




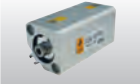

# 6

## PNEUMATIC CYLINDERS & VALVES



Pneumatic cylinders are mechanical devices that use the power of compressed air to generate linear motion. Pneumatic valves control airflow and direction.

### PNEUMATIC CYLINDERS & ACCESSORIES



				
<b>343</b> ISO 6432 Standard Mini Range	<b>344</b> ISO 15552 / VDMA Standard Range	<b>346</b> ISO 15552 / VDMA Standard Profile Range	<b>348</b> Compact Range	<b>349</b> ISO 21287 Compact Range



	<b>New Additions</b> 
<b>350</b> Guided Range	<b>351</b> Cylinder Accessories



	
<b>355</b> ISO 6432 Mini Range Series 16, 24, 25	<b>355</b> Compact Range Series 31



				
<b>356</b> ISO 21287 Compact Range Series 32	<b>356</b> ISO 15552 Aluminium Profile Range Series 61	<b>357</b> ISO 15552 Aluminium Tube & Profile Range Series 63	<b>358</b> Cylinder Accessories	<b>360</b> Magnetic Proximity Switches & Brackets



				<b>New</b> 
<b>362</b> ISO 6432 Standard-Based Range	<b>362</b> Round Cylinder Range	<b>363</b> ISO 15552 Standard-Based Range	<b>364</b> ISO 21287 Compact Range	<b>364</b> Mini Slide



	<b>New Additions</b> 		<b>New</b> 
<b>365</b> Cylinder Accessories	<b>367</b> Proximity Sensors & Accessories	<b>368</b> Quarter Turn Actuators	<b>368</b> Parallel Grippers

## SOLENOID & PNEUMATIC VALVES



<b>370</b> 3/2, 5/2 & 5/3 Pneumatically Operated Valves	<b>371</b> 3/2, 5/2 & 5/3 Solenoid Valves	<b>371</b> Standard Namur Solenoid Valves	<b>372</b> Solenoid Valve Accessories	<b>374</b> Manual & Pneumatic Operated Valves	<b>375</b> 3/2, 5/2 & 5/3 Manual Valves



<b>376</b> 3/2, 5/2, 5/3 & 4/3 Manual & Mechanical Valves	<b>377</b> 3/2 & 5/2 Manual & Mechanical Valves	<b>378</b> Manual & Mechanical Valves



<b>380</b> Solenoid Valves & Accessories	<b>386</b> Manually Operated Valves	<b>387</b> Mechanically Operated Valves



<b>388</b> Pressure Sensors & Accessories



<b>391</b> Solenoid Valves	<b>392</b> Solenoid / Spring Valves	<b>394</b> ISO 5599/1 Solenoid & Pneumatic Valves	<b>395</b> Solenoids for Electropneumatically Operated Valves



<b>396</b> Solenoid DIN Connectors	<b>398</b> Pneumatic Valves	<b>399</b> Mechanically Operated Valves	<b>400</b> Manually Operated Valves	<b>404</b> Automatic Valves



<b>406</b> Check Valves



<b>407</b> Slide & Non-Return Valves



<b>407</b> Heavy Duty Technical Valves



# E.MC Cylinders

E.MC boasts over 50 patents and provides pneumatic solutions to more than 50 different industries. Their products ensure high production efficiency with precision and low consumption of pneumatics. Their world-class manufacturing and testing facilities are designed to cater to the industry's ever-growing demand for streamlined performance and durability.

E.MC provides a wide range of pneumatic cylinders designed for the automation industry. These cylinders come in bore sizes ranging from 10 mm to 125 mm. They are engineered to deliver exceptional performance and reliability, fully enhancing productivity and efficiency.

E.MC uses high-precision American and Japanese CNC robots to assemble and test cylinders. Their automated machining process ensures that bores are accurately cut, increasing the devices' lifespan. We offer a variety of cylinder styles, including the ISO 15552/VDMA standard and profile cylinders, compact cylinders, the ISO 21287 compact cylinder, and guided cylinders, with a range of accessories.

## Specifications

Cylinder type: \*Single or double acting, magnetic positioning  
Max. operating pressure: 10 bar  
Operating temperature: -20°C to +80°C (dry air)

\*Single acting – ISO 6432 standard mini cylinder

## Available Ranges

Mini cylinders  
Compact cylinders  
Guided cylinders  
VDMA standard cylinders  
VDMA standard profile cylinders



## IA, IAC & IASB SERIES

### FEATURES / BENEFITS

- Front / rear covers machined by high precision CNC machine, giving high consistency & concentricity
- Japanese anti-dust seal, providing better sealing performance & dust protection
- German grease provides a longer cylinder life
- Riveted cylinder barrel structure & front / rear cover gives higher efficiency, performance & improved compression resistance
- Cap positioning machine guarantees front & rear caps locate at same horizontal position, making them easier to install

### SPECIFICATIONS

Cylinder type	Single or double acting Magnetic positioning
Materials	Aluminium end blocks. S45C hard chrome carbon steel piston rod. Stainless steel barrel NBR seals
Max. operating pressure	10 bar
Operating temperature	-20°C to +80°C (dry air)
Speed range	Double acting: 30 to 800 mm/s Single acting: 50 to 800 mm/s
Bore	ø10 mm, ø12 mm, ø16 mm, ø20 mm, ø25 mm
Mounting	Foot, front / rear flange & rear clevis
Available stroke length	0 – 500 mm
Cushion type	Rubber or adjustable air cushion

For cylinder dimensional drawings please see page 344



### IAC SERIES DOUBLE ACTING AIR CUSHIONED 16 MM BORE

PART NUMBER	BORE	STROKE	PRICE
EM-IAC16X25-S	16 mm	25 mm	£48.95
EM-IAC16X50-S	16 mm	50 mm	£52.04
EM-IAC16X80-S	16 mm	80 mm	£58.06
EM-IAC16X100-S	16 mm	100 mm	£58.12
EM-IAC16X125-S	16 mm	125 mm	£61.10
EM-IAC16X150-S	16 mm	150 mm	£64.19

### 20 MM BORE

EM-IAC20X25-S	20 mm	25 mm	£51.34
EM-IAC20X50-S	20 mm	50 mm	£55.26
EM-IAC20X80-S	20 mm	80 mm	£63.08
EM-IAC20X100-S	20 mm	100 mm	£63.08
EM-IAC20X125-S	20 mm	125 mm	£67.05
EM-IAC20X150-S	20 mm	150 mm	£70.91

### 25 MM BORE

EM-IAC25X25-S	25 mm	25 mm	£57.65
EM-IAC25X50-S	25 mm	50 mm	£60.04
EM-IAC25X80-S	25 mm	80 mm	£67.99
EM-IAC25X100-S	25 mm	100 mm	£67.99
EM-IAC25X125-S	25 mm	125 mm	£72.19
EM-IAC25X150-S	25 mm	150 mm	£76.46

### IA SERIES DOUBLE ACTING RUBBER CUSHIONED

#### 10 MM BORE



PART NUMBER	BORE	STROKE	PRICE
EM-IA10X25-S	10 mm	25 mm	£28.74
EM-IA10X50-S	10 mm	50 mm	£30.61
EM-IA10X80-S	10 mm	80 mm	£34.40
EM-IA10X100-S	10 mm	100 mm	£34.40

#### 12 MM BORE

EM-IA12X25-S	12 mm	25 mm	£40.36
EM-IA12X50-S	12 mm	50 mm	£42.70
EM-IA12X80-S	12 mm	80 mm	£49.82
EM-IA12X100-S	12 mm	100 mm	£49.82

#### 16 MM BORE

EM-IA16X25-S	16 mm	25 mm	£37.68
EM-IA16X50-S	16 mm	50 mm	£40.01
EM-IA16X80-S	16 mm	80 mm	£44.68
EM-IA16X100-S	16 mm	100 mm	£44.68
EM-IA16X125-S	16 mm	125 mm	£47.02
EM-IA16X150-S	16 mm	150 mm	£49.41

#### 20 MM BORE

EM-IA20X25-S	20 mm	25 mm	£39.49
EM-IA20X50-S	20 mm	50 mm	£42.52
EM-IA20X80-S	20 mm	80 mm	£48.54
EM-IA20X100-S	20 mm	100 mm	£48.54
EM-IA20X125-S	20 mm	125 mm	£51.58
EM-IA20X150-S	20 mm	150 mm	£54.55

#### 25 MM BORE

EM-IA25X25-S	25 mm	25 mm	£42.46
EM-IA25X50-S	25 mm	50 mm	£45.74
EM-IA25X80-S	25 mm	80 mm	£52.28
EM-IA25X100-S	25 mm	100 mm	£52.28
EM-IA25X125-S	25 mm	125 mm	£55.55
EM-IA25X150-S	25 mm	150 mm	£58.82

### IASB SERIES SINGLE ACTING SPRING RETURN

#### 12 MM BORE



PART NUMBER	BORE	STROKE	PRICE
EM-IASB12X25-S	12 mm	25 mm	£50.23
EM-IASB12X50-S	12 mm	50 mm	£55.49
EM-IASB12X80-S	12 mm	80 mm	£52.04
EM-IASB12X125-S	12 mm	125 mm	£54.61
EM-IASB12X150-S	12 mm	150 mm	£57.18

#### 16 MM BORE

EM-IASB16X25-S	16 mm	25 mm	£56.31
EM-IASB16X50-S	16 mm	50 mm	£59.81
EM-IASB16X80-S	16 mm	80 mm	£66.82
EM-IASB16X125-S	16 mm	125 mm	£70.32
EM-IASB16X150-S	16 mm	150 mm	£73.83

#### 20 MM BORE

EM-IASB20X25-S	20 mm	25 mm	£59.05
EM-IASB20X50-S	20 mm	50 mm	£63.55
EM-IASB20X80-S	20 mm	80 mm	£72.54
EM-IASB20X125-S	20 mm	125 mm	£77.04
EM-IASB20X150-S	20 mm	150 mm	£81.71

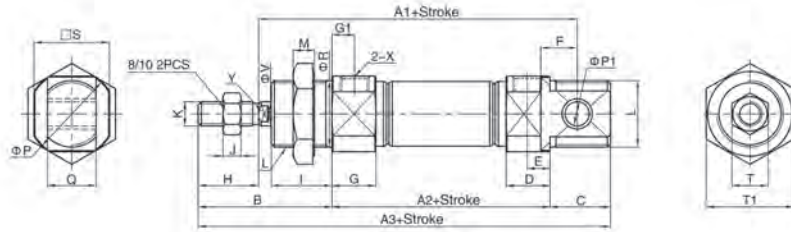
#### 25 MM BORE

EM-IASB25X10-S	25 mm	10 mm	£57.77
EM-IASB25X25-S	25 mm	25 mm	£63.43
EM-IASB25X50-S	25 mm	50 mm	£68.34
EM-IASB25X80-S	25 mm	80 mm	£78.15
EM-IASB25X125-S	25 mm	125 mm	£83.06
EM-IASB25X150-S	25 mm	150 mm	£87.85

EMC-IA SERIES

IA  $\Phi 8-\Phi 25$

CA Type



(mm)

Bore/Sign	A1	A2	A3	A4	A5	B	C	C1	C2	D	E	F	G	G1	H	I	J	K	L	M	P	P1	Q	R	S
8	64	46	86	74	-	28	12	9.5	5	9.5	5.2	6	11.5	7	12	12	3	M4X0.7	M12X1.25	7	17	4	8	12	15
10	64	46	86	74	-	28	12	9.5	5	9.5	5.2	6	11.5	7	12	12	3	M4X0.7	M12X1.25	7	17	4	8	12	15
12	75	50	105	88	105	38	17	10	5	10	5	9	12	7	16	17	5	M6X1.0	M16X1.5	6	19.7	6	12	16	18.3
16	82	56	111	94	111	38	17	10.5	5.5	10.5	5.5	9	12.5	7	16	17	5	M6X1.0	M16X1.5	6	22	6	12	16	20
20	95	62	126	106	126	44	20	14.5	7.5	14.5	7.5	12	14.5	7.5	20	20	6	M8X1.25	M22X1.5	7	29	8	16	22	25
25	104	65	137	115	137	50	22	16	8	16	8	12	16	8	22	22	6	M10X1.25	M22X1.5	7	33.5	8	16	22	30

Bore/Sign	T	T1	X	V	W	Y
8	7	17	M5X0.8	4	-	-
10	7	17	M5X0.8	4	-	-
12	10	22	M5X0.8	6	15	5
16	10	22	M5X0.8	6	15	5
20	12	29	1/8"	8	18	6
25	17	29	1/8"	10	20	8

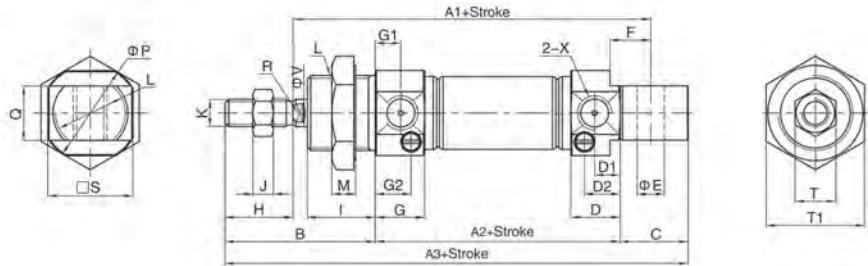
Note: With magnet and no magnet, the dimensions are same.

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EMC-IAC SERIES

IAC  $\Phi 16-\Phi 25$

CA Type



(mm)

Bore/Sign	A1	A2	A3	A4	A5	B	C	D	D1	D2	D3	E	F	G	G1	G2	H	I	J	K	L	M	P	Q	R
16	82	56	111	94	111	38	17	12	6	9	12	6	9	12.5	7	9.5	16	17	5	M6X1.0	M16X1.5	6	22	12	5
20	95	62	126	106	126	44	20	14.5	7.5	11	14.5	8	12	14.5	7.5	11	20	20	6	M8X1.25	M22X1.5	7	29	16	6
25	104	65	137	115	137	50	22	16	8	12.5	16	8	12	16	8	12.5	22	22	6	M10X1.25	M22X1.5	7	33.5	16	8

Bore/Sign	S	T	T1	X	V	W
16	20	10	22	M5X0.8	6	15
20	25	12	29	1/8"	8	18
25	30	17	29	1/8"	10	20

Note: With magnet and no magnet, the dimensions are same.

## FVBC SERIES

### DESCRIPTION

The updated FVBC / VBC series of pneumatic cylinders fully adheres to the ISO 1552 standard. The bore sizes range from 32mm to 100mm. The cylinder has been designed with a complete change of covers and piston, an entire PU sealing system, a magnet integrated into the wear ring slot, a double cushion structure, and a strengthened cushion needle and guider. We have studied every process that will improve quality, from material choice, die-casting technology, machining consistency, testing style, etc. All of this has resulted in further improvements. High-precision CNC machine robots machine the pneumatic cylinder, which is automatically assembled and tested.

### FEATURES

- Highlighted products for process optimisation
- Adheres to ISO1552 standard
- All PU sealing system
- Strong guiding design with high concentricity
- Bronze bearing with much better lateral loading
- Strengthened cushion design, soft ending
- Double cushioning system
- 2000 km loaded stroke life

Non-standard stroke available on request



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### FVBC SERIES CYLINDER 32 MM BORE

PART NUMBER	BORE	STROKE	PRICE
EM-FVBC32X25-S	32 mm	25 mm	£78.27
EM-FVBC32X50-S	32 mm	50 mm	£82.41
EM-FVBC32X80-S	32 mm	80 mm	£90.71
EM-FVBC32X100-S	32 mm	100 mm	£90.71
EM-FVBC32X125-S	32 mm	125 mm	£94.86
EM-FVBC32X160-S	32 mm	160 mm	£103.15
EM-FVBC32X200-S	32 mm	200 mm	£107.30
EM-FVBC32X250-S	32 mm	250 mm	£115.59

### 40 MM BORE

PART NUMBER	BORE	STROKE	PRICE
EM-FVBC40X25-S	40 mm	25 mm	£101.86
EM-FVBC40X50-S	40 mm	50 mm	£107.12
EM-FVBC40X80-S	40 mm	80 mm	£118.28
EM-FVBC40X100-S	40 mm	100 mm	£118.28
EM-FVBC40X125-S	40 mm	125 mm	£124.06
EM-FVBC40X160-S	40 mm	160 mm	£135.21
EM-FVBC40X200-S	40 mm	200 mm	£140.35
EM-FVBC40X250-S	40 mm	250 mm	£151.51

### 50 MM BORE

PART NUMBER	BORE	STROKE	PRICE
EM-FVBC50X25-S	50 mm	25 mm	£125.17
EM-FVBC50X50-S	50 mm	50 mm	£132.12
EM-FVBC50X80-S	50 mm	80 mm	£145.61
EM-FVBC50X100-S	50 mm	100 mm	£145.55
EM-FVBC50X125-S	50 mm	125 mm	£151.98
EM-FVBC50X160-S	50 mm	160 mm	£165.35
EM-FVBC50X200-S	50 mm	200 mm	£172.42
EM-FVBC50X250-S	50 mm	250 mm	£185.83

### 63 MM BORE

PART NUMBER	BORE	STROKE	PRICE
EM-FVBC63X25-S	63 mm	25 mm	£146.55
EM-FVBC63X50-S	63 mm	50 mm	£155.37
EM-FVBC63X80-S	63 mm	80 mm	£172.30
EM-FVBC63X100-S	63 mm	100 mm	£172.30
EM-FVBC63X125-S	63 mm	125 mm	£180.54
EM-FVBC63X160-S	63 mm	160 mm	£197.48
EM-FVBC63X200-S	63 mm	200 mm	£205.65
EM-FVBC63X250-S	63 mm	250 mm	£222.48
EM-FVBC63X320-S	63 mm	320 mm	£255.83
EM-FVBC63X400-S	63 mm	400 mm	£272.82
EM-FVBC63X500-S	63 mm	500 mm	£306.64

### SPECIFICATIONS

Cylinder type	Double acting, magnetic positioning
Materials	Aluminium end caps. S45C hard chrome carbon steel piston rod. Hard anodised aluminium barrel. PU seals
Max. working pressure	10 bar
Operating temperature	-20°C to +80°C (dry air)
Speed range	50 to 800 mm/s
Bore	ø32 mm, ø40 mm, ø50 mm, ø63 mm, ø80 mm, ø100 mm
Mounting	Foot, rear trunnion, 90° rear trunnion, front flange, rear flange.
Available stroke length	0 – 1900 mm
Cushion type	Adjustable air cushion

### 80 MM BORE

PART NUMBER	BORE	STROKE	PRICE
EM-FVBC80X25-S	80 mm	25 mm	£198.53
EM-FVBC80X50-S	80 mm	50 mm	£210.21
EM-FVBC80X80-S	80 mm	80 mm	£233.57
EM-FVBC80X100-S	80 mm	100 mm	£233.57
EM-FVBC80X125-S	80 mm	125 mm	£245.25
EM-FVBC80X160-S	80 mm	160 mm	£269.14
EM-FVBC80X200-S	80 mm	200 mm	£280.88
EM-FVBC80X250-S	80 mm	250 mm	£304.24
EM-FVBC80X320-S	80 mm	320 mm	£350.91
EM-FVBC80X400-S	80 mm	400 mm	£374.86
EM-FVBC80X500-S	80 mm	500 mm	£421.58

### 100 MM BORE

PART NUMBER	BORE	STROKE	PRICE
EM-FVBC100X25-S	100 mm	25 mm	£242.98
EM-FVBC100X50-S	100 mm	50 mm	£258.22
EM-FVBC100X80-S	100 mm	80 mm	£288.01
EM-FVBC100X100-S	100 mm	100 mm	£288.01
EM-FVBC100X125-S	100 mm	125 mm	£303.19
EM-FVBC100X160-S	100 mm	160 mm	£333.51
EM-FVBC100X200-S	100 mm	200 mm	£348.75
EM-FVBC100X250-S	100 mm	250 mm	£379.12
EM-FVBC100X320-S	100 mm	320 mm	£439.28
EM-FVBC100X400-S	100 mm	400 mm	£469.65
EM-FVBC100X500-S	100 mm	500 mm	£529.81

For cylinder dimensional drawings please see page 347



**VBC SERIES**

**DESCRIPTION**

The VBC series pneumatic cylinder is designed to meet the standards set in ISO 15552, with bore sizes ranging from 32 mm to 250 mm. The cylinder has been newly designed with a complete change of covers and piston, an entire PU sealing system, a magnet integrated into a wear ring slot, a double cushion structure, and a strengthened cushion needle and guider. E.M.C has also improved every process that contributes to better quality, including material choice, die-casting technology, machining consistency, and testing style. The pneumatic cylinders are machined with high-precision CNC machines and automatically assembled and tested. Additionally, the VBC series offers Mickey Mouse and tie-rod-type pneumatic cylinders in its range.

**FEATURES**

- Highlighted products for process optimisation
- Adheres to ISO15552 standard
- All PU sealing system
- Strong guiding design with high concentricity
- Bronze bearing with much better lateral loading
- Strengthened cushion design, soft ending
- Double cushioning system

**SPECIFICATIONS**

Cylinder type	Double acting, magnetic positioning
Materials	Aluminium end caps. S45C hard chrome carbon steel piston rod. Hard anodised aluminium barrel. PU seals
Max. working pressure	10 bar
Operating temperature	-20°C to +80°C (dry air)
Speed range	50 – 800 mm/s
Mounting	Foot, rear trunnion, 90° rear trunnion, front flange, rear flange.
Available bore sizes	ø32 – 250 mm
Available stroke length	0 – 1900 mm
Cushion type	Adjustable air cushion



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**VBC SERIES STANDARD PROFILE CYLINDER 32 MM BORE**

PART NUMBER	BORE	STROKE	PRICE
EM-VBC32X25-S	32 mm	25 mm	£74.94
EM-VBC32X50-S	32 mm	50 mm	£74.91
EM-VBC32X80-S	32 mm	80 mm	£80.38
EM-VBC32X100-S	32 mm	100 mm	£80.38
EM-VBC32X125-S	32 mm	125 mm	£85.34
EM-VBC32X160-S	32 mm	160 mm	£94.04
EM-VBC32X200-S	32 mm	200 mm	£94.04
EM-VBC32X250-S	32 mm	250 mm	£102.68
EM-VBC32X320-S	32 mm	320 mm	£115.06

**40 MM BORE**

EM-VBC40X25-S	40 mm	25 mm	£84.87
EM-VBC40X50-S	40 mm	50 mm	£84.85
EM-VBC40X80-S	40 mm	80 mm	£91.45
EM-VBC40X100-S	40 mm	100 mm	£91.45
EM-VBC40X125-S	40 mm	125 mm	£98.04
EM-VBC40X160-S	40 mm	160 mm	£105.14
EM-VBC40X200-S	40 mm	200 mm	£105.14
EM-VBC40X250-S	40 mm	250 mm	£113.84
EM-VBC40X320-S	40 mm	320 mm	£138.25

**50 MM BORE**

EM-VBC50X25-S	50 mm	25 mm	£113.23
EM-VBC50X50-S	50 mm	50 mm	£113.23
EM-VBC50X80-S	50 mm	80 mm	£121.48
EM-VBC50X100-S	50 mm	100 mm	£121.48
EM-VBC50X125-S	50 mm	125 mm	£129.71
EM-VBC50X160-S	50 mm	160 mm	£137.96
EM-VBC50X200-S	50 mm	200 mm	£137.96
EM-VBC50X250-S	50 mm	250 mm	£147.01
EM-VBC50X320-S	50 mm	320 mm	£166.35

**63 MM BORE**

EM-VBC63X25-S	63 mm	25 mm	£135.20
EM-VBC63X50-S	63 mm	50 mm	£135.20
EM-VBC63X80-S	63 mm	80 mm	£144.80
EM-VBC63X100-S	63 mm	100 mm	£144.80
EM-VBC63X125-S	63 mm	125 mm	£154.37
EM-VBC63X160-S	63 mm	160 mm	£166.87
EM-VBC63X200-S	63 mm	200 mm	£166.87
EM-VBC63X250-S	63 mm	250 mm	£181.77
EM-VBC63X320-S	63 mm	320 mm	£207.64
EM-VBC63X400-S	63 mm	400 mm	£226.33
EM-VBC63X500-S	63 mm	500 mm	£255.94

**80 MM BORE**

PART NUMBER	BORE	STROKE	PRICE
EM-VBC80X25-S	80 mm	25 mm	£174.44
EM-VBC80X50-S	80 mm	50 mm	£174.44
EM-VBC80X80-S	80 mm	80 mm	£190.08
EM-VBC80X100-S	80 mm	100 mm	£190.08
EM-VBC80X125-S	80 mm	125 mm	£205.75
EM-VBC80X160-S	80 mm	160 mm	£220.26
EM-VBC80X200-S	80 mm	200 mm	£220.26
EM-VBC80X250-S	80 mm	250 mm	£240.00
EM-VBC80X320-S	80 mm	320 mm	£275.51
EM-VBC80X400-S	80 mm	400 mm	£301.91
EM-VBC80X500-S	80 mm	500 mm	£343.96

**100 MM BORE**

EM-VBC100X25-S	100 mm	25 mm	£222.78
EM-VBC100X50-S	100 mm	50 mm	£222.78
EM-VBC100X80-S	100 mm	80 mm	£239.29
EM-VBC100X100-S	100 mm	100 mm	£239.29
EM-VBC100X125-S	100 mm	125 mm	£255.76
EM-VBC100X160-S	100 mm	160 mm	£274.69
EM-VBC100X200-S	100 mm	200 mm	£274.69
EM-VBC100X250-S	100 mm	250 mm	£297.00
EM-VBC100X320-S	100 mm	320 mm	£335.03
EM-VBC100X400-S	100 mm	400 mm	£363.76
EM-VBC100X500-S	100 mm	500 mm	£408.33

**125 MM BORE**

EM-VBC125X50-S	125 mm	50 mm	£377.59
EM-VBC125X80-S	125 mm	80 mm	£404.42
EM-VBC125X100-S	125 mm	100 mm	£404.42
EM-VBC125X125-S	125 mm	125 mm	£431.28
EM-VBC125X160-S	125 mm	160 mm	£458.15
EM-VBC125X200-S	125 mm	200 mm	£458.15
EM-VBC125X250-S	125 mm	250 mm	£484.96
EM-VBC125X320-S	125 mm	320 mm	£533.78
EM-VBC125X400-S	125 mm	400 mm	£560.54
EM-VBC125X500-S	125 mm	500 mm	£620.40

For cylinder dimensional drawings please see page 347

EMC-FVBC SERIES

**FVBC**

(mm)

Bore/Sign	A	B	C	D	E	F	G	H	I	J	K	L	N	O	P	Q	R	S	T	V	W	X	Z
32	142	48	94	30	29	19	27.5	22	17	6	M10x1.25	M6 Dp.16	13	1/8"	5.5	6	6	46.5	32.5	12	10	3	30
40	159	54	105	35	33	21	32	24	17	7	M12x1.25	M6 Dp.16	17	1/4"	6	7.5	8.5	54	38	16	13	3.5	35
50	175	69	106	40	42	27	31	32	23	8	M16x1.5	M8 Dp.16	15.5	1/4"	7.5	6.5	9.5	64	46.5	20	17	3.5	40
63	190	69	121	45	42	27	33	32	23	8	M16x1.5	M8 Dp.16	16.5	3/8"	7.5	7.5	11.5	75	56.5	20	17	4	45
80	214	86	128	45	53	33	33	40	26	10	M20x1.5	M10 Dp.17	16.5	3/8"	8	8.5	12.5	93	72	25	22	4	45
100	229	91	138	55	55	36	37	40	26	10	M20x1.5	M10 Dp.17	19.5	1/2"	10	7	12	110	89	25	22	4	55

Note: With magnet and without magnet, the dimensions are same.

EMC-VBC SERIES

**VBC**

(mm)

Bore/Sign	A	B	C	D	E	F	G	H	I	J	K	L	N	O	P	Q	R	S	T	V	W	X	Y
32	142	48	94	30	29	19	27.5	22	17	6	M10x1.25	M6 depth16	13	1/8"	5.5	6	6	47	32.5	12	10	3	30
40	159	54	105	35	33	21	32	24	17	7	M12x1.25	M6 depth16	17	1/4"	6	7.5	8.5	53	38	16	13	3.5	35
50	175	69	106	40	42	27	31	32	23	8	M16x1.5	M8 depth16	15.5	1/4"	7.5	6.5	9.5	65	46.5	20	17	3.5	40
63	190	69	121	45	42	27	33	32	23	8	M16x1.5	M8 depth16	16.5	3/8"	7.5	7.5	11.5	75	56.5	20	17	4	45
80	214	86	128	45	53	33	33	40	26	10	M20x1.5	M10 depth17	16.5	3/8"	9	7.5	13.5	95	72	25	22	4	45
100	229	91	138	55	55	36	37	40	26	10	M20x1.5	M10 depth17	18.5	1/2"	9.5	8.5	13.5	115	89	25	22	4	55
125	279	119	160	60	74	45	46	54	41	13.5	M27x2.0	M12 depth20	23	1/2"	14	12	14	140	110	32	27	-	-
160	332	152	180	85	94	58	50	72	55	18	M36x2.0	M16 depth24	25	3/4"	15	12	20	180	140	40	36	-	-
200	347	167	180	75	110	57	50	72	55	18	M36x2.0	M16 depth24	25	3/4"	-	-	-	220	175	40	36	-	-
250	388	188	200	90	121	67	52	84	65	21	M42x2.0	M20 depth25	26.5	1"	20.5	7.5	21	270	220	50	45	10	90

Note: With magnet and without magnet, the dimensions are same.



## SQN COMPACT SERIES

### DESCRIPTION

The SQN series compact pneumatic cylinder has a bore size ranging from 12 to 100 mm. All dynamic seals are imported and are lubricated with grease. The cylinder features robust, self-lubricating bronze bearings, providing high guiding performance and concentricity. Its piston rod and rod connection have a rotary riveting structure that ensures high concentricity, smooth running, and low starting pressure.

The compact cylinder has slots for three-sided magnetic switches for easier mounting. The rear cap and cylinder body are riveted together, ensuring superior assembling reliability. The front cap and barrel are connected by a buckle, making maintenance easier.

### FEATURES

- All dynamic seals from Japan, with German grease, longer life
- Strong self-lubricating bronze bearings, high lateral loading performance
- Piston rod & rod connection is rotary riveted, high concentricity
- Rear cover & body are riveted together, reliable

### SPECIFICATIONS

Cylinder type	Double acting, magnetic positioning
Max. working pressure	10 bar
Operating temperature	-20°C to +80°C (dry air)
Available bore size	ø16, ø20, ø25, ø32, ø40, ø50 mm
Available stroke length	0 – 50 mm
Cushion type	Anti-bump cushioning
Mounting type	Through hole mounting



3620



3620

### SQN SERIES DIAMOND PROFILE CYLINDER

#### 16 MM BORE

PART NUMBER	BORE	STROKE	PRICE
EM-SQN16X30-S	16 mm	30 mm	£30.11

#### 20 MM BORE

EM-SQN20X10-S	20 mm	10 mm	£26.52
EM-SQN20X15-S	20 mm	15 mm	£27.72
EM-SQN20X20-S	20 mm	20 mm	£28.93
EM-SQN20X25-S	20 mm	25 mm	£30.14
EM-SQN20X30-S	20 mm	30 mm	£31.34
EM-SQN20X40-S	20 mm	40 mm	£33.75
EM-SQN20X50-S	20 mm	50 mm	£36.17

#### 25 MM BORE

EM-SQN25X10-S	25 mm	10 mm	£27.72
EM-SQN25X15-S	25 mm	15 mm	£28.08
EM-SQN25X20-S	25 mm	20 mm	£30.14
EM-SQN25X25-S	25 mm	25 mm	£31.34
EM-SQN25X30-S	25 mm	30 mm	£31.59
EM-SQN25X40-S	25 mm	40 mm	£34.96
EM-SQN25X50-S	25 mm	50 mm	£37.37

### SQN SERIES SQUARE PROFILE CYLINDER

#### 32 MM BORE

PART NUMBER	BORE	STROKE	PRICE
EM-SQN32X10-S	32 mm	10 mm	£33.02
EM-SQN32X15-S	32 mm	15 mm	£34.58
EM-SQN32X20-S	32 mm	20 mm	£36.17
EM-SQN32X25-S	32 mm	25 mm	£37.73
EM-SQN32X30-S	32 mm	30 mm	£39.29
EM-SQN32X40-S	32 mm	40 mm	£42.44
EM-SQN32X50-S	32 mm	50 mm	£45.58

#### 40 MM BORE

EM-SQN40X10-S	40 mm	10 mm	£40.14
EM-SQN40X15-S	40 mm	15 mm	£41.73
EM-SQN40X20-S	40 mm	20 mm	£43.29
EM-SQN40X25-S	40 mm	25 mm	£44.85
EM-SQN40X30-S	40 mm	30 mm	£46.44
EM-SQN40X40-S	40 mm	40 mm	£49.57
EM-SQN40X50-S	40 mm	50 mm	£52.70

#### 50 MM BORE

EM-SQN50X10-S	50 mm	10 mm	£47.18
EM-SQN50X15-S	50 mm	15 mm	£49.28
EM-SQN50X20-S	50 mm	20 mm	£51.37
EM-SQN50X25-S	50 mm	25 mm	£53.47
EM-SQN50X30-S	50 mm	30 mm	£55.04
EM-SQN50X40-S	50 mm	40 mm	£59.24
EM-SQN50X50-S	50 mm	50 mm	£63.45

Additional strokes available on all bore sizes

## SF SERIES

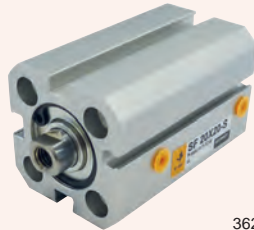
### DESCRIPTION

The SF series ISO21287 is a standard compact pneumatic cylinder with a bore size ranging from 20 to 100 mm. The cylinder is designed to be more robust with self-lubricating bronze bearings that provide high guiding performance. The piston rod and rod connection are designed with a rotary riveting structure to ensure high concentricity, smooth running, and low starting pressure.

The compact cylinder features slots for four-sided magnetic switches and has various mountings that make installation easy. The rear cap and cylinder body are riveted for superior assembling reliability, while the front cap and barrel are connected by a buckle for easier maintenance.

### SPECIFICATIONS

Cylinder type	Double acting, magnetic positioning
Max. working pressure	10 bar
Operating temperature	-20°C to +80°C (dry air)
Available bore size	ø20 – 100 mm
Available stroke length	10 – 50 mm
Cushion type	Rubber



### FEATURES / BENEFITS

- ISO21287 standard cylinder
- Compact structure, 50% space saving compared to ISO15552 standard pneumatic cylinders
- Double-ended cushion gasket, provides smooth reversing, less impact & mechanical damage
- Rotary riveted piston rod & rod connection, offering high concentricity
- Riveted rear cover & body for reliability

### Do you also need?



### Speed controllers

Find it on pages 497 – 501, section eight

### SF SERIES

#### 20 MM BORE

3620

PART NUMBER	BORE	STROKE	PRICE
EM-SF20X10-S	20 mm	10 mm	£32.41
EM-SF20X15-S	20 mm	15 mm	£33.38
EM-SF20X20-S	20 mm	20 mm	£34.45
EM-SF20X25-S	20 mm	25 mm	£35.31
EM-SF20X30-S	20 mm	30 mm	£36.27
EM-SF20X40-S	20 mm	40 mm	£38.20
EM-SF20X50-S	20 mm	50 mm	£40.12

#### 25 MM BORE

EM-SF25X10-S	25 mm	10 mm	£37.67
EM-SF25X15-S	25 mm	15 mm	£38.79
EM-SF25X20-S	25 mm	20 mm	£39.90
EM-SF25X25-S	25 mm	25 mm	£41.01
EM-SF25X30-S	25 mm	30 mm	£42.12
EM-SF25X40-S	25 mm	40 mm	£44.35
EM-SF25X50-S	25 mm	50 mm	£46.59

#### 32 MM BORE

EM-SF32X10-S	32 mm	10 mm	£40.58
EM-SF32X15-S	32 mm	15 mm	£41.56
EM-SF32X20-S	32 mm	20 mm	£42.52
EM-SF32X25-S	32 mm	25 mm	£43.48
EM-SF32X30-S	32 mm	30 mm	£44.45
EM-SF32X40-S	32 mm	40 mm	£46.37
EM-SF32X50-S	32 mm	50 mm	£48.27

#### 40 MM BORE

3620

PART NUMBER	BORE	STROKE	PRICE
EM-SF40X10-S	40 mm	10 mm	£43.16
EM-SF40X15-S	40 mm	15 mm	£44.26
EM-SF40X20-S	40 mm	20 mm	£45.36
EM-SF40X25-S	40 mm	25 mm	£46.47
EM-SF40X30-S	40 mm	30 mm	£47.61
EM-SF40X40-S	40 mm	40 mm	£47.57
EM-SF40X50-S	40 mm	50 mm	£52.06

#### 50 MM BORE

EM-SF50X10-S	50 mm	10 mm	£51.99
EM-SF50X15-S	50 mm	15 mm	£53.36
EM-SF50X20-S	50 mm	20 mm	£54.72
EM-SF50X25-S	50 mm	25 mm	£56.08
EM-SF50X30-S	50 mm	30 mm	£57.47
EM-SF50X40-S	50 mm	40 mm	£60.21
EM-SF50X50-S	50 mm	50 mm	£62.93

#### 63 MM BORE

EM-SF63X10-S	63 mm	10 mm	£64.67
EM-SF63X15-S	63 mm	15 mm	£66.41
EM-SF63X20-S	63 mm	20 mm	£68.14
EM-SF63X25-S	63 mm	25 mm	£69.84
EM-SF63X30-S	63 mm	30 mm	£71.58
EM-SF63X40-S	63 mm	40 mm	£75.03
EM-SF63X50-S	63 mm	50 mm	£78.47

Additional strokes available on all bore sizes

## EXS-M SERIES

### DESCRIPTION

The EXS-M is a precision-guided cylinder with twin rods and a slide bearing. Its double-cylinder design increases its force output while maintaining a compact profile and good resistance to side loads. The cylinder has multiple mounting points and an adjustable return stroke cushion that can be set between 0 and 5 mm.

### SPECIFICATIONS

Cylinder type	Double acting, magnetic positioning
Max. working pressure	10 bar
Operating temperature	-20°C to +80°C (dry air)
Available bore sizes	ø6 – 32 mm
Available stroke length	10 – 200 mm
Cushion type	Cushioned both ends, adjustable on return stroke 0 – 5 mm



3660

### EXS SERIES GUIDED CYLINDER 10 MM BORE

PART NUMBER	BORE	STROKE	PRICE
EM-EXSM10X25-S	10 mm	25 mm	£152.91
EM-EXSM10X75-S	10 mm	75 mm	£196.79

### 16 MM BORE

EM-EXSM16X25-S	16 mm	25 mm	£161.57
EM-EXSM16X50-S	16 mm	50 mm	£177.75
EM-EXSM16X75-S	16 mm	75 mm	£208.31

### 20 MM BORE

EM-EXSM20X10-S	20 mm	10 mm	£187.54
EM-EXSM20X25-S	20 mm	25 mm	£217.57
EM-EXSM20X50-S	20 mm	50 mm	£240.64
EM-EXSM20X75-S	20 mm	75 mm	£199.65

### 25 MM BORE

EM-EXSM25X25-S	25 mm	25 mm	£228.52
EM-EXSM25X50-S	25 mm	50 mm	£259.68
EM-EXSM25X75-S	25 mm	75 mm	£256.22

### 32 MM BORE

EM-EXSM32X25-S	32 mm	25 mm	£301.80
EM-EXSM32X50-S	32 mm	50 mm	£337.02
EM-EXSM32X75-S	32 mm	75 mm	£337.02

Alternative stroke sizes available upon request

## SGM SERIES

### DESCRIPTION

The SGM cylinder is a heavy-duty triple rod with a slide bearing, offering strong resistance to side loads and easy installation with multiple mounting points.

### SPECIFICATIONS

Cylinder type	Double acting, magnetic positioning
Max. working pressure	10 bar
Operating temperature	-20°C to +80°C (dry air)
Available bore sizes	ø12 – 63 mm
Available stroke sizes	5 – 250 mm
Cushion type	Rubber cushioned



3660

### SGM SERIES TRIPLE ROD GUIDED CYLINDER 12 MM BORE

PART NUMBER	BORE	STROKE	PRICE
EM-SGM12X25-S	12 mm	25 mm	£116.28
EM-SGM12X50-S	12 mm	50 mm	£127.90
EM-SGM12X75-S	12 mm	75 mm	£179.78

### 16 MM BORE

EM-SGM16X25-S	16 mm	25 mm	£126.33
EM-SGM16X50-S	16 mm	50 mm	£138.98
EM-SGM16X75-S	16 mm	75 mm	£186.44

### 20 MM BORE

EM-SGM20X25-S	20 mm	25 mm	£144.24
EM-SGM20X50-S	20 mm	50 mm	£162.77
EM-SGM20X75-S	20 mm	75 mm	£172.82

### 25 MM BORE

EM-SGM25X25-S	25 mm	25 mm	£172.27
EM-SGM25X50-S	25 mm	50 mm	£192.37
EM-SGM25X75-S	25 mm	75 mm	£202.90

### 32 MM BORE

EM-SGM32X25-S	32 mm	25 mm	£275.56
EM-SGM32X50-S	32 mm	50 mm	£249.45
EM-SGM32X75-S	32 mm	75 mm	£287.46

### 40 MM BORE

EM-SGM40X25-S	40 mm	25 mm	£294.97
EM-SGM40X50-S	40 mm	50 mm	£266.34
EM-SGM40X75-S	40 mm	75 mm	£363.85

### 50 MM BORE

EM-SGM50X25-S	50 mm	25 mm	£335.72
EM-SGM50X50-S	50 mm	50 mm	£364.81
EM-SGM50X75-S	50 mm	75 mm	£413.35

### 63 MM BORE

EM-SGM63X25-S	63 mm	25 mm	£388.12
EM-SGM63X50-S	63 mm	50 mm	£423.04
EM-SGM63X75-S	63 mm	75 mm	£487.57

## ISO 6432 STANDARD MINI CYLINDER ACCESSORIES – IASB, IAS, IA SERIES

### FOOT MOUNTS PAIR



PART NUMBER	CYLINDER BORE	PRICE
EM-FJ-IA12LB	12 mm / 16 mm	£5.43
EM-FJ-IA20LB	20 mm / 25 mm	£5.96

### SINGLE ROD FORK END



PART NUMBER	CYLINDER BORE	THREAD	PRICE
EM-FJ-M6X1IJ	12 mm / 16 mm	M6 x 1	£4.91
EM-FJ-M8X1.25IJ	20 mm	M8 x 1.25	£6.14
EM-FJ-M10X1.25IJ	25 mm	M10 x 1.25	£7.54

### REAR CLEVIS



PART NUMBER	CYLINDER BORE	PRICE
EM-FJ-IA12SDB	12 mm / 16 mm	£10.92
EM-FJ-IA20SDB	20 mm / 25 mm	£10.92

### MAGNETIC SWITCH



PART NUMBER	DESCRIPTION	PRICE
EM-HX-13D	2 wire without contact switch 10 – 28 V DC, 2 m lead	£26.76
EM-HX-13N	NPN type 3 wire 5 – 30 V DC, 2 m lead	£43.65
EM-HX-13P	PNP type 3 wire 5 – 30 V DC, 2 m lead	£43.65
EM-HX-13R	2 wire reed switch 5 – 240 V AC/DC, 2 m lead	£19.30

New  
Additions

### FLANGE MOUNTING



PART NUMBER	CYLINDER BORE	PRICE
EM-FJ-IA12FA	12 mm / 16 mm	£6.65
EM-FJ-IA20FA	20 mm / 25 mm	£7.30

### ROD FORK END



PART NUMBER	CYLINDER BORE	THREAD	PRICE
EM-FJ-M6X1YCJ	12 mm / 16 mm	M6 x 1	£5.67
EM-FJ-M8X1.25YCJ	20 mm	M8 x 1.25	£7.30

### FIXED STEEL BELT LENGTH TYPE FOR HX-13



PART NUMBER	BORE	PRICE
EM-PAB-13	6 to 63 mm	£3.42

New

### ROD EYE



PART NUMBER	CYLINDER BORE	THREAD	PRICE
EM-FJ-M6X1BJ	12 mm / 16 mm	M6 x 1	£6.19
EM-FJ-M8X1.25BJ	20 mm	M8 x 1.25	£6.67

### Do you also need?



25 mm  
rod fork end

Find it on page 352, section six

### Do you also need?



25 mm rod eye

Find it on page 352, section six

## ISO 15552 / VDMA CYLINDER ACCESSORIES

### FEMALE REAR TRUNNION & PIN



3610

PART NUMBER	CYLINDER BORE	PRICE
EM-FJ-VBC32CB	32 mm	£11.04
EM-FJ-VBC40CB	40 mm	£12.15
EM-FJ-VBC50CB	50 mm	£17.12
EM-FJ-VBC63CB	63 mm	£20.39
EM-FJ-VBC80CB	80 mm	£25.29
EM-FJ-VBC100CB	100 mm	£39.89
EM-FJ-VBC125CB	125 mm	£58.09

### ROD FORK END

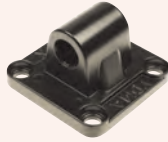


3610

PART NUMBER	CYLINDER BORE	THREAD	PRICE
EM-FJ-M10X1.25YCJ*	32 mm	M10 x 1.25	£10.28
EM-FJ-M12X1.25YCJ	40 mm	M12 x 1.25	£14.60
EM-FJ-M16X1.5YCJ	50 mm / 63 mm	M16 x 1.5	£20.80
EM-FJ-M20X1.5YCJ	80 mm / 100 mm	M20 x 1.5	£33.94
EM-FJ-M27X2YCJ	125 mm	M27 x 2	£82.24

\* EM-FJ-M10X1.25YCJ is also suitable for 25 mm IASB, IAS, IA series mini cylinders

### MALE REAR TRUNNION



3610

PART NUMBER	CYLINDER BORE	PRICE
EM-FJ-VBC32CA	32 mm	£10.11
EM-FJ-VBC40CA	40 mm	£11.04
EM-FJ-VBC50CA	50 mm	£13.32
EM-FJ-VBC63CA	63 mm	£16.59
EM-FJ-VBC80CA	80 mm	£29.03
EM-FJ-VBC100CA	100 mm	£31.37
EM-FJ-VBC125CA	125 mm	£44.68

### ROD EYE



3610

PART NUMBER	CYLINDER BORE	THREAD	PRICE
EM-FJ-M10X1.25BJ*	32 mm	M10 x 1.25	£8.94
EM-FJ-M12X1.25BJ	40 mm	M12 x 1.25	£9.29
EM-FJ-M16X1.5BJ	50 mm / 63 mm	M16 x 1.5	£16.12
EM-FJ-M20X1.5BJ	80 mm / 100 mm	M20 x 1.5	£25.23
EM-FJ-M27X2BJ	125 mm	M27 x 2	£65.83

\* EM-FJ-M10X1.25BJ is also suitable for 25 mm IASB, IAS, IA series mini cylinders

### 90° MALE REAR TRUNNION



3610

PART NUMBER	CYLINDER BORE	PRICE
EM-FJ-VBC32CR	32 mm	£11.63
EM-FJ-VBC40CR	40 mm	£14.66
EM-FJ-VBC50CR	50 mm	£20.15
EM-FJ-VBC63CR	63 mm	£25.64
EM-FJ-VBC80CR	80 mm	£37.85
EM-FJ-VBC100CR	100 mm	£51.34
EM-FJ-VBC125CR	125 mm	£65.83

### ROD FLOATING JOINT



3610

PART NUMBER	CYLINDER BORE	THREAD	PRICE
EM-FJ-M10X1.25FD	32 mm	M10 x 1.25	£17.88
EM-FJ-M12X1.25FD	40 mm	M12 x 1.25	£22.61
EM-FJ-M16X1.5FD	50 mm / 63 mm	M16 x 1.5	£38.26
EM-FJ-M20X1.5FD	80 mm / 100 mm	M20 x 1.5	£49.88
EM-FJ-M27X2FD	125 mm	M27 x 2	£105.54

### FRONT & REAR FLANGE



3610

PART NUMBER	CYLINDER BORE	PRICE
EM-FJ-VBC32FA	32 mm	£15.54
EM-FJ-VBC40FA	40 mm	£18.11
EM-FJ-VBC50FA	50 mm	£25.88
EM-FJ-VBC63FA	63 mm	£31.08
EM-FJ-VBC80FA	80 mm	£46.67
EM-FJ-VBC100FA	100 mm	£62.21
EM-FJ-VBC125FA	125 mm	£69.81

### FOOT MOUNTS PAIR



3610

PART NUMBER	CYLINDER BORE	PRICE
EM-FJ-VBC32LB	32 mm	£5.61
EM-FJ-VBC40LB	40 mm	£8.41
EM-FJ-VBC50LB	50 mm	£11.16
EM-FJ-VBC63LB	63 mm	£16.77
EM-FJ-VBC80LB	80 mm	£19.57
EM-FJ-VBC100LB	100 mm	£22.37
EM-FJ-VBC125LB	125 mm	£41.90



**FVBC SERIES  
MAGNETIC SWITCH**

3610

PART NUMBER	DESCRIPTION	PRICE
EM-HX-31R	2 wire reed auto switch SPST normally open Operating voltage 5 – 240 V DC/AC Red LED indicator, 2 m lead IP67 rated surge protection	£15.14
EM-HX-31N	NPN 3 wire solid state auto switch Normally open (input) Operating voltage 5 – 30 V DC Red LED indicator, 2 m lead IP67 rated surge protection	£41.56
EM-HX-31P	PNP 3 wire solid state auto switch Normally open (output) Operating voltage 5 – 30 V DC Red LED indicator, 2 m lead IP67 rated surge protection	£41.56



**HX-07 MAGNETIC SWITCH  
FOR USE WITH  
SQ, SGM & EXH SERIES**

3620

PART NUMBER	DESCRIPTION	PRICE
EM-HX-07R	Standard 2 wire reed switch Normally open Operating voltage 5 – 240 V DC/AC Red LED indicator, 2 m lead IP67 rated	£13.19
EM-HX-07N	NPN 3 wire solid state auto switch Normally open (input) Operating voltage 5 – 30 V DC Red LED indicator, 2 m lead IP67 rated surge protection	£37.99
EM-HX-07P	PNP 3 wire solid state auto switch Normally open (output) Operating voltage 5 – 30 V DC Red LED indicator, 2 m lead IP67 rated surge protection	£37.99



**VBC SERIES  
HX21 SWITCH CLAMP  
ALUMINIUM ALLOY**

3610

PART NUMBER	BORE	PRICE
EM-PI-1	32 mm / 40 mm	£3.51
EM-IH-50	50 mm	£3.51
EM-IH-63	63 mm	£3.51
EM-PI-3	80 mm	£6.37
EM-PI-4	100 mm	£6.37
EM-PI-5	125 mm	£11.46



**CYLINDER SEAL KIT  
SUITABLE FOR VBC & FVBC SERIES**

3610

PART NUMBER	BORE SIZE	PRICE
EM-VBC32-XLB	32 mm	£15.19
EM-VBC40-XLB	40 mm	£18.93
EM-VBC50-XLB	50 mm	£22.66
EM-VBC63-XLB	63 mm	£25.99
EM-VBC80-XLB	80 mm	£31.48
EM-VBC100-XLB	100 mm	£36.04
EM-VBC125-XLB	125 mm	£21.26



**VBC SERIES  
MAGNETIC SWITCH**

3610

PART NUMBER	DESCRIPTION	PRICE
EM-HX-21R	Standard 2 wire reed switch Normally open Operating voltage 5 – 240 V DC/AC 2 m lead IP67 rated surge protection	£12.59
EM-HX-21N	NPN 3 wire solid state auto switch Normally open (input) Operating voltage 5 – 30 V DC Red LED indicator, 2 m lead IP67 rated surge protection	£39.83
EM-HX-21P	PNP 3 wire solid state auto switch Normally open (output) Operating voltage 5 – 30 V DC Red LED indicator, 2 m lead IP67 rated surge protection	£39.83

Do you also need?



**Cylinders**



Find it on pages 342 – 350, section six



# Camozzi Cylinders

Series 16, 24, and 25 cylinders are designed to comply with the European Standard Specifications CETOP RP52-P and DIN/ISO 6432. They are made from high-quality materials and are highly versatile and reliable. The head and cap of each cylinder are precisely crimped to ensure perfect alignment of all parts.

Series 16 and 24 cylinders can operate at very high speeds. Bumpers are added to the piston to reduce noise and wear caused by high-impact loads. The Series 24 cylinder can accommodate magnetic proximity switches. The Series 31 single and double-acting magnetic cylinders are compact and can be installed in tight spaces. These cylinders come with feet brackets and guides inserted in the external profile parallel to the sliding axis on three sides. The guides are used to locate the switches that sense the piston position. The construction design of these cylinders provides excellent axis stability. The Series 32 cylinders are compact and can be installed in confined spaces.

The Series 61 cylinders comply with the dimensions in the ISO 15552 standards. These cylinders have a permanent magnet mounted on the piston that enables information to be received regarding the piston position using proximity switches mounted in grooves along the cylinder profile. The grooves can be covered with a slot cover profile. This cylinder series is equipped with adjustable end-stroke and mechanical cushioning to reduce the impact of the piston as it reaches the end of the stroke.

The Series 63 pneumatic cylinders have been developed per the ISO 15552 standard to ensure high performance and versatility. These cylinders feature a new system of adjustable pneumatic cushioning that provides the best regulation while significantly reducing the noise caused by the impact of the piston on the end block.



## ISO 6432 MINI CYLINDERS – SERIES 16, 24, 25

<b>001 Code</b>	Z Camozzi Cylinder
<b>002 Series</b>	16 Non magnetic 24 Magnetic 25 Magnetic, adjustable cushioning
<b>003 Version</b>	N Standard
<b>004 Operation</b>	1 Single-acting, front spring, no cushion 2 Double-acting 3 Double-acting, through-rod 7 Single-acting, through-rod
<b>005 Materials</b>	A Rolled 303 stainless steel rod, 304 stainless steel tube, anodised aluminium end-blocks
<b>006 Bore Size (mm)</b>	.. 8, 10, 12, 16, 20, 25
<b>007 Construction</b>	A Nose nut Mod. V + Piston rod lock nut Mod. U RL Cylinder with rod lock ø20 - ø25
<b>008 Stroke (mm)</b>	... See standard strokes table (right)

<b>001</b>	<b>002</b>	<b>003</b>	<b>004</b>	<b>005</b>	<b>006</b>	<b>007</b>	<b>008</b>
Z		N		A			



STANDARD STROKES		Series	Ø	10	25	40	50	80	100	125	160	200	250	300	320	400	500
16	8		●	●	●	●	●	●	■	■	■	■					
16	10		●	●	●	●	●	●	■	■	■	■					
16	12		●	●	●	●	●	●	■	■	■	■					
24	16		●	●	●	●	●	●	■	■	■	■					
24	20		●	●	●	●	●	●	■	■	■	■					
24	25		●	●	●	●	●	●	■	■	■	■					
25	16		●	●	●	●	●	●	■	■	■	■					
25	20		●	●	●	●	●	●	■	■	■	■					
25	25		●	●	●	●	●	●	■	■	■	■					

■ Double-acting      ● Single-acting

Please contact your distributor for further information

## COMPACT CYLINDERS – SERIES 31

<b>001 Code</b>	Z Camozzi Cylinder
<b>002 Series</b>	31 Compact magnetic
<b>003 Version</b>	M Male rod thread, mounted with rod nut Mod. U F Female rod thread R Non-rotating with flange only double-acting
<b>004 Operation</b>	1 Single-acting, front spring 2 Double-acting 3 Double-acting, through-rod 4 Single-acting, rear spring 7 Single-acting, through-rod
<b>005 Materials</b>	A Rolled 303 stainless steel rod – Aluminium tube profile
<b>006 Bore Size (mm)</b>	... 12, 16, 20, 25, 32, 40, 50, 63, 080, 100
<b>007 Design Type</b>	A Standard
<b>008 Stroke (mm)</b>	... See standard strokes table (right)

<b>001</b>	<b>002</b>	<b>003</b>	<b>004</b>	<b>005</b>	<b>006</b>	<b>007</b>	<b>008</b>
Z	31			A		A	



STANDARD STROKES		Ø	5	10	15	20	25	30	40	50	60	80
12	●	●	●	●	●	●	●	●	●	●		
16	●	●	●	●	●	●	●	●	●	●		
20	●	●	●	●	●	●	●	●	●	●	●	
25	●	●	●	●	●	●	●	●	●	●	●	
32	●	●	●	●	●	●	●	●	●	●	●	
40	●	●	●	●	●	●	●	●	●	●	●	●
50		●	●	●	●	●	●	●	●	●	●	●
63		●	●	●	●	●	●	●	●	●	●	●
80		●	●	●	●	●	●	●	●	●	●	●
100		●	●	●	●	●	●	●	●	●	●	●

■ Double-acting female, male      x Non-rotating      ● Single-acting female, male

Please contact your distributor for further information



## ISO 21287 COMPACT CYLINDERS – SERIES 32

<b>001 Code</b>	Z Camozzi Cylinder
<b>002 Series</b>	32 Compact magnetic
<b>003 Version</b>	M Male rod thread, mounted with rod nut Mod. U F Female rod thread R Antirotation with flange (not for single-acting version)
<b>004 Operation</b>	1 Single-acting, front spring 2 Double-acting 3 Double-acting, through-rod 4 Single-acting, rear spring
<b>005 Materials</b>	A Anodised aluminium body, end blocks & piston, PU seals (rod, end-blocks OR & piston)
<b>006 Bore Size (mm)</b>	... 20, 25, 32, 40, 50, 63, 80, 100
<b>007 Construction</b>	A Standard
<b>008 Stroke (mm)</b>	... See standard strokes table (right)

<b>001</b>	<b>002</b>	<b>003</b>	<b>004</b>	<b>005</b>	<b>006</b>	<b>007</b>	<b>008</b>
Z	32			A		A	



STANDARD STROKES										
Ø	5	10	15	20	25	30	40	50	60	80
20	■ x	■ x	■ x	■ x	■ x	x	x	x		
25	■ x	■ x	■ x	■ x	■ x	x	x	x		
32	■ x	■ x	■ x	■ x	■ x	x	x	x	x	x
40	■ x	■ x	■ x	■ x	■ x	x	x	x	x	x
50		■ x	■ x	■ x	■ x	x	x	x	x	x
63		■ x	■ x	■ x	■ x	x	x	x	x	x
80		■ x	■ x	■ x	■ x	x	x	x	x	x
100		■ x	■ x	■ x	■ x	x	x	x	x	x

■ Single-acting, front / rear spring, male / female rod thread      x Non-rotating      ● Double-acting, female, male rod thread

## ISO 15552 ALUMINIUM PROFILE CYLINDERS – SERIES 61

<b>001</b>	<b>002</b>	<b>003</b>	<b>004</b>	<b>005</b>	<b>006</b>	<b>007</b>	<b>008</b>	<b>009</b>
Z	61							



STANDARD STROKES														
Ø	25	50	75	80	100	125	150	160	200	250	300	320	400	500
32	■ x	■ x	■ x	x	x	x	x	x	x	x	x	x	x	x
40	■ x	■ x	■ x	x	x	x	x	x	x	x	x	x	x	x
50	■ x	■ x	■ x	x	x	x	x	x	x	x	x	x	x	x
63	■ x	■ x	■ x	x	x	x	x	x	x	x	x	x	x	x
80	■ x	■ x	■ x	x	x	x	x	x	x	x	x	x	x	x
100	■ x	■ x	x	x	x	x	x	x	x	x	x	x	x	x
125		x	x	x	x	x	x	x	x	x	x	x	x	x

■ Single-acting      x Double-acting

Please contact your distributor for further information

<b>001 Code</b>	Z Camozzi Cylinder
<b>002 Series</b>	61 ISO 15552 Aluminium Profile
<b>003 Version</b>	M Standard, magnetic L Low friction, magnetic
<b>004 Operation</b>	1 Single-acting, front spring (ø 32 ± ø 100) 2 Double-acting, front & rear cushioned 3 Double-acting, no cushion 4 Double-acting, rear cushioned 5 Double-acting, front cushioned 6 Double-acting, through-rod, front & rear cushioned 7 Single-acting, through-rod 8 Double-acting, through-rod, no cushion
<b>005 Materials</b>	P See specifications table R 420B stainless steel tie-rods, 303 stainless steel tie-rod nuts, other materials (see specifications table) C Rolled 303 stainless steel piston rod, 304 stainless steel piston rod nut U Rolled 303 stainless steel piston rod, stainless steel 304 piston-rod nut, stainless steel 420B tie-rods, stainless steel 303 tie-rod nuts W Rolled 304 stainless steel piston rod, stainless steel 304 piston-rod nut, 420B stainless steel tie-rods, 303 stainless steel tie-rod nuts Z Chrome plated 420B stainless steel rod, 304 stainless steel rod nut, 420B stainless steel tie-rods, 303 stainless steel tie-rods nuts, seals for low temperature (-40°C), brass rod scraper Y Chrome plated 420B stainless steel rod, 304 stainless steel rod nut, 420B stainless steel tie-rods, 303 stainless steel tie-rods nuts, seals for low temperature (-50°C), brass rod scraper

<b>006 Bore Size (mm)</b>	... 32, 40, 50, 63, 80, 100, 125
<b>007 Design Type</b>	A Standard with rod nut RL Cylinder with rod lock
<b>008 Stroke (mm)</b>	... See standard strokes table (above)
<b>009 Seals</b>	Standard V FKM rod seal N Tandem R NBR rod seal W All FKM seals +130°C C PU coated cylinder. Colour: Grey * L Low friction version without rod seal (rear supply only) ** ( _ _ _ ) = extended piston rod _ _ _ mm G with brass rod scraper (chrome plated 420B stainless steel rod, NBR rod seal)

## ISO 15552 ALUMINIUM TUBE & PROFILE CYLINDERS – SERIES 63

001	002	003	004	005	006	007	008	009	010	011	012	013	014
Z	63												

<b>001 Code</b>	Z Camozzi Cylinder
<b>002 Series</b>	63 ISO 15552 Cylinder
<b>003 Version</b>	M Standard, magnetic V Uniform movement (no stick slip), magnetic L Low friction, magnetic
<b>004 Construction</b>	T Round tube P Profile
<b>005 Operation</b>	1 Single-acting, front spring 2 Double-acting 6 Double-acting, through-rod 7 Single-acting, through-rod 9 Single-acting, rear spring
<b>006 Cushioning</b>	N No cushioning (mechanical endstops) C Cushioning on both sides F Front cushioning R Rear cushioning
<b>007 Bore Size (mm)</b>	... 32, 40, 50, 63, 80, 100, 125
<b>008 Construction</b>	A Standard with rod nut RL Cylinder with rod lock DC Back to back cylinder with DC accessory [X1/X2] TR Back to back cylinder for round tube [X1/X2] F Cylinder with centre trunnion
<b>009 Stroke (mm)</b>	.... Standard – See standard strokes table (right) N Tandem / More positions X1/X2 [X1<X2]
<b>010 Temperature Range</b>	Standard (-20°/+80°) W High temperatures (150°C) Z Low temperatures (-40°C) Y Low temperatures (-50°C)
<b>011 Resistance to Corrosion</b>	Standard C1 Rod nut 304 stainless steel, rod 304 stainless steel C2 End cap treated screws (profile) or stainless steel 303 tie-rods & stainless steel 420B tie-rods (round tube) C3 C2 + AISI 316 rod nut, stainless steel 316 rod C4 C1 + C2 C5 C3 + end caps with triple protection



STANDARD STROKES														
Ø	25	50	75	80	100	125	150	160	200	250	300	320	400	500
32	■●x	■●x	■x	x	x	x	x	x	x	x	x	x	x	x
40	■●x	■●x	■x	x	x	x	x	x	x	x	x	x	x	x
50	■●x	■●x	■x	x	x	x	x	x	x	x	x	x	x	x
63	■●x	■●x	■x	x	x	x	x	x	x	x	x	x	x	x
80	■●x	■●x	■x	x	x	x	x	x	x	x	x	x	x	x
100		■●x	■x	x	x	x	x	x	x	x	x	x	x	x
125		■●x	■x	x	x	x	x	x	x	x	x	x	x	x

■ Single-acting, front spring      x Double-acting      ● Single-acting, rear spring

Please contact your distributor for further information

<b>012 Rod Variations</b>	Standard (male rod thread) F Female rod thread K End caps with Kanigen treatment L Without rod seal (rear air inlet only) V FKM rod seal R NBR rod seal U Unlubricated operation H Hydrolytic environment A Use in food & other frequent washdown applications G Dry & dusty environments (with brass rod scraper & chrome-plated 420B stainless steel rod) B Cylinder with NBR bellow rod protection B2 Cylinder with through rod & NBR bellow rod protection on both sides ( _ _ _ ) = extended rod _ _ _ mm
<b>013 Other</b>	P Cylinder with RAL 7035 polyurethane coating
<b>014 Certification</b>	EX ATEX

## FOOT MOUNTS PAIR



PART NUMBER	CYLINDER BORE	SERIES	PRICE
ZB-8-10	8 – 10 mm	16	£6.17
ZB-12/16	12 – 16 mm	16, 24, 25	£7.93
ZB-20-25	20 – 25 mm	16, 24, 25	£9.06

## FOOT MOUNTS PAIR



PART NUMBER	CYLINDER BORE	SERIES	PRICE
ZB-32-20	20 mm	32	£3.90
ZB-31-25	25 mm	32	£4.12
ZB-41-32	32 mm	32, 61, 63	£10.08
ZB-41-40	40 mm	32, 61, 63	£11.54
ZB-41-50	50 mm	32, 61, 63	£12.85
ZB-41-63	63 mm	32, 61, 63	£16.30
ZB-41-80	80 mm	32, 61, 63	£19.56
ZB-41-100	100 mm	32, 61, 63	£28.75

## COUNTER BRACKET PAIR



PART NUMBER	CYLINDER BORE	SERIES	PRICE per pair
ZBF-32	32 mm	61	£43.03
ZBF-40-50	40 – 50 mm	61	£53.81
ZBF-63-80	63 – 80 mm	61	£64.15
ZBF-100-125	100 – 125 mm	61	£78.11

## FEMALE REAR TRUNNION



PART NUMBER	CYLINDER BORE	SERIES	PRICE
ZC-41-32	32 mm	32, 61, 63	£13.07
ZC-41-40	40 mm	32, 61, 63	£14.71
ZC-41-50	50 mm	32, 61, 63	£17.89

## FEMALE FRONT & REAR TRUNNION



PART NUMBER	CYLINDER BORE	SERIES	PRICE
ZCH-41-63	63 mm	32, 61, 63	£22.35
ZCH-41-80	80 mm	32, 61, 63	£27.97
ZCH-41-100	100 mm	32, 61, 63	£39.17

## FRONT & REAR FLANGE



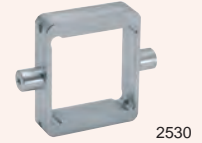
PART NUMBER	CYLINDER BORE	SERIES	PRICE
ZDE-32-20	20 mm	32	£21.22
ZDE-32-25	25 mm	32	£22.16
ZDE-41-32	32 mm	32, 61	£11.54
ZDE-41-40	40 mm	32, 61	£12.67
ZDE-41-50	50 mm	32, 61	£15.51
ZDE-41-63	63 mm	32, 61	£18.41
ZDE-41-80	80 mm	32, 61	£26.48
ZDE-41-100	100 mm	32, 61	£34.61

## FLANGE MOUNTING



PART NUMBER	CYLINDER BORE	SERIES	PRICE
ZE-8-10	8 – 10 mm	16	£2.79
ZE-12/16	12 – 16 mm	16, 24, 25	£3.31
ZE-20/25	20 – 25 mm	16, 24, 25	£4.60

## CENTRE TRUNNION



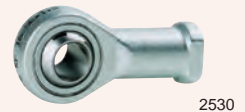
PART NUMBER	CYLINDER BORE	SERIES	PRICE
ZF-61-32	32 mm	61	£85.16
ZF-61-40	40 mm	61	£92.53
ZF-61-50	50 mm	61	£107.44
ZF-61-63	63 mm	61	£127.31
ZF-61-80	80 mm	61	£155.82
ZF-61-100	100 mm	61	£176.98

## ROD FORK END



PART NUMBER	CYLINDER BORE	SERIES	PRICE
ZG-8-10	8 – 10 mm	16	£5.93
ZG-12-16	12 – 16 mm	16	£4.14
ZG-20	20 mm	16, 24, 32, 35	£4.25
ZG-25-32	25 – 32 mm	16, 24, 25, 32, 61, 63	£3.84
ZG-40	40 mm	32, 61, 63	£5.93
ZG-50-63	50 – 63 mm	32, 61, 63	£13.44
ZG-80-100	80 – 100 mm	32, 61, 63	£22.91

## ROD EYE



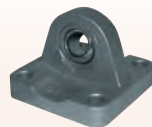
PART NUMBER	CYLINDER BORE	SERIES	PRICE
ZGA-32	32 mm	61, 63	£24.08
ZGA-40	40 mm	61, 63	£28.48
ZGA-50-63	50 – 63 mm	61, 63	£63.20
ZGA-80-100	80 – 100 mm	61, 63	£81.47



2530

### PISTON ROD SOCKET JOINT

PART NUMBER	CYLINDER BORE	SERIES	PRICE
ZGY-32	32 mm	61, 63	£25.80
ZGY-40	40 mm	61, 63	£33.92
ZGY-50-63	50 – 63 mm	61, 63	£52.21
ZGY-80-100	80 – 100 mm	61, 63	£77.83



2530

### TRUNNION BALL JOINT

PART NUMBER	CYLINDER BORE	SERIES	PRICE
ZR-41-32	32 mm	61, 63	£29.48
ZR-41-40	40 mm	61, 63	£30.88
ZR-41-50	50 mm	61, 63	£33.81
ZR-41-63	63 mm	61, 63	£44.45
ZR-41-80	80 mm	61, 63	£52.85
ZR-41-100	100 mm	61, 63	£71.37



2530

### FEMALE FRONT TRUNNION

PART NUMBER	CYLINDER BORE	SERIES	PRICE
ZH-41-32	32 mm	61, 63	£13.07
ZH-41-40	40 mm	61, 63	£14.71
ZH-41-50	50 mm	61, 63	£17.87
ZH-41-63	63 mm	61, 63	£22.35



2530

### TRUNNION PIN

PART NUMBER	CYLINDER BORE	SERIES	PRICE
ZS-32	32 mm	32, 61, 63	£3.70
ZS-40	40 mm	32, 61, 63	£4.35
ZS-50	50 mm	32, 61, 63	£4.52
ZS-63	63 mm	32, 61, 63	£6.12
ZS-80	80 mm	32, 61, 63	£6.68
ZS-100	100 mm	32, 61, 63	£7.80



2530

### TRUNNION BRACKET

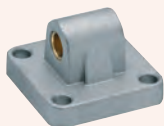
PART NUMBER	CYLINDER BORE	SERIES	PRICE
ZI-8-10	8 – 10 mm	16	£6.58
ZI-12/16	12 – 16 mm	16, 24, 25	£6.73
ZI-20/25	20 – 25 mm	16, 24, 25	£8.86



2530

### LOCKING NUT

PART NUMBER	CYLINDER BORE	SERIES	PRICE
ZU-25-32	25 – 32 mm	24, 25, 61, 63	£0.58
ZU-40	40 mm	61, 63	£0.88
ZU-50-63	50 – 63 mm	61, 63	£1.39
ZU-80-100	80 – 100 mm	61, 63	£2.07



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### MALE REAR TRUNNION

PART NUMBER	CYLINDER BORE	SERIES	PRICE
ZL-32-20	20 mm	32	£18.05
ZL-32-25	25 mm	32	£19.44
ZL-41-32	32 mm	32, 61, 63	£13.07
ZL-41-40	40 mm	32, 61, 63	£14.71
ZL-41-50	50 mm	32, 61, 63	£19.56
ZL-41-63	63 mm	32, 61, 63	£22.91
ZL-41-80	80 mm	32, 61, 63	£29.40
ZL-41-100	100 mm	32, 61, 63	£41.91



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### 90° MALE TRUNNION

PART NUMBER	CYLINDER BORE	SERIES	PRICE
ZZC-32	32 mm	32	£17.12
ZZC-40	40 mm	32	£23.89
ZZC-50	50 mm	32	£25.61
ZZC-63	63 mm	32	£38.42
ZZC-80	80 mm	32	£38.39
ZZC-100	100 mm	32	£58.80

## MAGNETIC PROXIMITY SWITCHES

### DESCRIPTION

The SK – CSV sensors are designed to fit into the grooves provided in the profile barrel of compact, rodless & ISO cylinders or on the surface of roundline & tie rod cylinders by using mounting bands or brackets.



**SWITCHES  
REED**

2530

PART NUMBER	SLOT	WIRE	VOLTAGE	CABLE	PRICE
ZSKR2C01200	T	2	3 – 130 V AC/DC	2 m	£28.85
ZCSV-220	V	2	10 – 110 V AC/DC	2 m	£29.33
ZSKR3C01200	T	3	5 – 30 V AC/DC	2 m	£42.91
ZCSV-232	V	3	5 – 30 V AC/DC	2 m	£36.01
ZSKR6C01500	T	2	5 – 230 V AC/DC	5 m	£92.12



**SWITCHES  
REED WITH M8 CONNECTOR**

2530

PART NUMBER	SLOT	WIRE	VOLTAGE	CABLE	PRICE
ZSKR2C01M8	T	2	5 – 50 V AC/DC	0.3 m	£50.42
ZCSV-250N	V	2	10 – 110 V AC/DC	0.3 m	£47.60
ZSKR3C01M8	T	3	5 – 30 V AC/DC	0.3 m	£52.65
ZCSV-262	V	3	5 – 30 V AC/DC	0.3 m	£49.38

### MAGNETO RESISTIVE – PNP

PART NUMBER	SLOT	WIRE	VOLTAGE	CABLE	PRICE
ZSKH3C01200	T	3	3 – 28 V DC	2 m	£62.78
ZCSV-332	V	3	10 – 27 V DC	2 m	£47.60

Six

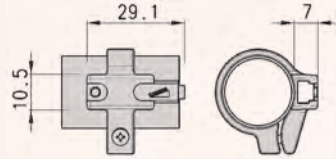


**SWITCHES  
FOR USE WITH SERIES 63  
PROFILE CYLINDERS**

2530

PART NUMBER	SLOT	WIRE	VOLTAGE	CABLE	PRICE
ZCSH-223-2	H	2	10 – 30 V AC/DC	2 m	£23.44
ZCSH-233-2	H	3	10 – 30 V AC/DC	2 m	£27.02

### BRACKETS – FOR USE WITH T SLOT TYPE SWITCHES



**FOR SERIES 16, 24**

2530

PART NUMBER	BORE	PRICE
ZSF16	16 mm	£4.42
ZSF20	20 mm	£4.42
ZSF25	25 mm	£4.42

### Do you also need?



### Cylinders & accessories



Find it on pages 354 – 360, section six



# Festo Pneumatic Cylinders



Energy Efficient

- ★ Innovative, industry leading, precision engineering
- ★ Extensive range of high quality Festo components
- ★ Single components to complete turnkey solutions

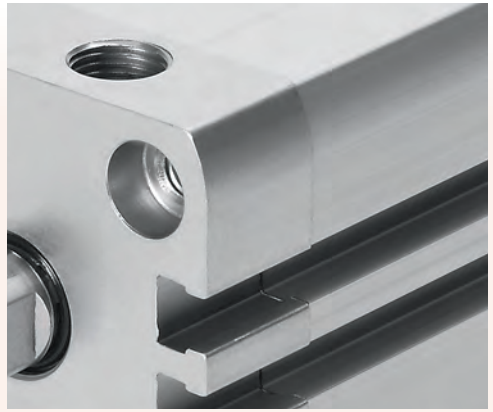
Typical uses of pneumatic cylinders include clamping, lifting, countersinking, pushing, pulling, feeding, turning, gripping, holding, joining, stopping, stamping, and embossing.

**Festo pneumatic cylinders increase safety with optional integrated braking modules for emergency stops.**

- High holding force
- Dynamic braking function
- Holding brake – Emergency stop function for braking and holding a movement in the event of pressure loss
- Double acting
- Extensive range of accessories to make installation possible virtually anywhere
- Contactless position sensing
- Self-adjusting cushioning

**Save energy with Festo's range of energy efficient profile cylinders!**

Festo's innovative cylinders can help you save significantly on compressed air consumption. You can save energy costs by adequately sizing pneumatic cylinders and reducing compressed air pressure. With every one-bar reduction in operating pressure, you can save up to 14% on compressed air costs. Festo DSBC cylinders are designed with high-integrity seals that prevent compressed air leaks, saving you considerable money over time.





## STANDARD-BASED CYLINDERS DSNU, TO ISO 6432, DOUBLE-ACTING

001 002 003 004 005

DSNU -  -  -  -

Mandatory entry

Optional entry



### STANDARD CONFIGURATION

<b>001</b>	<b>Type</b>
DSNU	Double-acting standard-based cylinder
<b>002</b>	<b>Bore Size (mm)</b>
...	8, 10, 12, 16, 20, 25
<b>003</b>	<b>Stroke (mm)</b>
...	10, 15, 20, 25, 30, 35, 40, 50, 60, 70, 80, 100, 125, 150, 160, 200, 250, 300, 320
<b>004</b>	<b>Cushioning</b>
P	Elastic cushioning rings / plates at both ends
PPV	Pneumatic cushioning adjustable at both ends
PPS	Pneumatic cushioning, self-adjusting at both ends
<b>005</b>	<b>Position Sensing</b>
-	None
A	Via proximity switch

### FEATURES

- ISO 6432
- Wide range of variants for customised applications
- Good running performance & long service life
- Self-adjusting pneumatic end-position cushioning saves time during commissioning & adapts optimally to load & speed changes
- Piston rod with male thread
- For position sensing

DSNU-S ultra short range available on request

### PRODUCT OPTIONS

1 ... 500 mm maximum stroke	
MQ	Alternative plain cylinder end cap, lateral connection
MA	Alternative plain cylinder end cap, axial connection
MH	Alternative cylinder end cap, direct mounting
Q	With protection against rotation
S2	Through piston rod
S6	Heat-resistant seals up to max. 120°C
S10	Slow speed
S11	Low friction
KP	With clamping unit
K2	Extended male piston rod thread
K3	Female piston rod thread
K5	Special piston rod thread
K6	Shortened male piston rod thread
K8	Extended piston rod
R3	High corrosion protection
KP	Clamping unit on the piston rod

Please contact your distributor for further information

## ROUND CYLINDERS DSNU, DOUBLE-ACTING

001 002 003 004 005

DSNU -  -  -  -  - A



### STANDARD CONFIGURATION

<b>001</b>	<b>Type</b>
DSNU	Double acting round cylinder
<b>002</b>	<b>Bore Size (mm)</b>
...	32, 40, 50, 63
<b>003</b>	<b>Stroke (mm)</b>
...	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 100, 125, 150, 160, 200, 250, 300, 320
<b>004</b>	<b>Cushioning</b>
P	Elastic cushioning rings / plates at both ends
PPV	Pneumatic cushioning adjustable at both ends
PPS	Pneumatic cushioning, self-adjusting at both ends
<b>005</b>	<b>Position Sensing</b>
A	Via proximity switch

### FEATURES

- Wide range of variants for customised applications
- Good running performance & long service life
- Self-adjusting pneumatic end-position cushioning saves time during commissioning & adapts optimally to load & speed changes
- Piston rod with female or male thread
- For position sensing

### PRODUCT OPTIONS

1 ... 500 mm maximum stroke	
MQ	Alternative plain cylinder end cap, lateral connection
MA	Alternative plain cylinder end cap, axial connection
MH	Alternative cylinder end cap, direct mounting
Q	With protection against rotation
S2	Through piston rod
S6	Heat-resistant seals up to max. 120°C
S10	Slow speed
S11	Low friction
KP	With clamping unit
K2	Extended male piston rod thread
K3	Female piston rod thread
K5	Special piston rod thread
K6	Shortened male piston rod thread
K8	Extended piston rod
R3	High corrosion protection
R8	Dust protection (scraper)
A6	Metal scraper
KP	Clamping unit on the piston rod

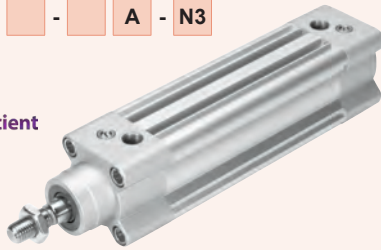
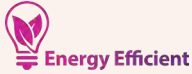
Please contact your distributor for further information



STANDARD-BASED CYLINDERS DSBC, TO ISO 15552, DOUBLE-ACTING

001 002 003 004 005 006

DSBC - - - A - N3



FEATURES

- ISO 15552 (ISO 6431, VDMA 24562)
- Self-adjusting pneumatic end-position cushioning saves time during commissioning & adapts optimally to load & speed changes
- Standard profile with two sensor slots
- Wide range of variants for customised applications
- Comprehensive range of mounting accessories for just about every type of installation
- For position sensing
- Variants with copper & zinc content less than 1% – recommended for production facilities for manufacturing lithium-ion batteries
- Male thread piston rod at one end

STANDARD CONFIGURATION

<b>001</b>	<b>Type</b>
<b>DSBC</b>	Double-acting standard-based cylinder
<b>002</b>	<b>Bore Size (mm)</b>
...	32, 40, 50, 63, 80, 100, 125
<b>003</b>	<b>Stroke (mm)</b>
...	20, 25, 30, 40, 50, 60, 70, 80, 100, 125, 150, 160, 200, 250, 300, 320, 400, 500
<b>004</b>	<b>Cushioning</b>
<b>PPV</b>	Pneumatic cushioning, adjustable at both ends
<b>PPS</b>	Pneumatic cushioning, self-adjusting at both ends
<b>005</b>	<b>Position Sensing</b>
<b>A</b>	Via proximity switch
<b>006</b>	<b>Standard</b>
<b>N3</b>	Conforms to ISO 15552

Please contact your distributor for further information

PRODUCT OPTIONS

1 ...	2800 mm maximum stroke
Q	With protection against rotation
L	Running characteristic low friction
U	Constant, slow movement
L1	Low friction for balancer applications
C	Clamping unit attached
E1	End-position locking at both ends
E2	End-position locking with advanced piston rod
E3	End-position locking with retracted piston rod
T	Through piston rod
F	Female piston rod thread
D3	Sensor slot on 3 sides of the profile
P	Elastic cushioning rings / plates both ends
R3	High corrosion protection
T1	Heat-resistant seals up to max. 120°C
T3	Low temperature -40 ... +80°C
T4	Temperature range 0 ... +150°C
P2	Bellows on bearing cap
A1	Increased chemical resistance
A2	Hard scraper
A3	Suitable for unlubricated operation
A6	Metal scraper
F1A	Recommended for production facilities for manufacturing lithium-ion batteries (Cu<=1%, Zn<=1%, Ni<=1%)
EX4	EU certification (II 2GD)
E...	Extended piston rod 1 ... 500 mm
...L	Extended piston rod thread 0 ... 70 mm



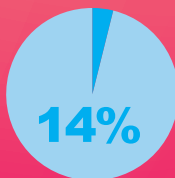
Energy Efficient

Industries' growing awareness about climate protection, energy prices, and rising cost pressures has made energy efficiency a key focus.

The DSBC cylinder has been designed with high-integrity seals to reduce compressed air leaks, saving money.

Properly sizing pneumatic cylinders and reducing compressed air pressure can significantly save energy costs.

Every one-bar reduction in operating pressure can result in a 14% reduction in compressed air costs.



Do you also need?



Energy saving regulator LRL, LRL L

- Constant differential pressure between input & output
- Cuts energy usage on cylinder return stroke approx. 20%
- Connecting thread M5, R1/8", R1/4", R3/8", R1/2"
- Push-in connector for tube OD 4, 6, 8, 10, 12 mm
- Rotatable 360°



Please contact your distributor for further information



## COMPACT CYLINDERS ADN, TO ISO 21287, DOUBLE-ACTING



001 002 003 004 005 006

ADN - - - - - A



### FEATURES

- ISO 21287
- Up to 50% less installation space than comparable standards-based cylinders to ISO 15552
- Piston rod with female or male thread
- Wide range of variants for customised applications
- For position sensing

ADN-S ultra short range available on request

### STANDARD CONFIGURATION

001	Type
ADN	Double-acting compact cylinder, to ISO 21287
002	Bore Size (mm)
...	12, 16, 20, 25, 32, 40, 50, 63, 80
003	Stroke (mm)
...	5, 10, 15, 20, 25, 30, 40, 50, 60, 80
004	Piston Rod Thread Type
A	Male Thread
I	Female thread
005	Cushioning
P	Elastic cushioning rings / plates at both ends
PPS	Pneumatic cushioning, self-adjusting at both ends
006	Position Sensing
A	Via proximity switch

Please contact your distributor for further information

### PRODUCT OPTIONS

100, 125 mm bore sizes	
1 ... 500 mm maximum stroke	
F1A	Recommended for production facilities for manufacturing lithium-ion batteries (Cu<=1%, Zn<=1%, Ni<=1%)
Q	Square piston rod
K8	Extended piston rod
S1	Reinforced piston rod
S2	Through piston rod
S20	Through, hollow piston rod
K2	Extended male piston rod thread
K5	Special piston rod thread
K10	Smooth anodised aluminium piston rod
S6	Heat-resistant seals up to max. 120°C
S10	Constant, slow movement
S11	Low friction
R3	High corrosion protection
R8	Dust protection
TL	Laser etched rating plate
TT	Low temperature -40 ... +80°C
KP	With clamping unit, attached
EL...	With end-position locking

## MINI SLIDE



001 002 003 004 005 006 007 008

DGST - - - - - - -



### FEATURES

- Compact mini slide
- Slide & yoke plate as a single component
- Excellent value for money
- High feed forces
- Symmetrical mounting interfaces
- Precise & resilient roller bearing guide
- Simple design with symmetrical mounting interfaces
- Can be operated without additional cushioning components

Please contact your distributor for further information

### STANDARD CONFIGURATION

001	Type
DGST	Mini Slide
002	Bore Size (mm)
...	6, 8, 10, 12, 16, 20, 25
003	Stroke (mm)
...	10, 20, 30, 40, 50, 80, 100, 125, 150, 200
004	Version
	Standard
L	Mirror-inverted
005	Cushioning
P	Elastic cushioning rings / plates on both sides
P1	Elastomer cushioning, adjustable on both sides, with fixed stop
E	Elastomer cushioning, short, on both sides
E1	Elastomer cushioning, double-sided, stroke not adjustable
Y12	Shock absorber, self-adjusting, linear at both ends, external
006	Position Sensing
A	For proximity sensor
007	Special material properties
	None
F1A	Recommended for production facilities for the manufacture of lithium-ion batteries
008	Lubrication
	Standard
H1	Food-safe lubrication



DSBC, ADN & DSNU ACCESSORIES



3110

ROD FORK END

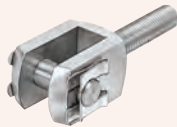
PART NUMBER	TYPE	BORE SIZE FOR DSBC	BORE SIZE FOR ADVC	PRICE
FES6532	SG-M4	-	10 mm	£3.50
FES3110	SG-M6	-	16 mm	£3.50
FES3111	SG-M8	-	20, 25 mm	£3.84
FES6144	SG-M10x1,25	32 mm	32, 40 mm	£5.81
FES6145	SG-M12x1,25	40 mm	50, 63 mm	£8.20
FES6146	SG-M16x1,5	50, 63 mm	80, 100 mm	£14.47
FES6147	SG-M20x1,5	80, 100 mm	125 mm	£38.73
FES14987	SG-M27x2-B	125 mm	-	£93.88



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ROD FLOATING JOINT

PART NUMBER	TYPE	PRICE
FES6528	FK-M4	£18.82
FES30984	FK-M5	£18.82
FES2061	FK-M6	£19.00
FES2062	FK-M8	£22.43
FES2063	FK-M10	£30.05
FES6140	FK-M10x1,25	£30.05
FES2064	FK-M12	£30.34
FES6141	FK-M12x1,25	£30.34
FES2065	FK-M16	£71.61
FES6142	FK-M16x1,5	£71.61
FES6143	FK-M20x1,5	£78.49
FES10746	FK-M36x2	£371.20



3110

ROD CLEVIS

PART NUMBER	TYPE	FOR BORE	PRICE
FES32954	SGA-M10X1,25	32, 40 mm	£74.75
FES10767	SGA-M12X1,25	50, 63 mm	£90.44
FES10768	SGA-M16X1,5	80, 100 mm	£99.11



3110

REAR CLEVIS

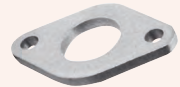
PART NUMBER	TYPE	FOR BORE	PRICE
FES6057	LBN-8/10	8, 10 mm	£7.32
FES6058	LBN-12/16	12, 16 mm	£8.20
FES6059	LBN-20/25	20, 25 mm	£9.07
FES195860	LBN-32	32 mm	£13.23
FES195861	LBN-40	40 mm	£17.00
FES195862	LBN-50/63	50, 63 mm	£22.28



3110

FOOT MOUNTS  
2 PIECES

PART NUMBER	TYPE	FOR BORE	PRICE
FES5124	HBN-8/10X2	8, 10 mm	£4.44
FES5126	HBN-12/16X2	12, 16 mm	£5.47
FES5128	HBN-20/25X2	20, 25 mm	£7.32



3110

FLANGE MOUNTING

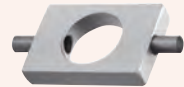
PART NUMBER	TYPE	FOR BORE	PRICE
FES5129	FBN-8/10	8, 10 mm	£2.23
FES5130	FBN-12/16	12, 16 mm	£2.28
FES5131	FBN-20/25	20, 25 mm	£2.43



3110

ROD EYE

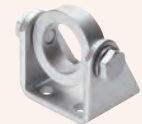
PART NUMBER	TYPE	PRICE
FES9253	SGS-M4	£13.11
FES9254	SGS-M6	£14.10
FES9255	SGS-M8	£15.45
FES9261	SGS-M10x1,25	£22.57
FES9262	SGS-M12x1,25	£28.44
FES9258	SGS-M16	£44.87
FES9263	SGS-M16X1,5	£44.87
FES9264	SGS-M20X1,5	£55.77



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CENTRE TRUNNION

PART NUMBER	TYPE	FOR BORE	PRICE
FES8608	WBN-8/10	8, 10 mm	£17.73
FES8609	WBN-12/16	12, 16 mm	£18.18
FES8610	WBN-20/25	20, 25 mm	£18.59



3110

SWIVEL MOUNTING

PART NUMBER	TYPE	FOR BORE	PRICE
FES539927	SBN-20/25	20, 25 mm	£17.00



3110

FOOT MOUNTS  
PAIR

PART NUMBER	TYPE	FOR BORE	PRICE
FES174369	HNC-32	32 mm	£14.13
FES174370	HNC-40	40 mm	£15.11
FES174371	HNC-50	50 mm	£17.73
FES174372	HNC-63	63 mm	£20.20
FES174373	HNC-80	80 mm	£29.29
FES174374	HNC-100	100 mm	£35.02



DSBC & ADN ACCESSORIES



FRONT & REAR FLANGE

PART NUMBER	TYPE	FOR BORE	PRICE
FES174376	FNC-32	32 mm	£20.66
FES174377	FNC-40	40 mm	£21.52
FES174378	FNC-50	50 mm	£25.76
FES174379	FNC-63	63 mm	£33.41
FES174380	FNC-80	80 mm	£38.37
FES174381	FNC-100	100 mm	£50.09
FES174382	FNC-125	125 mm	£82.15



RIGHT ANGLE CLEVIS FOOT

PART NUMBER	TYPE	FOR BORE	PRICE
FES31768	LQG-32	32 mm	£86.00
FES31769	LQG-40	40 mm	£90.30
FES31770	LQG-50	50 mm	£117.53
FES31771	LQG-63	63 mm	£120.74
FES31772	LQG-80	80 mm	£134.30
FES31773	LQG-100	100 mm	£148.92



FRONT REAR TRUNNION

PART NUMBER	TYPE	FOR BORE	PRICE
FES174390	SNCB-32	32 mm	£21.08
FES174391	SNCB-40	40 mm	£22.14
FES174392	SNCB-50	50 mm	£27.97
FES174393	SNCB-63	63 mm	£34.57
FES174394	SNCB-80	80 mm	£44.38
FES174395	SNCB-100	100 mm	£62.98
FES174396	SNCB-125	125 mm	£112.33



MALE REAR TRUNNION

PART NUMBER	TYPE	FOR BORE	PRICE
FES174404	SNCL-32	32 mm	£21.08
FES174405	SNCL-40	40 mm	£22.14
FES174406	SNCL-50	50 mm	£27.97
FES174407	SNCL-63	63 mm	£34.57
FES174408	SNCL-80	80 mm	£44.38
FES174409	SNCL-100	100 mm	£62.98
FES174410	SNCL-125	125 mm	£112.33



FOOT MOUNTS PAIR

PART NUMBER	TYPE	FOR BORE	PRICE
FES537237	HNA-12	12 mm	£6.13
FES537238	HNA-16	16 mm	£6.44
FES537239	HNA-20	20 mm	£7.17
FES537240	HNA-25	25 mm	£7.25
FES537241	HNA-32	32 mm	£11.86
FES537242	HNA-40	40 mm	£14.06
FES537243	HNA-50	50 mm	£15.11
FES537244	HNA-63	63 mm	£18.18
FES537249	HNA-80	80 mm	£27.97
FES537250	HNA-100	100 mm	£33.69



MULTI-POSITION KIT

PART NUMBER	TYPE	FOR BORE	PRICE
FES174422	DPNC-80	80 mm	£80.27
FES174423	DPNC-100	100 mm	£94.90



90° REAR TRUNNION

PART NUMBER	TYPE	FOR BORE	PRICE
FES33890	LNG-32	32 mm	£23.69
FES33891	LNG-40	40 mm	£27.35
FES33892	LNG-50	50 mm	£31.69
FES33893	LNG-63	63 mm	£33.56
FES33894	LNG-80	80 mm	£47.05
FES33895	LNG-100	100 mm	£55.99
FES33896	LNG-125	125 mm	£86.76



MULTI-POSITION KIT

PART NUMBER	TYPE	FOR BORE	PRICE
FES537263	DPNA-12	12 mm	£28.42
FES537264	DPNA-16	16 mm	£28.68
FES537265	DPNA-20	20 mm	£29.88
FES537266	DPNA-25	25 mm	£33.83
FES537267	DPNA-32	32 mm	£37.19
FES537268	DPNA-40	40 mm	£42.19
FES537269	DPNA-50	50 mm	£47.33
FES537270	DPNA-63	63 mm	£54.48
FES537271	DPNA-80	80 mm	£70.31
FES537272	DPNA-100	100 mm	£77.91



PROXIMITY SENSORS

FEATURES

- Switching output via reed contact or non-contacting
- Insertable in the slot from above, does not protrude over the cylinder profile
- Suitable for use with energy chains
- Cable clip & inscription labels included in the scope of delivery
- With switching status display
- Types in accordance with ATEX directive for potentially explosive atmospheres

FEATURES

- Magneto-resistive
- Ex2 II 3GD in accordance with EU Directive 94/9/EC

SPECIFICATIONS

Design	8M	For T-slot, insertable in the slot from above
	10M	For C-slot, insertable in the slot from above
Switching output, switching element function	ZS	N/O contact, 2-wire
	PS	PNP, N/O contact, 3-wire
	NS	NPN, N/O contact, 3-wire
	PO	PNP, N/C contact, 3-wire
Rated operating voltage	24 V DC	
Cable characteristics	E Energy chain + robot	
Connection technology	OE	Open end
	M8	Cable with plug M8x1, snap-on flange
	M8D	Cable with plug M8x1, rotatable thread
	M12	Cable with plug M12x1, rotatable thread

PROXIMITY SENSOR  
SMT-8



3110

PART NUMBER	TYPE	CABLE LENGTH	PRICE
FES574334	SMT-8M-A-PS-24V-E-0,3-M8D	0.3 m	£32.73
FES574337	SMT-8M-A-PS-24V-E-0,3-M12	0.3 m	£33.89
FES574335	SMT-8M-A-PS-24V-E-2,5-OE	2.5 m	£31.55
FES574336	SMT-8M-A-PS-24V-E-5,0-OE	5.0 m	£34.48
FES574342*	SMT-8M-A-PS-24V-E-0,3-M8D-Ex2	0.3 m	£31.98
FES574340	SMT-8M-A-PO-24V-E-7,5-OE	7.5 m	£39.75
FES574338	SMT-8M-A-NS-24V-E-2,5-OE	2.5 m	£33.89
FES574339	SMT-8M-A-NS-24V-E-0,3-M8D	0.3 m	£35.07
FES574341*	SMT-8M-A-ZS-24V-E-5,0-OE-Ex2	5.0 m	£33.64

SMT-10

FES551379	SMT-10M-NS-24V-E-0,3-L-M8D	0.3 m	£44.63
FES551377	SMT-10M-NS-24V-E-2,5-L-OE	2.5 m	£43.46
FES551375	SMT-10M-PS-24V-E-0,3-L-M8D	0.3 m	£42.34
FES551373	SMT-10M-PS-24V-E-2,5-L-OE	2.5 m	£41.17
FES551382	SMT-10M-ZS-24V-E-2,5-L-OE	2.5 m	£41.17



\* FES574342 & FES574341 are ATEX approved

Six

PROXIMITY SENSOR ACCESSORIES FOR DSNU CYLINDERS



SMBR  
MOUNTING KIT

3110

PART NUMBER	TYPE	FOR BORE	PRICE
FES175091	SMBR-8-8	8 mm	£5.38
FES175092	SMBR-8-10	10 mm	£5.38
FES175093	SMBR-8-12	12 mm	£5.38
FES175094	SMBR-8-16	16 mm	£5.38
FES175095	SMBR-8-20	20 mm	£5.38
FES175096	SMBR-8-25	25 mm	£5.38

PROXIMITY SWITCH



DESCRIPTION

Electronic proximity switch for T-slot can be inserted from above; commissioning without a power supply is quick, easy & very reliable, without the need for precision adjustment or re-adjustment, either via auto teach-in or programming.

FEATURES

- Measuring principle: magnetic Hall
- Auto teach-in: automatic teach-in of the switching point at system start-up
- Programmable: PNP/NPN, NO/NC & switching window range between 2 ... 15 mm
- Insertable in the slot from above, screw-clamped
- LED status indicator



PROXIMITY SWITCHES  
FOR T-SLOT



3110

PART NUMBER	TYPE	CABLE LENGTH	PRICE
FES8059120	SDBT-MSX-1L-PU-E-0.3-N-M8	0.3 m	£38.51
FES8059121	SDBT-MSX-1L-PU-E-2.5-N-LE	2.5 m	£37.14
FES8059122	SDBT-MSX-1L-PU-E-5-N-LE	5.0 m	£40.56
FES8059123	SDBT-MSX-1L-NU-E-0.3-N-M8	0.3 m	£38.51
FES8059124	SDBT-MSX-1L-NU-E-2.5-N-LE	2.5 m	£37.14
FES8059125	SDBT-MSX-1L-NU-E-5-N-LE	5.0 m	£40.56

DFPD QUARTER TURN ACTUATORS



DESCRIPTION

The DFPD series features a rack & pinion combination with a constant torque characteristic across the entire swivel range. The quarter turn actuators DFPD are perfect for automating your butterfly valves, ball valves & dampers.

FEATURES

- Uniform torque characteristic across the entire rotation angle of 90° with the double-acting version
- Version with swivel angle 120°, 135°, 180° for the sizes 40, 120, 240, 480, double-acting
- Process valve connection to ISO 5211
- Mounting hole pattern to VDI/VDE 3845
- Sturdy, non-slip & easy-to-clean aluminium housing
- Long service life, low wear
- Increased corrosion protection

SPECIFICATIONS

Temperature range	-20°C to +80°C
Operating pressure	2 bar to 8 bar (29 psi to 116 psi)



3110

DFPD QUARTER TURN ACTUATORS

PART NUMBER	TYPE	BORE	PRICE
FES8048142	DFPD-480-RP-90-RS60-F1012	480 mm	£673.27
FES8048127	DFPD-480-RP-90-RD-F1012	480 mm	£573.04
FES8048140	DFPD-300-RP-90-RS60-F0710	300 mm	£406.12
FES8048126	DFPD-300-RP-90-RD-F0710	300 mm	£378.36
FES8048138	DFPD-240-RP-90-RS60-F0710	240 mm	£357.22
FES8048125	DFPD-240-RP-90-RD-F0710	240 mm	£327.03
FES8048136	DFPD-160-RP-90-RS60-F0710	160 mm	£292.95
FES8048124	DFPD-160-RP-90-RD-F0710	160 mm	£269.41
FES8048134	DFPD-120-RP-90-RS60-F0507	120 mm	£256.20
FES8048123	DFPD-120-RP-90-RD-F0507	120 mm	£236.20
FES8047626	DFPD-80-RP-90-RS60-F0507	80 mm	£204.51
FES8047616	DFPD-80-RP-90-RD-F0507	80 mm	£172.30
FES8047624	DFPD-40-RP-90-RS60-F0507	40 mm	£153.11
FES8047615	DFPD-40-RP-90-RD-F0507	40 mm	£125.31
FES8047622	DFPD-20-RP-90-RS60-F04	20 mm	£122.84
FES8047614	DFPD-20-RP-90-RD-F04	20 mm	£100.24
FES8047613	DFPD-10-RP-90-RD-F03	10 mm	£81.66

ACCESSORIES



FEATURES

- Digital, electropneumatic positioner
- Simple & efficient position control of single- & double-acting pneumatic rotary & linear drives
- With integrated or external path / angular detection
- Simple commissioning through automatic initialisation function
- Intuitive menu navigation
- 4-conductor technology
- Variants with safety functions



3110

POSITIONER

PART NUMBER	TYPE	PRICE
FES3929539	CMSX-P-SE-C-U-F1-D-130-A	£781.66
FES3929370	CMSX-P-S-C-U-F1-S-50-A	£556.70
FES3929313	CMSX-P-S-C-U-F1-D-50-A	£685.94
FES2110841	CMSX-P-S-C-U-F1-D-50-C-G1	£580.96

FEATURES

- Pre-assembled mounting adaptor for ease of installation
- The trip cams can be easily set without additional tools
- Sturdy, corrosion-resistant design, ideal for use in harsh ambient conditions
- Clearly visible 3D position indicator allows the current position of the quarter turn actuator to be quickly detected
- With safety functions
- Variants to EU Explosion Protection Directive (ATEX)



3110

LIMIT SWITCH BOX

PART NUMBER	TYPE	PRICE
FES3482807	SRBC-CA3-YR90-N-20N-ZC-C2P20	£177.08
FES3482808	SRBC-CA3-YR90-N-1-P-C2P20	£170.48
FES3482805	SRBC-CA3-YR90-MW-22A-1W-C2P20	£65.33

DHPC PARALLEL GRIPPERS



FEATURES

- Resilient & precise ball guide
- High gripping force & compact size
- Max. repetition accuracy
- Can be used as a double-acting or single-acting gripper
- Single-acting variant or with gripping force retention normally open (NO) or normally closed (NC)
- Suitable for external & internal gripping
- Wide variety of mounting & attachment options
- Sustainable in production thanks to reduced use of materials



3110

PARALLEL GRIPPERS

PART NUMBER	TYPE	SIZE	PRICE
FES8116753	DHPC-10-A-S	10 mm	£233.54
FES8116785	DHPC-16-A-S	16 mm	£235.01
FES8116817	DHPC-20-A-S	20 mm	£271.38
FES8116849	DHPC-25-A-S	25 mm	£319.38
FES8116881	DHPC-32-A-S	32 mm	£501.85

Alternative gripper designs DHDS, DHWC, DHRC, HGDS also available. Please contact your distributor for further information.



# E.MC Valves

E.MC is a precision-engineering manufacturer that produces components for the pneumatics industry. They use high-precision machinery to assemble every E.MC valve in their state-of-the-art facility, ensuring that each undergoes quality testing.

Pneumatic valves are crucial in controlling the amount and direction of airflow. They can function as control and safety valves to stop the air supply or depress the system during hazardous situations.

## Every valve consists of three elements:

- 1, A port is an opening with a thread into which a coupling can be inserted. Valves generally have 2, 3, or 5 ports. Two ports are the minimum requirement for powering the valve. The third port is used for exhausting the valve. If five ports are available, it is usually to control a double-acting cylinder.
- 2, The switching mechanism is contained in a housing, which directs compressed air to the correct working port. Different switching technologies allow for various functions and applications.
- 3, A controller ensures that the valve switches at the appropriate time. It can be operated manually, mechanically, pneumatically, or electrically.

## Available Ranges

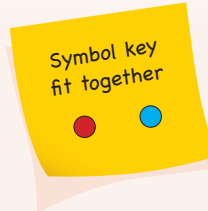
- 3/2, 5/2 and 5/3 pneumatically operated valves
- 3/2, 5/2 and 5/3 solenoid valves
- Manual and pneumatic-operated valves
- Manual and mechanical valves
- Automatic valves
- 3/2, 5/2 and 5/3 manual and pneumatic valves
- 3/2, 5/2, 5/3 and 4/3 manual and mechanical valves
- 3/2, 5/2 manual and mechanical valves
- 3/2, 5/2 manual valves



## RV SERIES

### SPECIFICATIONS

Working medium	Clean air
Working pressure	1.5 to 8 bar
Guaranteed pressure	12 bar
Working temperature	-20°C to +70°C (dry air)
Valve type	3/2, 5/2 & 5/3
Acting type	Internal pilot / external pilot type



### RV SERIES PILOT VALVE

3/2 SINGLE PILOT  
NORMALLY CLOSED  
SPRING RETURN



3630

RV SERIES PILOT VALVE  
5/3 DOUBLE PILOT  
CENTRE CLOSED



3630

PART NUMBER	FUNCTION	BODY SIZE	PORT SIZE	PRICE
● EM-RVA3211-06Q	3/2	18 mm	1/8"	£46.01
● EM-RVA3221-08Q	3/2	22 mm	1/4"	£43.73
● EM-RVA3231-10Q	3/2	27 mm	3/8"	£53.74
● EM-RVA3241-15	3/2	34 mm	1/2"	£86.31

\* Air return for products ending in Q

PART NUMBER	FUNCTION	BODY SIZE	EXHAUST INLET	PRICE
● EM-RVA5312C-06	5/3	18 mm	1/8" 1/8"	£110.65
● EM-RVA5322C-08	5/3	22 mm	1/8" 1/4"	£92.39
● EM-RVA5332C-10	5/3	27 mm	1/4" 3/8"	£120.16
● EM-RVA5342C-15	5/3	34 mm	1/2" 1/2"	£154.11

### RV SERIES PILOT VALVE

3/2 DOUBLE PILOT  
NORMALLY CLOSED



3630

RV SERIES PILOT VALVE  
5/3 DOUBLE PILOT  
PRESSURED CENTRE



3630

PART NUMBER	FUNCTION	BODY SIZE	PORT SIZE	PRICE
● EM-RVA3212-06	3/2	18 mm	1/8"	£61.78
● EM-RVA3222-08	3/2	22 mm	1/4"	£63.60
● EM-RVA3232-10	3/2	27 mm	3/8"	£75.46
● EM-RVA3242-15	3/2	34 mm	1/2"	£114.97

PART NUMBER	FUNCTION	BODY SIZE	EXHAUST INLET	PRICE
● EM-RVA5312P-06	5/3	18 mm	1/8" 1/8"	£154.11
● EM-RVA5322P-08	5/3	22 mm	1/8" 1/4"	£92.39
● EM-RVA5332P-10	5/3	27 mm	1/4" 3/8"	£120.16
● EM-RVA5342P-15	5/3	34 mm	1/2" 1/2"	£154.11

### RV SERIES PILOT VALVE

5/2 SINGLE PILOT  
SPRING RETURN



3630

RV SERIES PILOT VALVE  
5/3 DOUBLE PILOT  
CENTRE EXHAUST



3630

PART NUMBER	FUNCTION	BODY SIZE	EXHAUST INLET	PRICE
● EM-RVA5211-06Q	5/2	18 mm	1/8" 1/8"	£43.88
● EM-RVA5221-08Q	5/2	22 mm	1/8" 1/4"	£41.71
● EM-RVA5231-10Q	5/2	27 mm	1/4" 3/8"	£51.14
● EM-RVA5241-15	5/2	34 mm	1/2" 1/2"	£82.16

\* Air return for products ending in Q

PART NUMBER	FUNCTION	BODY SIZE	EXHAUST INLET	PRICE
● EM-RVA5312E-06	5/3	18 mm	1/8" 1/8"	£110.65
● EM-RVA5322E-08	5/3	22 mm	1/8" 1/4"	£92.39
● EM-RVA5332E-10	5/3	27 mm	1/4" 3/8"	£120.16
● EM-RVA5342E-15	5/3	34 mm	1/2" 1/2"	£154.11

### RV SERIES PILOT VALVE

5/2 DOUBLE PILOT



3630

PART NUMBER	FUNCTION	BODY SIZE	EXHAUST INLET	PRICE
● EM-RVA5212-06	5/2	18 mm	1/8" 1/8"	£61.78
● EM-RVA5222-08	5/2	22 mm	1/8" 1/4"	£60.60
● EM-RVA5232-10	5/2	27 mm	1/4" 3/8"	£71.87
● EM-RVA5242-15	5/2	34 mm	1/2" 1/2"	£117.45

### Do you also need?



### Manifolds



Find it on page 372, section six

## RV SERIES – BODY ONLY

### SPECIFICATIONS

Working medium	Clean air
Working pressure	1.5 to 8 bar
Guaranteed pressure	12 bar
Working temperature	-20°C to +70°C (dry air)
Valve type	3/2, 5/2 & 5/3
Acting type	Pilot type

### RV SERIES 3/2 SINGLE SOLENOID NORMALLY CLOSED

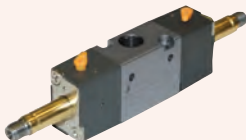


3640

PART NUMBER	FUNCTION	BODY SIZE	PORT SIZE	PRICE
● EM-RV3211-06Q-WX	3/2	18 mm	1/8"	£50.85
● EM-RV3221-08Q-WX	3/2	22 mm	1/4"	£42.75
● EM-RV3241-15-WX	3/2	34 mm	1/2"	£108.25

\* Air return available for products ending in Q

### RV SERIES 3/2 DOUBLE SOLENOID NORMALLY CLOSED



3640

PART NUMBER	FUNCTION	BODY SIZE	PORT SIZE	PRICE
● EM-RV3212-06-WX	3/2	18 mm	1/8"	£88.32
● EM-RV3222-08-WX	3/2	22 mm	1/4"	£80.18
● EM-RV3242-15-WX	3/2	34 mm	1/2"	£158.78

### RV SERIES 5/2 SINGLE SOLENOID



3640

PART NUMBER	FUNCTION	BODY SIZE	EXHAUST	INLET	PRICE
● EM-RV5211-06Q-WX	5/2	18 mm	1/8"	1/8"	£50.85
● EM-RV5221-08Q-WX	5/2	22 mm	1/8"	1/4"	£42.75
● EM-RV5241-15-WX	5/2	34 mm	1/2"	1/2"	£108.25

\* Air return available for products ending in Q

### RV SERIES 5/2 DOUBLE SOLENOID



3640

PART NUMBER	FUNCTION	BODY SIZE	EXHAUST	INLET	PRICE
● EM-RV5212-06-WX	5/2	18 mm	1/8"	1/8"	£88.32
● EM-RV5222-08-WX	5/2	22 mm	1/8"	1/4"	£80.18
● EM-RV5242-15-WX	5/2	34 mm	1/2"	1/2"	£158.78

### IP65 RATED

IP65 = Dust tight; full protection & protection against directed water jets of low pressure (6.3 mm) from any angle this is only if the DIN plug (DIN43650/pg9) is correctly fitted to coil with the rubber seal in place.

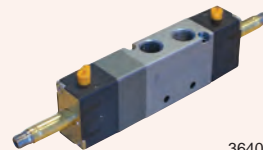
### RV SERIES 5/3 DOUBLE SOLENOID CENTRE CLOSED



3640

PART NUMBER	FUNCTION	BODY SIZE	EXHAUST	INLET	PRICE
● EM-RV5312C-06-WX	5/3	18 mm	1/8"	1/8"	£124.63
● EM-RV5322C-08-WX	5/3	22 mm	1/8"	1/4"	£119.81
● EM-RV5342C-15-WX	5/3	34 mm	1/2"	1/2"	£204.15

### RV SERIES 5/3 DOUBLE SOLENOID PRESSURE HELD



3640

PART NUMBER	FUNCTION	BODY SIZE	EXHAUST	INLET	PRICE
● EM-RV5312P-06-WX	5/3	18 mm	1/8"	1/8"	£129.18
● EM-RV5322P-08-WX	5/3	22 mm	1/8"	1/4"	£119.81
● EM-RV5342P-15-WX	5/3	34 mm	1/2"	1/2"	£204.15

### RV SERIES 5/3 DOUBLE SOLENOID PRESSURE EXHAUST



3640

PART NUMBER	FUNCTION	BODY SIZE	EXHAUST	INLET	PRICE
● EM-RV5312E-06-WX	5/3	18 mm	1/8"	1/8"	£129.18
● EM-RV5322E-08-WX	5/3	22 mm	1/8"	1/4"	£119.81
● EM-RV5342E-15-WX	5/3	34 mm	1/2"	1/2"	£204.15

## STANDARD NAMUR SOLENOID VALVES

### FEATURES

- Manual override control
- 5/2-3/2 Interchangeable
- Various voltages are available

### SPECIFICATIONS

Working pressure	1.5 to 8 bar
Working temperature	-5°C to +60°C

### RV SERIES (5/2) (3/2) NAMUR VALVE SINGLE SOLENOID – BODY ONLY



3640

PART NUMBER	VALVE BODY	PORT SIZE	PRICE
EM-V523231-08MREX	3/8"	1/4"	£45.35

### Do you also need?



### Coils

Find it on page 372, section six

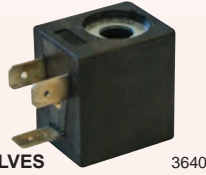
Symbol key fit together



## RV SERIES ACCESSORIES

New  
Additions

### RV SERIES COIL C/W PLUG FOR USE WITH 18 MM BODY SIZE VALVES



3640

PART NUMBER	VOLTAGE	PRICE
EM-XHD-V1-E1	110 / 50 V AC	£9.33
EM-XHD-V1-E2	220 / 50 V AC	£9.33
EM-XHD-V1-E4	24 V DC	£9.33
EM-XHD-V1-E5	12 V DC	£9.33
EM-XHD-V1-E7	24 V AC	£9.32

### FOR USE WITH 22 MM & 34 MM BODY SIZE VALVES

EM-XHD-V2-E1	110 / 50 V AC	£8.94
EM-XHD-V2-E2	220 / 50 V AC	£8.94
EM-XHD-V2-E4	24 V DC	£8.94
EM-XHD-V2-E5	12 V DC	£8.94
EM-XHD-V2-E7	24 V AC	£8.97

### IP65 RATED

IP65 = Dust tight; full protection & protection against directed water jets of low pressure (6.3 mm) from any angle this is only if the DIN plug (DIN43650/pg9) is correctly fitted to coil with the rubber seal in place.



3640

### RV SERIES PLUG CONNECTOR (DIN43650/pg9) FOR USE WITH 1/8" VALVES

PART NUMBER	VOLTAGE	PRICE
EM-DC-A2TEL	110 / 50 V AC & 220 / 50 V AC	£2.78
EM-DC-A1TEL	24 V AC	£2.78
EM-DC-D1TEL	12 V DC / 24 V DC	£2.78

### FOR USE WITH 1/4" & 1/2" VALVES

EM-DB-A2ELR	110 / 50 V AC & 220 / 50 V AC	£3.75
EM-DB-A1ELR	24 V AC	£3.75
EM-DB-D1ELR	12 V DC / 24 V DC	£3.75

### BLANKING PLATES 3 WAY

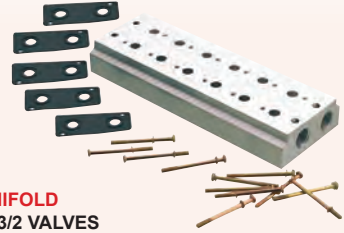


3640

PART NUMBER	BODY SIZE	PORT SIZE	PRICE
EM-VBP321	18 mm	1/8"	£3.08
EM-VBP322	22 mm	1/4"	£3.08
EM-VBP324	34 mm	1/2"	£3.24

### 5 WAY

EM-VBP521	18 mm	1/8"	£3.08
EM-VBP522	22 mm	1/4"	£3.08
EM-VBP524	34 mm	1/2"	£3.47



3640

### RV SERIES MANIFOLD FOR USE WITH 3/2 VALVES

PART NUMBER	NO. OF VALVES	BODY SIZE	PORT SIZE	PRICE
EM-V321-2F	2	18 mm	1/8"	£15.58
EM-V321-4F	4	18 mm	1/8"	£27.98
EM-V321-6F	6	18 mm	1/8"	£40.40
EM-V321-8F	8	18 mm	1/8"	£52.81
EM-V321-10F	10	18 mm	1/8"	£65.53
EM-V322-2F	2	22 mm	1/4"	£15.58
EM-V322-4F	4	22 mm	1/4"	£28.06
EM-V322-6F	6	22 mm	1/4"	£40.55
EM-V322-8F	8	22 mm	1/4"	£53.04
EM-V322-10F	10	22 mm	1/4"	£65.46
EM-V324-2F	2	34 mm	1/2"	£50.73
EM-V324-4F	4	34 mm	1/2"	£92.36
EM-V324-6F	6	34 mm	1/2"	£133.99
EM-V324-8F	8	34 mm	1/2"	£175.63
EM-V324-10F	10	34 mm	1/2"	£217.26

### FOR USE WITH 5/2 & 5/3 VALVES

EM-V521-2F	2	18 mm	1/8"	£15.58
EM-V521-4F	4	18 mm	1/8"	£28.06
EM-V521-6F	6	18 mm	1/8"	£40.55
EM-V521-8F	8	18 mm	1/8"	£53.04
EM-V521-10F	10	18 mm	1/8"	£65.53
EM-V522-2F	2	22 mm	1/4"	£14.26
EM-V522-4F	4	22 mm	1/4"	£25.67
EM-V522-6F	6	22 mm	1/4"	£37.09
EM-V522-8F	8	22 mm	1/4"	£48.50
EM-V522-10F	10	22 mm	1/4"	£59.90
EM-V524-2F	2	34 mm	1/2"	£44.48
EM-V524-4F	4	34 mm	1/2"	£80.10
EM-V524-6F	6	34 mm	1/2"	£115.72
EM-V524-8F	8	34 mm	1/2"	£151.34
EM-V524-10F	10	34 mm	1/2"	£186.96

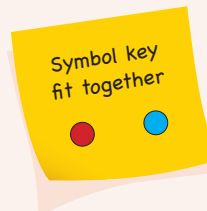
## VP SERIES SOLENOID VALVES



3640

### VP SERIES (3/2) SINGLE SOLENOID - 24 V DC

PART NUMBER	FUNCTION	VALVE BODY	PORT SIZE	PRICE
EM-VP321-06E4	3/2	1/8"	1/8"	£38.01



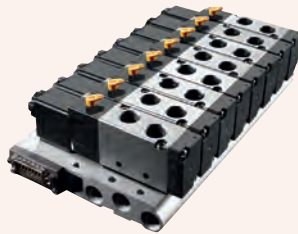
# E.MC Valve Terminal

- An integrated valve manifold with integrated wiring using a 15-pin D-Sub connector. The COM pin is universal for both positive and negative poles.
- It is possible to integrate 5/2 ways single control, 5/2 ways double control, and 5/3 ways on the same valve manifold.
- The integrated valve manifold has a double control core and a technical patent resulting from its innovative design.
- Each connector now has an LED to provide a more intuitive experience.
- DIN coils are easy to assemble and maintain and come conveniently in a low-power option.
- New sub-base design with optional DIN guide rail assembly, same installation size as RV manifold.



Six

## SR SERIES VALVE TERMINAL & ACCESSORIES



SR SERIES INTEGRATED MANIFOLD – PLUG-IN TYPE  
COMPLETE WITH 5/2 SOL / SPRING VALVES

3640

PART NUMBER	NO. OF VALVES	BODY SIZE	PORT SIZE	PRICE
EM-S1R3S-06E4	3	1 Series	1/8"	£150.41
EM-S1R4S-06E4	4	1 Series	1/8"	£194.95
EM-S1R5S-06E4	5	1 Series	1/8"	£242.39
EM-S1R6S-06E4	6	1 Series	1/8"	£289.85
EM-S1R7S-06E4	7	1 Series	1/8"	£337.29
EM-S1R8S-06E4	8	1 Series	1/8"	£384.72
EM-S1R9S-06E4	9	1 Series	1/8"	£432.19
EM-S1R10S-06E4	10	1 Series	1/8"	£479.63
EM-S1R11S-06E4	11	1 Series	1/8"	£527.06
EM-S1R12S-06E4	12	1 Series	1/8"	£574.50
EM-S1R13S-06E4	13	1 Series	1/8"	£621.96
EM-S1R14S-06E4	14	1 Series	1/8"	£669.40
EM-S2R3S-08E4	3	2 Series	1/4"	£158.18
EM-S2R4S-08E4	4	2 Series	1/4"	£198.83
EM-S2R5S-08E4	5	2 Series	1/4"	£247.14
EM-S2R6S-08E4	6	2 Series	1/4"	£295.46
EM-S2R7S-08E4	7	2 Series	1/4"	£343.75
EM-S2R8S-08E4	8	2 Series	1/4"	£392.07
EM-S2R9S-08E4	9	2 Series	1/4"	£440.36
EM-S2R10S-08E4	10	2 Series	1/4"	£488.68
EM-S2R11S-08E4	11	2 Series	1/4"	£537.00
EM-S2R12S-08E4	12	2 Series	1/4"	£585.29
EM-S2R13S-08E4	13	2 Series	1/4"	£633.61
EM-S2R14S-08E4	14	2 Series	1/4"	£681.93



15 PIN D SUB CONNECTOR

3640

PART NUMBER	CORE	LENGTH	PRICE
EM-D15-08-5M	8	5 m	£58.46
EM-D15-15-5M	15	5 m	£95.46



DIN GUIDE RAIL  
WITH GUIDE RAIL CLIP

3640

PART NUMBER	DESCRIPTION	PRICE
EM-D	1 m guide rail with clip	£44.09



3640

DIN GUIDE RAIL CLIP

PART NUMBER	DESCRIPTION	PRICE
EM-D0	Guide rail clip	£22.57



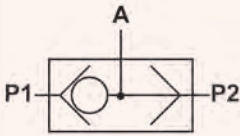
3640

BLIND PLATE

PART NUMBER	SIZE	PRICE
EM-SRBP521	1/8"	£6.24
EM-SRBP522	1/4"	£6.24

### SPECIFICATIONS

Control type	Pneumatic
Working pressure	1.5 to 8 bar
Working temperature	-20°C to +70°C



3630

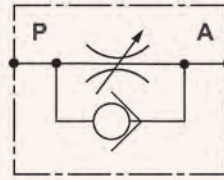
### SHUTTLE VALVE (OR GATE)

PART NUMBER	PORT SIZE	PRICE
EM-QS-06	1/8"	£23.50
EM-QS-08	1/4"	£23.50

### FLOW REGULATORS

#### SPECIFICATIONS

Working medium	Clean air
Working pressure	0.5 to 10 bar
Guaranteed pressure	15 bar
Working temperature	-20°C to +70°C



3630

### FLOW REGULATOR UNI DIRECTIONAL

PART NUMBER	PORT SIZE	PRICE
EM-QSC-06	1/8"	£18.93
EM-QSC-08	1/4"	£24.05
EM-QSC-10	3/8"	£30.67
EM-QSC-15	1/2"	£30.67

### SPECIFICATIONS

Control type	External control
Working pressure	0.5 to 8 bar
Working temperature	-5°C to +60°C



3630

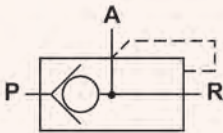
### IN-LINE NON-RETURN VALVE

PART NUMBER	PORT SIZE	PRICE
EM-EA-06	1/8"	£16.79
EM-EA-08	1/4"	£16.79
EM-EA-10	3/8"	£30.44
EM-EA-15	1/2"	£30.44

### AUTOMATIC VALVES

#### SPECIFICATIONS

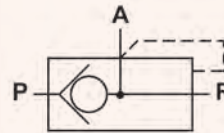
Working pressure	1.5 to 8 bar
Working temperature	-5°C to +60°C



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### QUICK EXHAUST VALVE

PART NUMBER	PORT SIZE	PRICE
EM-KKP-06	1/8"	£29.09
EM-KKP-08	1/4"	£30.59
EM-KKP-10	3/8"	£47.23
EM-KKP-15	1/2"	£66.70



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### QUICK EXHAUST VALVE

PART NUMBER	PORT SIZE	PRICE
EM-KKP-20	3/4"	£128.13
EM-KKP-25	1"	£128.13

## H SERIES – MANUAL

### SPECIFICATIONS

Working medium	Clean air
Working pressure	0 to 8 bar
Guaranteed pressure	12 bar
Working temperature	-5°C to +60°C
Valve type	3/2, 5/2 & 5/3
Seal material	NBR
Acting type	Manual



### 3/2 LEVER / SPRING SPRING RETURN

PART NUMBER	FUNCTION	PORT SIZE	PRICE
EM-H321-06S	3/2	1/8"	£51.17
EM-H322-08S	3/2	1/4"	£51.17
EM-H323-10S	3/2	3/8"	£60.89
EM-H324-15S	3/2	1/2"	£74.37

### 5/3 LEVER / SPRING / LEVER SPRING TO CENTRE – CENTRES CLOSED

PART NUMBER	FUNCTION	EXHAUST	INLET	PRICE
EM-H531C-06S	5/3	1/8"	1/8"	£77.64
EM-H532C-08S	5/3	1/8"	1/4"	£77.64
EM-H533C-10S	5/3	1/4"	3/8"	£88.90
EM-H534C-15S	5/3	1/2"	1/2"	£106.62



### 3/2 LEVER / LEVER DETENTED

PART NUMBER	FUNCTION	PORT SIZE	PRICE
EM-H321-06	3/2	1/8"	£39.35
EM-H322-08	3/2	1/4"	£39.35
EM-H323-10	3/2	3/8"	£46.84
EM-H324-15	3/2	1/2"	£57.17

### 5/3 LEVER / SPRING / LEVER SPRING TO CENTRE – CENTRES EXHAUST

PART NUMBER	FUNCTION	EXHAUST	INLET	PRICE
EM-H531E-06S	5/3	1/8"	1/8"	£79.40
EM-H532E-08S	5/3	1/8"	1/4"	£79.40
EM-H533E-10S	5/3	1/4"	3/8"	£90.92
EM-H534E-15S	5/3	1/2"	1/2"	£109.05



### 5/2 LEVER / SPRING SPRING RETURN

PART NUMBER	FUNCTION	EXHAUST	INLET	PRICE
EM-H521-06S	5/2	1/8"	1/8"	£45.26
EM-H522-08S	5/2	1/8"	1/4"	£45.26
EM-H523-10S	5/2	1/4"	3/8"	£66.23
EM-H524-15S	5/2	1/2"	1/2"	£75.69

### 5/3 LEVER / SPRING / LEVER MANUAL – PRESSURED CENTRES

PART NUMBER	FUNCTION	EXHAUST	INLET	PRICE
EM-H531P-06S	5/3	1/8"	1/8"	£79.40
EM-H532P-08S	5/3	1/8"	1/4"	£79.40
EM-H533P-10S	5/3	1/4"	3/8"	£90.92
EM-H534P-15S	5/3	1/2"	1/2"	£109.05



### 5/2 LEVER / LEVER DETENTED

PART NUMBER	FUNCTION	EXHAUST	INLET	PRICE
EM-H521-06	5/2	1/8"	1/8"	£39.35
EM-H522-08	5/2	1/8"	1/4"	£33.99
EM-H523-10	5/2	1/4"	3/8"	£38.79
EM-H524-15	5/2	1/2"	1/2"	£66.08

### 5/3 LEVER / LEVER / LEVER DETENTED – CENTRES CLOSED

PART NUMBER	FUNCTION	EXHAUST	INLET	PRICE
EM-H531C-06	5/3	1/8"	1/8"	£61.11
EM-H532C-08	5/3	1/8"	1/4"	£61.11
EM-H533C-10	5/3	1/4"	3/8"	£69.94
EM-H534C-15	5/3	1/2"	1/2"	£83.90

## H SERIES – MECHANICAL

### SPECIFICATIONS

Working medium	Clean air
Working pressure	0 to 8 bar
Guaranteed pressure	12 bar
Working temperature	-5°C to +60°C
Valve type	5/3
Seal material	NBR
Acting type	External control



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### 5/3 LEVER / LEVER / LEVER MANUAL – CENTRES EXHAUST

PART NUMBER	FUNCTION	EXHAUST	INLET	PRICE
EM-H531E-06	5/3	1/8"	1/8"	£61.11
EM-H532E-08	5/3	1/8"	1/4"	£61.11
EM-H533E-10	5/3	1/4"	3/8"	£69.94
EM-H534E-15	5/3	1/2"	1/2"	£83.90



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### 5/3 LEVER / LEVER / LEVER MANUAL – PRESSURED CENTRES

PART NUMBER	FUNCTION	EXHAUST	INLET	PRICE
EM-H531P-06	5/3	1/8"	1/8"	£61.11
EM-H532P-08	5/3	1/8"	1/4"	£61.11
EM-H533P-10	5/3	1/4"	3/8"	£69.94
EM-H534P-15	5/3	1/2"	1/2"	£83.90



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### 4/3 ROTARY LEVER VALVE

PART NUMBER	FUNCTION	PORT SIZE	PRICE
EM-R432-08	4/3	1/4" BSPP	£38.00
EM-R432-10	4/3	3/8" BSPP	£38.00
EM-R432-15	4/3	1/2" BSPP	£38.00

### SPECIFICATIONS

Control type	Manual
Working pressure	0 to 8 bar
Working temperature	-5°C to +60°C



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### FOOT VALVE

PART NUMBER	FUNCTION	DESCRIPTION	PORT SIZE	PRICE
EM-F322-08	3/2	Foot valve no cover	1/4"	£45.56
EM-F422-08	4/2	Foot valve no cover	1/4"	£48.82
EM-F522C-08L	5/2	Foot pedal with lock & cover	1/4"	£86.08

## L SERIES – MANUAL

### SPECIFICATIONS

Working medium	Clean air
Working pressure	0 to 8 bar
Guaranteed pressure	12 bar
Working temperature	-5°C to +60°C
Valve type	3/2 & 5/2
Acting type	Manual



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### 3/2 & 5/2 BUTTON VALVE DETENTED

PART NUMBER	FUNCTION	PORT SIZE	PRICE
EM-L321-06	3/2	1/8"	£33.99
EM-L322-08	3/2	1/4"	£32.41
EM-L323-10	3/2	3/8"	£42.11
EM-L324-15	3/2	1/2"	£53.30
EM-L521-06	5/2	1/8"	£35.56
EM-L522-08	5/2	1/4"	£35.56
EM-L523-10	5/2	3/8"	£43.21
EM-L524-15	5/2	1/2"	£59.06

### SPECIFICATIONS

Working medium	Clean air
Working pressure	0 – 8 bar
Guaranteed pressure	12 bar
Working temperature	-5°C to +60°C
Valve type	3/2 & 5/2
Acting type	External control



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### 3/2 & 5/2 HAND PULL VALVE BUTTON SPRING

PART NUMBER	FUNCTION	PORT SIZE	PRICE
EM-L321-06S	3/2	1/8"	£44.16
EM-L322-08S	3/2	1/4"	£42.11
EM-L323-10S	3/2	3/8"	£54.72
EM-L324-15S	3/2	1/2"	£69.31
EM-L521-06S	5/2	1/8"	£46.20
EM-L522-08S	5/2	1/4"	£46.20
EM-L523-10S	5/2	3/8"	£56.14
EM-L524-15S	5/2	1/2"	£76.80

## MANUAL & MECHANICAL VALVE WITH MANUAL OPERATING HEADS

### SPECIFICATION

Working pressure	0 to 8 bar
Guaranteed pressure	12 bar
Working temperature	-5°C to +60°C
Valve type	MV series: 3/2 M series: 3/2 & 5/2
Acting type	External control
Panel cut out size	Ø 22.5 mm

Alternative button colours available upon request

Lead times to be advised



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### PUSH BUTTON SPRING RETURN VALVE FLAT BUTTON

PART NUMBER	FUNCTION	PORT SIZE	PRICE
EM-MV32-06S5R	3/2	1/8"	£21.84
EM-M32-08S5R	3/2	1/4"	£30.35
EM-M52-08S5R	5/2	1/4"	£33.97



MV style body



M style body

### 3/2 ROLLER LEVER VALVE

PART NUMBER	FUNCTION	PORT SIZE	PRICE
EM-MV32-06S2	3/2	1/8"	£21.84
EM-MJ32-08S2	3/2	1/4"	£30.35
EM-M52-08S2	5/2	1/4"	£33.97



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### PUSH BUTTON SPRING RETURN VALVE RAISED BUTTON

PART NUMBER	FUNCTION	PORT SIZE	PRICE
EM-MV32-06S4G	3/2	1/8"	£21.84
EM-M32-08S4G	3/2	1/4"	£30.35
EM-M52-08S4G	5/2	1/4"	£33.97



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### TWO POSITION SELECTOR SWITCH VALVE WITH INDICATING ARROW

PART NUMBER	FUNCTION	PORT SIZE	PRICE
EM-MV32-06S1B	3/2	1/8"	£21.84
EM-M32-08S1B	3/2	1/4"	£30.35
EM-M52-08S1B	5/2	1/4"	£33.97



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### PALM BUTTON SPRING RETURN VALVE

PART NUMBER	FUNCTION	PORT SIZE	PRICE
EM-MV32-06S6R	3/2	1/8"	£21.84
EM-M32-08S6R	3/2	1/4"	£30.35
EM-M52-08S6R	5/2	1/4"	£33.97



MV style body



M style body

### BASIC – NO BUTTON VALVES SPRING RETURN

PART NUMBER	FUNCTION	PORT SIZE	PRICE
EM-MV322-06S7	3/2	1/8"	£19.40
EM-M32-08S7	3/2	1/4"	£30.35
EM-M52-08S7	5/2	1/4"	£33.99



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### TWIST LOCK PALM SWITCH VALVE

PART NUMBER	FUNCTION	PORT SIZE	PRICE
EM-MV32-06S3R	3/2	1/8"	£21.84
EM-M32-08S3R	3/2	1/4"	£30.35
EM-M52-08S3R	5/2	1/4"	£33.97

MANUAL & MECHANICAL VALVE WITH MANUAL OPERATING HEADS

**PUSH BUTTON SHROUDED  
S5 VALVE HEAD**



PART NUMBER	TO SUIT	PRICE
EM-M32-06S5R-P01	M32, M52 & MV32 valves	£10.17

**PALM TWIST UNLOCK  
S3 VALVE HEAD**



PART NUMBER	TO SUIT	PRICE
EM-M32-06S3R-P01	M32, M52 & MV32 valves	£10.17

**PUSH BUTTON RAISED  
S4 VALVE HEAD**



PART NUMBER	TO SUIT	PRICE
EM-M32-06S4G-P01	M32, M52 & MV32 valves	£10.17

**TWO POSITION SELECTOR  
S1 BLACK VALVE HEAD**



PART NUMBER	TO SUIT	PRICE
EM-M32-06S1B-P01	M32, M52 & MV32 valves	£8.99

**PALM SPRING RETURN  
S6 VALVE HEAD**



PART NUMBER	TO SUIT	PRICE
EM-M32-06S6R-P01	M32, M52 & MV32 valves	£10.17

Do you also need?



**One-touch  
push-in fittings**



Find it on pages 470 – 495, section eight

Do you also need?



**Polyurethane tubing**



Find it on pages 644 – 645, section ten



# Festo Valves

## Pneumatically and mechanically actuated industrial process valves and media valves

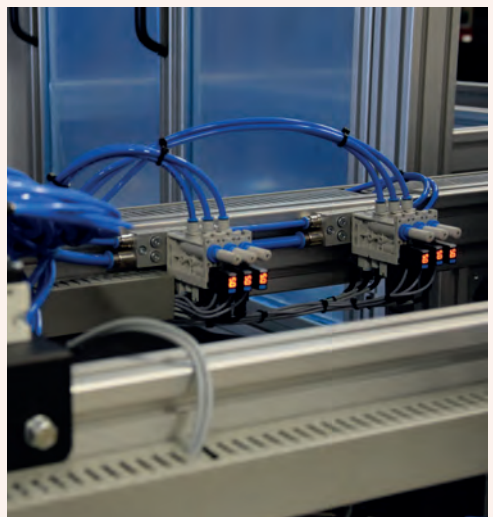
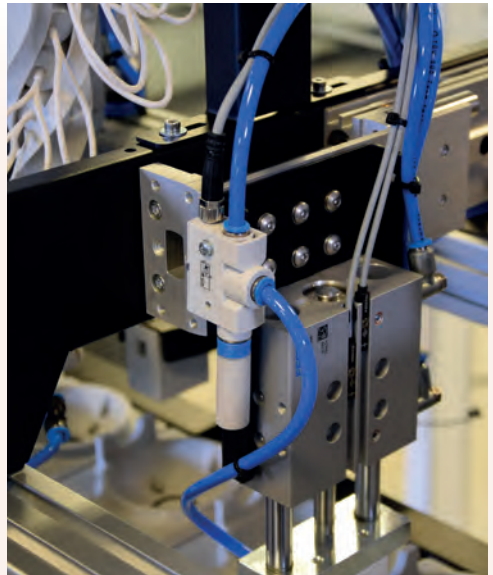
Festo's process and media valves are designed to regulate and control both liquids and gases. These valves are used in a variety of applications such as process automation, factory automation, filling and dispensing, cooling, heating/preheating, lubrication, steam distribution, and in machinery such as steam boilers, sterilisers, autoclaves, textile processing machines, filling systems, and industrial washing machines. They are also suitable for viscous media, dirty and aggressive liquids like acids, steam, various gases, and vacuum.

## Solenoid valves

Solenoid valves for controlling liquid and gas flows are essential for various industrial and commercial applications. These valves work by using an electromagnet to control the opening and closing of a valve seat. Depending on the design principle, solenoid valves can be classified into three types: directly controlled, servo-controlled, and force pilot-operated valves. These types differ in terms of how they are operated and maintained.

## Available Ranges

- Solenoid valves: VUVG & VUVS
- Namur solenoid valves: VSNC
- Manually operated valves
- Mechanically operated valves
- Pressure sensors







## VUVG SERIES

### FEATURES

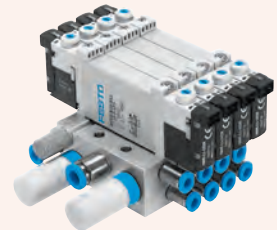
- Universal valve
- Basic valve & E-box combinations
- Width 10 mm, 14 mm & 18 mm
- Internal pilot air supply with VUVG-L
- Can be mounted as individual valve or sub-base valve on sturdy aluminium manifold rail
- Operating voltage 24 V DC without E-box

### SPECIFICATIONS

Valve function	T32C	2 x 3/2-way valve, normally closed
	T32U	2 x 3/2-way valve, normally open
	M52	5/2-way valve, single solenoid
	B52	5/2-way valve, double solenoid
	P53C	5/3-way valve, mid-position closed
Reset method	P53E	5/3-way valve, mid-position exhausted
	AT	Pneumatic spring / internal / non-detenting, detenting with accessories
	RT	Pneumatic-mechanical spring / internal / non-detenting, detenting with accessories
	ZT	Without / external / non-detenting, detenting
	T	Without / internal / non-detenting, detenting
	AZT	Pneumatic spring / external / non-detenting, detenting with accessories
RZT	Pneumatic-mechanical spring / external / non-detenting, detenting	



3110



3110

### VUVG SERIES IN-LINE VALVE / INDIVIDUAL VALVE 10 MM WIDTH

PART NUMBER	TYPE	THREAD	PRICE
FES8042540	VUVG-LK10-B52-T-M5-1H2L-S	M5	£69.62
FES8042544	VUVG-LK10-B52-T-M5-1R8L-S	M5	£81.22
FES8042548	VUVG-LK10-B52-T-M7-1H2L-S	M7	£72.78
FES8042552	VUVG-LK10-B52-T-M7-1R8L-S	M7	£84.37
FES8042539	VUVG-LK10-M52-AT-M5-1H2L-S	M5	£50.63
FES8042543	VUVG-LK10-M52-AT-M5-1R8L-S	M5	£56.43
FES8042547	VUVG-LK10-M52-AT-M7-1H2L-S	M7	£53.78
FES8042551	VUVG-LK10-M52-AT-M7-1R8L-S	M7	£59.58
FES8042538	VUVG-LK10-T32C-AT-M5-1H2L-S	M5	£73.82
FES8042546	VUVG-LK10-T32C-AT-M7-1H2L-S	M7	£77.00
FES8042550	VUVG-LK10-T32C-AT-M7-1R8L-S	M7	£88.59

### 14 MM WIDTH

FES8042564	VUVG-LK14-B52-T-G18-1H2L-S	G1/8	£75.96
FES8042568	VUVG-LK14-B52-T-G18-1R8L-S	G1/8	£87.53
FES8042563	VUVG-LK14-M52-AT-G18-1H2L-S	G1/8	£56.96
FES8042567	VUVG-LK14-M52-AT-G18-1R8L-S	G1/8	£62.76
FES8042562	VUVG-LK14-T32C-AT-G18-1H2L-S	G1/8	£80.16
FES8042566	VUVG-LK14-T32C-AT-G18-1R8L-S	G1/8	£91.75

### 18 MM WIDTH

FES8031532	VUVG-L18-M52-MT-G14-1R8L	G1/4	£93.19
FES8031531	VUVG-L18-M52-RT-G14-1R8L	G1/4	£89.61
FES8031534	VUVG-L18-P53C-T-G14-1R8L	G1/4	£140.52

### VUVG SERIES SUB-BASE VALVE 10 MM WIDTH

PART NUMBER	TYPE	PRICE
FES566487	VUVG-B10-T32C-AZT-F-1P3	£83.88
FES566488	VUVG-B10-T32U-AZT-F-1P3	£83.88
FES566490	VUVG-B10-M52-RZT-F-1P3	£58.77
FES566491	VUVG-B10-B52-ZT-F-1P3	£78.15
FES566492	VUVG-B10-P53C-ZT-F-1P3	£95.34
FES566493	VUVG-B10-P53E-ZT-F-1P3	£95.34
FES8042556	VUVG-BK10-B52-T-F-1H2L-S	£66.98
FES8042560	VUVG-BK10-B52-T-F-1R8L-S	£78.57
FES8042555	VUVG-BK10-M52-AT-F-1H2L-S	£47.99
FES8042554	VUVG-BK10-T32C-AT-F-1H2L-S	£71.20
FES8042558	VUVG-BK10-T32C-AT-F-1R8L-S	£82.79

### 14 MM WIDTH

FES566513	VUVG-B14-T32C-AZT-F-1P3	£92.49
FES566514	VUVG-B14-T32U-AZT-F-1P3	£92.49
FES566516	VUVG-B14-M52-AZT-F-1P3	£67.39
FES566517	VUVG-B14-B52-ZT-F-1P3	£86.74
FES566518	VUVG-B14-P53C-ZT-F-1P3	£103.96
FES566519	VUVG-B14-P53E-ZT-F-1P3	£103.96
FES8042572	VUVG-BK14-B52-T-F-1H2L-S	£73.32
FES8042576	VUVG-BK14-B52-T-F-1R8L-S	£84.89
FES8042571	VUVG-BK14-M52-AT-F-1H2L-S	£54.32
FES8042575	VUVG-BK14-M52-AT-F-1R8L-S	£60.12
FES8042570	VUVG-BK14-T32C-AT-F-1H2L-S	£77.54
FES8042574	VUVG-BK14-T32C-AT-F-1R8L-S	£89.13



VUVG SERIES



**SEAL VABD-L1-10X**  
10 MM SIZE

3110

PART NUMBER	TYPE	THREAD	PRICE
FES566672	VABD-L1-10X-S-M5	M5	£1.86
FES566673	VABD-L1-10X-S-M7	M7	£1.86

14 MM SIZE

FES566675	VABD-L1-14X-S-G18	G1/8	£1.86
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**MANIFOLD RAIL VABM**  
FOR INDIVIDUAL VALVE VUVG-L  
WITH SEAL VABM-L1-10X  
10 MM SIZE



3110

PART NUMBER	TYPE	THREAD	VALVE POS.	PRICE
FES566558	VABM-L1-10S-G18-2	G1/8	2	£43.01
FES566559	VABM-L1-10S-G18-3	G1/8	3	£50.18
FES566560	VABM-L1-10S-G18-4	G1/8	4	£57.36
FES566562	VABM-L1-10S-G18-6	G1/8	6	£71.68
FES566564	VABM-L1-10S-G18-8	G1/8	8	£86.03
FES566566	VABM-L1-10S-G18-10	G1/8	10	£100.36
FES576363	VABM-B10-20-G38-2-P53	G3/8	2	£30.10
FES576365	VABM-B10-20-G38-4-P53	G3/8	4	£43.54
FES576367	VABM-B10-20-G38-6-P53	G3/8	6	£56.97
FES576369	VABM-B10-20-G38-8-P53	G3/8	8	£70.39
FES576371	VABM-B10-20-G38-10-P53	G3/8	10	£83.81
FES8026261	VABM-B10-25S-G38-2	G3/8	2	£58.09
FES8026263	VABM-B10-25S-G38-4	G3/8	4	£82.29
FES8026265	VABM-B10-25S-G38-6	G3/8	6	£106.48
FES8026267	VABM-B10-25S-G38-8	G3/8	8	£130.66
FES8026269	VABM-B10-25S-G38-10	G3/8	10	£154.83

14 MM SIZE

FES566618	VABM-L1-14S-G14-2	G1/4	2	£54.50
FES566619	VABM-L1-14S-G14-3	G1/4	3	£63.79
FES566620	VABM-L1-14S-G14-4	G1/4	4	£73.14
FES566622	VABM-L1-14S-G14-6	G1/4	6	£91.78
FES566624	VABM-L1-14S-G14-8	G1/4	8	£110.44
FES566626	VABM-L1-14S-G14-10	G1/4	10	£129.10

**MANIFOLD RAIL VABM**  
FOR SUB-BASE VALVE VUVG-B  
10 MM SIZE



3110

PART NUMBER	TYPE	THREAD	VALVE POS.	PRICE
FES566582	VABM-L1-10W-G18-2	M5	2	£51.62
FES566583	VABM-L1-10W-G18-3	M5	3	£59.50
FES566584	VABM-L1-10W-G18-4	M5	4	£67.40
FES566586	VABM-L1-10W-G18-6	M5	6	£83.19
FES566588	VABM-L1-10W-G18-8	M5	8	£98.98
FES566590	VABM-L1-10W-G18-10	M5	10	£114.75
FES566606	VABM-L1-10HW-G18-2	M7	2	£51.62
FES566607	VABM-L1-10HW-G18-3	M7	3	£59.50
FES566608	VABM-L1-10HW-G18-4	M7	4	£67.40
FES566610	VABM-L1-10HW-G18-6	M7	6	£83.19
FES566612	VABM-L1-10HW-G18-8	M7	8	£98.98
FES566614	VABM-L1-10HW-G18-10	M7	10	£114.75
FES576417	VABM-B10-20S-G14-2	G1/4	2	£49.29
FES576419	VABM-B10-20S-G14-4	G1/4	4	£67.19
FES576421	VABM-B10-20S-G14-6	G1/4	6	£85.04
FES576423	VABM-B10-20S-G14-8	G1/4	8	£102.93
FES576425	VABM-B10-20S-G14-10	G1/4	10	£120.79
FES8026219	VABM-B10-25-G12-2-P53	G1/2	2	£38.28
FES8026221	VABM-B10-25-G12-4-P53	G1/2	4	£55.59
FES8026223	VABM-B10-25-G12-6-P53	G1/2	6	£72.90
FES8026225	VABM-B10-25-G12-8-P53	G1/2	8	£90.22
FES8026227	VABM-B10-25-G12-10-P53	G1/2	10	£107.52
FES8026379	VABM-B10-30S-G12-4	G1/2	4	£157.60
FES8026381	VABM-B10-30S-G12-6	G1/2	6	£213.65
FES8026383	VABM-B10-30S-G12-8	G1/2	8	£269.66
FES8026385	VABM-B10-30S-G12-10	G1/2	10	£325.68

14 MM SIZE

FES566642	VABM-L1-14W-G14-2	G1/8	2	£63.09
FES566643	VABM-L1-14W-G14-3	G1/8	3	£73.13
FES566644	VABM-L1-14W-G14-4	G1/8	4	£83.15
FES566646	VABM-L1-14W-G14-6	G1/8	6	£103.23
FES566648	VABM-L1-14W-G14-8	G1/8	8	£123.30
FES566650	VABM-L1-14W-G14-10	G1/8	10	£143.37



VUVG SERIES



3110

SEPARATOR VABD-B

PART NUMBER	TYPE	SIZE	FOR USE WITH	PRICE
FES569995	VABD-8-B	10	Individual Valve VUVG-L	£22.95
FES569996	VABD-10-B	14	Individual Valve VUVG-L & Sub-Base Valve VUVG-B	£24.38
FES569994	VABD-6-B	10	Sub-Base Valve VUVG-B	£21.51

FEATURES

- LED
- Protective circuit



3110

VAVE SERIES E-BOXES FLYING LEADS

PART NUMBER	TYPE	LENGTH	VOLTAGE	PRICE
FES566722	VAVE-L1-1VL1-LP	0.5 m	24 & 12 V DC	£7.90
FES566723	VAVE-L1-1VL2-LP	1.0 m	24 & 12 V DC	£8.76
FES566724	VAVE-L1-1VL3-LP	2.5 m	24 & 12 V DC	£11.33



3110

COVER VMPA/INSCRIPTION LABEL ASLR/H-RAIL MOUNTING VAME

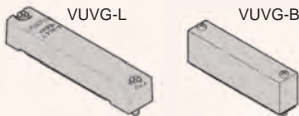
PART NUMBER	TYPE	SIZE	PIECES	PRICE
FES540897	VMPA-HBT-B	10, 14	10	£0.63
FES570818	ASLR-D-L1	10, 14	10	£1.43
FES569998	VAME-T-M4	10, 14	2	£7.17

VERTICAL PLUG

FES566715	VAVE-L1-1VH3-LP	-	24 & 12 V DC	£6.47
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HORIZONTAL PLUG

FES566714	VAVE-L1-1VH2-LP	-	24 & 12 V DC	£6.47
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3110

COVER PLATE VABB

PART NUMBER	TYPE	SIZE	FOR USE WITH	PRICE
FES566462	VABB-L1-10-S	10	Individual Valve VUVG-L	£5.74
FES569989	VABB-L1-14	14	Individual Valve VUVG-L & Sub-Base Valve VUVG-B	£7.17
FES566495	VABB-L1-10-W	10	Sub-Base Valve VUVG-B	£5.74

NEBV SERIES PLUG SOCKET WITH CABLE 2-PIN STRAIGHT SOCKET – FLYING LEADS, OPEN END



3110

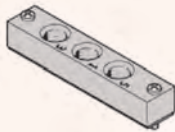
PART NUMBER	TYPE	CABLE LENGTH	PRICE
FES566654	NEBV-H1G2-KN-0.5-N-LE2	0.5 m	£1.71
FES566655	NEBV-H1G2-KN-1-N-LE2	1.0 m	£2.58
FES566656	NEBV-H1G2-KN-2.5-N-LE2	2.5 m	£5.17

NEBV SERIES PLUG SOCKET WITH CABLE 2-PIN STRAIGHT SOCKET – INDIVIDUAL CABLE, OPEN END



3110

VABF SERIES SUPPLY PLATE FOR USE WITH INDIVIDUAL VALVE VUVG-L



3110

PART NUMBER	TYPE	SIZE	THREAD	PRICE
FES569991	VABF-L1-10-P3A4-M5	10	M5	£11.49
FES569992	VABF-L1-10-P3A4-M7	10	M7	£11.49
FES569993	VABF-L1-14-P3A4-G18	14	G1/8	£14.33



VUVS SERIES

FEATURES

- A reliable, heavy duty valve with a long service life
- Low-cost universal valve with no performance limits
- Wide range of valve functions
- Durable, thanks to tried & tested piston spools

SPECIFICATIONS

Width	20 mm, 25 mm & 30 mm
Connection	G1/8, G1/4, G3/8
Spring	Mechanical & air

VALVE FUNCTION

M32C	3/2-way closed, single solenoid
M32U	3/2-way open, single solenoid
M52	5/2-way, single solenoid
B52	5/2-way, double solenoid
P53C	5/3-way mid closed, double solenoid
P53E	5/3-way mid exhaust, double solenoid
P53U	5/3-way mid press, double solenoid

SOLENOID VALVES  
LK20 TYPE



3110

PART NUMBER	TYPE	PRICE
FES8043215	VUVS-LK20-B52-D-G18-1C1-S	£77.74
FES8043213	VUVS-LK20-M32C-AD-G18-1C1-S	£52.48
FES8043214	VUVS-LK20-M52-AD-G18-1C1-S	£59.19

SOLENOID VALVES  
LK25 TYPE



3110

PART NUMBER	TYPE	PRICE
FES8043219	VUVS-LK25-B52-D-G14-1B2-S	£86.34
FES8043217	VUVS-LK25-M32C-AD-G14-1B2-S	£58.27
FES8043218	VUVS-LK25-M52-AD-G14-1B2-S	£65.73

SOLENOID VALVES  
L30 TYPE



3110

PART NUMBER	TYPE	PRICE
FES575628	VUVS-L30-P53U-MZD-G38-F8-1B2	£143.03
FES575626	VUVS-L30-P53U-MZD-G38-F8-1C1	£143.03

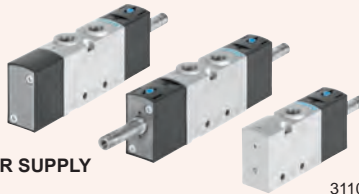
SOLENOID VALVES  
LK30 TYPE



3110

PART NUMBER	TYPE	PRICE
FES8049882	VUVS-LK30-B52-D-G38-1B2-S	£94.92
FES8049880	VUVS-LK30-M32C-AD-G38-1B2-S	£64.07
FES8049881	VUVS-LK30-M52-AD-G38-1B2-S	£72.27

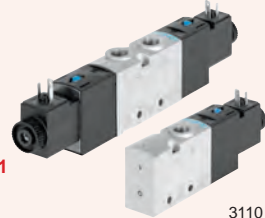
SOLENOID VALVES  
INTERNAL PILOT AIR SUPPLY  
L20 TYPE



3110

PART NUMBER	TYPE	PRICE
FES575260	VUVS-L20-M32C-MD-G18-F7	£62.11
FES575262	VUVS-L20-M32U-MD-G18-F7	£62.11
FES575250	VUVS-L20-M52-MD-G18-F7	£71.24
FES575251	VUVS-L20-B52-D-G18-F7	£87.24
FES575254	VUVS-L20-P53C-MD-G18-F7	£98.66
FES575252	VUVS-L20-P53E-MD-G18-F7	£98.66
FES575253	VUVS-L20-P53U-MD-G18-F7	£98.66

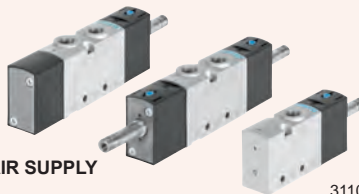
VUVS SERIES WITH 24 V COIL  
TO PATTERN TYPE C, EN175301  
INTERNAL PILOT AIR SUPPLY  
L20 TYPE



3110

PART NUMBER	TYPE	PRICE
FES575274	VUVS-L20-M32C-MD-G18-F7-1C1	£71.33
FES575276	VUVS-L20-M32U-MD-G18-F7-1C1	£71.33
FES575264	VUVS-L20-M52-MD-G18-F7-1C1	£80.46
FES575265	VUVS-L20-B52-D-G18-F7-1C1	£105.68
FES575268	VUVS-L20-P53C-MD-G18-F7-1C1	£117.15
FES575266	VUVS-L20-P53E-MD-G18-F7-1C1	£117.15
FES575267	VUVS-L20-P53U-MD-G18-F7-1C1	£117.15

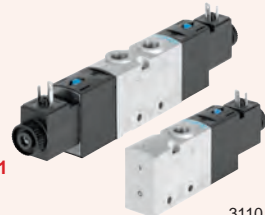
SOLENOID VALVES  
EXTERNAL PILOT AIR SUPPLY  
L20 TYPE



3110

PART NUMBER	TYPE	PRICE
FES575259	VUVS-L20-M32C-MZD-G18-F7	£62.11
FES575261	VUVS-L20-M32U-MZD-G18-F7	£62.11
FES575679	VUVS-L20-M52-MZD-G18-F7	£71.24
FES575682	VUVS-L20-B52-ZD-G18-F7	£87.24
FES575685	VUVS-L20-P53C-MZD-G18-F7	£98.66
FES575691	VUVS-L20-P53E-MZD-G18-F7	£98.66
FES575688	VUVS-L20-P53U-MZD-G18-F7	£98.66

VUVS SERIES WITH 24 V COIL  
TO PATTERN TYPE C, EN175301  
EXTERNAL PILOT AIR SUPPLY  
L20 TYPE



3110

PART NUMBER	TYPE	PRICE
FES575273	VUVS-L20-M32C-MZD-G18-F7-1C1	£71.33
FES575275	VUVS-L20-M32U-MZD-G18-F7-1C1	£71.33
FES575680	VUVS-L20-M52-MZD-G18-F7-1C1	£80.46
FES575683	VUVS-L20-B52-ZD-G18-F7-1C1	£105.68
FES575686	VUVS-L20-P53C-MZD-G18-F7-1C1	£117.15
FES575692	VUVS-L20-P53E-MZD-G18-F7-1C1	£117.15
FES575689	VUVS-L20-P53U-MZD-G18-F7-1C1	£117.15



VUVS SERIES

**SOLENOID COIL VACS  
CONNECTION PATTERN TYPE C  
FOR VUVS VALVES**



3110

PART NUMBER	TYPE	VOLTAGE	PRICE
FES8025330	VACS-C-C1-1	24 V DC	£9.22
FES8025335	VACS-C-C1-1A	24 V AC / 50/60 Hz	£9.22
FES8025337	VACS-C-C1-7A	48 V AC	£9.22
FES8025334	VACS-C-C1-16B	110/120 V AC / 50/60 Hz	£9.22
FES8025338	VACS-C-C1-3W	230/240 V AC / 50/60 Hz	£9.22

**SOLENOID COIL  
FOR COIL CONNECTION PATTERN  
TYPE A  
SUITABLE FOR VZWM-L**



3110

PART NUMBER	TYPE	VOLTAGE	TO FIT ARMATURE TUBE	PRICE
FES549903	MD-2-24VDC-PA	24 V DC	F4	£21.32
FES549904	MD-2-110VAC-PA	110 V AC	F4	£21.32
FES549905	MD-2-230VAC-PA	230 V AC	F4	£21.32
FES549906	MH-2-24VDC-PA	24 V DC	F5	£26.36
FES549907	MH-2-110VAC-PA	110 V AC	F5	£26.36
FES549908	MH-2-230VAC-PA	230 V AC	F5	£26.36

**FEATURES**

- For solenoid coils & valves, port pattern per DIN EN175 301, type C

**PLUG SOCKET MSSD  
FOR COIL CONNECTION PATTERN  
TYPE C**



3110

PART NUMBER	TYPE	CABLE CONNECTOR	PRICE
FES151687	MSSD-EB	Screw terminal	£2.47

**FEATURES**

- For solenoid coils & valves, standard industry port pattern

**PLUG SOCKET MSSD  
TYPE B**



3110

PART NUMBER	TYPE	CABLE CONNECTOR	PRICE
FES34431	MSSD-F	Screw terminal	£3.07

**PLUG SOCKET  
FOR MD & MH COILS**



3110

PART NUMBER	TYPE	PRICE
FES550067	MSSD-N	£2.06

**FEATURES**

- Suitable for coil connection pattern type C
- Pre-assembled
- Cable length: 2.5 m, 5 m, 10 m

**PLUG SOCKET KMEB  
WITH CABLE**



3110

PART NUMBER	TYPE	CABLE LENGTH	SUITABLE FOR COIL VOLTAGE	PRICE
FES151688	KMEB-1-24-2.5-LED	2.5 m	24 V DC	£23.12
FES151689	KMEB-1-24-5-LED	5 m	24 V DC	£26.76
FES193457	KMEB-1-24-10-LED	10 m	24 V DC	£34.04
FES151690	KMEB-1-230AC-2.5	2.5 m	230 V AC	£18.22
FES151691	KMEB-1-230AC-5	5 m	230 V AC	£21.69

**ILLUMINATING SEAL MEB-LD**



3110

PART NUMBER	TYPE	VOLTAGE	PRICE
FES151717	MEB-LD-12-24DC	12 – 24 V DC	£15.22
FES151718	MEB-LD-230AC	230 V DC	£21.47

**SOLENOID COILS**



3110

PART NUMBER	TYPE	VOLTAGE	PRICE
FES4527	MSFG-24/42-50/60	24 V DC / 42 V AC	£19.64
FES34411	MSFG-24/42-50/60-OD	24 V DC / 42 V AC	£16.24

## NAMUR SOLENOID VALVES

### FEATURES

- Operating voltage DC
- Cost optimised variant with plastic cover, brass armature tube & IP65 coils
- Conversion from 3/2 way to 5/2 way valve simply by turning the seal



**VSNC NAMUR SOLENOID VALVE**  
SINGLE SOLENOID, 24 V DC, TYPE B CONNECTOR 3110

PART NUMBER	TYPE	FUNCTION	PRICE
FES577295	VSNC-FC-M52-MD-G14-F8-1B2	5/2-way or 3/2-way	£87.32



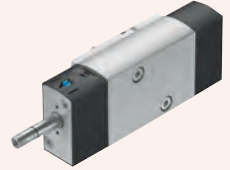
**VSNC NAMUR SOLENOID VALVE**  
SINGLE SOLENOID, WITHOUT COIL  
9 MM ARMATURE TUBE 3110

PART NUMBER	TYPE	FUNCTION	PRICE
FES577267	VSNC-FC-M52-MD-G14-FN	5/2-way or 3/2-way	£83.38



**VSNC NAMUR SOLENOID VALVE**  
DOUBLE SOLENOID, 24 V DC, TYPE B CONNECTOR 3110

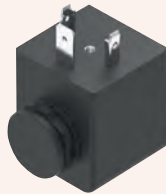
PART NUMBER	TYPE	FUNCTION	PRICE
FES577296	VSNC-F-B52-D-G14-F8-1B2	5/2-way	£134.34



**VSNC NAMUR SOLENOID VALVE**  
SINGLE SOLENOID, WITHOUT COIL  
8 MM ARMATURE TUBE 3110

PART NUMBER	TYPE	FUNCTION	PRICE
FES577257	VSNC-FC-M52-MD-G14-F8	5/2-way or 3/2-way	£74.79

## SOLENOID COILS



**SOLENOID COILS** 3110

PART NUMBER	TYPE	SIZE	VOLTAGE	PRICE
FES8029144	VACN-N-A1-1	9 mm	24 V DC 0.7 W	£13.18
FES8030822	VACF-A-A1-1	8 mm	24 V DC 2.6 W	£13.07

## Do you also need?

**FESTO**

**Cylinders**



Find it on pages 361 – 364, section six



3110

FINGER LEVER VALVE

PART NUMBER	TYPE	FUNCTION	PRICE
FES4500004	VHEF-L-M52-E-G14	5/2	£133.79
FES4500005	VHEF-L-M52-E-G18	5/2	£113.71
FES4500000	VHEF-L-M52-M-G14	5/2	£106.18
FES4500001	VHEF-L-M52-M-G18	5/2	£90.26
FES4500008	VHEF-LT-M32-M-G14	3/2	£85.47
FES4500009	VHEF-LT-M32-M-G18	3/2	£72.66



3110

PUSH BUTTON VALVE

PART NUMBER	TYPE	FUNCTION	PRICE
FES5299716	VHEF-P-B52-G14	5/2	£131.86
FES5299710	VHEF-P-B52-G18	5/2	£95.90
FES5299715	VHEF-P-M52-M-G14	5/2	£131.86
FES5299709	VHEF-P-M52-M-G18	5/2	£95.90
FES5299713	VHEF-PTC-B32-G14	3/2	£104.33
FES5299707	VHEF-PTC-B32-G18	3/2	£83.47
FES5299711	VHEF-PTC-M32-M-G14	3/2	£104.33
FES5299705	VHEF-PTC-M32-M-G18	3/2	£83.47
FES5299714	VHEF-PTCZ-B32-G14	3/2	£109.56
FES5299708	VHEF-PTCZ-B32-G18	3/2	£87.64
FES5299712	VHEF-PTCZ-M32-M-G14	3/2	£109.56
FES5299706	VHEF-PTCZ-M32-M-G18	3/2	£87.64



3110

HAND LEVER VALVE

PART NUMBER	TYPE	FUNCTION	PRICE
FES4165864	VHEF-HS-B52-G14	5/2	£206.83
FES4165863	VHEF-HS-B52-G18	5/2	£165.46
FES4165866	VHEF-HS-B53C-G14	5/3	£216.69
FES4165865	VHEF-HS-B53C-G18	5/3	£173.35
FES4165868	VHEF-HS-B53E-G14	5/3	£216.69
FES4165867	VHEF-HS-B53E-G18	5/3	£173.35
FES4165856	VHEF-HS-M52-M-G14	5/2	£206.83
FES4165855	VHEF-HS-M52-M-G18	5/2	£165.46
FES4165858	VHEF-HS-P53C-M-G14	5/3	£216.69
FES4165857	VHEF-HS-P53E-M-G18	5/3	£173.35
FES4165860	VHEF-HS-P53E-M-G14	5/3	£216.69
FES4165859	VHEF-HS-P53E-M-G18	5/3	£173.35
FES4165862	VHEF-HST-B32-G14	3/2	£125.90
FES4165861	VHEF-HST-B32-G18	3/2	£100.70
FES4165854	VHEF-HST-M32-M-G14	3/2	£125.90
FES4165853	VHEF-HST-M32-M-G18	3/2	£100.70



3110

SELECTOR VALVE

PART NUMBER	TYPE	FUNCTION	PRICE
FES4106817	VHEF-ES-B52-G14	5/2	£131.86
FES4106816	VHEF-ES-B52-G18	5/2	£105.50
FES4106819	VHEF-ES-B53C-G14	5/3	£138.14
FES4106818	VHEF-ES-B53C-G18	5/3	£110.50
FES4106821	VHEF-ES-B53E-G14	5/3	£138.14
FES4106820	VHEF-ES-B53E-G18	5/3	£110.50
FES4106809	VHEF-ES-M52-M-G14	5/2	£131.86
FES4106808	VHEF-ES-M52-M-G18	5/2	£105.50
FES4106811	VHEF-ES-P53C-M-G14	5/3	£138.14
FES4106810	VHEF-ES-P53E-M-G18	5/3	£110.50
FES4106813	VHEF-ES-P53E-M-G14	5/3	£138.14
FES4106812	VHEF-ES-P53E-M-G18	5/3	£110.50
FES4106815	VHEF-EST-B32-G14	3/2	£80.27
FES4106814	VHEF-EST-B32-G18	3/2	£64.21
FES4106807	VHEF-EST-M32-M-G14	3/2	£80.27
FES4106806	VHEF-EST-M32-M-G18	3/2	£64.21



3110

STEM ACTUATED VALVE

PART NUMBER	TYPE	FUNCTION	PRICE
FES8031304	VMEF-S-M52-E-G14	5/2	£118.47
FES8031299	VMEF-S-M52-E-G18	5/2	£94.77
FES8031302	VMEF-S-M52-M-G14	5/2	£98.72
FES8031297	VMEF-S-M52-M-G18	5/2	£78.96
FES8031300	VMEF-ST-M32-M-G14	3/2 NO or NC	£60.09
FES8031295	VMEF-ST-M32-M-G18	3/2 NO or NC	£48.08



3110

ROLLER LEVER VALVE

PART NUMBER	TYPE	FUNCTION	PRICE
FES8047102	VMEF-K-M52-M-G14	5/2	£141.02
FES8049240	VMEF-K-M52-M-G18	5/2	£112.82
FES8047103	VMEF-KT-M32-M-G14	3/2	£113.52
FES8049241	VMEF-KT-M32-M-G18	3/2	£90.82
FES8047093	VMEF-R-M52-E-G14	5/2	£155.80
FES8047092	VMEF-R-M52-E-G18	5/2	£124.64
FES8047094	VMEF-R-M52-M-G14	5/2	£136.33
FES8049238	VMEF-R-M52-M-G18	5/2	£109.06
FES8047095	VMEF-RT-M32-M-G14	3/2	£109.74
FES8049239	VMEF-RT-M32-M-G18	3/2	£87.80

ACCESSORIES

New Additions



3110

FRONT PANEL VALVE

PART NUMBER	TYPE	FUNCTION	PRICE
FES6817	SV-3-M5	3/2 Closed	£54.56
FES11914	SV-5-M5-B	5/2 Closed	£79.13



3110

MUSHROOM PUSH BUTTON

PART NUMBER	TYPE	COLOUR	PRICE
FES9293	P-22-SW	Black	£18.04
FES9295	P-30-SW	Black	£19.90



3110

KEY ACTUATOR

PART NUMBER	TYPE	PRICE
FES573107	Q-22-B	£91.29
FES9304	Q-30	£94.73



3110

MUSHROOM PUSH BUTTON WITH DETENT

PART NUMBER	TYPE	DESCRIPTION	COLOUR	PRICE
FES9297	PR-22-RT	Non-lockable	Red	£22.29
FES9298	PR-30-RT	Non-lockable	Red	£24.19
FES573108	PRS-22-RT-B	Lockable	Red	£98.34
FES9300	PRS-30-RT	Lockable	Red	£104.34



3110

TOGGLE SWITCH

PART NUMBER	TYPE	PRICE
FES9305	H-22-SW	£26.27
FES9306	H-30-SW	£28.33



3110

PUSH BUTTON ACTUATOR

PART NUMBER	TYPE	FUNCTION	COLOUR	PRICE
FES9290	T-22-GE	3/2	Yellow	£13.90
FES9997	T-22-RT	3/2	Red	£13.90
FES9289	T-22-SW	3/2	Black	£13.90
FES9292	T-30-GE	3/2	Yellow	£15.69
FES10014	T-30-RT	3/2	Red	£15.69
FES9291	T-30-SW	3/2	Black	£15.69



3110

SELECTOR SWITCH

PART NUMBER	TYPE	PRICE
FES9301	N-22-SW	£19.90
FES9302	N-30-SW	£22.29



PRESSURE SENSORS



FEATURES

- Programmable & configurable pressure switch for simple pressure sensing tasks
- Relative pressure measurement
- Teach-in function for programming
- Integrated microprocessor
- Switching status indicated by an LED visible from all sides

SPECIFICATIONS

Output function	FP	Freely programmable, N/O contact, N/C contact
	O	Threshold value with fixed hysteresis, 1 teach-in pressure, N/O contact
	C	Threshold value with fixed hysteresis, 1 teach-in pressure, N/C contact
	O1	Threshold value with fixed hysteresis, 2 teach-in pressures, N/O contact
	O2	Threshold value with variable hysteresis, 2 teach-in pressures, N/O contact
	O3	O3 Window comparator with fixed hysteresis, 2 teach-in pressures, N/O contact
Electrical output	P	1 switching output PNP



3160

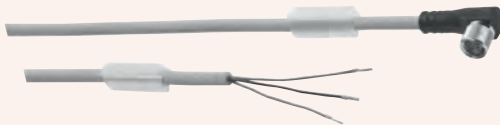
SDE5 PRESSURE SENSORS

PART NUMBER	TYPE	PRESSURE RANGE (BAR)	PRICE
FES542887	SDE5-V1-FP-Q6-P-M8	-1 to 0	£82.39
FES527461	SDE5-V1-O-Q6E-P-M8	-1 to 0	£82.39
FES527458	SDE5-V1-O-Q6-P-M8	-1 to 0	£83.93
FES527460	SDE5-V1-O-Q4E-P-M8	-1 to 0	£82.39
FES527457	SDE5-V1-O-Q4-P-M8	-1 to 0	£83.93
FES542886	SDE5-V1-O1-Q6-P-M8	-1 to 0	£83.93
FES542888	SDE5-D2-O-Q6E-P-K	0 to 2	£84.51
FES542897	SDE5-D10-FP-Q6E-P-M8	0 to 10	£80.86
FES542898	SDE5-D10-FP-Q6-P-M8	0 to 10	£82.39
FES542901	SDE5-D10-FP-Q4E-P-K	0 to 10	£82.98
FES542900	SDE5-D10-FP-Q4E-P-M8	0 to 10	£80.86
FES542899	SDE5-D10-FP-Q6-P-K	0 to 10	£84.51
FES527467	SDE5-D10-O-Q6E-P-M8	0 to 10	£82.39
FES542890	SDE5-D10-O-Q6E-P-K	0 to 10	£84.51
FES527464	SDE5-D10-O-Q6-P-M8	0 to 10	£83.95
FES527466	SDE5-D10-O-Q4E-P-M8	0 to 10	£82.39
FES527463	SDE5-D10-O-Q4-P-M8	0 to 10	£83.93
FES542894	SDE5-D10-C-Q6E-P-M8	0 to 10	£82.39
FES542889	SDE5-D10-C-Q4E-P-M8	0 to 10	£82.39
FES542895	SDE5-D10-C-Q6E-P-K	0 to 10	£84.51
FES542892	SDE5-D10-O2-Q6-P-M8	0 to 10	£83.93
FES542891	SDE5-D10-O2-Q6E-P-M8	0 to 10	£82.39



Six

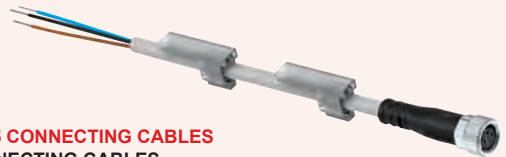
PRESSURE SENSOR ACCESSORIES



SDE5 CONNECTING CABLES  
CONNECTING CABLES  
ANGLED SOCKET

3110

PART NUMBER	TYPE	CABLE LENGTH	PRICE
FES541338	NEBU-M8W3-K-2.5-LE3	2.5 m	£8.77
FES541341	NEBU-M8W3-K-5-LE3	5.0 m	£12.96
FES541335	NEBU-M8W3-K-10-LE3	10.0 m	£21.39
FES575833	NEBU-M8W4-K-10-LE4	10.0 m	£24.09



SDE5 CONNECTING CABLES  
CONNECTING CABLES  
STRAIGHT SOCKET

3110

PART NUMBER	TYPE	CABLE LENGTH	PRICE
FES541333	NEBU-M8G3-K-2.5-LE3	2.5 m	£8.77
FES541334	NEBU-M8G3-K-5-LE3	5.0 m	£12.96
FES541363	NEBU-M12G5-K-2.5-LE3	2.5 m	£11.13
FES550326	NEBU-M12G5-K-2.5-LE4	2.5 m	£13.84
FES541330	NEBU-M12G5-K-2.5-LE5	2.5 m	£16.88
FES541364	NEBU-M12G5-K-5-LE3	5.0 m	£15.25
FES541328	NEBU-M12G5-K-5-LE4	5.0 m	£18.18
FES541331	NEBU-M12G5-K-5-LE5	5.0 m	£21.08
FES541332	NEBU-M8G3-K-10-LE3	10.0 m	£21.39
FES541348	NEBU-M8G3-K-2.5-M8G3	2.5 m	£15.57
FES541349	NEBU-M8G3-K-5-M8G3	5.0 m	£19.78
FES554035	NEBU-M8G4-K-2.5-M8G4	2.5 m	£18.35

PRESSURE SENSORS



FEATURES

- Two part, multi-coloured display
- Copy function (settings can be transferred from one device to another)
- Simple commissioning, thanks to intuitive operation
- Compact design 30 x 30 mm
- Electric output 2 x NPN



SPAN PRESSURE SENSORS WITH DISPLAY  
CABLE CONNECTION

3160

PART NUMBER	TYPE	PRESSURE RANGE (BAR)	PRICE
FES8035545	SPAN-B2R-G18M-PN-PN-L1	-1 to +1	£101.77
FES8035544	SPAN-P10R-G18M-PN-PN-L1	0 to 10	£101.77

PRESSURE SENSOR ACCESSORIES



SAMH-PN-F  
FRONT PANEL  
INSTALLATION KIT



3110

PART NUMBER	TYPE	PRICE
FES8035561	SAMH-PN-F	£10.44

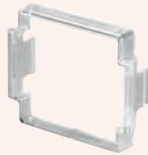
PRESSURE SWITCH



3110

PART NUMBER	TYPE	PRICE
FES10773	PEV-1/4-B	£138.76

SACC-PN-G  
PROTECTIVE COVER



3110

PART NUMBER	TYPE	PRICE
FES8035560	SACC-PN-G	£8.08

NEBU-M8 CONNECTING CABLE  
M8x1 4-WIRE, STRAIGHT SOCKET



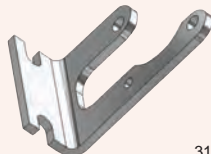
3110

PART NUMBER	TYPE	CABLE LENGTH	PRICE
FES541342	NEBU-M8G4-K-2.5-LE4	2.5 m	£11.54
FES541343	NEBU-M8G4-K-5-LE4	5.0 m	£15.73

M8x1 4-WIRE ANGLED SOCKET

PART NUMBER	TYPE	CABLE LENGTH	PRICE
FES541344	NEBU-M8W4-K-2.5-LE4	2.5 m	£11.54
FES541345	NEBU-M8W4-K-5-LE4	5.0 m	£15.73

SAMH-PU-A  
MOUNTING BRACKET



3110

PART NUMBER	TYPE	PRICE
FES8003354	SAMH-PU-A	£7.65

PLUG SOCKET WITH CABLE



3110

PART NUMBER	TYPE	PRICE
FES30935	KMF-1-24DC-2.5-LED	£18.67



# CamoZZi Valves

Control elements are crucial in pneumatic circuits for precise and reliable operation. Valves and solenoids drive pneumatic actuators and compressed air circuits.

CamoZZi's components are engineered to deliver the highest possible performance regarding flow rate and power consumption, whether using a direct, mechanical, or pneumatically operated valve.

We offer a wide range of pneumatic valves, solenoid valves, and valve islands, available in various sizes and flow rates, to cater to the specific requirements of any industrial sector.

## Available Ranges

- Solenoid valves – Series A
- Solenoid/spring valves – Series 3 & 4
- Solenoid and pneumatic valves – Series 9
- Solenoids for electro pneumatically operated valves
- Pneumatic valves – Series 3 & 4
- Mechanically operated mini valves – Series 2
- Mechanically and manually operated valves
- Manually operated valves
- Automatic valves



## DESCRIPTION

The Series A solenoid valves are of the directly operated type & can be used with dry or lubricated air. They are available in the 2/2 & 3/2-way versions with normally closed or normally open operations.

Symbol key  
Fit together

See page 397



2530

## STANDARD SOLENOID VALVES 300 BODY TYPE

PART NUMBER	FUNCTION	PORT SIZE	ORIFICE SIZE	PRICE
ZA321-0C2	2-Way NC	M5	1.5 mm	£39.76
ZA321-1C2	2-Way NC	1/8"	1.5 mm	£39.76
ZA321-1D2	2-Way NC	1/8"	2.0 mm	£40.92
ZA321-1E2	2-Way NC	1/8"	2.5 mm	£42.26
ZA322-0C2	2-Way NO	M5	1.8 mm	£47.47
ZA322-1C2	2-Way NO	1/8"	1.8 mm	£47.47
ZA331-0C2	3-Way NC	M5	1.5 mm	£33.23
ZA331-1C2	3-Way NC	1/8"	1.5 mm	£33.23
ZA332-0C2	3-Way NO	M5	1.5 mm	£39.62
ZA332-1C2	3-Way NO	1/8"	1.5 mm	£39.62

## SPECIFICATIONS

Type of construction	Poppet type
Valve group	2/2, 3/2-way position. Normally Closed (NC) or Normally Open (NO)
Materials	OT58 brass body (nickel plated), other parts: stainless steel, NBR seals
Mounting	M4 screws
Ports	M5, 1/8", cartridge ø4 mm
Operating temperature	0°C to 60°C (with dry air -20°C)
Operating pressure	0.9 to 15 bar
Nominal pressure	6 bar



2530

## STANDARD SOLENOID VALVE WITH MANUAL OVERRIDE 300 BODY TYPE

PART NUMBER	FUNCTION	INLET	OUTLET	PRICE
ZA331-4C2	3-Way NC	M5	1/8"	£40.13



2530

## STANDARD SOLENOID VALVE 600 BODY TYPE

PART NUMBER	FUNCTION	O-RING	ORIFICE SIZE	PRICE
ZA631-AC2	3-Way NC	Rotatable	1.5 mm	£36.94

## SOLENOID VALVES FOR MANIFOLD ASSEMBLY SINGLE MANIFOLD BODY TYPE



2530

PART NUMBER	FUNCTION	PORT SIZE	ORIFICE SIZE	PRICE
ZAA31-0C2	3-Way NC	M5	1.5 mm	£42.64
ZAA31-CC2	3-Way NC	ø4 mm	1.5 mm	£44.65

## STANDARD SOLENOID VALVE 400 BODY TYPE



2530

PART NUMBER	FUNCTION	PORT SIZE	ORIFICE SIZE	PRICE
ZA431-1C2	3-Way NC	1/8"	1.5 mm	£43.92

## STANDARD SOLENOID VALVE 300 BODY TYPE



2530

PART NUMBER	FUNCTION	INLET	OUTLET	PRICE
ZA331-3C2	3-Way NC	M5	1/8"	£35.42

## STANDARD SOLENOID VALVE 500 BODY TYPE



2530

PART NUMBER	FUNCTION	O-RING	ORIFICE SIZE	PRICE
ZA531-BC2	3-Way NC	Fixed	1.5 mm	£37.27

## STANDARD SOLENOID VALVE 100 BODY TYPE



2530

PART NUMBER	FUNCTION	O-RING	ORIFICE SIZE	PRICE
ZA131-AC2	3-Way NC	Rotatable	1.5 mm	£35.90

## Do you also need?



## Coils & plugs

Find it on pages  
395 – 397, section six

## DESCRIPTION

The 1/8" Series 3 solenoid valves have been designed as 3/2 & 5/2 ways. The main advantages of these solenoid valves is their small overall dimensions, which make them particularly suitable for small spaces.

## SPECIFICATIONS

Type of construction	Spool (pilot operated)
Valve group	3/2 Normally Closed (NC) or Normally Open (NO) 5/2 & 5/3-way port / position
Materials	Aluminium body, stainless steel spool, NBR seals
Mounting	Through holes in valve body
Ports	1/8", 1/4", 1/2"
Operating temperature	0°C to 60°C (with dry air -20°C)
Operating pressure	10 bar maximum
Nominal pressure	6 bar
Minimum pilot pressure	2 bar
Nominal flow	1/8" = 500 Nl/min
Class of insulation	Class H
Protection class	IP54 DIN 40050 (IP65 with DIN 43650/PG9 connector)
015 Actuation	Single solenoid, spring return (horizontal solenoids)
016 Actuation	Single solenoid, pneumatic spring return (horizontal solenoids)



### SERIES 3 3/2 SOL / SPRING



2530

PART NUMBER	FUNCTION	PORT SIZE	PRICE
Z338-015-02	3/2 NC	1/8"	£78.31
Z348-015-02	3/2 NO	1/8"	£78.31

### 5/2 SOL / SPRING

Z358-015-02	5/2	1/8"	£85.56
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### SERIES 3 3/2 SOL / SOL



2530

PART NUMBER	FUNCTION	PORT SIZE	PRICE
Z338-011-02	3/2	1/8"	£107.92

### 5/2 SOL / SOL

Z358-011-02	5/2	1/8"	£116.76
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### 5/3 SOL / SOL

Z368-011-02	5/3 CC	1/8"	£187.51
Z378-011-02	5/3 CO	1/8"	£187.51
Z388-011-02	5/3 C pressure	1/8"	£187.51



### SERIES 3 5/2 SOL / SPRING EXTERNAL PILOT



2530

PART NUMBER	FUNCTION	PORT SIZE	PRICE
Z358-E15-02	5/2	1/8"	£92.89



### SERIES 3 5/2 SOL / SOL EXTERNAL PILOT COMMAND



2530

PART NUMBER	FUNCTION	PORT SIZE	PRICE
Z358-E11-02	5/2	1/8"	£130.28

### 5/3 SOL / SOL

Z368-E11-02	5/3 CC	1/8"	£202.22
Z378-E11-02	5/3 CO	1/8"	£202.22
Z388-E11-02	5/3 C pressure	1/8"	£207.49



### SERIES 3 3/2 SOL / SPRING CAN BE MOUNTED ON MANIFOLD



2530

PART NUMBER	FUNCTION	PORT SIZE	PRICE
Z338L-015-2	3/2 NC	1/8"	£78.31
Z348L-015-2	3/2 NO	1/8"	£78.31



### SERIES 3 3/2 SOL / SOL CAN BE MOUNTED ON MANIFOLD



2530

PART NUMBER	FUNCTION	PORT SIZE	PRICE
Z338L-011-2	3/2	1/8"	£107.92

## Do you also need?



## Coils & plugs

Find it on pages  
395 – 397, section six

## DESCRIPTION

The Series 4 solenoid valves are a balanced spool type, and are available with various methods of activation.

## SPECIFICATIONS

Type of construction	Spool (pilot operated)
Valve group	3/2 Normally Closed (NC) or Normally Open (NO) 5/2 & 5/3-way port / position
Materials	Aluminium body, stainless steel spool, NBR seals
Mounting	Through holes in valve body
Ports	1/8", 1/4", 1/2"
Operating temperature	0°C to 60°C (with dry air -20°C)
Operating pressure	10 bar maximum
Nominal pressure	6 bar
Minimum pilot pressure	2 bar
Nominal flow	1/8" = 650 NI/min, 1/4" = 1250 NI/min, 1/2" = 1800 NI/min
Class of insulation	Class H
Protection class	IP54 DIN 40050 (IP65 with DIN 43650/PG9 connector)
015 Actuation	Single solenoid, spring return (horizontal solenoids)
016 Actuation	Single solenoid, pneumatic spring return (horizontal solenoids)



### SERIES 4 3/2 SOL / SPRING



2530

PART NUMBER	FUNCTION	PORT SIZE	PRICE
Z438-015-22	3/2 NC	1/8"	£95.12
Z434-015-22	3/2 NC	1/4"	£113.38

### 5/2 SOL / SPRING

Z458-015-22	5/2	1/8"	£98.75
Z454-015-22	5/2	1/4"	£124.86
Z452-015-50	5/2	1/2"	£224.56
Z452-016-50	5/2	1/2"	£284.91



### SERIES 4 3/2 SOL / SOL



2530

PART NUMBER	FUNCTION	PORT SIZE	PRICE
Z438-011-22	3/2	1/8"	£144.21
Z434-011-22	3/2	1/4"	£168.31

### 5/2 SOL / SOL

Z458-011-22	5/2	1/8"	£144.21
Z454-011-22	5/2	1/4"	£168.31
Z452-011-50	5/2	1/2"	£230.26

### 5/3 SOL / SOL

Z468-011-22	5/3 CC	1/8"	£213.06
Z464-011-22	5/3 CC	1/4"	£233.28
Z474-011-22	5/3 CO	1/4"	£233.28



### SERIES 4 5/2 SOL / SPRING VERTICAL SOLENOID



2530

PART NUMBER	FUNCTION	PORT SIZE	PRICE
Z454-V15-22	5/2	1/4"	£131.70
Z454-V16-22	5/2	1/4"	£143.10



### SERIES 4 5/2 SOL / SOL VERTICAL SOLENOID



2530

PART NUMBER	FUNCTION	PORT SIZE	PRICE
Z454-V11-22	5/2	1/4"	£177.37

## Do you also need?



### Coils & plugs

Find it on pages  
395 – 397, section six

## DESCRIPTION

### ISO 5599/1 STANDARDS

The Series 9 electropneumatically or pneumatically operated valves have been manufactured in sizes 1, 2 & 3, as recommended by ISO Standards. They are constructed to be actuated in different ways:

- Electrical actuation spring return
- Electrical actuation & pneumatic spring return
- Electrical actuation & return
- Pneumatic actuation & spring return
- Pneumatic actuation & differential pneumatic return
- Pneumatic actuation & return

For coils & plugs see pages 395 – 397



### SOL / SPRING 5/2



2530

PART NUMBER	FUNCTION	ISO	PRICE
Z951-P15-23	5/2	1	£103.20
Z952-P15-23	5/2	2	£122.32
Z953-P15-23	5/2	3	£267.10



### SOL / SOL 5/2



2530

PART NUMBER	FUNCTION	ISO	PRICE
Z951-P11-23	5/2	1	£143.42
Z952-P11-23	5/2	2	£160.60
Z953-P11-23	5/2	3	£284.59

### 5/3

Z961-P11-23	5/3 CC	1	£200.43
Z971-P11-23	5/3 CO	1	£200.43
Z962-P11-23	5/3 CC	2	£213.17
Z972-P11-23	5/3 CO	2	£213.17
Z963-P11-23	5/3 CC	3	£349.20
Z973-P11-23	5/3 CO	3	£349.20

### PNEU / SPRING 5/2



2530

PART NUMBER	FUNCTION	ISO	PRICE
Z951-000-35	5/2	1	£67.12
Z952-000-35	5/2	2	£84.68
Z953-000-35	5/2	3	£200.38

### PNEU / DIFF PNEU 5/2



2530

PART NUMBER	FUNCTION	ISO	PRICE
Z951-000-34	5/2	1	£67.12
Z952-000-34	5/2	2	£86.68
Z953-000-34	5/2	3	£193.38

### PNEU / PNEU 5/2



2530

PART NUMBER	FUNCTION	ISO	PRICE
Z951-000-33	5/2	1	£67.12
Z952-000-33	5/2	2	£82.47
Z953-000-33	5/2	3	£193.38

### 5/3

Z961-000-33	5/3 CC	1	£99.49
Z971-000-33	5/3 CO	1	£99.49
Z962-000-33	5/3 CC	2	£123.46
Z972-000-33	5/3 CO	2	£123.46
Z963-000-33	5/3 CC	3	£247.05
Z973-000-33	5/3 CO	3	£239.15

## SPECIFICATIONS

Type of construction	Spool (servo controlled)
Valve group	5/2 & 5/3-way port / position Centre Closed (CC) or Centre Open (CO)
Materials	Aluminium body, stainless steel spool, NBR seals
Mounting	Threaded holes in sub-base
Sub-base sizes	1 = 1/4", 2 = 3/8" & 3 = 1/2"
Operating temperature	0°C to 60°C (with dry air -20°C)
Operating pressure	10 bar maximum
Nominal pressure	6 bar
Nominal flow	Size 1: 900 NI/min, Size 2: 1610 NI/min Size 3: 3700 NI/min
Class of insulation	Class H
Protection class	IP54 DIN 40050 (IP65 with DIN 43650/PG9 connector)

### SINGLE SUB-BASE WITH SIDE OUTLETS



2530

PART NUMBER	INLET / EXHAUST	SIZE	PRICE
Z901-F1A	1/4"	ISO 1	£24.95
Z902-F2A	3/8"	ISO 2	£31.19
Z903-F3A	1/2"	ISO 3	£66.68

### SINGLE SUB-BASE WITH REAR OUTLETS



2530

PART NUMBER	INLET / EXHAUST	SIZE	PRICE
Z901-G1A	1/4"	ISO 1	£26.73
Z902-G2A	3/8"	ISO 2	£33.34
Z903-G3A	1/2"	ISO 3	£66.68

### MANIFOLD SUB-BASE WITH COMMON EXHAUST & INLET



2530

PART NUMBER	INLET / EXHAUST	SIZE	PRICE
Z901-C1A	1/4"	ISO 1	£27.03
Z902-C2A	3/8"	ISO 2	£33.57
Z903-C3A	1/2"	ISO 3	£95.63

### END BLOCK FOR MANIFOLD SUB-BASE



2530

PART NUMBER	INLET / EXHAUST	SIZE	PRICE
Z901-H1	1/4"	ISO 1	£31.84
Z902-H2	3/8"	ISO 2	£36.63
Z903-H3	1/2"	ISO 3	£97.81

### END BLOCK WITH FRONT OUTLET



2530

PART NUMBER	INLET / EXHAUST	SIZE	PRICE
Z901-N1	1/4"	ISO 1	£43.49
Z902-N2	3/8"	ISO 2	£56.17
Z903-N3	1/2"	ISO 3	£79.93

### MANIFOLD SUB-BASE WITH COMMON EXHAUST & INLET



2530

PART NUMBER	INLET / EXHAUST	SIZE	PRICE
Z901-N1A	1/4"	ISO 1	£37.50

### END BLOCK FOR MANIFOLD BASES



2530

PART NUMBER	INLET / EXHAUST	SIZE	PRICE
Z901-HN1	1/4"	ISO 1	£63.77

## SOLENOID MOD. U7... / U7\*EX & MOD. G7...

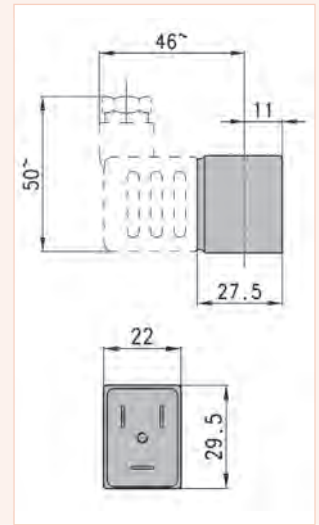
### DESCRIPTION

The dimensions, as well as the power consumption of these solenoids, differ, so that the best possible choice can be made depending on the type of electronic or electromechanical operating system used.

### SPECIFICATIONS

Connections	Bipolar plus earth DIN 43650 (vers. B) Mod. U7*EX marked II 3 GD Eex nA T4
Solenoid material	U7* = PET - G7* = PA

Mod.	Solenoid Voltage (1)	Power Absorption (1)	Solenoid Voltage (2)	Power Absorption (2)	Solenoid Voltage (3)	Power Absorption (3)
U7H	12 V DC	3.1 W	24 V - 50/60 Hz	3.5 VA		
G7H	12 V DC	3.1 W	24 V - 50/60 Hz	3.5 VA		
U7K	110 V - 50/60 Hz	3.8 VA	125 V - 50/60 Hz	5.5 VA	72 V DC	4.8 W
U7K1	110 V - 50/60 Hz	5.8 VA	125 V - 50/60 Hz	8.3 VA	72 V DC	5.6 W
G7K	110 V - 50/60 Hz	3.8 VA	125 V - 50/60 Hz	5.5 VA	72 V DC	4.8 W
G7K1	110 V - 50/60 Hz	5.8 VA	125 V - 50/60 Hz	8.3 VA	72 V DC	5.6 W
U7J	230 V - 50/60 Hz	3.5 VA	240 V - 50/60 Hz	4 VA		
G7J	230 V - 50/60 Hz	3.5 VA	240 V - 50/60 Hz	4 VA		
U79	48 V DC	3.1 W				
G79	48 V DC	3.1 W				
U710	110 V DC	3.2 W				
G710	110 V DC	3.2 W				
U77	24 V DC	3.1 W	48 V - 50/60 Hz	3.8 VA		
U771	24 V DC	3.1 W	48 V - 50/60 Hz	3.8 VA		
G77	24 V DC	3.1 W	48 V - 50/60 Hz	3.8 VA		
G771	24 V DC	3.1 W	48 V - 50/60 Hz	3.8 VA		
U7F	380 V - 50/60 Hz	7 VA				
U72	12 V DC	5 W				
G72	12 V DC	5 W				
U73	24 V DC	5 W				
G73	24 V DC	5 W				



### SOLENOIDS STANDARD DIN PLUG 18 MM FORM A



PART NUMBER	VOLTAGE	PRICE
ZA8B24	24 V 50/60 Hz 5 VA	£25.55
ZA8D110	110 V 50/60 Hz 5 VA	£25.55
ZA8E220	220 V 50/60 Hz 5 VA	£25.55
ZA8324	24 V DC 4 W	£25.55

### SOLENOIDS LATCHING COIL STANDARD PLUG



PART NUMBER	VOLTAGE	PRICE
ZG9324	24 V DC	£57.22

### SOLENOIDS - PET STANDARD DIN PLUG 11 MM



PART NUMBER	VOLTAGE	PRICE
ZU7H	12 V DC 3.1 W	£17.22
ZU7K	110 V AC 50/60 Hz 3.8 VA	£17.22
ZU7J	240 V AC 50/60 Hz 4 VA	£17.22
ZU79	48 V DC 3.1 W	£17.22
ZU77	48 V 50/60 Hz 3.5 VA	£17.22
ZU72	12 V DC 5 W	£17.22
ZU73	24 V DC 5 W	£17.22
ZU74	48 V DC 5 W	£17.22
ZU76	110 V DC 5 W	£17.22

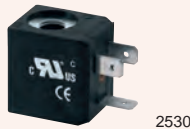
### SOLENOIDS PRE-WIRED EXPLOSION PROOF



PART NUMBER	VOLTAGE	PRICE
ZH8D110	110 V 50/60 Hz 5 VA	£153.50
ZH8E220	220 V 50/60 Hz 5 VA	£153.50
ZH8324	24 V DC 4 W	£153.50

Size 10.2 mm

### SOLENOIDS - NYLON STANDARD DIN PLUG 11 MM



PART NUMBER	VOLTAGE	PRICE
ZG7H	12 V DC 3.1 W	£14.86
ZG7K	110 V AC 50/60 Hz 3.8 VA	£14.86
ZG7J	240 V 50/60 Hz 4 VA	£14.86
ZG72	12 V DC 5 W	£14.86
ZG73	24 V DC 5 W	£14.86
ZG77	48 V 50/60 Hz 3.5 VA	£14.86

Please note:  
DIN Plugs are NOT included with solenoid

Note: to order the ATEX version, add EX at the end of the code.

Mod. U7K1, G7K1, U771 & G771 are to be used only with solenoid valves Series A, NO in line.



## DESCRIPTION

The range of Solenoid DIN Connectors, with cable gland entry, offers flexibility & is suitable for a wide variety of applications.

## SPECIFICATIONS

Insulation group	VDE 0110 1/89 – Class C
Materials	Polyamide (glass fibre reinforced) connectors. NBR standard (form A & B) profile gasket. NBR standard (form C) flat gasket. M3 x 32 mm (form A & B), M3 x 28 mm (industrial form C), M2.5 x 28 mm (form C) screws
Voltage	Up to 250 V AC or DC unless otherwise stated
Current	10A (nominal) 16A (max) – Form A & B 6A (nominal) 10A (max) – Form C
Temperature range	-40°C to +90°C
Cable gland size	PG7 cable diameter 4 – 6 mm PG9 cable diameter 6 – 8 mm



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### INDUSTRIAL FORM B 11 MM PIN SPACING

PART NUMBER	TYPE (LED VOLTAGE AC/DC)	CABLE ENTRY	PRICE
ZKB2000B9	Black	PG9	£2.51
ZKB2V54T9	Transparent (24 V LED)	PG9	£13.07
ZKB2V55T9	Transparent (115 V LED)	PG9	£13.07
ZKB2V56T9	Transparent (230 V LED)	PG9	£13.56

For use with Series A, Series 3 & 4, & ISO valves



2530

### SOLENOID CONNECTORS

PART NUMBER	DESCRIPTION	PRICE
Z121-803	With 300 mm cable	£5.82
Z121-806	With 600 mm cable	£8.16
Z121-810	With 1000 mm cable	£10.77

For use with Series K & Series E valves (size 10.5 mm)



2530

### FORM A 18 MM PIN SPACING

PART NUMBER	TYPE (VOLTAGE AC/DC)	CABLE ENTRY	PRICE
ZKA132000B9	Black	PG9	£2.51
ZKA2000A9	Grey	PG9	£2.50

For use with Series 4 valves - 1/2, Series 6 & A80 coils

### Do you also need?



### Solenoid Valves & Coils



Find it on pages 390 – 395, section six

## DESCRIPTION

The range of Solenoid DIN moulded cable connectors offers a fast & efficient method of connection, resulting in reduced installation time & cost.

## SPECIFICATIONS

Insulation group	VDE 0110 1/89 – Class C
Materials	TPU connectors. PVC standard cable. Integrated TPU gasket. M3 x 28 mm (form A & B), M3 x 23 mm (industrial form C), M2.5 x 23 mm (form C) screws
Voltage	Up to 250 V AC or DC unless otherwise stated
Current	5A – Form A & B 3A – Form C
Temperature range	-40°C to +90°C
Standard cable: Form A & B Form C	3 x 0.75 mm <sup>2</sup> conductors PVC H05 VVF 3 x 0.50 mm <sup>2</sup> conductors PVC H03 VVF



### FORM A 18 MM PIN SPACING DOUBLE EARTH



2530

PART NUMBER	TYPE (LED VOLTAGE AC/DC)	CABLE LENGTH	PRICE
ZMA11000530	Cable connector only	3 m	£11.75
ZMA61V54530	Cable connector (24 V LED)	3 m	£24.82

For use with Series 4 valves – 1/2, Series 6 & A80 coils



### FORM B 11 MM PIN SPACING 12 O'CLOCK EARTH



2530

PART NUMBER	TYPE (LED VOLTAGE AC/DC)	CABLE LENGTH	PRICE
ZMB15000530	Cable connector only	3 m	£15.72
ZMB65V54530	Cable connector (24 V LED)	3 m	£24.82
ZMB65V55530	Cable connector (115 V LED)	3 m	£24.82
ZMB65V56530	Cable connector (230 V LED)	3 m	£24.82

For use with Series A, Series 3 & 4, & ISO valves



### INDUSTRIAL FORM B 11 MM PIN SPACING 6 O'CLOCK EARTH



2530

PART NUMBER	TYPE (LED VOLTAGE AC/DC)	CABLE LENGTH	PRICE
ZMB63V55530	Cable connector (115 V LED)	3 m	£24.82

For use with Series A, Series 3 & 4, & ISO valves



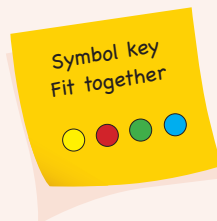
### INDUSTRIAL FORM C 9.4 MM PIN SPACING DOUBLE EARTH



2530

PART NUMBER	TYPE (LED VOLTAGE AC/DC)	CABLE LENGTH	PRICE
ZMD14000130	Cable connector only	3 m	£13.71

For use with Series EN & Series P valves



## DESCRIPTION

The pneumatically operated Series 3 & Series 4 valves have been designed with three different methods of return. A pneumatic signal, mechanical spring or differential pneumatic return. This is due to the type of design consisting of a balanced spool, which means that it can be used for a wide range of applications.

## SPECIFICATIONS

Type of construction	Spool (servo controlled)
Valve group	3/2, 5/2 & 5/3-way position Centre Closed (CC) or Centre Open (CO)
Materials	Aluminium body, stainless steel spool, NBR seals
Mounting	Through holes in valve body
Ports	1/8", 1/4", 1/2"
Operating temperature	0°C to 60°C (with dry air -20°C)
Operating pressure	10 bar maximum
Nominal pressure	6 bar
Minimum pilot pressure	2.5 bar
Nominal flow	Series 3: 1/8" = 750 NI/min Series 4: 1/8" = 650 NI/min 1/4" = 1250 NI/min, 1/2" = 1900 NI/min
Nominal diameter	1/8" = 5 mm, 1/4" = 7.5 mm, 1/2" = 12 mm



2530



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### PNEUMATIC / SPRING

3/2

PART NUMBER	FUNCTION	PORT SIZE	PRICE
Z338-035	3/2	1/8"	£43.23
Z338L-035	3/2	1/8"	£43.23
Z438-035	3/2	1/8"	£55.31
Z434-035	3/2	1/4"	£76.97

L – Can be mounted on manifolds

### PNEUMATIC / PNEUMATIC

3/2

PART NUMBER	FUNCTION	PORT SIZE	PRICE
Z338-033	3/2	1/8"	£48.05
Z338L-033	3/2	1/8"	£48.05
Z438-033	3/2	1/8"	£57.80
Z434-033	3/2	1/4"	£76.97

L – Can be mounted on manifolds

5/2

PART NUMBER	FUNCTION	PORT SIZE	PRICE
Z358-035	5/2	1/8"	£45.73
Z458-035	5/2	1/8"	£61.38
Z454-035	5/2	1/4"	£77.18
Z452-035	5/2	1/2"	£219.82

5/2

PART NUMBER	FUNCTION	PORT SIZE	PRICE
Z358-033	5/2	1/8"	£50.43
Z458-033	5/2	1/8"	£62.34
Z454-033	5/2	1/4"	£81.64
Z452-033	5/2	1/2"	£212.58

5/3

PART NUMBER	FUNCTION	PORT SIZE	PRICE
Z468-033	5/3 CC	1/8"	£104.71
Z464-033	5/3 CC	1/4"	£119.88
Z474-033	5/3 CO	1/4"	£119.88



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### PNEUMATIC / PNEUMATIC DIFFERENTIAL

3/2

PART NUMBER	FUNCTION	PORT SIZE	PRICE
Z438-034	3/2	1/8"	£64.97
Z434-034	3/2	1/4"	£79.11

5/2

PART NUMBER	FUNCTION	PORT SIZE	PRICE
Z458-034	5/2	1/8"	£64.97
Z454-034	5/2	1/4"	£83.79
Z452-034	5/2	1/2"	£212.58

Do you also need?



### Super rapid push-in fittings



Find it on pages 525 – 527, section eight

### SPECIFICATIONS

Media	Filtered compressed air without lubricant. If lubricated air is used, it is recommended that ISO VG32 oil is used. Once applied, the lubrication should never be interrupted.
Materials	Aluminium valve body, NBR seals, OT58 brass poppet & plunger, stainless steel spools



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### PLUNGER 3/2

PART NUMBER	FUNCTION	PORT SIZE	PRICE
Z235-945	3/2	M5	£20.14
Z234-945	3/2	4 mm	£24.48

### SPECIFICATIONS

Operating temperature	0°C to 60°C
Operating pressure	2 to 10 bar
Connections	4 mm, M5
Mounting	Through holes in valve body



2530

### PANEL MOUNTED PLUNGER 3/2

PART NUMBER	FUNCTION	PORT SIZE	PRICE
Z235-985	3/2	M5	£23.41
Z234-985	3/2	4 mm	£27.70



2530

### ROLLER LEVER 3/2

PART NUMBER	FUNCTION	PORT SIZE	PRICE
Z235-955	3/2	M5	£26.49
Z234-955	3/2	4 mm	£30.93



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### ONE WAY TRIP 3/2

PART NUMBER	FUNCTION	PORT SIZE	PRICE
Z235-965	3/2	M5	£29.68
Z234-965	3/2	4 mm	£33.93

## MECHANICALLY OPERATED VALVES – SERIES 1 & 3

### SPECIFICATIONS

Media	Filtered compressed air without lubricant. If lubricated air is used, it is recommended that ISO VG32 oil is used. Once applied, the lubrication should never be interrupted.
Materials	Aluminium valve body, NBR seals, OT58 brass poppet & plunger, stainless steel spools



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### PLUNGER 3/2

PART NUMBER	FUNCTION	PORT SIZE	PRICE
Z338-945	3/2	1/8"	£27.69
Z138-945	3/2 NC	1/8"	£32.24
Z148-945	3/2 NO	1/8"	£37.81
Z134-945	3/2	1/4"	£53.09

### 5/2

Z358-945	5/2	1/8"	£33.78
Z158-945	5/2	1/8"	£58.60
Z154-945	5/2	1/4"	£98.23

### SPECIFICATIONS

Operating temperature	0°C to 60°C
Operating pressure	0 to 10 bar
Connections	1/8", 1/4"
Mounting	Through holes in valve body



2530

### ROLLER LEVER 3/2

PART NUMBER	FUNCTION	PORT SIZE	PRICE
Z338-955	3/2	1/8"	£39.76
Z138-955	3/2	1/8"	£42.16
Z134-955	3/2	1/4"	£61.47

### 5/2

Z358-955	5/2	1/8"	£42.45
Z158-955	5/2	1/8"	£86.45
Z154-955	5/2	1/4"	£119.92



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### ROLLER LEVER ONE WAY TRIP 3/2

PART NUMBER	FUNCTION	PORT SIZE	PRICE
Z338-965	3/2	1/8"	£51.68
Z138-965	3/2	1/8"	£63.53

### 5/2

Z358-965	5/2	1/8"	£52.30
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## MECHANICALLY OPERATED SENSOR VALVES SERIES 3 & 4

### SPECIFICATIONS

Media	Filtered compressed air without lubricant. If lubricated air is used, it is recommended that ISO VG32 oil is used. Once applied, the lubrication should never be interrupted.
Materials	Aluminium valve body, NBR seals, OT58 brass poppet & plunger, stainless steel spools
Valve group	3/2, 5/2-way position. Normally Closed (NC) or Normally Open (NO)
Operating temperature	0°C to 60°C
Connections	1/8", 1/4"
Mounting	By through-holes in valve body



2530

### LEVER 3/2

PART NUMBER	FUNCTION	PORT SIZE	PRICE
Z338-D159A5	3/2 NC	1/8"	£78.81

### 5/2

Z358-D159A5	5/2	1/8"	£83.05
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## MANUALLY OPERATED VALVES

### DESCRIPTION

The manually operated, panel mounted valves, dia 22, have been designed to satisfy all the application requirements of the controls industry i.e. low actuating force 6N, short operational stroke & speed / accuracy of signal.

### SPECIFICATIONS

Type of construction	Poppet (closed centres)
Valve group	3/2, 5/3-way position. Normally Closed (NC)
Materials	Aluminium body, OT58 brass plunger, NBR seals
Mounting	Panel
Ports	M5 or cartridge diameter 4
Operating temperature	0°C to 60°C (with dry air -20°C)
Operating pressure	2 to 8 bar
Nominal pressure	6 bar
Nominal flow	60 NI/min
Nominal diameter	2.5 mm



2530

### PUSH BUTTON 3/2

PART NUMBER	FUNCTION	PORT SIZE	PRICE
Z235-895	3/2 NC	M5	£38.90
Z234-895	3/2 NC	4 mm tube	£42.92



2530

### KEY LOCKABLE 3/2

PART NUMBER	FUNCTION	PORT SIZE	PRICE
Z235-904	3/2 NC	M5	£66.38
Z234-904	3/2 NC	4 mm tube	£70.91



2530

### SELECTOR SWITCH 3/2 – 2-POSITION

PART NUMBER	FUNCTION	PORT SIZE	PRICE
Z235-990	3/2 NC	M5	£50.87
Z234-990	3/2 NC	4 mm tube	£55.32



2530

### SELECTOR SWITCH 5/3 – 3-POSITION

PART NUMBER	FUNCTION	PORT SIZE	PRICE
Z285-870	5/3	M5	£75.19
Z284-870	5/3	4 mm tube	£84.11



2530

**PALM SWITCH  
SPRING RETURN  
3/2**

PART NUMBER	FUNCTION	PORT SIZE	PRICE
Z235-975	3/2 NC	M5	£52.08
Z234-975	3/2 NC	4 mm tube	£56.54



2530

**VALVE FOR USE  
WITH OPERATORS  
3/2**

PART NUMBER	FUNCTION	PORT SIZE	PRICE
Z235-000	3/2 NC	M5	£24.38
Z234-000	3/2 NC	4 mm tube	£28.83
Z245-000	3/2 NO	M5	£27.57
Z244-000	3/2 NO	4 mm tube	£31.27



2530

**PALM SWITCH  
LATCHING – TWIST TO RELEASE  
3/2**

PART NUMBER	FUNCTION	PORT SIZE	PRICE
Z235-972	3/2 NC	M5	£57.23
Z234-972	3/2 NC	4 mm tube	£61.68



2530

**SINGLE BRACKET**

PART NUMBER	DESCRIPTION	PRICE
Z210-000	Single	£1.86



2530

**PALM SWITCH  
STABLE  
3/2**

PART NUMBER	FUNCTION	PORT SIZE	PRICE
Z234-970	3/2 NC	4 mm tube	£57.45



2530

**DOUBLE BRACKET**

PART NUMBER	DESCRIPTION	PRICE
Z220-000	Double	£2.82



2530

**JOYSTICK  
3/2**

PART NUMBER	FUNCTION	PORT SIZE	PRICE
Z235-905	3/2 NC	M5	£53.01
Z234-905	3/2 NC	4 mm tube	£57.45

## DESCRIPTION

The Series 3 manual valves (1/8", 3/2 & 5/2-way) & the Series 4 manual valves (1/4", 3/2, 5/2 & 5/3-way) are available with actuators designed to satisfy different needs. The 3/2-way valves are normally closed when P is the inlet; they can also be normally open when R is the inlet.



2530

## SWITCH

3/2

PART NUMBER	FUNCTION	PORT SIZE	PRICE
Z338-990	3/2 NC	1/8"	£45.73

5/2

Z358-990	5/2	1/8"	£50.43
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## SPECIFICATIONS

Type of construction	Spool type
Valve function	3/2, 5/2, 5/3-way position. Normally Closed (NC), Centre Closed (CC) or Centre Open (CO)
Materials	Aluminium body, stainless steel spool, NBR seals
Mounting	Through holes in valve body
Threaded ports	1/8", 1/4"
Operating temperature	0°C to 60°C (with dry air -20°C)
Operating pressure	0 to 10 bar
Nominal pressure	6 bar
Nominal flow	Series 3: 1/8" = 500 NI/min Series 4: 1/8" = 650 NI/min 1/4" = 1250 NI/min
Nominal diameter	1/8" = 5 mm 1/4" = 7.5 mm



2530

## PUSH / PULL

3/2

PART NUMBER	FUNCTION	PORT SIZE	PRICE
Z338-910	3/2 NC	1/8"	£33.78
Z434-910	3/2 NC	1/4"	£66.23

5/2

Z358-910	5/2	1/8"	£38.36
Z454-910	5/2	1/4"	£71.60

## PUSH BUTTON

3/2



2530

PART NUMBER	FUNCTION	PORT SIZE	COLOUR	PRICE
Z338-895	3/2 NC	1/8"	Black	£38.36
Z338-896	3/2 NC	1/8"	Green	£38.36
Z338-897	3/2 NC	1/8"	Red	£38.36

5/2

Z358-895	5/2	1/8"	Black	£48.05
Z358-896	5/2	1/8"	Green	£48.05
Z358-897	5/2	1/8"	Red	£48.05

## PUSH & SPRING RETURN

3/2



2530

PART NUMBER	FUNCTION	PORT SIZE	PRICE
Z338-915	3/2 NC	1/8"	£33.78
Z434-915	3/2 NC	1/4"	£66.23

5/2

Z358-915	5/2	1/8"	£38.36
Z454-915	5/2	1/4"	£71.60

## PALM SWITCH

3/2



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PART NUMBER	FUNCTION	PORT SIZE	COLOUR	PRICE
Z338-975	3/2 NC	1/8"	Black	£45.73
Z338-976	3/2 NC	1/8"	Green	£45.73
Z338-977	3/2 NC	1/8"	Red	£45.73

5/2

Z358-975	5/2	1/8"	Black	£53.12
Z358-976	5/2	1/8"	Green	£53.12
Z358-977	5/2	1/8"	Red	£53.12



**LEVER**  
3/2

PART NUMBER	FUNCTION	PORT SIZE	PRICE
Z138-900	3/2 NC	1/8"	£59.65
Z134-900	3/2 NC	1/4"	£80.87

5/2

Z158-900	5/2	1/8"	£114.12
Z154-900	5/2	1/4"	£138.85



**LEVER**  
3/2

PART NUMBER	FUNCTION	PORT SIZE	PRICE
Z138-935	3/2 NC	1/8"	£39.07
Z134-935	3/2 NC	1/4"	£60.28

**LEVER**  
3/2

PART NUMBER	FUNCTION	LEVER/SPRING	PORT SIZE	PRICE
Z338-900	3/2 NC	L/L	1/8"	£45.73
Z338-905	3/2 NC	L/S	1/8"	£47.74
Z434-900	3/2 NC	L/L	1/4"	£81.78
Z434-905	3/2 NC	L/S	1/4"	£81.78

5/2

Z358-900	5/2	L/L	1/8"	£53.12
Z358-905	5/2	L/S	1/8"	£55.31
Z454-900	5/2	L/L	1/4"	£90.77
Z454-905	5/2	L/S	1/4"	£90.77

5/3

Z368-900	5/3 CC	L/L/L	1/8"	£61.57
Z368-905	5/3 CC	L/S/L	1/8"	£68.96
Z378-900	5/3 CO	L/L/L	1/8"	£61.57
Z378-905	5/3 CO	L/S/L	1/8"	£68.96
Z464-900	5/3 CC	L/L/L	1/4"	£93.70
Z464-905	5/3 CC	L/S/L	1/4"	£93.70
Z474-900	5/3 CO	L/L/L	1/4"	£93.70
Z474-905	5/3 CO	L/S/L	1/4"	£93.70

## FOOT OPERATED PEDAL VALVES

### DESCRIPTION

The pedals can be supplied in either the pneumatic or electrical foot operated version. The pneumatic type is available with a 5/2 valve & 1/4" front ports, which allow the fittings & silencers to be assembled conveniently on the front face. A 3/2 operation can be obtained by closing an outlet port. The electrical type is available with a single pole changeover contact microswitch & a front wire outlet (PG9). The pedal can be operated as bi-stable or monostable, by switching the selector placed under the small red protection flap.

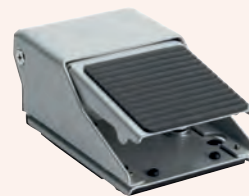
### SPECIFICATIONS – PNEUMATICALLY OPERATED

Type of construction	Spool type
Valve function	3/2 & 5/2
Materials	Valve body AL, stainless steel spool, NBR seals, plastic casing
Assembly	Valve built into pedal body
Operating temperature	0°C to 50°C (with dry air -10°C)
Operating pressure	2.5 to 8 bar
Rated flow	650 NI/min
Ports	1/4" gas



**PNEUMATICALLY OPERATED FOOT VALVE**

PART NUMBER	FUNCTION	PRICE
Z354925	5/2	£90.60



**FOOT OPERATED VALVE**

PART NUMBER	FUNCTION	PORT SIZE	PRICE
Z235-925	3/2 NC	M5	£77.86
Z234-925	3/2 NC	4 mm tube	£82.39



## CIRCUIT SELECTOR

### DESCRIPTION

The circuit selector, Mod. SCS-668-06, enables two signals coming alternately from two different points to be channelled towards the same point. The selector is mounted through holes in the body.



2530

### SHUTTLE VALVE ZSCS SERIES

PART NUMBER	PORT SIZE	PRICE
ZSCS668-06	1/8"	£21.77

### SPECIFICATIONS

Type of construction	Poppet type
Valve group	Automatic
Materials	AL body, OT58 bush, NBR seals, delrin poppet
Pressure	0.2 to 10 bar
Operating temperature	0°C to 80°C (with dry air -20°C)
Nominal flow	800 NI/min
Fluid	Filtered air: without lubrication. If lubricated air is used, it is recommended that ISO VG32 oil is used. Once applied, the lubrication should never be interrupted

## UNIDIRECTIONAL NON RETURN VALVES

### DESCRIPTION

The unidirectional valves in the VNR Series are available with M5, G1/8 & G1/4 ports. These poppet type valves allow operation at low pressures, both when there is a free flow & during retention.



2530

### NON RETURN VALVES ZVNR SERIES

PART NUMBER	PORT SIZE	PRICE
ZVNR-205-M5	M5	£14.64
ZVNR210-1/8	1/8"	£12.98
ZVNR84307	1/4"	£22.11

### SPECIFICATIONS

Type of construction	Poppet type
Valve group	Automatic
Materials	OT58 body, NBR seals, stainless steel spring
Pressure	M5 = 1 bar, 1/8" = 0.2 bar, 1/4" = 0.2 bar
Operating temperature	0°C to 80°C (with dry air -20°C)
Nominal flow	M5 = 50 NI/min, 1/8" = 600 NI/min, 1/4" = 1400 NI/min
Fluid	Filtered air: without lubrication. If lubricated air is used, it is recommended that ISO VG32 oil is used. Once applied, the lubrication should never be interrupted

## QUICK EXHAUST VALVES

### DESCRIPTION

Quick exhaust valves are commonly used to increase the speed of cylinders or for rapid depressurisation of tanks containing compressed air. The models VSO 425 – M5 & VSO 426 – 04 are specially designed for mounting on solenoid valves & valves incorporating a Ø4 cartridge. We recommend mounting a silencer on the outlet.



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### QUICK EXHAUST VALVES ZVSC SERIES

PART NUMBER	PORT SIZE	PRICE
ZVSC588	1/8"	£13.11
ZVSC544	1/4"	£15.68
ZVSC522	1/2"	£24.61

### SPECIFICATIONS

Type of construction	Poppet type
Valve group	Automatic
Materials	OT58 (brass) body. NBR seals ZVSO series. Desmopan seals ZVS series
Pressure	ZVS 1/8" 0.5 bar ZVS 1/4" 0.3 bar ZVS 1/2" 0.2 bar ZVSO 1 bar
Operating temperature	0°C to 80°C (with dry air -20°C)
Nominal flow	ZVS 1/8" P to A 530 NI/min, A to R 940 NI/min ZVS 1/4" P to A 860 NI/min, A to R 1600 NI/min ZVS 1/2" P to A 4700 NI/min, A to R 6250 NI/min ZVSO P to A = 50 NI/min, A to R 330 NI/min
Fluid	Filtered air: without lubrication. If lubricated air is used, it is recommended that ISO VG32 oil is used. Once applied the lubrication should never be interrupted

### QUICK EXHAUST VALVES ZVSO SERIES



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PART NUMBER	SIZE	PRICE
ZVSO425-M5	M5	£10.96

### QUICK EXHAUST VALVES ZVSO SERIES



2530

PART NUMBER	CARTRIDGE	PRICE
ZVSO426-04	Ø4 mm	£10.96

## AUTOMATIC VALVES – FLOW CONTROL

### DESCRIPTION

These unidirectional flow controllers are equipped with M5, 1/8" & 1/4" ports. They are mainly used for controlling the speed of cylinders & may be mounted on control panels or cylinders, as required. The 1/8" & 1/4" port versions are available with two different types of adjustments too.

### SPECIFICATIONS

Type of construction	Needle type
Valve group	Uni & bidirectional controller
Materials	Aluminium body, brass needle, NBR seals
Mounting	Through holes in valve body / control panel
Ports	M5, 1/8", 1/4"
Operating temperature	0°C to 80°C (with dry air -20°C)
Nominal pressure	6 bar
Nominal diameter	M5 = 1.5 mm, 1/8" = 2 or 3 mm, 1/4" = 4 or 6 mm
Nominal flow	Ask for details



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### FLOW CONTROL VALVE UNIDIRECTIONAL

PART NUMBER	PORT SIZE	ORIFICE SIZE	PRICE
ZRFU-452	M5	1.5 mm	£16.54
ZRFU-482	1/8"	2.0 mm	£14.95
ZRFU-483	1/8"	3.0 mm	£14.95
ZRFU-444	1/4"	4.0 mm	£24.61
ZRFU-446	1/4"	6.0 mm	£24.61
ZRFU-429	1/2"	9.0 mm	£76.27

### BIDIRECTIONAL

ZRFO-352	M5	1.5 mm	£16.54
ZRFO-382	1/8"	2.0 mm	£14.95
ZRFO-383	1/8"	3.0 mm	£14.95
ZRFO-344	1/4"	4.0 mm	£24.61
ZRFO-346	1/4"	6.0 mm	£24.61

### SLIDE VALVE



2530

PART NUMBER	PORT SIZE	PRICE
ZVMS-105	M5	£15.28
ZVMS-118	1/8"	£16.61
ZVMS-114	1/4"	£17.75
ZVMS-138	3/8"	£22.93
ZVMS-112	1/2"	£28.27
ZVMS-134	3/4"	£37.96

## AUTOMATIC VALVES – BLOCKING

### DESCRIPTION

These unidirectional & bidirectional blocking valves enable direct mounting onto cylinders. The internal design of the blocking valves allows a very high flow rate & reliable operation.

### SPECIFICATIONS

Type of construction	Poppet type
Valve group	Uni & bidirectional blocking valve
Materials	OT58 body, NBR seals
Mounting	Male thread
Ports	1/8", 1/4"
Operating temperature	0°C to 80°C (with dry air -20°C)
Operating pressure	VBU = 0.3 to 10 bar VBO = 0 to 10 bar
Nominal pressure	6 bar
Nominal diameter	1/8" = 5.5 mm, 1/4" = 8 mm
Nominal flow	Ask for details



2530

### BLOCKING VALVES UNIDIRECTIONAL

PART NUMBER	PORT SIZE	PRICE
ZVBU-1/8	1/8"	£44.89
ZVBU-1/4	1/4"	£49.35
ZVBU-3/8	3/8"	£62.60

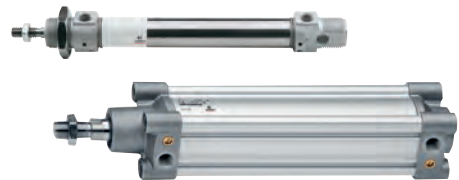
### BIDIRECTIONAL

ZVBO-1/8	1/8"	£44.89
ZVBO-1/4	1/4"	£49.35
ZVBO-3/8	3/8"	£62.60

### Do you also need?



### Cylinders & accessories



Find it on pages 354 – 360, section six

## FEATURES

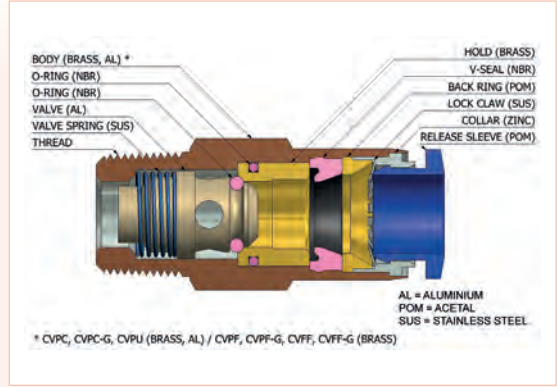
- Suitable for low pressure applications
- Allows compressed air from one side to flow & blocks the inverse flow to protect & maintain the vacuum line
- Easily applied to low pressure piping

## APPLICATIONS

- Used where air should flow in only one direction
- Used where air pressure of the ventilation section should be kept uniformed
- Good for low pressure devices

## SPECIFICATIONS

Suitability	Air (no other type of gas or liquid) <b>Do not use in water applications</b>
Working pressure	0 to 150 psi (10.2 bar)
Negative pressure	-29.5 in Hg -750 mm Hg (-750 Torr)
Working temperature	0°C to +60°C (+32°F to +140°F)
Application tube	Polyurethane & nylon



## TUBE TO THREAD



### STRAIGHT BSPT MALE

PART NUMBER	TUBE OD	THREAD	PRICE each
CDCVPC0401	4 mm	1/8" BSPT	£9.06
CDCVPC0601	6 mm	1/8" BSPT	£12.01
CDCVPC0602	6 mm	1/4" BSPT	£12.01
CDCVPC0801	8 mm	1/8" BSPT	£10.75
CDCVPC0802	8 mm	1/4" BSPT	£11.32
CDCVPC1003	10 mm	3/8" BSPT	£23.74
CDCVPC1004	10 mm	1/2" BSPT	£24.98
CDCVPC1203	12 mm	3/8" BSPT	£24.61
CDCVPC1204	12 mm	1/2" BSPT	£25.74



### STRAIGHT METRIC MALE

PART NUMBER	TUBE OD	THREAD	PRICE each
CDCVPC04M5	4 mm	M5 x 0.8	£8.48
CDCVPC04M6	4 mm	M6 x 1.0	£8.48

### BSPP MALE

PART NUMBER	TUBE OD	THREAD	PRICE each
CDCVPC04G1	4 mm	1/8" BSPP	£9.06
CDCVPC06G1	6 mm	1/8" BSPP	£12.01
CDCVPC06G2	6 mm	1/4" BSPP	£12.01
CDCVPC08G1	8 mm	1/8" BSPP	£10.75
CDCVPC08G2	8 mm	1/4" BSPP	£11.32
CDCVPC10G3	10 mm	3/8" BSPP	£23.74
CDCVPC10G4	10 mm	1/2" BSPP	£24.98
CDCVPC12G3	12 mm	3/8" BSPP	£24.61
CDCVPC12G4	12 mm	1/2" BSPP	£25.74

## METRIC TUBE TO TUBE



### STRAIGHT UNIONS

PART NUMBER	TUBE OD	PRICE each
CDCVPU04	4 mm	£9.06
CDCVPU06	6 mm	£12.01
CDCVPU08	8 mm	£12.45
CDCVPU10	10 mm	£28.00
CDCVPU12	12 mm	£29.75

## THREAD TO THREAD



### BUSH BSPT FEMALE / BSPT MALE

PART NUMBER	FEMALE THREAD	MALE THREAD	PRICE each
CDCVPF0101	1/8" BSPT	1/8" BSPT	£12.01
CDCVPF0202	1/4" BSPT	1/4" BSPT	£11.32
CDCVPF0303	3/8" BSPT	3/8" BSPT	£12.01
CDCVPF0404	1/2" BSPT	1/2" BSPT	£22.34



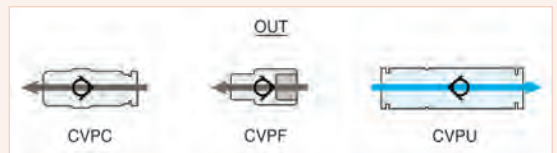
### BUSH BSPP FEMALE / BSPP MALE

PART NUMBER	FEMALE THREAD	MALE THREAD	PRICE each
CDCVPF01G1	1/8" BSPP	1/8" BSPP	£12.01
CDCVPF02G2	1/4" BSPP	1/4" BSPP	£11.32
CDCVPF03G3	3/8" BSPP	3/8" BSPP	£12.01
CDCVPF04G4	1/2" BSPP	1/2" BSPP	£22.34



### STRAIGHT UNIONS BSPT FEMALE

PART NUMBER	THREAD	PRICE each
CDCVFF01-01	1/8" BSPT	£10.71
CDCVFF02-02	1/4" BSPT	£14.20
CDCVFF03-03	3/8" BSPT	£20.90
CDCVFF04-04	1/2" BSPT	£23.72



Fitting material aluminium

## SLIDE & NON-RETURN VALVES

### SPECIFICATIONS

Temperature range -20°C to +80°C (4°F to 176°F)

### MATERIALS

Body Nickel plated brass



1450

### NON-RETURN VALVE METRIC FEMALE

PART NUMBER	THREAD	PRESSURE	PRICE
B/V6062-M5	M5	8 bar	£15.87

### NON-RETURN VALVE BSPP FEMALE

B/V6062-02	1/8" BSPP	8 bar	£15.08
B/V6062-04	1/4" BSPP	8 bar	£18.63
B/V6062-06	3/8" BSPP	8 bar	£40.61
B/V6062-08	1/2" BSPP	8 bar	£41.75

### SLIDE VALVE BSPP FEMALE



1450

PART NUMBER	THREAD	PRESSURE	PRICE
B/V6060-02	1/8" BSPP	10 bar	£26.98
B/V6060-04	1/4" BSPP	10 bar	£33.43
B/V6060-06	3/8" BSPP	10 bar	£42.95
B/V6060-08	1/2" BSPP	10 bar	£54.13



1450

### NON-RETURN VALVE METRIC MALE / METRIC FEMALE

PART NUMBER	THREAD	THREAD	PRESSURE	PRICE
B/V6063-M5	M5	M5	8 bar	£16.63

### BSPP MALE / BSPP FEMALE

B/V6063-02	1/8" BSPP	1/8" BSPP	8 bar	£15.87
B/V6063-04	1/4" BSPP	1/4" BSPP	8 bar	£19.53
B/V6063-06	3/8" BSPP	3/8" BSPP	8 bar	£42.71
B/V6063-08	1/2" BSPP	1/2" BSPP	8 bar	£43.78

## HEAVY DUTY TECHNICAL VALVES

## VALVES

### FEATURES

High pressure resistance. Wide temperature range. Long life reliable product. Low pressure head loss. Lightweight, easy to transport. Environment friendly, non-toxic. Easy & fast installation, very easy to operate.

### SPECIFICATIONS

Working pressure	10 bar	16 bar	16 bar
Temperature range	-5°C to +60°C	-20°C to +90°C	-20°C to +90°C
MATERIALS	Grey	White	Black
Body	Polypropylene	PVDF	Acetal
O-ring	EPDM	FKM	NBR

### FEATURES

Heavy duty Quatro Tech valves provide dependable operation & long life; Quatro Tech valves have only one moveable part, which significantly reduces the grinding & discrepancies. Ability to handle a wide range of aggressive chemicals.

### SPECIFICATIONS

Nominal pressure	Up to 10 bar (145 psi)		
Temperature range	-5°C to +60°C (23°F to 140°F) subject to application		
Material	Glass fibre reinforced polypropylene		
O-ring material	EPDM		



3860

### DUAL TECH VALVE GREY – EPDM O-RING

PART NUMBER	MALE THREAD	FEMALE THREAD	PRICE
TF-23002504043	1/4" BSPT	1/4" BSPT	£15.01

### WHITE – FKM O-RING

TF-23002904041	1/4" BSPT	1/4" BSPT	£31.76
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3860

### QUATRO TECH VALVE BSPT MALE FIXED CONNECTOR

PART NUMBER	INLET	THREAD	PRICE
TF-23003403033	1/4" BSPT	1/8" BSPT	£22.13
TF-23003404043	1/4" BSPT	1/4" BSPT	£22.13



### DUAL TECH VALVE BLACK – NBR O-RING

PART NUMBER	MALE THREAD	FEMALE THREAD	PRICE
TF-23002404042	1/4" BSPT	1/4" BSPT	£16.08



3860

### QUATRO TECH VALVE BARB UNION CONNECTOR

PART NUMBER	INLET	HOSE ID	PRICE
TF-23003408083	1/4" BSPT	8 mm	£23.67



3860