Contents

Pneumatics

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:

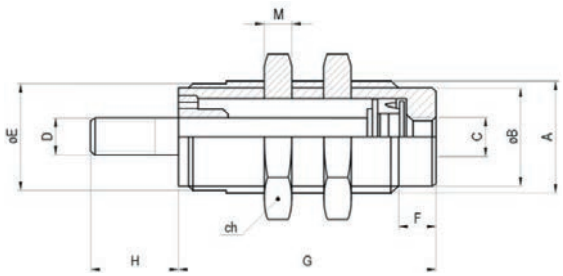
- Max +60°C

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

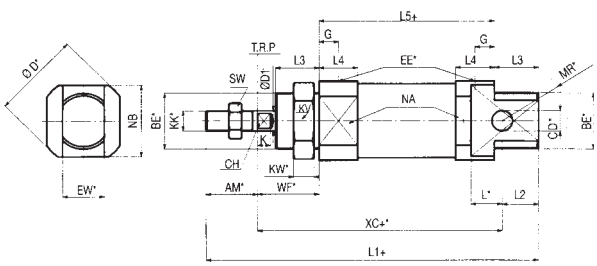
Dimensions

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

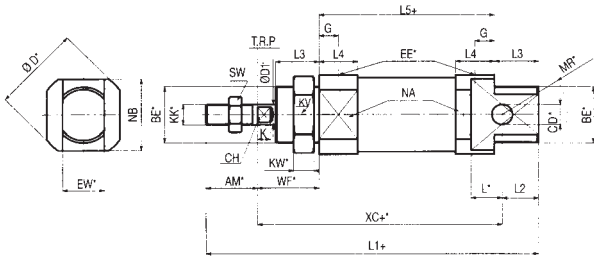
See page 26

ISO 6432 Mini Cylinders

ISO 6432 Double Acting Cylinders

Magnetic

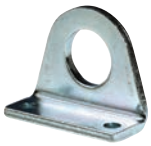
Code P03	Diameter mm	Stroke mm	Price
1120160010CN	16	10	40.95
1120160025CN	16	25	42.00
1120160050CN	16	50	43.80
1120160080CN	16	80	45.00
1120160100CN	16	100	46.05
1120160125CN	16	125	47.40
1120160160CN	16	160	49.90
1120160200CN	16	200	51.50
1120200010CN	20	10	45.30
1120200025CN	20	25	45.95
1120200050CN	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

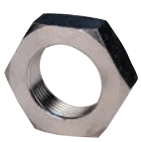
To Suit ISO 6432 Cylinders

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

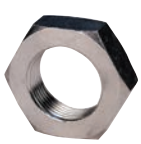
Code P03	To Suit	Price
W0950080005	10	4.45
W0950120005	12-16	5.55
W0950200005	20-25	5.65



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: -10ºC to +70ºC
- 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

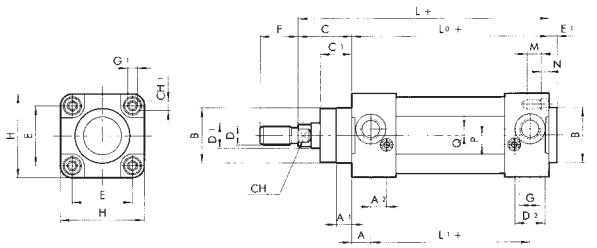
Ø	A	A1	A2	B	C	C1	CH	CH1	D	D1	D2	E	E1	F	G	G1	H	Ø	L	L0	L1	L2	M	N	P	Q
32	10	7	10	30	26	16	10	6	M10 x 1.25	12	15	32.5	5	22	G1/8	M6	47	32	120	94	74	146	9	4.5	6	4
40	12	9	10	35	30	20	13	6	M12 x 1.25	16	19	38	5	24	G1/4	M6	53	40	135	105	81	165	9	4.5	6	4
50	14	14	10	40	37	25	17	8	M16 x 1.5	20	19	46.5	5	32	G1/4	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

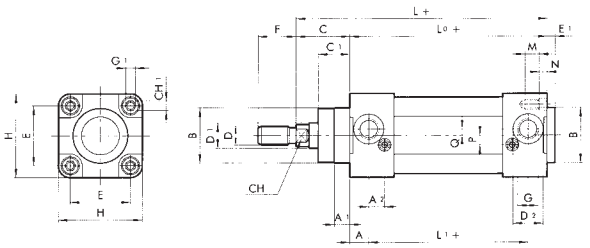
Magnetic & Cushioned

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

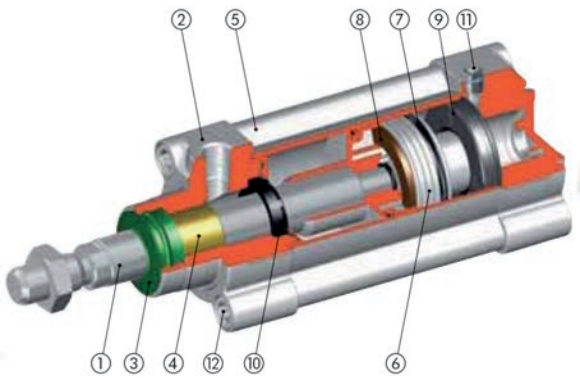
Code P54	Diameter mm	Stroke mm	Price
W1212500025	250	25	2250.60
W1212500050	250	50	2280.00
W1212500080	250	80	2315.30
W1212500100	250	100	2338.90
W1212500125	250	125	2368.30
W1212500160	250	160	2409.50
W1212500200	250	200	2456.60
W1212500250	250	250	2515.50
W1212500320	250	320	2597.90
W1212500400	250	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

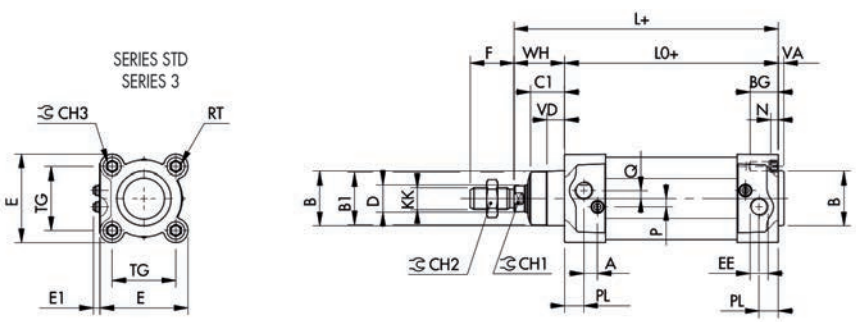
ISO 15552 Cylinders, Series HCR (High Corrosion Resistance)

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	LO	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

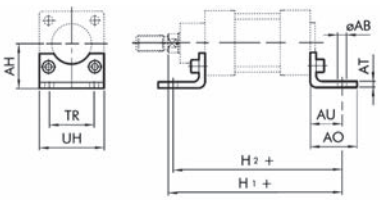
Code P60	Diameter mm	Stroke mm	Price
1213630125BL	63	125	393.20
1213630160BL	63	160	400.80
1213630200BL	63	200	409.45
1213630250BL	63	250	420.25
1213630320BL	63	320	435.45
1213630400BL	63	400	452.75
1213630500BL	63	500	474.40
1213800025WL	80	25	505.00
1213800050WL	80	50	512.70
1213800080WL	80	80	521.90
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

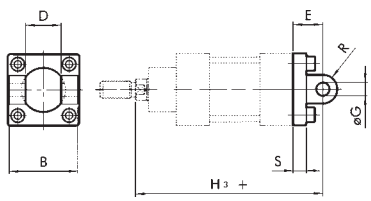
Code P03	Ø	AB	AH	AO	AT	AU	TR	UH	H1	H2	Price
W0950322001	32	7	32	35	4	24	32	45	144	142	**6.50**
W0950402001	40	9	36	43	4	28	36	52	163	161	**7.65**
W0950502001	50	9	45	47	4	32	45	65	175	170	**9.10**
W0950632001	63	9	50	47	6	32	50	75	190	185	**9.85**
W0950802001	80	12	63	61	6	41	63	95	215	210	**16.95**
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

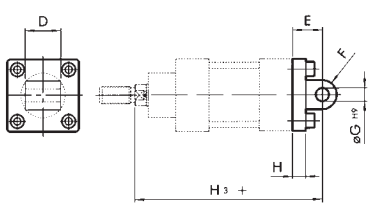
Code P03	Ø	B	D	E	ØG	H3	R	S	Price
W0950322003	32	45	26	22	10	142	11	10	**19.00**
W0950402003	40	52	28	25	12	160	13	10	**19.15**
W0950502003	50	60	32	27	12	170	13	12	**22.10**
W0950632003	63	70	40	32	16	190	17	12	**26.55**
W0950802003	80	90	50	36	16	210	17	16	**33.90**
W0951002003	100	110	60	41	20	230	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**

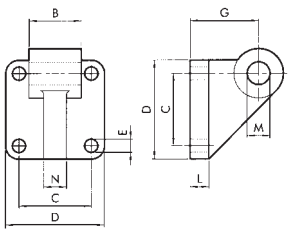


ISO 15552 Cylinders Accessories (Formerly ISO 6431)

Male 90° Hinge

To Suit ISO 15552 Cylinders

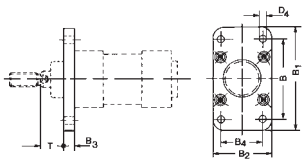
Code P03	Ø	B	C	D	E	G	L	M	N	Price
W0950322108	32	25.5	25	45	7	32	10	10	10	**27.70**
W0950402108	40	27.5	32	52	7	36	10	12	12	**27.70**
W0950502108	50	31.5	32	65	9	45	12	12	12	**27.70**
W0950632108	63	39.5	40	75	9	50	16	16	15	**41.50**
W0950802108	80	49.5	40	95	11	63	16	16	15	**44.55**
W0951002108	100	59.5	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

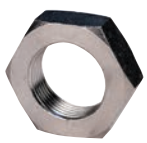
Code P03	Ø	B	B1	B2	B3	B4	ØD4	T	Price
W0950322002	32	64	80	50	10	32	7	16	**11.15**
W0950402002	40	72	90	55	10	36	9	20	**12.30**
W0950502002	50	90	110	65	12	45	9	25	**14.80**
W0950632002	63	100	120	75	12	50	9	25	**21.65**
W0950802002	80	126	153	95	16	63	12	30	**26.55**
W0951002002	100	150	178	115	16	75	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**

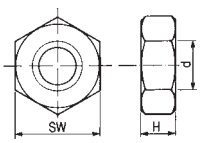


Piston Rod Nut

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**

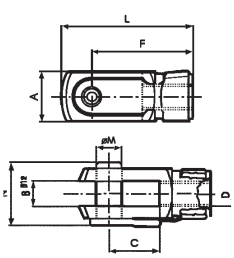




Fork Clevis

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**

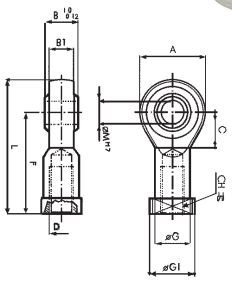


ISO 15552 Cylinders Accessories (Formerly ISO 6431)

Spherical Rod Eye

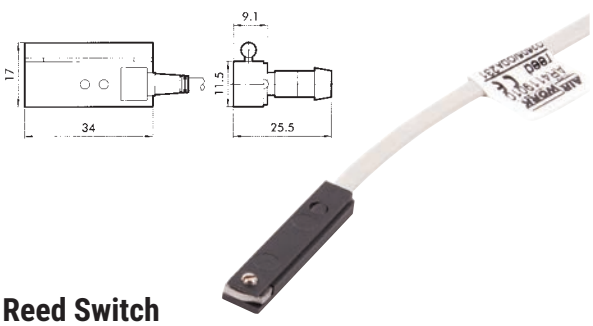
To Suit ISO 15552 Cylinders

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

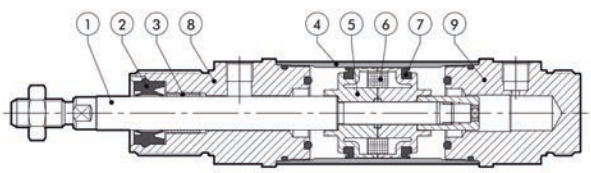
Dimensions

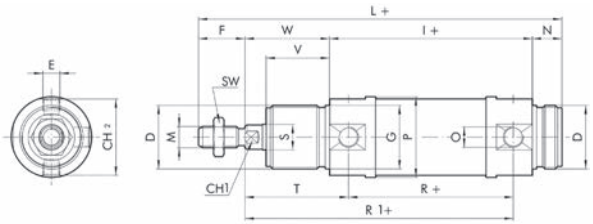
Ø	D	E	F	ØG	CH1	I	L	M	N	O	Ø P	R	ØS	SW	T	CH2	V	W	L1
32	M30x1.5	M8x1	22	30	10	96	172	M10x1.25	14	G1/8	38	78	12	17	49	36	30	40	220
40	M38x1.5	M10x1	24	38	13	113	198	M12x1.25	16	G1/4	46	89	16	19	57	43	35	45	251
50	M45x1.5	M12x1.5	32	45	17	120	220	M16x1.5	18	G1/4	57	96	20	24	62	54	38	50	284

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

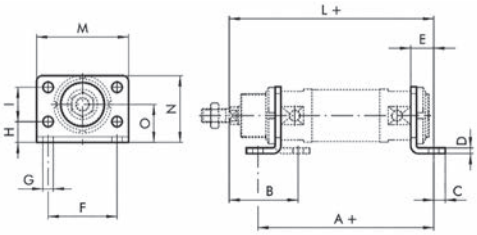
Code P54	Diameter mm	Stroke mm	Price
1120320025CN	32	25	81.80
1120320050CN	32	50	84.15
1120320080CN	32	80	86.45
1120320100CN	32	100	91.20
1120320125CN	32	125	98.20
1120320160CN	32	160	101.75
1120320200CN	32	200	106.45
1120320250CN	32	250	112.30
1120400025CN	40	25	96.40
1120400050CN	40	50	100.00
1120400080CN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

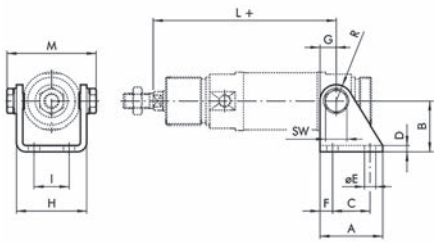
To Suit RNDC Cylinders



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

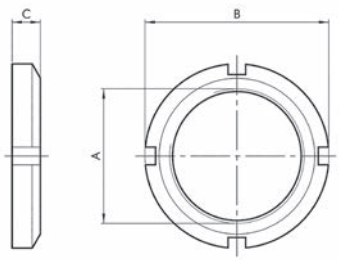
To Suit RNDC Cylinders



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

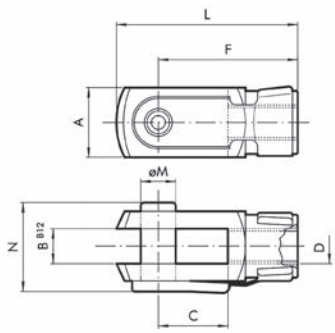
To Suit RNDC Cylinders



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

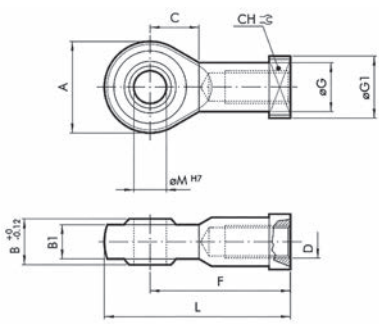
To Suit RNDC Cylinders



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

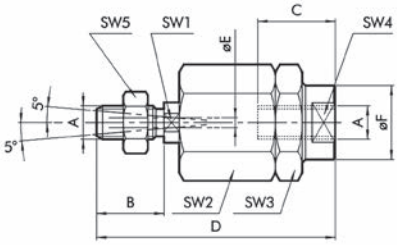
Spherical Rod Eye

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

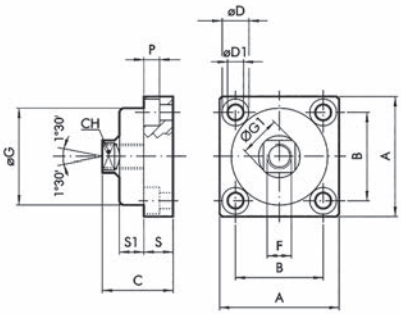
Round RNDC Cylinder Accessories



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

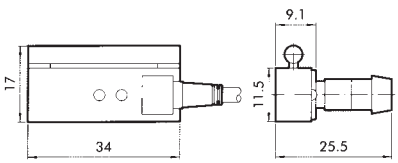
To Suit RNDC Cylinders

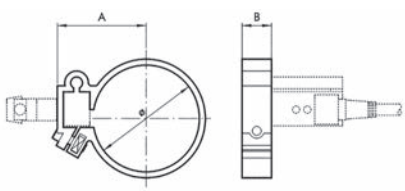
Code P03	Ø	A	B	C	CH	ØD	ØD1	F	ØG	ØG1	P	S	S1	Price
W0950326021	32	49	36	30	13	11	6.5	M10 x 1.25	39.5	17	6.5	12	10	66.75
W0950406021	40	59	42	36	15	14	8.5	M12 x 1.25	44	19	8.5	15	13.5	85.30
W0950506021	50	79	58	44	22	17	10.5	M16 x 1.5	59	26	10.5	20	15	93.00

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

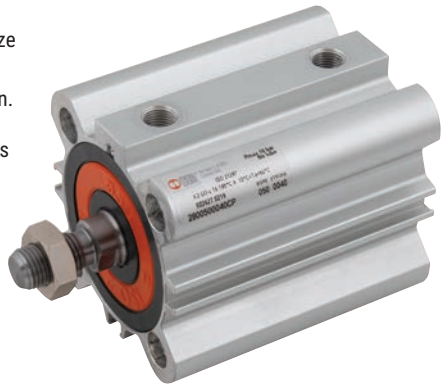
To Suit RNDC Cylinders

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

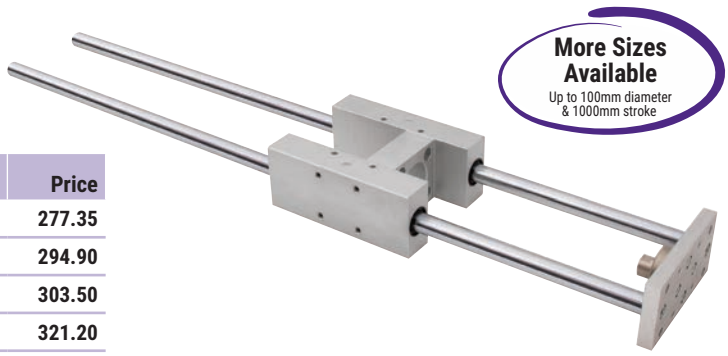
Technical Data

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

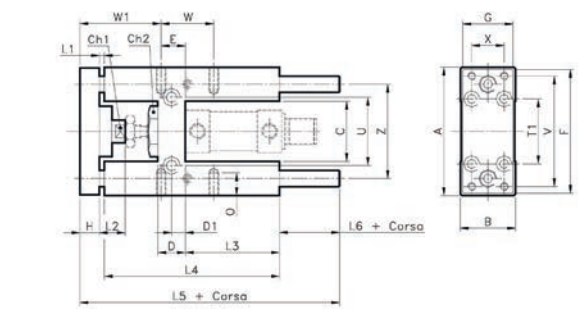
H Type Guide Unit

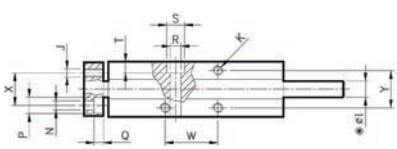
With Self-lubricating Bushings

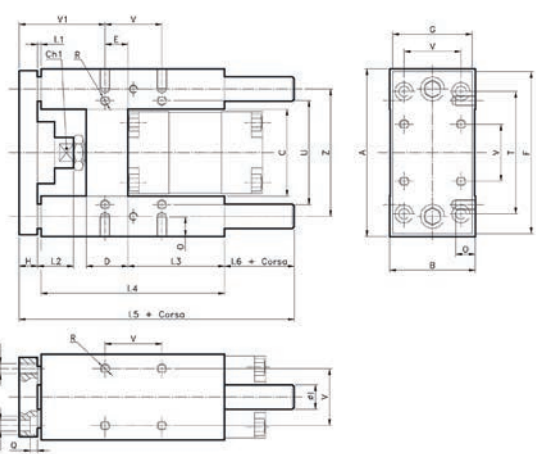


More Sizes Available
Up to 100mm diameter & 1000mm stroke

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





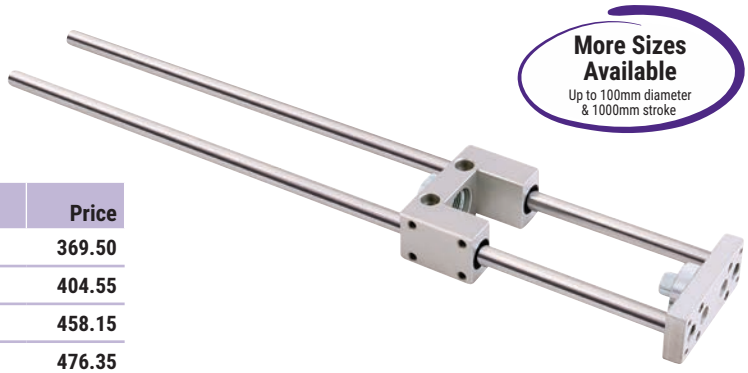


Cylinder Guide Units

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

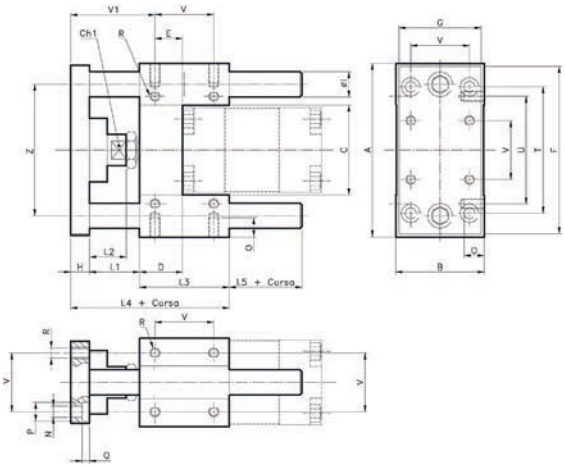


More Sizes Available
Up to 100mm diameter & 1000mm stroke

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

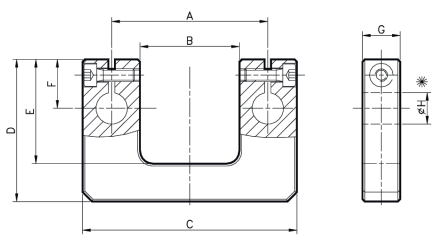
Technical Data

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

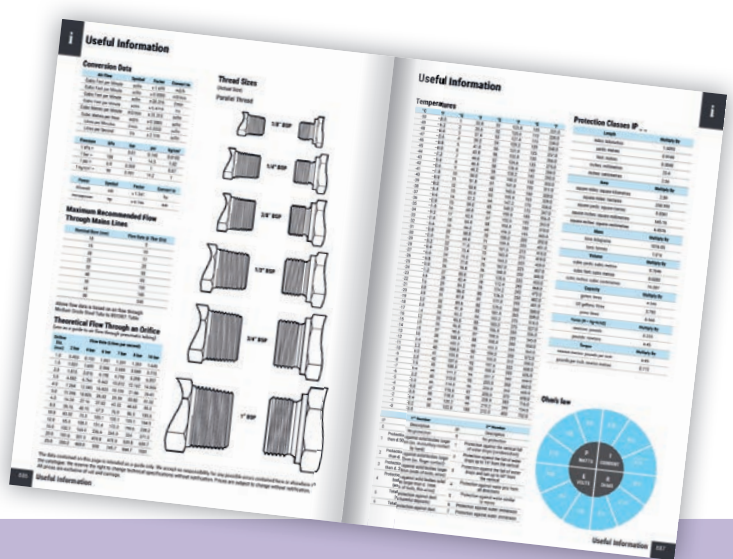
Rear End Plate

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

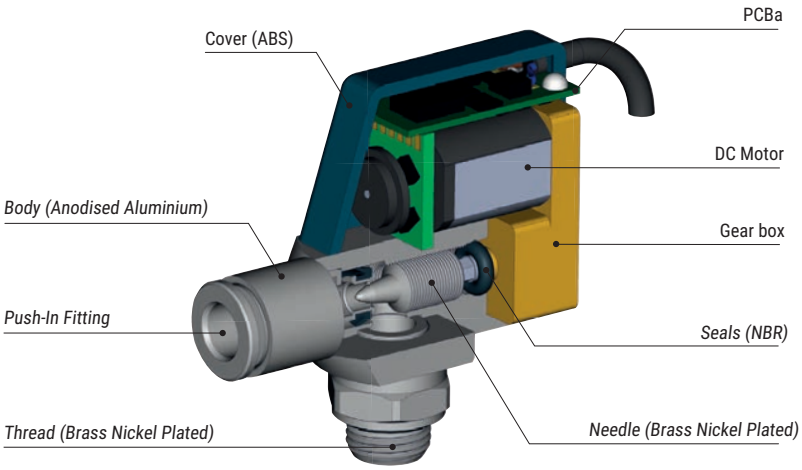
Exhaust Silencer Restrictor

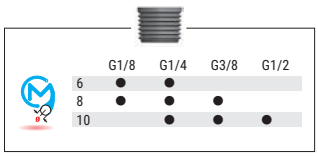
BSPP

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

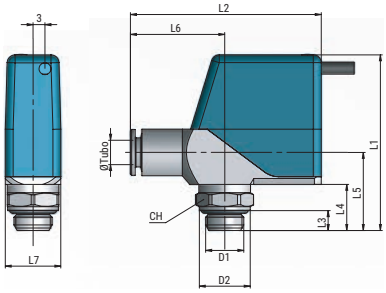
Flow Control Valves

Electronic Proportional Flow Control EV10



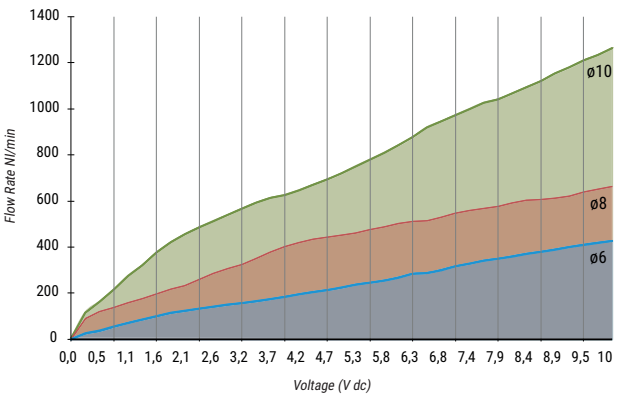


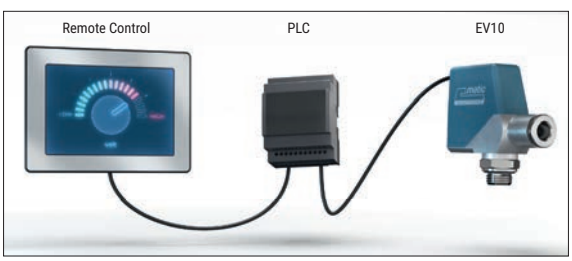
ØTube	D1	D2	L1	L2	L3	L4	L5	L6	L7	CH
Ø6	1/8"	14,5	44,2	48	5	11,6	19,7	23,7	14	13
	1/4"	16	47,7		6,5	15,1	23,2			13
Ø8	1/8"	14,5	45,2	52,2	5	11,6	20,7	26,6	14	13
	1/4"	16	48,7		6,5	15,1	24,2			13
	3/8"	20	49,2		7	15,6	24,7			13
Ø10	1/4"	16	50,8	62,4	6,5	15,5	24,8	31,7	16	16
	3/8"	20	52,8		7	19	28,3			16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

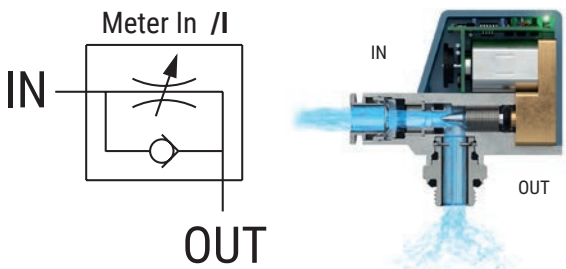
Technical Features

- **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

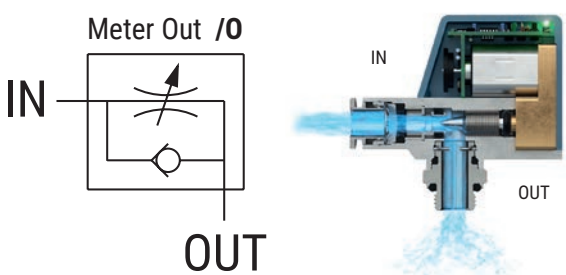
Code Q04	Tube OD mm	Thread BSPP	Price
E4000I31	6	G1/8"	149.05
E4000I32	6	G1/4"	149.05
E4000I41	8	G1/8"	149.05
E4000I42	8	G1/4"	149.05
E4000I43	8	G3/8"	149.05
E4000I52	10	G1/4"	160.25
E4000I53	10	G3/8"	160.25
E4000I54	10	G1/2"	160.25



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

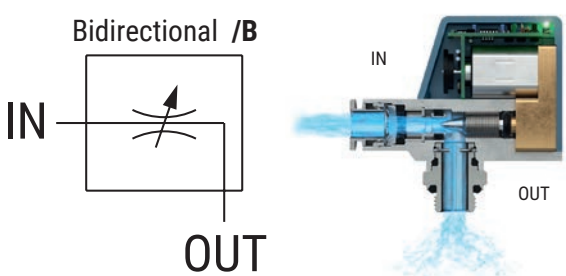


Electronic Proportional Flow Control

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

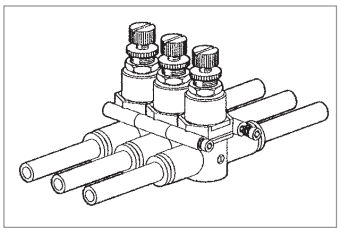
lineonline
LINE OF PRODUCTS ON LINE

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.

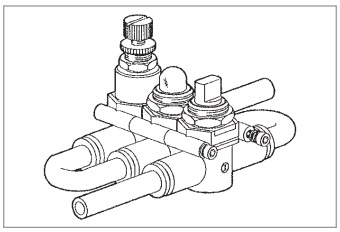
Line on Line is ultra-modular; the components can be connected in parallel, in series or combined parallel/series.

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.

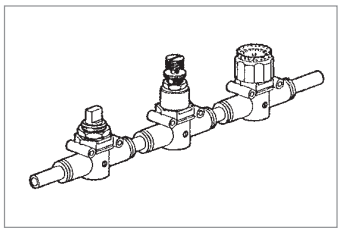
The body is made of technopolymer, giving a product that is extremely lightweight and compact. One side of the body is marked with an indelible pneumatic symbol to facilitate identification and indicate the direction of flow.



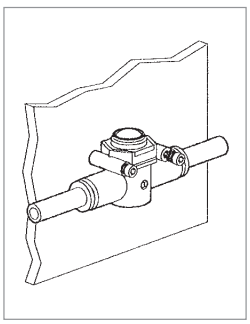
Parallel Lines



Serial Line Parallel Fittings



Serial Line In-line Fittings



Wall Fixing

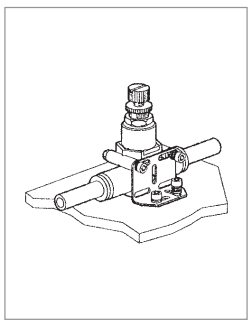
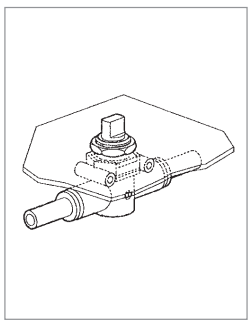
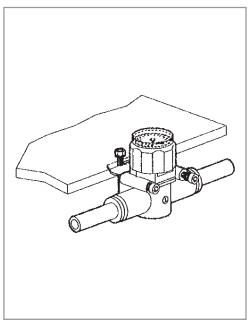


Plate Fixing



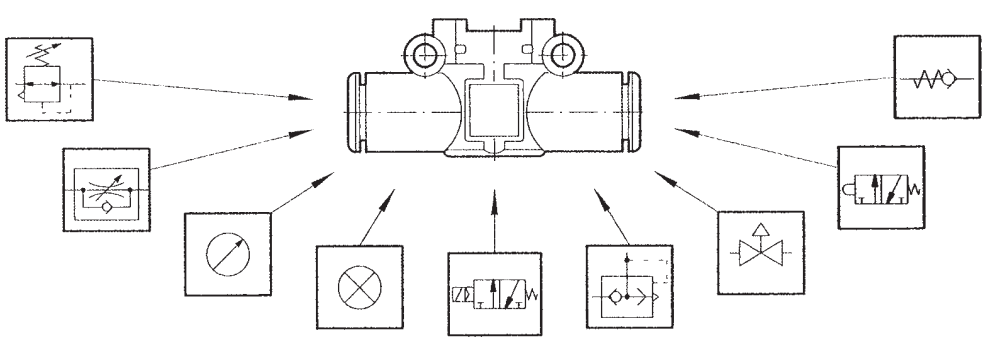
Panel Fixing

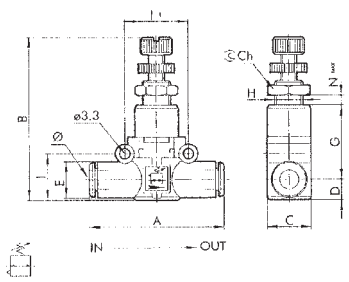


Under Wall Fixing

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.

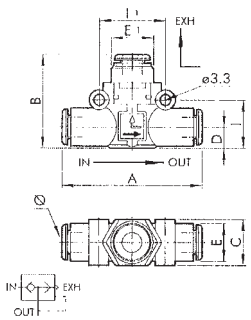
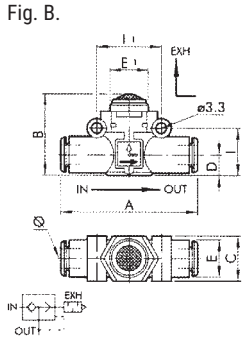


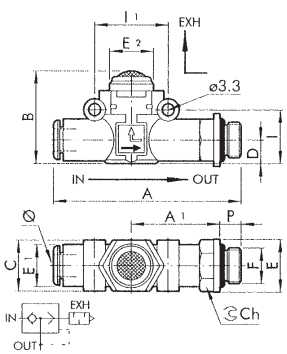
Fig. B.



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



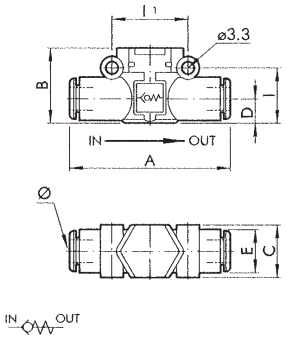
In-line Quick Exhaust Valve

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



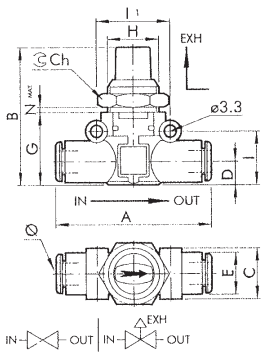
Code	P05	Ø	A	B	C	D	E	I	I1	Price
9064016		6	47	20	14.7	6.4	11.4	14.6	20	9.70
9064024		8	55.5	25.5	18.7	9.1	13.8	18.7	24	9.80

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



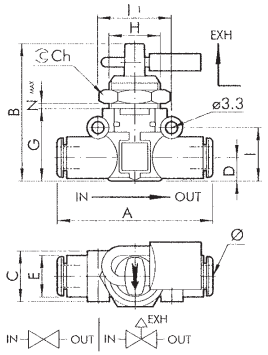
Code	P05	Function	Ø	A	B	C	D	E	G	H	I	I1	Ch	Nmax	Price
9065016		V2V L	6	47	41	14.7	6.4	11.4	21	M15 x 1	14.6	20	17	5.5	17.20
9066016		V3V L	6	47	41	14.7	6.4	11.4	21	M15 x 1	14.6	20	17	5.5	17.20
9065024		V2V L	8	55.5	46	18.7	9.1	13.8	26	M15 x 1	18.7	24	17	5.5	18.30
9066024		V3V L	8	55.5	46	18.7	9.1	13.8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

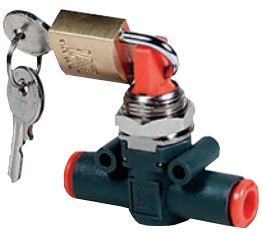
Technical Data

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

In-line Shut-off Valve, Lockable

Tube to Tube

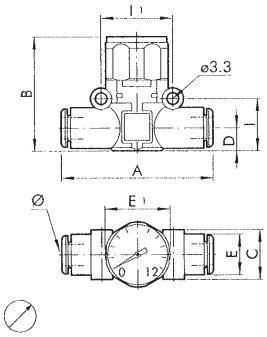




Code	P05	Function	Ø	A	B	C	D	E	G	H	I	I1	Ch	Nmax	Price
9065116		V2V L	6	47	41	14.7	6.4	11.4	21	M15 x 1	14.6	20	17	5.5	28.75
9066116		V3V L	6	47	41	14.7	6.4	11.4	21	M15 x 1	14.6	20	17	5.5	28.75
9065124		V2V L	8	55.5	46	18.7	9.1	13.8	26	M15 x 1	18.7	24	17	5.5	30.30
9066124		V3V L	8	55.5	46	18.7	9.1	13.8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

Technical Data

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



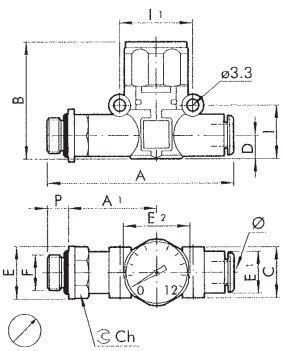
In-line Pressure Gauge

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



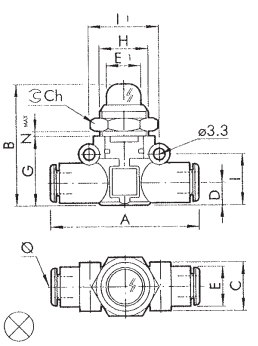
In-line Pressure Gauge

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

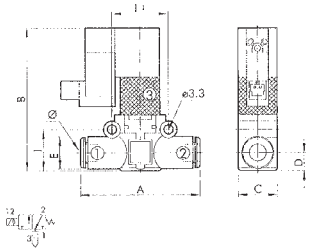
Tube to Tube

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

Functional Fittings

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



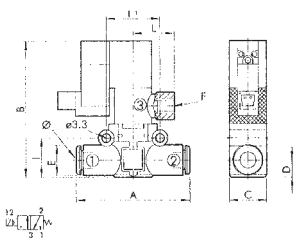
In-line 3 Port Solenoid Valve, Silenced Exhaust

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



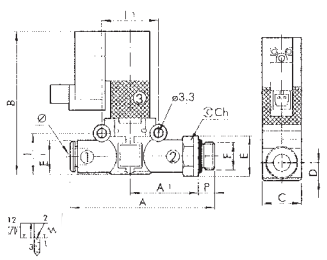
In-line 3 Port Solenoid Valve, Threaded Exhaust

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

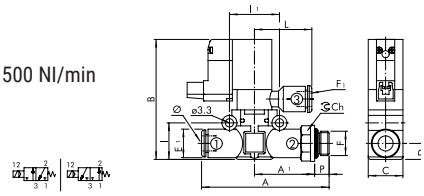
Thread to Tube

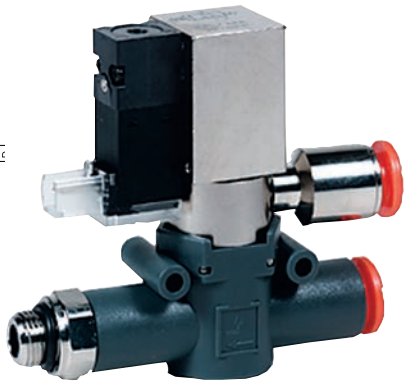
Code	P05	Ø	F	P	A	A1	B	C	I	I1	Ch1	Price
9069408		6	1/8	6	57.3	27.8	55.5	14.7	14.6	20	12	58.80
9069409		6	1/4	8	60.3	28.8	55.5	14.7	14.6	20	14	59.25
9069410		8	1/8	6	65.3	31.3	63.5	18.7	18.7	24	14	59.25
9069411		8	1/4	8	69.7	34.2	63.5	18.7	18.7	24	14	59.65

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

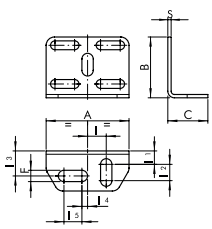
Tube to Thread

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

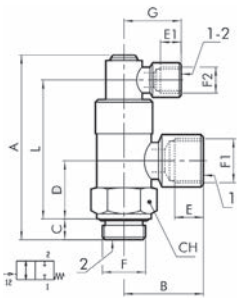
Stop valves mounted on the cylinder inlets allow a flow of air only in the presence of a pneumatic pilot. This item is mainly used as a safety valve. When pressure drops in the pneumatic pilot, all cylinder movement is halted.

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

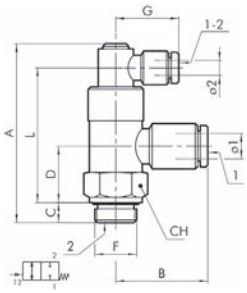
Fully Threaded



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

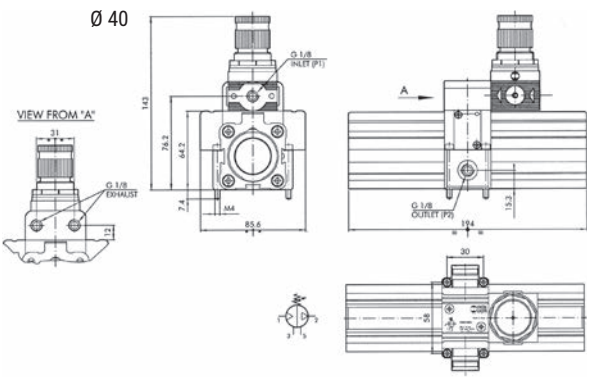
		Booster Ø40	Booster Ø40 with regulator	Booster Ø63	Booster Ø63 with regulator
Bore		Ø 40		Ø 63	
Fluid		Filtered unlubricated compressed air. Lubrication, if used, must be continuous.			
Threaded port		G1/8		G3/8	
Inlet pressure	**MPa**	0.2-1			
	bar	2-10			
	psi	29-145			
Outlet pressure	**MPa**	Maximum 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

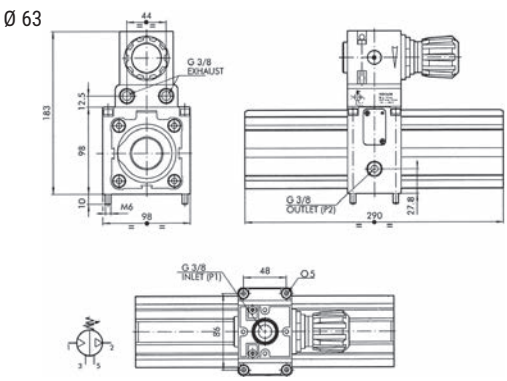
Without Regulator

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

Ø 40



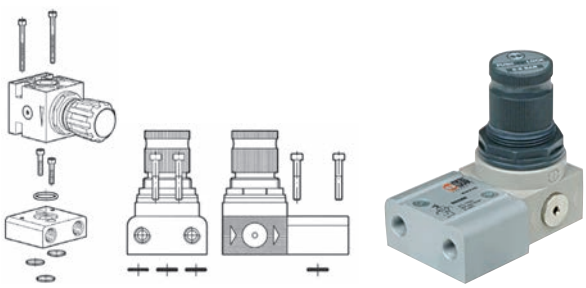
Ø 63



Air Regulators

To Suit Air Pressure Multiplier (Booster)

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



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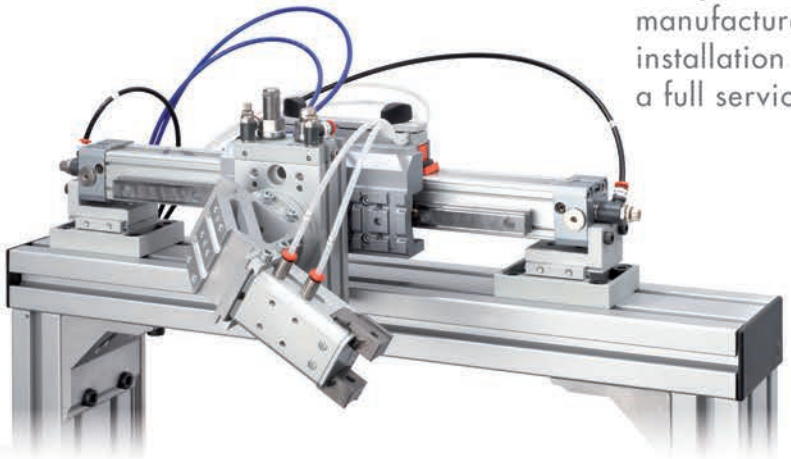

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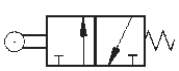
Mechanical Valves, Miniature

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

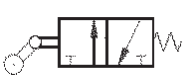


Normally closed

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

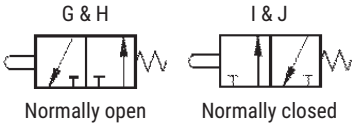
'VME' One Way Roller Valve

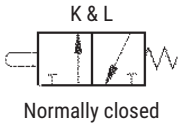
M5 Thread

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

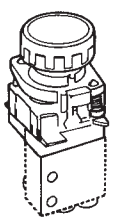
M5 Thread

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.

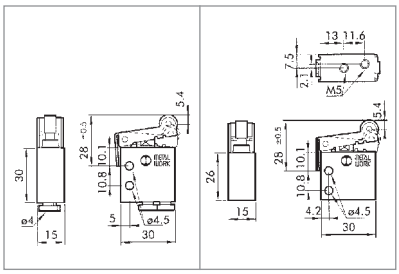


Figure: A

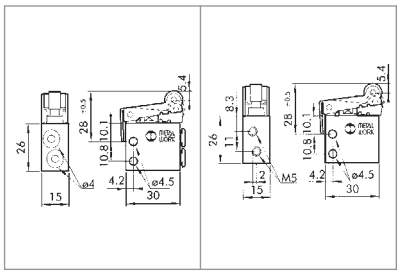


Figure: B

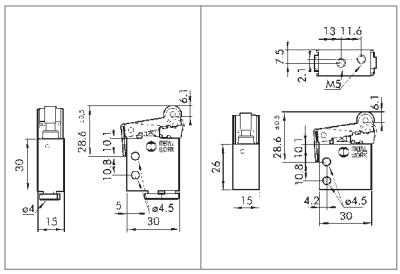


Figure: C

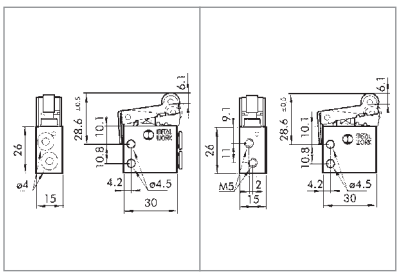


Figure: D

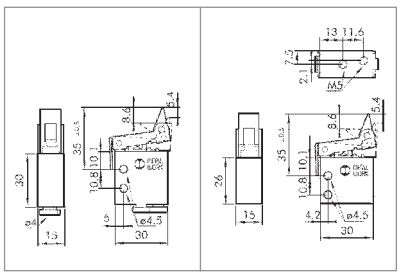


Figure: E

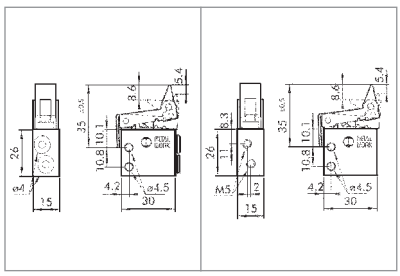


Figure: F

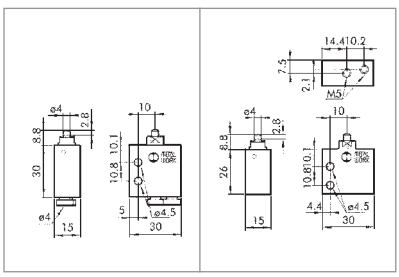


Figure: G

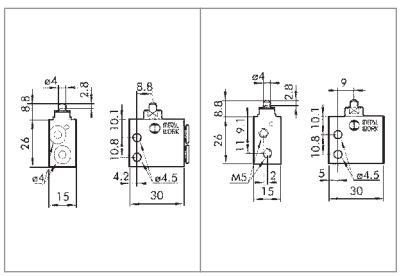


Figure: H

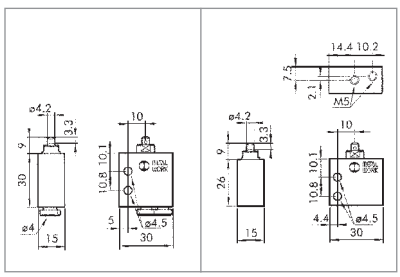


Figure: I

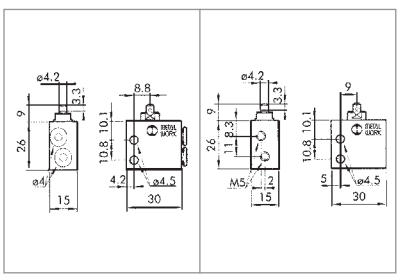


Figure: J

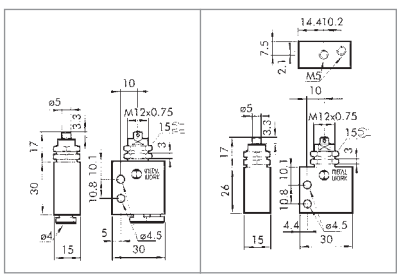


Figure: K

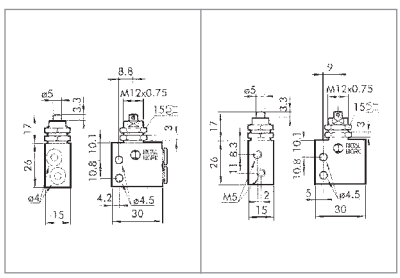


Figure: L

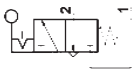
Mechanical Valves, Miniature

- 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

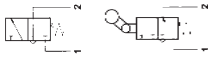
Code	N17	Description	Price
08.017.2		Single	1.90
08.015.2		Double	1.75



Toggle Lever Valve

Brass

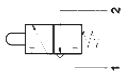
Code	N17	Description	Price
305LL		M5 Ports	20.45



Valve for Manual Actuator

M5 Ports or 4mm Fittings

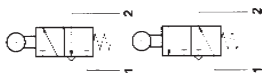
Code	N17	Description	Price
305MB		3/2 NC M5 Ports	14.85
315MB		3/2 NO M5 Ports	16.00
304MB		3/2 NC 4mm Fittings	17.10
314MB		3/2 NO 4mm Fittings	14.65



Plunger Valve

M5 Ports or 4mm Fittings

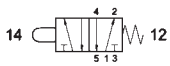
Code	N17	Description	Price
305MA		3/2 NC M5 Ports	13.25
315MA		3/2 NO M5 Ports	15.45
304MA		3/2 NC 4mm Fittings	15.55
314MA		3/2 NO 4mm Fittings	17.00



Roller Lever Valve

M5 Ports or 4mm Fittings

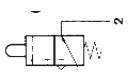
Code	N17	Description	Price
305MR		3/2 NC M5 Ports	16.15
315MR		3/2 NO M5 Ports	16.70
304MR		3/2 NC 4mm Fittings	18.15
314MR		3/2 NO 4mm Fittings	21.00



5/2 Valve for Manual Actuator

M5 Ports or 4mm Fittings

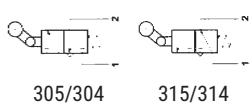
Code	N17	Description	Price
504MBCU		5/2 4mm Fittings	32.60



Panel Mounted Plunger Valve

M5 Ports or 4mm Fittings

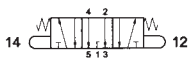
Code	N17	Description	Price
305MV		3/2 NC M5 Ports	13.65
315MV		3/2 NO M5 Ports	16.85
304MV		3/2 NC 4mm Fittings	16.20
314MV		3/2 NO 4mm Fittings	14.20



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

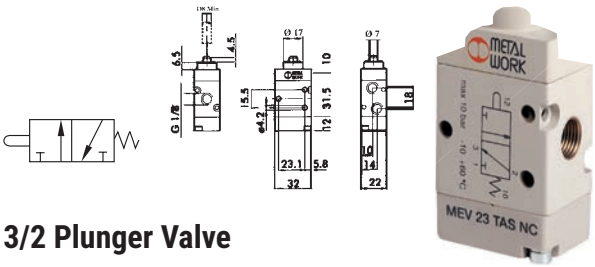
M5 Ports or 4mm Fittings

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

Mechanical Valves

Technical Specifications

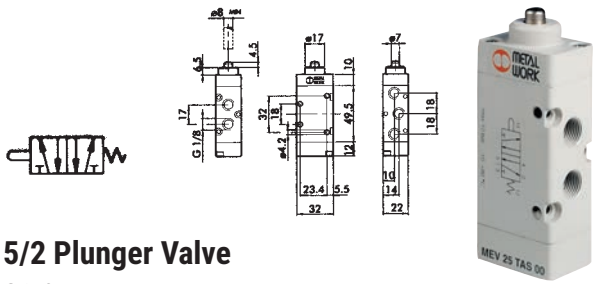
- Operating pressure range:
  - Direct control version: vacuum to 10 bar
  - Servo piloted version: 2.5 to 10 bar
- Operating temperature range: -10°C to +60°C
- Nominal diameter: 5mm
- Flow rate at 6 bar P1Δ bar: 550 Nl/min



3/2 Plunger Valve

G1/8 Ports

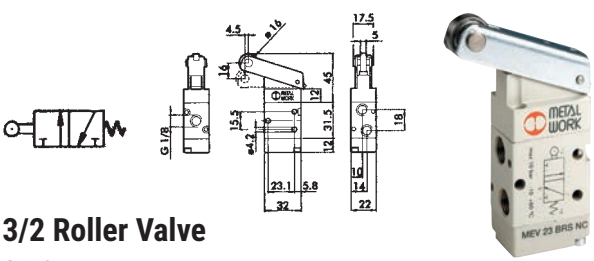
Code P06	Description	Price
7001000100	3/2 G1/8" Normally Closed	27.25



5/2 Plunger Valve

G1/8 Ports

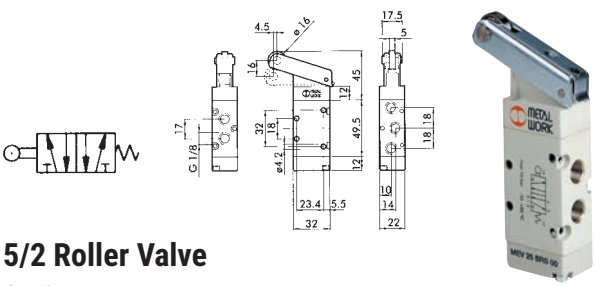
Code P06	Description	Price
7001000110	5/2 G1/8"	30.30



3/2 Roller Valve

G1/8 Ports

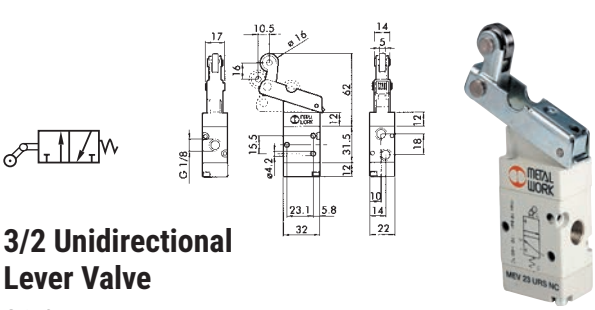
Code P06	Description	Price
7001000500	3/2 G1/8" Normally Closed	38.10



5/2 Roller Valve

G1/8 Ports

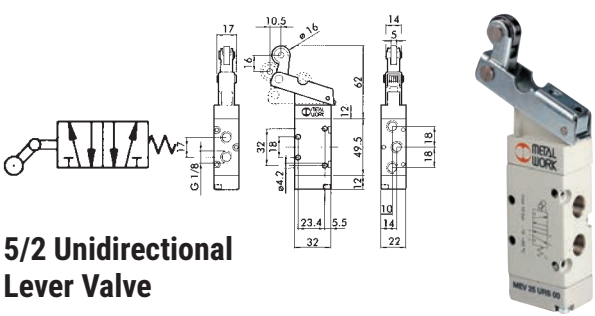
Code P06	Description	Price
7001000510	5/2 G1/8"	41.70



3/2 Unidirectional Lever Valve

G1/8 Ports

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

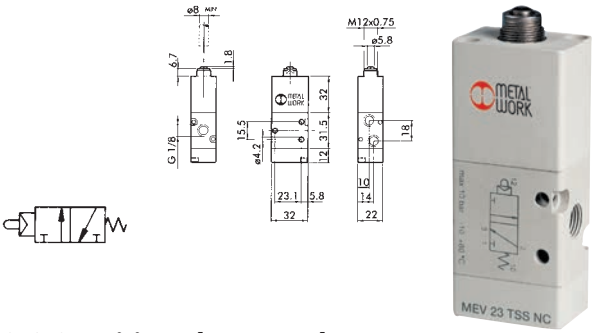


5/2 Unidirectional Lever Valve

G1/8 Ports

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

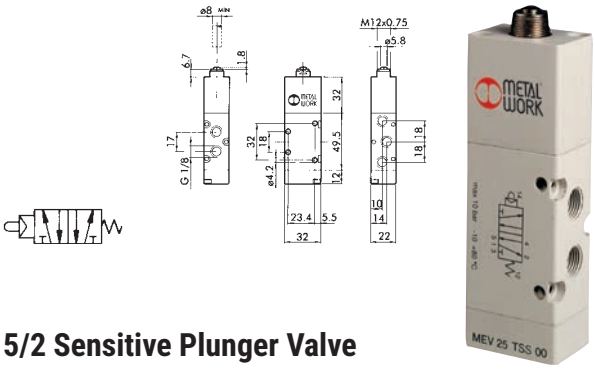
Mechanical Valves



3/2 Sensitive Plunger Valve

G1/8 Ports

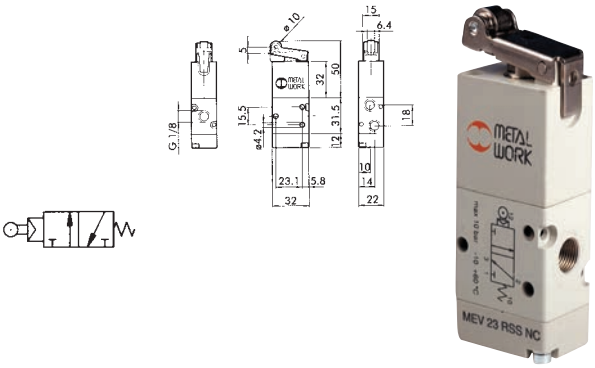
Code P06	Description	Price
7001000200	3/2 G1/8" Normally Closed	41.10



5/2 Sensitive Plunger Valve

G1/8 Ports

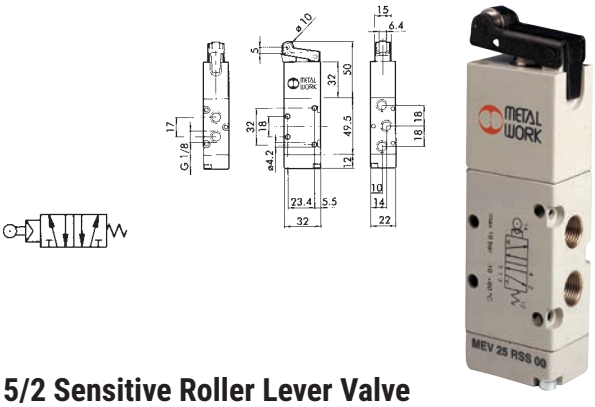
Code P06	Description	Price
7001000210	5/2 G1/8"	53.05



3/2 Sensitive Roller Lever Valve

G1/8 Ports

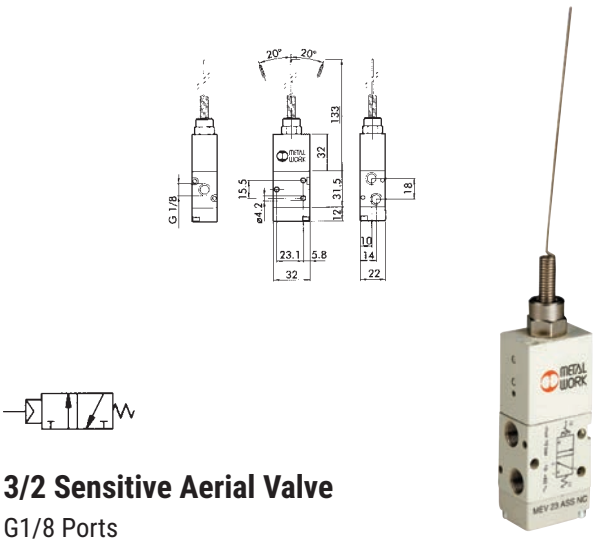
Code P06	Description	Price
7001000400	3/2 G1/8" Normally Closed	51.15



5/2 Sensitive Roller Lever Valve

G1/8 Ports

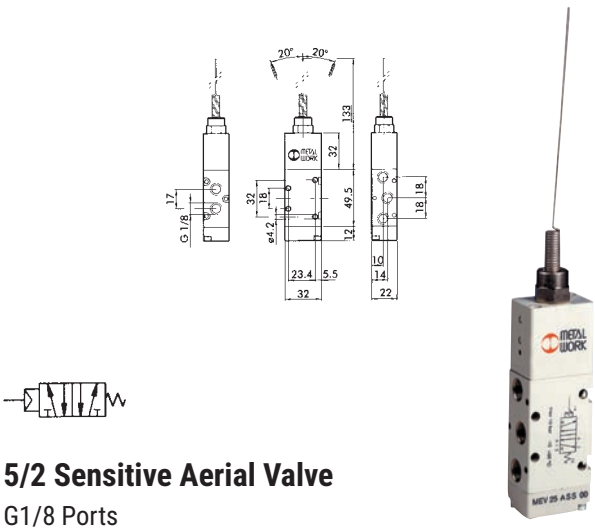
Code P06	Description	Price
7001000410	5/2 G1/8"	55.85



3/2 Sensitive Aerial Valve

G1/8 Ports

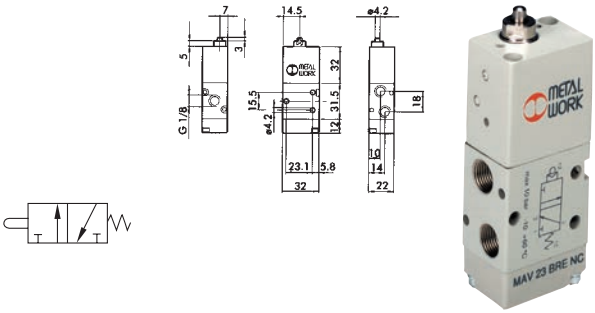
Code P06	Description	Price
7001000700	3/2 G1/8" Normally Closed	63.25



5/2 Sensitive Aerial Valve

G1/8 Ports

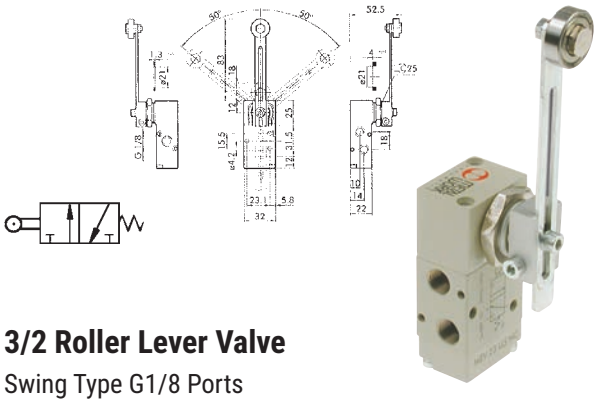
Code P06	Description	Price
7001000710	5/2 G1/8"	66.55



3/2 Plunger Valve for Manual Actuator

G1/8 Ports

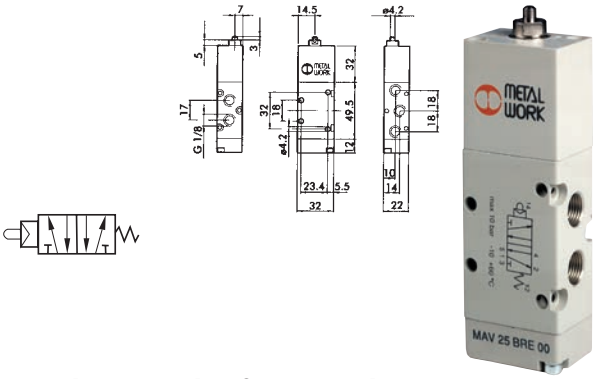
Code P06	Description	Price
7010001800	3/2 G1/8" Normally Closed	42.25



3/2 Roller Lever Valve

Swing Type G1/8 Ports

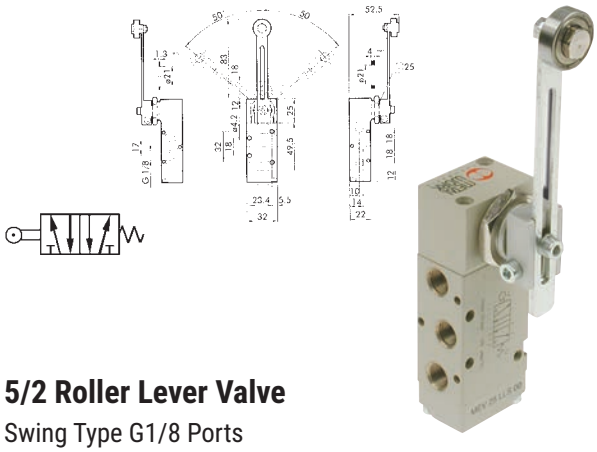
Code P06	Description	Price
7001000900	3/2 G1/8" Ports Spring Return	77.60



5/2 Plunger Valve for Manual Actuator

G1/8 Ports

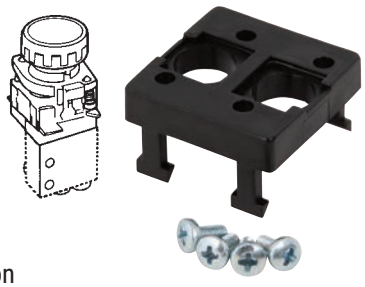
Code P06	Description	Price
7010001900	5/2 G1/8"	45.95



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

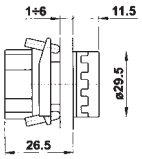
For 'VME Push Button

Code P06	Description	Price
0351000050	For Plunger Valves	2.45

For Push-in Fittings

See section 6

Mechanical Valves

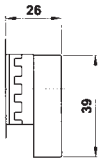


Push Button Actuator

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

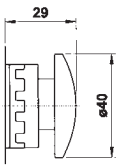
*With red and black alternative buttons.



Selector Actuator

Long Lever

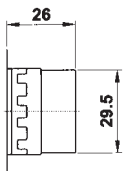
Code	N17	Description	Price
RM400N		Black, 0-1	19.45
RM450N		Black, 1-0	27.65
RM413N		Black, 2-0-1	23.55
RM483N		Black, 0-1-2	22.30



Mushroom Button Actuator

40mm

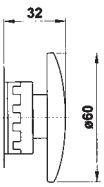
Code	N17	Description	Price
RM050R		Red, Monostable	13.60
RM050N		Black, Monostable	13.55
RM055R		Red, Multidirectional	35.25
RM055N		Black, Multidirectional	29.00
RM065R		Red, Twist to Unlock	33.30



Selector Actuator

Short Lever

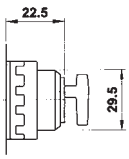
Code	N17	Description	Price
RM300N		Black, 0-1	17.15
RM350N		Black, 1-0	26.45
RM313N		Black, 2-0-1	17.00
RM383N		Black, 0-1-2	16.40



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

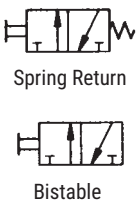


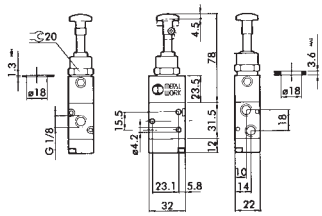
Selector Actuator

Key Operated

Code	N17	Description	Price
RM200N		Bistable Key Selector	26.85

Hand Valves

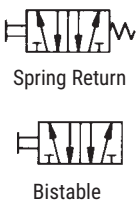


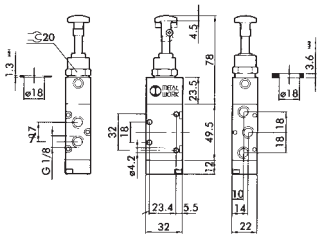


3/2 Push/Pull Valve

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

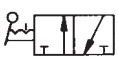


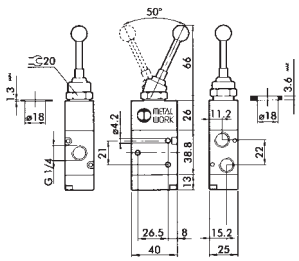


5/2 Push/Pull Valve

G1/8 Ports

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

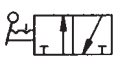


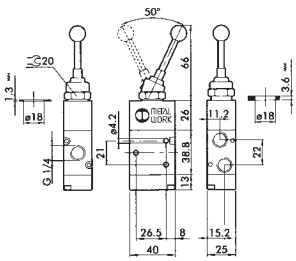


3/2 Top Lever Valve

G1/8 Ports

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

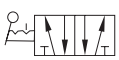


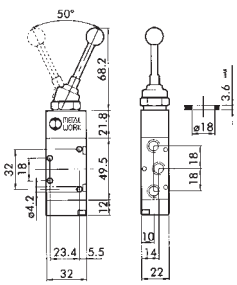


3/2 Top Lever Valve

G1/4 Ports

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

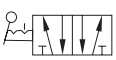


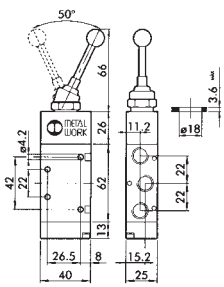


5/2 Top Lever Valve

G1/8 Ports

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



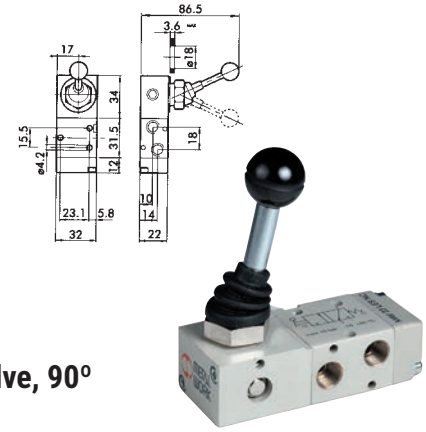


5/2 Top Lever Valve

G1/4 Ports

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

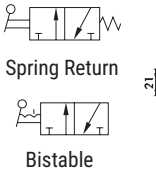
Hand Valves

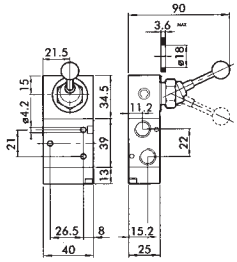


3/2 Lever Valve, 90º

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

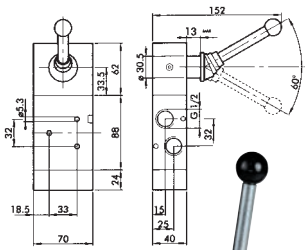




3/2 Lever Valve, 90º

G1/4 Ports

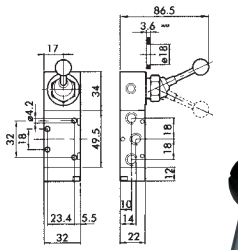
Code P06	Description	Price
7020000100	3/2 NC Spring Return, G1/4"	60.90
7020000200	3/2 Bistable, G1/4"	60.90



3/2 Lever Valve, 90º

G1/2 Ports

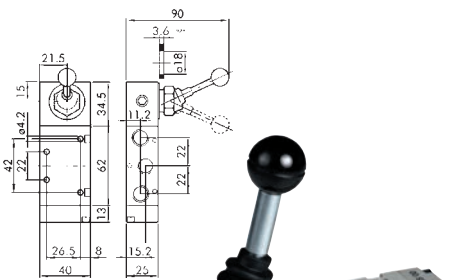
Code P06	Description	Price
7030000100	3/2 NC Spring Return, G1/2"	161.20
7030000200	3/2 Bistable, G1/2"	161.20



5/2 Lever Valve, 90º

G1/8 Ports

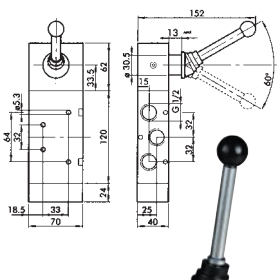
Code P06	Description	Price
7010000300	5/2 Spring Return, G1/8"	40.00
7010000400	5/2 Bistable, G1/8"	40.00



5/2 Lever Valve, 90º

G1/4 Ports

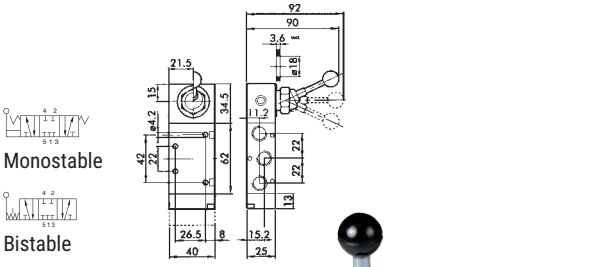
Code P06	Description	Price
7020000300	5/2 Spring Return, G1/4"	66.00
7020000400	5/2 Bistable, G1/4"	66.00



5/2 Lever Valve, 90º

G1/2 Ports

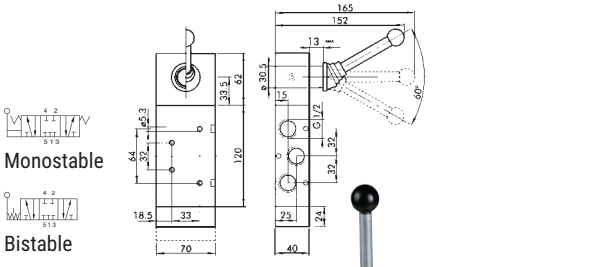
Code P06	Description	Price
7030000300	5/2 Spring Return, G1/2"	182.05
7030000400	5/2 Bistable, G1/2"	182.05



5/3 Lever Valve, Closed Centres

G1/4 Ports

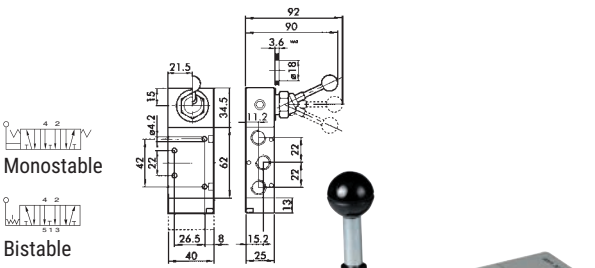
Code P06	Description	Price
7020001000	5/3 CC Monostable, G1/4"	68.70
7020000500	5/3 CC Bistable, G1/4"	68.70



5/3 Lever Valve, Closed Centres

G1/2 Ports

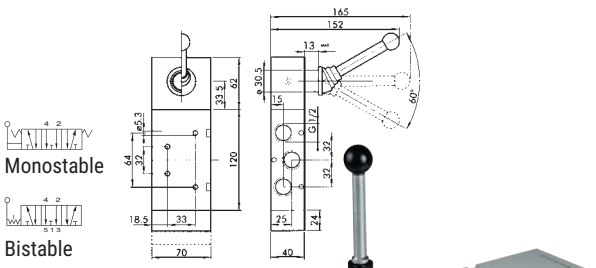
Code P06	Description	Price
7030001000	5/3 CC Monostable, G1/2"	196.95
7030000500	5/3 CC Bistable, G1/2"	196.95



5/3 Lever Valve, Open Centres

G1/4 Ports

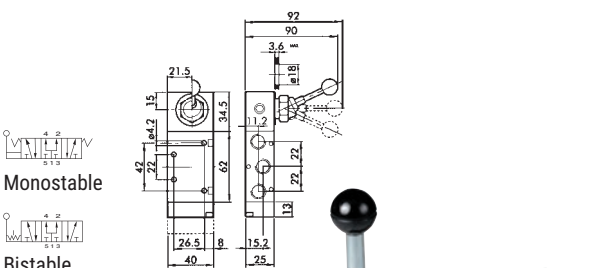
Code P06	Description	Price
7020000900	5/3 OC Monostable, G1/4"	68.70
7020000600	5/3 OC Bistable, G1/4"	68.70



5/3 Lever Valve, Open Centres

G1/2 Ports

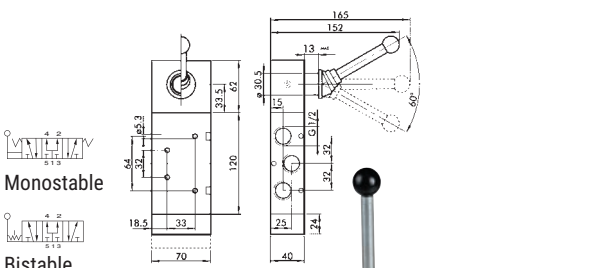
Code P06	Description	Price
7030000900	5/3 CC Monostable, G1/2"	196.95
7030000600	5/3 CC Bistable, G1/2"	196.95



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

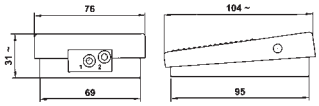
G1/2 Ports

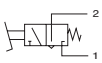
Code P06	Description	Price
7030001100	5/3 PC Monostable, G1/2"	196.95
7030000700	5/3 PC Bistable, G1/2"	196.95

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

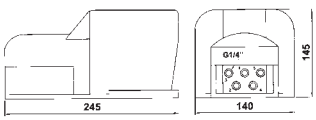




3/2 Compact Foot Pedal

Without Protective Cover

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



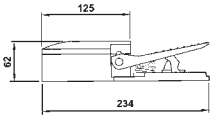
Spring Return Bistable

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

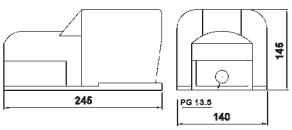
Code N17	Description	Price
PEDS502M	5/2 G1/4" Spring Return	62.20
PEDS502B	5/2 G1/4" Bistable	65.80

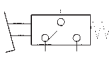
- Life time (cycles) 10.000.000
- Contact resistance 25 mΩ
- Electrical protection degree IP 54
- Contacts: 1 NO + 1 NC rapid switch

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

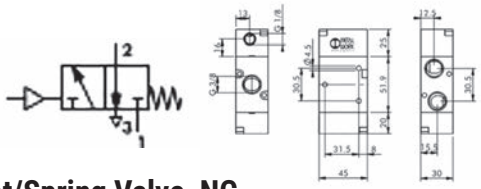
Code N17	Description	Price
01.087.0	NO-NC Contacts	40.60
01.088.0	NO-NC Contacts with Safety Feature*	46.50

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

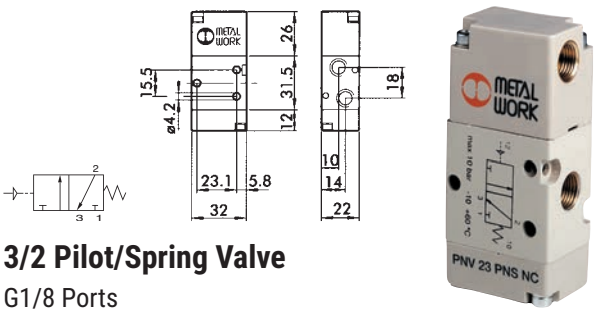
Technical Data	1/8"	1/4"	3/8"	1/2"
Operating Pressure Bar	Vacuum to 10			
Minimum pilot pressure:				
monostable bar	2.5 to 10			
bistable bar	1 to 10			
Operating temperature range	-10°C to +60°C			
Nominal diameter mm	5	7.5	13.3	15
Conductance C Nl/min - bar	121.43	264.26	505.52	971.43
Critical ratio 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

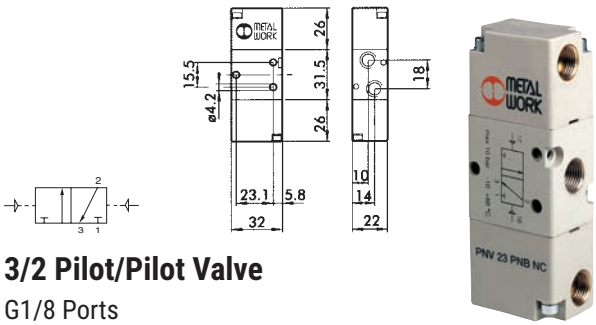
Code P06	Description	Price
7040010200	3/2 G3/8"	66.60



3/2 Pilot/Spring Valve

G1/8 Ports

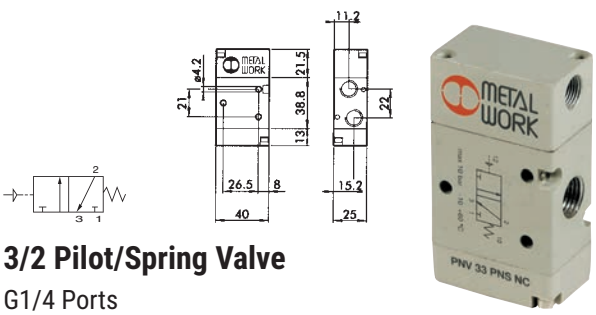
Code P06	Description	Price
7010010200	3/2 G1/8"	35.25



3/2 Pilot/Pilot Valve

G1/8 Ports

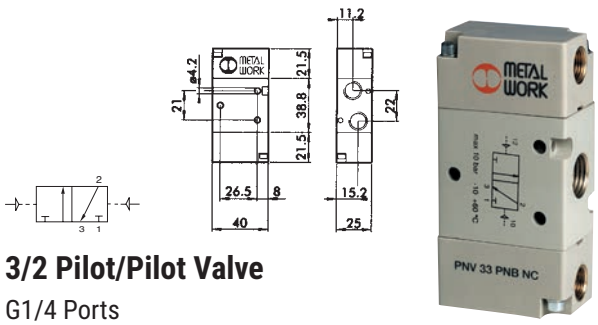
Code P06	Description	Price
7010010100	3/2 G1/8"	38.85



3/2 Pilot/Spring Valve

G1/4 Ports

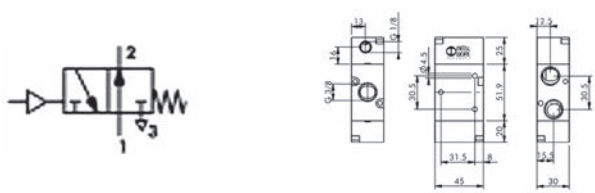
Code P06	Description	Price
7020010200	3/2 G1/4"	44.95



3/2 Pilot/Pilot Valve

G1/4 Ports

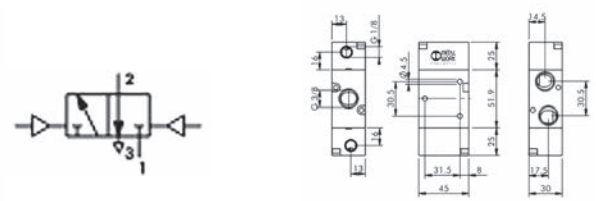
Code P06	Description	Price
7020010100	3/2 G1/4"	49.35



3/2 Pilot/Spring Valve

G3/8 Ports

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

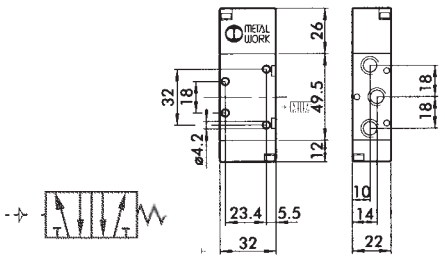


3/2 Pilot/Pilot Valve, NC

G3/8 Ports

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

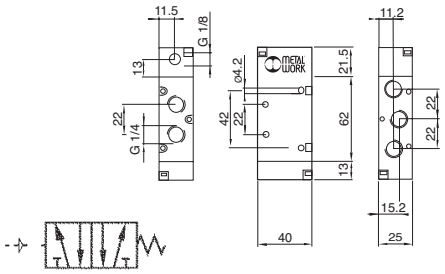
Pneumatically Operated Valves



5/2 Pilot/Spring Valve

G1/8 Ports

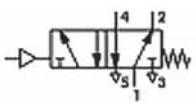
Code	P06	Description	Price
7010011100		5/2 G1/8"	41.45

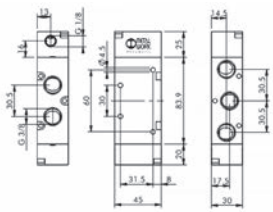


5/2 Pilot/Spring Valve

G1/4 Ports

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

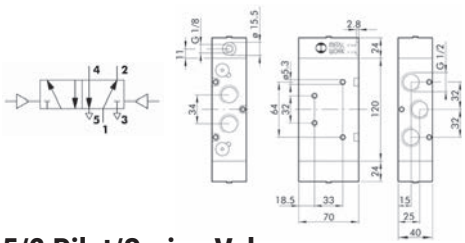




5/2 Pilot/Spring Valve

G3/8" Ports

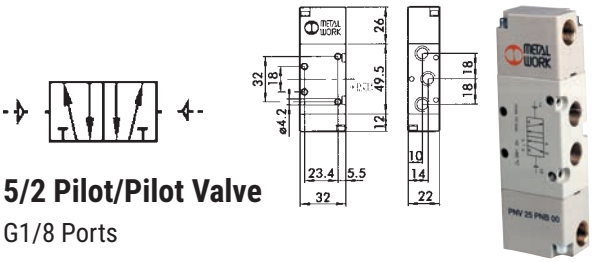
Code	P06	Description	Price
7040011100		5/2 G3/8"	77.05



5/2 Pilot/Spring Valve

G1/2 Ports

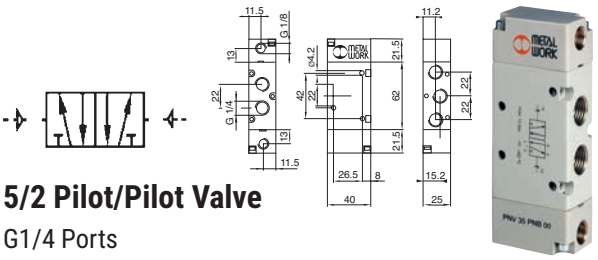
Code	P06	Description	Price
7030011100		5/2 G1/2"	162.00



5/2 Pilot/Pilot Valve

G1/8 Ports

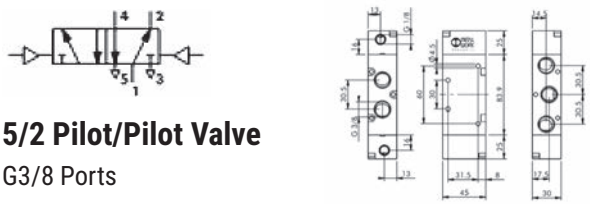
Code	P06	Description	Price
7010011200		5/2 G1/8	44.65



5/2 Pilot/Pilot Valve

G1/4 Ports

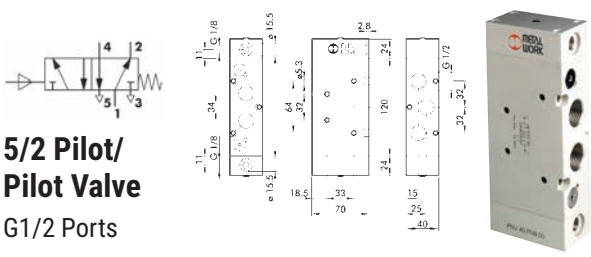
Code	P06	Description	Price
7020011200		5/2 G1/4	55.15



5/2 Pilot/Pilot Valve

G3/8 Ports

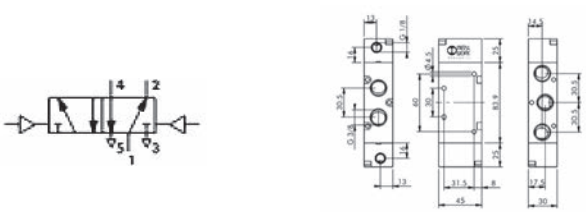
Code	P06	Description	Price
7040011200		5/2 G3/8"	83.45



5/2 Pilot/ Pilot Valve

G1/2 Ports

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

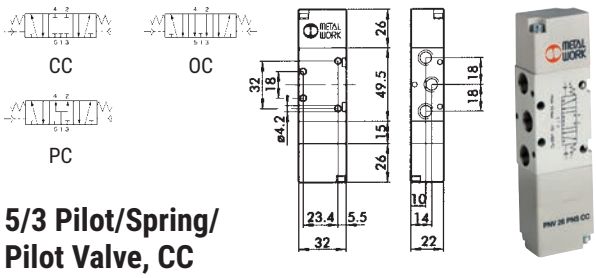


5/2 Pilot/Pilot Valve (Differential)

G3/8 Ports

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

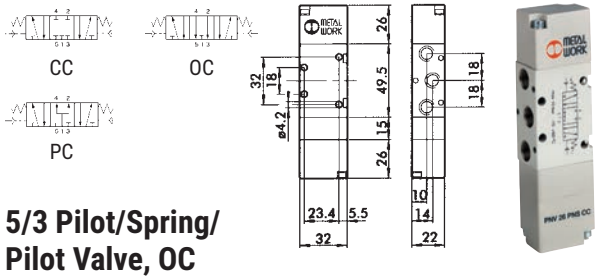
Pneumatically Operated Valves



5/3 Pilot/Spring/ Pilot Valve, CC

G1/8 Ports

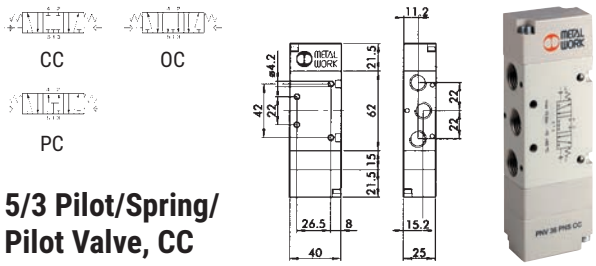
Code P06	Description	Price
7010012100	5/3 G1/8" CC	47.00



5/3 Pilot/Spring/ Pilot Valve, OC

G1/8 Ports

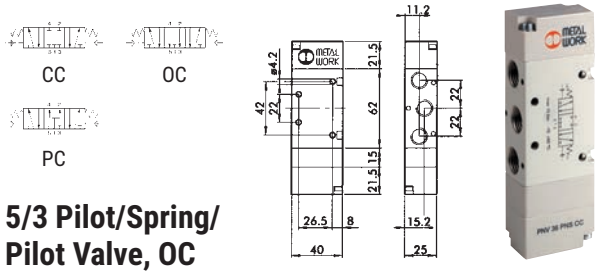
Code P06	Description	Price
7010012200	5/3 G1/8" OC	47.00



5/3 Pilot/Spring/ Pilot Valve, CC

G1/4 Ports

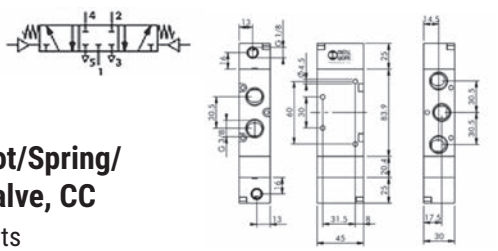
Code P06	Description	Price
7020012100	5/3 G1/4" CC	59.30



5/3 Pilot/Spring/ Pilot Valve, OC

G1/4 Ports

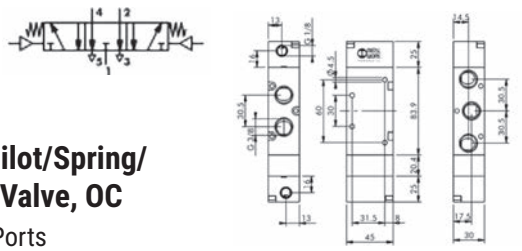
Code P06	Description	Price
7020012200	5/3 G1/4" OC	59.30



5/3 Pilot/Spring/ Pilot Valve, CC

G3/8 Ports

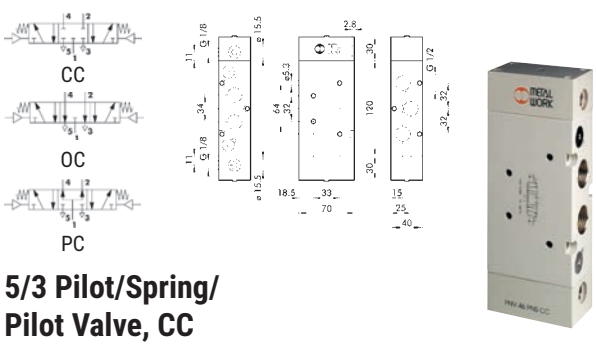
Code P06	Description	Price
7040012100	5/3 G3/8" CC	87.25



5/3 Pilot/Spring/ Pilot Valve, OC

G3/8 Ports

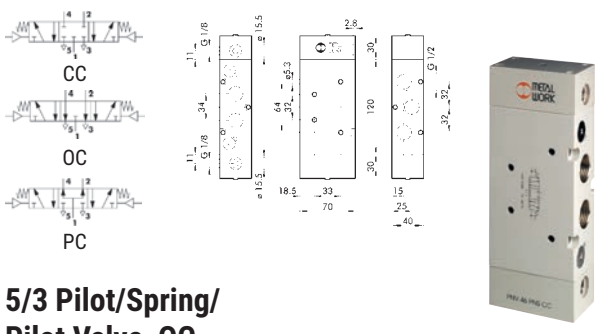
Code P06	Description	Price
7040012200	5/3 G3/8" OC	87.25



5/3 Pilot/Spring/ Pilot Valve, CC

G1/2 Ports

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

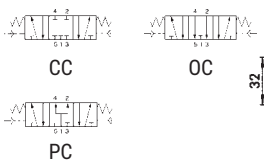


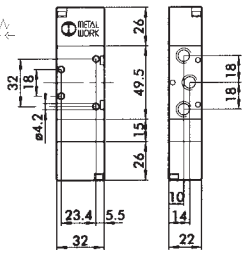
5/3 Pilot/Spring/ Pilot Valve, OC

G1/2 Ports

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

Pneumatically Operated Valves

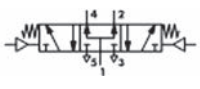


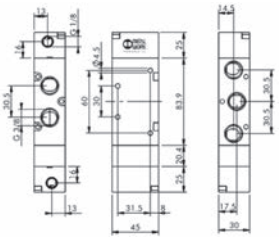


5/3 Pilot/Spring/ Pilot Valve, PC

G1/8 Ports

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

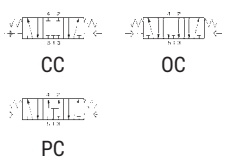


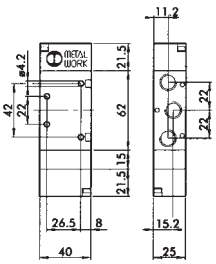


5/3 Pilot/Spring/ Pilot Valve, PC

G3/8 Ports

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

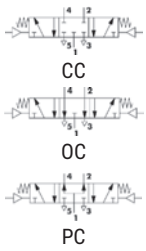


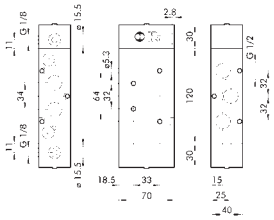


5/3 Pilot Valve, PC

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

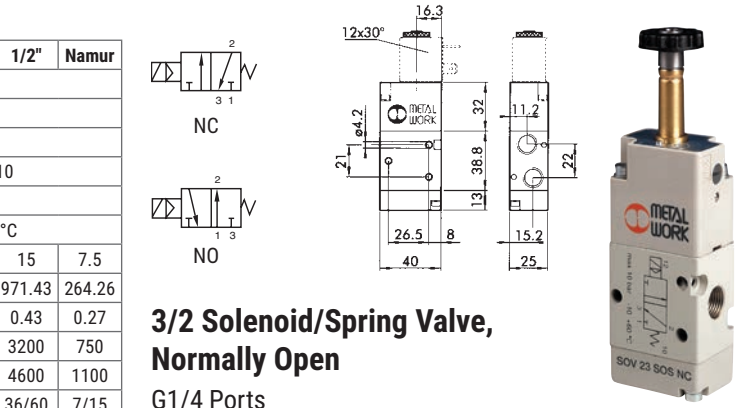
For Silencers

See pages 432-433

Solenoid Control Valves

Solenoid Valves

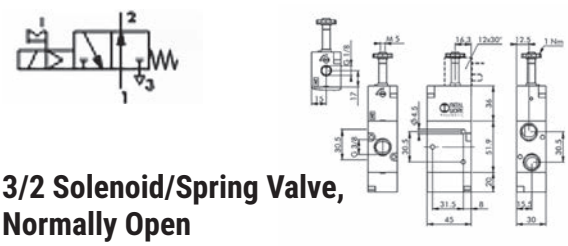
Technical Data	1/8"	1/4"	3/8"	1/2"	Namur
Operating pressure:					
monostable bar	2.5 to 10				
bistable bar	1 to 10				
external pilot assisted bar	Vacuum to 10				
Minimum pilot pressure bar	2.5				
Operating temperature range	-10°C to +60°C				
Nominal diameter mm	5	7.5	13.3	15	7.5
Conductance C Nl/min - 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				



3/2 Solenoid/Spring Valve, Normally Open

G1/4 Ports

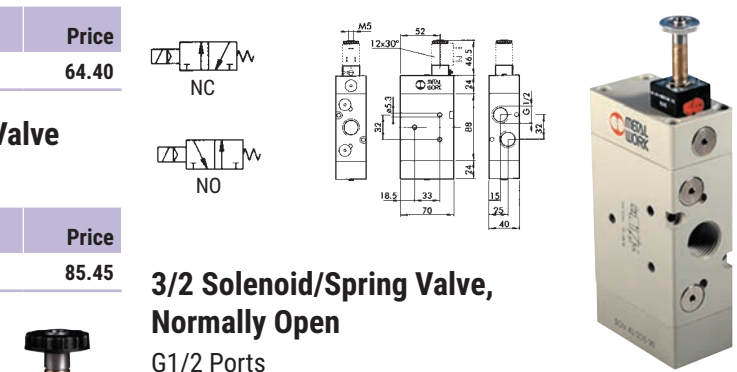
Code	P06	Description	Price
7020020400		3/2 G1/4" NO	66.00



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

Namur Interface Solenoid/ Spring Valve

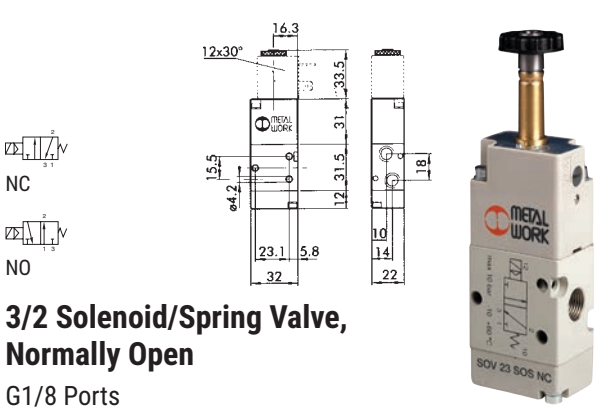
G1/4 Ports

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

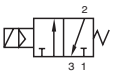
G1/8 Ports

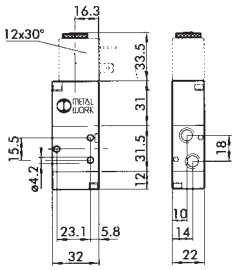
Code	P06	Description	Price
7010020400		3/2 G1/8" NO	57.55

For Solenoid Plugs

See section 4

Solenoid Control Valves

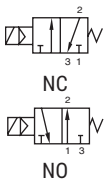


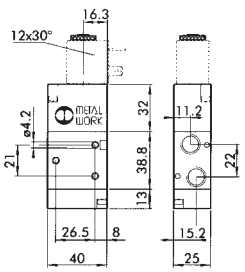


3/2 Solenoid/Spring Valve, Normally Closed

G1/8 Ports

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

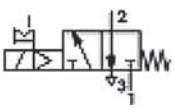


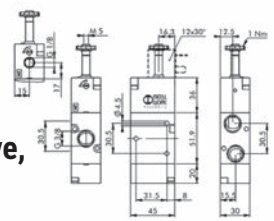


3/2 Solenoid/Spring Valve, Normally Closed

G1/4 Ports

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

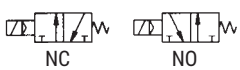


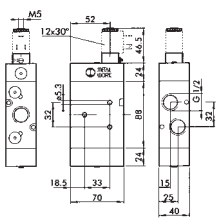


3/2 Solenoid/Spring Valve, Normally Closed

G3/8 Ports

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

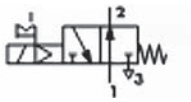


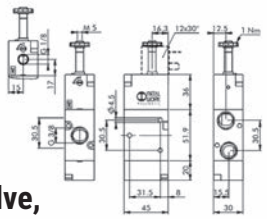


3/2 Solenoid/ Spring Valve, Normally Closed

G1/2 Ports

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

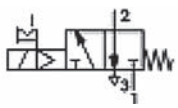


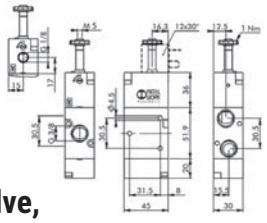


3/2 Solenoid/Spring Valve, Normally Open Assisted

G3/8 Ports

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

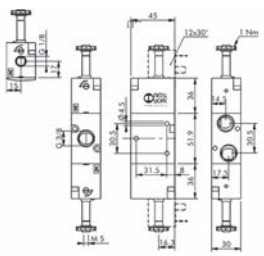




3/2 Solenoid/Spring Valve, Normally Closed Assisted

G3/8 Ports

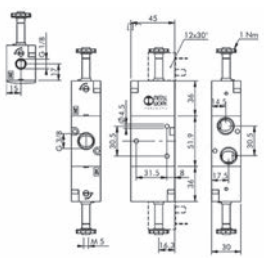
Code	P06	Description	Price
7040020500		3/2 G3/8" NC ASS	81.45



3/2 Solenoid/Solenoid Valve, Normally Closed

G3/8 Ports

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



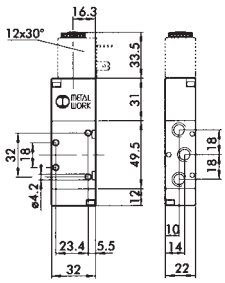
3/2 Solenoid/ Solenoid Valve, Normally Closed Assisted

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.



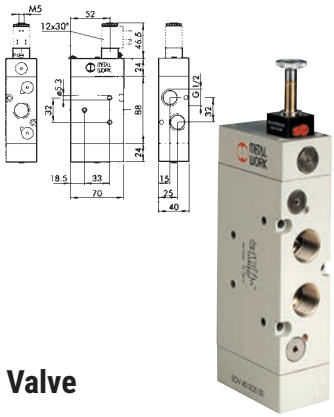
5/2 Solenoid/Spring Valve

G1/8 Ports

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

Sol/Spring

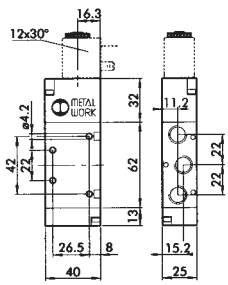
Sol/Sol



5/2 Solenoid/Spring Valve

G1/2 Ports

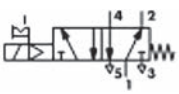
Code	P06	Description	Price
7030021100		5/2 G1/2" Sol/Spring	185.50

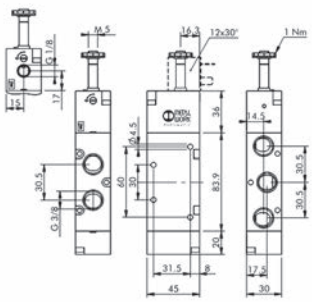


5/2 Solenoid/Spring Valve

G1/4 Ports

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

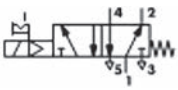


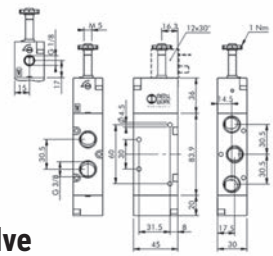


5/2 Solenoid/Spring Valve, Assisted

G3/8 Ports

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





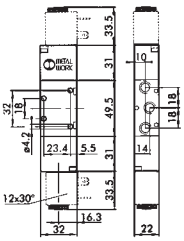
5/2 Solenoid/Spring Valve

G3/8 Ports

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

Solenoid Control Valves

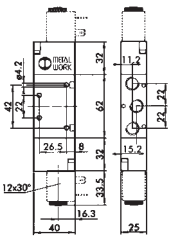
Note: solenoid coils must be ordered separately.



5/2 Solenoid/ Solenoid Valve

G1/8 Ports

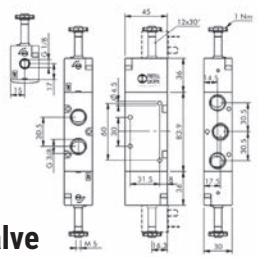
Code	P06	Description	Price
7010021200		5/2 G1/8"	88.30



5/2 Solenoid/ Solenoid Valve

G1/4 Ports

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



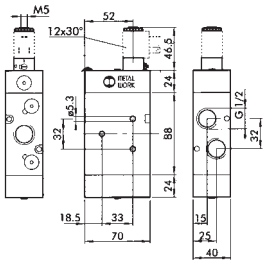
5/2 Solenoid/Solenoid Valve

G3/8 Ports

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

Sol/Spring

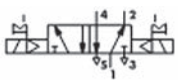
Sol/Sol

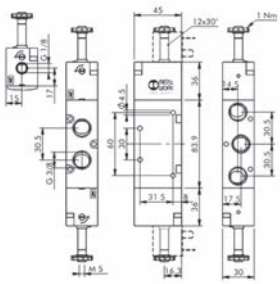


5/2 Solenoid/ Solenoid Valve

G1/2 Ports

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

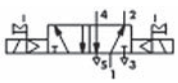


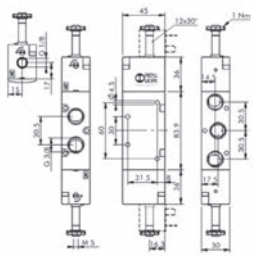


5/2 Solenoid/Solenoid Valve, Differential

G3/8 Ports

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





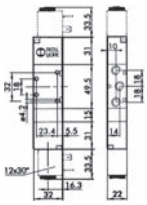
5/2 Solenoid/Solenoid Valve, Assisted

G3/8 Ports

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

Technical Data

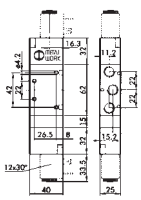
- Operating temperature range: -10°C to +60°C
- Nominal diameter: 7.5mm
- Flow rate at 6 bar Δ P 0.5 bar: 750 Nl/min
- Flow rate at 6 bar Δ P 1 bar: 1100 Nl/min
- Note: solenoid coils must be ordered separately.



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

G1/8 Ports

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

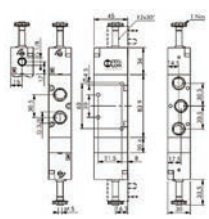


PC

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

G1/4 Ports

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



PC

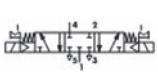
Body only

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: 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, Pressure Centres

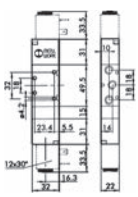
G1/2 Ports

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

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

G1/2 Ports

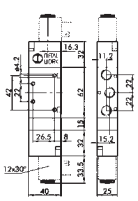
Code P06	Description	Price
7030022100	G1/2" CC Solenoid	239.50

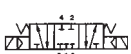


5/3 Solenoid/Spring/Solenoid Valve, Closed Centres

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

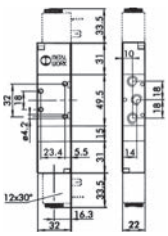
Code P06	Description	Price
7020022100	5/3 G1/4" CC	117.45

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

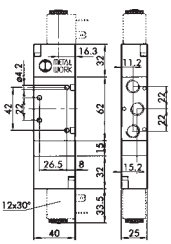
Note: solenoid coils must be ordered separately.

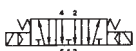


5/3 Solenoid/Spring/Solenoid Valve, Open Centres

G1/8 Ports

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

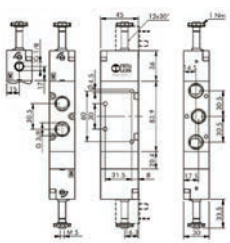




5/3 Solenoid/Spring/Solenoid Valve, Open Centres

G1/4 Ports

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



Body only

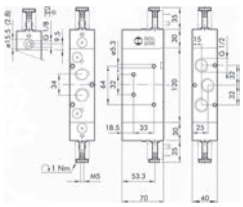
5/3 Solenoid/Spring/Solenoid Valve, Open Centres

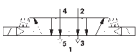
G3/8 Ports

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: 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



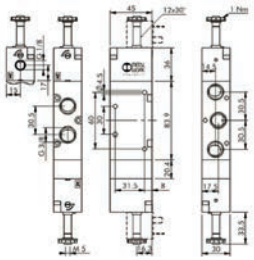


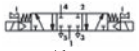
OC

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

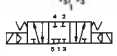
G1/2 Ports

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

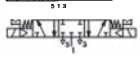




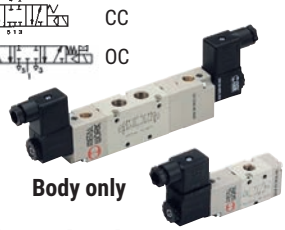
PC



CC



OC



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

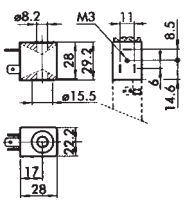
G3/8 Ports

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

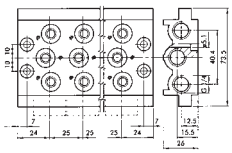
22mm

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

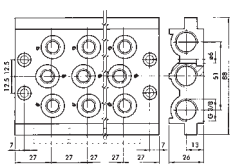


G1/8" Ports

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

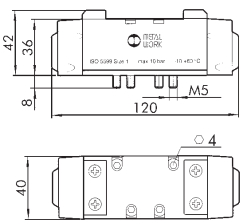
In-line, 1/4" Ports

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

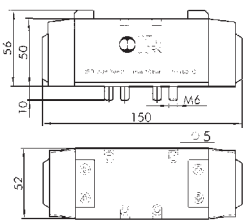
ISO Valves

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

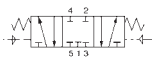
5/2 Pilot/Spring

Code P06	ISO Size	Price
7051011100	1	65.35
7052011100	2	111.55

Pneumatic ISO 5599 Valves

5/2 Pilot/Pilot

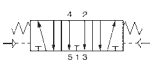
Code P06	ISO Size	Price
7051011200	1	65.35
7052011200	2	115.55



Pneumatic ISO 5599 Valves

5/3 Pilot/Pilot Closed Centres

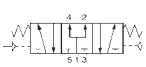
Code P06	ISO Size	Price
7051012100	1	90.10
7052012100	2	119.80



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

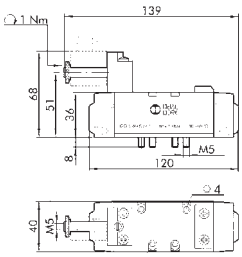
5/3 Pilot/Pilot Pressurised Centres

Code P06	ISO Size	Price
7051012300	1	90.10
7052012300	2	119.80

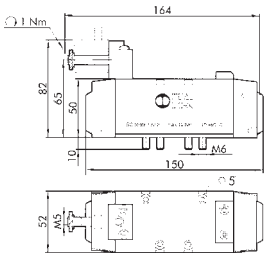
ISO Valves

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.

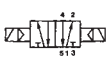


ISO size 2.

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

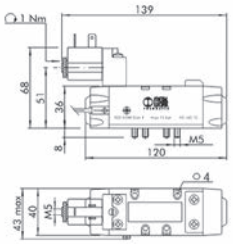
Code P06	ISO Size	Price
7051022300	1	142.30
7052022300	2	173.15

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

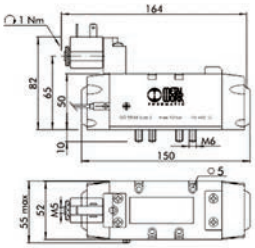


Safe Air Series Solenoid Spring Valves ISO 5599/1

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

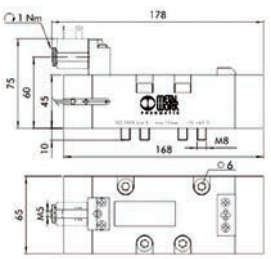


Safe Air Series Solenoid Spring Valves ISO 5599/1

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

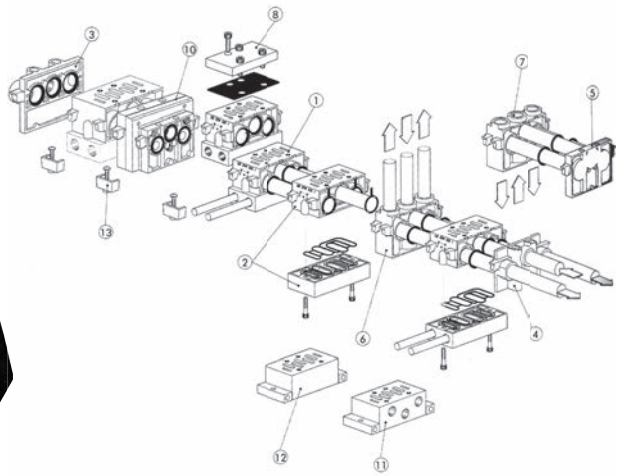
ISO 3, 2.5 Metre, 3 Wires

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.

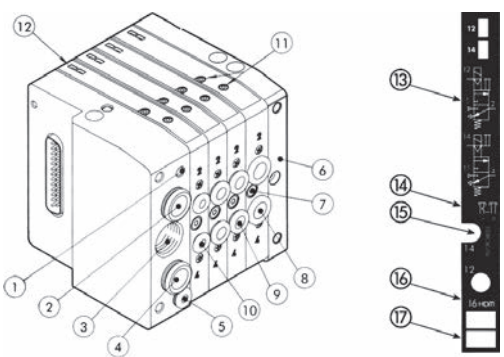
The ratio of the HDM's flow rate to its dimensions are unrivalled – miniaturisation and efficiency have reached a peak.

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		

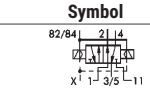
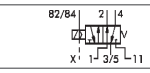
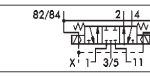
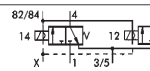
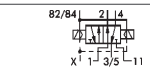
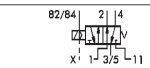
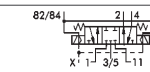
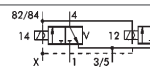
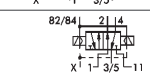
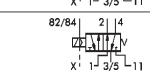
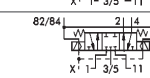
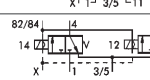
Components

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

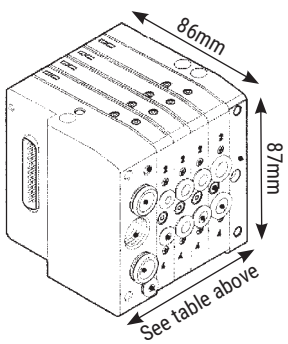


Multimach Valve System

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.

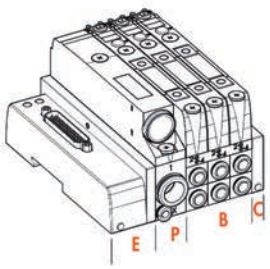
The following pages contain further technical data regarding the system.
For further information, or to request a quote, please contact our sales team.

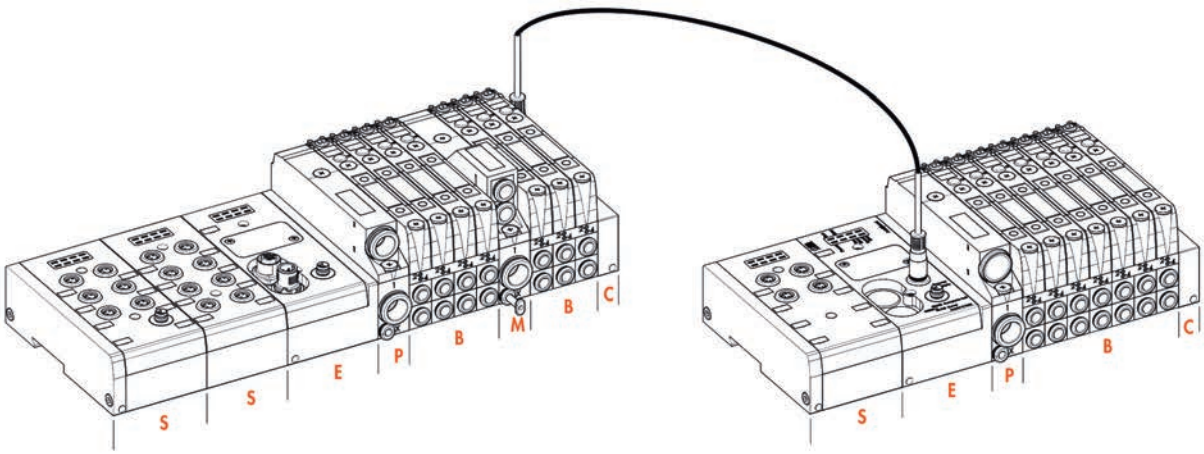
EB 80 Electro-pneumatic System

Components

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

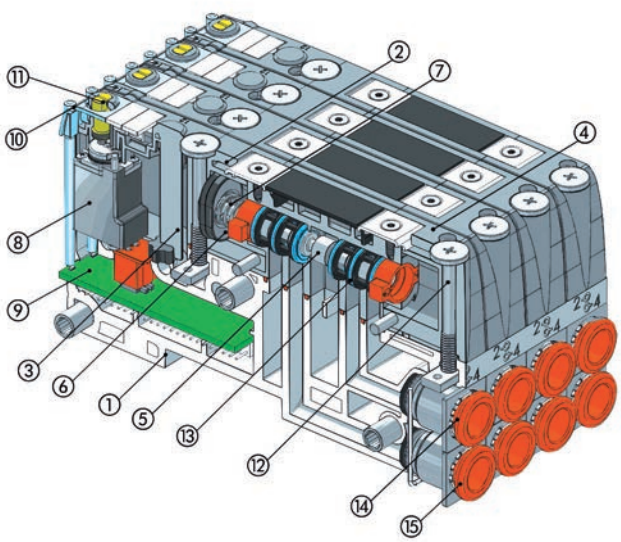
S 1/0 **S**ignal modules
E **E**lectrical connection
P **P**neumatic supply
B **B**ases for solenoid valves; the valves are fixed on the bases
M Inter**M**ediate Modules
C **C**losed end-plate





Components – Solenoid Valve & Base

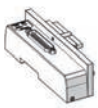
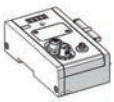
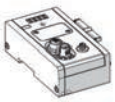
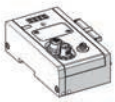
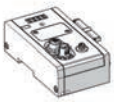
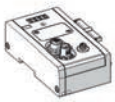
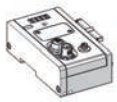
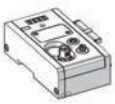
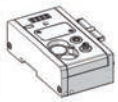
1. BASE: technopolymer
2. VALVE BODY: technopolymer
3. CONTROL: technopolymer
4. BASE: technopolymer
5. SPOOL: chemically nickel-plated aluminium
6. CONTROL PISTON: stainless steel and NBR
7. SPRING: Oteva® steel and Dacromet® treatment
8. SOLENOID VALVE
9. ELECTRONIC BOARD
10. LED light display: technopolymer
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



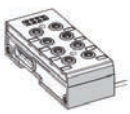
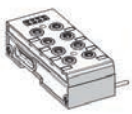
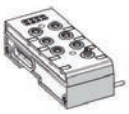
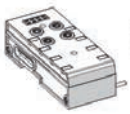
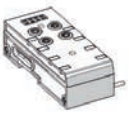
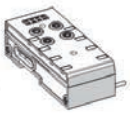
EB 80 Electro-pneumatic System

The EB 80 World

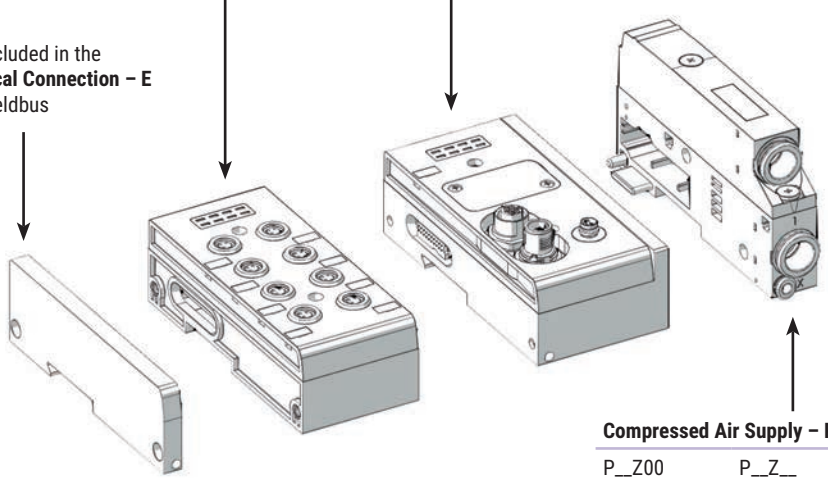
Electrical Connection – E

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

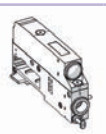
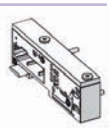
Signal Module – S

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

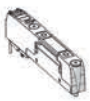
EB 80 Electro-pneumatic System

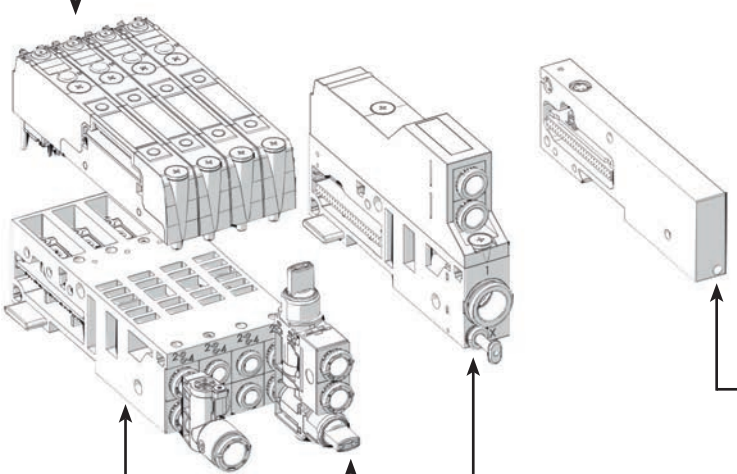
new

METAL WORK PNEUMATIC

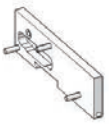
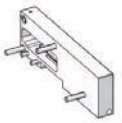
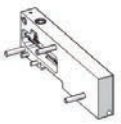
The EB 80 World

Valves

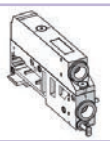
Z_	I_	W_	L_	V_	K_	O_	G_	J_	R_	N0	Y8
											
2 valves 2/2 NC	2 valves 2/2 NC (valid as 5/3 OC)	2 valves 2/2 NO (valid as 5/3 PC)	3/2 NC + 3/2 NO	Monostable 5/2	Bistable 5/2	5/3 CC	3/2 NC high flow	3/2 NO high flow	Shut-off valve	Dummy valve	Bypass



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

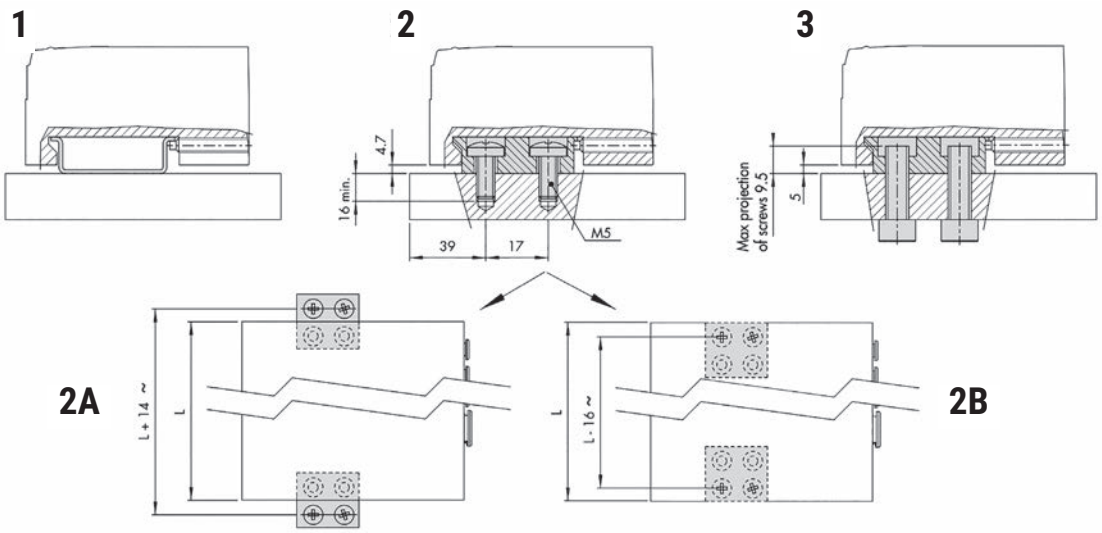
Fittings with pneumatic functions

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.



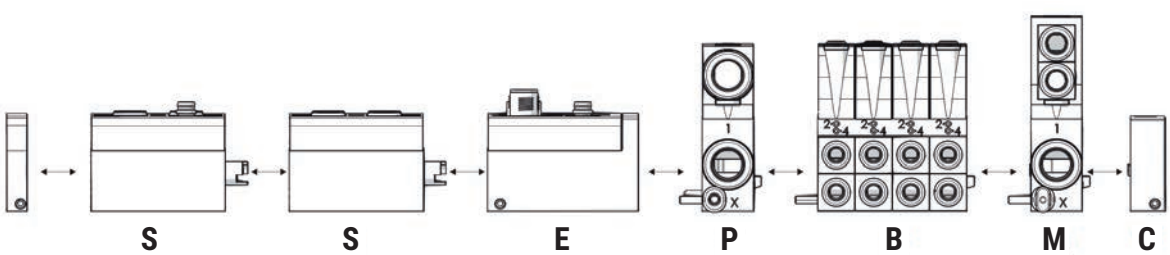
Lubrication

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.

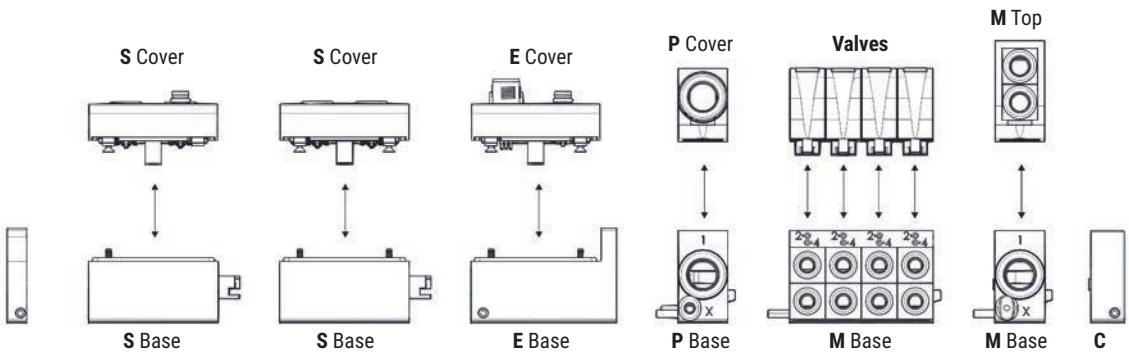


EB 80 Electro-pneumatic System

Vertical Modularity

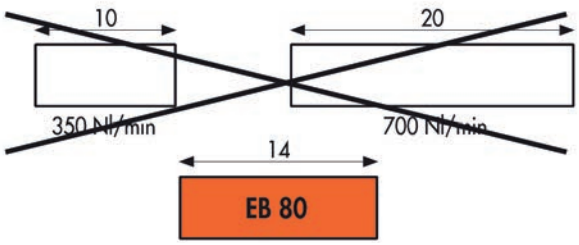
Easy replacement (no need to disassemble the pack) of the valves on the bases, and also of the top part (cover) of subsystems **S, E, P, M** using a single Phillips-head screwdriver.

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

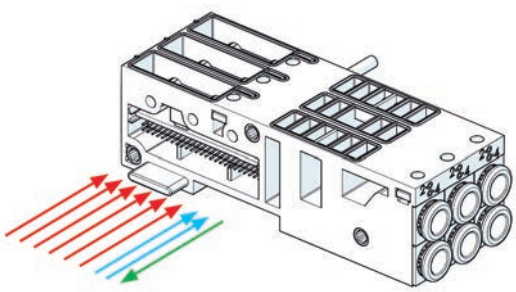
- Reduced dimensions
- High flow rate
- One warehouse and spares



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

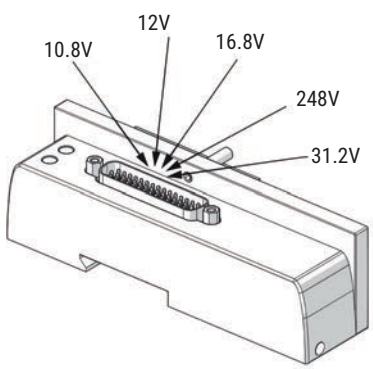
The same base fits both multi-pole connections and field buses

- 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

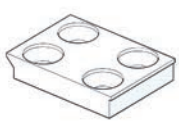
An endless number of EB 80 systems can be obtained and their description is variable in length, which can be very extended. The actual ordering CODE of an EB 80 system is created by Metal Work S.p.A. with a limited number of characters.

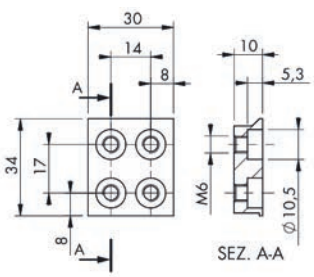
The ordering code is not explicative. The description only is univocal, complete and explicative.

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.

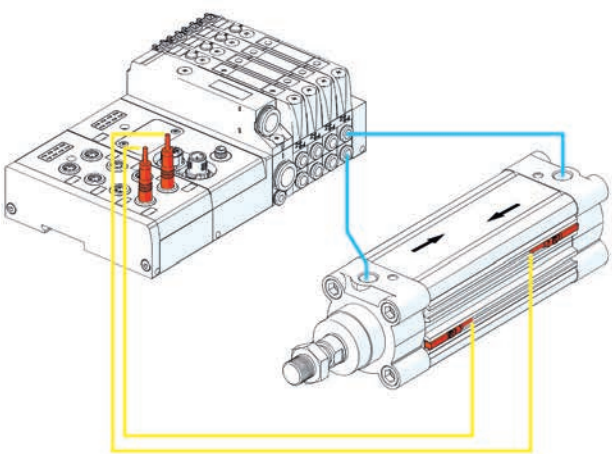
They reorganise and optimise maintenance management by developing predictive maintenance in order to:

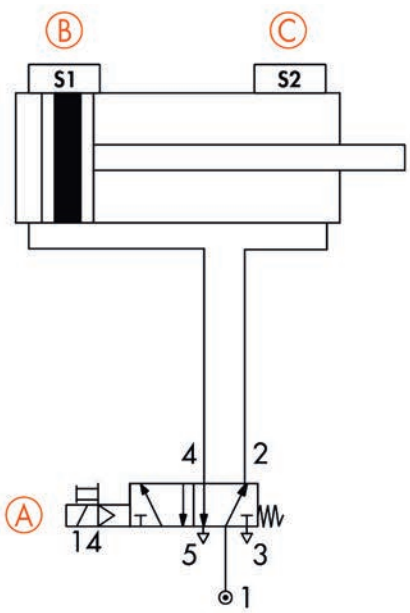
- Predict faults
- Intervene early to avoid system downtime
- Have all information on equipment operation available, in real time
- Monitor component end-of-lifetime
- Optimise warehouse spare parts management

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





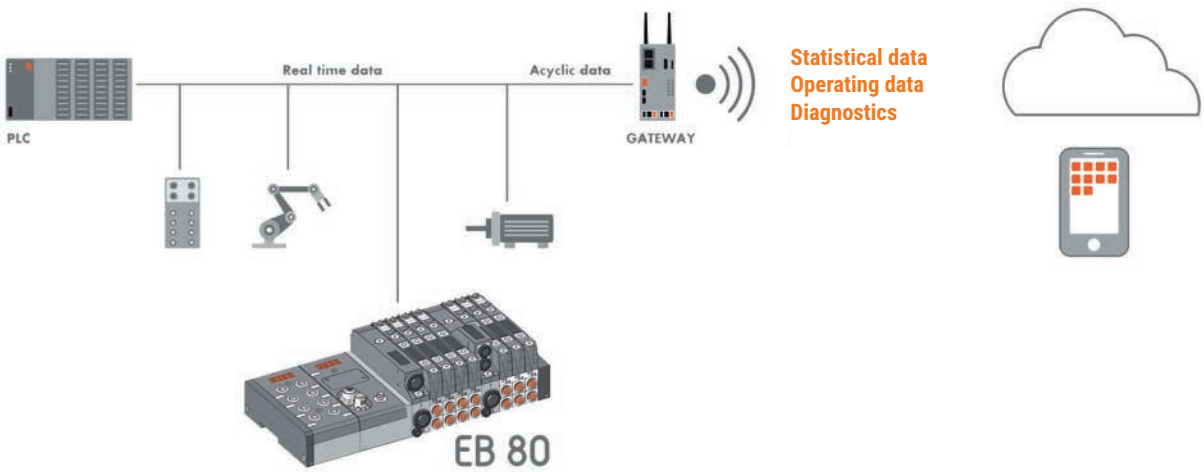
EB 80 Electro-pneumatic System

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"

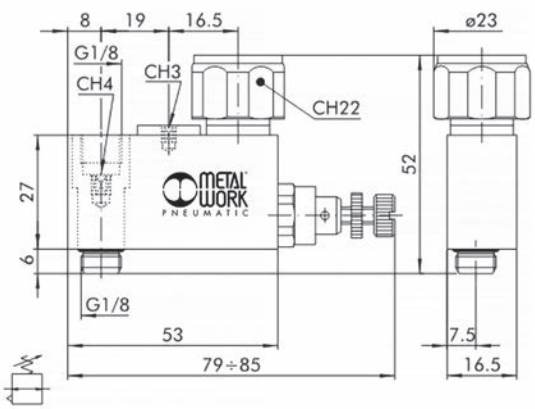
Code P06	Thread	Price
W3606000002	G1/4"	44.10
W3606000004	G1/2"	55.80

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.

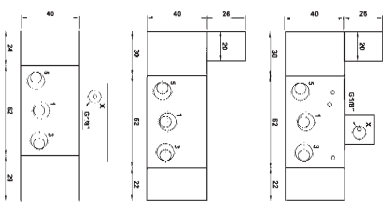
Technical Specifications

- 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.

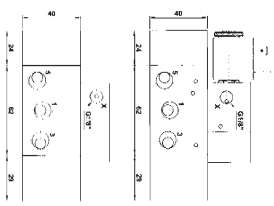
Technical Specifications

- 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

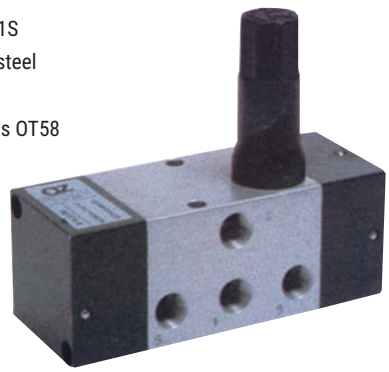
High flow five way valve with a pneumatic timer which allows the automatic return of the valve after a preset time. The time is adjusted by screw R. When a signal is applied to X the valve will stay operated until the time set at R has elapsed, then the valve will automatically re-set. To repeat the 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

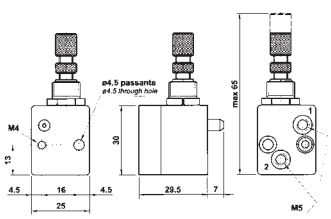
This valve works on the venturi principal and is primarily used for air driven liquid spraying applications such as conveyor lubrication and sawing machines.

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

Two Hand Safety Valve

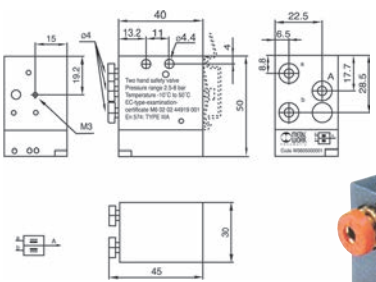
4mm Push-in Fittings

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



Code	P03	Price
W3605000001		196.30

Slow Start Valve

G1/4 Ports

Valve Operation

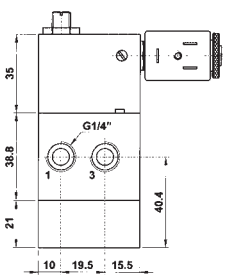
Very compact and sensitive valve designed to apply pressure to a pneumatic circuit in two phases. When the pilot solenoid valve (X) is energised, a progressively increasing pressure is applied to the circuit over a period of time set by screw S. The progressive start pressure is set by adjusting screw 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



Code	N17	Description	Price
10.003.3		Slow Start Valve	584.00

Complete Two Handed Push Button Assembly

4mm Push-in Connections

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

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

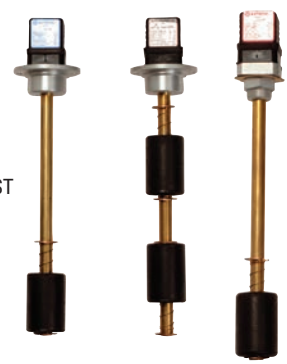
Float Level Switches

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

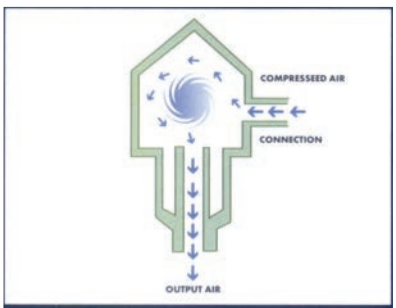
The Neublade from Beckair utilises innovative technology developed to give the highest performance, lowest noise and lowest air consumption compared to any other product.

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

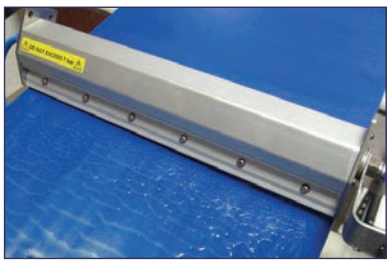
The key to its performance is our flow straightening technology (patent applied for) which provides an exceptionally laminar sheet of air. The low levels of turbulence also mean extremely low noise (65dB).

- 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**

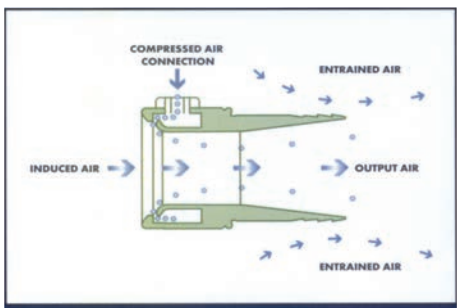
Air Knives & Amplifiers

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**

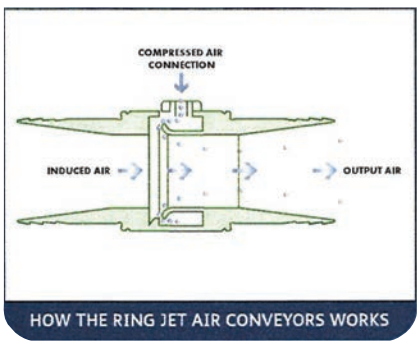
Ringjet Air Conveyors convey all kinds of parts and material without blowers, pumps or electricity

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**

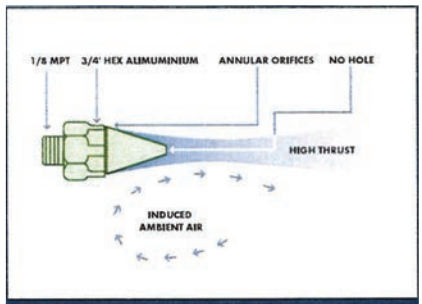
Air Knives & Amplifiers

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



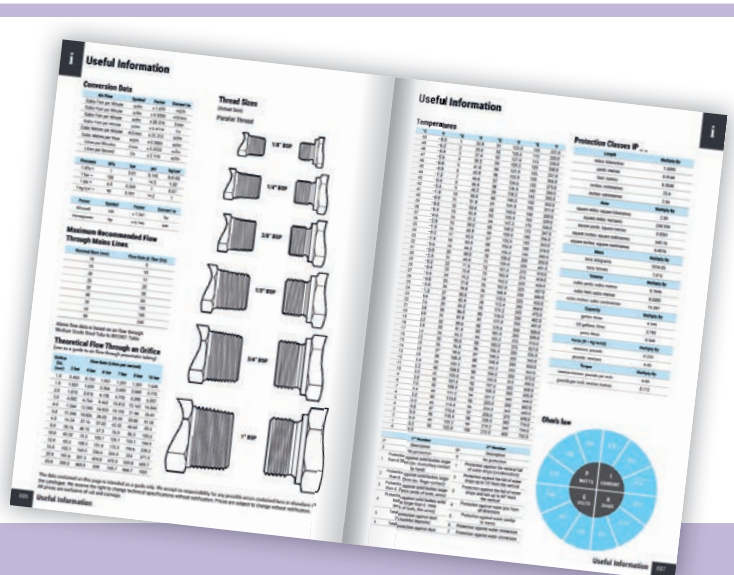
HOW THE AIRMISER WORKS

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.

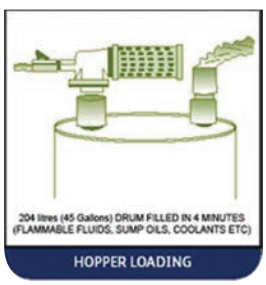
The Pneu-Power has very high performance and is capable of moving material over very long distances. The Pneu-Power is extremely robust, being manufactured from cast aluminium and is designed for use in harsh environments.

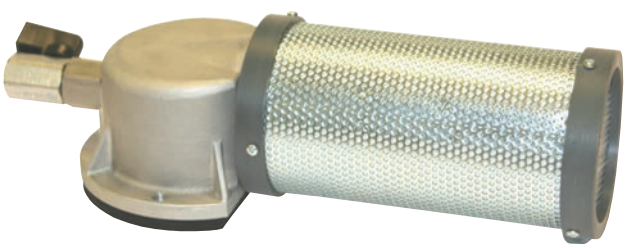
For applications where extraction only is required, the silencer (supplied) diffuses the air and reduces the noise from the device.

- 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

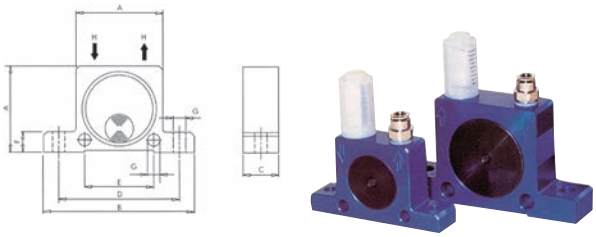
- Extraction: welding fumes, solvent vapours, dust
- Ventilating: confined spaces, tanks, sewers, tunnels
- Cooling: components, pipework

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



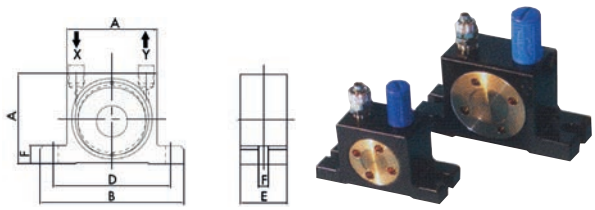
Type	Frequency VPM			Centrifugal Force			Air Consumption/Min		
	2 bar	4 bar	6 bar	2 bar	4 bar	6 bar	2 bar	4 bar	6 bar
S8	25,500	31,000	35,000	13	26	36	83	145	195
S10	22,500	28,000	34,000	25	47	71	92	150	200
S13	15,000	18,500	22,500	32	55	87	94	158	225
S16	13,000	17,000	19,500	45	80	110	122	200	280
S20	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)



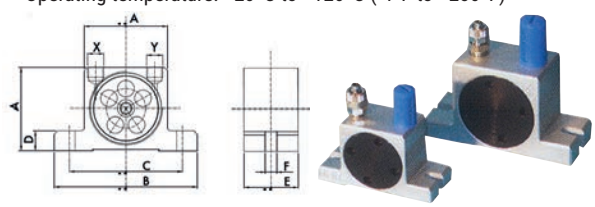
Type	Vibrations			Centrifugal Force			Air Consumption		
	2 bar	4 bar	6 bar	2 bar	4 bar	6 bar	2 bar	4 bar	6 bar
OR50	21,000	25,000	29,500	188	281	355	78	144	204
OR65	19,000	22,000	26.000	235	439	552	100	198	296
OR80	14,000	16,000	21,500	342	587	624	122	255	378
OR100	6,750	9,750	11,000	289	604	783	132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

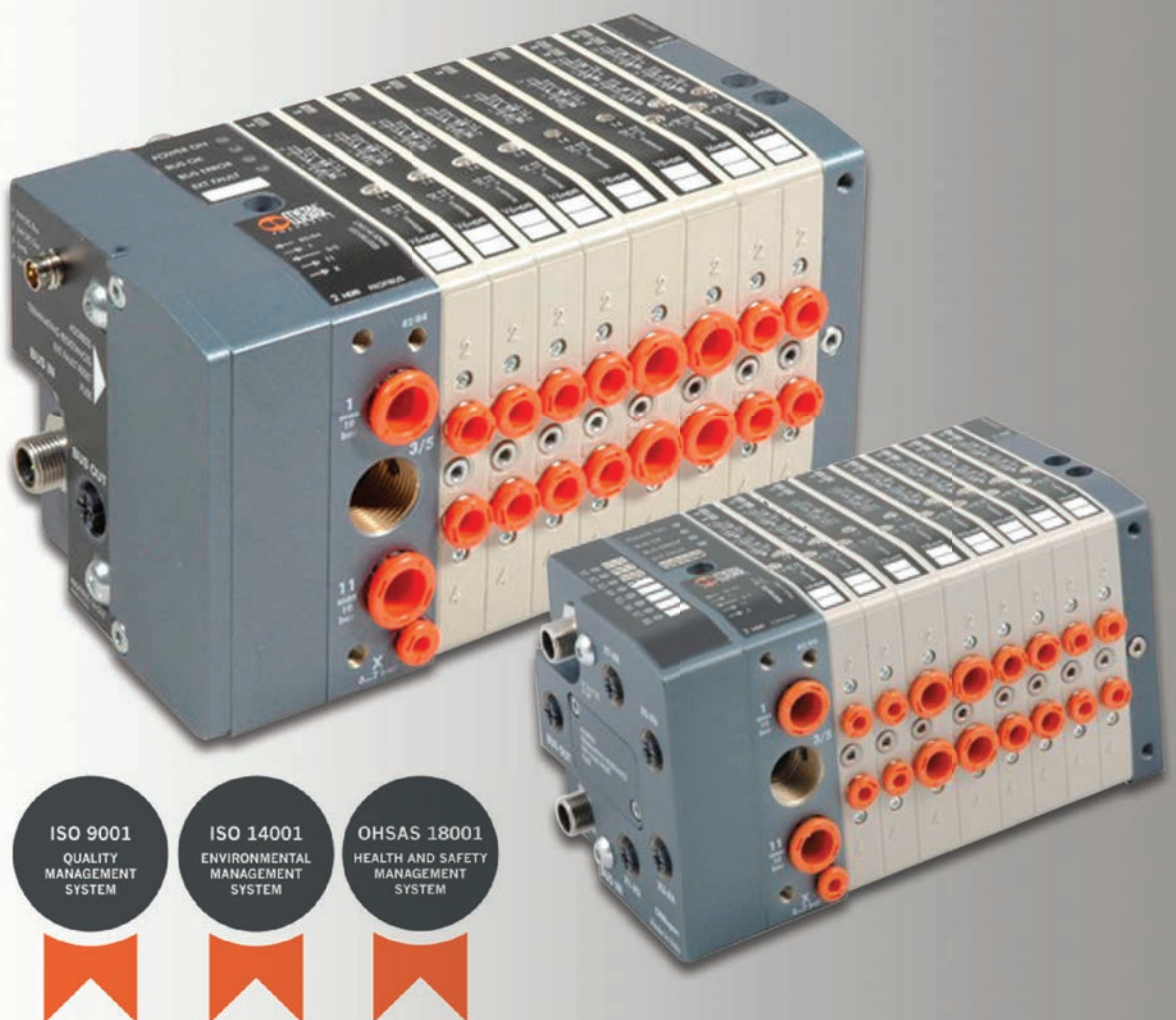
Turbine

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

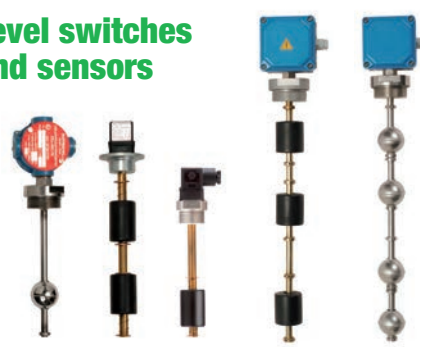
Elettrotec is back in the UK market to meet all your needs on control devices for fluids

Pressure and Vacuum switches

Temperature switches

Flow meters and flow switches

Level switches and sensors



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CONTROL DEVICES FOR FLUIDS

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