFV	231
BV3FF	228
BV3L1	231
BV3L112	231
BV3L114	231
BV3L12	231
BV3L14	231
BV3L2	231
BV3L34	231
BV3L38	231
BV3SS1	696
BV3SS112	696
BV3SS112P	697
BV3SS114	696
BV3SS114P	697
BV3SS12	696
BV3SS12P	697
BV3SS14	696
BV3SS1P	697
BV3SS2	696
BV3SS212	696
BV3SS212P	697
BV3SS2P	697
BV3SS3	696
BV3SS34	696
BV3SS34P	697
BV3SS38	696
BV3SS3P	697
BV3SS4	696
BV3T1	231
BV3T112	231
BV3T114	231
BV3T12	231
BV3T14	231
BV3T2	231
BV3T34	231
BV3T38	231
BV4FF	228
BVSS1	696
BVSS112	696
BVSS114	696
BVSS12	696
BVSS14	696
BVSS2	696
BVSS34	696
BVSS38	696
BVSS3L112P	697
BVSS3L114P	697
BVSS3L12P	697
BVSS3L1P	697
BVSS3L2P	697
BVSS3L34P	697
BVSS3T112P	697
BVSS3T114P	697
BVSS3T12P	697
BVSS3T1P	697
BVSS3T2P	697
BVSS3T34P	697
BVT12FF	229
BVT12MF	229
BVT14FF	229
BVT14MF	229
BVT1FF	229
BVT1MF	229
BVT34FF	229
BVT34MF	229
BVT38FF	229
BVT38MF	229
BVWRGA-1	230
BVWRGA-1.1/2	230
BVWRGA-1.1/4	230
BVWRGA-1/2	230
BVWRGA-1/4	230
BVWRGA-2	230
BVWRGA-2.1/2	230
BVWRGA-3	230
BVWRGA-3/4	230
BVWRGA-3/8	230
BVWRGA-4	230
BYRTS4-6	366
BYRTS6-8	366
BYRTS8-10	366
BYTS10-10	366
BYTS12-12	366
BYTS4-4	366
BYTS6-6	366
BYTS8-8	366
C	
C2752	584
C2753	584
C2766	583
C605-100	585
C705-100	584
C705-200	584
C760-GAR	583
CAM-A-112A	482
CAM-A-112B	484
CAM-A-112PP	483
CAM-A-112SS	485
CAM-A-114A	482
CAM-A-114B	484
CAM-A-114PP	483
CAM-A-114SS	485
CAM-A-12A	482
CAM-A-12B	484
CAM-A-12PP	483
CAM-A-12SS	485
CAM-A-1A	482
CAM-A-1B	484
CAM-A-1PP	483
CAM-A-1SS	485
CAM-A-212A	482
CAM-A-212SS	485
CAM-A-2A	482
CAM-A-2B	484
CAM-A-2PP	483
CAM-A-2SS	485
CAM-A-34A	482
CAM-A-34B	484
CAM-A-34PP	483
CAM-A-34SS	485
CAM-A-3A	482
CAM-A-3B	484
CAM-A-3PP	483
CAM-A-3SS	485
CAM-A-4A	482
CAM-A-4B	484
CAM-A-4PP	483
CAM-A-4SS	485
CAM-A-6A	482
CAM-A-6SS	485
CAM-B-112A	482
CAM-B-112B	484
CAM-B-112PP	483
CAM-B-112SS	485
CAM-B-114A	482
CAM-B-114B	484
CAM-B-114PP	483
CAM-B-114SS	485
CAM-B-12A	482
CAM-B-12B	484
CAM-B-12PP	483
CAM-B-12SS	485
CAM-B-1A	482
CAM-B-1B	484
CAM-B-1PP	483
CAM-B-1SS	485
CAM-B-212A	482
CAM-B-212B	484
CAM-B-212SS	485
CAM-B-2A	482
CAM-B-2B	484
CAM-B-2PP	483
CAM-B-2SS	485
CAM-B-34A	482
CAM-B-34B	484

C

Part Code	Page
CAM-B-34PP	483
CAM-B-34SS	485
CAM-B-3A	482
CAM-B-3B	484
CAM-B-3PP	483
CAM-B-3SS	485
CAM-B-4A	482
CAM-B-4B	484
CAM-B-4SS	485
CAM-C-112A	482
CAM-C-112B	484
CAM-C-112PP	483
CAM-C-112SS	485
CAM-C-114A	482
CAM-C-114B	484
CAM-C-114PP	483
CAM-C-114SS	485
CAM-C-12A	482
CAM-C-12B	484
CAM-C-12PP	483
CAM-C-12SS	485
CAM-C-1A	482
CAM-C-1B	484
CAM-C-1PP	483
CAM-C-1SS	485
CAM-C-212A	482
CAM-C-212B	484
CAM-C-212SS	485
CAM-C-2A	482
CAM-C-2B	484
CAM-C-2PP	483
CAM-C-2SS	485
CAM-C-34A	482
CAM-C-34B	484
CAM-C-34PP	483
CAM-C-34SS	485
CAM-C-3A	482
CAM-C-3B	484
CAM-C-3PP	483
CAM-C-3SS	485
CAM-C-4A	482
CAM-C-4B	484
CAM-C-4PP	483
CAM-C-6A	482
CAM-D-112A	482
CAM-D-112B	484
CAM-D-112PP	483
CAM-D-112SS	485
CAM-D-114A	482
CAM-D-114B	484
CAM-D-114PP	483
CAM-D-114SS	485
CAM-D-12A	482
CAM-D-12B	484
CAM-D-12PP	483
CAM-D-12SS	485
CAM-D-1A	482
CAM-D-1B	484
CAM-D-1PP	483
CAM-D-1SS	485
CAM-D-212A	482
CAM-D-212B	484
CAM-D-212SS	485
CAM-D-2A	482
CAM-D-2B	484
CAM-D-2PP	483
CAM-D-2SS	485
CAM-D-34A	482
CAM-D-34B	484
CAM-D-34PP	483
CAM-D-34SS	485
CAM-D-3A	482
CAM-D-3B	484
CAM-D-3PP	483
CAM-D-3SS	485
CAM-D-4A	482
CAM-D-4B	484
CAM-D-4PP	483
CAM-D-4SS	485
CAM-D-6A	482
CAM-DC-112A	482
CAM-DC-112B	484
CAM-DC-112PP	483
CAM-DC-112SS	485
CAM-DC-114A	482
CAM-DC-114PP	483
CAM-DC-114SS	485
CAM-DC-12A	482
CAM-DC-12B	484
CAM-DC-1A	482
CAM-DC-1B	484
CAM-DC-1PP	483
CAM-DC-1SS	485
CAM-DC-212A	482
CAM-DC-212B	484
CAM-DC-2A	482
CAM-DC-2B	484
CAM-DC-2PP	483
CAM-DC-2SS	485
CAM-DC-34A	482
CAM-DC-34PP	483
CAM-DC-34SS	485
CAM-DC-3A	482
CAM-DC-3B	484
CAM-DC-3PP	483
CAM-DC-3SS	485
CAM-DC-4A	482
CAM-DC-4SS	485
CAM-DC-6A	482
CAM-DP-112A	482
CAM-DP-112B	484
CAM-DP-112PP	483
CAM-DP-112SS	485
CAM-DP-114A	482
CAM-DP-114B	484
CAM-DP-114PP	483
CAM-DP-12A	482
CAM-DP-12B	484
CAM-DP-12SS	485
CAM-DP-1A	482
CAM-DP-1B	484
CAM-DP-1PP	483
CAM-DP-1SS	485
CAM-DP-212A	482
CAM-DP-212B	484
CAM-DP-212SS	485
CAM-DP-2A	482
CAM-DP-2B	484
CAM-DP-2PP	483
CAM-DP-2SS	485
CAM-DP-34A	482
CAM-DP-34PP	483
CAM-DP-34SS	485
CAM-DP-3A	482
CAM-DP-3B	484
CAM-DP-3PP	483
CAM-DP-3SS	485
CAM-DP-4A	482
CAM-DP-4B	484
CAM-DP-6A	482
CAM-E-112A	482
CAM-E-112B	484
CAM-E-112PP	483
CAM-E-112SS	485
CAM-E-114A	482
CAM-E-114B	484
CAM-E-114PP	483
CAM-E-114SS	485
CAM-E-12A	482
CAM-E-12B	484
CAM-E-12PP	483
CAM-E-12SS	485
CAM-E-1A	482
CAM-E-1B	484
CAM-E-1PP	483
CAM-E-1SS	485
CAM-E-212A	482
CAM-E-212B	484
CAM-E-212SS	485
CAM-E-2A	482
CAM-E-2B	484
CAM-E-2PP	483
CAM-E-2SS	485
CAM-E-34A	482
CAM-E-34B	484
CAM-E-34PP	483
CAM-E-34SS	485
CAM-E-3A	482
CAM-E-3B	484
CAM-E-3PP	483
CAM-E-3SS	485
CAM-E-4A	482
CAM-E-4B	484
CAM-E-4PP	483
CAM-E-4SS	485
CAM-E-6A	482
CAM-F-112A	482
CAM-F-112B	484
CAM-F-112PP	483
CAM-F-112SS	485
CAM-F-114A	482
CAM-F-114B	484
CAM-F-114PP	483
CAM-F-114SS	485
CAM-F-12A	482
CAM-F-12B	484
CAM-F-12PP	483
CAM-F-12SS	485
CAM-F-1A	482
CAM-F-1B	484
CAM-F-1PP	483
CAM-F-1SS	485
CAM-F-212A	482
CAM-F-212B	484
CAM-F-212SS	485
CAM-F-2A	482
CAM-F-2B	484
CAM-F-2PP	483
CAM-F-2SS	485
CAM-F-34A	482
CAM-F-34B	484
CAM-F-34PP	483
CAM-F-34SS	485
CAM-F-3A	482
CAM-F-3B	484
CAM-F-3PP	483
CAM-F-3SS	485
CAM-F-4A	482

C

Part Code	Page
CAM-F-4B	484
CAM-F-4PP	483
CAM-F-4SS	485
CAM-F-6A	482
CAM-S-1-BUNA	486
CAM-S-1-EPDM	486
CAM-S-1-PTFE	486
CAM-S-1-VITON	486
CAM-S-112-BUNA	486
CAM-S-112-EPDM	486
CAM-S-112-PTFE	486
CAM-S-112-VITON	486
CAM-S-114-BUNA	486
CAM-S-114-EPDM	486
CAM-S-114-PTFE	486
CAM-S-114-VITON	486
CAM-S-12-BUNA	486
CAM-S-12-EPDM	486
CAM-S-12-PTFE	486
CAM-S-12-VITON	486
CAM-S-2-BUNA	486
CAM-S-2-EPDM	486
CAM-S-2-PTFE	486
CAM-S-2-VITON	486
CAM-S-212-BUNA	486
CAM-S-212-EPDM	486
CAM-S-212-PTFE	486
CAM-S-212-VITON	486
CAM-S-3-BUNA	486
CAM-S-3-EPDM	486
CAM-S-3-PTFE	486
CAM-S-3-VITON	486
CAM-S-34-BUNA	486
CAM-S-34-EPDM	486
CAM-S-34-PTFE	486
CAM-S-34-VITON	486
CAM-S-4-BUNA	486
CAM-S-4-EPDM	486
CAM-S-6-BUNA	486
CB1-BAR	872
CB1-LG	872
CB2-BAR	872
CB2-LG	872
CB3-BAR	872
CB3-LG	872
CB30-LG	873
CB4-BAR	872
CB4-LG	872
CDE	854
CEPR-19/21.5	862
CEPR-21.5/24	862
CEPR-27/30	862
CEPR-31/35	862
CEPS-21.5/24	862
CEPS-24/27	862
CEPS-27/30	862
CEPS-32/35	862
CEPS-36/40	862
CERNBS-100	859
CERNBS-125	859
CERNBS-150	859
CERSBS-100	859
CERSBS-125	859
CERSBS-150	859
CF-500	641
CF1	224
CF100/2CL-50M	852
CF150/3CL-50M	852
CF200/2CL-50M	852
CF300/2CL-50M	852
CF300/3CL-50M	852
CF4	224
CF400/4CL-50M	852
CF5	224
CF6	224
CF8	224
CF9	224
CFP	481
CFV1B-N	90
CFV2B-N	90
CFV3B-N	90
CFV4B-N	90
CFV5B-N	90
CG16	880
CG1N02000C022	249
CG1N02VL1C022	250
CG1N02VL2C022	250
CG1N02VL3C022	250
CH10.25-IQ	595
CH4.25-IQ	595
CH6.25-IQ	595
CHH1-20M	522
CHH12-20M	522
CHH34-20M	522
CHH38-20M	522
CHH58-20M	522
CLASS1	875
CLASS2	875
CLASS3	875
CLASS30	874
CLASS31	874
CLASS32	874
CLASS41	874
CLASS42	874
CLASS5	875
CLASS6	875
CLASS7	875
CLASS8	875
CLSVGNBS-100	861
CLSVGNBS-125	861
CLSVGNBS-160	861
CLSVGNBS-200	861
CLSVGNBS-50	861
CLSVGNBS-75	861
CLSVGRBBH-100	862
CLSVGRBBH-125	862
CLSVGRBBH-50	862
CLSVGRBBH-75	862
CLSVGRBS-100	861
CLSVGRBS-125	861
CLSVGRBS-160	861
CLSVGRBS-200	861
CLSVGRBS-50	861
CLSVGRBS-75	861
CLSVGRNBBH-100	862
CLSVGRNBBH-125	862
CLSVGRNBBH-50	862
CLSVGRNBBH-75	862
CLSVNBRBS-100	861
CLSVNBRBS-125	861
CLSVNBRBS-160	861
CLSVNBRBS-200	861
CLSVNBRBS-75	861
CLSVNBRNBS-100	861
CLSVNBRNBS-125	861
CLSVNBRNBS-160	861
CLSVNBRNBS-200	861
CLSVNBRNBS-75	861
CLSVPPBBH-100	862
CLSVPPBBH-125	862
CLSVPPBBH-50	862
CLSVPPBBH-75	862
CLSVPPBS-100	861
CLSVPPBS-125	861
CLSVPPBS-160	861
CLSVPPBS-200	861
CLSVPPBS-50	861
CLSVPPBS-75	861
CLSVPPNBBH-100	862
CLSVPPNBBH-125	862
CLSVPPNBBH-50	862
CLSVPPNBBH-75	862
CLSVPPNBS-100	861
CLSVPPNBS-125	861
CLSVPPNBS-160	861
CLSVPPNBS-200	861
CLSVPPNBS-50	861
CLSVPPNBS-75	861
CLW-DWS10	478
CLW-DWS34	478
CLW-DWSG10	478
CLW-DWSG34	478
CLW-VKM	478
CLW-VKM-K	478
CLW-VKO	478
CLW10F	478
CLW10H	478
CLW10M	478
CLW13F	478
CLW13H	478
CLW13HS	478
CLW13M	478
CLW15H	478
CLW15HS	478
CLW19F	478
CLW19H	478
CLW19HS	478
CLW19M	478
CLW25F	478
CLW25H	478
CLW25HS	478
CLW25M	478
CLW32F	478
CLW32H	478
CLW32M	478
CLWRO	480
CLWRP	480
CM0715S	624
CM0722S	624
CM0728S	624
CM1N02000A022	251
CM1N02000B022	251
CM1N02VL1A022	251
CM1N02VL1B022	251
CM1N02VL2A022	251
CM1N02VL2B022	251
CM1N02VL3A022	251
CM1N02VL3B022	251
CN-SS1	408
CN-SS112	408
CN-SS114	408
CN-SS12	408
CN-SS2	408
CN-SS3	408
CN-SS34	408
CN-ST1	408
CN-ST112	408
CN-ST114	408

C

Part Code	Page
CN-ST12	408
CN-ST2	408
CN-ST212	408
CN-ST3	408
CN-ST34	408
CN-ST4	408
CN-ST5	408
CN-ST6	408
CNFP-100	859
CNFP-125	859
CNFP-150	859
CNK018	333
CNK028	333
CNK059	333
CNK128	333
CNK159	333
CNK254	333
CNKD028	333
CNKD059	333
CNNBS-100	859
CNNBS-125	859
CNNBS-150	859
CNRV12	236
CNRV12-V	236
CNRV14	236
CNRV14-V	236
CNRV18	236
CNRV18-V	236
CNRV38	236
CNRV38-V	236
CNRVM5	236
CNSPS-100	859
CNSPS-125	859
CNSPS-150	859
CO1A03	594
CO1B03	594
CO2E03	594
CO2F03	594
CO2H03	594
CO2J03	594
CO3A03	594
CO3B03	594
CO8E72	594
COFH10-20M	521
COFH12-20M	521
COFH32-20M	521
COFH35-20M	521
COFH40-20M	521
COFH45-20M	521
COFH50-20M	521
COFH55-20M	521
COFH60-20M	521
COFH70-20M	521
COFH75-20M	521
COFH80-20M	521
COFH90-2OM	521
COP-100	880
COP04-30M	548
COP06-10M	548
COP06-30M	548
COP08-10M	548
COP08-30M	548
COP1/2-10M	548
COP1/2-30M	548
COP1/4-10M	548
COP1/4-30M	548
COP1/8-30M	548
COP10-10M	548
COP10-30M	548
COP12-10M	548
COP12-30M	548
COP3/16-30M	548
COP3/8-10M	548
COP3/8-30M	548
COP5/16-10M	548
COP5/16-30M	548
CPF-50	481
CPFP-100	859
CPFP-125	859
CPFP-150	859
CPNBS-100	859
CPNBS-125	859
CPNBS-150	859
CPSBS-100	859
CPSBS-125	859
CPSBS-150	859
CPWFP-100	859
CPWFP-125	859
CPWFP-160	859
CPWFP-200	859
CPWFP-75	859
CQP-1	481
CQP-2	481
CQP-3	481
CQP-3/4	481
CQP-4	481
CR33-1-UPVC	636
CR33-112-UPVC	636
CR33-114-UPVC	636
CR33-12-UPVC	636
CR33-2-UPVC	636
CR33-212-UPVC	636
CR33-34-UPVC	636
CRBFP-100	859
CRBFP-125	859
CRBFP-160	859
CRBFP-200	859
CRBFP-75	859
CRGFP-100	859
CRGFP-125	859
CRGFP-160	859
CRGFP-200	859
CRGFP-75	859
CRH1-1M	522
CRH112-1M	522
CRH114-1M	522
CRH118-1M	522
CRH134-1M	522
CRH138-1M	522
CRH2-1M	522
CRH78-1M	522
CRHA-1320-AW	585
CRHA-1330-AW	585
CRHA-1920-AW	585
CRHA-1930-AW	585
CRHA-2520-AW	585
CRHA-920-AW	585
CRHA-930-AW	585
CRWM-1320-AW	585
CRWM-1340-AW	585
CRWM-1920-AW	585
CRWM-1940-AW	585
CRWM-2520-AW	585
CRYSTALBOX	872
CS100/1CL-50M	851
CS100/2CL-50M	851
CS150/3CL-50M	851
CS200/2CL-50M	851
CS200/2OR-50M	851
CS200/2RD-50M	851
CS300/2BK-50M	851
CS300/2CL-50M	851
CS300/2RD-50M	851
CS300/3CL-50M	851
CS300/3RD-50M	851
CS400/4CL-50M	851
CS400/4RD-50M	851
CSK9	882
CSKS	882
CSLNBS-100	860
CSLNBS-125	860
CSLNBS-150	860
CSLNFP-100	860
CSLNFP-125	860
CSLNFP-150	860
CSLNNBS-100	860
CSLNNBS-125	860
CSLNNBS-150	860
CSLPBS-100	860
CSLPBS-125	860
CSLPBS-150	860
CSLPFP-100	860
CSLPFP-125	860
CSLPFP-150	860
CSLPNBS-100	860
CSLPNBS-125	860
CSLPNBS-150	860
CSP200/2CL-50M	851
CSP300/3CL-50M	851
CSR-2-40	880
CSS-12	880
CT100X2.5BLK-100	825
CT100X2.5NAT-100	825
CT140X3.6BLK-100	825
CT140X3.6NAT-100	825
CT160X4.8BLK-100	825
CT160X4.8NAT-100	825
CT200X2.5BLK-100	825
CT200X2.5NAT-100	825
CT200X3.6BLK-100	825
CT200X3.6NAT-100	825
CT200X4.8BLK-100	825
CT200X4.8NAT-100	825
CT300X3.6BLK-100	825
CT300X3.6NAT-100	825
CT300X4.8BLK-100	825
CT300X4.8NAT-100	825
CT300X7.6BLK-100	825
CT300X7.6NAT-100	825
CT370X4.8BLK-100	825
CT370X4.8NAT-100	825
CT370X7.6BLK-100	825
CT370X7.6NAT-100	825
CT540X7.8BLK-100	825
CT540X7.8NAT-100	825
CT750X7.8BLK-100	825
CT750X7.8NAT-100	825
CTR	814
CTR-2	814
CTR-2/C	814
CTR/C	814
CUPVC/TUBE-11022	632
CUPVC/TUBE-11053	632
CUPVC/TUBE-12525	632
CUPVC/TUBE-14028	632
CUPVC/TUBE-16032	632
CUPVC/TUBE-16047	632
CUPVC/TUBE-7518	632

Part Code	Page
CUPVC/TUBE-7536	632
CUPVC/TUBE-9018	632
CUPVC/TUBE-9043	632
CUPVC/TUBE2015	632
CUPVC/TUBE2515	632
CUPVC/TUBE2519	632
CUPVC/TUBE3218	632
CUPVC/TUBE3224	632
CUPVC/TUBE4020	632
CUPVC/TUBE4030	632
CUPVC/TUBE5018	632
CUPVC/TUBE5024	632
CUPVC/TUBE5037	632
CUPVC/TUBE6318	632
CUPVC/TUBE6330	632
CUPVC/TUBE6347	632
CV500	575
CV500-DS10	575
CV500-DS7	575
CV500-DS8	575
CV500-DS9	575
CV501	575
CV501-DS1	575
CV501-DS10	575
CV501-DS11	575
CV501-DS12	575
CV501-DS13	575
CV501-DS14	575
CV501-DS15	575
CV501-DS16	575
CV501-DS17	575
CV501-DS18	575
CV501-DS19	575
CV501-DS2	575
CV501-DS20	575
CV501-DS3	575
CV501-DS4	575
CV501-DS5	575
CV501-DS6	575
CV501-DS7	575
CV501-DS8	575
CV501-DS9	575
CW1	428
CW100	584
CW112	428
CW114	428
CW12	428
CW14	428
CW18	428
CW2	428
CW34	428
CW38	428
CX10-30M	513
CX12-30M	513
CX6-30M	513
CX8-30M	513
CXL06-30M	513
CXL08-30M	513
CXL10-30M	513
CXL12-30M	513
D	
D028XAC	332
D038XAC	332
D058XAC	332
D059XAC	332
D078XAC	332
D079XAC	332
D101H004	269
D101H005	269
D101H006	269
D101H007	269
D101H008	269
D101H009	269
D101H010	269
D101H011	269
D108EB18///	245
D108FB24///	245
D108XAC	332
D109XAC	332
D375XE69	271
D375XE70	271
D375XE71	271
D375XE72	271
D375XE73	271
D375XE74	271
D375XE75	271
D385FE75	272
D385XE69	272
D385XE70	272
D385XE71	272
D385XE72	272
D385XE73	272
D385XE74	272
D83075-OLP118	589
D84050-OLP118	589
DA1020	349
DA1022	346
DA1030	349
DA1047	348
DA1048	348
DA1049	348
DA1050	346
DA1051	346
DA1052	348
DA1053	348
DA1054	348
DA1060	348
DA1061	348
DA1067	346
DA1085	348
DA1091	348
DA1092	349
DA1093	349
DA1094	348
DA1103	349
DA1110	349
DA1111	349
DA1115	349
DA1116	349
DA1120	346
DA1125	347
DA1130	348
DA1137	346
DA1177	348
DA1253	349
DA1254	349
DAC1A03	593
DAC403	594
DAS-6	740
DDH2-50M	521
DDH34-50M	521
DF1	883
DF5004	350
DF5006	350
DF5022	350
DG-10-1	725
DG1900	595
DG1902	595
DG1909	595
DHG2BG	563
DHT3BG	563
DIRAPFRLAL048048	614
DIRAPLAL048048	614
DIRAPLAL068068	614
DIRAPMAL048048	614
DIRCALML016025	603
DIRDERFF025048	607
DIRDERFF032048	607
DIRDERFF040048	607
DIRDERFF040068	607
DIRDERFF050048	607
DIRDERFF050068	607
DIRDERFF063048	607
DIRDERFF063068	607
DIRDERFF063088	607
DIRDERFF080048	607
DIRDERFF080068	607
DIRDERFF080088	607
DIRDERFF110068	607
DIRDERFF110088	607
DIRDIL168DIN	613
DIRFEM10168CF	613
DIRFEM8016CF	615
DIRFEM8020CF	615
DIRFEM8025CF	615
DIRFEM8032CF	615
DIRFEM8040CF	615
DIRFEM8050CF	615
DIRFEM8063CF	615
DIRFEM8080CF	615
DIRFEM8110CF	615
DIRMOLMLEST16	603
DIRMOLMLEST20	603
DIRMOLMLEST25	603
DIRMOLMLINT16	603
DIRMOLMLINT20	603
DIRMOLMLINT25	603
DIRPIEGTMLS1625	603
DIRPMUAL120	614
DIRPMUAL200	614
DIRRULLUNI	612
DIRSM016050	615
DIRSM063110	615
DIRSPE020032	615
DIRSPE040063	615
DISPKS1	562
DISPKS2	562
DISPKZ1	562
DISPKZ2	562
DM100/A	854
DM100/B	854
DM100/C	854
DM100/D	854
DM12212	420
DM12214	420
DM12312	420
DM12314	420
DM12412	420
DM12414	420
DM12512	420
DM12514	420
DM12612	420
DM12614	420
DM14218	420
DM14318	420
DM14418	420
DM14518	420
DM14618	420

D, E

Part Code	Page
DM182M5	420
DM183M5	420
DM184M5	420
DM185M5	420
DM186M5	420
DM38214	420
DM38314	420
DM38414	420
DM38514	420
DM38614	420
DMD121012	420
DMD121014	420
DMD121212	420
DMD12412	420
DMD12414	420
DMD12612	420
DMD12614	420
DMD12812	420
DMD12814	420
DMD141018	420
DMD141218	420
DMD14418	420
DMD14618	420
DMD14818	420
DMD1810M5	420
DMD1812M5	420
DMD184M5	420
DMD186M5	420
DMD188M5	420
DMD381014	420
DMD381214	420
DMD38414	420
DMD38614	420
DMD38814	420
DMX12	421
DMX14	421
DMX18	421
DMX38	421
DP12.17	597
DP12.4	597
DP2005	81
DSH1-40M	532
DSH12-40M	532
DSH34-40M	532
DTAG-3	594
DUBV-110-UPVC	631
DUBV-16-UPVC	631
DUBV-20-UPVC	631
DUBV-25-UPVC	631
DUBV-32-UPVC	631
DUBV-40-UPVC	631
DUBV-50-UPVC	631
DUBV-63-UPVC	631
DUBV-75-UPVC	631
DUBV-90-UPVC	631
DUC-100-CON	547
DUC-100-RED	547
DUC-105-EARTH	547
DUC-115-EARTH	547
DUC-125-CON	547
DUC-125-EARTH	547
DUC-125-RED	547
DUC-135-EARTH	547
DUC-145-EARTH	547
DUC-150-CON	547
DUC-150-RED	547
DUC-155-EARTH	547
DUC-165-EARTH	547
DUC-180-CON	547
DUC-195-EARTH	547
DUC-200-CON	547
DUC-200-RED	547
DUC-215-EARTH	547
DUC-245-EARTH	547
DUC-250-CON	547
DUC-250-RED	547
DUC-295-EARTH	547
DUC-315-EARTH	547
DUC-345-EARTH	547
DUC-35-EARTH	547
DUC-395-EARTH	547
DUC-45-EARTH	547
DUC-50-CON	547
DUC-55-EARTH	547
DUC-60-CON	547
DUC-65-EARTH	547
DUC-75-CON	547
DUC-75-EARTH	547
DUC-75-RED	547
DUC-80-CON	547
DUC-85-EARTH	547
DUC-95-EARTH	547
DUCV-110-UPVC	631
DUCV-16-UPVC	631
DUCV-20-UPVC	631
DUCV-25-UPVC	631
DUCV-32-UPVC	631
DUCV-40-UPVC	631
DUCV-50-UPVC	631
DUCV-63-UPVC	631
DUCV-75-UPVC	631
DUCV-90-UPVC	631
DUFV-110-UPVC	631
DUFV-20-UPVC	631
DUFV-25-UPVC	631
DUFV-32-UPVC	631
DUFV-40-UPVC	631
DUFV-50-UPVC	631
DUFV-63-UPVC	631
DUFV-75-UPVC	631
DUFV-90-UPVC	631
E	
E0406AC	330
E0406DAC	332
E0406X1	328
E0406X25	326
E0406X5	327
E0407AC	330
E0407DAC	332
E0407SR	331
E0407X1	328
E0407X25	326
E0407X5	327
E0413AC	330
E0413DAC	332
E0413SR	331
E0413X1	328
E0413X25	326
E0413X5	327
E0613AC	330
E0613DAC	332
E0613SR	331
E0613X1	328
E0613X25	326
E0613X5	327
E0620AC	330
E0620DAC	332
E0620X1	328
E0620X25	326
E0620X5	327
E0625AC	330
E0625DAC	332
E0625SR	331
E0625X1	328
E0625X25	326
E0625X5	327
E0730AC	330
E0730SR	331
E0730X1	328
E0730X25	326
E0730X5	327
E0730XA	329
E0830AC	330
E0830SR	331
E0830X1	328
E0830X25	326
E0830X5	327
E0830XA	329
E0860AC	330
E0860SR	331
E0860X1	328
E0860X25	326
E0860X5	327
E0860XA	329
E106AB25///	242
E106AB35///	242
E106BB25///	242
E106BB35///	242
E106CB35///	242
E106CB40///	242
E106CB45///	242
E106DB35///	242
E106DB40///	242
E106DB52///	242
E107CB10///	244
E107CB12/5/	245
E107DB12///	244
E107DB12/5/	245
E107EB18///	244
E107EB18/5/	245
E107FB24///	244
E107FB24/5/	245
E107GB38///	244
E107GB38/5/	245
E107HB38///	244
E107HB38/5/	245
E107IB50///	244
E107IB50/5/	245
E108CB12///	245
E108DB12///	245
E108EB18///	245
E108FB24///	245
E110BE35///	243
E110BE52///	243
E110CE35///	243
E110CE52///	243
E110DE52///	243
E111AE20///	243
E111AE25///	243
E1140AC	330
E1140SR	331
E1140X1	328
E1140X25	326
E1140X5	327
E1140XA	329
E1160AC	330
E1160SR	331
E1160X1	328

E

Part Code	Page
E1160X25	326
E1160X5	327
E1160XA	329
E1175AC	330
E1175SR	331
E1175X1	328
E1175X25	326
E1175X5	327
E1175XA	329
E119CV12/1/	246
E119CW12/1/	246
E119DV12/1/	246
E119DW12/1/	246
E207CB12///	244
E207DB12///	244
E207EB18///	244
E207FB25///	244
E207GB37///	244
E207HB37///	244
E207IB50///	244
E306AB25///	242
E306BB25///	242
E310BE25///	243
E311AE15///	243
E311AE20///	243
E4000B31	29
E4000B32	29
E4000B41	29
E4000B42	29
E4000B43	29
E4000B52	29
E4000B53	29
E4000B54	29
E4000I31	29
E4000I32	29
E4000I41	29
E4000I42	29
E4000I43	29
E4000I52	29
E4000I53	29
E4000I54	29
E4000O31	29
E4000O32	29
E4000O41	29
E4000O42	29
E4000O43	29
E4000O52	29
E4000O53	29
E4000O54	29
EB-45-32-UPVC	628
EB-45-40-UPVC	628
EB-45-63-UPVC	628
EB-45-75-UPVC	628
EB-45-90-UPVC	628
EC10/WF/10RD	511
EC10/WF/2.5RD	511
EC10/WF/5RD	511
EC12/WF/10RD	511
EC12/WF/2.5RD	511
EC12/WF/5RD	511
EC8/WF/10RD	511
EC8/WF/15RD	511
EC8/WF/2.5RD	511
EC8/WF/5RD	511
ECONM10/7BK30	498
ECONM10/7BL30	498
ECONM10/7GN30	498
ECONM10/7NA30	498
ECONM10/7RD30	498
ECONM10/7YW30	498
ECONM10/8BK100	499
ECONM10/8BK30	498
ECONM10/8BL100	499
ECONM10/8BL30	498
ECONM10/8GN30	498
ECONM10/8NA100	499
ECONM10/8NA30	498
ECONM10/8RD30	498
ECONM10/8YW30	498
ECONM12/10BK30	498
ECONM12/10NA30	498
ECONM12/10RD30	498
ECONM12/9BK30	498
ECONM12/9BL30	498
ECONM12/9GN30	498
ECONM12/9NA30	498
ECONM12/9RD30	498
ECONM12/9YW30	498
ECONM14/11BK30	498
ECONM14/11NA30	498
ECONM15/12NA30	498
ECONM16/13NA30	498
ECONM18/14NA30	498
ECONM22/17NA30	498
ECONM4/25BK30	498
ECONM4/25BL30	498
ECONM4/25GN30	498
ECONM4/25NA100	499
ECONM4/25NA30	498
ECONM4/25RD30	498
ECONM4/25YW30	498
ECONM4/3NA30	498
ECONM5/33NA30	498
ECONM5/3BK30	498
ECONM5/3BL30	498
ECONM5/3GN30	498
ECONM5/3NA100	499
ECONM5/3NA30	498
ECONM5/3RD30	498
ECONM5/3YW30	498
ECONM6/45NA30	498
ECONM6/4BK100	499
ECONM6/4BK30	498
ECONM6/4BL100	499
ECONM6/4BL30	498
ECONM6/4BL500	499
ECONM6/4GN100	499
ECONM6/4GN30	498
ECONM6/4NA100	499
ECONM6/4NA30	498
ECONM6/4NA500	499
ECONM6/4RD100	499
ECONM6/4RD30	498
ECONM6/4YW100	499
ECONM6/4YW30	498
ECONM8/55BK30	498
ECONM8/55NA30	498
ECONM8/6BK100	499
ECONM8/6BK30	498
ECONM8/6BL100	499
ECONM8/6BL30	498
ECONM8/6GN30	498
ECONM8/6NA100	499
ECONM8/6NA30	498
ECONM8/6NA500	499
ECONM8/6RD30	498
ECONM8/6YW30	498
EE-45-110-UPVC	627
EE-45-125-UPVC	627
EE-45-140-UPVC	627
EE-45-16-UPVC	627
EE-45-160-UPVC	627
EE-45-20-UPVC	627
EE-45-200-UPVC	627
EE-45-225-UPVC	627
EE-45-25-UPVC	627
EE-45-32-UPVC	627
EE-45-40-UPVC	627
EE-45-50-UPVC	627
EE-45-63-UPVC	627
EE-45-75-UPVC	627
EE-45-90-UPVC	627
EE-90-110-UPVC	627
EE-90-125-UPVC	627
EE-90-140-UPVC	627
EE-90-16-UPVC	627
EE-90-160-UPVC	627
EE-90-20-UPVC	627
EE-90-200-UPVC	627
EE-90-225-UPVC	627
EE-90-25-UPVC	627
EE-90-32-UPVC	627
EE-90-40-UPVC	627
EE-90-50-UPVC	627
EE-90-63-UPVC	627
EE-90-75-UPVC	627
EE-90-90-UPVC	627
EEFFUP1	423
EEFFUP112	423
EEFFUP114	423
EEFFUP12	423
EEFFUP14	423
EEFFUP18	423
EEFFUP2	423
EEFFUP34	423
EEFFUP38	423
EEMFUP12	423
EEMFUP14	423
EEMFUP18	423
EEMFUP38	423
EEMMUP12	422
EEMMUP14	422
EEMMUP18	422
EEMMUP38	422
EES-90-110-UPVC	627
EES-90-20-UPVC	627
EES-90-25-UPVC	627
EES-90-32-UPVC	627
EES-90-40-UPVC	627
EES-90-50-UPVC	627
EES-90-63-UPVC	627
EES-90-75-UPVC	627
EES-90-90-UPVC	627
EFC12F	416
EFC12MF	416
EFC14F	416
EFC14MF	416
EFC18F	416
EFC18MF	416
EFC38F	416
EFC38MF	416
EFFE12	417
EFFE14	417
EFFE18	417
EFFE38	417
EFFFBTUP14	423
EFFFBTUP18	423
EFFFBTUP38	423

E, F

Part Code	Page
EFFFTUP1	423
EFFFTUP112	423
EFFFTUP114	423
EFFFTUP12	423
EFFFTUP14	423
EFFFTUP18	423
EFFFTUP212	423
EFFFTUP3	423
EFFFTUP34	423
EFFFTUP38	423
EFFFYUP12	423
EFFFYUP38	423
EFS1	414
EFS12	414
EFS14	414
EFS18	414
EFS34	414
EFS38	414
EFSM5	414
EFSUP1	422
EFSUP112	422
EFSUP114	422
EFSUP12	422
EFSUP14	422
EFSUP18	422
EFSUP2	422
EFSUP212	422
EFSUP34	422
EFSUP38	422
EFSUP4	422
EMF45UP14	423
EMF45UP18	423
EMFA1	415
EMFA12	415
EMFA14B	415
EMFA14D	415
EMFA18C	415
EMFA18D	415
EMFA38	415
EMFE12	417
EMFE14	417
EMFE18	417
EMFE38	417
EMME12	417
EMME14	417
EMME18	417
EMME38	417
EMMMTUP12	423
EMMMTUP14	423
EMMMTUP18	423
EMMMTUP38	423
EPGB050114	338

Part Code	Page
EPGB050314	338
EPGB050414	338
EPGB050614	338
EPGB051014	338
EPGB051214	338
EPGB051614	338
EPGB060114	338
EPGB060314	338
EPGB060414	338
EPGB060614	338
EPGB061014	338
EPGB061214	338
EPGB061614	338
EPGR040118	338
EPGR040318	338
EPGR040418	338
EPGR040618	338
EPGR041018	338
EPGR041218	338
EPGR041618	338
EPGR042018	338
EPGR050118	338
EPGR050314	338
EPGR050414	338
EPGR050418	338
EPGR050614	338
EPGR050618	338
EPGR051014	338
EPGR051018	338
EPGR051214	338
EPGR051218	338
EPGR051614	338
EPGR051618	338
EPGR052014	338
EPGR052018	338
EPGR060114	338
EPGR060314	338
EPGR060414	338
EPGR060614	338
EPGR061014	338
EPGR061214	338
EPGR061614	338
ESU1	423
ESU12	423
ESU14	423
ESU18	423
ESU34	423
ESU38	423
ETF12	416
ETF14	416
ETF18	416
ETF38	416

Part Code	Page
ETFFM12	416
ETFFM14	416
ETFFM18	416
ETFFM38	416
ETFMF12	416
ETFMF14	416
ETFMF18	416
ETFMF38	416
ETM12	417
ETM14	417
ETM18	417
ETM38	417
ETMFM12	417
ETMFM14	417
ETMFM18	417
ETMFM38	417
ETMMF12	416
ETMMF14	416
ETMMF18	416
ETMMF38	416
EVA-B-32-30M	546
EVA-B-32-CUFF	546
EVA-B-38-30M	546
EVA-B-38-CUFF	546
EVA-B-50-30M	546
EVA-B-50-CUFF	546
EVA-G-32-30M	546
EVA-G-32-CUFF	546
EVA-G-38-30M	546
EVA-G-38-CUFF	546
EVA-G-50-30M	546
EVA-G-50-CUFF	546
EVGR040118	338
F	
F12MD	316
F14MD	316
F18MD	316
F38MD	316
F7925-OLP118	590
F83050-OLP118	590
FA100	821
FA100-2S	821
FA102	821
FA102-2S	821
FA200	821
FA200-2S	821
FA202	821
FA202-2S	821
FA300	821
FA300-2S	821
FASA150-110-UPVC	630
FASA150-25-UPVC	630

Part Code	Page
FASA150-32-UPVC	630
FASA150-40-UPVC	630
FASA150-50-UPVC	630
FASA150-63-UPVC	630
FASA150-75-UPVC	630
FASA150-90-UPVC	630
FD84050-OLP118	590
FD9450-OLPBW118	591
FF10-CS-M5M	175
FF10-N-M5M	175
FF10-S-M5M	175
FF10-WS-M5M	175
FF10-WS-M5M-FDA	175
FF15-CS	175
FF15-N	175
FF15-S	175
FF15-WS	175
FF15-WS-FDA	175
FF15X-CS	175
FF15X-N	175
FF15X-S	175
FF15X-WS	175
FF15X-WS-FDA	175
FF20-CS	176
FF20-N	176
FF20-S	176
FF20-WS	176
FF20-WS-FDA	176
FF20X-CS	176
FF20X-N	176
FF20X-S	176
FF20X-WS	176
FF20X-WS-FDA	176
FF25-CS	176
FF25-N	176
FF25-S	176
FF25-WS	176
FF25-WS-FDA	176
FF30-CS	176
FF30-N	176
FF30-S	176
FF30-WS	176
FF30-WS-FDA	176
FFILT.ELW	598
FFILT.ET	598
FFILT.KIT	598
FFILT.KITW	598
FGPN16-1	639
FGPN16-112	639
FGPN16-114	639
FGPN16-12	639
FGPN16-2	639

F

Part Code	Page
FGPN16-3	639
FGPN16-34	639
FGPN16-4	639
FGPN16-6	639
FGR-1-18	879
FGR-3-18	879
FGTABE-1	639
FGTABE-112	639
FGTABE-114	639
FGTABE-12	639
FGTABE-2	639
FGTABE-3	639
FGTABE-34	639
FGTABE-4	639
FGTABE-6	639
FHTC11	407
FHTC112	407
FHTC112112	407
FHTC112114	407
FHTC1141	407
FHTC114114	407
FHTC1212	407
FHTC1214	407
FHTC1238	407
FHTC12516	407
FHTC1258	407
FHTC134	407
FHTC1414	407
FHTC14316	407
FHTC1438	407
FHTC14516	407
FHTC158	407
FHTC1814	407
FHTC1818	407
FHTC18316	407
FHTC2112	407
FHTC22	407
FHTC3412	407
FHTC3434	407
FHTC3438	407
FHTC3458	407
FHTC3812	407
FHTC3814	407
FHTC3838	407
FHTC38516	407
FHTF1212	407
FHTF1234	407
FHTF1238	407
FHTF1258	407
FHTF1412	407
FHTF1414	407
FHTF1438	407
FHTF1814	407
FHTF18316	407
FHTF3812	407
FHTF3814	407
FHTF3838	407
FHTF38516	407
FHTW11	407
FHTW112	407
FHTW1212	407
FHTW1214	407
FHTW1238	407
FHTW12516	407
FHTW1258	407
FHTW134	407
FHTW1414	407
FHTW14316	407
FHTW1438	407
FHTW14516	407
FHTW158	407
FHTW1814	407
FHTW1818	407
FHTW18316	407
FHTW3412	407
FHTW3434	407
FHTW3438	407
FHTW3458	407
FHTW3812	407
FHTW3814	407
FHTW3838	407
FHTW38516	407
FL1	224
FL2	224
FL3	224
FL4	224
FL5	224
FL6	224
FL8	224
FL9	224
FLAN-A150-1-SOP	682
FLAN-A150-1-WN	682
FLAN-A150-112-WN	682
FLAN-A150-112SCR	683
FLAN-A150-112SOP	682
FLAN-A150-114-WN	682
FLAN-A150-12-SOP	682
FLAN-A150-2-SCR	683
FLAN-A150-2-SOP	682
FLAN-A150-2-WN	682
FLAN-A150-212-WN	682
FLAN-A150-212SCR	683
FLAN-A150-3-SCR	683
FLAN-A150-3-SOP	682
FLAN-A150-3-WN	682
FLAN-A150-34-SOP	682
FLAN-A150-4-SOP	682
FLAN-A150-4-WN	682
FLAN-A300-1-SCR	683
FLAN-A300-112SCR	683
FLAN-A300-114SOP	682
FLAN-A300-12-SCR	683
FLAN-A300-2-SCR	683
FLAN-A300-2-SOP	682
FLAN-A300-212-WN	682
FLAN-A300-3-WN	682
FLAN-A300-34-SCR	683
FLAN-A300-34-SOP	682
FLAN-A300-4-SOP	682
FLAN-A300-4-WN	682
FLAN-D-1-SCR	681
FLAN-D-100-BLANK	682
FLAN-D-100-SOB	681
FLAN-D-100-SOP	681
FLAN-D-114-SCR	681
FLAN-D-12-SCR	681
FLAN-D-125-SOP	681
FLAN-D-15-BLANK	682
FLAN-D-150-BLANK	682
FLAN-D-150-SOP	681
FLAN-D-2-SCR	681
FLAN-D-20-BLANK	682
FLAN-D-200-BLANK	682
FLAN-D-200-SOB	681
FLAN-D-200-SOP	681
FLAN-D-212-SCR	681
FLAN-D-25-BLANK	682
FLAN-D-250-BLANK	682
FLAN-D-250-SOB	681
FLAN-D-250-SOP	681
FLAN-D-3-SCR	681
FLAN-D-300-BLANK	682
FLAN-D-300-SOB	681
FLAN-D-300-SOP	681
FLAN-D-32-BLANK	682
FLAN-D-32-SOP	681
FLAN-D-34-SCR	681
FLAN-D-4-SCR	681
FLAN-D-50-BLANK	682
FLAN-D-50-SOB	681
FLAN-D-50-SOP	681
FLAN-D-6-SCR	681
FLAN-D-65-BLANK	682
FLAN-D-65-SOP	681
FLAN-D-80-BLANK	682
FLAN-D-80-SOB	681
FLAN-D-80-SOP	681
FLAN-D150-12-SOB	681
FLAN-D150-58-SOB	681
FLAN-E-1-SCR	681
FLAN-E-100-BLANK	682
FLAN-E-100-SOB	681
FLAN-E-100-SOP	681
FLAN-E-112-SCR	681
FLAN-E-114-SCR	681
FLAN-E-12-SCR	681
FLAN-E-125-BLANK	682
FLAN-E-125-SOB	681
FLAN-E-125-SOP	681
FLAN-E-15-BLANK	682
FLAN-E-15-SOB	681
FLAN-E-15-SOP	681
FLAN-E-150-BLANK	682
FLAN-E-150-SOP	681
FLAN-E-2-SCR	681
FLAN-E-20-SOB	681
FLAN-E-20-SOP	681
FLAN-E-200-BLANK	682
FLAN-E-200-SOP	681
FLAN-E-212-SCR	681
FLAN-E-25-BLANK	682
FLAN-E-25-SOB	681
FLAN-E-25-SOP	681
FLAN-E-250-BLANK	682
FLAN-E-250-SOB	681
FLAN-E-250-SOP	681
FLAN-E-3-SCR	681
FLAN-E-300-BLANK	682
FLAN-E-300-SOP	681
FLAN-E-32-BLANK	682
FLAN-E-32-SOB	681
FLAN-E-32-SOP	681
FLAN-E-34-SCR	681
FLAN-E-4-SCR	681
FLAN-E-40-BLANK	682
FLAN-E-40-SOB	681
FLAN-E-40-SOP	681
FLAN-E-5-SCR	681
FLAN-E-50-BLANK	682
FLAN-E-50-SOB	681
FLAN-E-50-SOP	681
FLAN-E-6-SCR	681
FLAN-E-65-BLANK	682
FLAN-E-65-SOB	681
FLAN-E-65-SOP	681
FLAN-E-80-BLANK	682
FLAN-E-80-SOB	681
FLAN-E-80-SOP	681
FLAN-E150-12-SOB	681
FLAN-E150-58-SOB	681
FLAN-T16-1-SCR	683
FLAN-T16-1-SOP	682

F, G

Part Code	Page
FLAN-T16-1-WN	682
FLAN-T16-112-SOP	682
FLAN-T16-112-WN	682
FLAN-T16-114-SCR	683
FLAN-T16-114-SOP	682
FLAN-T16-114-WN	682
FLAN-T16-12-SCR	683
FLAN-T16-12-SOP	682
FLAN-T16-2-SCR	683
FLAN-T16-2-SOP	682
FLAN-T16-2-WN	682
FLAN-T16-212-SCR	683
FLAN-T16-212-SOP	682
FLAN-T16-212-WN	682
FLAN-T16-3-SCR	683
FLAN-T16-3-SOP	682
FLAN-T16-3-WN	682
FLAN-T16-34-SCR	683
FLAN-T16-34-SOP	682
FLAN-T16-4-SCR	683
FLAN-T16-4-SOP	682
FLAN-T16-4-WN	682
FLAN-T40-1-SCR	683
FLAN-T40-1-WN	682
FLAN-T40-112-SCR	683
FLAN-T40-112-SOP	682
FLAN-T40-112-WN	682
FLAN-T40-114-SCR	683
FLAN-T40-12-SCR	683
FLAN-T40-12-SOP	682
FLAN-T40-2-SCR	683
FLAN-T40-2-SOP	682
FLAN-T40-2-WN	682
FLAN-T40-212-SCR	683
FLAN-T40-212-SOP	682
FLAN-T40-212-WN	682
FLAN-T40-3-SCR	683
FLAN-T40-3-SOP	682
FLAN-T40-34-SCR	683
FLAN-T40-4-SCR	683
FLAN-T40-4-SOP	682
FLAN-T40-4-WN	682
FLX15	625
FLX16	625
FLX17	625
FLX18	625
FLX19	625
FLX20	625
FLX21	625
FLX22	625
FLX23	625
FLX24	625
FLX25	625
FLX26	625
FLX27	625
FLX29	625
FLX31	625
FLX33	625
FLX36	625
FLX37	625
FLX38	625
FM-RTV-310	828
FM01-100	827
FM01-20	827
FM15-100	827
FM15-20	827
FM150	822
FM150-2S	822
FM18-250	829
FM18-50	829
FM22-250	828
FM22-50	828
FM250	822
FM250-2S	822
FM4	597
FM41-250	828
FM41-50	828
FM42-250	828
FM42-50	828
FM43-250	827
FM43-50	827
FM50	822
FM50-2S	822
FM66-50	828
FM70-250	827
FM70-50	827
FM72-250	828
FM74-250	829
FM74-50	829
FM95-100	827
FM95-20	827
FM96-100	827
FM96-20	827
FMP01VG1	90
FMP02VG6	90
FMP03VL100	90
FMP04VL160	90
FMP05VL250	90
FMP06VG10	90
FMP06VL4	90
FMP07VG16	90
FMP07VL7	90
FMP08VG25	90
FMP08VL11	90
FMP09VG40	90
FMP09VL18	90
FMP10VG100	90
FMP10VL35	90
FMP11VG100	90
FMP11VL50	90
FMP12VG160	90
FMP12VL70	90
FMP13VG250	90
FMP13VL130	90
FMP14VG300	90
FMP14VL150	90
FMP15VG350	90
FMP15VL170	90
FOR-1-18	878
FOR-3-18	878
FPN16-110-UPVC	630
FPN16-20-UPVC	630
FPN16-25-UPVC	630
FPN16-32-UPVC	630
FPN16-40-UPVC	630
FPN16-50-UPVC	630
FPN16-63-UPVC	630
FPN16-75-UPVC	630
FPN16-90-UPVC	630
FPP12	418
FPP14	418
FPP18	418
FPP38	418
FPT12	418
FPT14	418
FPT18	418
FPT38	418
FR+L12MD	315
FR+L14MD	315
FR+L18MD	315
FR+L38MD	315
FR12MD	314
FR14MD	314
FR18MD	314
FR38MD	314
FRBP1214	415
FRBP1238	415
FRBP134	415
FRBP1418	415
FRBP18M5	415
FRBP3412	415
FRBP3814	415
FRBP3818	415
FRL12MD	315
FRL14MD	315
FRL18MD	315
FRL38MD	315
FSB/05	814
FSB/25	814
FSB/25BM	814
FSB/25SD	814
FSD13050-OLP118	590
FSD14050-OLP118	590
FSSG10/8-12/8	425
FSSG6/4-1/4	425
FSSG6/4-3/8	425
FSSG8/6-1/4	425
FSSG8/6-3/8	425
FTA-110-3-UPVC	630
FTA-110-4-UPVC	630
FTA-16-12-UPVC	630
FTA-16-38-UPVC	630
FTA-20-12-UPVC	630
FTA-20-34-UPVC	630
FTA-25-1-UPVC	630
FTA-25-12-UPVC	630
FTA-25-34-UPVC	630
FTA-32-1-UPVC	630
FTA-32-34-UPVC	630
FTA-40-1-UPVC	630
FTA-40-114-UPVC	630
FTA-50-112-UPVC	630
FTA-50-114-UPVC	630
FTA-50-2-UPVC	630
FTA-63-112-UPVC	630
FTA-63-2-UPVC	630
FTA-75-2-UPVC	630
FTA-75-212-UPVC	630
FTA-90-212-UPVC	630
FTA-90-3-UPVC	630
FTA-90-4-UPVC	630
FW1	428
FW112	428
FW114	428
FW12	428
FW14	428
FW18	428
FW34	428
FW38	428
G	
G-3050-N	591
G1TU2VL1	249
G1TU2VL2	249
G1TU2VL3	249
GA-3100-N	591
GBN1	668
GBN1-0100	668
GBN1-0150	668
GBN1-0200	668
GBN1-0250	668
GBN1-0300	668
GBN1-0400	668

G

Part Code	Page
GBN1-0500	668
GBN112	668
GBN112-0150	668
GBN112-0200	668
GBN112-0250	668
GBN112-0300	668
GBN114	668
GBN114-0150	668
GBN114-0200	668
GBN114-0250	668
GBN114-0300	668
GBN12	668
GBN12-0150	668
GBN12-0200	668
GBN12-0250	668
GBN12-0300	668
GBN12-0400	668
GBN12-0500	668
GBN2	668
GBN2-0150	668
GBN2-0200	668
GBN2-0250	668
GBN2-0300	668
GBN34	668
GBN34-0100	668
GBN34-0150	668
GBN34-0200	668
GBN34-0250	668
GBN34-0300	668
GBN34-0400	668
GBN34-0500	668
GBN38	668
GBNT1	672
GBNT112	672
GBNT114	672
GBNT12	672
GBNT2	672
GBNT34	672
GBNT38	672
GBP-M10	672
GBR-110	630
GBR-20	630
GBR-25	630
GBR-32	630
GBR-40	630
GBR-50	630
GBR-63	630
GBR-75	630
GBR-90	630
GBV112FF	228
GBV112MF	229
GBV114FF	228
GBV114MF	229
GBV12FF	228
GBV12MF	229
GBV14FF	228
GBV14MF	229
GBV1FF	228
GBV1MF	229
GBV2FF	228
GBV2MF	229
GBV34FF	228
GBV34MF	229
GBV38FF	228
GBV38MF	229
GBVT12FF	229
GBVT12MF	229
GBVT1FF	229
GBVT1MF	229
GBVT34FF	229
GBVT34MF	229
GDPR1	672
GDPR112	672
GDPR114	672
GDPR12	672
GDPR2	672
GDPR34	672
GFBC1	672
GFBC112	672
GFBC114	672
GFBC12	672
GFBC2	672
GFBC34	672
GFBC38	672
GFEC1	671
GFEC112	671
GFEC114	671
GFEC12	671
GFEC2	671
GFEC34	671
GFEC38	671
GFET1	670
GFET112	670
GFET114	670
GFET12	670
GFET2	670
GFET3	670
GFET34	670
GFET38	670
GFET4	670
GFEU1	671
GFEU112	671
GFEU114	671
GFEU12	671
GFEU2	671
GFEU3	671
GFEU34	671
GFEU38	671
GFFEB451	670
GFFEB45112	670
GFFEB45114	670
GFFEB4512	670
GFFEB452	670
GFFEB453	670
GFFEB4534	670
GFFEB4538	670
GFFEB901	670
GFFEB90112	670
GFFEB90114	670
GFFEB9012	670
GFFEB902	670
GFFEB903	670
GFFEB9034	670
GFFEB9038	670
GFFEB904	670
GFFEE1	669
GFFEE112	669
GFFEE114	669
GFFEE12	669
GFFEE2	669
GFFEE212	669
GFFEE3	669
GFFEE34	669
GFFEE38	669
GFFEE4	669
GFFRE112	670
GFFRE1121	670
GFFRE112114	670
GFFRE1141	670
GFFRE11412	670
GFFRE1238	670
GFFRE134	670
GFFRE21	670
GFFRE2112	670
GFFRE2114	670
GFFRE3412	670
GFFRE3438	670
GFRT112	670
GFRT1121	670
GFRT112114	670
GFRT11212	670
GFRT11234	670
GFRT1141	670
GFRT11412	670
GFRT11434	670
GFRT1238	670
GFRT134	670
GFRT138	670
GFRT21	670
GFRT2112	670
GFRT2114	670
GFRT212	670
GFRT234	670
GFRT3412	670
GFRT3438	670
GFS1	669
GFS112	669
GFS114	669
GFS12	669
GFS2	669
GFS3	669
GFS34	669
GFS38	669
GFS4	669
GG-1	728
GGC-M10	672
GH12Y-25M	514
GH12Y-50M	514
GH19Y-25M	514
GH19Y-50M	514
GH203	207
GH252	207
GH253	207
GH25Y-25M	514
GH25Y-50M	514
GH302	207
GHEN1	668
GHEN112	668
GHEN114	668
GHEN12	668
GHEN2	668
GHEN3	668
GHEN34	668
GHEN38	668
GHEN4	668
GHL302	207
GHRN112	668
GHRN1121	668
GHRN112114	668
GHRN11234	668
GHRN1141	668
GHRN11412	668
GHRN11434	668
GHRN1214	668
GHRN1238	668
GHRN134	668
GHRN21	668
GHRN2112	668

G

Part Code	Page
GHRN2114	668
GHRN32	668
GHRN3412	668
GHRN3438	668
GKA10	480
GKA12	480
GKA14	480
GKA15	480
GKA34	480
GKA38	480
GKA54	480
GKD2	683
GKD3	683
GKI10	480
GKI12	480
GKI14	480
GKI15	480
GKI34	480
GKI38	480
GKI54	480
GKIBCNP162	683
GKIBCNP163	683
GKIBCNP164	683
GKIBCNP166	683
GKNP163	683
GKNP166	683
GMBP1	671
GMBP112	671
GMBP114	671
GMBP12	671
GMBP2	671
GMBP3	671
GMBP34	671
GMBP38	671
GMBP4	671
GMFEE1	669
GMFEE112	669
GMFEE114	669
GMFEE12	669
GMFEE2	669
GMFEE212	669
GMFEE3	669
GMFEE34	669
GMFEE38	669
GMFEE4	669
GMFEU1	671
GMFEU112	671
GMFEU114	671
GMFEU12	671
GMFEU2	671
GMFEU34	671
GMFEU38	671
GMIT1	673
GMIT1/2	673
GMIT112	673
GMIT112/2	673
GMIT114	673
GMIT114/2	673
GMIT12	673
GMIT12/2	673
GMIT12/2PE	673
GMIT12PE	673
GMIT2	673
GMIT2/2	673
GMIT34	673
GMIT34/2	673
GN-14	826
GN-18	826
GN-BOX-1	826
GN-BOX-2	826
GN-D-HEX-14	826
GN-D-HEX-18	826
GN-RH16-14	826
GN-RH16-18	826
GN45-14	826
GN45-18	826
GN65-18	826
GN90-14	826
GN90-18	826
GPA06-100M	516
GPA06-15M-F1/4	514
GPA06-30M	516
GPA08-100M	516
GPA08-15M-F1/4	514
GPA08-30M	516
GPA10-100M	516
GPA10-15M-F3/8	514
GPA10-30M	516
GPA13-100M	516
GPA13-15M-F1/2	514
GPA13-30M	516
GPA19-15M	516
GPA19-15M-AS	519
GPA19-30M	516
GPA25-30M	516
GPBT1	672
GPBT112	672
GPBT114	672
GPBT12	672
GPBT2	672
GPBT34	672
GPN16BR16-1	639
GPN16BR16-112	639
GPN16BR16-114	639
GPN16BR16-12	639
GPN16BR16-2	639
GPN16BR16-212	639
GPN16BR16-3	639
GPN16BR16-34	639
GPN16BR16-4	639
GPN16BR16-5	639
GPN16BR16-6	639
GPN16BR16-8	639
GR100	584
GRB112	669
GRB1121	669
GRB112114	669
GRB11212	669
GRB11234	669
GRB1141	669
GRB11412	669
GRB11434	669
GRB1214	669
GRB1238	669
GRB134	669
GRB138	669
GRB21	669
GRB2112	669
GRB2114	669
GRB212	669
GRB234	669
GRB31	669
GRB3112	669
GRB32	669
GRB3412	669
GRB3438	669
GRB42	669
GRB4212	669
GRB43	669
GRD2	683
GRD3	683
GRD4	683
GRD6	683
GRD8	683
GRFS112	668
GRFS1121	668
GRFS112114	668
GRFS11212	668
GRFS11234	668
GRFS1141	668
GRFS11412	668
GRFS11434	668
GRFS1238	668
GRFS134	668
GRFS138	668
GRFS21	668
GRFS2112	668
GRFS2114	668
GRFS212	668
GRFS234	668
GRFS3112	668
GRFS32	668
GRFS3412	668
GRFS42	668
GRFS43	668
GRIBCNP162	683
GRIBCNP163	683
GRIBCNP164	683
GRIBCNP166	683
GRIBCNP168	683
GRNP162	683
GRNP163	683
GRNP164	683
GRNP166	683
GRNP168	683
GS-27-G	312
GS203	207
GS252	207
GS253	207
GS300/2GN-50M	852
GS302	207
GSK10	480
GSK13	480
GSK16	480
GSK19	480
GSK25	480
GSK32	480
GSK38	480
GSK9	882
GSKS	882
GSL302	207
GSM10-1M	672
GSPR1	672
GSPR112	672
GSPR114	672
GSPR12	672
GSPR2	672
GSPR34	672
GV112B	233
GV112SS	698
GV114B	233
GV114SS	698
GV12B	233
GV12SS	698
GV1B	233
GV1SS	698
GV212B	233
GV212SS	698

Part Code	Page
GV2B	233
GV2SS	698
GV34B	233
GV34SS	698
GV38B	233
GV38SS	698
GV3B	233
GV3SS	698
GV4B	233
GVSS1	698
GVSS112	698
GVSS114	698
GVSS12	698
GVSS2	698
GVSS34	698
H	
HANDYFIT-4	384
HANDYFIT-6	384
HANDYFIT-6/8	384
HANDYFIT-8	384
HANDYKIT-10	376
HANDYKIT-4	376
HANDYKIT-6	376
HANDYKIT-6/8	376
HANDYKIT-8	376
HANDYKIT-B-10	377
HANDYKIT-B-4	377
HANDYKIT-B-6	377
HANDYKIT-B-6/8	377
HANDYKIT-B-8	377
HBBH1	755
HBBH112	755
HBBH114	755
HBBH12	755
HBBH14	755
HBBH2	755
HBBH34	755
HBBH38	755
HBFC1	754
HBFC112	754
HBFC114	754
HBFC12	754
HBFC14	754
HBFC2	754
HBFC34	754
HBFC38	754
HBFC58	754
HBFX1	754
HBFX12	754
HBFX14	754
HBFX34	754
HBFX38	754

Part Code	Page
HBMX12	755
HBMX14	755
HBMX34	755
HBMX38	755
HBPA11	751
HBPA112	751
HBPA1121	751
HBPA112114	751
HBPA1141	751
HBPA11434	751
HBPA1212	751
HBPA1214	751
HBPA1238	751
HBPA134	751
HBPA1414	751
HBPA2112	751
HBPA2114	751
HBPA3412	751
HBPA3414	751
HBPA3434	751
HBPA3438	751
HBPA3814	751
HBPA3838	751
HBPMN12M1215	750
HBPMN12M1415	750
HBPMN12M1615	750
HBPMN12M1815	750
HBPMN12M2015	750
HBPMN12M2215	750
HBPMN12M2415	750
HBPMN12M2615	750
HBPMN14M1010	750
HBPMN14M1015	750
HBPMN14M1215	750
HBPMN14M1415	750
HBPMN14M1615	750
HBPMN14M1815	750
HBPMN14M2015	750
HBPMN14M2215	750
HBPMN18M1415	750
HBPMN1M1815	750
HBPMN1M2215	750
HBPMN1M2615	750
HBPMN34M2015	750
HBPMN34M2215	750
HBPMN34M2615	750
HBPMN38M1215	750
HBPMN38M1415	750
HBPMN38M1615	750
HBPMN38M1815	750
HBPMN38M2015	750
HBPMN38M2215	750

Part Code	Page
HBPN1	750
HBPN1112	750
HBPN1114	750
HBPN112	750
HBPN1122	750
HBPN114	750
HBPN114112	750
HBPN1142	750
HBPN12	750
HBPN121	750
HBPN12112	750
HBPN12114	750
HBPN122	750
HBPN1234	750
HBPN1258	750
HBPN14	750
HBPN141	750
HBPN1412	750
HBPN1434	750
HBPN1438	750
HBPN1458	750
HBPN18	750
HBPN1814	750
HBPN1838	750
HBPN2	750
HBPN21	750
HBPN34	750
HBPN341	750
HBPN34112	750
HBPN34114	750
HBPN342	750
HBPN38	750
HBPN381	750
HBPN3812	750
HBPN3834	750
HBPN3858	750
HBPN58	750
HBPN581	750
HBPN58114	750
HBPN5834	750
HBPRB112	751
HBPRB1121	751
HBPRB112114	751
HBPRB11234	751
HBPRB114	751
HBPRB1141	751
HBPRB11412	751
HBPRB11434	751
HBPRB1214	751
HBPRB1238	751
HBPRB134	751
HBPRB138	751

Part Code	Page
HBPRB1418	751
HBPRB21	751
HBPRB2112	751
HBPRB2114	751
HBPRB212	751
HBPRB234	751
HBPRB3412	751
HBPRB3414	751
HBPRB3438	751
HBPRB3814	751
HBPRB3818	751
HBPRS112	752
HBPRS1121	752
HBPRS112114	752
HBPRS1141	752
HBPRS11434	752
HBPRS1214	752
HBPRS1238	752
HBPRS134	752
HBPRS1418	752
HBPRS2112	752
HBPRS2114	752
HBPRS3412	752
HBPRS3438	752
HBPRS3814	752
HBPRS3818	752
HBPS1	751
HBPS112	751
HBPS114	751
HBPS12	751
HBPS14	751
HBPS18	751
HBPS2	751
HBPS34	751
HBPS58	751
HBPTN11	750
HBPTN1112	750
HBPTN1114	750
HBPTN112	750
HBPTN112112	750
HBPTN1141	750
HBPTN114112	750
HBPTN114114	750
HBPTN121	750
HBPTN12114	750
HBPTN1212	750
HBPTN1214	750
HBPTN1234	750
HBPTN1238	750
HBPTN134	750
HBPTN1412	750
HBPTN1414	750

H

Part Code	Page
HBPTN1434	750
HBPTN1438	750
HBPTN1814	750
HBPTN1818	750
HBPTN22	750
HBPTN341	750
HBPTN3412	750
HBPTN3414	750
HBPTN3434	750
HBPTN3438	750
HBPTN381	750
HBPTN3812	750
HBPTN3814	750
HBPTN3818	750
HBPTN3834	750
HBPTN3838	750
HBSEFF1	752
HBSEFF112	752
HBSEFF114	752
HBSEFF12	752
HBSEFF14	752
HBSEFF18	752
HBSEFF2	752
HBSEFF34	752
HBSEFF38	752
HBSEFF58	752
HBSEMF1	752
HBSEMF112	752
HBSEMF114	752
HBSEMF12	752
HBSEMF14	752
HBSEMF18	752
HBSEMF2	752
HBSEMF34	752
HBSEMF38	752
HBSEMF58	752
HBTPN112114	750
HCP1	754
HCP112	754
HCP114	754
HCP12	754
HCP14	754
HCP143MS	572
HCP143SS	572
HCP143SS316	572
HCP18	754
HCP2	754
HCP34	754
HCP38	754
HCP58	754
HCV112FF	748
HCV114FF	748
HCV12FF	748
HCV14FF	748
HCV1FF	748
HCV34FF	748
HCV38FF	748
HDC28	622
HDOP-100	878
HEP-1	481
HEP-2	481
HEP-3	481
HEP-34	481
HF1275	576
HF3588	576
HF5029	576
HF7244	576
HF7322	576
HF7323	576
HF7325	576
HF7326	576
HF7327	576
HF7328	576
HF7329	576
HF7330	576
HF7331	576
HF7332	576
HF7333	576
HGSAB1	563
HGU020-0100	21
HGU020-0200	21
HGU020-0250	21
HGU020-0320	21
HGU020-0400	21
HGU020-0500	21
HGU032-0100	21
HGU032-0200	21
HGU032-0250	21
HGU032-0320	21
HGU032-0400	21
HGU032-0500	21
HGU040-0100	21
HGU040-0200	21
HGU040-0250	21
HGU040-0320	21
HGU040-0400	21
HGU040-0500	21
HGU050-0100	21
HGU050-0200	21
HGU050-0250	21
HGU050-0320	21
HGU050-0400	21
HGU050-0500	21
HGU063-0100	21
HGU063-0200	21
HGU063-0250	21
HGU063-0320	21
HGU063-0400	21
HGU063-0500	21
HGZAB1	563
HH250	818
HH250-2S	818
HH300	818
HH300-2S	818
HH350	818
HH350-2S	818
HH400	818
HH400-2S	818
HH500	818
HH550	818
HH600	818
HJ-AL112	408
HJ-AL114	408
HJ-AL2	408
HJ-AL212	408
HJ-AL3	408
HJ-AL4	408
HJ-SS1	408
HJ-SS112	408
HJ-SS114	408
HJ-SS2	408
HJ-SS3	408
HJ-SS34	408
HJ-SS4	408
HJ-ST1	408
HJ-ST10	408
HJ-ST112	408
HJ-ST114	408
HJ-ST12	408
HJ-ST2	408
HJ-ST212	408
HJ-ST3	408
HJ-ST34	408
HJ-ST38	408
HJ-ST4	408
HJ-ST5	408
HJ-ST6	408
HJ-ST8	408
HLN1	755
HLN112	755
HLN114	755
HLN12	755
HLN14	755
HLN2	755
HLN34	755
HLN38	755
HMEE1	752
HMEE112	752
HMEE114	752
HMEE12	752
HMEE14	752
HMEE18	752
HMEE2	752
HMEE34	752
HMEE38	752
HMEE58	752
HP.SUC17	595
HP.SUC6	595
HP110418	393
HP1104M6X1	393
HP1104M8X1	393
HP110618	393
HP1106M10X1	393
HP1106M6X1	393
HP1106M8X1	393
HP140418	393
HP1404M6X1	393
HP1404M8X1	393
HP140618	393
HP1406M10X1	393
HP1406M6X1	393
HP1406M8X1	393
HPP1	418
HPP12	418
HPP14	418
HPP18	418
HPP34	418
HPP38	418
HPPM5	418
HPS205	595
HPS25	595
HPT12	418
HPT14	418
HPT18	418
HPT38	418
HPTV-1	234
HPTV-12	234
HPTV-34	234
HPTV-38	234
HR031010BL	592
HR65/6M	592
HRM85/30M	592
HRP1	754
HRP112	754
HRP114	754
HRP12	754
HRP14	754
HRP18	754

H

Part Code	Page
HRP34	754
HRP38	754
HSFFB451	753
HSFFB4512	753
HSFFB4514	753
HSFFB4534	753
HSFFB4538	753
HSFFB901	753
HSFFB9012	753
HSFFB9014	753
HSFFB9034	753
HSFFB9038	753
HSFFB9058	753
HSMFB451	753
HSMFB45112	753
HSMFB45114	753
HSMFB4512	753
HSMFB4514	753
HSMFB452	753
HSMFB4534	753
HSMFB4538	753
HSMFB4558	753
HSMFB901	754
HSMFB90112	754
HSMFB90114	754
HSMFB9012	754
HSMFB9014	754
HSMFB902	754
HSMFB9034	754
HSMFB9038	754
HSMFB9058	754
HSMMB901	754
HSMMB90114	754
HSMMB9012	754
HSMMB9014	754
HSMMB9034	754
HSMMB9038	754
HSMMB9058	754
HSP1	754
HSP112	754
HSP114	754
HSP12	754
HSP14	754
HSP18	754
HSP2	754
HSP34	754
HSP38	754
HSP58	754
HSSFF1	751
HSSFF1112	751
HSSFF1114	751
HSSFF112	751
HSSFF114	751
HSSFF114112	751
HSSFF12	751
HSSFF121	751
HSSFF1234	751
HSSFF1258	751
HSSFF14	751
HSSFF1412	751
HSSFF1438	751
HSSFF2	751
HSSFF34	751
HSSFF341	751
HSSFF38	751
HSSFF3812	751
HSSFF58	751
HSSFF581	751
HSSFF5834	751
HSSMF11	752
HSSMF112112	752
HSSMF112114	752
HSSMF1141	752
HSSMF114114	752
HSSMF1212	752
HSSMF1234	752
HSSMF1238	752
HSSMF134	752
HSSMF1412	752
HSSMF1414	752
HSSMF1438	752
HSSMF2112	752
HSSMF2114	752
HSSMF22	752
HSSMF341	752
HSSMF3412	752
HSSMF3434	752
HSSMF3812	752
HSSMF3814	752
HSSMF3838	752
HSST04-10-3M	793
HSST04-10-6M	793
HSST06-10-3M	793
HSST06-10-6M	793
HSST06-15-3M	793
HSST06-15-6M	793
HSST08-10-3M	793
HSST08-10-6M	793
HSST08-15-3M	793
HSST08-15-6M	793
HSST08-20-3M	793
HSST08-20-6M	793
HSST10-10-3M	793
HSST10-10-6M	793
HSST10-15-3M	793
HSST10-15-6M	793
HSST10-20-3M	793
HSST10-20-6M	793
HSST12-10-3M	793
HSST12-10-6M	793
HSST12-15-3M	793
HSST12-15-6M	793
HSST12-20-3M	793
HSST12-20-6M	793
HSST12-30-3M	793
HSST12-30-6M	793
HSST14-15-3M	793
HSST14-15-6M	793
HSST15-15-3M	793
HSST15-15-6M	793
HSST15-20-3M	793
HSST15-20-6M	793
HSST16-15-3M	793
HSST16-15-6M	793
HSST16-20-3M	793
HSST16-20-6M	793
HSST16-25-3M	793
HSST16-25-6M	793
HSST16-30-3M	793
HSST16-30-6M	793
HSST18-15-3M	793
HSST18-15-6M	793
HSST18-20-3M	793
HSST18-20-6M	793
HSST20-20-3M	793
HSST20-20-6M	793
HSST20-25-3M	793
HSST20-25-6M	793
HSST20-30-3M	793
HSST20-30-6M	793
HSST22-15-3M	793
HSST22-15-6M	793
HSST22-20-3M	793
HSST22-20-6M	793
HSST25-15-3M	793
HSST25-15-6M	793
HSST25-20-3M	793
HSST25-20-6M	793
HSST25-25-3M	793
HSST25-25-6M	793
HSST25-30-3M	793
HSST25-30-6M	793
HSST25-40-3M	793
HSST25-40-6M	793
HSST28-20-3M	793
HSST28-20-6M	793
HSST28-30-3M	793
HSST28-30-6M	793
HSST30-30-3M	793
HSST30-30-6M	793
HSST30-40-3M	793
HSST30-40-6M	793
HSST35-20-3M	793
HSST35-20-6M	793
HSST35-30-3M	793
HSST35-30-6M	793
HSST38-30-3M	793
HSST38-30-6M	793
HSST38-40-3M	793
HSST38-40-6M	793
HSST38-50-3M	793
HSST38-50-6M	793
HSST42-30-3M	793
HSST42-30-6M	793
HSSTI025-18-3M	794
HSSTI025-18-6M	794
HSSTI025-20-3M	794
HSSTI025-20-6M	794
HSSTI025-22-3M	794
HSSTI025-22-6M	794
HSSTI038-16-3M	794
HSSTI038-16-6M	794
HSSTI038-18-3M	794
HSSTI038-18-6M	794
HSSTI038-20-3M	794
HSSTI038-20-6M	794
HSSTI100-12-3M	794
HSSTI100-12-6M	794
HSSTI100-16-3M	794
HSSTI100-16-6M	794
HSSTI100-18-3M	794
HSSTI100-18-6M	794
HSSTI500-16-3M	794
HSSTI500-16-6M	794
HSSTI500-18-3M	794
HSSTI500-18-6M	794
HSSTI500-20-3M	794
HSSTI500-20-6M	794
HSSTI750-12-3M	794
HSSTI750-12-6M	794
HSSTI750-14-3M	794
HSSTI750-14-6M	794
HSSTI750-16-3M	794
HSSTI750-16-6M	794
HSSTI750-18-3M	794
HSSTI750-18-6M	794
HSTI025-16-3M	792
HSTI025-16-6M	792
HSTI025-18-3M	792
HSTI025-18-6M	792
HSTI025-20-3M	792
HSTI025-20-6M	792

H

Part Code	Page
HSTI038-16-3M	792
HSTI038-16-6M	792
HSTI038-20-3M	792
HSTI038-20-6M	792
HSTI050-10-3M	792
HSTI050-10-6M	792
HSTI050-14-3M	792
HSTI050-14-6M	792
HSTI050-16-3M	792
HSTI050-16-6M	792
HSTI050-18-3M	792
HSTI050-18-6M	792
HSTI050-20-3M	792
HSTI050-20-6M	792
HSTI063-12-3M	792
HSTI063-12-6M	792
HSTI063-16-3M	792
HSTI063-16-6M	792
HSTI063-18-3M	792
HSTI063-18-6M	792
HSTI075-12-3M	792
HSTI075-12-6M	792
HSTI075-14-3M	792
HSTI075-14-6M	792
HSTI075-16-3M	792
HSTI075-16-6M	792
HSTI075-18-3M	792
HSTI075-18-6M	792
HSTI100-10-3M	792
HSTI100-10-6M	792
HSTI100-12-3M	792
HSTI100-12-6M	792
HSTI100-14-3M	792
HSTI100-14-6M	792
HSTI100-16-3M	792
HSTI100-16-6M	792
HSTI100-18-3M	792
HSTI100-18-6M	792
HSTI125-10-3M	792
HSTI125-10-6M	792
HSTI125-12-3M	792
HSTI125-12-6M	792
HSTI150-10-3M	792
HSTI150-10-6M	792
HSTP06-10-3M	791
HSTP06-10-6M	791
HSTP06-15-3M	791
HSTP06-15-6M	791
HSTP08-10-3M	791
HSTP08-10-6M	791
HSTP08-15-3M	791
HSTP08-15-6M	791
HSTP08-20-3M	791
HSTP08-20-6M	791
HSTP10-10-3M	791
HSTP10-10-6M	791
HSTP10-15-3M	791
HSTP10-15-6M	791
HSTP10-20-3M	791
HSTP10-20-6M	791
HSTP12-10-3M	791
HSTP12-10-6M	791
HSTP12-15-3M	791
HSTP12-15-6M	791
HSTP12-20-3M	791
HSTP12-20-6M	791
HSTP12-25-3M	791
HSTP12-25-6M	791
HSTP12-30-3M	791
HSTP12-30-6M	791
HSTP14-15-3M	791
HSTP14-15-6M	791
HSTP14-20-3M	791
HSTP14-20-6M	791
HSTP15-15-3M	791
HSTP15-15-6M	791
HSTP15-20-3M	791
HSTP15-20-6M	791
HSTP16-15-3M	791
HSTP16-15-6M	791
HSTP16-20-3M	791
HSTP16-20-6M	791
HSTP16-25-3M	791
HSTP16-25-6M	791
HSTP16-30-3M	791
HSTP16-30-6M	791
HSTP18-15-3M	791
HSTP18-15-6M	791
HSTP18-20-3M	791
HSTP18-20-6M	791
HSTP18-25-3M	791
HSTP18-25-6M	791
HSTP20-15-3M	791
HSTP20-15-6M	791
HSTP20-20-3M	791
HSTP20-20-6M	791
HSTP20-25-3M	791
HSTP20-25-6M	791
HSTP20-30-3M	791
HSTP20-30-6M	791
HSTP20-40-3M	791
HSTP20-40-6M	791
HSTP22-15-3M	791
HSTP22-15-6M	791
HSTP22-20-3M	791
HSTP22-20-6M	791
HSTP22-25-3M	791
HSTP22-25-6M	791
HSTP22-30-3M	791
HSTP22-30-6M	791
HSTP25-15-3M	791
HSTP25-15-6M	791
HSTP25-20-3M	791
HSTP25-20-6M	791
HSTP25-25-3M	791
HSTP25-25-6M	791
HSTP25-30-3M	791
HSTP25-30-6M	791
HSTP25-40-3M	791
HSTP25-40-6M	791
HSTP28-20-3M	791
HSTP28-20-6M	791
HSTP28-25-3M	791
HSTP28-25-6M	791
HSTP28-30-3M	791
HSTP28-30-6M	791
HSTP30-20-3M	791
HSTP30-20-6M	791
HSTP30-25-3M	791
HSTP30-25-6M	791
HSTP30-30-3M	791
HSTP30-30-6M	791
HSTP30-40-3M	791
HSTP30-40-6M	791
HSTP30-50-3M	791
HSTP30-50-6M	791
HSTP32-20-3M	791
HSTP32-20-6M	791
HSTP35-20-3M	791
HSTP35-20-6M	791
HSTP35-25-3M	791
HSTP35-25-6M	791
HSTP35-30-3M	791
HSTP35-30-6M	791
HSTP35-60-3M	791
HSTP35-60-6M	791
HSTP38-30-3M	791
HSTP38-30-6M	791
HSTP38-40-3M	791
HSTP38-40-6M	791
HSTP38-50-3M	791
HSTP38-50-6M	791
HSTP38-60-3M	791
HSTP38-60-6M	791
HSTP42-20-3M	791
HSTP42-20-6M	791
HSTP42-30-3M	791
HSTP42-30-6M	791
HSTP42-40-3M	791
HSTP42-40-6M	791
HSTP50-50-3M	791
HSTP50-50-6M	791
HSTY04-10-3M	790
HSTY04-10-6M	790
HSTY06-10-3M	790
HSTY06-10-6M	790
HSTY06-15-3M	790
HSTY06-15-6M	790
HSTY06-20-3M	790
HSTY06-20-6M	790
HSTY08-10-3M	790
HSTY08-10-6M	790
HSTY08-15-3M	790
HSTY08-15-6M	790
HSTY10-10-3M	790
HSTY10-10-6M	790
HSTY10-15-3M	790
HSTY10-15-6M	790
HSTY10-20-3M	790
HSTY10-20-6M	790
HSTY12-10-3M	790
HSTY12-10-6M	790
HSTY12-15-3M	790
HSTY12-15-6M	790
HSTY12-20-3M	790
HSTY12-20-6M	790
HSTY15-15-3M	790
HSTY15-15-6M	790
HSTY15-20-3M	790
HSTY15-20-6M	790
HSTY16-15-3M	790
HSTY16-15-6M	790
HSTY16-20-3M	790
HSTY16-20-6M	790
HSTY16-30-3M	790
HSTY16-30-6M	790
HSTY18-15-3M	790
HSTY18-15-6M	790
HSTY18-20-3M	790
HSTY18-20-6M	790
HSTY18-25-3M	790
HSTY18-25-6M	790
HSTY20-20-3M	790
HSTY20-20-6M	790
HSTY20-25-3M	790
HSTY20-25-6M	790
HSTY20-30-3M	790
HSTY20-30-6M	790
HSTY22-15-3M	790
HSTY22-15-6M	790
HSTY22-20-3M	790
HSTY22-20-6M	790

H

Part Code	Page
HSTY22-25-3M	790
HSTY22-25-6M	790
HSTY25-20-3M	790
HSTY25-20-6M	790
HSTY25-25-3M	790
HSTY25-25-6M	790
HSTY25-30-3M	790
HSTY25-30-6M	790
HSTY25-40-3M	790
HSTY25-40-6M	790
HSTY28-20-3M	790
HSTY28-20-6M	790
HSTY28-25-3M	790
HSTY28-25-6M	790
HSTY28-30-3M	790
HSTY28-30-6M	790
HSTY30-25-3M	790
HSTY30-25-6M	790
HSTY30-30-3M	790
HSTY30-30-6M	790
HSTY30-40-3M	790
HSTY30-40-6M	790
HSTY30-50-3M	790
HSTY30-50-6M	790
HSTY35-20-3M	790
HSTY35-20-6M	790
HSTY35-30-3M	790
HSTY35-30-6M	790
HSTY38-30-3M	790
HSTY38-30-6M	790
HSTY38-40-3M	790
HSTY38-40-6M	790
HSTY42-20-3M	790
HSTY42-20-6M	790
HSTY42-30-3M	790
HSTY42-30-6M	790
HSV12F	237
HSV12M	237
HSV14F	237
HSV14M	237
HSV18F	237
HSV18M	237
HSV38F	237
HT100	564
HT11	404
HT1112	404
HT1114	404
HT1114NP	406
HT112	404
HT112112	404
HT112112NP	406
HT112114	404
HT1122	404
HT112NP	406
HT1141	404
HT114112	404
HT114114	404
HT114114NP	406
HT1141NP	406
HT11NP	406
HT120	564
HT121	404
HT1212	404
HT1212NP	406
HT1214	404
HT1214NP	406
HT121NP	406
HT1234	404
HT1234NP	406
HT1238	404
HT1238NP	406
HT12516	404
HT12516NP	406
HT1258	404
HT1258NP	406
HT134	404
HT134NP	406
HT140	564
HT1412	404
HT1412NP	406
HT1414	404
HT1414NP	406
HT1418	404
HT1418NP	406
HT14316	404
HT14316NP	406
HT1438	404
HT1438NP	406
HT14516	404
HT14516NP	406
HT158	404
HT160	564
HT180	564
HT1814	404
HT1814NP	406
HT1818	404
HT1818NP	406
HT18316	404
HT18316NP	406
HT1838	404
HT1838NP	406
HT18516	404
HT18516NP	406
HT200	564
HT2112	404
HT22	404
HT220	564
HT22NP	406
HT240	564
HT260	564
HT27	564
HT280	564
HT30	564
HT320	564
HT340	564
HT341	404
HT34114	404
HT3412	404
HT3412NP	406
HT3414	404
HT341NP	406
HT3434	404
HT3434NP	406
HT3438	404
HT3438NP	406
HT34516	404
HT3458	404
HT3458NP	406
HT35	564
HT360	564
HT380	564
HT3812	404
HT3812NP	406
HT3814	404
HT3814NP	406
HT3834	404
HT3834NP	406
HT3838	404
HT3838NP	406
HT38516	404
HT38516NP	406
HT3858	404
HT3858NP	406
HT40	564
HT400	564
HT420	564
HT440	564
HT45	564
HT460	564
HT480	564
HT50	564
HT500	564
HT60	564
HT65	564
HT70	564
HT80	564
HT90	564
HT95	564
HTFFF1	753
HTFFF112	753
HTFFF114	753
HTFFF12	753
HTFFF14	753
HTFFF18	753
HTFFF2	753
HTFFF34	753
HTFFF38	753
HTFFF58	753
HTFFM1	753
HTFFM112	753
HTFFM114	753
HTFFM12	753
HTFFM14	753
HTFFM34	753
HTFFM38	753
HTFMM1	753
HTFMM112	753
HTFMM114	753
HTFMM12	753
HTFMM14	753
HTFMM2	753
HTFMM34	753
HTFMM38	753
HTMFM1	753
HTMFM112	753
HTMFM114	753
HTMFM12	753
HTMFM14	753
HTMFM2	753
HTMFM34	753
HTMFM38	753
HTMMM1	753
HTMMM112	753
HTMMM114	753
HTMMM12	753
HTMMM14	753
HTMMM18	753
HTMMM2	753
HTMMM34	753
HTMMM38	753
HTMMM58	753
HTP11	405
HTP1114	405
HTP112	405
HTP121	405
HTP1212	405
HTP1212M	405
HTP1214	405

H, I

Part Code	Page
HTP1217M	405
HTP1234	405
HTP1238	405
HTP12516	405
HTP1258	405
HTP134	405
HTP1412	405
HTP1412M	405
HTP1414	405
HTP14316	405
HTP1438	405
HTP14516	405
HTP147M	405
HTP148M	405
HTP149M	405
HTP158	405
HTP1814	405
HTP1838	405
HTP18516	405
HTP187M	405
HTP188M	405
HTP189M	405
HTP341	405
HTP3412	405
HTP3414	405
HTP3434	405
HTP3438	405
HTP34516	405
HTP3458	405
HTP3812	405
HTP3812M	405
HTP3814	405
HTP3817M	405
HTP3834	405
HTP3838	405
HTP38516	405
HTP3858	405
HTP389M	405
HV1050	820
HV150	819
HV150-2S	819
HV200	819
HV200-2S	819
HV250-U	819
HV250-U2S	819
HV300	819
HV300-2S	819
HV450	819
HV450-2S	819
HV650	820
HV850	820
HVPVC1/2-30M	497
HVPVC1/4-30M	497
HVPVC3/8-30M	497
HVPVC5/16-30M	497
HW100	584
HW100P	584
I	
IBC-A-1-S606	487
IBC-A-112-S606	487
IBC-A-2-NPSM	487
IBC-A-2-S606	487
IBC-A-3-S1008	487
IBC-C-2-1	487
IBC-C-2-112	487
IBC-C-2-114	487
IBC-C-2-2	487
IBC-C-3-3	487
IBC-D-112-112BSP	487
IBC-D-2-2BSP	487
IBC-D-2-S606	487
IBC-DC-112	487
IBC-DC-2	487
IBC-DC-3	487
IBC-DP-112	487
IBC-DP-2	487
IBC-EPDM-SEAL	487
IBC-HA-1-S606	487
IBC-HA-112-S606	487
IBC-HA-2-S606	487
IBC-HA-2NPS-S606	487
IBC-HA-3-S1008	487
IBC-HA-34-S606	487
IBC-HA-S606-1008	487
IBC-HA-S606-2BSP	487
IBC-HA-S606-2NPS	487
IBC-HC-1-S606	487
IBC-HC-112-S606	487
IBC-HC-114-S606	487
IBC-HC-2-S606	487
IBC-HD-112-S606	487
IBC-HD-2-S606	487
IBC-HD-2NPS-S606	487
IF1V1/A	88
IF1VE1/A	88
IF2V3/A	88
IF2VE3/A	88
IF3V6/A	88
IF3VE6/A	88
IF4V16/A	88
IF4VE16/A	88
IF5V60/A	88
IF5VE60/A	88
IFE0.5R2.5	88
IFE1R3	88
IFE2R9	88
IFE3R18	88
IFE4R24	88
IFE5R35	88
IFE6R60/15	88
IL-SBF-10MSS	788
IL-SBF-12MSS	788
IL-SBF-12SS	788
IL-SBF-16MSS	788
IL-SBF-16SS	788
IL-SBF-20MSS	788
IL-SBF-25MSS	788
IL-SBF-4SS	788
IL-SBF-5SS	788
IL-SBF-6MSS	788
IL-SBF-6SS	788
IL-SBF-8MSS	788
IL-SBF-8SS	788
IL-SBFC-12-12NSS	788
IL-SBFC-12M-8NSS	788
IL-SBFC-16-16NSS	788
IL-SBFC-4-2NSS	788
IL-SBFC-4-4NSS	788
IL-SBFC-6-4NSS	788
IL-SBFC-6M-4NSS	788
IL-SBFC-8-6NSS	788
IL-SBFC-8-8NSS	788
IL-SBFC-8M-4NSS	788
IL-SBHU-10MSS	782
IL-SBHU-12MSS	782
IL-SBHU-12SS	782
IL-SBHU-16MSS	782
IL-SBHU-16SS	782
IL-SBHU-20MSS	782
IL-SBHU-25MSS	782
IL-SBHU-4SS	782
IL-SBHU-6MSS	782
IL-SBHU-6SS	782
IL-SBHU-8MSS	782
IL-SBHU-8SS	782
IL-SBMC-12-12NSS	784
IL-SBMC-16-16NSS	784
IL-SBMC-4-2NSS	784
IL-SBMC-4-4NSS	784
IL-SBMC-6-4NSS	784
IL-SBMC-6-6NSS	784
IL-SBMC-6-8NSS	784
IL-SBMC-8-6NSS	784
IL-SBMC-8-8NSS	784
IL-SC-10MSS	789
IL-SC-12MSS	789
IL-SC-12SS	789
IL-SC-16MSS	789
IL-SC-16SS	789
IL-SC-20MSS	789
IL-SC-25MSS	789
IL-SC-4SS	789
IL-SC-6MSS	789
IL-SC-6SS	789
IL-SC-8MSS	789
IL-SC-8SS	789
IL-SFC-10M-4NSS	784
IL-SFC-12-12NSS	784
IL-SFC-12-8NSS	784
IL-SFC-12M-8NSS	784
IL-SFC-16-12NSS	784
IL-SFC-16-16NSS	784
IL-SFC-6M-4NSS	784
IL-SFC-8-4NSS	784
IL-SFC-8-6NSS	784
IL-SFC-8-8NSS	784
IL-SFC-8M-4NSS	784
IL-SFC-8M-6NSS	784
IL-SFC-8M-8NSS	784
IL-SFE-10-6NSS	786
IL-SFE-10-8NSS	786
IL-SFE-10M-4NSS	786
IL-SFE-10M-6NSS	786
IL-SFE-10M-8NSS	786
IL-SFE-12-12NSS	786
IL-SFE-12-8NSS	786
IL-SFE-12M-6NSS	786
IL-SFE-12M-8NSS	786
IL-SFE-14-12NSS	786
IL-SFE-16-12NSS	786
IL-SFE-16-16NSS	786
IL-SFE-2-2NSS	786
IL-SFE-2-4NSS	786
IL-SFE-3-2NSS	786
IL-SFE-3-4NSS	786
IL-SFE-4-2NSS	786
IL-SFE-4-4NSS	786
IL-SFE-4-6NSS	786
IL-SFE-4-8NSS	786
IL-SFE-5-2NSS	786
IL-SFE-5-4NSS	786
IL-SFE-5-6NSS	786
IL-SFE-6-12NSS	786
IL-SFE-6-2NSS	786
IL-SFE-6-4NSS	786
IL-SFE-6-6NSS	786
IL-SFE-6-8NSS	786
IL-SFE-6M-4NSS	786

Part Code	Page
IL-SFE-6M-6NSS	786
IL-SFE-6M-8NSS	786
IL-SFE-8-12NSS	786
IL-SFE-8-4NSS	786
IL-SFE-8-6NSS	786
IL-SFE-8-8NSS	786
IL-SFE-8M-4NSS	786
IL-SFE-8M-8NSS	786
IL-SFF-10MSS	789
IL-SFF-12MSS	789
IL-SFF-12SS	789
IL-SFF-16MSS	789
IL-SFF-16SS	789
IL-SFF-20MSS	789
IL-SFF-25MSS	789
IL-SFF-4SS	789
IL-SFF-5SS	789
IL-SFF-6MSS	789
IL-SFF-6SS	789
IL-SFF-8MSS	789
IL-SFF-8SS	789
IL-SGC-10M-4GSS	784
IL-SGC-10M-6GSS	784
IL-SGC-10M-8GSS	784
IL-SGC-12M-4GSS	784
IL-SGC-12M-6GSS	784
IL-SGC-12M-8GSS	784
IL-SGC-20M-8GSS	784
IL-SGC-4-4GSS	784
IL-SGC-4-6GSS	784
IL-SGC-4-8GSS	784
IL-SGC-6-4GSS	784
IL-SGC-6-6GSS	784
IL-SGC-6-8GSS	784
IL-SGC-6M-4GSS	784
IL-SGC-6M-6GSS	784
IL-SGC-6M-8GSS	784
IL-SGC-8-4GSS	784
IL-SGC-8-6GSS	784
IL-SGC-8-8GSS	784
IL-SGC-8M-4GSS	784
IL-SGC-8M-6GSS	784
IL-SGC-8M-8GSS	784
IL-SGMC-12-8GSS	783
IL-SGMC-16-12GSS	783
IL-SGMC-4-2GSS	783
IL-SGMC-4-4GSS	783
IL-SGMC-4-6GSS	783
IL-SGMC-4-8GSS	783
IL-SGMC-5-2GSS	783
IL-SGMC-5-4GSS	783
IL-SGMC-5-6GSS	783
IL-SGMC-5-8GSS	783
IL-SGMC-6-4GSS	783
IL-SGMC-6-6GSS	783
IL-SGMC-6-8GSS	783
IL-SGMC-8-12GSS	783
IL-SGMC-8-4GSS	783
IL-SGMC-8-6GSS	783
IL-SGMC-8-8GSS	783
IL-SGMC10M4GSS	783
IL-SGMC10M6GSS	783
IL-SGMC10M8GSS	783
IL-SGMC12M4GSS	783
IL-SGMC12M6GSS	783
IL-SGMC12M8GSS	783
IL-SGMC16M6GSS	783
IL-SGMC16M8GSS	783
IL-SGMC20M12GSS	783
IL-SGMC20M8GSS	783
IL-SGMC25M12GSS	783
IL-SGMC25M16GSS	783
IL-SGMC6M4GSS	783
IL-SGMC6M6GSS	783
IL-SGMC6M8GSS	783
IL-SGMC8M4GSS	783
IL-SGMC8M6GSS	783
IL-SGMC8M8GSS	783
IL-SMC-10M-4NSS	783
IL-SMC-10M-6NSS	783
IL-SMC-10M-8NSS	783
IL-SMC-12-12NSS	783
IL-SMC-12-16NSS	783
IL-SMC-12-8NSS	783
IL-SMC-12M-4NSS	783
IL-SMC-12M-6NSS	783
IL-SMC-12M-8NSS	783
IL-SMC-16-12NSS	783
IL-SMC-16-16NSS	783
IL-SMC-16M-12NSS	783
IL-SMC-16M-6NSS	783
IL-SMC-16M-8NSS	783
IL-SMC-20M-12NSS	783
IL-SMC-20M-8NSS	783
IL-SMC-25M-12NSS	783
IL-SMC-25M-16NSS	783
IL-SMC-4-2NSS	783
IL-SMC-4-4NSS	783
IL-SMC-4-6NSS	783
IL-SMC-4-8NSS	783
IL-SMC-6-4NSS	783
IL-SMC-6-6NSS	783
IL-SMC-6-8NSS	783
IL-SMC-6M-4NSS	783
IL-SMC-6M-6NSS	783
IL-SMC-6M-8NSS	783
IL-SMC-8-12NSS	783
IL-SMC-8-4NSS	783
IL-SMC-8-6NSS	783
IL-SMC-8-8NSS	783
IL-SMC-8M-4NSS	783
IL-SMC-8M-6NSS	783
IL-SMC-8M-8NSS	783
IL-SME-10M-4NSS	785
IL-SME-10M-6NSS	785
IL-SME-10M-8NSS	785
IL-SME-12-12NSS	785
IL-SME-12-8NSS	785
IL-SME-12M-12NSS	785
IL-SME-12M-4NSS	785
IL-SME-12M-6NSS	785
IL-SME-12M-8NSS	785
IL-SME-16-12NSS	785
IL-SME-16-16NSS	785
IL-SME-16M-12NSS	785
IL-SME-16M-6NSS	785
IL-SME-16M-8NSS	785
IL-SME-20M-12NSS	785
IL-SME-20M-8NSS	785
IL-SME-25M-12NSS	785
IL-SME-25M-16NSS	785
IL-SME-4-2NSS	785
IL-SME-4-4NSS	785
IL-SME-6-4NSS	785
IL-SME-6-6NSS	785
IL-SME-6-8NSS	785
IL-SME-6M-2NSS	785
IL-SME-6M-4NSS	785
IL-SME-6M-6NSS	785
IL-SME-6M-8NSS	785
IL-SME-8-4NSS	785
IL-SME-8-6NSS	785
IL-SME-8-8NSS	785
IL-SME-8M-2NSS	785
IL-SME-8M-4NSS	785
IL-SME-8M-6NSS	785
IL-SME-8M-8NSS	785
IL-SN-10MSS	789
IL-SN-12MSS	789
IL-SN-12SS	789
IL-SN-16MSS	789
IL-SN-16SS	789
IL-SN-20MSS	789
IL-SN-25MSS	789
IL-SN-4SS	789
IL-SN-5SS	789
IL-SN-6MSS	789
IL-SN-6SS	789
IL-SN-8MSS	789
IL-SN-8SS	789
IL-SOSC-12-12USS	788
IL-SOSC-16-16USS	788
IL-SOSC-2-2USS	788
IL-SOSC-3-3USS	788
IL-SOSC-4-4USS	788
IL-SOSC-5-5USS	788
IL-SOSC-6-6USS	788
IL-SOSC-8-8USS	788
IL-SP-10MSS	789
IL-SP-12MSS	789
IL-SP-12SS	789
IL-SP-16MSS	789
IL-SP-16SS	789
IL-SP-20MSS	789
IL-SP-25MSS	789
IL-SP-4SS	789
IL-SP-5SS	789
IL-SP-6MSS	789
IL-SP-6SS	789
IL-SP-8MSS	789
IL-SP-8SS	789
IL-SPC-10MSS	788
IL-SPC-12MSS	788
IL-SPC-12SS	788
IL-SPC-16MSS	788
IL-SPC-16SS	788
IL-SPC-4SS	788
IL-SPC-6MSS	788
IL-SPC-6SS	788
IL-SPC-8MSS	788
IL-SPC-8SS	788
IL-SPME-10-8GSS	785
IL-SPME-12-12GSS	785
IL-SPME-12-8GSS	785
IL-SPME-16-12GSS	785
IL-SPME-16-16GSS	785
IL-SPME-4-2GSS	785
IL-SPME-4-4GSS	785
IL-SPME-6-4GSS	785
IL-SPME-6-6GSS	785
IL-SPME-8-8GSS	785
IL-SPME10M4GSS	785
IL-SPME10M6GSS	785
IL-SPME12M12GSS	785
IL-SPME12M4GSS	785
IL-SPME12M6GSS	785
IL-SPME12M8GSS	785
IL-SPME25M16GSS	785
IL-SPME6M2GSS	785
IL-SPME6M4GSS	785
IL-SPME8M2GSS	785
IL-SPME8M4GSS	785

I

Part Code	Page
IL-SR-10M-12MSS	787
IL-SR-10M-6MSS	787
IL-SR-10M-6SS	787
IL-SR-10M-8MSS	787
IL-SR-12-16SS	787
IL-SR-12M-16MSS	787
IL-SR-20M-25MSS	787
IL-SR-4-12SS	787
IL-SR-4-5SS	787
IL-SR-4-6SS	787
IL-SR-4-8SS	787
IL-SR-6-4SS	787
IL-SR-6-8SS	787
IL-SR-6M-10MSS	787
IL-SR-6M-12MSS	787
IL-SR-6M-4SS	787
IL-SR-6M-8MSS	787
IL-SR-8-12SS	787
IL-SR-8-16SS	787
IL-SR-8-4SS	787
IL-SR-8-6SS	787
IL-SR-8M-10MSS	787
IL-SR-8M-12MSS	787
IL-SRU-10M-8MSS	782
IL-SRU-12-8SS	782
IL-SRU-12M-10MSS	782
IL-SRU-12M-6MSS	782
IL-SRU-12M-8MSS	782
IL-SRU-16-12SS	782
IL-SRU-16M-12MSS	782
IL-SRU-25M-20MSS	782
IL-SRU-5-4SS	782
IL-SRU-6-4SS	782
IL-SRU-6-5SS	782
IL-SRU-8-4SS	782
IL-SRU-8-6SS	782
IL-SRU-8M-6MSS	782
IL-SRUT10106SS	786
IL-SRUT12124SS	786
IL-SRUT12126SS	786
IL-SRUT12128SS	786
IL-SRUT1212M6MSS	786
IL-SRUT161612SS	786
IL-SRUT16164SS	786
IL-SRUT16166SS	786
IL-SRUT16168SS	786
IL-SRUT664SS	786
IL-SRUT884SS	786
IL-SRUT886SS	786
IL-SU-10MSS	782
IL-SU-12MSS	782
IL-SU-16MSS	782
IL-SU-20MSS	782
IL-SU-25MSS	782
IL-SU-4SS	782
IL-SU-6MSS	782
IL-SU-6SS	782
IL-SU-8MSS	782
IL-SU-8SS	782
IL-SUC-10MSS	787
IL-SUC-12MSS	787
IL-SUC-12SS	787
IL-SUC-16MSS	787
IL-SUC-16SS	787
IL-SUC-20MSS	787
IL-SUC-25MSS	787
IL-SUC-4SS	787
IL-SUC-6MSS	787
IL-SUC-6SS	787
IL-SUC-8MSS	787
IL-SUC-8SS	787
IL-SUE-10MSS	784
IL-SUE-12MSS	784
IL-SUE-12SS	784
IL-SUE-16MSS	784
IL-SUE-16SS	784
IL-SUE-20MSS	784
IL-SUE-25MSS	784
IL-SUE-4SS	784
IL-SUE-6MSS	784
IL-SUE-6SS	784
IL-SUE-8MSS	784
IL-SUE-8SS	784
IL-SUT-10MSS	786
IL-SUT-12MSS	786
IL-SUT-16MSS	786
IL-SUT-16SS	786
IL-SUT-20MSS	786
IL-SUT-25MSS	786
IL-SUT-4SS	786
IL-SUT-6MSS	786
IL-SUT-6SS	786
IL-SUT-8MSS	786
IL-SUT-8SS	786
IQ-DS-06L/S	775
IQ-DS-08L/S	775
IQ-DS-10L/S	775
IQ-DS-12L/S	775
IQ-DS-14S	775
IQ-DS-15L	775
IQ-DS-16S	775
IQ-DS-18L	775
IQ-DS-20S	775
IQ-DS-22L	775
IQ-DS-25S	775
IQ-DS-28L	775
IQ-DS-30S	775
IQ-DS-35L	775
IQ-DS-38S	775
IQ-DS-42L	775
IQ-G-04LL	773
IQ-G-06/04LL	773
IQ-G-06L	773
IQ-G-06LL	773
IQ-G-06S	773
IQ-G-08/06L	773
IQ-G-08L	773
IQ-G-08LL	773
IQ-G-08S	773
IQ-G-10/06L	773
IQ-G-10/08L	773
IQ-G-10/08S	773
IQ-G-10L	773
IQ-G-10S	773
IQ-G-12/06L	773
IQ-G-12/06S	773
IQ-G-12/08L	773
IQ-G-12/08S	773
IQ-G-12/10L	773
IQ-G-12/10S	773
IQ-G-12L	773
IQ-G-12S	773
IQ-G-14S	773
IQ-G-15/10L	773
IQ-G-15/12L	773
IQ-G-15L	773
IQ-G-16/12S	773
IQ-G-16S	773
IQ-G-18/10L	773
IQ-G-18/12L	773
IQ-G-18/15L	773
IQ-G-18L	773
IQ-G-20/12S	773
IQ-G-20/16S	773
IQ-G-20S	773
IQ-G-22/12L	773
IQ-G-22/15L	773
IQ-G-22/18L	773
IQ-G-22L	773
IQ-G-25/16S	773
IQ-G-25/20S	773
IQ-G-25S	773
IQ-G-28/18L	773
IQ-G-28/22L	773
IQ-G-28L	773
IQ-G-30/25S	773
IQ-G-30S	773
IQ-G-35L	773
IQ-G-38/30S	773
IQ-G-38S	773
IQ-G-42L	773
IQ-GA-06LR	771
IQ-GA-06LR1/4	771
IQ-GA-06SR	771
IQ-GA-08LR	771
IQ-GA-08LR3/8	771
IQ-GA-08SR	771
IQ-GA-10LR	771
IQ-GA-10LR3/8	771
IQ-GA-10SR	771
IQ-GA-12LR	771
IQ-GA-12LR1/2	771
IQ-GA-12LR1/4	771
IQ-GA-12SR	771
IQ-GA-14SR	771
IQ-GA-15LR	771
IQ-GA-16SR	771
IQ-GA-18LR	771
IQ-GA-20SR	771
IQ-GA-22LR	771
IQ-GA-25SR	771
IQ-GA-28LR	771
IQ-GA-30SR	771
IQ-GA-35LR	771
IQ-GA-38SR	771
IQ-GA-42LR	771
IQ-GE-06LM-WD	772
IQ-GE-06LR-WD	769
IQ-GE-06LR1/4-WD	769
IQ-GE-06LR3/8-WD	769
IQ-GE-06SM-WD	772
IQ-GE-06SR-WD	769
IQ-GE-08LM-WD	772
IQ-GE-08LR-WD	769
IQ-GE-08LR1/8-WD	769
IQ-GE-08LR3/8-WD	769
IQ-GE-08SM-WD	772
IQ-GE-08SR-WD	769
IQ-GE-08SR3/8-WD	769
IQ-GE-10LM-WD	772
IQ-GE-10LM12x1.5	772
IQ-GE-10LM16x1.5	772
IQ-GE-10LM18x1.5	772
IQ-GE-10LR-WD	769
IQ-GE-10LR1/2-WD	769
IQ-GE-10LR1/8-WD	769
IQ-GE-10LR3/8-WD	769
IQ-GE-10SM-WD	772
IQ-GE-10SR-WD	769
IQ-GE-10SR1/2-WD	769
IQ-GE-10SR1/4-WD	769
IQ-GE-12LM-WD	772

I

Part Code	Page
IQ-GE-12LM18x1.5	772
IQ-GE-12LM22x1.5	772
IQ-GE-12LR-WD	769
IQ-GE-12LR1/2-WD	769
IQ-GE-12LR1/4-WD	769
IQ-GE-12LR3/4-WD	769
IQ-GE-12SM-WD	772
IQ-GE-12SR-WD	769
IQ-GE-12SR1/2-WD	769
IQ-GE-12SR1/4-WD	769
IQ-GE-12SR3/4-WD	769
IQ-GE-15LM-WD	772
IQ-GE-15LM16x1.5	772
IQ-GE-15LR-WD	769
IQ-GE-15LR3/4-WD	769
IQ-GE-15LR3/8-WD	769
IQ-GE-16SM-WD	772
IQ-GE-16SR-WD	769
IQ-GE-16SR3/4-WD	769
IQ-GE-16SR3/8-WD	769
IQ-GE-18LR-WD	769
IQ-GE-18LR3/4-WD	769
IQ-GE-20SM-WD	772
IQ-GE-20SR-WD	769
IQ-GE-20SR1-WD	769
IQ-GE-20SR1/2-WD	769
IQ-GE-22LM-WD	772
IQ-GE-22LR-WD	769
IQ-GE-22LR1-WD	769
IQ-GE-22LR1/2-WD	769
IQ-GE-25SM-WD	772
IQ-GE-25SR-WD	769
IQ-GE-25SR3/4-WD	769
IQ-GE-28LM-WD	772
IQ-GE-28LR-WD	769
IQ-GE-28LR3/4-WD	769
IQ-GE-30SM-WD	772
IQ-GE-30SR-WD	769
IQ-GE-30SR1-WD	769
IQ-GE-30SR11/2WD	769
IQ-GE-30SR3/4-WD	769
IQ-GE-35LR-WD	769
IQ-GE-35LR1-WD	769
IQ-GE-38SM-WD	772
IQ-GE-38SR-WD	769
IQ-GE-38SR1-WD	769
IQ-GE-38SR11/4WD	769
IQ-GE-42LM-WD	772
IQ-GE-42LR-WD	769
IQ-GE-42LR11/4WD	769
IQ-GS-06L	770
IQ-GS-06S	770
IQ-GS-08L	770
IQ-GS-08S	770
IQ-GS-10L	770
IQ-GS-10S	770
IQ-GS-12L	770
IQ-GS-12S	770
IQ-GS-14S	770
IQ-GS-15L	770
IQ-GS-16S	770
IQ-GS-18L	770
IQ-GS-20S	770
IQ-GS-22L	770
IQ-GS-25S	770
IQ-GS-28L	770
IQ-GS-30S	770
IQ-GS-35L	770
IQ-GS-38S	770
IQ-GS-42L	770
IQ-K-06L	770
IQ-K-06S	770
IQ-K-08L	770
IQ-K-10L	770
IQ-K-10S	770
IQ-K-12L	770
IQ-K-12S	770
IQ-K-15L	770
IQ-K-16S	770
IQ-K-18L	770
IQ-K-20S	770
IQ-K-22L	770
IQ-K-25S	770
IQ-K-28L	770
IQ-K-30S	770
IQ-K-38S	770
IQ-M-04LL	775
IQ-M-06L	775
IQ-M-06LL	775
IQ-M-06S	775
IQ-M-08L	775
IQ-M-08LL	775
IQ-M-08S	775
IQ-M-10L	775
IQ-M-10S	775
IQ-M-12L	775
IQ-M-12S	775
IQ-M-14S	775
IQ-M-15L	775
IQ-M-16S	775
IQ-M-18L	775
IQ-M-20S	775
IQ-M-22L	775
IQ-M-25S	775
IQ-M-28L	775
IQ-M-30S	775
IQ-M-35L	775
IQ-M-38S	775
IQ-M-42L	775
IQ-S-04LL	775
IQ-S-06LL	775
IQ-S-08LL	775
IQ-T-04LL	774
IQ-T-06L	774
IQ-T-06LL	774
IQ-T-06S	774
IQ-T-08L	774
IQ-T-08LL	774
IQ-T-08S	774
IQ-T-10L	774
IQ-T-10S	774
IQ-T-12L	774
IQ-T-12S	774
IQ-T-14S	774
IQ-T-15L	774
IQ-T-16S	774
IQ-T-18L	774
IQ-T-20S	774
IQ-T-22L	774
IQ-T-25S	774
IQ-T-28L	774
IQ-T-30S	774
IQ-T-35L	774
IQ-T-38S	774
IQ-T-42L	774
IQ-W-04LL	774
IQ-W-06L	774
IQ-W-06LL	774
IQ-W-06S	774
IQ-W-08L	774
IQ-W-08LL	774
IQ-W-08S	774
IQ-W-10L	774
IQ-W-10S	774
IQ-W-12L	774
IQ-W-12S	774
IQ-W-14S	774
IQ-W-15L	774
IQ-W-16S	774
IQ-W-18L	774
IQ-W-20S	774
IQ-W-22L	774
IQ-W-25S	774
IQ-W-28L	774
IQ-W-30S	774
IQ-W-35L	774
IQ-W-38S	774
IQ-W-42L	774
IQ-WE-04LLRK	772
IQ-WE-06LLRK	772
IQ-WE-06LR1/4K	772
IQ-WE-06LRK	772
IQ-WE-06SRK	772
IQ-WE-08LLRK	772
IQ-WE-08LR1/8K	772
IQ-WE-08LR3/8K	772
IQ-WE-08LRK	772
IQ-WE-08SRK	772
IQ-WE-10LR3/8K	772
IQ-WE-10LRK	772
IQ-WE-10SRK	772
IQ-WE-12LR1/2K	772
IQ-WE-12LR1/4K	772
IQ-WE-12LRK	772
IQ-WE-12SR1/2K	772
IQ-WE-12SRK	772
IQ-WE-15LRK	772
IQ-WE-16SRK	772
IQ-WE-18LRK	772
IQ-WE-20SRK	772
IQ-WE-22LRK	772
IQSS-DS-06L/S	781
IQSS-DS-08L/S	781
IQSS-DS-10L/S	781
IQSS-DS-12L/S	781
IQSS-DS-14S	781
IQSS-DS-15L	781
IQSS-DS-16S	781
IQSS-DS-18L	781
IQSS-DS-20S	781
IQSS-DS-22L	781
IQSS-DS-25S	781
IQSS-DS-28L	781
IQSS-DS-30S	781
IQSS-DS-35L	781
IQSS-DS-38S	781
IQSS-DS-42L	781
IQSS-EWD-06L-V	780
IQSS-EWD-06S-V	780
IQSS-EWD-08L-V	780
IQSS-EWD-08S-V	780
IQSS-EWD-10L-V	780
IQSS-EWD-10S-V	780
IQSS-EWD-12L-V	780
IQSS-EWD-12S-V	780
IQSS-EWD-14S-V	780
IQSS-EWD-15L-V	780
IQSS-EWD-16S-V	780
IQSS-EWD-18L-V	780
IQSS-EWD-20S-V	780
IQSS-EWD-22L-V	780
IQSS-EWD-25S-V	780

I

Part Code	Page
IQSS-EWD-28L-V	780
IQSS-EWD-30S-V	780
IQSS-EWD-35L-V	780
IQSS-EWD-38S-V	780
IQSS-EWD-42L-V	780
IQSS-G-04LL	778
IQSS-G-06L	778
IQSS-G-06LL	778
IQSS-G-06S	778
IQSS-G-08/06L	779
IQSS-G-08L	778
IQSS-G-08LL	778
IQSS-G-08S	778
IQSS-G-10/08L	779
IQSS-G-10L	778
IQSS-G-10S	778
IQSS-G-12/08L	779
IQSS-G-12/08S	779
IQSS-G-12/10L	779
IQSS-G-12L	778
IQSS-G-12S	778
IQSS-G-14S	778
IQSS-G-15/08L	779
IQSS-G-15/10L	779
IQSS-G-15L	778
IQSS-G-16/10S	779
IQSS-G-16/12S	779
IQSS-G-16S	778
IQSS-G-18/15L	779
IQSS-G-18L	778
IQSS-G-20/16S	779
IQSS-G-20S	778
IQSS-G-22/18L	779
IQSS-G-22L	778
IQSS-G-25/20S	779
IQSS-G-25S	778
IQSS-G-28/22L	779
IQSS-G-28L	778
IQSS-G-30S	778
IQSS-G-35L	778
IQSS-G-38S	778
IQSS-G-42L	778
IQSS-GE-06LR	776
IQSS-GE-06LR1/4	776
IQSS-GE-06LR1/4K	778
IQSS-GE-06LRK	778
IQSS-GE-06SR	776
IQSS-GE-06SR1/8	776
IQSS-GE-06SR3/8	776
IQSS-GE-08LR	776
IQSS-GE-08LR1/2K	778
IQSS-GE-08LR1/8	776
IQSS-GE-08LR3/8	776
IQSS-GE-08LRK	778
IQSS-GE-08SR	776
IQSS-GE-08SR1/8	776
IQSS-GE-08SR3/8	776
IQSS-GE-10LR	776
IQSS-GE-10LR1/2	776
IQSS-GE-10LR1/2K	778
IQSS-GE-10LR1/8	776
IQSS-GE-10LR1/8K	778
IQSS-GE-10LR3/8	776
IQSS-GE-10LR3/8K	778
IQSS-GE-10LRK	778
IQSS-GE-10SR	776
IQSS-GE-10SRK	778
IQSS-GE-12LR	776
IQSS-GE-12LR1/2	776
IQSS-GE-12LR1/2K	778
IQSS-GE-12LR1/4	776
IQSS-GE-12LR1/4K	778
IQSS-GE-12LR3/4	776
IQSS-GE-12LRK	778
IQSS-GE-12SR	776
IQSS-GE-12SR1/2	776
IQSS-GE-12SR1/4	776
IQSS-GE-12SR3/4	776
IQSS-GE-14SR	776
IQSS-GE-15LR	776
IQSS-GE-15LR3/4	776
IQSS-GE-15LR3/4K	778
IQSS-GE-15LR3/8	776
IQSS-GE-15LR3/8K	778
IQSS-GE-15LRK	778
IQSS-GE-16SR	776
IQSS-GE-16SR3/4	776
IQSS-GE-16SR3/8	776
IQSS-GE-18LR	776
IQSS-GE-18LR3/4	776
IQSS-GE-18LRK	778
IQSS-GE-20SR	776
IQSS-GE-20SR1	776
IQSS-GE-20SR1/2	776
IQSS-GE-22LR	776
IQSS-GE-22LR1	776
IQSS-GE-22LR1/2	776
IQSS-GE-22LRK	778
IQSS-GE-25SR	776
IQSS-GE-25SR1/2	776
IQSS-GE-25SR11/4	776
IQSS-GE-25SR3/4	776
IQSS-GE-25SRK	778
IQSS-GE-28LR	776
IQSS-GE-28LR11/4	776
IQSS-GE-28LR3/4	776
IQSS-GE-30SR	776
IQSS-GE-30SR1	776
IQSS-GE-30SR11/2	776
IQSS-GE-30SR3/4	776
IQSS-GE-30SRK	778
IQSS-GE-35LR	776
IQSS-GE-35LR1	776
IQSS-GE-35LR11/2	776
IQSS-GE-38SR	776
IQSS-GE-38SR11/4	776
IQSS-GE-42LR	776
IQSS-GE-42LR11/4	776
IQSS-GS-06L	777
IQSS-GS-06S	777
IQSS-GS-08L	777
IQSS-GS-08S	777
IQSS-GS-10L	777
IQSS-GS-10S	777
IQSS-GS-12L	777
IQSS-GS-12S	777
IQSS-GS-14S	777
IQSS-GS-15L	777
IQSS-GS-16S	777
IQSS-GS-18L	777
IQSS-GS-20S	777
IQSS-GS-22L	777
IQSS-GS-25S	777
IQSS-GS-28L	777
IQSS-GS-30S	777
IQSS-GS-35L	777
IQSS-GS-38S	777
IQSS-GS-42L	777
IQSS-M-04LL	781
IQSS-M-06L	781
IQSS-M-06LL	781
IQSS-M-06S	781
IQSS-M-08L	781
IQSS-M-08LL	781
IQSS-M-08S	781
IQSS-M-10L	781
IQSS-M-10S	781
IQSS-M-12L	781
IQSS-M-12S	781
IQSS-M-14S	781
IQSS-M-15L	781
IQSS-M-16S	781
IQSS-M-18L	781
IQSS-M-20S	781
IQSS-M-22L	781
IQSS-M-25S	781
IQSS-M-28L	781
IQSS-M-30S	781
IQSS-M-35L	781
IQSS-M-38S	781
IQSS-M-42L	781
IQSS-S-04LL	781
IQSS-S-06LL	781
IQSS-S-08LL	781
IQSS-T-04LL	780
IQSS-T-06L	780
IQSS-T-06LL	780
IQSS-T-06S	780
IQSS-T-08L	780
IQSS-T-08LL	780
IQSS-T-08S	780
IQSS-T-10L	780
IQSS-T-10S	780
IQSS-T-12L	780
IQSS-T-12S	780
IQSS-T-14S	780
IQSS-T-15L	780
IQSS-T-16S	780
IQSS-T-18L	780
IQSS-T-20S	780
IQSS-T-22L	780
IQSS-T-25S	780
IQSS-T-28L	780
IQSS-T-30S	780
IQSS-T-35L	780
IQSS-T-38S	780
IQSS-T-42L	780
IQSS-W-04LL	779
IQSS-W-06L	779
IQSS-W-06LL	779
IQSS-W-06S	779
IQSS-W-08L	779
IQSS-W-08LL	779
IQSS-W-08S	779
IQSS-W-10L	779
IQSS-W-10S	779
IQSS-W-12L	779
IQSS-W-12S	779
IQSS-W-14S	779
IQSS-W-15L	779
IQSS-W-16S	779
IQSS-W-18L	779
IQSS-W-20S	779
IQSS-W-22L	779
IQSS-W-25S	779
IQSS-W-28L	779
IQSS-W-30S	779
IQSS-W-35L	779
IQSS-W-38S	779
IQSS-W-42L	779
IQSS-WS-06L	777
IQSS-WS-08L	777

I, J

Part Code	Page
IQSS-WS-08S	777
IQSS-WS-10L	777
IQSS-WS-10S	777
IQSS-WS-12L	777
IQSS-WS-12S	777
IQSS-WS-14S	777
IQSS-WS-15L	777
IQSS-WS-16S	777
IQSS-WS-18L	777
IQSS-WS-20S	777
IQSS-WS-22L	777
IQSS-WS-25S	777
IQSS-WS-28L	777
IQSS-WS-30S	777
IQSS-WS-38S	777
IQSS-WS-42L	777
ISOLTDBV112FF	228
ISOLTDBV114FF	228
ISOLTDBV12FF	228
ISOLTDBV1FF	228
ISOLTDBV2FF	228
ISOLTDBV34FF	228
J	
J4CPG1403	701
J4CPG1404	701
J4CPG1405	701
J4CPG1603	701
J4CPG1604	701
J4CPG1605	701
J4CPG1806	701
J4CPG2107	701
J4CPG2108	701
J4CPG2109	701
J4CPG2308	701
J4CPG2309	701
J4SPG1603	701
J4SPG1604	701
J4SPG1605	701
J4SPG1805	701
J4SPG1806	701
J4SPG2106	701
J4SPG2107	701
J4SPG2108	701
J4SPG2308	701
J4SPG2309	701
J9CPG1603	273
J9CPG1604	273
J9CPG1605	273
J9CPG1806	273
J9CPG2107	273
J9CPG2108	273
J9CPG2109	273
J9SPG1603	273
J9SPG1604	273
J9SPG1605	273
J9SPG1805	273
J9SPG1806	273
J9SPG2106	273
J9SPG2107	273
J9SPG2108	273
J9SPG2309	273
JA165	573
JA165SS	573
JG-L-WSK	621
JGWALLBOX-1/2	621
JGWALLBOX-3/4	621
JSC019MS	567
JSC019SS	567
JSC019SS316	568
JSC022MS	567
JSC022SS	567
JSC022SS316	568
JSC025MS	567
JSC025SS	567
JSC025SS316	568
JSC028MS	567
JSC028SS	567
JSC028SS316	568
JSC031MS	567
JSC031SS	567
JSC031SS316	568
JSC035MS	567
JSC035SS	567
JSC035SS316	568
JSC039MS	567
JSC039SS	567
JSC039SS316	568
JSC043MS	567
JSC043SS	567
JSC043SS316	568
JSC047MS	567
JSC047SS	567
JSC047SS316	568
JSC051MS	567
JSC051SS	567
JSC051SS316	568
JSC055MS	567
JSC055SS	567
JSC055SS316	568
JSC059MS	567
JSC059SS	567
JSC059SS316	568
JSC063MS	567
JSC063SS	567
JSC063SS316	568
JSC067MS	567
JSC067SS	567
JSC067SS316	568
JSC073MS	567
JSC073SS	567
JSC073SS316	568
JSC079MS	567
JSC079SS	567
JSC079SS316	568
JSC085MS	567
JSC085SS	567
JSC085SS316	568
JSC091MS	567
JSC091SS	567
JSC091SS316	568
JSC097MS	567
JSC097SS	567
JSC097SS316	568
JSC103MS	567
JSC103SS	567
JSC103SS316	568
JSC112MS	567
JSC112SS	567
JSC112SS316	568
JSC121MS	567
JSC121SS	567
JSC121SS316	568
JSC130MS	567
JSC130SS	567
JSC130SS316	568
JSC139MS	567
JSC139SS	567
JSC139SS316	568
JSC148MS	567
JSC148SS	567
JSC148SS316	568
JSC161MS	567
JSC161SS	567
JSC161SS316	568
JSC174MS	567
JSC174SS	567
JSC174SS316	568
JSC187MS	567
JSC187SS	567
JSC187SS316	568
JSC200MS	567
JSC200SS	567
JSC200SS316	568
JSC213MS	567
JSC213SS	567
JSC213SS316	568
JSC226MS	567
JSC226SS	567
JSC226SS316	568
JSC239MS	567
JSC239SS	567
JSC239SS316	568
JSC252MS	567
JSC252SS	567
JSC252SS316	568
JSC265MS	567
JSC265SS	567
JSC265SS316	568
JSSB1	853
JUB-0	569
JUB-00	569
JUB-000	569
JUB-000SS	569
JUB-000SS316	570
JUB-00SS	569
JUB-00SS316	570
JUB-0SS	569
JUB-0SS316	570
JUB-0X	569
JUB-0XSS	569
JUB-0XSS316	570
JUB-1	569
JUB-10.5	569
JUB-10.5SS	569
JUB-10.5SS316	570
JUB-11.5	569
JUB-11.5SS	569
JUB-11.5SS316	570
JUB-12.5	569
JUB-12.5SS	569
JUB-12.5SS316	570
JUB-1A	569
JUB-1ASS	569
JUB-1ASS316	570
JUB-1MSS	569
JUB-1MSS316	570
JUB-1SS	569
JUB-1SS316	570
JUB-1X	569
JUB-1XSS	569
JUB-1XSS316	570
JUB-2	569
JUB-2A	569
JUB-2ASS	569
JUB-2ASS316	570
JUB-2SS	569
JUB-2SS316	570
JUB-2X	569

J, K, L, M

Part Code	Page
JUB-2XSS	569
JUB-2XSS316	570
JUB-3	569
JUB-3SS	569
JUB-3SS316	570
JUB-3X	569
JUB-3XSS	569
JUB-3XSS316	570
JUB-4	569
JUB-4SS	569
JUB-4SS316	570
JUB-4X	569
JUB-4XSS	569
JUB-4XSS316	570
JUB-5	569
JUB-5SS	569
JUB-5SS316	570
JUB-6	569
JUB-6SS	569
JUB-6SS316	570
JUB-6X	569
JUB-6XSS	569
JUB-6XSS316	570
JUB-7	569
JUB-7.5	569
JUB-7.5SS	569
JUB-7.5SS316	570
JUB-7SS	569
JUB-7SS316	570
JUB-8.5	569
JUB-8.5SS	569
JUB-8.5SS316	570
JUB-9.5	569
JUB-9.5SS	569
JUB-9.5SS316	570
JUB-M00	569
JUB-M00SS	569
JUB-M00SS316	570
K	
K10800-100M	509
K10800-50M	509
K12100-100M	509
K12100-50M	509
K42000-100M	509
K42000-50M	509
K64000-100M	509
K64000-50M	509
K86000-100M	509
K86000-50M	509
KBN10008	270
KBN10015	270
KBN17030	270
KEYBV-1	234
KEYBV-12	234
KEYBV-34	234
KG3043.20	23
KG3043.32	23
KG3043.40	23
KG3043.50	23
KG3043.63	23
KM0228E	621
KM0328E	620
KM0428E	620
KM062822E	621
KMF-12	811
KMF-14	811
KMF-38	811
KMV-12	811
KMV-14	811
KMV-38	811
L	
L12MD	317
L14MD	317
L18MD	317
L375XE69	271
L375XE70	271
L375XE71	271
L375XE72	271
L375XE73	271
L375XE74	271
L375XE75	271
L385FE75	271
L385XE69	271
L385XE70	271
L385XE71	271
L385XE72	271
L385XE73	271
L385XE74	271
L38MD	317
L8230FZ	587
L8250-EU	586
L8250FZ	587
L8306-EU	586
L8306-FZ	587
L8310-EU	586
L8335-EU	586
L8335-FZ	587
L8345-EU	586
L8350-EU	586
L8351-EU	586
LC650-OLP70	588
LC670-OLP70	588
LC850-OLP70	588
LC870-OLP70	588
LD100	336
LD101	336
LD200	336
LD202	336
LD203	336
LF150-N-12F	195
LF150-S-12F	195
LF150-WS-12F	195
LF150-WS-12FDA	195
LF200-N-12F	195
LF200-S-12F	195
LF200-WS-12F	195
LF200-WS-12FDA	195
LF250-N-12F	195
LF250-S-12F	195
LF250-WS-12F	195
LF250-WS-12FDA	195
LF300-N-12F	195
LF300-S-12F	195
LF300-WS-12F	195
LF300-WS-12FDA	195
LFHH1-100M	519
LFHH1-10M	519
LFHH11/2-100M	519
LFHH11/2-10M	519
LFHH11/4-100M	519
LFHH11/4-10M	519
LFHH2-100M	519
LFHH2-10M	519
LFHH3-100M	519
LFHH3-10M	519
LFHH4-100M	519
LFHH4-10M	519
LFHH6-100M	519
LFHH6-10M	519
LFHM11/2-100M	519
LFHM11/2-10M	519
LFHM2-100M	519
LFHM2-10M	519
LFHM21/2-100M	519
LFHM21/2-10M	519
LFHM3-100M	519
LFHM3-10M	519
LFHM4-100M	519
LFHM4-10M	519
LFHM6-100M	519
LFHM6-10M	519
LGH12-30M	532
LM1FA100	87
LM1FA150	87
LM1FA200	87
LM1FA250	87
LM1FA300	87
LM1FA350	87
LM1FA400	87
LM1FA450	87
LM1FA500	87
LM2FA100	87
LM2FA150	87
LM2FA200	87
LM2FA250	87
LM2FA300	87
LM2FA350	87
LM2FA400	87
LM2FA450	87
LM2FA500	87
LN1	415
LN12	415
LN14	415
LN18	415
LN34	415
LN38	415
LNSG10/8	425
LNSG12/10	425
LNSG6/4	425
LNSG8/6	425
LPH-12.5	576
LPH-13.5	576
LPH-14.5	576
LPH-16	576
LPH-18	576
LPH-19	576
LPH-19.5	576
LPH-22	576
LPH-23	576
LPH-25	576
LPH-28	576
LPH-30	576
LPH-33	576
LPH-38	576
LPH-41	576
LSB/1	809
LSB/12	809
LSB/34	809
LSB/38	809
M	
M-AC1000-M5	307
M-AC1010-M5	307
M-AF1000-M5	307
M-AL1000-M5	307
M-AR1000-M5	307
M-AW1000-M5	307
M100/A	854
M100/B	854

M

Part Code	Page
M100/C	854
M100/D	854
M13001	687
M13002	687
M13003	687
M13301	687
M13302	687
M13303	687
M14301	687
M1TS2VL1	250
M1TS2VL2	250
M1TS2VL3	250
M2NS2000	251
M2TS2VL1	252
M2TS2VL2	252
M2TS2VL3	252
M3122	208
M3123	208
M3124	208
M3132	208
M3133	208
M3134	208
M3700	596
MA110414	390
MA110418	390
MA110614	390
MA110618	390
MA110814	390
MA110818	390
MA110838	390
MA111012	390
MA111014	390
MA111038	390
MA111212	390
MA111214	390
MA111238	390
MA120414	390
MA120418	390
MA1204M5	390
MA120614	390
MA120618	390
MA1206M5	390
MA120814	390
MA120818	390
MA120838	390
MA121012	390
MA121014	390
MA121038	390
MA121212	390
MA121214	390
MA121238	390
MA130418	390
MA130614	390
MA130618	390
MA130814	390
MA130818	390
MA131014	390
MA131038	390
MA140414	390
MA140418	390
MA140614	390
MA140618	390
MA140814	390
MA140818	390
MA141014	390
MA141038	390
MA150414	390
MA150418	390
MA150614	390
MA150618	390
MA150814	390
MA150818	390
MA150838	390
MA151014	390
MA151038	390
MA151212	390
MA151238	390
MA160414	390
MA160418	390
MA1604M5	390
MA160614	390
MA160618	390
MA1606M5	390
MA160814	390
MA160818	390
MA160838	390
MA161014	390
MA161038	390
MA161212	390
MA161214	390
MA161238	390
MA200414	391
MA200418	391
MA200614	391
MA200618	391
MA200814	391
MA200818	391
MA200838	391
MA201014	391
MA201038	391
MA201212	391
MA201238	391
MA210414	391
MA210418	391
MA210614	391
MA210618	391
MA210814	391
MA210818	391
MA210838	391
MA211014	391
MA211038	391
MA211212	391
MA211238	391
MA250406	391
MA250408	391
MA250410	391
MA250412	391
MA250604	391
MA250608	391
MA250610	391
MA250612	391
MA250806	391
MA250810	391
MA250812	391
MA251012	391
MA260404	391
MA260604	391
MA260606	391
MA260806	391
MA260808	391
MA261008	391
MA261010	391
MA261212	391
MA270404	392
MA270606	392
MA270808	392
MA271010	392
MA271212	392
MA280404	391
MA280606	391
MA280808	391
MA281010	391
MA281212	391
MA290404	392
MA290606	392
MA290808	392
MA291010	392
MA291212	392
MA370404	392
MA370606	392
MA370808	392
MA380414	391
MA380418	391
MA3804M5	391
MA380614	391
MA380618	391
MA3806M5	391
MA380814	391
MA380818	391
MA381014	391
MA381038	391
MA381212	391
MA381238	391
MA400004	392
MA400006	392
MA400008	392
MA400010	392
MA400012	392
MB106/L10	399
MB108/L10	399
MB110L10	399
MB112L10	399
MBK018	333
MBK028	333
MBK059	333
MBK128	333
MBK159	333
MBK254	333
MBKD028	333
MBKD059	333
MBV1FF	232
MBV1MF	232
MBV2FF	232
MBV2MF	232
MBV3FF	232
MBV3MF	232
MBV4FF	232
MBV4MF	232
MBV5FF	232
MBV5MF	232
MC0709	559
MC0810	559
MC1012	559
MC104	399
MC104/083	399
MC104/163	399
MC106	399
MC106/083	399
MC106/104	399
MC106/163	399
MC106/243	399
MC106/3	400
MC108	399
MC108/083	399
MC108/106	399
MC108/163	399
MC108/243	399
MC10A1-20	217
MC10A1-40	217
MC10A2-20	217
MC10A2-40	217
MC10B1-20	217

M

Part Code	Page
MC10B1-40	217
MC10B2-20	217
MC10B2-40	217
MC10C1-20	218
MC10C1-40	218
MC10C2-20	218
MC10C2-40	218
MC10D1-20	218
MC10D1-40	218
MC10D2-20	218
MC10D2-40	218
MC110	399
MC110/106	399
MC110/108	399
MC110/163	399
MC110/243	399
MC110/323	399
MC110/8	400
MC1113	559
MC112	399
MC112/108	399
MC112/163	399
MC112/243	399
MC112/323	399
MC115	399
MC115/108	399
MC115/110	399
MC115/243	399
MC115/323	399
MC1214	559
MC1315	559
MC1416	559
MC1517	559
MC1618	559
MC180810	580
MC180815	580
MC180820	580
MC181010	580
MC181015	580
MC181310	580
MC1820	559
MC20A1-40	217
MC20A1-60	217
MC20A2-40	217
MC20A2-60	217
MC20B1-40	217
MC20B1-60	217
MC20B2-40	217
MC20B2-60	217
MC20C1-40	218
MC20C1-60	218
MC20C2-40	218
MC20C2-60	218
MC20D1-40	218
MC20D1-60	218
MC20D2-40	218
MC20D2-60	218
MC23A1-40	217
MC23A1-60	217
MC23A2-40	217
MC23A2-60	217
MC23B1-40	217
MC23B1-60	217
MC23B2-40	217
MC23B2-60	217
MC23C1-40	218
MC23C1-60	218
MC23C2-40	218
MC23C2-60	218
MC23D1-40	218
MC23D1-60	218
MC23D2-40	218
MC23D2-60	218
MC25A1-40	217
MC25A1-60	217
MC25A2-40	217
MC25A2-60	217
MC25B1-40	217
MC25B1-60	217
MC25B2-40	217
MC25B2-60	217
MC25C1-40	218
MC25C1-60	218
MC25C2-40	218
MC25C2-60	218
MC9011	559
MCSG10	582
MCX101310K	581
MCZAB1	563
MD-9205	854
MD201010	580
MD203812	580
MDC03	882
MDPE20BK-100M	647
MDPE20BL-100M	647
MDPE25BK-100M	647
MDPE25BL-100M	647
MDPE32BK-100M	647
MDPE32BL-100M	647
MDPE63BK-100M	647
MDPE63BL-100M	647
MDS-102-10M	546
MDS-152-10M	546
MDS-203-10M	546
MDS-25-10M	546
MDS-32-10M	546
MDS-38-10M	546
MDS-51-10M	546
MDS-76-10M	546
ME104	399
ME104/083	399
ME106	399
ME106/083	399
ME106/163	399
ME108	399
ME108/083	399
ME108/163	399
ME108/243	399
ME110	399
ME110/163	399
ME110/243	399
ME110/323	399
ME112	399
ME112/163	399
ME112/243	399
ME112/323	399
ME115	399
ME115/243	399
ME115/323	399
MEH-32-10M	536
MEH-38-10M	536
MEH-45-10M	536
MEH-51-40M	536
MFAP11	415
MFAP121	415
MFAP1234	415
MFAP1412	415
MFAP1414	415
MFAP1438	415
MFAP1814	415
MFAP1818	415
MFAP1838	415
MFAP341	415
MFAP3434	415
MFAP3812	415
MFAP3834	415
MFAP3838	415
MFAPM518	415
MFAT11	415
MFAT121	415
MFAT1212	415
MFAT1234	415
MFAT1412	415
MFAT1414	415
MFAT1438	415
MFAT1814	415
MFAT1818	415
MFAT1838	415
MFAT341	415
MFAT3434	415
MFAT3812	415
MFAT3834	415
MFAT3838	415
MLF10-25M	533
MLF12-25M	533
MLF6-25M	533
MLF8-25M	533
MM011504N	620
MM012206N	620
MM012808N	620
MM051504N	621
MM052206N	621
MM052818N	621
MM501514N	621
MM502216N	621
MMNB12	423
MMNB14	423
MMNB18	423
MMNB38	423
MN115	399
MN203810	580
MNF708	399
MNF806	399
MNF808	399
MNF810	399
MNF812	399
MP100	873
MP125	873
MP150	873
MP175	873
MP195	873
MPM303X10	208
MPM303X12	208
MPM303X14	208
MPM303X16	208
MPM303X6	208
MPM303X8	208
MRJ314	424
MRJ618	424
MS-25	595
MS10-14K	85
MS100-14K	85
MS2-14K	85
MS20-A	220
MS20-B	220
MS20-C	220
MS20-D	220
MS40-A	220
MS40-B	220
MS40-C	220
MS40-D	220
MS50-14K	85

Part Code	Page
MS60-A	220
MS60-B	220
MS60-C	220
MS60-D	220
MSEH-2-10M	537
MSEH-2-30M	537
MSEH-212-10M	537
MSEH-212-30M	537
MSEH-3-10M	537
MSEH-3-30M	537
MSEH-4-10M	537
MSEH-4-30M	537
MSEH-6-10M	537
MSEH-6-30M	537
MSSGP10/8-3/8	425
MSSGP12/10-3/8	425
MSSGP6/4-1/2	425
MSSGP6/4-1/4	425
MSSGP6/4-1/8	425
MSSGP8/6-1/2	425
MSSGP8/6-1/4	425
MSSGT10/8-1/2	425
MSSGT10/8-1/4	425
MSSGT10/8-1/8	425
MSSGT10/8-3/8	425
MSSGT6/4-1/4	425
MSSGT6/4-1/8	425
MSSGT8/6-1/2	425
MSSGT8/6-1/4	425
MSSGT8/6-3/8	425
MT104	399
MT106	399
MT108	399
MT110	399
MT112	399
MT115	399
MTA-110-3-UPVC	629
MTA-110-4-UPVC	629
MTA-110-5-UPVC	629
MTA-12-38-UPVC	629
MTA-16-12-UPVC	629
MTA-16-38-UPVC	629
MTA-20-12-UPVC	629
MTA-20-34-UPVC	629
MTA-20-38-UPVC	629
MTA-25-1-UPVC	629
MTA-25-12-UPVC	629
MTA-25-34-UPVC	629
MTA-32-1-UPVC	629
MTA-32-114-UPVC	629
MTA-32-34UPVC	629
MTA-40-1-UPVC	629
MTA-40-112-UPVC	629
MTA-40-114-UPVC	629
MTA-50-112-UPVC	629
MTA-50-114-UPVC	629
MTA-50-2-UPVC	629
MTA-63-112-UPVC	629
MTA-63-2-UPVC	629
MTA-63-212-UPVC	629
MTA-75-2-UPVC	629
MTA-75-212-UPVC	629
MTA-75-3-UPVC	629
MTA-90-212-UPVC	629
MTA-90-3-UPVC	629
MTA-90-4-UPVC	629
MTR4X6X10	510
MTR4X6X2	510
MTR4X6X3	510
MTR4X6X4	510
MTR4X6X7	510
MTR6X8X10	510
MTR6X8X2	510
MTR6X8X3	510
MTR6X8X4	510
MTR6X8X7	510
MUR104	399
MUR106	399
MUR108	399
MUR110	399
MUR112	399
MUR115	399
MV330418	392
MV3304M5	392
MV330614	392
MV330618	392
MV330814	392
MV330818	392
MV370418C	392
MV3704M5C	392
MV370614C	392
MV370618C	392
MV3706M5C	392
MV370814C	392
MV370818C	392
MV370838C	392
MV371014C	392
MV371038C	392
MV390418C	392
MV3904M5C	392
MV390614C	392
MV390618C	392
MV3906M5C	392
MV390814C	392
MV390818C	392
MV390838C	392
MV391014C	392
MV391038C	392
MV550614	392
MV550618	392
MV550814	392
MV550818	392
MX110414	394
MX110418	394
MX110614	394
MX110618	394
MX110814	394
MX110818	394
MX111014	394
MX111038	394
MX111212	394
MX111238	394
MX120418	394
MX1204M5	394
MX120614	394
MX120618	394
MX120814	394
MX120818	394
MX140418	394
MX140614	394
MX140618	394
MX140814	394
MX140818	394
MX150418	394
MX150614	394
MX150618	394
MX150814	394
MX150818	394
MX151014	394
MX151038	394
MX151212	394
MX151238	394
MX160418	394
MX1604M5	394
MX160614	394
MX160618	394
MX160814	394
MX160818	394
MX250406	395
MX250608	395
MX250810	395
MX260404	394
MX260606	394
MX260808	394
MX261010	394
MX261212	394
MX270404	394
MX270606	394
MX270808	394
MX271010	394
MX271212	394
MX280404	394
MX280606	394
MX280808	394
MX281010	394
MX281212	394
MX290404	394
MX290606	394
MX290808	394
MX291010	394
MX291212	394
MX350418	395
MX350614	395
MX350618	395
MX350814	395
MX350818	395
N	
N1020B/A	401
N1021B/C	401
N1023B/C	401
N1025B/C	401
N1028B/D	401
N12-12BRBSP	512
N12-25BRBSP	512
N12-50BRBSP	512
N14-12BRBSP	512
N14-25BRBSP	512
N14-50BRBSP	512
N2217	854
N2217T	854
N2220	854
N2350	854
N38-12BRBSP	512
N38-25BRBSP	512
N38-50BRBSP	512
N516-12BRBSP	512
N516-25BRBSP	512
N516-50BRBSP	512
NAB-B-12/9-3.5M	520
NAB-B-12/9-5M	520
NAB-R-12/9-3.5M	520
NAB-R-12/9-5M	520
NAB-Y-12/9-3.5M	520
NAB-Y-12/9-5M	520
NB0709	570
NB0709SS	570
NB0810	570
NB0810SS	570

N

Part Code	Page
NB0911	570
NB0911SS	570
NB1012	570
NB1012SS	570
NB1113	570
NB1113SS	570
NB1214	570
NB1214SS	570
NB1315	570
NB1315SS	570
NB1416	570
NB1416SS	570
NB1517	570
NB1618	570
NB1820	570
NEN12	412
NEN14	412
NEN18	412
NEN38	412
NEO-1-102-4M	541
NEO-1-127-4M	541
NEO-1-152-4M	541
NEO-1-203-4M	541
NEO-1-38-4M	541
NEO-1-51-4M	541
NEO-1-63-4M	541
NEO-1-76-4M	541
NEO-2-102-4M	541
NEO-2-127-4M	541
NEO-2-152-4M	541
NEO-2-203-4M	541
NEO-2-38-4M	541
NEO-2-51-4M	541
NEO-2-63-4M	541
NEO-2-76-4M	541
NHP-1	481
NHP-2	481
NHP-3	481
NHP-34	481
NHP12	412
NHP14	412
NHP18	412
NHP38	412
NI-HP10/6BK100	504
NI-HP10/6BK25	504
NI-HP12/10BK100	504
NI-HP12/10BK25	504
NI-HP12/7BK100	504
NI-HP12/7BK25	504
NI-HP14/3.6BK100	504
NI-HP14/3.6BK25	504
NI-HP38/5BK100	504
NI-HP38/5BK25	504
NI-HP4/2.5BK100	504
NI-HP4/2.5BK25	504
NI-HP6/3BK100	504
NI-HP6/3BK25	504
NI-HP8/5BK100	504
NI-HP8/5BK25	504
NI10/25BK30	503
NI10/25BK500	503
NI10/25BL30	503
NI10/25GN30	503
NI10/25NA30	503
NI10/25NA500	503
NI10/25RD30	503
NI10/25YW30	503
NI12/37BK30	503
NI12/37BK500	503
NI12/37BL30	503
NI12/37NA30	503
NI12/37NA500	503
NI16/5NA30	503
NI19/59NA30	503
NI25/81NA30	503
NI4/075BK30	503
NI4/075NA30	503
NI5/117BK30	503
NI5/117NA30	503
NI6/17BK30	503
NI6/17BK500	503
NI6/17BL30	503
NI6/17GN30	503
NI6/17NA30	503
NI6/17NA500	503
NI6/17RD30	503
NI6/17YW30	503
NI8/21BK30	503
NI8/21BK500	503
NI8/21BL30	503
NI8/21NA30	503
NI8/21NA500	503
NIPC12-12	371
NIPC12-14	371
NIPC12-38	371
NIPC14-14	371
NIPC14-18	371
NIPC14-38	371
NIPC18-14	371
NIPC18-18	371
NIPC316-14	371
NIPC316-18	371
NIPC316-38	371
NIPC38-12	371
NIPC38-14	371
NIPC38-18	371
NIPC38-34	371
NIPC516-14	371
NIPC516-18	371
NIPC516-38	371
NIPC532-14	371
NIPC532-18	371
NIPCF12-12	371
NIPCF12-14	371
NIPCF12-38	371
NIPCF14-14	371
NIPCF14-18	371
NIPCF14-38	371
NIPCF18-14	371
NIPCF18-18	371
NIPCF316-14	371
NIPCF316-18	371
NIPCF38-12	371
NIPCF38-14	371
NIPCF38-18	371
NIPCF38-38	371
NIPCF516-12	371
NIPCF516-14	371
NIPCF516-18	371
NIPCF516-38	371
NIPCF532-14	371
NIPCF532-18	371
NIPCR12-12	371
NIPCR12-14	371
NIPCR12-38	371
NIPCR14-14	371
NIPCR14-18	371
NIPCR14-38	371
NIPCR18-14	371
NIPCR18-18	371
NIPCR316-14	371
NIPCR316-18	371
NIPCR316-38	371
NIPCR38-12	371
NIPCR38-14	371
NIPCR38-18	371
NIPCR38-38	371
NIPCR516-14	371
NIPCR516-18	371
NIPCR516-38	371
NIPCR532-14	371
NIPCR532-18	371
NIPL12-12	372
NIPL12-14	372
NIPL14-14	372
NIPL14-18	372
NIPL14-38	372
NIPL18-14	372
NIPL18-18	372
NIPL316-14	372
NIPL316-18	372
NIPL316-38	372
NIPL38-12	372
NIPL38-14	372
NIPL38-18	372
NIPL38-38	372
NIPL516-14	372
NIPL516-18	372
NIPL516-38	372
NIPL532-14	372
NIPL532-18	372
NIPLE12-12	372
NIPLE12-14	372
NIPLE12-38	372
NIPLE14-14	372
NIPLE14-18	372
NIPLE14-38	372
NIPLE18-14	372
NIPLE18-18	372
NIPLE316-14	372
NIPLE316-18	372
NIPLE316-38	372
NIPLE38-12	372
NIPLE38-14	372
NIPLE38-18	372
NIPLE38-38	372
NIPLE516-14	372
NIPLE516-18	372
NIPLE516-38	372
NIPLE532-14	372
NIPLE532-18	372
NIPLF12-12	372
NIPLF12-14	372
NIPLF12-38	372
NIPLF14-14	372
NIPLF14-18	372
NIPLF14-38	372
NIPLF18-14	372
NIPLF18-18	372
NIPLF316-14	372
NIPLF316-18	372
NIPLF38-12	372
NIPLF38-14	372
NIPLF38-18	372
NIPLF38-38	372
NIPLF516-12	372
NIPLF516-14	372
NIPLF516-18	372

N

Part Code	Page
NIPLF516-38	372
NIPLF532-14	372
NIPLF532-18	372
NM10/7BK30	500
NM10/7NA30	500
NM10/8BK25BOX	508
NM10/8BK30	500
NM10/8BK500	501
NM10/8BL25BOX	508
NM10/8BL30	500
NM10/8NA25BOX	508
NM10/8NA30	500
NM10/8NA500	501
NM10/8RD30	500
NM12/10BK25BOX	508
NM12/10BK30	500
NM12/10BK500	501
NM12/10BL25BOX	508
NM12/10BL30	500
NM12/10NA25BOX	508
NM12/10NA30	500
NM12/10NA500	501
NM12/10RD30	500
NM12/9BK30	500
NM12/9NA30	500
NM14/11BK30	500
NM14/11NA30	500
NM16/13NA30	500
NM18/14NA30	500
NM22/17NA30	500
NM4/25BK30	500
NM4/25BL30	500
NM4/25GN30	500
NM4/25NA100	501
NM4/25NA30	500
NM4/25RD30	500
NM4/25YW30	500
NM4/2BK25BOX	508
NM4/2BL25BOX	508
NM4/2NA25BOX	508
NM4/2RD25BOX	508
NM5/33BK30	500
NM5/33BL30	500
NM5/33GN30	500
NM5/33NA100	501
NM5/33NA30	500
NM5/33RD30	500
NM5/33YW30	500
NM6/4BK100	501
NM6/4BK25BOX	508
NM6/4BK30	500
NM6/4BK500	501
NM6/4BL100	501
NM6/4BL25BOX	508
NM6/4BL30	500
NM6/4GN30	500
NM6/4NA100	501
NM6/4NA25BOX	508
NM6/4NA30	500
NM6/4NA500	501
NM6/4RD100	501
NM6/4RD25BOX	508
NM6/4RD30	500
NM6/4YW30	500
NM8/55BK30	500
NM8/55NA30	500
NM8/6BK100	501
NM8/6BK25BOX	508
NM8/6BK30	500
NM8/6BK500	501
NM8/6BL100	501
NM8/6BL25BOX	508
NM8/6BL30	500
NM8/6GN30	500
NM8/6NA100	501
NM8/6NA25BOX	508
NM8/6NA30	500
NM8/6NA500	501
NM8/6RD100	501
NM8/6RD25BOX	508
NM8/6RD30	500
NM8/6YW30	500
NMBHF10-12	369
NMBHF10-14	369
NMBHF10-38	369
NMBHF12-12	369
NMBHF12-14	369
NMBHF12-38	369
NMBHF4-14	369
NMBHF4-18	369
NMBHF6-12	369
NMBHF6-14	369
NMBHF6-18	369
NMBHF6-38	369
NMBHF8-12	369
NMBHF8-14	369
NMBHF8-18	369
NMBHF8-38	369
NMHVMF6-G01	370
NMHVMF6-G02	370
NMHVMF6-G03	370
NMHVMF8-G01	370
NMHVMF8-G02	370
NMHVMF8-G03	370
NMPB10-12	368
NMPB10-14	368
NMPB10-18	368
NMPB10-38	368
NMPB12-12	368
NMPB12-14	368
NMPB22-38	368
NMPB4-14	368
NMPB4-18	368
NMPB6-14	368
NMPB6-18	368
NMPB6-38	368
NMPB8-12	368
NMPB8-14	368
NMPB8-18	368
NMPB8-38	368
NMPCF10-12	368
NMPCF10-14	368
NMPCF10-18	368
NMPCF10-38	368
NMPCF12-12	368
NMPCF12-14	368
NMPCF12-38	368
NMPCF4-14	368
NMPCF4-18	368
NMPCF6-14	368
NMPCF6-18	368
NMPCF6-38	368
NMPCF8-12	368
NMPCF8-14	368
NMPCF8-18	368
NMPCF8-38	368
NMPD10-12	369
NMPD10-14	369
NMPD10-38	369
NMPD12-12	369
NMPD12-14	369
NMPD12-38	369
NMPD4-14	369
NMPD4-18	369
NMPD6-14	369
NMPD6-18	369
NMPD6-38	369
NMPD8-12	369
NMPD8-14	369
NMPD8-18	369
NMPD8-38	369
NMPH10-12	369
NMPH10-38	369
NMPH12-12	369
NMPH12-14	369
NMPH12-38	369
NMPH4-18	369
NMPH6-14	369
NMPH6-18	369
NMPH8-14	369
NMPH8-18	369
NMPH8-38	369
NMPHF10-12	369
NMPHF10-14	369
NMPHF10-38	369
NMPHF12-12	369
NMPHF12-14	369
NMPHF12-38	369
NMPHF4-14	369
NMPHF4-18	369
NMPHF6-14	369
NMPHF6-18	369
NMPHF6-38	369
NMPHF8-12	369
NMPHF8-14	369
NMPHF8-38	369
NMPKB10-8-G03	369
NMPKB6-4-G01	369
NMPKB8-4-G02	369
NMPKB8-6-G02	369
NMPL10-12	368
NMPL10-14	368
NMPL10-18	368
NMPL10-38	368
NMPL12-12	368
NMPL12-14	368
NMPL12-38	368
NMPL4-14	368
NMPL4-18	368
NMPL4-38	368
NMPL6-14	368
NMPL6-18	368
NMPL6-38	368
NMPL8-12	368
NMPL8-14	368
NMPL8-18	368
NMPL8-38	368
NMPLE10-12	368
NMPLE10-14	368
NMPLE10-18	368
NMPLE10-38	368
NMPLE12-12	368
NMPLE12-14	368
NMPLE12-38	368
NMPLE4-14	368
NMPLE4-18	368
NMPLE6-12	368
NMPLE6-14	368

N, O

Part Code	Page
NMPLE6-18	368
NMPLE6-38	368
NMPLE8-12	368
NMPLE8-14	368
NMPLE8-18	368
NMPLE8-38	368
NMPLEE10-12	368
NMPLEE10-14	368
NMPLEE10-18	368
NMPLEE10-38	368
NMPLEE12-12	368
NMPLEE12-14	368
NMPLEE12-38	368
NMPLEE4-14	368
NMPLEE4-18	368
NMPLEE6-14	368
NMPLEE6-18	368
NMPLEE6-38	368
NMPLEE8-12	368
NMPLEE8-14	368
NMPLEE8-18	368
NMPLEE8-38	368
NMPLF10-12	368
NMPLF10-14	368
NMPLF10-18	368
NMPLF10-38	368
NMPLF12-12	368
NMPLF12-14	368
NMPLF12-38	368
NMPLF4-14	368
NMPLF4-18	368
NMPLF6-14	368
NMPLF6-18	368
NMPLF6-38	368
NMPLF8-12	368
NMPLF8-14	368
NMPLF8-18	368
NMPLF8-38	368
NMPX10-12	369
NMPX10-14	369
NMPX10-38	369
NMPX12-12	369
NMPX12-14	369
NMPX12-38	369
NMPX4-18	369
NMPX6-14	369
NMPX6-18	369
NMPX6-38	369
NMPX8-12	369
NMPX8-14	369
NMPX8-18	369
NMPX8-38	369
NMS10/7BK30	502
NMS10/7NA30	502
NMS12/85BK30	502
NMS12/85NA30	502
NMS4/25BK30	502
NMS4/25NA30	502
NMS6/4NA30	502
NMS8/55BK30	502
NMS8/55NA30	502
NMSL10-G02	370
NMSL10-G03	370
NMSL10-G04	370
NMSL12-G02	370
NMSL12-G03	370
NMSL12-G04	370
NMSL4-G01	370
NMSL4-G02	370
NMSL6-G01	370
NMSL6-G02	370
NMSL6-G03	370
NMSL8-G01	370
NMSL8-G02	370
NMSL8-G03	370
NMSL8-G04	370
NOW12	428
NOW14	428
NOW18	428
NOW38	428
NOZ.C	596
NOZ.S3A	596
NOZA.SS	596
NOZA.X	596
NOZA.X25	596
NPBC1	418
NPBC12	418
NPBC14	418
NPBC18	418
NPBC34	418
NPBC38	418
NRB12-14	412
NRB12-18	412
NRB12-38	412
NRB14-18	412
NRB34-12	412
NRB34-14	412
NRB34-38	412
NRB38-14	412
NRB38-18	412
NRN12-14	412
NRN12-38	412
NRN14-18	412
NRN38-14	412
NRN38-18	412
NSC12	412
NSC14	412
NSC18	412
NSC38	412
NTB100BA	87
NTB100CA	87
NTB105BA	87
NTB105CA	87
NTB25BA	87
NTB25CA	87
NTB31BA	87
NTB31CA	87
NTB38BA	87
NTB38CA	87
NTB47BA	87
NTB47CA	87
NTB60BA	87
NTB60CA	87
NTB70BA	87
NTB70CA	87
NTB80BA	87
NTB80CA	87
NTB90BA	87
NTB90CA	87
NTSDH-1-10M	537
NTSDH-1-5M	537
NTSDH-112-10M	537
NTSDH-112-5M	537
NTSDH-114-10M	537
NTSDH-114-5M	537
NTSDH-2-10M	537
NTSDH-2-5M	537
NTSDH-212-10M	537
NTSDH-212-5M	537
NTSDH-3-10M	537
NTSDH-3-5M	537
NTSDH-4-10M	537
NTSDH-4-5M	537
NVB12-FF	234
NVB12-MM	234
NVB14-FF	234
NVB14-MM	234
NVB18-FF	234
NVB18-MM	234
NVB38-FF	234
NVB38-MM	234
NW1	428
NW112	428
NW114	428
NW12	428
NW14	428
NW18	428
NW2	428
NW34	428
NW38	428
NWM5	428
O	
OA100	584
OA200	584
ODSCV1414	535
ODSCV1438	535
ODSCV3838	535
ODSCV51638	535
OEMC14	535
OEMC38	535
OEMC3814	535
ON14	535
ON38	535
OR-2-40	878
OR100	97
OR50	97
OR65	97
OR80	97
ORK1	825
ORK2	825
ORK5	825
OSK018	333
OSK028	333
OSK059	333
OSK128	333
OSK159	333
OSK254	333
OSK9	882
OSKD028	333
OSKD059	333
OSKS	882
OSV200815	582
OSV200820	582
OSV201015	582
OT10	97
OT10S	97
OT13	97
OT1414	535
OT1438	535
OT16	97
OT16S	97
OT20	97
OT25	97
OT25S	97
OT30	97
OT36	97
OT36S	97
OT38	535

Part Code	Page
OT516	535
OT8	97
P	
P15-N6	219
P15-S3	219
P15-W3	219
P17-N6	219
P17-S3	219
P17-W3	219
P1NZ3000	252
P20-N6	219
P20-S3	219
P20-W3	219
P22804A	46
P22804B	46
P22804G	46
P22804V	46
P27-N6	219
P27-S3	219
P27-W3	219
P32-N6	219
P32-S3	219
P32-W3	219
P48-N6	219
P48-S3	219
P48-W3	219
P60-N6	219
P60-S3	219
P60-W3	219
P85-S3	219
PA-1209-3M	620
PA-1512-3M	620
PA-1814-3M	620
PA-2218-3M	620
PA-2823-3M	620
PA150	821
PA150-2S	821
PA250	821
PA250-2S	821
PA270	821
PBV90-10-3/8	235
PBV90-12-1/2	235
PBV90-6-1/4	235
PBVFHT-16-1/2	235
PBVFHT-16-3/4	235
PBVFHT-20-1/2	235
PBVFHT-20-3/4	235
PBVHT-12	235
PBVHT-16	235
PBVHT-20	235
PBVMP-1/2	235
PBVMP-1/2-3/4	235

Part Code	Page
PBVMP-3/4	235
PBVMPHT-12-1/2	235
PBVMPHT-12-3/4	235
PBVMPHT-16-1/2	235
PBVMPHT-16-3/4	235
PBVMPHT-20-1/2	235
PBVMPHT-20-3/4	235
PBVTMT-10-3/8	235
PBVTMT-12-1/2	235
PBVTMT-6-1/4	235
PBVTT-10	235
PBVTT-12	235
PBVTT-6	235
PC-101-1	676
PC-101-2	676
PC-101-3	676
PC-101-4	676
PC-101-4/3	676
PC-101-5	676
PC-101-5/4	676
PC-104-1	676
PC-104-2	676
PC-104-3	676
PC-104-4	676
PC-104-5	676
PC-116-1	676
PC-116-2	676
PC-116-3	676
PC-116-4	676
PC-116-5	676
PC-119-1	676
PC-119-2	676
PC-119-3	676
PC-119-4	676
PC-119-5	676
PC-125-1	676
PC-125-2	676
PC-125-3	676
PC-125-4	676
PC-125-5	676
PC-128-1	676
PC-128-2	676
PC-128-3	676
PC-128-4	676
PC-129-2	676
PC-129-3	676
PC-129-4	676
PC-130-2	677
PC-131-1	677
PC-131-2	677
PC-131-3	677
PC-131-4	677

Part Code	Page
PC-131-5	677
PC-132-1	677
PC-132-2	677
PC-132-3	677
PC-132-4	677
PC-132-5	677
PC-133-1	677
PC-133-2	677
PC-133-3	677
PC-133-4	677
PC-133-5	677
PC-134-3	677
PC-134-4	677
PC-135-2	677
PC-135-3	677
PC-135-4	677
PC-138-1	677
PC-138-2	677
PC-138-3	677
PC-138-4	677
PC-140-1	677
PC-140-2	677
PC-140-3	677
PC-143-1	677
PC-143-2	677
PC-143-3	677
PC-143-4	677
PC-144-2	677
PC-144-3	677
PC-144-4	677
PC-145-2	677
PC-146-2	677
PC-146-3	677
PC-146-4	677
PC-147-3	678
PC-147-4	678
PC-148-1	678
PC-148-2	678
PC-148-3	678
PC-148-4	678
PC-149-1	678
PC-149-2	678
PC-149-3	678
PC-149-4	678
PC-149-5	678
PC-150-2	678
PC-150-3	678
PC-150-4	678
PC-158-2	678
PC-158-3	678
PC-158-4	678
PC-160-2	678

Part Code	Page
PC-160-3	678
PC-160-4	678
PC-160-5	678
PC-161-1	678
PC-161-2	678
PC-161-3	678
PC-161-3/2	678
PC-161-4	678
PC-161-4/2	678
PC-165-1	678
PC-165-3	678
PC-165-5	678
PC-167-1	679
PC-167-2	679
PC-167-3	679
PC-167-4	679
PC-167-5	679
PC-168-2	679
PC-168-3	679
PC-168-4	679
PC-169-1	679
PC-169-2	679
PC-169-3	679
PC-169-4	679
PC-169M	679
PC-170-1	679
PC-170-2	679
PC-170-3	679
PC-170-4	679
PC-170-5	679
PC-171-1	679
PC-171-2	679
PC-171-3	679
PC-171-5	679
PC-173F-1	679
PC-173F-2	679
PC-173F-3	679
PC-173F-5	679
PC-173M-2	679
PC-173M-3	679
PC-173M-4	679
PC-173M-5	679
PC-176-2	679
PC-176-3	679
PC-176-4	679
PC-176-5	679
PC-179-1	680
PC-179-2	680
PC-179-3	680
PC-179-4	680
PC-182-2	680
PC-182-3	680

P

Part Code	Page
PC-182-4	680
PC-225-4	680
PC-233	680
PC-235-1-2	680
PC-2353-4-5	680
PC-GS3-4-5	680
PC005	558
PC006	558
PC006/15	558
PC008	558
PC008/15	558
PC010	558
PC010/15	558
PC012	558
PC012/15	558
PC013	558
PC013/15	558
PC014	558
PC014/15	558
PC015	558
PC015/15	558
PC016	558
PC016/15	558
PC017	558
PC017/15	558
PC018	558
PC018/15	558
PC019	558
PC019/15	558
PC020	558
PC020/15	558
PC021	558
PC021/15	558
PC022	558
PC022/15	558
PC023	558
PC023/15	558
PC024	558
PC025	558
PC025/15	558
PC026	558
PC026/15	558
PC027	558
PC028	558
PC028/15	558
PC030/15	558
PC032/15	558
PC034/15	558
PC035/15	558
PC037/15	558
PC038/15	558
PC040/15	558
PC15E	622
PC22E	622
PC28E	622
PCCL200	852
PCCL300	852
PCCL400	852
PCSE	622
PCSRAB1	563
PCV112SS	698
PCV114SS	698
PCV12SS	698
PCV1SS	698
PCV2SS	698
PCV34SS	698
PCV38SS	698
PCZRAB1	563
PD004	334
PD006	334
PD008	334
PD010	334
PD015	334
PD025	334
PD035	334
PD045	334
PD055	334
PD065	334
PD085	334
PD105	334
PD135	334
PD175	334
PD215	334
PD275	334
PD365	334
PE14/38BK100	507
PE14/38BK25	507
PE14/38NA100	507
PE14/38NA25	507
PE17/14BK100	507
PE17/14BK25	507
PE17/14NA100	507
PE17/14NA25	507
PE38/12BK100	507
PE38/12BK25	507
PE38/12NA100	507
PE38/12NA25	507
PE4/6BK500	507
PE4/6BL50	507
PE4/6BL500	507
PE4/6NA50	507
PE4/6NA500	507
PE6/8BK500	507
PE6/8BL50	507
PE6/8BL500	507
PE6/8NA50	507
PE6/8NA500	507
PE9/12BL50	507
PE9/12NA50	507
PECF-50	646
PECF-63	646
PECF-75	646
PECF-90	646
PED304M	50
PED502B	50
PED502M	50
PED502S	50
PEDS502B	50
PEDS502M	50
PEEE90-16	646
PEEE90-20	646
PEEE90-25	646
PEEE90-32	646
PEEE90-40	646
PEEE90-50	646
PEEE90-63	646
PEEE90-90	646
PEEP-16	645
PEEP-20	645
PEEP-25	645
PEEP-32	645
PEEP-50	645
PEEP-63	645
PEET90-16	646
PEET90-20	646
PEET90-25	646
PEET90-32	646
PEET90-40	646
PEET90-50	646
PEET90-63	646
PEET90-75	646
PEFA-1104	645
PEFA-1612	645
PEFA-2012	645
PEFA-2034	645
PEFA-251	645
PEFA-2512	645
PEFA-2534	645
PEFA-321	645
PEFA-3234	645
PEFA-401	645
PEFA-40114	645
PEFA-50112	645
PEFA-632	645
PEFA-75212	645
PEFA-903	645
PEFEE90-1612	646
PEFEE90-2012	646
PEFEE90-2512	646
PEFEE90-2534	646
PEFEE90-321	646
PEFEE90-3234	646
PEFEE90-40114	646
PEFEE90-50112	646
PEFEE90-632	646
PEFET90-1612	646
PEFET90-2012	646
PEFET90-2512	646
PEFET90-2534	646
PEFET90-321	646
PEFET90-3234	646
PEFET90-40114	646
PEFET90-50112	646
PEFET90-632	646
PEFET90-903	646
PEHT-1/2-13	409
PEHT-1/2-8	409
PEHT-1/4-10	409
PEHT-1/4-6	409
PEHT-1/4-8	409
PEHT-1/8-4	409
PEHT-1/8-6	409
PEHT-3/8-10	409
PEHT-3/8-13	409
PEHT-3/8-6	409
PEHT-3/8-8	409
PEM0210W	623
PEM0228W	623
PEM0310W	623
PEM03228W	623
PEM0410W	623
PEM0428W	623
PEM061510W	624
PEM062215W	624
PEM062815W	624
PEM062822W	624
PEM221010W	623
PEM3022BW	623
PEM3028AW	623
PEM3028DW	623
PEM3201W	623
PEM3202W	623
PEM3203W	623
PEM3210W	623
PEMA-1612	645
PEMA-2012	645
PEMA-2034	645
PEMA-251	645

P

Part Code	Page
PEMA-2512	645
PEMA-2534	645
PEMA-321	645
PEMA-32114	645
PEMA-3234	645
PEMA-401	645
PEMA-40112	645
PEMA-40114	645
PEMA-50112	645
PEMA-50114	645
PEMA-502	645
PEMA-632	645
PEMA-752	645
PEMA-75212	645
PEMA-903	645
PEMEE90-2012	646
PEMEE90-2512	646
PEMEE90-2534	646
PEMEE90-321	646
PEMEE90-3234	646
PEMEE90-50112	646
PEMEE90-632	646
PEMET90-2012	646
PEMET90-2534	646
PEMET90-321	646
PEMET90-50112	646
PEMET90-632	646
PERC-2016	645
PERC-2520	645
PERC-3220	645
PERC-3225	645
PERC-4032	645
PERC-5032	645
PERC-5040	645
PERC-6350	645
PERT90-2520	646
PERT90-3225	646
PERT90-4032	646
PERT90-6350	646
PESB-2012	646
PESB-2534	646
PESC-110	645
PESC-16	645
PESC-20	645
PESC-25	645
PESC-32	645
PESC-40	645
PESC-50	645
PESC-63	645
PESC-75	645
PESC-90	645
PEUBT-15-25-20	649
PEUBT-15-25-25	649
PEUBT-21-32-25	649
PEUBT-21-32-32	649
PEUBT-27-40-32	649
PEUBT-27-40-40	649
PEUBV-15-25	649
PEUBV-15-32	649
PEUBV-20	649
PEUBV-21-25	649
PEUBV-21-32	649
PEUBV-25	649
PEUBV-27-40	649
PEUBV-32	649
PEUBV-40	649
PEUBV-50	649
PEUBV-63	649
PEUBVF-15-1	649
PEUBVF-15-34	649
PEUBVF-20-12	649
PEUBVF-21-1	649
PEUBVF-21-34	649
PEUBVF-25-34	649
PEUBVF-27-112	649
PEUBVF-27-114	649
PEUBVF-32-1	649
PEUBVF-40-114	649
PEUBVF-50-112	649
PEUBVF-63-2	649
PEUBVM-15-1	649
PEUBVM-15-12	649
PEUBVM-15-34	649
PEUBVM-20-12	649
PEUBVM-21-1	649
PEUBVM-21-34	649
PEUBVM-25-34	649
PEUBVM-27-112	649
PEUBVM-27-114	649
PEUBVM-32-1	649
PEUBVM-40-114	649
PEUBVM-50-112	649
PEUBVM-63-2	649
PEUC-15-16	648
PEUC-15-20	648
PEUC-15-25	648
PEUC-15-32	648
PEUC-15-40	648
PEUC-21-20	648
PEUC-21-25	648
PEUC-21-32	648
PEUC-21-40	648
PEUC-21-50	648
PEUC-27-25	648
PEUC-27-32	648
PEUC-27-40	648
PEUC-27-50	648
PEUC-27-63	648
PEUC-35-32	648
PEUC-35-40	648
PEUC-35-50	648
PEUC-35-63	648
PEUCT-15-20	649
PEUCT-15-25	649
PEUCT-15-32	649
PEUCT-21-25	649
PEUCT-21-32	649
PEUCT-21-40	649
PEUCT-27-32	649
PEUCT-27-40	649
PEUEC-15	648
PEUEC-21	648
PEUEC-27	648
PEUEC-35	648
PEUF90-15-20	648
PEUF90-15-25	648
PEUF90-21-25	648
PEUF90-21-32	648
PEUF90-27-40	648
PEUFAD15-25	648
PEUFAD21-32	648
PEUFAD27-35	648
PEUFASC-15-1	648
PEUFASC-15-12	648
PEUFASC-15-34	648
PEUFASC-21-1	648
PEUFASC-21-34	648
PEUFASC-27-1	648
PEUFASC-27-114	648
PEUFASC-35-112	648
PEUFE-15-12	648
PEUFE-15-34	648
PEUFE-21-1	648
PEUFE-21-34	648
PEUFE-27-1	648
PEUFE-27-114	648
PEUFMSC-15-1	648
PEUFMSC-15-12	648
PEUFMSC-15-34	648
PEUFMSC-21-1	648
PEUFMSC-21-114	648
PEUFMSC-21-34	648
PEUFMSC-27-1	648
PEUFMSC-27-112	648
PEUFMSC-27-114	648
PEUFMSC-35-112	648
PEUFMSC-35-114	648
PEUFMSC-35-2	648
PEUFT-15-12	649
PEUFT-15-34	649
PEUFT-21-1	649
PEUFT-21-34	649
PEUFT-27-1	649
PEUFT-27-114	649
PEUME-15-12	648
PEUME-15-34	648
PEUME-21-1	648
PEUME-21-34	648
PEUME-27-1	648
PEUME-27-114	648
PEUMT-15-12	649
PEUMT-15-34	649
PEUMT-21-1	649
PEUMT-27-114	649
PEUSP715	648
PEUUBV-15-22	649
PEUUBV-21-22	649
PEUUBV-21-27	649
PEUUBV-27-35	649
PG-27-10-R1	307
PGB050114	337
PGB050314	337
PGB050318	337
PGB050414	337
PGB050418	337
PGB050614	337
PGB050618	337
PGB051014	337
PGB051018	337
PGB051214	337
PGB052014	337
PGB060114	337
PGB060314	337
PGB060414	337
PGB060614	337
PGB061014	337
PGB061214	337
PGB062014	337
PGB100138	337
PGB100338	337
PGB100438	337
PGB100638	337
PGB101038	337
PGB101238	337
PGB102038	337
PGBG060314	339
PGBG060414	339
PGBG060614	339
PGBG061014	339
PGBG0612014	339
PGBG061214	339
PGBG061414	339

P

Part Code	Page
PGBG0620014	339
PGBG062014	339
PGBG0625014	339
PGBG062514	339
PGBG0640014	339
PGBG064014	339
PGBG066014	339
PGBG100312	339
PGBG100412	339
PGBG100612	339
PGBG101012	339
PGBG1012012	339
PGBG101212	339
PGBG101612	339
PGBG102012	339
PGBG1025012	339
PGBG102512	339
PGBG1040012	339
PGBG104012	339
PGBG106012	339
PGBP040318	340
PGBP040418	340
PGBP040618	340
PGBP041018	340
PGBP041218	340
PGBP060314	340
PGBP060414	340
PGBP060614	340
PGBP061014	340
PGBP061214	340
PGBU040318	340
PGBU040418	340
PGBU040618	340
PGBU041018	340
PGBU041218	340
PGBU060314	340
PGBU060414	340
PGBU060614	340
PGBU061014	340
PGBU061214	340
PGR040118	337
PGR040318	337
PGR040418	337
PGR040618	337
PGR041018	337
PGR041218	337
PGR042018	337
PGR050114	337
PGR050118	337
PGR050314	337
PGR050318	337
PGR050414	337
PGR050418	337
PGR050614	337
PGR050618	337
PGR051014	337
PGR051018	337
PGR051214	337
PGR051218	337
PGR052014	337
PGR052018	337
PGR060114	337
PGR060314	337
PGR060414	337
PGR060614	337
PGR061014	337
PGR061214	337
PGR062014	337
PGRG060114	339
PGRG060314	339
PGRG060414	339
PGRG060614	339
PGRG061014	339
PGRG0612014	339
PGRG061214	339
PGRG061414	339
PGRG062014	339
PGRG0625014	339
PGRG062514	339
PGRG0640014	339
PGRG064014	339
PGRG066014	339
PGRG100312	339
PGRG100412	339
PGRG100612	339
PGRG101012	339
PGRG101212	339
PH12-10M	522
PH14-10M	522
PH316-10M	522
PH38-10M	522
PH516-10M	522
PHR06-10M	531
PHR06-30M	531
PHR10-10M	531
PHR10-30M	531
PHR12-10M	531
PHR12-30M	531
PHR19-10M	531
PHR19-30M	531
PHR25-10M	531
PHT-1/2-13	409
PHT-1/2-8	409
PHT-1/4-10	409
PHT-1/4-6	409
PHT-1/4-8	409
PHT-1/8-4	409
PHT-1/8-6	409
PHT-3/8-10	409
PHT-3/8-13	409
PHT-3/8-6	409
PHT-3/8-8	409
PHTC-4	409
PHTC-6	409
PHTJ-10-10	409
PHTJ-10-6	409
PHTJ-10-8	409
PHTJ-13-13	409
PHTJ-13-8	409
PHTJ-19-19	409
PHTJ-3-3	409
PHTJ-4-3	409
PHTJ-4-4	409
PHTJ-6-4	409
PHTJ-6-6	409
PHTJ-8-4	409
PHTJ-8-6	409
PHTJ-8-8	409
PHTT-10-10	409
PHTT-10-6	409
PHTT-10-8	409
PHTT-13-10	409
PHTT-13-13	409
PHTT-13-8	409
PHTT-19-19	409
PHTT-3-3	409
PHTT-4-4	409
PHTT-4-6	409
PHTT-6-4	409
PHTT-6-6	409
PHTT-8-13	409
PHTT-8-4	409
PHTT-8-6	409
PHTT-8-8	409
PHTY-13-13	409
PHTY-19-19	409
PHTY-3-3	409
PHTY-4-4	409
PHTY-4-6	409
PHTY-6-6	409
PHTY-6-8	409
PHTY-8-8	409
PI010601S	398
PI010602S	398
PI010801S	398
PI010802S	398
PI011202S	398
PI011203S	398
PI011603S	398
PI011604S	398
PI0206S	398
PI0208S	398
PI0212S	398
PI0216S	398
PI0306S	398
PI0308S	398
PI0312S	398
PI0316S	398
PI0406S	398
PI0408S	398
PI0412S	398
PI0416S	398
PI050601S	398
PI050801S	398
PI050802S	398
PI051202S	398
PI051203S	398
PI051603S	398
PI051604S	398
PI061006S	398
PI061008S	398
PI061206S	398
PI061208S	398
PI061210S	398
PI061610S	398
PI061612S	398
PI0806S	398
PI0808S	398
PI0812S	398
PI0816S	398
PI1206S	398
PI1208S	398
PI1212S	398
PI1216S	398
PI201006S	398
PI201008S	398
PI201206S	398
PI201208S	398
PI201210S	398
PI201610S	398
PI201612S	398
PKM0215W	623
PKM0222W	623
PKM0315W	623
PKM0322W	623
PKM0415W	623
PKM0422W	623
PKM201510W	623
PKM202215W	623
PKM221515W	623
PKM222222W	623
PKM3022AW	623

P

Part Code	Page
PKM3022CW	623
PKM3022DW	623
PKM4615W	623
PKM4622W	623
PKMSTC1514	624
PKMSTC1516	624
PKMSTC2216	624
PL-20	647
PL-25	647
PL-32	647
PM010401E	396
PM010402E	396
PM010411E	396
PM010412E	396
PM010601E	396
PM010602E	396
PM010611E	396
PM010612E	396
PM010801E	396
PM010801S	398
PM010802E	396
PM010802S	398
PM010803E	396
PM010811E	396
PM010812E	396
PM010813E	396
PM011002E	396
PM011003E	396
PM011004E	396
PM011012E	396
PM011013E	396
PM011014E	396
PM011203E	396
PM011204E	396
PM011514E	620
PM011814E	620
PM012216E	620
PM0204E	396
PM0206E	396
PM0208E	396
PM0208S	398
PM0210E	396
PM0215E	621
PM0218E	621
PM0222E	621
PM0304E	396
PM0306E	396
PM0308E	396
PM0308S	398
PM0310E	396
PM0315E	620
PM0318E	620
PM0322E	620
PM0404E	396
PM0406E	396
PM0408E	396
PM0408S	398
PM0410E	396
PM0415E	620
PM0418E	620
PM0422E	620
PM050401E	397
PM050402E	397
PM050411E	397
PM050412E	397
PM050601E	397
PM050602E	397
PM050611E	397
PM050612E	397
PM050801E	397
PM050801S	398
PM050802E	397
PM050802S	398
PM050803E	397
PM050803S	398
PM050811E	397
PM050812E	397
PM050813E	397
PM051002E	397
PM051003E	397
PM051004E	397
PM051012E	397
PM051013E	397
PM051014E	397
PM051203E	397
PM051204E	397
PM051513E	621
PM051514E	621
PM051814E	621
PM052214E	621
PM052216E	621
PM060604E	397
PM060804E	397
PM060806E	397
PM061006E	397
PM061008E	397
PM061208E	397
PM061210E	397
PM061512E	621
PM061815E	621
PM062215E	621
PM062218E	621
PM062815E	621
PM0804R	397
PM0806R	397
PM0808R	397
PM0808S	398
PM0810R	397
PM0815E	622
PM0818E	622
PM0822E	622
PM0828E	622
PM090401E	397
PM090402E	397
PM090411E	397
PM090412E	397
PM090601E	397
PM090602E	397
PM090611E	397
PM090612E	397
PM090801E	397
PM090802E	397
PM090803E	397
PM090811E	397
PM090812E	397
PM090813E	397
PM091002E	397
PM091003E	397
PM091004E	397
PM091012E	397
PM091013E	397
PM091014E	397
PM091203E	397
PM091204E	397
PM091213E	397
PM091214E	397
PM1204E	397
PM1206E	397
PM1208E	397
PM1208S	398
PM1210E	397
PM1212E	397
PM15WB	621
PM1912E	622
PM1915E	622
PM1918E	622
PM1922E	622
PM200604E	396
PM200804E	396
PM200806E	396
PM201004E	396
PM201006E	396
PM201008E	396
PM201208E	396
PM201210E	396
PM210604E	397
PM210804E	397
PM210806E	397
PM211004E	397
PM211006E	397
PM211008E	397
PM211208E	397
PM211210E	397
PM220404E	396
PM220606E	396
PM220808E	396
PM221010E	396
PM221515E	621
PM221818E	621
PM222222E	621
PM22WB	621
PM2304E	397
PM2310E	397
PM3018AE	621
PM3022AE	621
PM303X1	208
PM303X2	208
PM303X3	208
PM303X4	208
PM4612E	622
PM4615E	622
PM4622E	622
PMC10-IVN	85
PMC2-IVN	85
PMC25-IVN	85
PMC5-IVN	85
PMC80-IVN	85
PMFIL-10	235
PMFIL-12	235
PMFIL-6	235
PMFIL-8	235
PMN10A-14K	84
PMN150A-14K	84
PMN1A-14K	84
PMN20A-14K	84
PMN250A-14K	84
PMN2A-14K	84
PMN300A-14K	84
PMN50A-14K	84
PMN80A-14K	84
PMTT22E	621
PMUB15E	622
PN1	414
PN1114	414
PN112	414
PN1122	414
PN114	414
PN114112	414
PN12	414
PN1234	414
PN14	414
PN1412	414

P

Part Code	Page
PN1438	414
PN18	414
PN1814	414
PN1838	414
PN2	414
PN34	414
PN341	414
PN38	414
PN3812	414
PNFG-110	631
PNFG-20	631
PNFG-25	631
PNFG-32	631
PNFG-40	631
PNFG-50	631
PNFG-63	631
PNFG-75	631
PNFG-90	631
PNM518	414
POLY-STATION	882
PPC150-IVN	85
PPC300-IVN	85
PPCC11	422
PPCC112	422
PPCC112112	422
PPCC114114	422
PPCC1212	422
PPCC1214	422
PPCC1238	422
PPCC134	422
PPCC1414	422
PPCC1418	422
PPCC1818	422
PPCC22	422
PPCC3412	422
PPCC3434	422
PPCC3438	422
PPCC3814	422
PPCC3818	422
PPCC3838	422
PPCF150-IVN	85
PPCF300-IVN	85
PPCLIP-1	641
PPCLIP-110	632
PPCLIP-112	641
PPCLIP-114	641
PPCLIP-12	641
PPCLIP-16	632
PPCLIP-160	632
PPCLIP-2	641
PPCLIP-20	632
PPCLIP-225	632
PPCLIP-25	632
PPCLIP-32	632
PPCLIP-34	641
PPCLIP-38	641
PPCLIP-4	641
PPCLIP-40	632
PPCLIP-50	632
PPCLIP-6	641
PPCLIP-63	632
PPCLIP-8	641
PPJJMS	573
PPJJSS	573
PPMS	572
PPSS	572
PPSS316	572
PPWS	573
PRB112	414
PRB112114	414
PRB1141	414
PRB1214	414
PRB1218	414
PRB1238	414
PRB134	414
PRB138	414
PRB1418	414
PRB18M5	414
PRB2112	414
PRB2114	414
PRB3412	414
PRB3414	414
PRB3438	414
PRB3814	414
PRB3818	414
PS150-14K	85
PS300-14K	85
PSE4610W	623
PSK10-N	86
PSK100-N	86
PSK360_N	86
PSM10	84
PSM100	84
PSM2	84
PSM50	84
PSP150	84
PSP300	84
PSS-10	432
PSS-12	432
PSS-6	432
PSS-8	432
PSS4	432
PSS6	432
PSS8	432
PTEC1	408
PTEC12	408
PTEC14	408
PTEC18	408
PTEC34	408
PTEC38	408
PTFE108-100M	509
PTFE108-50M	509
PTFE1210-100M	509
PTFE1210-50M	509
PTFE42-100M	509
PTFE42-50M	509
PTFE64-100M	509
PTFE64-50M	509
PTFE86-100M	509
PTFE86-50M	509
PTHT-1/4-6	409
PTHT-1/4-8	409
PTHT-1/8-4	409
PTHT-1/8-6	409
PU10/65BK25	505
PU10/65BL25	505
PU10/65NA25	505
PU10/8BK25	505
PU10/8BK25BOX	508
PU10/8BL25	505
PU10/8BL25BOX	508
PU10/8NA25	505
PU10/8NA25BOX	508
PU12/8BK25	505
PU12/8BL25	505
PU12/8NA25	505
PU12/9BK25	505
PU12/9BL25	505
PU12/9NA25	505
PU4/25BK100	506
PU4/25BK25	505
PU4/25BL100	506
PU4/25BL25	505
PU4/25NA100	506
PU4/25NA25	505
PU4/25RD100	506
PU4/25RD25	505
PU4/2BK25	505
PU4/2BK25BOX	508
PU4/2BL25	505
PU4/2BL25BOX	508
PU4/2NA25	505
PU4/2NA25BOX	508
PU4/2RD25BOX	508
PU5/3BK25	505
PU5/3BL25	505
PU5/3NA25	505
PU6/4BK100	506
PU6/4BK25	505
PU6/4BK25BOX	508
PU6/4BL100	506
PU6/4BL25	505
PU6/4BL25BOX	508
PU6/4NA100	506
PU6/4NA25	505
PU6/4NA25BOX	508
PU6/4RD100	506
PU6/4RD25	505
PU6/4RD25BOX	508
PU8/55BK25	505
PU8/55BL25	505
PU8/55NA25	505
PU8/55RD25	505
PU8/5BK100	506
PU8/5BL100	506
PU8/5NA100	506
PU8/5RD100	506
PU8/6BK100	506
PU8/6BK25	505
PU8/6BK25BOX	508
PU8/6BL100	506
PU8/6BL25	505
PU8/6BL25BOX	508
PU8/6NA100	506
PU8/6NA25	505
PU8/6NA25BOX	508
PU8/6RD25BOX	508
PUC08/2BL	511
PUC08/2RD	511
PUC08/4BL	511
PUC08/4RD	511
PUC08/6BL	511
PUC08/6RD	511
PUC10/2BL	511
PUC10/2RD	511
PUC10/4BL	511
PUC10/4RD	511
PUC10/6BL	511
PUC10/6RD	511
PUC12/2BL	511
PUC12/2RD	511
PUC12/4BL	511
PUC12/4RD	511
PUC12/6BL	511
PUC12/6RD	511
PUD-F-100-10M	539
PUD-F-125-10M	539
PUD-F-150-10M	539
PUD-F-160-10M	539
PUD-F-175-10M	539
PUD-F-200-10M	539
PUD-F-225-10M	539

P, Q

Part Code	Page
PUD-F-250-10M	539
PUD-F-300-10M	539
PUD-F-38-10M	539
PUD-F-50-10M	539
PUD-F-65-10M	539
PUD-F-75-10M	539
PUD-H-100-10M	539
PUD-H-125-10M	539
PUD-H-150-10M	539
PUD-H-160-10M	539
PUD-H-200-10M	539
PUD-H-250-10M	539
PUD-H-300-10M	539
PUD-H-50-10M	539
PUD-H-65-10M	539
PUD-H-75-10M	539
PUD-L-100-10M	538
PUD-L-115-10M	538
PUD-L-120-10M	538
PUD-L-125-10M	538
PUD-L-130-10M	538
PUD-L-140-10M	538
PUD-L-150-10M	538
PUD-L-160-10M	538
PUD-L-180-10M	538
PUD-L-200-10M	538
PUD-L-225-10M	538
PUD-L-250-10M	538
PUD-L-38-10M	538
PUD-L-50-10M	538
PUD-L-60-10M	538
PUD-L-65-10M	538
PUD-L-75-10M	538
PUD-L-80-10M	538
PUD-L-90-10M	538
PUD-M-100-10M	538
PUD-M-115-10M	538
PUD-M-120-10M	538
PUD-M-125-10M	538
PUD-M-130-10M	538
PUD-M-140-10M	538
PUD-M-150-10M	538
PUD-M-160-10M	538
PUD-M-180-10M	538
PUD-M-200-10M	538
PUD-M-225-10M	538
PUD-M-250-10M	538
PUD-M-300-10M	538
PUD-M-350-10M	538
PUD-M-38-10M	538
PUD-M-400-10M	538
PUD-M-50-10M	538
PUD-M-60-10M	538
PUD-M-65-10M	538
PUD-M-75-10M	538
PUD-M-80-10M	538
PUD-M-90-10M	538
PUD-P-0025-10M	540
PUD-P-0032-10M	540
PUD-P-0038-10M	540
PUD-P-0040-10M	540
PUD-P-0050-10M	540
PUD-P-0060-10M	540
PUD-P-0063-10M	540
PUD-P-0075-10M	540
PUD-P-0080-10M	540
PUD-P-0100-10M	540
PUD-P-0125-10M	540
PUD-P-0150-10M	540
PVC-F-25-15M	545
PVC-F-25-CUFF	545
PVC-F-32-15M	545
PVC-F-38-15M	545
PVC-F-38-CUFF	545
PVC-F-51-15M	545
PVC-F-51-CUFF	545
PVC-F-63-15M	545
PVC-F-63-CUFF	545
PVC-F-76-15M	545
PVC-L-100-10M	544
PVC-L-125-10M	544
PVC-L-150-10M	544
PVC-L-160-10M	544
PVC-L-200-10M	544
PVC-L-32-10M	544
PVC-L-38-10M	544
PVC-L-50-10M	544
PVC-L-55-10M	544
PVC-L-65-10M	544
PVC-L-75-10M	544
PVC-L-80-10M	544
PVC-L-90-10M	544
PVC-M-100-10M	545
PVC-M-115-10M	545
PVC-M-125-10M	545
PVC-M-150-10M	545
PVC-M-25-10M	545
PVC-M-32-10M	545
PVC-M-38-10M	545
PVC-M-45-10M	545
PVC-M-50-10M	545
PVC-M-55-10M	545
PVC-M-65-10M	545
PVC-M-75-10M	545
PVC-M-80-10M	545
PVC-M-90-10M	545
PVC-R-102-10M	544
PVC-R-127-10M	544
PVC-R-152-10M	544
PVC-R-160-10M	544
PVC-R-203-10M	544
PVC-R-254-10M	544
PVC-R-305-10M	544
PVC-R-51-10M	544
PVC-R-60-10M	544
PVC-R-76-10M	544
PVC-R-80-10M	544
PVC10/15-30M	496
PVC10/3-30M	496
PVC12/15-30M	496
PVC12/3-30M	496
PVC16/15-30M	496
PVC16/3-30M	496
PVC19/15-30M	496
PVC19/3-30M	496
PVC25/3-30M	496
PVC3/15-30M	496
PVC32/5-30M	496
PVC38/5-30M	496
PVC5/15-30M	496
PVC5/3-30M	496
PVC50/6-30M	496
PVC6/15-30M	496
PVC6/3-30M	496
PVC8/15-30M	496
PVC8/3-30M	496
Q	
QC025057	560
QC025070	560
QC025101	560
QC038089	560
QC044177	560
QC044217	560
QC044406	560
QC050254	560
QC051127	560
QC052152	560
QC052312	560
QC258355	560
QLCAAL020	611
QLCAAL025	611
QLCAAL032	611
QLCAAL040	611
QLCAAL050	611
QLCAAL063	611
QLCAAL080	611
QLCAAL168	613
QLCAPA016	607
QLCAPA020	607
QLCAPA025	607
QLCAPA032	607
QLCAPA040	607
QLCAPA050	607
QLCAPA063	607
QLCLE016020	607
QLCLE025032	607
QLCLE040050	607
QLCLE063	607
QLCLEAL020025	611
QLCLEAL032040	611
QLCLEAL050	611
QLCLEAL063	611
QLCLEAL080	611
QLDER168108	613
QLDER168128	613
QLDER168168	613
QLDER168208	613
QLDER168248	613
QLDERAL025020	611
QLDERAL032020	611
QLDERAL040020	611
QLDERAL040025	611
QLDERAL050020	611
QLDERAL050025	611
QLDERAL063020	611
QLDERAL063025	611
QLDERAL063032	611
QLDERAL080025	611
QLDERAL080032	611
QLDERAL110020	611
QLDERAL110025	611
QLDERAL110032	611
QLDERPA025016	607
QLDERPA025020	607
QLDERPA032016	607
QLDERPA032020	607
QLDERPA040016	607
QLDERPA040020	607
QLDERPA040025	607
QLDERPA050016	607
QLDERPA050020	607
QLDERPA050025	607
QLDERPA063020	607
QLDERPA063025	607
QLDERPA063032	607
QLDERPA080025	607
QLDERPA080032	607
QLDERPA110025	607

Q

Part Code	Page
QLDERPA110032	607
QLFLA168480DIN	613
QLFLEX020	615
QLFLEX025	615
QLFLEX032	615
QLFLEX040	615
QLFLEX050	615
QLFLEX063	615
QLGO45AL020	610
QLGO45AL025	610
QLGO45AL032	610
QLGO45AL040	610
QLGO45AL168	612
QLGO45PA020	606
QLGO45PA025	606
QLGO45PA032	606
QLGO45PA040	606
QLGO45PA050	606
QLGO45PA063	606
QLGO90AL020	610
QLGO90AL025	610
QLGO90AL032	610
QLGO90AL040	610
QLGO90AL050	610
QLGO90AL063	610
QLGO90AL080	610
QLGO90AL110	610
QLGO90AL168	612
QLGO90MAL020048	610
QLGO90MAL025048	610
QLGO90MAL025068	610
QLGO90PA016	606
QLGO90PA020	606
QLGO90PA025	606
QLGO90PA032	606
QLGO90PA040	606
QLGO90PA050	606
QLGO90PA063	606
QLGO90PM020048	606
QLGO90PM025048	606
QLGO90PM025068	606
QLKIT-16	617
QLKIT-20	617
QLKIT-25	617
QLMAAFL168	613
QLMAAL020	610
QLMAAL025	610
QLMAAL032	610
QLMAAL040	610
QLMAAL050	610
QLMAAL063	610
QLMAAL080	610
QLMAAL110	610
QLMAAL168	613
QLMAPA016	606
QLMAPA020	606
QLMAPA025	606
QLMAPA032	606
QLMAPA040	606
QLMAPA050	606
QLMAPA063	606
QLMFLAL080248DIN	611
QLMFLAL110328DIN	611
QLMIS016063	607
QLMISAL020110	611
QLMNMAL020048	610
QLMNMAL020068	610
QLMNMAL025068	610
QLMNMAL025088	610
QLMNMAL032108	610
QLMNMAL040128	610
QLMNMAL050168	610
QLMNMAL063168	610
QLMNMAL063208	610
QLMNMAL080208	610
QLMNMAL080248	610
QLMNPA016048	606
QLMNPA020048	606
QLMNPA020068	606
QLMNPA025048	606
QLMNPA025068	606
QLMNPA025088	606
QLMNPA032088	606
QLMNPA032108	606
QLMNPA040088	606
QLMNPA040108	606
QLMNPA040128	606
QLMNPA050128	606
QLMNPA050168	606
QLMNPA063168	606
QLMPMAL020048	610
QLMPMAL020068	610
QLMPMAL025068	610
QLMPMAL025088	610
QLMPMAL032108	610
QLMPMAL040128	610
QLMPMAL050168	610
QLMPMAL063208	610
QLPUNM016038	615
QLPUNM020048	615
QLPUNM020068	615
QLPUNM025088	615
QLPUNM032108	615
QLPUNM040128	615
QLPUNM050168	615
QLPUNM063168	615
QLPUNM080248	615
QLRIDPA025020	606
QLRIDPA032025	606
QLRIDPA040025	606
QLRIDPA040032	606
QLRIDPA050040	606
QLRIDTU168063	612
QLRIDTU168080	612
QLRIDTU168110	612
QLSCI016	605
QLSCI020	605
QLSCI025	605
QLTEAL020	610
QLTEAL025	610
QLTEAL032	610
QLTEAL040	610
QLTEAL050	610
QLTEAL063	610
QLTEAL080	610
QLTEAL110	610
QLTEAL168	612
QLTEPA016	606
QLTEPA020	606
QLTEPA025	606
QLTEPA032	606
QLTEPA040	606
QLTEPA050	606
QLTEPA063	606
QLTPAL020048	610
QLTPAL025068	610
QLTPAL032088	610
QLTPAL040108	610
QLTPAL050128	610
QLTPAL063168	610
QLTPAL080208	610
QLTPAL110248	610
QLTPPA020048	607
QLTPPA025048	607
QLTRPA025016	607
QLTRPA025020	607
QLTRPA032020	607
QLTRPA032025	607
QLTRPA040025	607
QLTRPA040032	607
QLTRPA050032	607
QLTRPA050040	607
QLTRPA063040	607
QLTRPA063050	607
QLTUAL4016	605
QLTUAL4020	605
QLTUAL4025	605
QLTUAL4032	605
QLTUAL4040	605
QLTUAL4050	605
QLTUAL4063	605
QLTUAL6020	605
QLTUAL6025	605
QLTUAL6032	605
QLTUAL6040	605
QLTUAL6050	605
QLTUAL6063	605
QLTUAL6080	605
QLTUAL6110	605
QLTUAL6168	612
QLTUALG6020	605
QLTUALG6025	605
QLTUALG6040	605
QLTUALG6063	605
QLTUALGY6020	605
QLTUALGY6025	605
QLTUALGY6032	605
QLTUALGY6040	605
QLTUALGY6050	605
QLTUALGY6063	605
QLTUALGY6080	605
QLTUMLST016	603
QLTUMLST020	603
QLTUMLST025	603
QLVAF016048	608
QLVAF020048	608
QLVAF020048AL	614
QLVAF025068	608
QLVAF025068AL	614
QLVAINOX080	614
QLVAINOXF080248	614
QLVALFAR168	613
QLVAM016048	608
QLVAM020048	608
QLVAM020048AL	614
QLVAM025068	608
QLVAM025068AL	614
QLVAVIP050	608
QLVAVIP063	608
QRC1310H	439
QRC1312F	439
QRC1312M	439
QRC1314F	439
QRC1314M	439
QRC1338F	439
QRC1338M	439
QRC136H	439
QRC138H	439

Q

Part Code	Page
QRC1410H	440
QRC1412F	440
QRC1412M	440
QRC1413H	440
QRC1414F	440
QRC1414M	440
QRC1418M	440
QRC1438F	440
QRC1438M	440
QRC146H	440
QRC148H	440
QRC1910H	442
QRC1912F	442
QRC1912M	442
QRC1913H	442
QRC1914F	442
QRC1914M	442
QRC1938F	442
QRC1938M	442
QRC196H	442
QRC198H	442
QRC2018F	443
QRC2018M	443
QRC203H	443
QRC203P	443
QRC204H	443
QRC204P	443
QRC205H	443
QRC20M5F	443
QRC20M5M	443
QRC2114FBL	446
QRC2114FBN	446
QRC2114FGN	446
QRC2114FN	444
QRC2114FRD	446
QRC2114MBL	446
QRC2114MBN	446
QRC2114MGN	446
QRC2114MN	444
QRC2114MRD	446
QRC2118FBL	446
QRC2118FBN	446
QRC2118FGN	446
QRC2118FN	444
QRC2118FRD	446
QRC2118MBL	446
QRC2118MBN	446
QRC2118MGN	446
QRC2118MN	444
QRC2118MRD	446
QRC2138FN	444
QRC2138MN	444
QRC214HN	444
QRC214PN	444
QRC216HN	444
QRC216PN	444
QRC218HN	444
QRC21B14F	445
QRC21B14M	445
QRC21B18F	445
QRC21B18M	445
QRC21B38F	445
QRC21B38M	445
QRC2210BH	447
QRC2212BF	447
QRC2212BM	447
QRC2213BH	447
QRC2214BF	447
QRC2214BM	447
QRC2238BF	447
QRC2238BM	447
QRC226BH	447
QRC228BH	447
QRC2310BH	448
QRC2312BF	448
QRC2312BM	448
QRC2313BH	448
QRC2314BF	448
QRC2314BM	448
QRC2338BF	448
QRC2338BM	448
QRC236BH	448
QRC238BH	448
QRC2410H	449
QRC2412F	449
QRC2412M	449
QRC2413H	449
QRC2414F	449
QRC2414M	449
QRC2418M	449
QRC2438F	449
QRC2438M	449
QRC246H	449
QRC248H	449
QRC2510BH	450
QRC2510HS	453
QRC2512BF	450
QRC2512BM	450
QRC2512FS	453
QRC2512MS	453
QRC2513BH	450
QRC2513HS	453
QRC2514BF	450
QRC2514BM	450
QRC2514FS	453
QRC2514MS	453
QRC2538BF	450
QRC2538BM	450
QRC2538FS	453
QRC2538MS	453
QRC256BH	450
QRC256HS	453
QRC258BH	450
QRC258HS	453
QRC25B12F	451
QRC25B12M	451
QRC25B14F	451
QRC25B14M	451
QRC25B38F	451
QRC25B38M	451
QRC25SS12F	452
QRC25SS12M	452
QRC25SS14F	452
QRC25SS14M	452
QRC25SS38F	452
QRC25SS38M	452
QRC2610H	454
QRC2612F	454
QRC2612M	454
QRC2613H	454
QRC2614F	454
QRC2614M	454
QRC2638F	454
QRC2638M	454
QRC266H	454
QRC266P	454
QRC268H	454
QRC268P	454
QRC269P	454
QRC2710H	457
QRC2712F	457
QRC2712M	457
QRC2713H	457
QRC2714F	457
QRC2714M	457
QRC2716H	457
QRC2719H	457
QRC2734F	457
QRC2734M	457
QRC2738F	457
QRC2738M	457
QRC279H	457
QRC3210H	458
QRC3212F	458
QRC3212M	458
QRC3213H	458
QRC3214F	458
QRC3214M	458
QRC3216H	458
QRC3219H	458
QRC3234M	458
QRC3238F	458
QRC3238M	458
QRC3310BH	459
QRC3312BF	459
QRC3312BM	459
QRC3313BH	459
QRC3314BF	459
QRC3314BM	459
QRC3338BF	459
QRC3338BM	459
QRC336BH	459
QRC338BH	459
QRC3410BH	460
QRC3412BF	460
QRC3412BM	460
QRC3413BH	460
QRC3414BF	460
QRC3414BM	460
QRC3416BH	460
QRC3419BH	460
QRC3434BF	460
QRC3434BM	460
QRC3438BF	460
QRC3438BM	460
QRC348BH	460
QRC6506H	473
QRC6509H	473
QRC6514F	473
QRC6538F	473
QRC6606H	473
QRC6609H	473
QRC6614F	473
QRC6638F	473
QRC6706H	473
QRC6709H	473
QRC6714F	473
QRC6738F	473
QRC6810H	461
QRC6812F	461
QRC6812M	461
QRC6813H	461
QRC6814F	461
QRC6819H	461
QRC6834F	461
QRC6834M	461
QRC6838F	461
QRC6838M	461

Q

Part Code	Page
QRC86456H	463
QRC86458H	463
QRC86459H	463
QRC8645V6H	462
QRC8645V8H	462
QRC8645V9H	462
QRC86906H	463
QRC86908H	463
QRC86909H	463
QRC8690V6H	462
QRC8690V8H	462
QRC8690V9H	462
QRC86S14F	463
QRC86S14M	463
QRC86S18F	463
QRC86S6H	463
QRC86S8H	463
QRC86S9H	463
QRC86SEALNBR	463
QRC86SEALVITON	463
QRC86SV14F	462
QRC86SV14M	462
QRC86SV18F	462
QRC86SV6H	462
QRC86SV8H	462
QRC86SV9H	462
QRC874510H	463
QRC874513H	463
QRC8745V10H	462
QRC8745V13H	462
QRC879010H	463
QRC879013H	463
QRC8790V10H	462
QRC8790V13H	462
QRC87S10H	463
QRC87S13H	463
QRC87SEALNBR	463
QRC87SEALVITON	463
QRC87SV10H	462
QRC87SV13H	462
QRCH12F	746
QRCH12FSSV	746
QRCH14F	746
QRCH14FSSV	746
QRCH1F	746
QRCH1FSSV	746
QRCH34F	746
QRCH34FSSV	746
QRCH38F	746
QRCH38FSSV	746
QRCHA12F	747
QRCHA12FSSV	747
QRCHA14F	747
QRCHA14FSSV	747
QRCHA1F	747
QRCHA1FSSV	747
QRCHA34F	747
QRCHA34FSSV	747
QRCHA38F	747
QRCHA38FSSV	747
QRCHB12F-S	746
QRCHB14F-S	746
QRCHB1F-S	746
QRCHB34F-S	746
QRCHB38F-S	746
QRCHF0614F-S	747
QRCHF1012F-S	747
QRCHF1038F-S	747
QRCHF1212F-S	747
QRCHF1234F-S	747
QRCHF1634F-S	747
QRCHF1910F-S	747
QRCSC10H	441
QRCSC12F	441
QRCSC12M	441
QRCSC13H	441
QRCSC14F	441
QRCSC14M	441
QRCSC38F	441
QRCSC38M	441
QRCSC6H	441
QRCSC8H	441
QRP1310H	439
QRP1312F	439
QRP1312M	439
QRP1314F	439
QRP1314M	439
QRP1338F	439
QRP1338M	439
QRP136H	439
QRP138H	439
QRP1410H	440
QRP1412F	440
QRP1412M	440
QRP1413H	440
QRP1414F	440
QRP1414M	440
QRP1418F	440
QRP1418M	440
QRP1438F	440
QRP1438M	440
QRP146H	440
QRP148H	440
QRP1910H	442
QRP1914F	442
QRP1914M	442
QRP1938F	442
QRP1938M	442
QRP196H	442
QRP198H	442
QRP2018F	443
QRP2018M	443
QRP203H	443
QRP203P	443
QRP204H	443
QRP204P	443
QRP205H	443
QRP20M5F	443
QRP20M5M	443
QRP2114FBL	446
QRP2114FBN	446
QRP2114FGN	446
QRP2114FN	444
QRP2114FRD	446
QRP2114MBL	446
QRP2114MBN	446
QRP2114MGN	446
QRP2114MN	444
QRP2114MRD	446
QRP2118FBL	446
QRP2118FBN	446
QRP2118FGN	446
QRP2118FN	444
QRP2118FRD	446
QRP2118MBL	446
QRP2118MBN	446
QRP2118MGN	446
QRP2118MN	444
QRP2118MRD	446
QRP2138FN	444
QRP2138MN	444
QRP214HBL	446
QRP214HBN	446
QRP214HGN	446
QRP214HN	444
QRP214HRD	446
QRP214PN	444
QRP215HN	444
QRP216HBL	446
QRP216HBN	446
QRP216HGN	446
QRP216HN	444
QRP216HRD	446
QRP216PN	444
QRP218HN	444
QRP21B10H	445
QRP21B14F	445
QRP21B14M	445
QRP21B18F	445
QRP21B18M	445
QRP21B38F	445
QRP21B38M	445
QRP21B4H	445
QRP21B6H	445
QRP21B8H	445
QRP2210H	447
QRP2212F	447
QRP2212M	447
QRP2213H	447
QRP2214F	447
QRP2214M	447
QRP2238F	447
QRP2238M	447
QRP226H	447
QRP228H	447
QRP2310H	448
QRP2312F	448
QRP2312M	448
QRP2313H	448
QRP2314F	448
QRP2314M	448
QRP2338F	448
QRP2338M	448
QRP236H	448
QRP238H	448
QRP2412F	449
QRP2412M	449
QRP2413H	449
QRP2414F	449
QRP2414M	449
QRP2418F	449
QRP2418M	449
QRP2438F	449
QRP2438M	449
QRP246H	449
QRP248H	449
QRP249H	449
QRP2510H	450
QRP2512F	450
QRP2512M	450
QRP2513H	450
QRP2514F	450
QRP2514M	450
QRP2518F	450
QRP2518M	450
QRP2538F	450
QRP2538M	450
QRP256H	450

Part Code	Page
QRP258H	450
QRP25B10H	451
QRP25B12F	451
QRP25B12M	451
QRP25B13H	451
QRP25B14F	451
QRP25B14M	451
QRP25B38F	451
QRP25B38M	451
QRP25B6H	451
QRP25B8H	451
QRP25SS12F	452
QRP25SS12M	452
QRP25SS14F	452
QRP25SS14M	452
QRP25SS38F	452
QRP25SS38M	452
QRP2610H	455
QRP2612F	455
QRP2612M	455
QRP2613H	455
QRP2614F	455
QRP2614M	455
QRP2618F	455
QRP2618M	455
QRP2638F	455
QRP2638M	455
QRP264P	455
QRP266H	455
QRP266P	455
QRP268H	455
QRP268P	455
QRP269P	455
QRP2710H	457
QRP2712F	457
QRP2712M	457
QRP2713H	457
QRP2714F	457
QRP2714M	457
QRP2716H	457
QRP2719H	457
QRP2734F	457
QRP2734M	457
QRP2738F	457
QRP2738M	457
QRP279H	457
QRP3210H	458
QRP3212F	458
QRP3212M	458
QRP3213H	458
QRP3214F	458
QRP3214M	458
QRP3216H	458
QRP3219H	458
QRP3234M	458
QRP3238F	458
QRP3238M	458
QRP3310BH	459
QRP3312BF	459
QRP3312BM	459
QRP3313BH	459
QRP3314BF	459
QRP3314BM	459
QRP3338BF	459
QRP3338BM	459
QRP336BH	459
QRP338BH	459
QRP3410BH	460
QRP3412BF	460
QRP3412BM	460
QRP3413BH	460
QRP3416BH	460
QRP3438BF	460
QRP3438BM	460
QRP6506H	474
QRP6509H	474
QRP6514F	474
QRP6538F	474
QRP6606H	474
QRP6609H	474
QRP6614F	474
QRP6638F	474
QRP6706H	474
QRP6709H	474
QRP6714F	474
QRP6738F	474
QRP6810H	461
QRP6812M	461
QRP6813H	461
QRP6814F	461
QRP6814M	461
QRP6834M	461
QRP6838F	461
QRP6838M	461
QRP8614F	463
QRP8614M	463
QRP8618F	463
QRP8618M	463
QRP8638M	463
QRP86EL100	463
QRP86EL100G18	463
QRP86EL120	463
QRP86EL150G18	463
QRP86EL240	463
QRP86EL250G18	463
QRP86EL63	463
QRP86V14M	462
QRP8712F	463
QRP8712M	463
QRP8714F	463
QRP8714M	463
QRP8738F	463
QRP8738M	463
QRP87EL150	463
QRP87EL150G14	463
QRP87EL250G14	463
QRP87EL300	463
QRP87V12M	462
QRP87V14M	462
QRP87V38M	462
QRPH12F	746
QRPH12FSSV	746
QRPH14F	746
QRPH14FSSV	746
QRPH1F	746
QRPH1FSSV	746
QRPH34F	746
QRPH34FSSV	746
QRPH38F	746
QRPH38FSSV	746
QRPHA12F	747
QRPHA12FSSV	747
QRPHA14F	747
QRPHA14FSSV	747
QRPHA1F	747
QRPHA1FSSV	747
QRPHA34F	747
QRPHA34FSSV	747
QRPHA38F	747
QRPHA38FSSV	747
QRPHB12F-S	746
QRPHB14F-S	746
QRPHB1F-S	746
QRPHB34F-S	746
QRPHB38F-S	746
QRPHF0614F-S	747
QRPHF1012F-S	747
QRPHF1038F-S	747
QRPHF1212F-S	747
QRPHF1234F-S	747
QRPHF1634F-S	747
QRPHF1910F-S	747
QRPSC10H	441
QRPSC12F	441
QRPSC12M	441
QRPSC13H	441
QRPSC14F	441
QRPSC14M	441
QRPSC38F	441
QRPSC38M	441
QRPSC6H	441
QRPSC8H	441
QRTC2612F	455
QRTC2638F	455
QRYC2612F	455
QRYC2638F	455
R	
R112-BR	313
R114-BR	313
R121-BR	313
R123-1-AL	313
R123-1-BR	313
R123-34-AL	313
R123-34-BR	313
R12MD	316
R130-12-AL	313
R130-12-BR	313
R130-2-AL	313
R130-2-BR	313
R138-BR	313
R14MD	316
R18MD	316
R212ST	318
R214M	318
R214ST	318
R238ST	318
R3114	688
R3121	688
R3130	689
R3130-2	689
R3138	688
R3150	689
R38MD	316
R412006000	117
R412006001	117
R412006009	117
R412006010	117
R412006018	118
R412006019	118
R412006027	118
R412006028	118
R412006036	118
R412006037	118
R412006045	118
R412006046	118
R412006072	118
R412006075	118
R412006101	119

R

Part Code	Page
R412006103	119
R412006105	119
R412006107	119
R412006109	119
R412006111	119
R412006113	119
R412006115	119
R412006117	119
R412006119	119
R412006121	119
R412006123	119
R412006137	120
R412006139	120
R412006141	120
R412006143	120
R412006145	120
R412006149	120
R412006151	120
R412006153	120
R412006155	120
R412006157	120
R412006200	122
R412006201	122
R412006209	122
R412006210	122
R412006225	121
R412006231	121
R412006250	127
R412006251	127
R412006260	127
R412006261	127
R412006265	126
R412006266	126
R412006267	126
R412006269	126
R412006270	126
R412006271	126
R412006298	124
R412006299	124
R412006307	124
R412006308	124
R412006318	123
R412006319	123
R412006327	123
R412006328	123
R412006368	125
R412006370	125
R412006371	125
R412007000	117
R412007001	117
R412007009	117
R412007010	117
R412007018	118
R412007019	118
R412007027	118
R412007028	118
R412007036	118
R412007037	118
R412007045	118
R412007046	118
R412007072	118
R412007075	118
R412007101	119
R412007103	119
R412007105	119
R412007107	119
R412007109	119
R412007111	119
R412007113	119
R412007115	119
R412007117	119
R412007119	119
R412007121	119
R412007123	119
R412007137	120
R412007139	120
R412007141	120
R412007143	120
R412007145	120
R412007149	120
R412007151	120
R412007153	120
R412007155	120
R412007157	120
R412007200	122
R412007201	122
R412007209	122
R412007210	122
R412007225	121
R412007231	121
R412007250	127
R412007251	127
R412007260	127
R412007261	127
R412007265	126
R412007266	126
R412007267	126
R412007269	126
R412007270	126
R412007271	126
R412007298	124
R412007299	124
R412007307	124
R412007308	124
R412007318	123
R412007319	123
R412007327	123
R412007328	123
R412007368	125
R412007370	125
R412007371	125
R412009000	117
R412009001	117
R412009009	117
R412009010	117
R412009101	119
R412009103	119
R412009105	119
R412009107	119
R412009109	119
R412009111	119
R412009113	119
R412009115	119
R412009117	119
R412009119	119
R412009121	119
R412009123	119
R412009200	122
R412009201	122
R412009209	122
R412009210	122
R412009225	121
R412009231	121
R412009250	127
R412009251	127
R412009260	127
R412009261	127
R412009298	124
R412009299	124
R412009307	124
R412009308	124
R412009318	123
R412009319	123
R412009327	123
R412009328	123
R412009368	125
R412009370	125
R412009371	125
R412014600	117
R412014602	117
R412014624	121
R412014627	119
R412014628	119
R412014629	119
R412014645	122
R412014646	122
R412014655	122
R412014656	122
R412014662	127
R412014664	127
R412014666	126
R412014668	126
R412014672	124
R412014673	124
R412014675	123
R412014676	123
R412014755	125
R412014757	125
R412014758	125
R480079499	105
R480079809	105
R480140083	105
R480140455	105
R480140491	105
R480140759	105
R480140833	105
R480141106	105
R480141371	105
R480141373	105
R480141666	105
RB-11063-UPVC	627
RB-11075-UPVC	627
RB-11090-UPVC	627
RB-125110-UPVC	627
RB-12575-UPVC	627
RB-12590-UPVC	627
RB-140110-UPVC	627
RB-140125-UPVC	627
RB-14090-UPVC	627
RB-160110-UPVC	627
RB-160125-UPVC	627
RB-160140-UPVC	627
RB-16090-UPVC	627
RB-180125-UPVC	627
RB-180140-UPVC	627
RB-180160-UPVC	627
RB-200160-UPVC	627
RB-200180-UPVC	627
RB-2016-UPVC	627
RB-225160-UPVC	627
RB-225200-UPVC	627
RB-2516-UPVC	627
RB-2520-UPVC	627
RB-3216-UPVC	627
RB-3220-UPVC	627
RB-3225-UPVC	627
RB-4020-UPVC	627
RB-4025-UPVC	627

Part Code	Page
RB-4032-UPVC	627
RB-5025-UPVC	627
RB-5032-UPVC	627
RB-5040-UPVC	627
RB-6325-UPVC	627
RB-6332-UPVC	627
RB-6340-UPVC	627
RB-6350-UPVC	627
RB-7532-UPVC	627
RB-7540-UPVC	627
RB-7550-UPVC	627
RB-7563-UPVC	627
RB-9050-UPVC	627
RB-9063-UPVC	627
RB-9075-UPVC	627
RCAH20-10-100	517
RCAH20-10-25	517
RCAH20-12-100	517
RCAH20-12-25	517
RCAH20-15-100	517
RCAH20-15-25	517
RCAH20-19-100	517
RCAH20-19-25	517
RCAH20-25-25	517
RCAH20-25-50	517
RCAH20-6-100	517
RCAH20-6-25	517
RCAH20-8-100	517
RCAH20-8-25	517
RCTT-20	647
RCTT-25	647
RCTT-32	647
RCTT-50	647
RCTT-75	647
RF104	728
RFS1234	415
RFS1412	415
RFS1438	415
RFS1814	415
RFS1838	415
RFS341	415
RFS3812	415
RFSM518	415
RH1-1M	521
RH112-1M	521
RH114-1M	521
RH118-1M	521
RH1316-1M	521
RH134-1M	521
RH138-1M	521
RH158-1M	521
RH178-1M	521
RH1916-1M	521
RH2-1M	521
RH212-1M	521
RH214-1M	521
RH238-1M	521
RH3-1M	521
RH4-1M	521
RH78-1M	521
RHIT1	674
RHIT1/2	674
RHIT1/2PE	674
RHIT112	674
RHIT112/2	674
RHIT112/2PE	674
RHIT112PE	674
RHIT114	674
RHIT114/2	674
RHIT114/2PE	674
RHIT114PE	674
RHIT12	674
RHIT12/2	674
RHIT12/2PE	674
RHIT12PE	674
RHIT1PE	674
RHIT2	674
RHIT2/2	674
RHIT2/2PE	674
RHIT2PE	674
RHIT34	674
RHIT34/2	674
RHIT34/2PE	674
RHIT34PE	674
RIV-100	740
RJTHL1	712
RJTHL112	712
RJTHL2	712
RJTHL212	712
RJTHL3	712
RLHO20-10-100	534
RLHO20-10-25	534
RLHO20-6-100	534
RLHO20-6-25	534
RLHO20-8-100	534
RLHO20-8-25	534
RM010	46
RM050N	46
RM050R	46
RM055N	46
RM055R	46
RM056R	46
RM065R	46
RM066R	46
RM200N	46
RM2306E	397
RM2308E	397
RM2312E	397
RM300N	46
RM313N	46
RM350N	46
RM383N	46
RM400N	46
RM450N	46
RMIT1	674
RMIT1/2	674
RMIT1/2PE	674
RMIT112	674
RMIT112/2	674
RMIT112/2PE	674
RMIT112PE	674
RMIT114	674
RMIT114/2	674
RMIT114/2PE	674
RMIT114PE	674
RMIT12	674
RMIT12/2	674
RMIT12/2PE	674
RMIT12PE	674
RMIT1PE	674
RMIT2	674
RMIT2/2	674
RMIT2/2PE	674
RMIT2PE	674
RMIT34	674
RMIT34/2	674
RMIT34/2PE	674
RMIT34PE	674
RPIPC108	557
RPIPC112	557
RPIPC137	557
RPIPC14	557
RPIPC159	557
RPIPC164	557
RPIPC20	557
RPIPC26	557
RPIPC32	557
RPIPC40	557
RPIPC48	557
RPIPC54	557
RPIPC58	557
RPIPC68	557
RPIPC72	557
RPIPC82	557
RPIPC88	557
RPP12	418
RPP14	418
RPP18	418
RPP38	418
RPPM5	418
RPRC13	557
RPRC20	557
RPRC25	557
RPRC52	557
RV316-AP	740
RWHB20-10-100	533
RWHB20-10-25	533
RWHB20-6-100	533
RWHB20-6-25	533
RWHB20-8-100	533
RWHB20-8-25	533
RWHR10-10-100	533
RWHR10-10-25	533
RWHR10-8-100	533
RWHR10-8-25	533
S	
S10	97
S101H003	268
S101H004	268
S101H005	268
S101H006	268
S101H007	268
S101H008	268
S101H009	268
S13	97
S16	97
S20	97
S25	97
S30	97
S36	97
S375XE69	271
S375XE70	271
S375XE71	271
S375XE72	271
S375XE73	271
S375XE74	271
S375XE75	271
S385FE75	272
S385XE69	272
S385XE70	272
S385XE71	272
S385XE72	272
S385XE73	272
S385XE74	272
S8	97
SA2-PLIERS	820
SA6002	346
SA6003	346

S

Part Code	Page
SA6026	349
SA6033	350
SA6038	349
SA6042	348
SA6043	341
SA6086	346
SA6093	341
SA6100	347
SA6102	341
SA6107	349
SA6109	349
SA6113	347
SA6118	341
SA6119	347
SA6125	341
SA6127	349
SA6128	349
SA6130	346
SA6149	349
SA6647	223
SA6648	223
SA6650	223
SA6655	346
SA6665	350
SA6691	346
SA6692	346
SA6693	346
SA6694	347
SA6695	347
SA6696	350
SA6708	347
SA6710	349
SA6712	347
SA6713	347
SA6719	349
SA6720	349
SA6749	223
SA6750	223
SA6789	346
SA6790	346
SA6791	347
SA6792	347
SA6793	346
SA6799	347
SA6800	347
SA6801	347
SA6802	347
SA6803	347
SA6804	347
SA6806	347
SA6807	347
SA6808	347
SA6809	347
SA6810	347
SA6811	347
SA6812	347
SA6813	347
SA6814	347
SA6815	347
SA6826	349
SA6827	348
SA6828	348
SA6829	348
SA6830	348
SA6831	347
SA6832	346
SA6833	346
SA6834	349
SA6836	349
SA6837	346
SA6838	346
SA6839	347
SA6840	347
SA6852	346
SA6853	346
SA6890	346
SA6952	223
SA6958	349
SAS1	432
SAS12	432
SAS14	432
SAS18	432
SAS34	432
SAS38	432
SASM5	432
SAT13	724
SAT14	724
SAT15	724
SBFF1	853
SBFF2	853
SBSF1	853
SC21CF	472
SC21CM	472
SC21EF	472
SC21EM	472
SC21JF	472
SC21JM	472
SC21R	472
SC21S	472
SC21T	472
SCABS-500	641
SCLW13F	479
SCLW13H	479
SCLW13HS	479
SCLW13M	479
SCLW19F	479
SCLW19H	479
SCLW19HS	479
SCLW19M	479
SCLW25F	479
SCLW25H	479
SCLW25HS	479
SCLW25M	479
SCUPVC-500	641
SCV112SS	698
SCV114SS	698
SCV12SS	698
SCV14SS	698
SCV1SS	698
SCV212SS	698
SCV2SS	698
SCV34SS	698
SCV38SS	698
SCV3SS	698
SD32-32A	481
SD50-32A	481
SDHF1-30M	524
SDHF11/2-30M	524
SDHF11/4-30M	524
SDHF2-30M	524
SDHF21/2-10M	524
SDHF21/2-30M	524
SDHF3-10M	524
SDHF3-30M	524
SDHF4-10M	524
SDHF4-30M	524
SDHH1-30M	528
SDHH11/2-10M	528
SDHH11/2-30M	528
SDHH11/4-10M	528
SDHH11/4-30M	528
SDHH2-10M	528
SDHH2-30M	528
SDHH21/2-10M	528
SDHH21/2-30M	528
SDHH3-10M	528
SDHH3-30M	528
SDHH4-10M	528
SDHH4-30M	528
SDHHL1-10M	529
SDHHL1-30M	529
SDHHL11/2-10M	529
SDHHL11/2-30M	529
SDHHL11/4-10M	529
SDHHL11/4-30M	529
SDHHL2-10M	529
SDHHL2-30M	529
SDHHL21/2-10M	529
SDHHL21/2-30M	529
SDHHL3-10M	529
SDHHL3-30M	529
SDHHL4-10M	529
SDHHL4-30M	529
SDHM1-30M	525
SDHM11/2-10M	525
SDHM11/2-30M	525
SDHM11/4-10M	525
SDHM11/4-30M	525
SDHM2-10M	525
SDHM2-30M	525
SDHM21/2-10M	525
SDHM21/2-30M	525
SDHM3-10M	525
SDHM3-30M	525
SDHMS1-30M	526
SDHMS11/2-10M	526
SDHMS11/2-30M	526
SDHMS11/4-10M	526
SDHMS11/4-30M	526
SDHMS2-10M	526
SDHMS2-30M	526
SDHMS21/2-10M	526
SDHMS21/2-30M	526
SDHMS3-10M	526
SDHMS3-30M	526
SDHMS4-10M	526
SDHMS4-30M	526
SDHR1-30M	530
SDHR11/2-10M	530
SDHR11/2-30M	530
SDHR11/4-10M	530
SDHR11/4-30M	530
SDHR2-10M	530
SDHR2-30M	530
SDHR21/2-10M	530
SDHR21/2-30M	530
SDHR3-10M	530
SDHR3-30M	530
SDR-1	481
SDR-2	481
SDR-3	481
SF-110-UPVC	630
SF-20-UPVC	630
SF-25-UPVC	630
SF-32-UPVC	630
SF-40-UPVC	630
SF-50-UPVC	630
SF-63-UPVC	630

S

Part Code	Page
SF-75-UPVC	630
SF-90-UPVC	630
SFG-1	638
SFG-110	630
SFG-112	638
SFG-114	638
SFG-12	638
SFG-2	638
SFG-20	630
SFG-212	638
SFG-25	630
SFG-3	638
SFG-32	630
SFG-34	638
SFG-4	638
SFG-40	630
SFG-5	638
SFG-50	630
SFG-63	630
SFG-75	630
SFG-90	630
SGA3665-OLP	588
SGA3850-OLP	588
SGK-30	881
SGK-30-REFILL	881
SGK-50	881
SGK-50-REFILL	881
SGP-200	879
SGR-2-40	879
SGS-12	879
SH8107	341
SH8108	341
SH8110	341
SH8113	341
SH8118	341
SH8119	341
SH8146	341
SH8148	341
SH8149	341
SH8150	341
SH8152	341
SH8154	341
SH8155	341
SHA3850-OLP	588
SI4	224
SI5	224
SI6	224
SI8	224
SIL-1-102-4M	542
SIL-1-127-4M	542
SIL-1-152-4M	542
SIL-1-203-4M	542
SIL-1-38-4M	542
SIL-1-51-4M	542
SIL-1-63-4M	542
SIL-1-76-4M	542
SIL-2-102-4M	542
SIL-2-127-4M	542
SIL-2-152-4M	542
SIL-2-203-4M	542
SIL-2-38-4M	542
SIL-2-51-4M	542
SIL-2-63-4M	542
SIL-2-76-4M	542
SK38-T	481
SK38-TN	481
SK38/15-T	481
SK38/15-TN	481
SK50-T	481
SK50-TN	481
SKD	481
SKD-1	481
SL10	822
SL10-2S	822
SL150	822
SL250	822
SL350	822
SLIPSSAF-1	710
SLIPSSAF-112	710
SLIPSSAF-12	710
SLIPSSAF-2	710
SLIPSSF-112	710
SLIPSSF-12	710
SLIPSSF-2	710
SLIPSSF-3	710
SLIPSSF-34	710
SLNS-1	808
SLNS-112	808
SLNS-114	808
SLNS-12	808
SLNS-14	808
SLNS-2	808
SLNS-34	808
SLNS-38	808
SLNT-1	809
SLNT-112	809
SLNT-114	809
SLNT-12	809
SLNT-2	809
SLNT-34	809
SLNT-38	809
SLV/127	807
SLV/76	807
SLVT/127	807
SLVT/76	807
SM-1	808
SM-1/HP	808
SM-114	808
SM-12	808
SM-12/HP	808
SM-14	808
SM-22.15	808
SM-34	808
SM-34/HP	808
SM-38	808
SM9017	343
SM9018	343
SM9019	343
SM9020	343
SM9021	343
SM9022	343
SM9023	343
SM9024	343
SM9025	343
SM9026	343
SM9027	343
SM9028	343
SM9029	343
SM9030	343
SM9031	343
SM9032	343
SM9033	343
SM9034	343
SM9035	343
SM9036	343
SM9037	343
SM9038	343
SM9039	343
SM9040	343
SM9041	343
SM9042	343
SM9043	343
SM9044	343
SM9045	343
SM9046	343
SM9047	343
SM9048	343
SM9049	343
SM9050	343
SM9051	343
SM9052	343
SM9053	343
SM9054	343
SM9055	343
SM9056	343
SM9085	343
SM9086	343
SM9087	343
SM9126	342
SM9127	342
SM9128	342
SM9129	342
SM9130	342
SM9131	342
SM9132	342
SM9133	342
SM9134	342
SM9135	342
SM9136	342
SM9137	342
SM9138	342
SM9139	342
SM9140	342
SM9141	342
SM9142	342
SM9143	342
SM9144	342
SM9145	342
SM9146	342
SM9147	342
SM9148	342
SM9149	342
SM9150	342
SM9151	342
SM9152	342
SM9153	342
SM9154	342
SM9155	342
SM9156	342
SM9157	342
SM9158	342
SM9159	342
SM9160	342
SM9161	342
SM9162	342
SM9163	342
SM9164	342
SM9165	342
SM9166	342
SM9167	342
SM9168	342
SM9169	342
SM9170	342
SM9171	342
SM9172	342
SM9173	342
SM9174	342
SM9175	342
SM9176	342
SM9177	342
SM9178	342
SM9179	342

S

Part Code	Page
SM9180	342
SM9181	342
SM9183	342
SM9184	342
SM9185	342
SM9349	343
SM9350	343
SM9351	343
SM9352	343
SMSSGP10/6.5-1/4	425
SMSSGP6/4-1/4	425
SMSSGP6/4-1/8	425
SMSSGP8/6-1/4	425
SMSSGP8/6-1/8	425
SMSSGT10/6.5-1/4	425
SMSSGT10/8-1/4	425
SMSSGT12/8-3/8	425
SMSSGT6/4-1/4	425
SMSSGT6/4-1/8	425
SMSSGT8/6-1/4	425
SNCP10-12	554
SNCP11-13	554
SNCP13-15	554
SNCP14-16	554
SNCP15-17	554
SNCP16-18	554
SNCP17-19	554
SNCP18-20	554
SNCP20-22	554
SNCP21-23	554
SNCP23-25	554
SNCP26-28	554
SNCP30-32	554
SNCP35-37	554
SNCP44-46	554
SNCP47-49	554
SNCP8-10	554
SOK-30	881
SOK-30-REFILL	881
SOK-50	881
SOK-50-REFILL	881
SOP-200	878
SOS-12	878
SP-2032	647
SP-2063	647
SP-4063	647
SP-75110	647
SPAN-RJT-1	712
SPAN-RJT-112	712
SPAN-RJT-2	712
SPAN-RJT-212	712
SPAN-RJT-3	712
SPAN-RJT-4	712
SPG-1-15	729
SPG-1-18	729
SPG-1-20	729
SPG-2-15	729
SPG-2-20	729
SPG-2-25	729
SPPVC1-30M	536
SPPVC1.1/2-30M	536
SPPVC34-30M	536
SPR-333	575
SPR-500	575
SPS.KTMK	598
SPT70B	598
SPT70K-110	598
SRG2A	595
SRG2A.KIT	595
SRJ1	424
SRJ12	424
SRJ14	424
SRJ18	424
SRJ34	424
SRJ38	424
SRTT-2-1.0-25M	509
SRTT-4-1.0-25M	509
SRTT-5-1.5-25M	509
SRTT-6-1.0-25M	509
SRTT-6-1.5-25M	509
SRTT-8-1.0-25M	509
SRTT-8-2.0-25M	509
SS25-T	481
SS32-T	481
SS32-TN	481
SS38-T	481
SS4	224
SS40-T	481
SS5	224
SS6	224
SS8	224
SSBN1	702
SSBN1-0100	708
SSBN1-0150	708
SSBN1-0200	708
SSBN1-0300	708
SSBN112	702
SSBN112-0100	708
SSBN112-0150	708
SSBN112-0200	708
SSBN112-0300	708
SSBN114	702
SSBN114-0100	708
SSBN114-0150	708
SSBN114-0200	708
SSBN114-0300	708
SSBN12	702
SSBN12-0100	708
SSBN12-0150	708
SSBN12-0200	708
SSBN12-0300	708
SSBN14	702
SSBN14-0100	708
SSBN14-0150	708
SSBN14-0200	708
SSBN14-0300	708
SSBN18	702
SSBN2	702
SSBN2-0150	708
SSBN2-0200	708
SSBN2-0300	708
SSBN212	702
SSBN3	702
SSBN34	702
SSBN34-0100	708
SSBN34-0150	708
SSBN34-0200	708
SSBN34-0300	708
SSBN38	702
SSBN38-0100	708
SSBN38-0150	708
SSBN38-0200	708
SSBN38-0300	708
SSBN4	702
SSCL100	852
SSCL200	852
SSCL300	852
SSCL400	852
SSCLW10F	480
SSCLW10H	480
SSCLW13F	480
SSCLW13H	480
SSCLW13M	480
SSCLW19F	480
SSCLW19H	480
SSCLW19M	480
SSCLW25F	480
SSCLW25H	480
SSCLW25M	480
SSCNFP-100	860
SSCNFP-125	860
SSCNFP-80	860
SSCNNBS-100	860
SSCNNBS-125	860
SSCNNBS-80	860
SSCNSBS-100	860
SSCNSBS-125	860
SSCNSBS-80	860
SSCPFP-100	860
SSCPFP-125	860
SSCPFP-80	860
SSCPNBS-100	860
SSCPNBS-125	860
SSCPNBS-80	860
SSCPSBS-125	860
SSCPSBS-80	860
SSCTN1	707
SSCTN112	707
SSCTN114	707
SSCTN12	707
SSCTN14	707
SSCTN18	707
SSCTN2	707
SSCTN212	707
SSCTN3	707
SSCTN34	707
SSCTN4	707
SSFB1	704
SSFB112	704
SSFB114	704
SSFB12	704
SSFB14	704
SSFB18	704
SSFB2	704
SSFB212	704
SSFB3	704
SSFB34	704
SSFB38	704
SSFB4	704
SSFC1	707
SSFC112	707
SSFC114	707
SSFC12	707
SSFC14	707
SSFC18	707
SSFC2	707
SSFC212	707
SSFC3	707
SSFC34	707
SSFC38	707
SSFC4	707
SSFE1	703
SSFE112	703
SSFE114	703
SSFE12	703
SSFE14	703
SSFE18	703
SSFE2	703
SSFE212	703
SSFE3	703
SSFE34	703
SSFE38	703

S

Part Code	Page
SSFE4	703
SSFHT1	706
SSFHT112	706
SSFHT114	706
SSFHT12	706
SSFHT14	706
SSFHT2	706
SSFHT34	706
SSFHT38	706
SSFS1	703
SSFS112	703
SSFS114	703
SSFS12	703
SSFS14	703
SSFS18	703
SSFS2	703
SSFS212	703
SSFS3	703
SSFS34	703
SSFS38	703
SSFS4	703
SSFT1	705
SSFT112	705
SSFT114	705
SSFT12	705
SSFT14	705
SSFT18	705
SSFT2	705
SSFT212	705
SSFT3	705
SSFT34	705
SSFT38	705
SSFT4	705
SSFU1	707
SSFU112	707
SSFU114	707
SSFU12	707
SSFU14	707
SSFU18	707
SSFU2	707
SSFU212	707
SSFU3	707
SSFU34	707
SSFU38	707
SSFU4	707
SSFY1	706
SSFY12	706
SSFY14	706
SSFY18	706
SSFY34	706
SSFY38	706
SSHBC1	709
SSHBC112	709
SSHBC114	709
SSHBC12	709
SSHBC14	709
SSHBC18	709
SSHBC2	709
SSHBC212	709
SSHBC3	709
SSHBC34	709
SSHBC38	709
SSHBC4	709
SSHFS1	702
SSHFS112	702
SSHFS114	702
SSHFS12	702
SSHFS14	702
SSHFS18	702
SSHFS2	702
SSHFS212	702
SSHFS3	702
SSHFS34	702
SSHFS38	702
SSHFS4	702
SSHJ1	708
SSHJ112	708
SSHJ114	708
SSHJ12	708
SSHJ14	708
SSHJ2	708
SSHJ34	708
SSHJ38	708
SSHJ516	708
SSHN1	702
SSHN112	702
SSHN114	702
SSHN12	702
SSHN14	702
SSHN18	702
SSHN2	702
SSHN212	702
SSHN3	702
SSHN34	702
SSHN38	702
SSHN4	702
SSHP1	709
SSHP112	709
SSHP114	709
SSHP12	709
SSHP14	709
SSHP18	709
SSHP2	709
SSHP212	709
SSHP3	709
SSHP34	709
SSHP38	709
SSHP4	709
SSHRN112	702
SSHRN1121	702
SSHRN1141	702
SSHRN1214	702
SSHRN1238	702
SSHRN134	702
SSHRN1418	702
SSHRN21	702
SSHRN2112	702
SSHRN212112	702
SSHRN2122	702
SSHRN32	702
SSHRN3212	702
SSHRN3412	702
SSHRN3814	702
SSHRN42	702
SSHRN43	702
SSHT1	706
SSHT1-12	708
SSHT1112	708
SSHT1114	708
SSHT112	706
SSHT1121	708
SSHT112114	708
SSHT1122	708
SSHT114	706
SSHT1141	708
SSHT114112	708
SSHT12	706
SSHT121	708
SSHT1214	708
SSHT1234	708
SSHT1238	708
SSHT134	708
SSHT14	706
SSHT1412	708
SSHT1418	708
SSHT14316	708
SSHT1438	708
SSHT14516	708
SSHT18	706
SSHT1814	708
SSHT18316	708
SSHT18516	708
SSHT2	706
SSHT2112	708
SSHT212	706
SSHT3	706
SSHT34	706
SSHT341	708
SSHT3412	708
SSHT3458	708
SSHT38	706
SSHT3812	708
SSHT3814	708
SSHT4	706
SSHYGT-1-3M	712
SSHYGT-112-3M	712
SSHYGT-2-3M	712
SSHYGT-212-3M	712
SSHYGT-3-3M	712
SSHYGT-4-3M	712
SSLN1	704
SSLN112	704
SSLN114	704
SSLN12	704
SSLN14	704
SSLN2	704
SSLN34	704
SSLN38	704
SSMBV2FF	696
SSMBV2MF	696
SSMBV3FF	696
SSMBV3MF	696
SSMBV4FF	696
SSMBV4MF	696
SSMBV5FF	696
SSMBV5MF	696
SSMBV6FF	696
SSMBV6MF	696
SSMFE1	704
SSMFE112	704
SSMFE114	704
SSMFE12	704
SSMFE14	704
SSMFE18	704
SSMFE2	704
SSMFE212	704
SSMFE3	704
SSMFE34	704
SSMFE38	704
SSMFE4	704
SSMFE451	706
SSMFE45112	706
SSMFE45114	706
SSMFE4512	706
SSMFE4514	706
SSMFE4518	706
SSMFE452	706
SSMFE4534	706
SSMFE4538	706
SSMFU1	707
SSMFU112	707
SSMFU114	707

S

Part Code	Page
SSMFU12	707
SSMFU14	707
SSMFU18	707
SSMFU2	707
SSMFU34	707
SSMFU38	707
SSMIPC18-26	480
SSMIPC26-33	480
SSMIPC32-40	480
SSPC1	561
SSPC1/2	561
SSPC1/4	561
SSPC3/4	561
SSPC3/8	561
SSPGB060114	340
SSPGB060314	340
SSPGB060414	340
SSPGB060614	340
SSPGB061014	340
SSPGB061214	340
SSPGB061614	340
SSPGBG060114	340
SSPGBG060314	340
SSPGBG060414	340
SSPGBG060614	340
SSPGBG061014	340
SSPGBG0612014	340
SSPGBG061214	340
SSPGBG061614	340
SSPGBG0620014	340
SSPGBG0625014	340
SSPGBG062514	340
SSPGBG0640014	340
SSPGBG064014	340
SSPGBG066014	340
SSPGR060114	340
SSPGR060314	340
SSPGR060414	340
SSPGR060614	340
SSPGR061014	340
SSPGR061614	340
SSRB112	705
SSRB1121	705
SSRB112114	705
SSRB11212	705
SSRB11234	705
SSRB114	705
SSRB1141	705
SSRB11412	705
SSRB11434	705
SSRB1214	705
SSRB1218	705
SSRB1238	705
SSRB134	705
SSRB138	705
SSRB1418	705
SSRB21	705
SSRB2112	705
SSRB2114	705
SSRB212112	705
SSRB2122	705
SSRB234	705
SSRB3112	705
SSRB32	705
SSRB3212	705
SSRB3412	705
SSRB3414	705
SSRB3438	705
SSRB3814	705
SSRB3818	705
SSRB42	705
SSRB4212	705
SSRB43	705
SSRBC1	709
SSRBC112	709
SSRBC114	709
SSRBC12	709
SSRBC14	709
SSRBC18	709
SSRBC2	709
SSRBC212	709
SSRBC3	709
SSRBC34	709
SSRBC38	709
SSRBC4	709
SSRFE112	706
SSRFE1121	706
SSRFE112114	706
SSRFE1141	706
SSRFE11434	706
SSRFE1214	706
SSRFE1238	706
SSRFE134	706
SSRFE1418	706
SSRFE21	706
SSRFE2112	706
SSRFE2114	706
SSRFE3412	706
SSRFE3438	706
SSRFE3814	706
SSRFS112114	704
SSRFS1141	704
SSRFS1238	704
SSRFS134	704
SSRFS1418	704
SSRFS2112	704
SSRFS212112	704
SSRFS2122	704
SSRFS3112	704
SSRFS32	704
SSRFS3212	704
SSRFS3412	704
SSRFS3814	704
SSRFS42	704
SSRFS4212	704
SSRFS43	704
SSRFT112	705
SSRFT1121	705
SSRFT112114	705
SSRFT11234	705
SSRFT1141	705
SSRFT11434	705
SSRFT1214	705
SSRFT1238	705
SSRFT134	705
SSRFT1418	705
SSRFT21	705
SSRFT2112	705
SSRFT2114	705
SSRFT212	705
SSRFT3412	705
SSRFT3438	705
SSRFT3814	705
SSRL1968	853
SSRL984	853
SSSP1	709
SSSP112	709
SSSP114	709
SSSP12	709
SSSP14	709
SSSP18	709
SSSP2	709
SSSP212	709
SSSP3	709
SSSP34	709
SSSP38	709
SSSP4	709
ST100	883
ST11	724
ST12	724
ST1M	853
ST20	883
ST203	724
ST206	724
ST208	724
ST210	724
ST212	724
ST216	724
ST218	724
ST224	724
ST230	724
ST236	724
ST30	883
ST40	883
ST60	883
STAFFA	352
STAFFA-X	352
STFF06	724
STFF12	724
STRL	853
SV802	241
SV803	241
SV804	241
SVD10-12-0.5BAR	240
SVD10-12-1.5BAR	240
SVD10-12-10.0BAR	240
SVD10-12-10.5BAR	240
SVD10-12-11.0BAR	240
SVD10-12-11.5BAR	240
SVD10-12-12.0BAR	240
SVD10-12-12.5BAR	240
SVD10-12-15.0BAR	240
SVD10-12-16.0BAR	240
SVD10-12-2.5BAR	240
SVD10-12-3.5BAR	240
SVD10-12-30.0BAR	240
SVD10-12-4.0BAR	240
SVD10-12-5.0BAR	240
SVD10-12-5.5BAR	240
SVD10-12-6.0BAR	240
SVD10-12-6.5BAR	240
SVD10-12-7.0BAR	240
SVD10-12-7.5BAR	240
SVD10-12-8.0BAR	240
SVD10-12-8.5BAR	240
SVD10-12-9.0BAR	240
SVD10-34-10.0BAR	240
SVD10-34-11.0BAR	240
SVD10-34-6.0BAR	240
SVD10-34-7.0BAR	240
SVD10-34-8.0BAR	240
SVD10-38-10.0BAR	239
SVD10-38-11.0BAR	239
SVD10-38-12.0BAR	239
SVD10-38-15.0BAR	239
SVD10-38-5.0BAR	239
SVD10-38-6.0BAR	239
SVD10-38-7.0BAR	239
SVD10-38-8.0BAR	239
SVD8-14-1.0BAR	239
SVD8-14-1.5BAR	239
SVD8-14-10.0BAR	239

Part Code	Page
SVD8-14-10.5BAR	239
SVD8-14-11.0BAR	239
SVD8-14-11.5BAR	239
SVD8-14-12.0BAR	239
SVD8-14-15.0BAR	239
SVD8-14-2.0BAR	239
SVD8-14-2.5BAR	239
SVD8-14-3.0BAR	239
SVD8-14-3.5BAR	239
SVD8-14-4.0BAR	239
SVD8-14-4.5BAR	239
SVD8-14-5.0BAR	239
SVD8-14-5.5BAR	239
SVD8-14-6.0BAR	239
SVD8-14-6.5BAR	239
SVD8-14-7.0BAR	239
SVD8-14-7.5BAR	239
SVD8-14-8.0BAR	239
SVD8-14-8.5BAR	239
SVD8-14-9.0BAR	239
T	
T-110-UPVC	628
T-125-UPVC	628
T-140-UPVC	628
T-16-UPVC	628
T-160-UPVC	628
T-20-UPVC	628
T-200-UPVC	628
T-225-UPVC	628
T-25-UPVC	628
T-32-UPVC	628
T-40-UPVC	628
T-50-UPVC	628
T-63-UPVC	628
T-75-UPVC	628
T-90-UPVC	628
TABSSDF-112	710
TABSSDF-2	710
TABSSDF-4	710
TABSSEF-1	710
TABSSEF-112	710
TABSSEF-2	710
TABSSEF-3	710
TB-0615	741
TB-1020	741
TB-1530	741
TB-3050	741
TB-4070	741
TB-6090	741
TB-PLUG-M22	475
TBCEF-M16F	475
TBCEF-M22F	475
TBCF-M22F	475
TBF-EVO100C12	86
TBF-EVO100C38	86
TBF-EVO105C12	86
TBF-EVO105C38	86
TBF-EVO110C12	86
TBF-EVO110C38	86
TBF-EVO125C12	86
TBF-EVO125C38	86
TBF-EVO25C12	86
TBF-EVO25C38	86
TBF-EVO35C12	86
TBF-EVO35C38	86
TBF-EVO45C12	86
TBF-EVO45C38	86
TBF-EVO50C12	86
TBF-EVO50C38	86
TBF-EVO55C12	86
TBF-EVO55C38	86
TBF-EVO60C12	86
TBF-EVO60C38	86
TBF-EVO65C12	86
TBF-EVO65C38	86
TBF-EVO70C12	86
TBF-EVO70C38	86
TBF-EVO75C12	86
TBF-EVO75C38	86
TBF-EVO80C12	86
TBF-EVO80C38	86
TBF-EVO85C12	86
TBF-EVO85C38	86
TBF-EVO90C12	86
TBF-EVO90C38	86
TBF-EVO95C12	86
TBF-EVO95C38	86
TBF-M22-QA	475
TBPE-M22F	475
TBPSV-M16F	475
TBPSV-M22F	475
TCAS-1	812
TCAS-114	812
TCAS-12	812
TCAS-14	812
TCAS-2	812
TCAS-34	812
TCAS-38	812
TCN-1	813
TCN-112	813
TCN-114	813
TCN-12	813
TCN-14	813
TCN-2	813
TCN-34	813
TCN-38	813
TCNB-12	811
TCNB-14	811
TCNB-34	811
TCNB-38	811
TCNS-1	813
TCNS-112	813
TCNS-114	813
TCNS-12	813
TCNS-14	813
TCNS-2	813
TCNS-34	813
TCNS-38	813
TCS14	574
TCUT0001	574
TCUT0101	574
TD1-IQ	335
TDG16C05	594
TE-45-110-UPVC	628
TE-45-16-UPVC	628
TE-45-20-UPVC	628
TE-45-25-UPVC	628
TE-45-32-UPVC	628
TE-45-40-UPVC	628
TE-45-50-UPVC	628
TE-45-63-UPVC	628
TE-45-75-UPVC	628
TE-45-90-UPVC	628
TE-90-110-UPVC	628
TE-90-16-UPVC	628
TE-90-20-UPVC	628
TE-90-25-UPVC	628
TE-90-32-UPVC	628
TE-90-40-UPVC	628
TE-90-50-UPVC	628
TE-90-63-UPVC	628
TE-90-75-UPVC	628
TE-90-90-UPVC	628
TFM01VG10	89
TFM01VL4	89
TFM02VG16	89
TFM02VL7	89
TFM03VG40	89
TFM03VL18	89
TFM04VG60	89
TFM04VL36	89
TFM05VG160	89
TFM05VL70	89
TFM06VG250	89
TFM06VL100	89
TFM07VG350	89
TFM07VL150	89
TFM08VG250	89
TFM08VL110	89
TFM09VG350	89
TFM09VL150	89
TFM10VG400	89
TFM10VL220	89
TFM11VG500	89
TFM11VL300	89
TFM12VG600	89
TFM12VL360	89
TFM13VG850	89
TFM13VL450	89
TFM14VG1200	89
TFM14VL550	89
TFM15VG1400	89
TFM15VL750	89
TGPC-1	594
TM-1	810
TM-12	810
TM-14	810
TM-34	810
TM-38	810
TMA-1	810
TMA-12	810
TMA-14	810
TMA-34	810
TMA-38	810
TMBG-1	716
TMDA112E	255
TMDA112L	256
TMDA112SS	259
TMDA112SS2	258
TMDA112SSANSI150	262
TMDA112SSPN16	263
TMDA112SST	261
TMDA112T	257
TMDA114E	255
TMDA114L	256
TMDA114SS	259
TMDA114SS2	258
TMDA114SSPN16	263
TMDA114SST	261
TMDA114T	257
TMDA12E	255
TMDA12L	256
TMDA12SS	259
TMDA12SS2	258
TMDA12SSANSI150	262
TMDA12SSPN16	263
TMDA12SST	261
TMDA12T	257
TMDA14E	255
TMDA14L	256
TMDA14SS	259
TMDA14SS2	258

T

Part Code	Page
TMDA14SSL	260
TMDA14SST	261
TMDA14T	257
TMDA1E	255
TMDA1L	256
TMDA1SS	259
TMDA1SS2	258
TMDA1SSANSI150	262
TMDA1SSPN16	263
TMDA1SST	261
TMDA1T	257
TMDA212E	255
TMDA212SS	259
TMDA212SSANSI150	262
TMDA212SSPN16	263
TMDA2E	255
TMDA2L	256
TMDA2SSANSI150	262
TMDA2SSPN16	263
TMDA2SST	261
TMDA2T	257
TMDA34E	255
TMDA34L	256
TMDA34SS	259
TMDA34SS2	258
TMDA34SSANSI150	262
TMDA34SSPN16	263
TMDA34SST	261
TMDA34T	257
TMDA38E	255
TMDA38L	256
TMDA38SS	259
TMDA38SS2	258
TMDA38SST	261
TMDA38T	257
TMDA3E	255
TMDA3SS	259
TMDA3SSANSI150	262
TMDA3SSPN16	263
TMDA4SS	259
TMDA4SSANSI150	262
TMDA4SSPN16	263
TMDA5SSPN16	263
TMDA6SSANSI150	262
TMDA6SSPN16	263
TMDA8SSANSI150	262
TMDA8SSPN16	263
TME140212E	255
TME140212SS	259
TME1403E	255
TME1403SS	259
TME14SST	261
TME20112E	255
TME20114E	255
TME20114SS2	258
TME2012E	255
TME2012L	256
TME2012SS	259
TME2012SS2	258
TME2012SSL	260
TME2012T	257
TME2014E	255
TME2014L	256
TME2014SS	259
TME2014SS2	258
TME2014SSL	260
TME2014T	257
TME201E	255
TME201L	256
TME201SS	259
TME201SS2	258
TME201T	257
TME202E	255
TME2034E	255
TME2034L	256
TME2034SS	259
TME2034SSL	260
TME2034SST	261
TME2034T	257
TME2038E	255
TME2038L	256
TME2038SS	259
TME2038SS2	258
TME2038SSL	260
TME2038T	257
TME20SST	261
TME3004SS	259
TME3034SS2	258
TME35112L	256
TME35112SS	259
TME35112SS2	258
TME35112T	257
TME35114L	256
TME35114SS	259
TME35114SSL	260
TME35114SST	261
TME35114T	257
TME351SSL	260
TME351SST	261
TME352L	256
TME352T	257
TME38SST	261
TME44112SSL	260
TME55112SST	261
TME552SS	259
TME552SS2	258
TME852SSL	260
TME85SST	261
TMEHV2019D08	263
TMEHV2019D12	263
TMEHV2019D16	263
TMEHV2019D20	263
TMEHV2019D24	263
TMEHV2019D32	263
TMEHV2019D40	263
TMEHV2019D48	263
TMEHV2019D64	263
TMEHV2019D80	263
TMEHV2020D08	262
TMEHV2020D12	262
TMEHV2020D16	262
TMEHV2020D24	262
TMEHV2020D32	262
TMEHV2020D40	262
TMEHV2020D48	262
TMEHV2020D64	262
TMEL12SST	261
TMEL140212E	255
TMEL140212SS	259
TMEL1403E	255
TMEL1403SS	259
TMEL20112E	255
TMEL20114E	255
TMEL20114SS2	258
TMEL2012E	255
TMEL2012L	256
TMEL2012SS	259
TMEL2012SS2	258
TMEL2012SSL	260
TMEL2012T	257
TMEL2014E	255
TMEL2014L	256
TMEL2014SS	259
TMEL2014SS2	258
TMEL2014SSL	260
TMEL2014SST	261
TMEL2014T	257
TMEL201E	255
TMEL201L	256
TMEL201SS	259
TMEL201SS2	258
TMEL201T	257
TMEL202E	255
TMEL2034E	255
TMEL2034L	256
TMEL2034SS	259
TMEL2034SS2	258
TMEL2034SSL	260
TMEL2034SST	261
TMEL2034T	257
TMEL2038E	255
TMEL2038L	256
TMEL2038SS	259
TMEL2038SS2	258
TMEL2038SSL	260
TMEL2038SST	261
TMEL2038T	257
TMEL3004SS	259
TMEL35112L	256
TMEL35112SS	259
TMEL35112SS2	258
TMEL35112T	257
TMEL35114L	256
TMEL35114SS	259
TMEL35114SSL	260
TMEL35114SST	261
TMEL35114T	257
TMEL351SSL	260
TMEL351SST	261
TMEL352L	256
TMEL352T	257
TMEL55112SSL	260
TMEL55112SST	261
TMEL552SS	259
TMEL552SS2	258
TMEL852SSL	260
TMEL852SST	261
TMELV2019D08	263
TMELV2019D12	263
TMELV2019D16	263
TMELV2019D20	263
TMELV2019D24	263
TMELV2019D32	263
TMELV2019D40	263
TMELV2019D48	263
TMELV2019D64	263
TMELV2019D80	263
TMELV2020D08	262
TMELV2020D12	262
TMELV2020D16	262
TMELV2020D24	262
TMELV2020D32	262
TMELV2020D40	262
TMELV2020D48	262
TMELV2020D64	262
TMNSE10-G02SS	373
TMNSE10-G03SS	373
TMNSE10-G04SS	373
TMNSE12-G04SS	373
TMNSE4-G01SS	373
TMNSE6-G01SS	373
TMNSE6-G02SS	373

T

Part Code	Page
TMNSE8-G01SS	373
TMNSE8-G02SS	373
TMNSE8-G03SS	373
TMPB10-G02SS	373
TMPB10-G03SS	373
TMPB10-G04SS	373
TMPB12-G04SS	373
TMPB4-G01SS	373
TMPB6-G01SS	373
TMPB6-G02SS	373
TMPB8-G01SS	373
TMPB8-G02SS	373
TMPC10-02SS	373
TMPC10-03SS	373
TMPC10-G02SS	373
TMPC10-G03SS	373
TMPC12-04SS	373
TMPC12-G04SS	373
TMPC4-01SS	373
TMPC4-G01SS	373
TMPC6-01SS	373
TMPC6-02SS	373
TMPC6-G01SS	373
TMPC6-G02SS	373
TMPC8-01SS	373
TMPC8-02SS	373
TMPC8-G01SS	373
TMPC8-G02SS	373
TMPCF10-G02SS	373
TMPCF10-G03SS	373
TMPCF12-G03SS	373
TMPCF12-G04SS	373
TMPCF4-G01SS	373
TMPCF6-G01SS	373
TMPCF6-G02SS	373
TMPCF8-G01SS	373
TMPCF8-G02SS	373
TMPG10-6SS	374
TMPG10-8SS	374
TMPG12-10SS	374
TMPG12-8SS	374
TMPG6-4SS	374
TMPG8-4SS	374
TMPG8-6SS	374
TMPGJ10-6SS	374
TMPGJ10-8SS	374
TMPGJ12-10SS	374
TMPGJ12-8SS	374
TMPGJ6-4SS	374
TMPGJ8-4SS	374
TMPGJ8-6SS	374
TMPL10-02SS	373
TMPL10-03SS	373

Part Code	Page
TMPL10-G02SS	373
TMPL10-G03SS	373
TMPL12-04SS	373
TMPL12-G04SS	373
TMPL4-01SS	373
TMPL4-G01SS	373
TMPL6-01SS	373
TMPL6-02SS	373
TMPL6-G01SS	373
TMPL6-G02SS	373
TMPL8-01SS	373
TMPL8-02SS	373
TMPL8-G01SS	373
TMPL8-G02SS	373
TMPLF10-G02SS	373
TMPLF10-G03SS	373
TMPLF12-G03SS	373
TMPLF12-G04SS	373
TMPLF4-G01SS	373
TMPLF6-G01SS	373
TMPLF6-G02SS	373
TMPLF8-G01SS	373
TMPLF8-G02SS	373
TMPM-10SS	374
TMPM-12SS	374
TMPM-4SS	374
TMPM-6SS	374
TMPM-8SS	374
TMPP-10SS	374
TMPP-4SS	374
TMPP-6SS	374
TMPP-8SS	374
TMPP12SS	374
TMPUC-10SS	374
TMPUC-12SS	374
TMPUC-4SS	374
TMPUC-6SS	374
TMPUC-8SS	374
TMPUL-10SS	374
TMPUL-12SS	374
TMPUL-4SS	374
TMPUL-6SS	374
TMPUL-8SS	374
TMPUT-10SS	374
TMPUT-12SS	374
TMPUT-4SS	374
TMPUT-6SS	374
TMPUT-8SS	374
TMPY-10SS	374
TMPY-12SS	374
TMPY-4SS	374
TMPY-6SS	374
TMPY-8SS	374

Part Code	Page
TMSA112E	255
TMSA112L	256
TMSA112SS	259
TMSA112SS2	258
TMSA112SSANSI150	262
TMSA112SSPN16	263
TMSA112SST	261
TMSA112T	257
TMSA114E	255
TMSA114L	256
TMSA114SS	259
TMSA114SS2	258
TMSA114SSPN16	263
TMSA114SST	261
TMSA114T	257
TMSA12E	255
TMSA12L	256
TMSA12SS	259
TMSA12SS2	258
TMSA12SSANSI150	262
TMSA12SSPN16	263
TMSA12SST	261
TMSA12T	257
TMSA14E	255
TMSA14L	256
TMSA14SS	259
TMSA14SS2	258
TMSA14SSL	260
TMSA14SST	261
TMSA14T	257
TMSA1E	255
TMSA1L	256
TMSA1SS	259
TMSA1SS2	258
TMSA1SSANSI150	262
TMSA1SSPN16	263
TMSA1SST	261
TMSA1T	257
TMSA212E	255
TMSA212SS	259
TMSA212SSANSI150	262
TMSA212SSPN16	263
TMSA2E	255
TMSA2L	256
TMSA2SS	259
TMSA2SS2	258
TMSA2SSANSI150	262
TMSA2SSPN16	263
TMSA2SST	261
TMSA2T	257
TMSA34E	255
TMSA34L	256
TMSA34SS	259

Part Code	Page
TMSA34SS2	258
TMSA34SSANSI150	262
TMSA34SSPN16	263
TMSA34SST	261
TMSA34T	257
TMSA38E	255
TMSA38L	256
TMSA38SS	259
TMSA38SS2	258
TMSA38SST	261
TMSA38T	257
TMSA3E	255
TMSA3SS	259
TMSA3SSANSI150	262
TMSA3SSPN16	263
TMSA4SS	259
TMSA4SSANSI150	262
TMSA4SSPN16	263
TMSA5SSPN16	263
TMSA6SSANSI150	262
TMSA6SSPN16	263
TMSA8SSANSI150	262
TMSA8SSPN16	263
TN1	414
TN1114	414
TN112	414
TN1122	414
TN114	414
TN114112	414
TN12	414
TN1234	414
TN14	414
TN1412	414
TN1438	414
TN18	414
TN1814	414
TN1838	414
TN2	414
TN34	414
TN341	414
TN38	414
TN3812	414
TN6000	596
TNUP1	422
TNUP112	422
TNUP114	422
TNUP12	422
TNUP14	422
TNUP1412	422
TNUP1438	422
TNUP18	422
TNUP1814	422
TNUP1838	422

T, U

Part Code	Page
TNUP2	422
TNUP212	422
TNUP3	422
TNUP34	422
TNUP38	422
TNUP3812	422
TNUPNPT11	422
TNUPNPT121	422
TNUPNPT1212	422
TNUPNPT1234	422
TNUPNPT1238	422
TNUPNPT1412	422
TNUPNPT1414	422
TNUPNPT1434	422
TNUPNPT1814	422
TNUPNPT1818	422
TNUPNPT341	422
TNUPNPT3434	422
TNUPNPT3814	422
TNUPNPT3834	422
TNUPNPT3838	422
TPE-100-10M	543
TPE-150-10M	543
TPE-180-10M	543
TPE-200-10M	543
TPE-250-10M	543
TPE-50-10M	543
TPE-60-10M	543
TPE-70-10M	543
TPE-75-10M	543
TPE-80-10M	543
TPG1H01	594
TPG3H01	594
TPG4H01	594
TPHC-AL-112F	488
TPHC-AL-112M	488
TPHC-AL-212F	488
TPHC-AL-212M	488
TPHC-AL-2F	488
TPHC-AL-2M	488
TPHC-AL-3F	488
TPHC-AL-3M	488
TPHC-AL-4F	488
TPHC-AL-4M	488
TPHC-BR-112F	488
TPHC-BR-112M	488
TPHC-BR-114F	488
TPHC-BR-114M	488
TPHC-BR-12F	488
TPHC-BR-12M	488
TPHC-BR-1F	488
TPHC-BR-1M	488
TPHC-BR-2F	488
TPHC-BR-2M	488
TPHC-BR-34F	488
TPHC-BR-34M	488
TPHC-BR-3F	488
TPHC-BR-3M	488
TPHC-BR-4F	488
TPHC-BR-4M	488
TPHC-MI-112F	488
TPHC-MI-112M	488
TPHC-MI-212F	488
TPHC-MI-212M	488
TPHC-MI-2F	488
TPHC-MI-2M	488
TPHC-MI-3F	488
TPHC-MI-3M	488
TPHC-MI-4F	488
TPHC-MI-4M	488
TPHC-PP-112F	488
TPHC-PP-112M	488
TPHC-PP-212F	488
TPHC-PP-212M	488
TPHC-PP-2F	488
TPHC-PP-2M	488
TPHC-PP-3F	488
TPHC-PP-3M	488
TPHC-PP-4F	488
TPHC-PP-4M	488
TR-11050-UPVC	628
TR-11063-UPVC	628
TR-11075-UPVC	628
TR-11090-UPVC	628
TR-125110-UPVC	628
TR-12563-UPVC	628
TR-12575-UPVC	628
TR-12590-UPVC	628
TR-140110-UPVC	628
TR-140125-UPVC	628
TR-14075-UPVC	628
TR-14090-UPVC	628
TR-160110-UPVC	628
TR-160125-UPVC	628
TR-160140-UPVC	628
TR-16090-UPVC	628
TR-2016-UPVC	628
TR-2516-UPVC	628
TR-2520-UPVC	628
TR-3216-UPVC	628
TR-3220-UPVC	628
TR-3225-UPVC	628
TR-4016-UPVC	628
TR-4020-UPVC	628
TR-4025-UPVC	628
TR-4032-UPVC	628
TR-5020-UPVC	628
TR-5025-UPVC	628
TR-5032-UPVC	628
TR-5040-UPVC	628
TR-6320-UPVC	628
TR-6325-UPVC	628
TR-6332-UPVC	628
TR-6340-UPVC	628
TR-6350-UPVC	628
TR-7532-UPVC	628
TR-7540-UPVC	628
TR-7550-UPVC	628
TR-7563-UPVC	628
TR-9040-UPVC	628
TR-9050-UPVC	628
TR-9063-UPVC	628
TR-9075-UPVC	628
TRB112	414
TRB1121	414
TRB112114	414
TRB1141	414
TRB1214	414
TRB1218	414
TRB1238	414
TRB134	414
TRB138	414
TRB1418	414
TRB2112	414
TRB2114	414
TRB3412	414
TRB3414	414
TRB3438	414
TRBUP1412	422
TRBUP1438	422
TRBUP1812	422
TRBUP1814	422
TRBUP1838	422
TRBUP3812	422
TSM10N	623
TSM15N	623
TSM22N	623
TSM28N	623
TSN-1	810
TSN-112	810
TSN-114	810
TSN-12	810
TSN-14	810
TSN-2	810
TSN-34	810
TSN-38	810
TT-2	532
TY-16-UPVC	628
TY-20-UPVC	628
TY-25-UPVC	628
TY-32-UPVC	628
TY-40-UPVC	628
TY-50-UPVC	628
TY-63-UPVC	628
U	
U-110-UPVC	629
U-16-UPVC	629
U-20-UPVC	629
U-25-UPVC	629
U-32-UPVC	629
U-40-UPVC	629
U-50-UPVC	629
U-63-UPVC	629
U-75-UPVC	629
U-90-UPVC	629
U25-N6	219
U25-S3	219
U25-W3	219
U30-N6	219
U30-S3	219
U30-W3	219
U45-N6	219
U45-S3	219
U45-W3	219
U55-N6	219
U55-S3	219
U55-W3	219
U65-N6	219
U65-S3	219
U65-W3	219
U75-N6	219
U75-S3	219
U75-W3	219
UF450	820
UGU020-0100	22
UGU020-0200	22
UGU020-0320	22
UGU020-0400	22
UGU020-0500	22
UGU032-0100	22
UGU032-0200	22
UGU032-0250	22
UGU032-0320	22
UGU032-0400	22
UGU032-0500	22
UGU040-0100	22
UGU040-0200	22
UGU040-0250	22
UGU040-0320	22
UGU040-0400	22
UGU040-0500	22
UGU050-0100	22

U

Part Code	Page
UGU050-0200	22
UGU050-0250	22
UGU050-0320	22
UGU050-0400	22
UGU050-0500	22
UGU063-0100	22
UGU063-0200	22
UGU063-0250	22
UGU063-0320	22
UGU063-0400	22
UGU063-0500	22
UPVC/TUBE-3-110	632
UPVC/TUBE-3-140	632
UPVC/TUBE-3-16	632
UPVC/TUBE-3-160	632
UPVC/TUBE-3-20	632
UPVC/TUBE-3-225	632
UPVC/TUBE-3-25	632
UPVC/TUBE-3-32	632
UPVC/TUBE-3-40	632
UPVC/TUBE-3-50	632
UPVC/TUBE-3-63	632
UPVC/TUBE-3-75	632
UPVC/TUBE-3-90	632
UPVC/TUBE-6-110	632
UPVC/TUBE-6-140	632
UPVC/TUBE-6-16	632
UPVC/TUBE-6-160	632
UPVC/TUBE-6-20	632
UPVC/TUBE-6-225	632
UPVC/TUBE-6-25	632
UPVC/TUBE-6-32	632
UPVC/TUBE-6-40	632
UPVC/TUBE-6-50	632
UPVC/TUBE-6-63	632
UPVC/TUBE-6-75	632
UPVC/TUBE-6-90	632
UPVC45E-1	635
UPVC45E-112	635
UPVC45E-114	635
UPVC45E-12	635
UPVC45E-2	635
UPVC45E-212	635
UPVC45E-3	635
UPVC45E-34	635
UPVC45E-4	635
UPVC90E-1	634
UPVC90E-112	634
UPVC90E-114	634
UPVC90E-12	634
UPVC90E-2	634
UPVC90E-212	634
UPVC90E-3	634
UPVC90E-34	634
UPVC90E-4	634
UPVCBR-110	631
UPVCBR-20	631
UPVCBR-25	631
UPVCBR-32	631
UPVCBR-40	631
UPVCBR-50	631
UPVCBR-63	631
UPVCBR-75	631
UPVCBR-90	631
UPVCBSR90-1	634
UPVCBSR90-112	634
UPVCBSR90-114	634
UPVCBSR90-12	634
UPVCBSR90-2	634
UPVCBSR90-212	634
UPVCBSR90-3	634
UPVCBSR90-34	634
UPVCBSR90-4	634
UPVCCAP-1	636
UPVCCAP-112	636
UPVCCAP-114	636
UPVCCAP-12	636
UPVCCAP-2	636
UPVCCAP-212	636
UPVCCAP-3	636
UPVCCAP-34	636
UPVCCAP-4	636
UPVCCAP-5	636
UPVCCAP-6	636
UPVCCAP-8	636
UPVCCV-1	640
UPVCCV-112	640
UPVCCV-114	640
UPVCCV-12	640
UPVCCV-2	640
UPVCCV-34	640
UPVCEBN-1	637
UPVCEBN-112	637
UPVCEBN-11288	637
UPVCEBN-114	637
UPVCEBN-11475	637
UPVCEBN-12	637
UPVCEBN-1250	637
UPVCEBN-14	637
UPVCEBN-163	637
UPVCEBN-2	637
UPVCEBN-212	637
UPVCEBN-212106	637
UPVCEBN-288	637
UPVCEBN-3	637
UPVCEBN-3128	637
UPVCEBN-34	637
UPVCEBN-3456	637
UPVCEBN-38	637
UPVCEBN-3843	637
UPVCEBN-4	637
UPVCEBN-4153	637
UPVCEDUBV-1	640
UPVCEDUBV-112	640
UPVCEDUBV-114	640
UPVCEDUBV-12	640
UPVCEDUBV-2	640
UPVCEDUBV-212	640
UPVCEDUBV-3	640
UPVCEDUBV-34	640
UPVCEDUBV-4	640
UPVCEE45-1	635
UPVCEE45-112	635
UPVCEE45-114	635
UPVCEE45-12	635
UPVCEE45-2	635
UPVCEE45-212	635
UPVCEE45-3	635
UPVCEE45-34	635
UPVCEE45-4	635
UPVCEE45-5	635
UPVCEE45-6	635
UPVCEE45-8	635
UPVCEE90-1	634
UPVCEE90-112	634
UPVCEE90-114	634
UPVCEE90-12	634
UPVCEE90-2	634
UPVCEE90-212	634
UPVCEE90-3	634
UPVCEE90-34	634
UPVCEE90-4	634
UPVCEE90-5	634
UPVCEE90-6	634
UPVCEE90-8	634
UPVCEFS-110	626
UPVCEFS-125	626
UPVCEFS-140	626
UPVCEFS-16	626
UPVCEFS-160	626
UPVCEFS-20	626
UPVCEFS-200	626
UPVCEFS-225	626
UPVCEFS-25	626
UPVCEFS-32	626
UPVCEFS-40	626
UPVCEFS-50	626
UPVCEFS-63	626
UPVCEFS-75	626
UPVCEFS-90	626
UPVCES-1	633
UPVCES-112	633
UPVCES-114	633
UPVCES-12	633
UPVCES-2	633
UPVCES-212	633
UPVCES-3	633
UPVCES-34	633
UPVCES-4	633
UPVCES-5	633
UPVCES-6	633
UPVCES-8	633
UPVCET-1	635
UPVCET-112	635
UPVCET-114	635
UPVCET-12	635
UPVCET-2	635
UPVCET-212	635
UPVCET-3	635
UPVCET-34	635
UPVCET-4	635
UPVCET-5	635
UPVCET-6	635
UPVCET-8	635
UPVCETC-1	638
UPVCETC-112	638
UPVCETC-114	638
UPVCETC-12	638
UPVCETC-2	638
UPVCETC-212	638
UPVCETC-3	638
UPVCETC-34	638
UPVCETC-4	638
UPVCEU-1	636
UPVCEU-112	636
UPVCEU-114	636
UPVCEU-12	636
UPVCEU-2	636
UPVCEU-212	636
UPVCEU-3	636
UPVCEU-34	636
UPVCEU-4	636
UPVCFF-1	638
UPVCFF-112	638
UPVCFF-114	638
UPVCFF-12	638
UPVCFF-2	638
UPVCFF-3	638

U

Part Code	Page
UPVCFF-34	638
UPVCFF-4	638
UPVCFHC-11230	637
UPVCFHC-11425	637
UPVCFHC-120	637
UPVCFHC-21450	637
UPVCFHC-23460	637
UPVCFHC-240	637
UPVCFHC-3416	637
UPVCFS-110-4	626
UPVCFS-125-5	626
UPVCFS-16-3/8	626
UPVCFS-20-1/2	626
UPVCFS-25-3/4	626
UPVCFS-32-1	626
UPVCFS-40-1.1/4	626
UPVCFS-50-1.1/2	626
UPVCFS-63-2	626
UPVCFS-75-2.1/2	626
UPVCFS-90-3	626
UPVCFTA-11	636
UPVCFTA-112112	636
UPVCFTA-112114	636
UPVCFTA-1122	636
UPVCFTA-1141	636
UPVCFTA-114114	636
UPVCFTA-1212	636
UPVCFTA-1234	636
UPVCFTA-134	636
UPVCFTA-2112	636
UPVCFTA-2122	636
UPVCFTA-212212	636
UPVCFTA-2123	636
UPVCFTA-22	636
UPVCFTA-3212	636
UPVCFTA-33	636
UPVCFTA-34	636
UPVCFTA-341	636
UPVCFTA-3412	636
UPVCFTA-3434	636
UPVCFTA-43	636
UPVCFTA-44	636
UPVCFU1	636
UPVCFU112	636
UPVCFU114	636
UPVCFU12	636
UPVCFU2	636
UPVCFU212	636
UPVCFU3	636
UPVCFU34	636
UPVCFU4	636
UPVCIDUBV-1	640
UPVCIDUBV-112	640
UPVCIDUBV-114	640
UPVCIDUBV-12	640
UPVCIDUBV-2	640
UPVCIDUBV-212	640
UPVCIDUBV-3	640
UPVCIDUBV-34	640
UPVCIDUBV-38	640
UPVCIDUBV-4	640
UPVCL3BV-1	640
UPVCL3BV-112	640
UPVCL3BV-114	640
UPVCL3BV-12	640
UPVCL3BV-2	640
UPVCL3BV-34	640
UPVCMHC-11	637
UPVCMHC-11250	637
UPVCMHC-11440	637
UPVCMHC-1212	637
UPVCMHC-1220	637
UPVCMHC-132	637
UPVCMHC-1412	637
UPVCMHC-260	637
UPVCMHC-3425	637
UPVCMHC-3434	637
UPVCMHC-3816	637
UPVCMTA-11	636
UPVCMTA-1114	636
UPVCMTA-112112	636
UPVCMTA-1122	636
UPVCMTA-114112	636
UPVCMTA-114114	636
UPVCMTA-1212	636
UPVCMTA-212212	636
UPVCMTA-22	636
UPVCMTA-33	636
UPVCMTA-341	636
UPVCMTA-3412	636
UPVCMTA-3434	636
UPVCMTA-44	636
UPVCMU112	636
UPVCMU2	636
UPVCMU2-112	636
UPVCPN16BF-1	638
UPVCPN16BF-112	638
UPVCPN16BF-114	638
UPVCPN16BF-12	638
UPVCPN16BF-2	638
UPVCPN16BF-3	638
UPVCPN16BF-34	638
UPVCPN16BF-4	638
UPVCPN16BF-5	638
UPVCPN16BF-6	638
UPVCRB-112	633
UPVCRB-1121	633
UPVCRB-112114	633
UPVCRB-11234	633
UPVCRB-1141	633
UPVCRB-11434	633
UPVCRB-134	633
UPVCRB-21	633
UPVCRB-2112	633
UPVCRB-2114	633
UPVCRB-212112	633
UPVCRB-2122	633
UPVCRB-3112	633
UPVCRB-32	633
UPVCRB-3212	633
UPVCRB-3412	633
UPVCRB-42	633
UPVCRB-4212	633
UPVCRB-43	633
UPVCRB-53	633
UPVCRB-54	633
UPVCRB-64	633
UPVCRB-86	633
UPVCRBT-112114	634
UPVCRBT-1141	634
UPVCRBT-1214	634
UPVCRBT-134	634
UPVCRBT-2112	634
UPVCRBT-2122	634
UPVCRBT-3212	634
UPVCRBT-3412	634
UPVCRBT-3814	634
UPVCRBT-43	634
UPVCRFS-110-50	626
UPVCRFS-110-63	626
UPVCRFS-110-75	626
UPVCRFS-110-90	626
UPVCRFS-125-110	626
UPVCRFS-125-90	626
UPVCRFS-140-110	626
UPVCRFS-140-125	626
UPVCRFS-140-90	626
UPVCRFS-160-110	626
UPVCRFS-160-140	626
UPVCRFS-20-16	626
UPVCRFS-25-16	626
UPVCRFS-25-20	626
UPVCRFS-32-20	626
UPVCRFS-32-25	626
UPVCRFS-40-20	626
UPVCRFS-40-25	626
UPVCRFS-40-32	626
UPVCRFS-50-25	626
UPVCRFS-50-32	626
UPVCRFS-50-40	626
UPVCRFS-63-40	626
UPVCRFS-63-50	626
UPVCRFS-75-40	626
UPVCRFS-75-50	626
UPVCRFS-75-63	626
UPVCRFS-90-40	626
UPVCRFS-90-50	626
UPVCRFS-90-63	626
UPVCRFS-90-75	626
UPVCRS-112112	633
UPVCRS-1141	633
UPVCRS-134	633
UPVCRS-2112	633
UPVCRS-2122	633
UPVCRS-3212	633
UPVCRS-3412	633
UPVCRS-43	633
UPVCS-1104	634
UPVCS-321	634
UPVCS-3534	634
UPVCS-40114	634
UPVCS-50112	634
UPVCS-632	634
UPVCS-903	634
UPVCSAHC-1	637
UPVCSAHC-112	637
UPVCSAHC-114	637
UPVCSAHC-12	637
UPVCSAHC-2	637
UPVCSAHC-34	637
UPVCSF-1	638
UPVCSF-112	638
UPVCSF-114	638
UPVCSF-12	638
UPVCSF-2	638
UPVCSF-212	638
UPVCSF-3	638
UPVCSF-34	638
UPVCSF-4	638
UPVCSF-5	638
UPVCSF-6	638
UPVCSF-8	638
UPVCT-1	635
UPVCT-112	635
UPVCT-114	635
UPVCT-12	635
UPVCT-2	635
UPVCT-212	635

U, V

Part Code	Page
UPVCT-3	635
UPVCT-34	635
UPVCT-4	635
UPVCT3BV-1	640
UPVCT3BV-112	640
UPVCT3BV-114	640
UPVCT3BV-12	640
UPVCT3BV-2	640
UPVCT3BV-34	640
UPVCT45-1	635
UPVCT45-112	635
UPVCT45-114	635
UPVCT45-12	635
UPVCT45-2	635
UPVCT45-212	635
UPVCT45-34	635
UPVCTUBEC-3-2	641
UPVCTUBEC-3-3	641
UPVCTUBEC-3-4	641
UPVCTUBEC-3-5	641
UPVCTUBEC-3-6	641
UPVCTUBEC-3-8	641
UPVCTUBEC-6-2	641
UPVCTUBEC-6-3	641
UPVCTUBEC-6-4	641
UPVCTUBEC-6-5	641
UPVCTUBEC-6-6	641
UPVCTUBEE-3-1	641
UPVCTUBEE-3-112	641
UPVCTUBEE-3-114	641
UPVCTUBEE-3-12	641
UPVCTUBEE-3-2	641
UPVCTUBEE-3-3	641
UPVCTUBEE-3-34	641
UPVCTUBEE-3-4	641
UPVCTUBEE-6-1	641
UPVCTUBEE-6-112	641
UPVCTUBEE-6-114	641
UPVCTUBEE-6-12	641
UPVCTUBEE-6-2	641
UPVCTUBEE-6-3	641
UPVCTUBEE-6-34	641
UPVCTUBEE-6-4	641
USG48	728
USP28	728
UST25	728
UT-110-UPVC	629
UT-16-UPVC	629
UT-20-UPVC	629
UT-25-UPVC	629
UT-32-UPVC	629
UT-40-UPVC	629
UT-50-UPVC	629
UT-63-UPVC	629
UT-75-UPVC	629
UT-90-UPVC	629
V	
VB10-A	143
VB10-CS	143
VB10-N	143
VB10-S	143
VB10-U	143
VB10-WS	143
VB10-WS-FDA	143
VB110-A	147
VB110-CS	147
VB110-N	147
VB110-S	147
VB110-U	147
VB110-WS	147
VB110-WS-FDA	147
VB110B-A	148
VB110B-CS	148
VB110B-N	148
VB110B-S	148
VB110B-U	148
VB110B-WS	148
VB110B-WS-FDA	148
VB12-A	143
VB12-CS	143
VB12-N	143
VB12-S	143
VB12-U	143
VB12-WS	143
VB12-WS-FDA	143
VB15-A	143
VB15-CS	143
VB15-N	143
VB15-PU	143
VB15-S	143
VB15-U	143
VB15-WS	143
VB15-WS-FDA	143
VB150-A	148
VB150-CS	148
VB150-N	148
VB150-S	148
VB150-U	148
VB150-WS	148
VB150-WS-FDA	148
VB17-A	144
VB17-CS	144
VB17-N	144
VB17-S	144
VB17-U	144
VB17-WS	144
VB17-WS-FDA	144
VB20-A	144
VB20-CS	144
VB20-N	144
VB20-PU	144
VB20-S	144
VB20-U	144
VB20-WS	144
VB20-WS-FDA	144
VB30-A	145
VB30-CS	145
VB30-N	145
VB30-PU	145
VB30-S	145
VB30-U	145
VB30-WS	145
VB30-WS-FDA	145
VB30M-A	150
VB30M-CS	150
VB30M-N	150
VB30M-PU	150
VB30M-S	150
VB30M-U	150
VB30M-WS	150
VB30M-WS-FDA	150
VB40-A	145
VB40-CS	145
VB40-N	145
VB40-PU	145
VB40-S	145
VB40-U	145
VB40-WS	145
VB40-WS-FDA	145
VB5-A	142
VB5-CS	142
VB5-N	142
VB5-S	142
VB5-U	142
VB5-WS	142
VB5-WS-FDA	142
VB50-A	146
VB50-CS	146
VB50-N	146
VB50-PU	146
VB50-S	146
VB50-U	146
VB50-WS	146
VB50-WS-FDA	146
VB50M-A	150
VB50M-CS	150
VB50M-N	150
VB50M-PU	150
VB50M-S	150
VB50M-U	150
VB50M-WS	150
VB50M-WS-FDA	150
VB6X-A	142
VB6X-CS	142
VB6X-N	142
VB6X-S	142
VB6X-U	142
VB6X-WS	142
VB6X-WS-FDA	142
VB75-A	146
VB75-CS	146
VB75-N	146
VB75-PU	146
VB75-S	146
VB75-U	146
VB75-WS	146
VB75-WS-FDA	146
VB75B-A	147
VB75B-CS	147
VB75B-N	147
VB75B-S	147
VB75B-U	147
VB75B-WS	147
VB75B-WS-FDA	147
VB8X-A	142
VB8X-CS	142
VB8X-N	142
VB8X-S	142
VB8X-U	142
VB8X-WS	142
VB8X-WS-FDA	142
VBL10-A	152
VBL10-CS	152
VBL10-N	152
VBL10-S	152
VBL10-U	152
VBL10-WS	152
VBL10-WS-FDA	152
VBL15-A	152
VBL15-CS	152
VBL15-N	152
VBL15-S	152
VBL15-U	152
VBL15-WS	152
VBL15-WS-FDA	152
VBL20-A	153
VBL20-CS	153
VBL20-N	153

V

Part Code	Page
VBL20-S	153
VBL20-U	153
VBL20-WS	153
VBL20-WS-FDA	153
VBL30-A	153
VBL30-CS	153
VBL30-N	153
VBL30-S	153
VBL30-U	153
VBL30-WS	153
VBL30-WS-FDA	153
VBL35M-A	154
VBL35M-CS	154
VBL35M-FDA-30	154
VBL35M-FDA-55	154
VBL35M-N	154
VBL35M-S	154
VBL35M-U	154
VBL35M-WS	154
VBL40-A	154
VBL40-CS	154
VBL40-N	154
VBL40-S	154
VBL40-U	154
VBL40-WS	154
VBL40-WS-FDA	154
VBL40B-A	155
VBL40B-CS	155
VBL40B-FDA-30	155
VBL40B-FDA-55	155
VBL40B-N	155
VBL40B-S	155
VBL40B-U	155
VBL40B-WS	155
VBL50-A	155
VBL50-CS	155
VBL50-N	155
VBL50-S	155
VBL50-U	155
VBL50-WS	155
VBL50-WS-FDA	155
VBU35-N	157
VBU35-PU	157
VBU35-S	157
VBU35-WS	157
VBU35-WS-FDA	157
VBU45-N	157
VBU45-PU	157
VBU45-S	157
VBU45-WS	157
VBU45-WS-FDA	157
VBU55-N	158
VBU55-PU	158
VBU55-S	158
VBU55-WS	158
VBU55-WS-FDA	158
VBX35-PU	160
VBX45-PU	160
VBX55-PU	160
VCN2A-14K	84
VCS102	207
VCS102C	207
VD30-A-18F	178
VD30-A-M10M	178
VD30-A-M8M	178
VD30-CS-18F	178
VD30-CS-M10M	178
VD30-CS-M8M	178
VD30-N-18F	178
VD30-N-M10M	178
VD30-N-M8M	178
VD30-PU-18F	178
VD30-PU-M10M	178
VD30-PU-M8M	178
VD30-S-18F	178
VD30-S-M10M	178
VD30-S-M8M	178
VD30-U-18F	178
VD30-U-M10M	178
VD30-U-M8M	178
VD30-WS-18F	178
VD30-WS-FDA-18F	178
VD30-WS-FDA-M10M	178
VD30-WS-FDA-M8M	178
VD30-WS-M10M	178
VD30-WS-M8M	178
VD40-A-18F	179
VD40-A-M10M	179
VD40-A-M8M	179
VD40-CS-18F	179
VD40-CS-M10M	179
VD40-CS-M8M	179
VD40-N-18F	179
VD40-N-M10M	179
VD40-N-M8M	179
VD40-PU-18F	179
VD40-PU-M10M	179
VD40-PU-M8M	179
VD40-S-18F	179
VD40-S-M10M	179
VD40-S-M8M	179
VD40-U-18F	179
VD40-U-M10M	179
VD40-U-M8M	179
VD40-WS-18F	179
VD40-WS-FDA-18F	179
VD40-WS-FDA-M10M	179
VD40-WS-FDA-M8M	179
VD40-WS-M10M	179
VD40-WS-M8M	179
VD50-A-18F	180
VD50-A-M10M	180
VD50-A-M8M	180
VD50-CS-18F	180
VD50-CS-M10M	180
VD50-CS-M8M	180
VD50-N-18F	180
VD50-N-M10M	180
VD50-N-M8M	180
VD50-PU-18F	180
VD50-PU-M10M	180
VD50-PU-M8M	180
VD50-S-18F	180
VD50-S-M10M	180
VD50-S-M8M	180
VD50-U-18F	180
VD50-U-M10M	180
VD50-U-M8M	180
VD50-WS-18F	180
VD50-WS-FDA-18F	180
VD50-WS-FDA-M10M	180
VD50-WS-FDA-M8M	180
VD50-WS-M10M	180
VD50-WS-M8M	180
VD60-A-18F	181
VD60-A-M10M	181
VD60-A-M8M	181
VD60-CS-18F	181
VD60-CS-M10M	181
VD60-CS-M8M	181
VD60-N-18F	181
VD60-N-M10M	181
VD60-N-M8M	181
VD60-PU-18F	181
VD60-PU-M10M	181
VD60-PU-M8M	181
VD60-S-18F	181
VD60-S-M10M	181
VD60-S-M8M	181
VD60-U-18F	181
VD60-U-M10M	181
VD60-U-M8M	181
VD60-WS-18F	181
VD60-WS-FDA-18F	181
VD60-WS-FDA-M10M	181
VD60-WS-FDA-M8M	181
VD60-WS-M10M	181
VD60-WS-M8M	181
VD70-PU-18F	181
VD70-PU-M10M	181
VD70-PU-M8M	181
VD85-A-12F	182
VD85-A-18F	182
VD85-A-M10M	182
VD85-A-M8M	182
VD85-CS-12F	182
VD85-CS-18F	182
VD85-CS-M10M	182
VD85-CS-M8M	182
VD85-N-12F	182
VD85-N-18F	182
VD85-N-M10M	182
VD85-N-M8M	182
VD85-S-12F	182
VD85-S-18F	182
VD85-S-M10M	182
VD85-S-M8M	182
VD85-U-12F	182
VD85-U-18F	182
VD85-U-M10M	182
VD85-U-M8M	182
VD85-WS-12F	182
VD85-WS-18F	182
VD85-WS-FDA-12F	182
VD85-WS-FDA-18F	182
VD85-WS-FDA-M10M	182
VD85-WS-FDA-M8M	182
VD85-WS-M10M	182
VD85-WS-M8M	182
VD85X-A-18F	183
VD85X-CS-18F	183
VD85X-N-18F	183
VD85X-S-18F	183
VD85X-U-18F	183
VD85X-WS-18F	183
VD85X-WS-FDA-18F	183
VD90F-PU-12F	183
VD90F-PU-14F	183
VD90F-PU-18F	183
VD90F-PU-38F	183
VD90F-PU-H19	183
VD90F-PU-M10M	183
VDA10003	274
VDA10004	274
VDA10005	274
VDA10006	274
VDA10007	274
VDA10008	274

V

Part Code	Page
VDA10009	274
VF110-A	192
VF110-CS	192
VF110-N	192
VF110-S	192
VF110-U	192
VF110-WS	192
VF110-WS-FDA	192
VF15-A	189
VF15-CS	189
VF15-N	189
VF15-S	189
VF15-U	189
VF15-WS	189
VF15-WS-FDA	189
VF150-A	192
VF150-CS	192
VF150-N	192
VF150-S	192
VF150-U	192
VF150-WS	192
VF150-WS-FDA	192
VF20-A	189
VF20-CS	189
VF20-N	189
VF20-S	189
VF20-U	189
VF20-WS	189
VF20-WS-FDA	189
VF200-A	193
VF200-CS	193
VF200-N	193
VF200-S	193
VF200-U	193
VF200-WS	193
VF200-WS-FDA	193
VF25-A	190
VF25-CS	190
VF25-N	190
VF25-S	190
VF25-U	190
VF25-WS	190
VF25-WS-FDA	190
VF30-A	190
VF30-CS	190
VF30-N	190
VF30-S	190
VF30-U	190
VF30-WS	190
VF30-WS-FDA	190
VF300-A-34F	193
VF300-CS-34F	193
VF300-N-34F	193
VF300-S-34F	193
VF300-U-34F	193
VF300-WS-34F	193
VF300-WS-FDA-34F	193
VF40-A	190
VF40-CS	190
VF40-N	190
VF40-PU	190
VF40-S	190
VF40-U	190
VF40-WS	190
VF40-WS-FDA	190
VF50-A	191
VF50-CS	191
VF50-N	191
VF50-PU	191
VF50-S	191
VF50-U	191
VF50-WS	191
VF50-WS-FDA	191
VF50X2-A	191
VF50X2-CS	191
VF50X2-N	191
VF50X2-S	191
VF50X2-U	191
VF50X2-WS	191
VF50X2-WS-FDA	191
VF75-A	191
VF75-CS	191
VF75-N	191
VF75-PU	191
VF75-S	191
VF75-U	191
VF75-WS	191
VF75-WS-FDA	191
VF90-PU	192
VFC100-A	187
VFC100-CS	187
VFC100-N	187
VFC100-PU	187
VFC100-S	187
VFC100-U	187
VFC100-WS	187
VFC100-WS-FDA	187
VFC50-A-1838MF	185
VFC50-CS-1838MF	185
VFC50-N-1838MF	185
VFC50-PU-1838MF	185
VFC50-S-1838MF	185
VFC50-U-1838MF	185
VFC50-WS-1838MF	185
VFC50-WS-FDA	185
VFC60-A-1838MF	185
VFC60-CS-1838MF	185
VFC60-N-1838MF	185
VFC60-PU-1838MF	185
VFC60-S-1838MF	185
VFC60-U-1838MF	185
VFC60-WS-1838MF	185
VFC60-WS-FDA	185
VFC60X1-A-M10M	185
VFC60X1-CS-M10M	185
VFC60X1-N-M10M	185
VFC60X1-PU-M10M	185
VFC60X1-S-M10M	185
VFC60X1-U-M10M	185
VFC60X1-WS-M10M	185
VFC60X1-WSA-FDA	185
VFC75-A-1838MF	186
VFC75-CS-1838MF	186
VFC75-N-1838MF	186
VFC75-PU-1838MF	186
VFC75-S-1838MF	186
VFC75-U-1838MF	186
VFC75-WS-1838MF	186
VFC75-WS-FDA	186
VFC75X1-A-M10M	186
VFC75X1-CS-M10M	186
VFC75X1-N-M10M	186
VFC75X1-S-M10M	186
VFC75X1-U-M10M	186
VFC75X1-WS-FDA	186
VFC75X1-WS-M10M	186
VFC75X2-A-M16M	186
VFC75X2-CS-M16M	186
VFC75X2-N-M16M	186
VFC75X2-S-M16M	186
VFC75X2-U-M16M	186
VFC75X2-WS-FDA	186
VFC75X2-WS-M16M	186
VFC90-PU	187
VGB050114	337
VGB050118	337
VGB060114	337
VGB100138	337
VGBG060114	339
VGBG100112	339
VGBP040118	340
VGBP060114	340
VGBU040118	340
VGBU060114	340
VGR040118	337
VGR050114	337
VGR050118	337
VGR060114	337
VISCO	598
VISCO.110	598
VMC1	84
VMC1A	84
VNC10003	274
VNC10004	274
VNC10005	274
VNC10006	274
VNC10007	274
VNC10008	274
VNC10009	274
VOBL35X90-A	162
VOBL35X90-CS	162
VOBL35X90-FDA	162
VOBL35X90-N	162
VOBL35X90-S	162
VOBL35X90-U	162
VOBL35X90-WS	162
VOU10X30-CS	166
VOU10X30-N	166
VOU10X30-S	166
VOU10X30-U	166
VOU10X30-WS	166
VOU10X30-WS-FDA	166
VOU15X45-CS	166
VOU15X45-N	166
VOU15X45-S	166
VOU15X45-U	166
VOU15X45-WS	166
VOU15X45-WS(FDA)	166
VOU20X60-CS	166
VOU20X60-N	166
VOU20X60-S	166
VOU20X60-U	166
VOU20X60-WS	166
VOU20X60-WS(FDA)	166
VOU4X10-CS	164
VOU4X10-N	164
VOU4X10-S	164
VOU4X10-U	164
VOU4X10-WS	164
VOU4X10-WS(FDA)	164
VOU4X20-CS	164
VOU4X20-N	164
VOU4X20-S	164
VOU4X20-U	164
VOU4X20-WS	164
VOU4X20-WS-FDA	164
VOU6X10-CS	164
VOU6X10-N	164
VOU6X10-S	164
VOU6X10-U	164
VOU6X10-WS	164
VOU6X10-WS(FDA)	164

V, W

Part Code	Page
VOU6X20-CS	165
VOU6X20-N	165
VOU6X20-S	165
VOU6X20-U	165
VOU6X20-WS	165
VOU6X20-WS-FDA	165
VOU8X20-CS	165
VOU8X20-N	165
VOU8X20-S	165
VOU8X20-U	165
VOU8X20-WS	165
VOU8X20-WS-FDA	165
VOU8X30-CS	165
VOU8X30-N	165
VOU8X30-S	165
VOU8X30-U	165
VOU8X30-WS	165
VOU8X30-WS-FDA	165
VPE	651
VSM1-T	84
VSM2-T	84
VSM202	207
VSM203	207
VSM303	207
VTC3021-2	208
VTC3022-2	208
VTC3031-2	208
VTC3032-2	208
VTC3122-2	208
VTC3123-2	208
VTC3124-2	208
VTC3132-2	208
VTC3133-2	208
VTC3134-2	208
VTF-0706	222
VTF-1208	222
VTF01-118	222
VTF01-154	222
VTF02-118	222
VTF02-154	222
VTF12-141	222
VTF12-96	222
VTF34-141	222
VTF34-96	222
VTF38-141	222
VTF38-96	222
VTFE-B110	148
VTFE-B40	148
VTFE-B75	148
VTFE-BL20	155
VTFE-BL30	155
VTFE-BL40	155
VTFE-BL40B	155
VTFE-BL50	155
VTFE-BU35	158
VTFE-BU45	158
VTFE-BU55	158
VTFE-BX35	160
VTFE-BX45	160
VTFE-BX55	160
VTFE-OBL35X90	162
VTFE27.5-39096	222
VTFE27.5-39141	222
VTFE47.4-62118	222
VTFE47.4-62154	222
VU1.5X-A	168
VU1.5X-CS	168
VU1.5X-N	168
VU1.5X-S	168
VU1.5X-U	168
VU1.5X-WS	168
VU1.5X-WS(FDA)	168
VU10-A	170
VU10-CS	170
VU10-N	170
VU10-S	170
VU10-U	170
VU10-WS	170
VU10-WS(FDA)	170
VU15-A	171
VU15-CS	171
VU15-N	171
VU15-S	171
VU15-U	171
VU15-WS	171
VU15-WS(FDA)	171
VU2-A	168
VU2-CS	168
VU2-N	168
VU2-S	168
VU2-U	168
VU2-WS	168
VU2-WS(FDA)	168
VU20-A	171
VU20-CS	171
VU20-N	171
VU20-S	171
VU20-U	171
VU20-WS	171
VU20-WS-FDA	171
VU25-A	171
VU25-CS	171
VU25-N	171
VU25-S	171
VU25-U	171
VU25-WS	171
VU25-WS-FDA	171
VU2X-A	168
VU2X-CS	168
VU2X-N	168
VU2X-S	168
VU2X-U	168
VU2X-WS	168
VU2X-WS(FDA)	168
VU3-A	169
VU3-CS	169
VU3-N	169
VU3-S	169
VU3-U	169
VU3-WS	169
VU3-WS(FDA)	169
VU30-A	172
VU30-CS	172
VU30-N	172
VU30-S	172
VU30-U	172
VU30-WS	172
VU30-WS-FDA	172
VU30X-CS	172
VU30X-N	172
VU30X-S	172
VU30X-U	172
VU30X-WS	172
VU30X-WS-FDA	172
VU4-A	169
VU4-CS	169
VU4-N	169
VU4-S	169
VU4-U	169
VU4-WS	169
VU4-WS-FDA	169
VU40-A	172
VU40-CS	172
VU40-N	172
VU40-S	172
VU40-U	172
VU40-WS	172
VU40-WS-FDA	172
VU4X-A	169
VU4X-CS	169
VU4X-N	169
VU4X-S	169
VU4X-U	169
VU4X-WS	169
VU4X-WS-FDA	169
VU50-A	173
VU50-CS	173
VU50-N	173
VU50-S	173
VU50-U	173
VU50-WS	173
VU50-WS-FDA	173
VU6-A	170
VU6-CS	170
VU6-N	170
VU6-S	170
VU6-U	170
VU6-WS	170
VU6-WS-FDA	170
VU8-A	170
VU8-CS	170
VU8-N	170
VU8-S	170
VU8-U	170
VU8-WS	170
VU8-WS-FDA	170
VU80-A	173
VU80-CS	173
VU80-N	173
VU80-S	173
VU80-U	173
VU80-WS	173
VU80-WS-FDA	173
VUP4.M	236
VUP4.VM	236
VUP8.M	236
VUP8.VM	236
VX150014C	395
VX150018C	395
VX230014	698
VX230018	698
W	
W0215000001	61
W0215000011	61
W0215000021	61
W0215000031	61
W0950000132	18
W0950000140	18
W0950000150	18
W0950000510	7
W0950000512	7
W0950000516	7
W0950000520	7
W0950000525	7
W0950000711	15
W0950000712	15
W0950000713	15
W0950001100	695
W0950001103	691
W0950080001	7
W0950080002	7
W0950080005	7

W

Part Code	Page
W0950080010	7
W0950080011	7
W0950080020	7
W0950080025	7
W0950120001	7
W0950120002	7
W0950120005	7
W0950120010	7
W0950120011	7
W0950120020	7
W0950120025	7
W0950200001	7
W0950200002	7
W0950200005	7
W0950200010	7
W0950200011	7
W0950200020	7
W0950200025	7
W0950320002	17
W0950320005	17
W0950320010	17
W0950322001	13
W0950322002	14
W0950322003	13
W0950322004	13
W0950322030	18
W0950322108	14
W0950326021	18
W0950400002	17
W0950400005	17
W0950400010	17
W0950402001	13
W0950402002	14
W0950402003	13
W0950402004	13
W0950402010	14
W0950402030	18
W0950402108	14
W0950406021	18
W0950500002	17
W0950500005	17
W0950500010	17
W0950502001	13
W0950502002	14
W0950502003	13
W0950502004	13
W0950502010	14
W0950502030	18
W0950502108	14
W0950506021	18
W0950632001	13
W0950632002	14
W0950632003	13
W0950632004	13
W0950632108	14
W0950802001	13
W0950802002	14
W0950802003	13
W0950802004	13
W0950802010	14
W0950802020	14
W0950802025	15
W0950802108	14
W0951002001	13
W0951002002	14
W0951002003	13
W0951002004	13
W0951002108	14
W0951252001	13
W0951252002	14
W0951252003	13
W0951252004	13
W0951252008	14
W0951252010	14
W0951252020	14
W0951252025	15
W0951602001	13
W0951602002	14
W0951602003	13
W0951602004	13
W0951602008	14
W0951602010	14
W0951602020	14
W0952002001	13
W0952002002	14
W0952002003	13
W0952002004	13
W0952002025	15
W0952022180	695
W095X120001	691
W095X120002	691
W095X120005	691
W095X120010	691
W095X120011	691
W095X120020	691
W095X200001	691
W095X200002	691
W095X200005	691
W095X200010	691
W095X200011	691
W095X200020	691
W095X322001	694
W095X322002	695
W095X322003	694
W095X322004	694
W095X322007	695
W095X322008	694
W095X322011	695
W095X322020	695
W095X322050	695
W095X402001	694
W095X402002	695
W095X402003	694
W095X402004	694
W095X402007	695
W095X402008	694
W095X402011	695
W095X402020	695
W095X402050	695
W095X502001	694
W095X502002	695
W095X502003	694
W095X502004	694
W095X502007	695
W095X502008	694
W095X502011	695
W095X502020	695
W095X502050	695
W095X632001	694
W095X632002	695
W095X632003	694
W095X632004	694
W095X632007	695
W095X632008	694
W095X632050	695
W095X802001	694
W095X802002	695
W095X802003	694
W095X802004	694
W095X802007	695
W095X802008	694
W095X802011	695
W095X802020	695
W095X802050	695
W095XA12001	694
W095XA12002	695
W095XA12003	694
W095XA12004	694
W095XA12007	695
W095XA12008	694
W095XA12050	695
W0970512000	35
W1000060005	4
W1000060010	4
W1000060015	4
W1000100005	4
W1000100010	4
W1000100015	4
W1000160005	4
W1000160010	4
W1000160015	4
W1211600025	10
W1211600050	10
W1211600080	10
W1211600100	10
W1211600125	10
W1211600160	10
W1211600200	10
W1211600250	10
W1211600320	10
W1211600400	10
W1211600500	10
W1212000025	10
W1212000050	10
W1212000080	10
W1212000100	10
W1212000125	10
W1212000160	10
W1212000200	10
W1212000250	10
W1212000320	10
W1212000400	10
W1212000500	10
W1212500025	10
W1212500050	10
W1212500080	10
W1212500100	10
W1212500125	10
W1212500160	10
W1212500200	10
W1212500250	10
W1212500320	10
W1212500400	10
W1212500500	10
W1213200025	10
W1213200050	10
W1213200080	10
W1213200100	10
W1213200125	10
W1213200160	10
W1213200200	10
W1213200250	10
W1213200320	10
W1213200400	10
W1213200500	10
W1800160010	690
W1800160025	690
W1800160050	690

W

Part Code	Page
W1800160080	690
W1800160100	690
W1800160125	690
W1800160160	690
W1800160200	690
W1800160250	690
W1800160320	690
W1800200010	690
W1800200025	690
W1800200050	690
W1800200080	690
W1800200100	690
W1800200125	690
W1800200160	690
W1800200200	690
W1800200250	690
W1800200320	690
W1800200400	690
W1800250010	690
W1800250025	690
W1800250050	690
W1800250080	690
W1800250100	690
W1800250125	690
W1800250160	690
W1800250200	690
W1800250250	690
W1800250320	690
W1800250400	690
W1800250500	690
W1840320025	693
W1840320050	693
W1840320080	693
W1840320100	693
W1840320125	693
W1840320160	693
W1840320200	693
W1840320250	693
W1840320320	693
W1840320400	693
W1840320500	693
W1840400025	693
W1840400050	693
W1840400080	693
W1840400100	693
W1840400125	693
W1840400160	693
W1840400200	693
W1840400250	693
W1840400320	693
W1840400400	693
W1840400500	693

Part Code	Page
W1840500025	693
W1840500050	693
W1840500080	693
W1840500100	693
W1840500125	693
W1840500160	693
W1840500200	693
W1840500250	693
W1840500320	693
W1840500400	693
W1840500500	693
W1840630025	693
W1840630050	693
W1840630080	693
W1840630100	693
W1840630125	693
W1840630160	693
W1840630200	693
W1840630250	693
W1840630320	693
W1840630400	693
W1840630500	693
W1840800025	693
W1840800050	693
W1840800080	693
W1840800100	693
W1840800125	693
W1840800160	693
W1840800200	693
W1840800250	693
W1840800320	693
W1840800400	693
W1840800500	693
W1841000025	693
W1841000050	693
W1841000080	693
W1841000100	693
W1841000125	693
W1841000160	693
W1841000200	693
W1841000250	693
W1841000320	693
W1841000400	693
W1841000500	693
W3501000100	40
W3501000101	40
W3501000110	40
W3501000111	40
W3501000200	39
W3501000201	39
W3501000210	39
W3501000211	39

Part Code	Page
W3501000300	39
W3501000311	39
W3501000400	40
W3501000411	40
W3501001100	40
W3501001101	40
W3501001110	40
W3501001111	40
W3501001200	39
W3501001201	39
W3501001210	39
W3501001211	39
W3501001301	39
W3501001311	39
W3501001401	40
W3501001411	40
W3604000001	68
W3604000002	68
W3604000003	68
W3604000004	68
W3604000005	68
W3604000006	68
W3605000001	82
W3606000002	78
W3606000004	78
W6001101001	36
W6001101106	36
W6001111011	36
W6001111106	36
W6001111108	36
W6001121021	36
W6001121108	36
W6001121110	36
W6001131112	36
WALL-STATION	882
WC-S2-2	489
WC-S2-3	489
WC-S2-312	489
WC-S2-4	489
WC-S2-5	489
WC-S2-6	489
WC-S2-8	489
WC-S4-2	490
WC-S4-3	490
WC-S4-312	490
WC-S4-4	490
WC-S4-5	490
WC-S4-6	490
WC-S4-8	490
WC-S74-112	489
WC-S74-2	489
WC-S74-212	489
WC-S74-3	489

Part Code	Page
WC-S74-312	489
WC-S74-4	489
WC-S74-5	489
WC-S74-6	489
WC-S74-8	489
WC-S75-112	490
WC-S75-2	490
WC-S75-212	490
WC-S75-3	490
WC-S75-312	490
WC-S75-4	490
WC-S75-5	490
WC-S75-6	490
WC-S75-8	490
WC-S77-2	489
WC-S77-3	489
WC-S77-312	489
WC-S77-4	489
WC-S77-5	489
WC-S77-6	489
WC-S77-8	489
WC-S78-2	489
WC-S78-3	489
WC-S78-312	489
WC-S78-4	489
WC-S78-5	489
WC-S78-6	489
WC-S78-8	489
WC-SET-2	490
WC-SET-3	490
WC-SET-312	490
WC-SET-4	490
WC-SET-5	490
WC-SET-6	490
WC-SET-8	490
WDH12-50M	532
WDHC1	564
WDHC1-SS	564
WDHC1A	564
WDHC1A-SS	564
WDHC1X	564
WDHC1X-SS	564
WDHC2	564
WDHC2-SS	564
WDHC2A	564
WDHC2A-SS	564
WDHC2X	564
WDHC2X-SS	564
WDHC3	564
WDHC3-SS	564
WDHC3X	564
WDHC3X-SS	564

W, X, Y, Z

Part Code	Page
WDHC4	564
WDHC4-SS	564
WDHC4X	564
WDHC4X-SS	564
WDHC5	564
WDHC5-SS	564
WDHC6-SS	564
WDHC7-SS	564
WDHCMOO	564
WDHCMOO-SS	564
WDHCO	564
WDHCO-SS	564
WDHCOO	564
WDHCOO-SS	564
WDHCOOO	564
WDHCOOO-SS	564
WDHCOX	564
WDHCOX-SS	564
WGK-1	729
WHA1/4-1/4-10MA	534
WHA1/4-1/4-10MO	534
WHA1/4-1/4-15MA	534
WHA1/4-1/4-20MA	534
WHA1/4-1/4-5MA	534
WHA1/4-1/4-5MO	534
WHA1/4-3/8-10MA	534
WHA1/4-3/8-15MA	534
WHA1/4-3/8-20MA	534
WHA1/4-3/8-5MA	534
WHA1/4-3/8-5MO	534
WHA3/8-3/8-10MO	534
WHA3/8-3/8-5MO	534
WHA3/8-38-10MA	534
WHA3/8-38-15MA	534
WHA3/8-38-20MA	534
WHA3/8-38-5MA	534
WHA5/16-3/8-10MA	534
WHA5/16-3/8-15MA	534
WHA5/16-3/8-20MA	534
WHA5/16-3/8-5MA	534
WHP100	584
WHPCK-1	480
WHPCK-2	480
WMUN104	399
WMUN106	399
WMUN108	399
WMUN110	399
WMUN112	399
WNSSAF-1	710
WNSSAF-12	710
WNSSAF-2	710
WNSSAF-3	710
WNSSAF-34	710

Part Code	Page
WPVC1-30M	523
WPVC1/2-30M	523
WPVC11/2-10M	523
WPVC11/2-30M	523
WPVC11/4-10M	523
WPVC11/4-30M	523
WPVC2-10M	523
WPVC2-30M	523
WPVC21/2-10M	523
WPVC21/2-30M	523
WPVC3-10M	523
WPVC3-30M	523
WPVC3/4-30M	523
WPVC4-10M	523
WPVC4-30M	523
WS-50IQ	571
WS12	571
WS16	571
WS20	571
WS27	571
WS32	571
WS40	571
WS45	571
WS60	571
WS70	571
WSHOP-STATION	882
WTC28	621
WYREM-102-6M	543
WYREM-110-6M	543
WYREM-127-6M	543
WYREM-152-6M	543
WYREM-165-6M	543
WYREM-180-6M	543
WYREM-203-6M	543
WYREM-25-6M	543
WYREM-254-6M	543
WYREM-305-6M	543
WYREM-32-6M	543
WYREM-38-6M	543
WYREM-45-6M	543
WYREM-51-6M	543
WYREM-60-6M	543
WYREM-63-6M	543
WYREM-76-6M	543
WYREM-80-6M	543
WYREM-82-6M	543
WYREM-90-6M	543
X	
X-110-UPVC	629
X-16-UPVC	629
X-20-UPVC	629
X-25-UPVC	629

Part Code	Page
X-32-UPVC	629
X-40-UPVC	629
X-50-UPVC	629
X-63-UPVC	629
X-75-UPVC	629
X-90-UPVC	629
X25-N6	219
X25-S3	219
X25-W3	219
X30-N6	219
X30-S3	219
X30-W3	219
X45-N6	219
X45-S3	219
X45-W3	219
X55-N6	219
X55-S3	219
X55-W3	219
X65-N6	219
X65-S3	219
X65-W3	219
X75-N6	219
X75-S3	219
X75-W3	219
XL/03/M10	807
XL/03/M12	807
XL/03T/M10	807
XL/03T/M12	807
XL/05/M10	807
XL/05/M12	807
XL/05T/M10	807
XL/05T/M12	807
XL/10/M12	807
XL/10T/M12	807
XS2001	856
XS4001	858
Y	
YCAH20-13-100	517
YCAH20-13-25	517
YCAH20-19-100	517
YCAH20-19-15AS	519
YCAH20-19-25	517
YCAH20-25-25	517
YCAH20-25-50	517
YFF12	417
YFF14	417
YFF18	417
YFF38	417
YMF12	417
YMF14	417
YMF18	417
YMF38	417

Part Code	Page
YS112B	233
YS112BN	233
YS112SS	699
YS114B	233
YS114BN	233
YS114SS	699
YS12B	233
YS12BN	233
YS12SS	699
YS14SS	699
YS1B	233
YS1BN	233
YS1SS	699
YS212B	233
YS212SS	699
YS2B	233
YS2BN	233
YS2SS	699
YS34B	233
YS34BN	233
YS34SS	699
YS38B	233
YS38SS	699
YS3B	233
YS3SS	699
YS4B	233
Z	
Z29100BREATHE	300
ZS15E1-10L	248
ZS15E2-10L	248
ZS15E4-10L	248
ZS15E7-10L	248
ZS15VE1-10LS2	248
ZS15VE2-10LS2	248
ZS15VE4-10LS2	248
ZS15VE7-10LS2	248
ZS20E1	248
ZS20E2	248
ZS20E4	248
ZS20E7	248
ZS20VE1S2	248
ZS20VE2S2	248
ZS20VE4S2	248
ZS20VE7S2	248
ZS25E1-25L	248
ZS25E2	248
ZS25E4	248
ZS25E7	248
ZS25VE1S2	248
ZS25VE2S2	248
ZS25VE4S2	248
ZS25VE7S2	248

A, B

A	
ACL Solenoid Valves	242-247
Actuated Ball Valves	255-263, 268-270
Adaptors	
Brass	422-423
Brass, Nickel Plated	414-418
Nylon	412
Polypropylene	413
Steel	750-759
Adhesives	675, 827-829
Adjustable Switches	
Pressure	84-86
Vacuum	84-87
Visual & Electric Flow	88
Aeropro Pneumatic Power Tools	735-739
Air & Water Hose	519
Air Dusters	836
Air Knives & Amplifiers	91-97
Air Line Ring Main Systems	620-622
Air Preparation	
Air Service Units	123-124, 279-280, 292, 297, 304-307, 309, 311, 315
Filter/Regulators	122, 279, 288, 296, 307, 309, 311, 314
Filters	117-118, 278, 284-285, 294, 300-301, 307-308, 311, 316
Lubricators	121, 278, 289, 296, 302, 307, 309, 311, 317
Modular Series	117-124
Regulators	24-26, 119-120, 278, 286-287, 295, 301-302, 307-308, 311, 313, 316, 318
Stainless Steel	686-689
Valves	126-127, 290-291, 298, 304
Air Pressure Multipliers (Boosters)	37
Air Receivers	351-352
Air Service Units	123-124, 279-280, 292, 297, 301-312, 315
Air Tools	
Basic Air Tool Kit	739
Caulking Gun	740
Drills	735
Grease Gun	740
Grinders	738
Impact Screwdrivers	737
Impact Wrenches	736
Nailer & Stapler	739
Ratchet Wrenches	737
Riveter	740
Sander	740
Tool Balancer	741
Air/Water Blow Guns	721
Aircom Ring Main Systems	603-617
Airline Oil	741
All Stainless Steel Push-in Fittings	373-374
Aluminium Manifolds	614
Aluminium Ring Main Fittings	607-613
Aluminium Valves	614
Alwitco Mufflers	429-431
Ambersil Lubricants & Cleaners	833-850
Angle Seat Valves	273
Anti-static Sprays	836
Automotive Tubing & Hose	520-522
Aventics Pneumatics	102-127
B	
Ball Valves	
Hydraulic	748
Pneumatic	228-232
Stainless Steel	696-697, 699
Beck Air Knives & Amplifiers	91-97
Block Fittings	36
Blow Guns	717-721, 724-726
Bonded Seals	749

Boxed Tubing	508
Braided PVC Hose	494-495
Brass Quick-fit Fittings	425
Butterfly Valves	271-272
C	
C.matic Flow Control Valves	28-29
C.matic Metric Push-in Fittings	390-395
Cable Ties	825
Calipers	854
Cam & Groove Couplings	482-486
Cartridge Cylinders	4
Castors	859-862
Check & Stop Valves	367
Check Valves	748
Circlips	825
Clamps	795-806
Cleaners	
Solvent Based	834-835
Water Based	833
Coilhose Recoil Hoses	512
Compression Fittings	
Brass, Imperial	400-401
Brass, Metric	399
Polyethylene	645-647
Condensate Drains	335-336
Copper Tubing	548
Corrosion Inhibitors	842-843
Couplings	
60 & 100 Series	467
Air Brake	475
Cam & Groove	482-486
Claw	478-480
Euro Safety	453
IBC	487
Instantair	470
Lever Lock	489-490
Lug Type	488-489
PF	469
Safety	470-472
Sandblast & Nozzles Holders	481
Schrader	471
Series 13	439
Series 14	440
Series 17	441
Series 19	442
Series 20	443
Series 21	444
Series 21B	445
Series 21K	446
Series 22	447
Series 23	448
Series 24	449
Series 25	450
Series 25, Stainless Steel	452
Series 25B	451
Series 26	454
Series 26	455
Series 27	457
Series 32	458
Series 33	459
Series 34	460
Series 68	461
Series 86 & 100	463
Series 86 & 101	463
Series 86 & 102	463
Series 86 & 103	463
Series 86 & 87	462
Series 86 & 88	462
Series 86 & 89	462
Series 86 & 90	462
Series 86 & 91	462
Series 86 & 92	462
Series 86 & 93	463
Series 86 & 94	463

Series 86 & 95	463
Series 86 & 96	463
Series 86 & 97	463
Series 86 & 98	463
Series 86 & 99	463
Series DN	464-465
Series Standard	466
Water	476-477
Welding	473-474
XF	468
D	
Deadman Handle Ball Valves	699
DIN2353 Hydraulic Fittings	769-775
DIN2353 Hydraulic Fittings, Stainless Steel	776-781
Distribution Manifolds	420-421
Drain Plugs	810
Drip Leg Drains	298
Drum & Pallet Bunding	883-884
Dryers	334
Ducting Hose	
Anti-static	538-540
Anti-static, Food Grade	539
Glass Fabric	541-542
PVC	544-546
Wyrem	543
E	
Electrical Socket Connectors	249-252
Elettrotec Switches	84-90
Enclosures	863-864
F	
Faicom Hose Reels	580-582
Ferrules	576
Filler Plugs	810-814
Filter Elements	
AFE	345
Atlas Copco	344
Becker	349
Busch	348
Compair Demag	350
Domnick Hunter	343
Ingersoll Rand	344
Mann & Hummel	341
Rietschle	346-347
Ultrafilter	342
Zander	343
Filter/Regulators	122, 279, 281-282, 288, 296, 307, 309, 311, 314
Filters	117-118, 278, 284-285, 294, 300-301, 307-308, 311, 316
Filtration	326-333
Finger-tight Fittings	387-388
Fittings Kits	
Brass, Nickel Plated	419
Techmatic Push-in	376-378
Metal Work Push-in	384
Flange Gaskets	683
Flanges	
Carbon Steel	681-682
Forged Steel	682-683
Stainless Steel	710
Flexzilla Hose Reels	587
Float Level Switches	87
Flow Control Valves	
Hydraulic	748
Pneumatic	27-29
Flow Meters	89-90
Fogco Misting Systems	653-663
Food Grade Fittings	385-386
Food Group Cleaners	846-849
Food Group Lubricants	850
Foot Pedals	50
Fuelling Equipment	595-598

G, H, I, J

G	
Gasket Stripper	837
Gate, Globe & Check Valves	698
Greasing & Lubrication	826
H	
Hand Valves	47-49
Handrail Pipe Clamp Systems	
Standard Range	676-678
Swivel Range	679-680
Hose	
Air & Water	519
Compressor	519
Diesel & Bio Diesel	521
Ducting	538-547
Fuel	521-522
Hi-Vis	497
Layflat	519
Radiator	521-522
Reinforced PVC	494-495, 513-514
Unreinforced PVC	496
Hose Clips	549-573
Hose Connectors	408
Hose Crimpers & Die Sets	575
Hose Reels	580-592
Hose Tails	
Brass	404-408
Nylon	410-411
Plastic	409
Steel	408
Hydraulic Adaptors	750-759
Hydraulic Clamps	795-806
Hydraulic Couplings	
Series 70	746
Series 72	747
Series 76	747
Hydraulic DIN2353 Fittings	
Stainless Steel	776-781
Steel	769-775
Hydraulic Hose Coupling Inserts	760-768
Hydraulic Tank Accessories	807-814
Hydraulic Tube	790-794
Hydraulic Twin Ferrule Fittings	782-789
Hydraulic Valves	748
Hygienic Pipe Fittings	711-713
I	
IBC Off Load Couplings	487
Industrial Hose	536-537
Inflating Guns	722
In-line Vacuum Filter	222
Insert Deal Air Preparation	313-318, 686-689
Interchange Filter Elements	341-350
ISO 15552 Cylinders	
Accessories	14-15
Cylinder Mountings & Accessories	106-107
Cylinders	8-10, 105
Cylinders, All Stainless Steel	694-695
Cylinders, Series HCR (High Corrosion Resistance)	12
ISO 21287 Cylinders	19-20
ISO 6432 Cylinders	
Cylinders	5-6, 102
Mountings & Accessories	7, 103
ISO Valves	
Accessories	65
Pilot	51-54, 62
Solenoid	63-64
J	
JCS Hose Clips	562-566
Jet Air Nozzles	722
John Guest	
Push-in Fittings	396-398
Ring Main Systems	620-625
Jubilee Hose Clips	567-573
JWL Blow Guns & Air Tools	717-723

K, L, M, N, O

K	
Kit Cases	874-875
L	
Label Remover	837
Leak Detection	651
Legacy Hose Reels	586
Lever Lock Water Couplings	489-490
Line on Line Functional Fittings	31-35
Lorch Safety Valves	239-240
Lubricants	830-831, 838-841
Lubricators	121, 278, 289, 296, 302, 307, 309, 311, 317
Ludecke Couplings	478-481
Lug Type Couplings	488
M	
M8 Electrical Cable	253-254
Magnifying Glasses	854
Malleable Iron	
Accessories	675
Pipe Fittings	668-672
Steel Tube	673-674
Manual Ball Valves	696
Manual Valves & Strainers	233-234
Mechanical Valves	40-46
Mechanical Valves, Miniature	39-42
Metal Cutting	844
Metal Work	
Air Preparation	278-306
ISO 15552 Cylinders	693-694
ISO 6432 Cylinders	690-691
Pneumatics	4-20, 24-27, 30-41, 43-49, 51-78, 83
Push-in Fittings	380-386
Micro FRL Units	307
Micrometers	854
Mikalor Hose Clips	549-556
Miniature FRLs	278-280
Misting Systems	
Adaptors	661
Air Injection Dry Fog System	658
Controllers	663
Fans	656-657
Filters	662
Nozzles	660
Pump Kits	653-654
Pumps	655
Slip Lok	659
Modular	
FRL Series	117-124
FRL Series Accessories	125
FRL Series, Valves	126-127
Oil Fog Lubricators	317
Modular Coolant Hose System	855-858
Multi-core Nylon Tubing	510
Multilayer Bendable Pipe	603
N	
Nito Water Couplings	476-477
Non-return Valves	236
Norma Hose Tails	409
Nylon Tubing	
Boxed	508
High Pressure	504
Imperial	503
Metric	498-502
O	
O Clip Pliers	574
O-Rings	825
Oil, Pneumatic ISO 22	741
Oil Level Sight Glasses	808-809
Omal	
Actuated Valves	700-701
Valves	268-274
Oxy/Acetylene Equipment	535

P, R

P	
PCL	
Couplings	466-472
Tyre Inflation Equipment	593-594
Pilot Valves	
TC08 Series	110
TC15 Series	111
Pipe Clamps	574
Pipe Cutters & Tube Benders	574, 650
Piping System Kits	617
Plastic Valves	235
Pneumatic Control Valves	
Dual Pressure	80
Electro-pneumatic Systems	69-77
Flip Flop	79
Foot	50
Impulse Generator	80
Logic	68
Manual	47-49
Mechanical	39-46
Oscillating	79
Pilot	51-54, 62, 110-111
Slow Start	82
Solenoid	55-61, 63-65, 112-115
Timer	81
Two Hand Safety	82
Vacuum Liquid Sprayer	81
Pneumatic Cylinder Guide Units	21-23
Pneumatic Cylinders	
Cartridge	4
Compact	108-109
ISO 15552	8-10, 12, 14-15, 105
ISO 21287	19-20
ISO 6432	5-6, 102
ISO 6432, Stainless Steel	690-691
RNDC Round	16
Stainless Steel	690-695
Pneumatic Fittings	
Finger-tight	387-388
Push-in	356-384, 393-398, 620-625
Polyethylene Pipe Universal Transition Fittings	648-649
Polyethylene Tubing	507
Polyurethane Tubing	505-506, 508
Precision Regulators	318
Pressure & Vacuum Gauges	337-340
Pressure & Vacuum Switches	83, 291
Pressure Reducer with Gauge	15, 78
Pressure Regulators	24-26, 119-120, 278, 286-287, 295, 301-302, 307-308, 311, 313, 316, 318
Propeller Flow Indicators	90
PTFE, PVDF & Silicone Tubing	509
Push-in Fittings	
Blue Plastic	361-366
Brass Nickel Plated	380-381, 390-392
Grey Plastic	356-360
Kits	376-378, 384
Lubrication	393
NPT	368-372
Plastic	396-398, 620-622
Plastic Plumbing	623-625
Stainless Steel	373-374, 394-395
Technopolymer	382-383
PVC	
Air Tool Hose	513
Door Curtains	851-853
Hose	494-497
PVC & Rubber/Alloy Hose	514, 516-517
Vacuum Hose	524
R	
Recoil Hose Quick-Fit Spring Guards	425
Recoil Hoses	511-512

R, S, T

Redashe Hose Reels	583-585
Reelcraft Hose Reels	588-591
Regulators	24-26, 119-120, 278, 286-287, 295, 301-302, 307-308, 311, 313, 316, 318
Reinforced PVC Hose	494-495
Rittal Enclosures	863-864
Rotary Unions	424
Round RNDC Cylinders & Accessories	16-18
S	
Safety Excess Flow Valve (Air Fuse)	241
Safety Valves	237-240
Screen Cleaner	836
Seals, Bonded	749
Silencers & Mufflers	429-433
Sodablaster Air Blow Guns	723
Solenoid Coils	247, 352
Solenoid Control Valves	55-61, 112-116, 242-246, 248
Special Purpose Valves	78-82
Specialist Hose & Tubing	531-533
Spill Absorbents & Spill Prevention	878-882
Spill Kits	881-882
Stainless Steel Fittings, 150lb	702-709
Standard Series FRLs	
New Deal	280, 293-299
New Deal Accessories	298-299
New Deal Breathe Air Set	300
Standard Series Pressure Regulators	313
Storage Bin System	868-871
Suction & Discharge Hose	
Dairy Steam	532
Delivery	525
Effluent	532
Food Grade	524
Garden	532
Lightweight	529
Medium Duty	528
Non-marking Wash Down	532
Oil Resistant	530
Super Flexible Delivery	526
Water Vending	531
Wire Reinforced PVC	523
Suction Cups	
Bellows & Cross Groove	160
Deep	178-183
Direct Fitting	150
Double Bellow	157-158
Dual Lip Structure	161
Fittings	200-201
Flat	189-193
Flat & Curve	185-187
Flat Dual Lip Structure	195
Mark Free	175-176
Multi Bellow, Long	148, 152-155
Multi Bellow, Long & Oval Type	162
Oval Universal	164-166
Single	142-148
Universal	168-173
Syntesi	
Accessories	293
Standard Series FRLs	284-292
System Pipes	605
T	
Tank Accessories	807-814
TC08 Series	
Pilot Valves	110
Solenoid Valves	112-113

T, U, V, W, Y

TC15 Series Pilot Valves	111
Techmatic	
Air Blow Gun	716
Air Preparation	307-312
Fittings Kits	419
Push-in Fittings	356-378
Solenoid Valves	248
Tyre Inflation Equipment	594
Valves	255-267
Technopolymer	
Fittings	606-607
Valves	608
Tefen Hose Tails & Adaptors	410-412
Temperature Switches	86-87
Threaded Adaptors	
Brass Nickel Plated	414-418
Nylon	412
Polypropylene	413
Threaded Polypropylene Fittings	644
Tilt-bin Systems	872-875
Toggle Clamps	
Horizontal	818
Latch Type	821
Push Type	822
Vertical	819-820
Tube Clips	574
Tube Cutters	574
Twin Ferrule Hydraulic Fittings	782-789
Tyre Inflation Equipment	593-594
U	
Unreinforced PVC Hose	496
UPVC	
Imperial Pipe System	633-641
Metric Pipe System	626-632
Threaded Fittings	642-643
Threaded PVC Fittings	426-427
V	
Vacuum	
Filters	223-224
Magic Grippers	217-220
Pumps	207-208
Suction Cups	142-148, 150, 152-158, 160-162, 164-166, 168-173, 175-176, 178-183, 185-187, 189-193, 195, 200-201, 207-208, 217-220, 223-224
Valves	
Angle Seat Valves	273
Ball Valves	228-232
Butterfly Valves	271-272
Non-return	235
Safety Valves	237-240
Variable Area Flow Meters	89-90
Vibrators	97
VIP Actuated Valves	274
Visual Flow Indicators	88
Vmeca Vacuum	130-225
W	
Wade Compression Fittings	399-401
Wafer Butterfly Valves	264-367
Walker Filtration & Dryers	326-334
Washers	428
Water Filters & Regulators	281-282
Water Guns & Nozzles	727-728
WD-40 Professional Lubricants	830
Welding/Gas Hose	533-534
Wipes & Hand Cleaners	845
Wire Reinforced PVC Suction Hose	523
Workshop Guns	729
WRAS UPVC	
Pipe Systems	626-641
Threaded Fittings	642-644
Y	
Y Strainer	699

TF Automation
Best Solutions

DESIGN – ENGINEER – MANUFACTURE

TF Automation are specialist engineers who design and manufacture process automation solutions, as well as supplying pneumatic and industrial components. Supporting a wide range of manufacturing industries from automotive, aerospace and pharmaceutical, to food and beverage, printing and packaging, TF Automation provide special purpose machinery, designed to clients' bespoke requirements.

Process automation and continuous improvement of manufacturing processes are central to all our projects at TF Automation and we strive to offer the most innovative and technologically advanced solutions for all our clients.

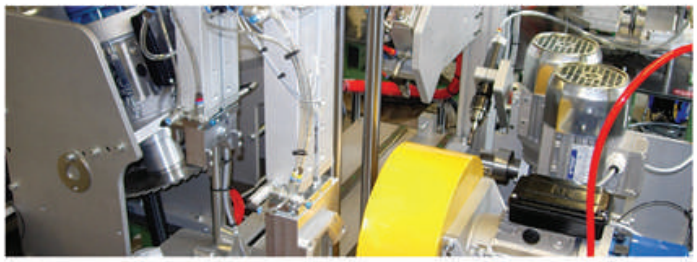
APPLICATIONS

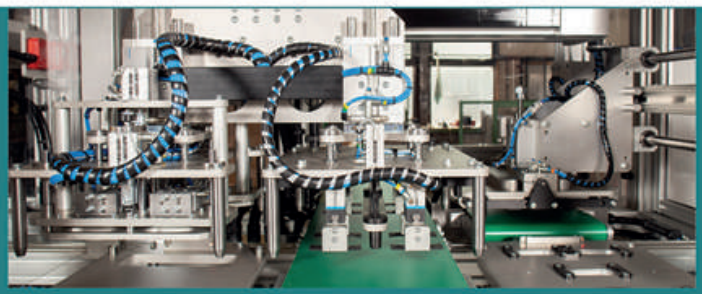
- Assembly and Testing
- Process Automation
- Robotics & Product Handling
- Product Marking
- Manual Workstations

SUPPORT SERVICES

- In-house Design
- In-house Manufacture
- Programming
- Testing & Commissioning









To find out more or to discuss your next automation project with our design team, please get in touch

T: **01274 308005** E: **info@tfautomation.co.uk**
www.tfautomation.co.uk



TF Automation
Best Solutions

TF AUTOMATION

Hillam Road, Canal Road, Bradford,
West Yorkshire, BD2 1QN

T : 01274 308005
E : sales@tfautomation.co.uk

www.tfautomation.co.uk