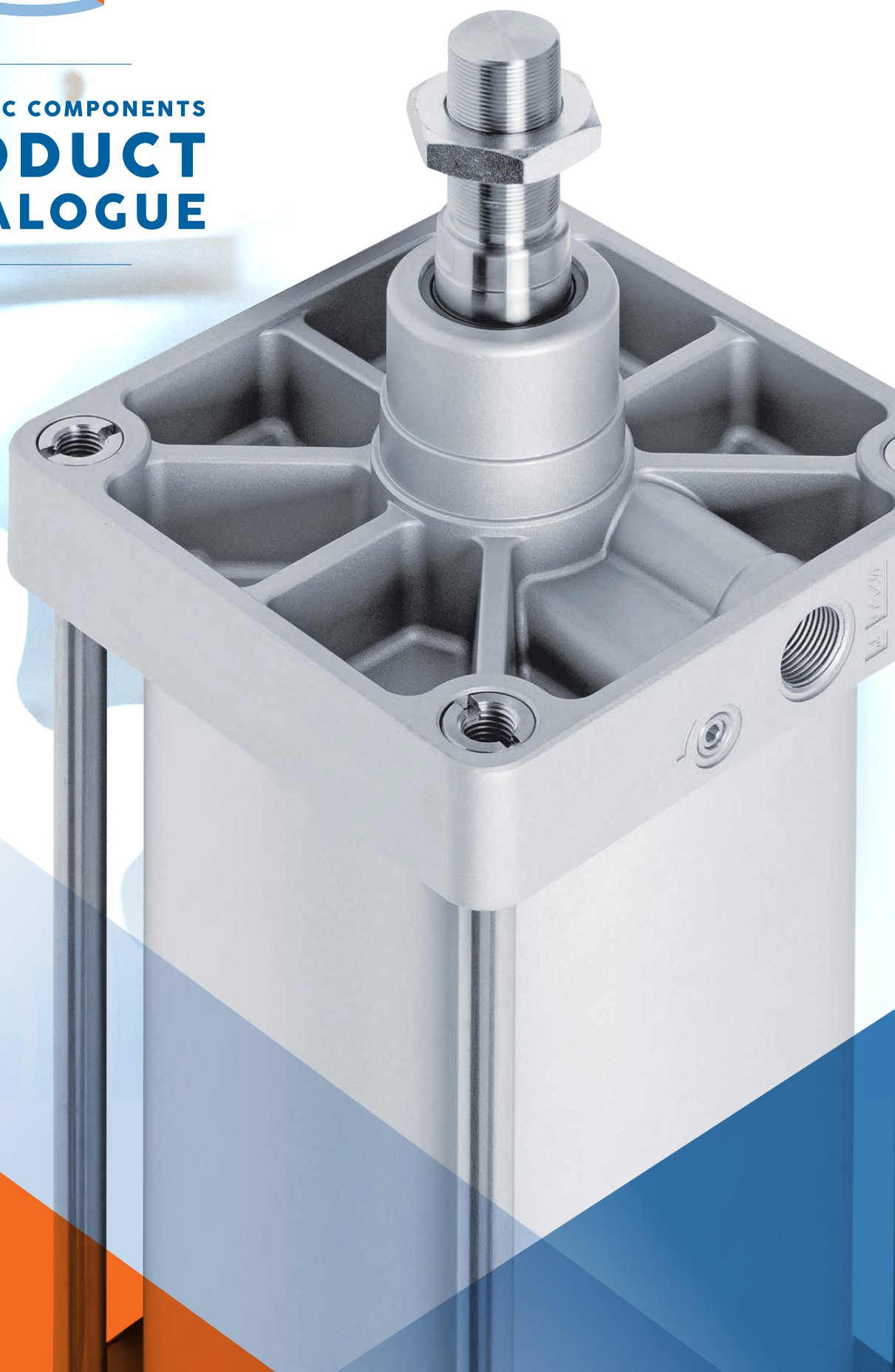




PNEUMATIC COMPONENTS

PRODUCT CATALOGUE



YOUR PARTNER IN PRESSURE SINCE 1974



PIMATIC

OUR RELIABLE PARTNER WHEN UNDER PRESSURE

Dear Valued Customer

50 years ago, our goal was to design and produce advanced pneumatic products for our customers' individual requirements. Today we still have the same goal. Today Pimatic is known as the world leader in applied pneumatics.

Strongly developing Pimatic serves a wide range international OEMs with top products, which are designed and produced by our dedicated professionals. We are able to offer complicated tailored solutions starting from designing and participating into our customers product development until implementation and spare part offering.

In addition to the product we manufacture, we have chosen top international brands as our reliable partners. Our product range tells our story about our technical know-how, user friendliness, quality and reliability in all languages.

Pimatic's strength and service ability also mean the resources to respond to an overall economic way of thinking. Economy starts from component purchase price, it can be seen in the functional reliability of components and in a long service life. It means also advanced standardization, low maintenance costs and good spare part availability. What would be more economical and environmentally friendly than to design and manufacture a product which has a life cycle of up to 40 years.

Our operations are guided by the ISO9001 and ISO14001 quality management systems, and we are committed to complying with sustainable development in our operations principles. Our goal is to continue to reduce operations resulting in environmental load and already in the product development phase minimize the environmental impact of the product throughout the product's life cycle.

Dear customer, today we have an opportunity to serve you better than ever. This product catalog includes the latest pneumatic know-how. In addition to these standard components, we design and manufacture numerous customized products to fulfill our customers' individual requirements, even the most challenging ones. We strongly believe that this catalog will help you in your work. When you think of a reliable and overall economic partner for applied pneumatics, you think of 50-years old Pimatic.

Lassi Valo
Product manager

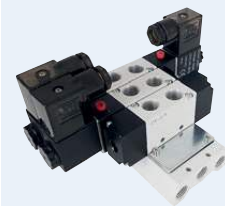


CYLINDERS

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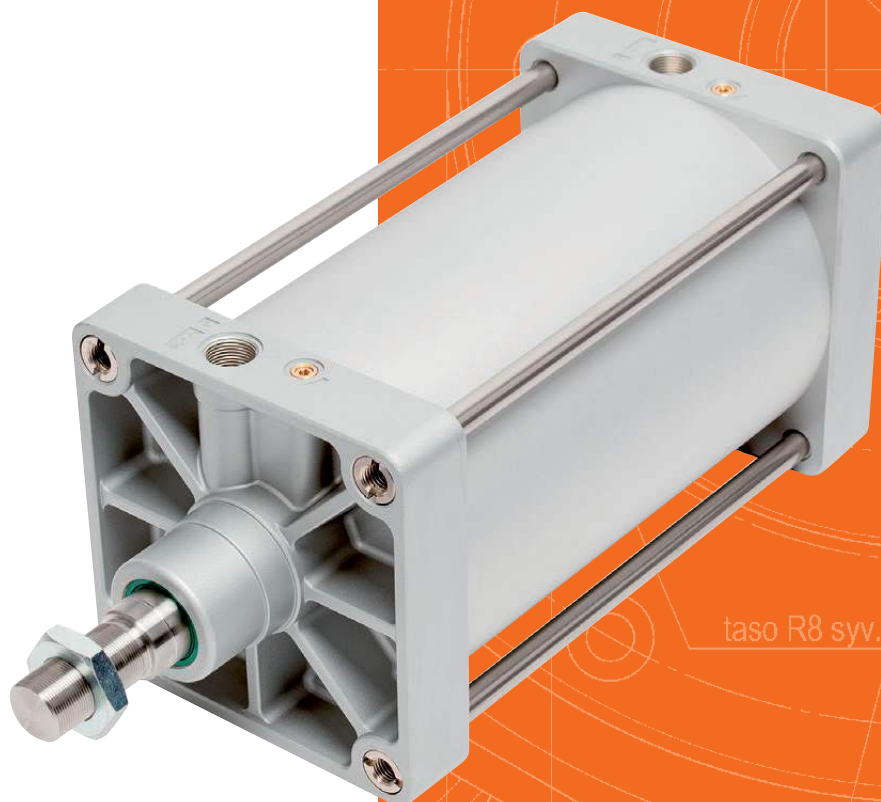
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CYLINDERS

PNEUMATIC | QUALITY

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ISO15552 cylinders SAI Series

SPECIFICATIONS

- Dimensioning ISO15552
- Anodised profile tube
- Ends painted aluminium casting
- Chrome-plated (20 µm) piston rod
- Gaskets TPU/NBR
- Equipped with guides and a locking device
Magnetic piston as standard
- Pressure range: 1.5...10 bar (0.15...1.0 MPa)
- Temperature range: -20...+70 °C with standard gaskets (TPU/NBR)
- Working fluid: Filtered (40 µm) compressed air or neutral gases, with or without spray lubrication



ORDER EXAMPLE

SAI 32 x 50 S G

1 2 3 4 5

1. Model: Double acting
2. Cylinder diameter
3. Stroke
4. Magnetic piston
5. Thread type G

Mounting accessories on page 11. | Sensors on page 18.

CYLINDER Ø	PISTON ROD Ø	CONNECTOR SIZE Ø	PISTON SURFACE AREA CM2		FORCE N / 6 BAR		DAMPING length mm
			+motion	-motion	+motion	-motion	
32	12	G 1/8	8.0	6.9	470	410	27
40	16	G 1/4	12.6	10.6	750	630	27
50	20	G 1/4	19.6	16.5	1170	980	30
63	20	G 3/8	31.2	28.1	1860	1650	30
80	25	G 3/8	50.3	45.4	3,000	2650	36
100	25	G 1/2	79.5	73.5	4,700	4,300	36

MANUFACTURING PROGRAMME

CYLINDER Ø	STANDARD STROKES										
	25	50	80	100	125	160	200	250	320	400	500
32	x	x	x	x	x	x	x	x	x	x	x
40	x	x	x	x	x	x	x	x	x	x	x
50	x	x	x	x	x	x	x	x	x	x	x
63	x	x	x	x	x	x	x	x	x	x	x
80	x	x	x	x	x	x	x	x	x	x	x
100	x	x	x	x	x	x	x	x	x	x	x

ISO15552 cylinders P2720 series

SPECIFICATIONS

- Double acting and spring return version
- Magnetic piston as standard feature
- ISO15552 construction
- Diecast aluminium covers
- Hard anodized profile tube or round tube with tie rod construction available
- Chromed piston rod
- Pressure range 0...10 bar
- Temperature range -35...+80°C with standard seals (PU) and 0...150°C with high temperature seals. Metal piston rod scraper upon request. Temperature -40°C)
- Media: Pressurized air (Filtered 40µm) or inert gases, lubricated or dry
- Diameter: 32, 40, 50, 63, 80, 100, 125, 160, 200, 250 and 320mm
- Stroke lengths of spring return cylinders 25,50,80,100,125 and 160mm (profiled tube only available)



ORDER EXAMPLE

P2720 RV - 63/20 - 100

1

2

3

4

1. Cylinder series
P2720-Double acting cylinder
P2721- Cylinder with a double rod
P2723- rear opposed tandem cylinder
2. Blank = standard structure
H = Chromed piston rod, AISI 316
R = tie-rod construction
KR= the external parts of cylinder are corrosion resistant aluminium or

- AISI316, tie-rod construction
3. Cylinder / piston rod diameter
4. Stroke

CYLINDER Ø	PISTON ROD Ø	CONNECTOR SIZE Ø	PISTON SURFACE AREA CM ²		FORCE N / 6 BAR		DAMPING length mm
			+motion	-motion	+motion	-motion	
32	12	G 1/8	8,0	6,9	470	410	21
40	16	G 1/4	12,6	10,6	750	630	21
50	20	G 1/4	19,6	16,5	1170	980	21
63	20	G 3/8	31,2	28,1	1860	1650	21
80	25	G 3/8	50,3	45,4	3000	2650	28
100	25	G 1/2	78,5	73,5	4700	4300	31
125	32	G 1/2	123	115	7300	6800	37
160	40	G 3/4	201	188	12000	11100	42
200	40	G 3/4	314	302	18800	18000	42
250	50	G 1	490,8	471,2	29400	28200	53
320	63	G 1	804,2	773,0	48200	46300	53

MANUFACTURING PROGRAMME

CYLINDER Ø	STANDARD STROKES										
	25	50	80	100	125	160	200	250	320	400	500
32	x	x	x	x	x	x	x	x	x	x	x
40	x	x	x	x	x	x	x	x	x	x	x
50	x	x	x	x	x	x	x	x	x	x	x
63		x	x	x	x	x	x	x	x	x	x
80		x	x	x	x	x	x	x	x	x	x
100		x	x	x	x	x	x	x	x	x	x
125				x	x	x	x	x	x	x	x
160				x	x	x	x	x	x	x	x
200				x	x	x	x	x	x	x	x
250				x	x	x	x	x	x	x	x
320				x	x	x	x	x	x	x	x

Additional optional stroke lengths P2520-32-32-100 max. 3,000 mm, P2520R-32-320 max. 2,700 mm.

P2720 series replaces P2520 series.

ISO15552 cylinder P3720-series

SPECIFICATIONS

- Double acting cylinder
- Magnetic piston as standard feature
- ISO15552 design with tie rod construction
- Stainless steel (AISI316) covers
- Stainless steel tube and tie rods (AISI316)
- Stainless steel piston rod (AISI316)
- Pressure range 0...10 bar
- Temperature range -35...+80°C with standard seals (PU) and 0...150°C with high temperature seals.
- Media: Pressurized air (filtered 40µm) or inert gases, lubricated or not
- Diameters 32, 40, 50, 63, 80,100, 125 and 160mm
- Special seals available upon request



ORDER EXAMPLE

P3720 RV - 32/12 - 100 + BH + PNO

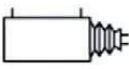
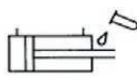
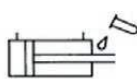
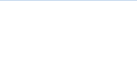
1 2 3 4 5 6

1. Cylinder serie
2. R = tie rod construction (standard feature)
Blank = standard seals
V = High temperature seals
3. Cylinder/ piston rod diameter
4. Stroke (mm)
5. Mounting accessories
6. Drawing number (customer specials)

Mounting accessories on page 11. | Sensors on page 18.

Equipment options for ISO cylinders

STRUCTURAL, SEAL, AND EQUIPMENT OPTIONS

P2721 Cylinder with a double rod	The cylinder provides equal thrust and pulling forces and allows for better piston rod control.	
P2723 Rear ends of cylinders are against each other	The cylinders have the same or different stroke lengths, which allow three or four different positions.	
P2720V Cylinder with high temperature seals	Piston, piston rod, damping and O-ring heat-resistant Viton.	
P2720R Cylinder with tie rod construction	Cylinders with diameters from 32 to 100 can be supplied with a round, hard-anodised tube or profile tube. Standard feature for diameters 125 to 320.	
P2720P Cylinder piston rod is protected with bellow seal	Bellow seal may change the dimensions and the stroke lengths are limited, please request a separate dimension table.	
P2720H Cylinder with a corrosion-resistant piston rod	Cylinder is equipped with AISI316 piston rod.	
P2720K Externally corrosion-resistant cylinder	The external parts of the cylinder are corrosion-resistant aluminium or AISI316.	
P2720-pn Customer-specific application	The drawing number can be used to define a customer-specific solution using the structure of the basic cylinder.	

ISO15552 cylinder guides and locking devices

ISO15552 CYLINDER GUIDES TSAI SERIES

- H-shaped guide with sliding or linear ball bearings available for cylinders
- Stroke length max. 500 mm

ORDER EXAMPLE

TSAI M 32 x 50 S G

1 2 3 4 5 6

1. Cylinder kit with guides
2. Guide type
M = slide bearing
L = linear ball bearing
3. Cylinder diameter
4. Stroke
5. Magnet piston
6. Thread type

Mounting accessories on page 11. | Sensors on page 18.
(A separate sensor bracket is required when using the sensor)



ISO15552 CYLINDER LOCKING DEVICES, CYLINDER AND LOCKING DEVICE TSAI SERIES

- Technical values and standard cylinder stroke lengths according to the SAI cylinder kit
- Lock opening pressure min. 3 bar, maximum pressure 7 bar

ORDER EXAMPLE

BSAI 32 x 50 S G

1 2 3 4 5

1. Model: Double acting, with lock
2. Cylinder diameter
3. Stroke
4. Magnet piston
5. Thread type G

Mounting accessories on page 11. | Sensors on page 18.



Note the additional length according to the table due to the lock

CYLINDER Ø	EXTRA LENGTH MM	LOCKING FORCE N	CONNECTOR SIZE Ø
32	59	500	G 1/8
40	63.5	900	G 1/8
50	74.5	1,400	G 1/8
63	75	2,200	G 1/8
80	107	3,600	G 1/8
100	107	5,500	G 1/8

ISO21287 Compact cylinders ACE Series

SPECIFICATIONS

- Compact ISO 21287-compliant pneumatic cylinder
- Cylinder diameter 12...125 mm
- Single and double acting models available
- Chrome-plated steel rod
- Aluminium ends and tube
- Magnetic piston as standard
- Pressure range: One-way 2...10 bar (0.2...1.0 MPa), 2-way 1.5...10 bar (0.15...1.0 MPa)
- Temperature range: -20...+70 °C
- Working fluid: Filtered (40 µm) compressed air or neutral gases, with or without spray lubrication



ORDER EXAMPLE

ACE 40x50 B S G

1 2 3 5 4 6

1. Cylinder kit
ACE = double acting
ASE = single acting, spring return
ATE = single acting, push return
ACED = double acting with guides, through rod
ACE = double acting with guides
TACED = double acting with guides, Double rod
2. Diameter
3. Stroke
4. Piston rod thread
No marking = internal thread
B = external thread
5. Magnet piston
no marking = diam. 12...25
G = G thread diam. 32...125
6. G = G thread diam. 32...125

Mounting accessories on page 11. | Sensors on page 18.

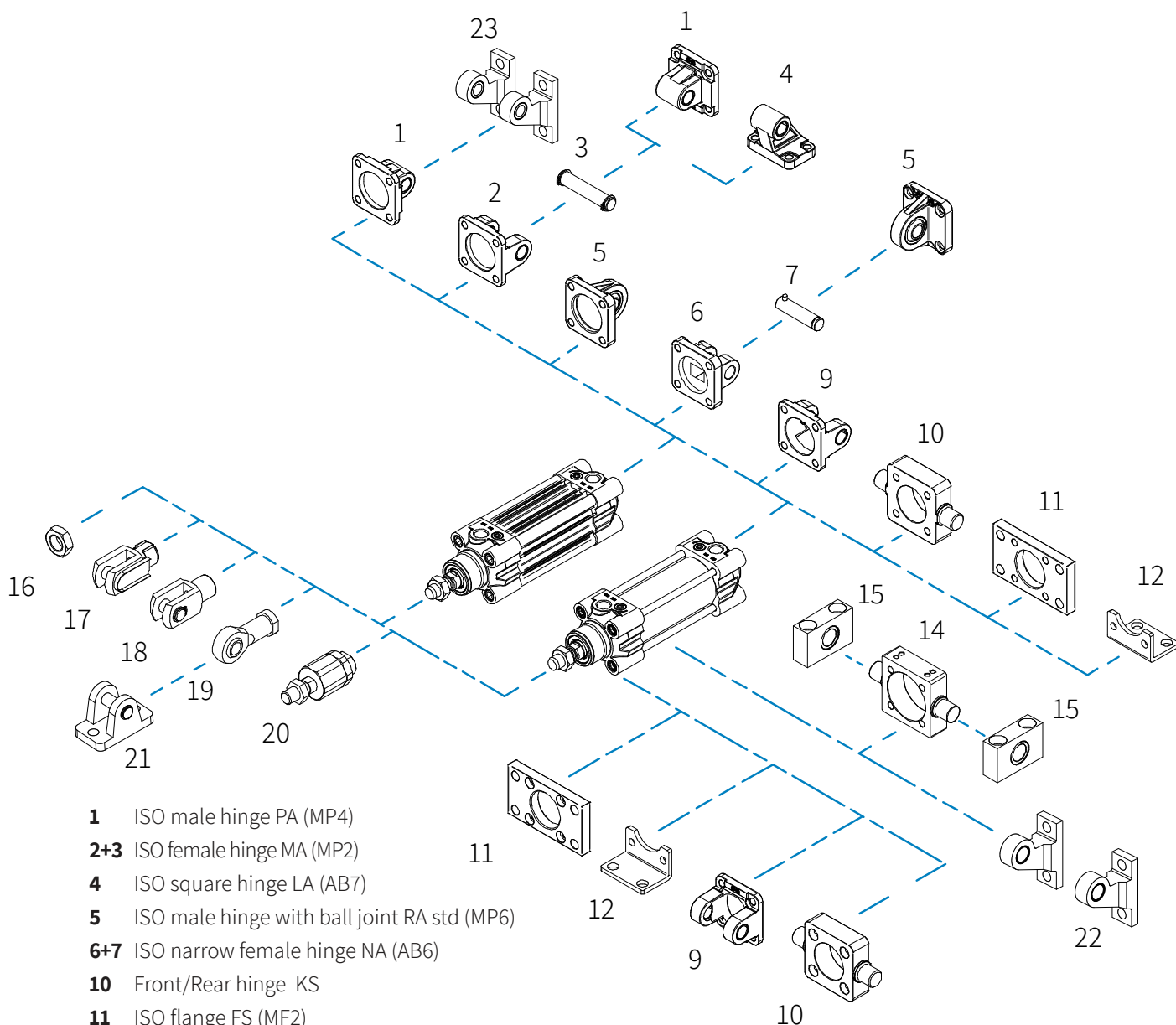
CYLINDER Ø	PISTON ROD Ø	CONNECTOR SIZE Ø	PISTON ROD INTERNAL THREAD	PISTON ROD EXTERNAL THREAD	FORCE N / 6 BAR + MOTION		FORCE N / 6 BAR - MOTION	
					Double acting	Single acting	Double acting	Single acting
12	6	M5	M3	M5 x 0.8	68	51	51	34
16	8	M5	M4	M6 x 1.0	120	98	90	68
20	10	M5	M6	M8 x 1.25	188	159	141	112
25	10	M5	M6	M8 x 1.25	294	259	247	212
32	12	G1/8	M8	M10 x 1.25	482	433	415	365
40	12	G1/8	M8	M10 x 1.25	754	682	686	615
50	16	G1/8	M10	M12 x 1.25	1178	1072	1057	951
63	16	G1/8	M10	M12 x 1.25	1870	1732	1750	1612
80	20	G1/8	M12	M16 x 1.5	3016	2819	2827	2630
100	20	G1/8	M12	M16 x 1.5	4712	4426	4524	4238
125	25	G1/4	M16	M20 x 1.5	7363		7086	

Standard stroke length | Single acting: 5, 10, 15, 20 and 25 mm | Double acting 5, 10, 15, 20, 30, 40, 50, 60, 80 and 100 mm

MANUFACTURING PROGRAMME

SERIES	CYLINDER Ø	STANDARD STROKES										
		5	10	15	20	25	30	40	50	60	80	100
ACE ACED	12	x	x	x	x		x	x	x			
	16	x	x	x	x		x	x	x			
	20-125	x	x	x	x		x	x	x	x	x	x
ASE ATE	12	x	x									
	16-100	x	x	x	x	x						
TACE TACED	12	x	x	x	x		x	x	x			
	16	x	x	x	x		x	x	x	x		
	20-100	x	x	x	x		x	x	x	x	x	x

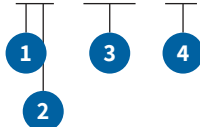
Mounting accessories ISO 15552



- 1** ISO male hinge PA (MP4)
- 2+3** ISO female hinge MA (MP2)
- 4** ISO square hinge LA (AB7)
- 5** ISO male hinge with ball joint RA std (MP6)
- 6+7** ISO narrow female hinge NA (AB6)
- 10** Front/Rear hinge KS
- 11** ISO flange FS (MF2)
- 12** ISO foot mounting SS (MS1)
- 14** Intermediate hinge for tie rod TA (MT4)
- 15** Support for intermediate hinge, YS (AT4))
- 16** Locking nut DS
- 17** Clevis with lockable PIN CS
- 19** Rod eye BS
- 20** Self aligning joint JS
- 21** Clevis hinge UA
- 22** Joint bracket VA
- 23** Joint bracket ZA

ORDER EXAMPLE

RA - 050 - 20



- 1.** Mounting accessory type
- 2.** Material
A= aluminum
S= steel
H= AISI 316
- 3.** Diameter
- 4.** Cylinder series

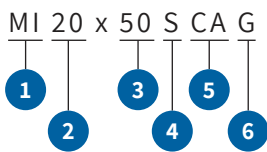
ISO6432 Mini cylinders MI Series

SPECIFICATIONS

- Single or double acting, ISO 6432-compliant pneumatic cylinder
- Stainless steel piston rod and tube
- Anodised aluminium ends
- Pressure range: double acting 1.5–10 bar (0.15–1.0 MPa), single acting 2–10 bar (0.2–1.0 MPa)
- Temperature range: –20...+70 °C
- Working fluid: Dry or spray-lubricated air (40 µm) or neutral gases



ORDER EXAMPLE



1. MI = double acting
MIC = double acting with adjustable damping
MSI = single acting, rod inside
MTI = single-acting, rod outside
MID = double acting, double rod
2. Cylinder diameter
3. Stroke
4. Magnetic piston as standard
5. Rear end, thread + joint hole (no selection in MID model)
6. Thread type G

Mounting accessories on page 11. | Sensors on page 18.

CYLINDER Ø	PISTON ROD Ø	CONNECTOR SIZE Ø	PISTON SURFACE AREA CM2		RCE N / 6 BAR		RCE N / 6 BAR	
			+motion	-motion	single acting	+motion	-motion	
8	4	M5	0.5	0.37	25.5	30	22.2	
10	4	M5	0.78	0.65	41.1	46.8	39	
12	6	M5	1.13	0.85	60.3	67.8	51	
16	6	M5	2.00	1.72	99.8	120	103.2	
20	8	G 1/8	3.14	2.64	160.3	188.4	158.4	
25	10	G 1/8	4.91	4.12	261.9	294.6	247	

MANUFACTURING PROGRAMME

SERIES	CYLINDER Ø	STANDARD STROKES										MAX. STROKE
		10	25	50	80	100	125	160	200	250	320	
MI	8	x	x	x	x	x	x					200
	10	x	x	x	x	x	x	x	x			200
	12	x	x	x	x	x	x	x	x	x		500
	16	x	x	x	x	x	x	x	x	x	x	600
	20	x	x	x	x	x	x	x	x	x	x	800
	25	x	x	x	x	x	x	x	x	x	x	800
MIC	20	x	x	x	x	x	x	x	x	x	x	800
	25	x	x	x	x	x	x	x	x	x	x	800
	25	x	x	x	x	x	x	x	x	x	x	800
MSI	8	x	x	x								
	10	x	x	x								
	12	x	x	x								
	16	x	x	x	x	x						
	20	x	x	x	x	x	x					
	25	x	x	x	x	x	x					
MID	8	x	x	x	x	x						100
	10	x	x	x	x	x						100
	12	x	x	x	x	x	x	x	x			200
	16	x	x	x	x	x	x	x	x	x		300
	20	x	x	x	x	x	x	x	x	x		300
	25	x	x	x	x	x	x	x	x	x		300

ISO6432 AISI304 Cylinders Z-series

SPECIFICATIONS

- Double acting or spring returned ISO 6432 construction
- Stainless steel (AISI304) Covers, tube and rod nut
- Stainless steel (AISI316)Piston rod
- Anti-rotation available upon request (hexagonal piston rod material AISI303)
- Pressure range 1...10 bar
- Temperature range -35...+80 °C with standard seals (PU) and 0...150 °C with high temperature seals
- Media: pressurized air (filtered 40 µm) or inert gas. Lubricated or with out lubrication
- Diameters 16, 20, 25 and 32mm



ORDER EXAMPLE

ZDM A 025 100 GS M
1 2 3 4 5 6

1. Cylinder construction
ZDM = Double acting with magnetic piston
ZSE = Spring returned, rear spring
ZS = Spring returned, front spring
2. Construction
Blank = Standard
A = Anti-rotation (hexagonal rod)
P = Double rod
3. Diameters 016, 020, 025 or 032
4. Stroke length (mm).
5. Seal
GS standard seals (PU)
VA high temperature seals
6. Threat M = Male thread
7. Empty = Without cushioning
W = Cushioning (available for sizes 20 ja 25)
8. Option: Ex approved Ex II2GD c T4

Mounting accessories on page 11. | Sensors on page 18.

Mounting accessories ISO6432 Mini cylinders MI and Z Series

MOUNTING ACCESSORIES



FLANGE BRACKET	
CYLINDER Ø	ORDER NUMBER
8	F 012 10
10	F 012 10
12	F 016 10
16	F 016 10
20	F 022 10
25	F 022 10



ANGLE PLATE BRACKET	
CYLINDER Ø	ORDER NUMBER
8	S 012 10
10	S 012 10
12	S 016 10
16	S 016 10
20	S 022 10
25	S 022 10



NUT, ON NECK	
CYLINDER Ø	ORDER NUMBER
8	D 12
10	D 12
12	D 16
16	D 16
20	D 22
25	D 22



BALL JOINT BRACKET	
CYLINDER Ø	ORDER NUMBER
8	B 04
10	B 04
12	B 06
16	B 06
20	B 08
25	BS 032



ARTICULATED CLEVIS COUPLING	
CYLINDER Ø	ORDER NUMBER
8	C 04
10	C 04
12	C 06
16	C 06
20	C 08
25	CS 032



NUT FOR PISTON ROD	
CYLINDER Ø	ORDER NUMBER
8	D 04
10	D 04
12	D 06
16	D 06
20	D 08
25	DS 032



FORK JOINT BRACKET	
CYLINDER Ø	ORDER NUMBER
8	U 04 10
10	U 04 10
12	U 06 10
16	U 06 10
20	U 08 10
25	U 08 10

Mounting accessories for Z-series:

Please add letter **R** to order code and the material is stainless steel (AISI304) for example **CR** 04 or **BR** 04

Piston and diaphragm type trust cylinders KE, KD, ME and MD Series

SPECIFICATIONS

- Single or double acting piston or diaphragm type thrust cylinders without end damping
- Body material: galvanized steel
- Steel piston rod SIS 1650)
- Material of diaphragm: reinforced nitrile rubber
- NBR seals
- Pressure range: 0...8 bar (0...0.8 MPa)
- Temperature range: -20...+80 °C
- Media: Pressurized air /filtered (40 µm) or inert gases, lubricated or not



PISTON TYPE TRUST CYLINDER

OPERATION	ORDER NUMBER	FORCE KN / 6 BAR	STROKE	CONNECTOR SIZE Ø	PISTON ROD THREAD	MOUNTING THREAD
Single acting	KE 160-50	1.6	50	G 1/4	M 12 x 1,75	M 24 x 3
Single acting	KE 160-80	1.6	80	G 1/4	M 12 x 1,75	M 24 x 3
Single acting	KE 300-50	3	50	G 1/4	M 12 x 1,75	M 24 x 3
Single acting	KE 300-80	3	80	G 1/4	M 12 x 1,75	M 24 x 3
Single acting	KE 2500-60	25	60	G 1/2	M 24 x 3	M 48 x 3
Single acting	KE 2500-100	25	100	G 1/2	M 24 x 3	M 48 x 3
Double acting	KD 2500-60	25	60	G 1/2	M 24 x 3	M 48 x 3
Double acting	KD 2500-80	25	80	G 1/2	M 24 x 3	M 48 x 3

DIAPHRAGM TYPE TRUST CYLINDER

OPERATION	ORDER NUMBER	FORCE KN / 6 BAR	STROKE	CONNECTOR SIZE Ø	PISTON ROD THREAD	FASTENING THREAD
Single acting	ME 300-40	3	40	G 1/4	M 12 x 1,75	M 24 x 2
Single acting	ME 600-50	6	50	G 1/4	M 16 x 2	M 36 x 3
Single acting	ME 1200-50	12	50	G 1/2	M 20 x 2,5	M 36 x 3
Double acting	MD 300-40	3	40	G 1/4	M 12 x 1,75	M 24 x 2
Double acting	MD 600-50	6	50	G 1/4	M 16 x 2	M 36 x 3
Double acting	MD 1200-50	12	50	G 1/2	M 20 x 2,5	M 36 x 3

MOUNTING ACCESSORIES



CLEVIS WITH PIN	
BOX TYPE	ORDER NUMBER
ME&MD/300, KE 160/300	C-12 x 1.75
ME/MD-600	C-16 x 2

ROD NUT	
BOX TYPE	ORDER NUMBER
KE 160/30	M24X3
ME/MD 300	M24X2
ME/MD 600	M36X3
KE/KE2500	M48x3

Rotating cylinder DSO Series

SPECIFICATIONS

- Rack-and-pinion double-acting rotating cylinder
- Suitable for heavy duty use
- Ends, tube, and frame are aluminium
- Rack and pinion are made of steel
- Pressure range: 0...10 bar (0...1.0 MPa)
- Temperature range: -10...+80 °C
- Working fluid: Spray-lubricated compressed air, filtration 5 µm



ORDER EXAMPLE

DSO-P - 63 / 180 - D - P - H

1 2 3 4 5 6

1. Cylinder kit
DSO-P = pneumatic operation
DSO-H = hydraulic operation
DSO-HPE22 = pneumatic operation, oil stabilisation and speed control
DSO-HPE66 = pneumatic operation, oil stabilisation, speed control and lock valves
DSO-HPR = hydropneumatic use, oil right
DSO-HPL = hydropneumatic use, oil left
2. Cylinder diameter mm
(See table for diameters)
3. Torque angle 0...720 °
4. Axle model / standard as shown
D = pass-through
B = perforated
BN = internal key way
5. End damping / standard anti-damping
P = pneum. adjustable
PP = pneum. progressive
OEM = hydr. adjustable
6. Additional accessories
H = adjustable restrictor (15 °/end)
E = magnetic piston

CYLINDER DIAMETER	TORQUE AT 6 BAR
50	18 Nm
63	36 Nm
80	74 Nm
100	150 Nm
125	250 Nm
160	510 Nm
200	990 Nm

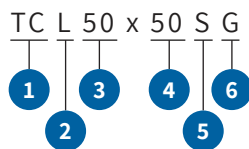
Guide cylinder TC Series

SPECIFICATIONS

- Double acting cylinder for transverse forces or non-rotational construction
- Compact design, combined cylinder and two rotary guides
- Guides are equipped with either slide or ball bearing
- Pressure range: 1.5...10 bar (0.15...1.0 MPa)
- Temperature range: -20...+70 °C
- Working fluid: Filtered (40 µm) compressed air or neutral gases, with or without spray lubrication



ORDER EXAMPLE



1. TC three-rod, double acting
2. L = slide bearing
M = linear ball bearing
3. Cylinder diameter mm
(See table for diameters)
4. Stroke mm
(See table for stroke lengths)
5. S Magnet piston
6. G thread type, 12 and 16 diameters, no marking

MANUFACTURING PROGRAMME

CYLINDER DIAMETER	CONNECTOR SIZE Ø	STANDARD STROKES																		MAX. STROKE LENGTH
		10	20	25	30	40	50	60	70	75	80	90	100	125	150	175	200	225	250	
12	M5	x	x	x	x	x	x	x	x	x	x	x	x	x	x					150
16	M5	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x			200
20	G1/8		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	250
25	G1/8		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	250
32	G1/8			x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	250
40	G1/8			x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	250
50	G1/4			x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	250
63	G1/4			x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	250
80	G3/8			x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	250
100	G3/8			x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	250

Cylinder sensors

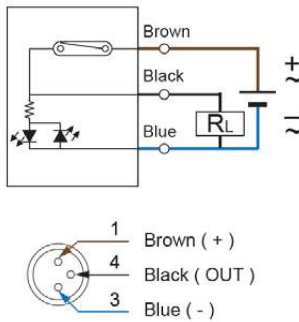
SPECIFICATIONS

- Sensor diameter 6,3mm
- PUR-cable
- ø3mm wires 0,15mm²
- Temperature range -10...+70°C
- Reed-switch or PNP current source
- Supplied with LED-indicator

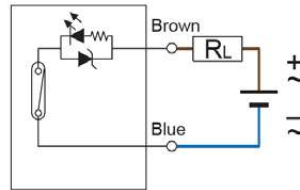


WIRING DIAGRAMS

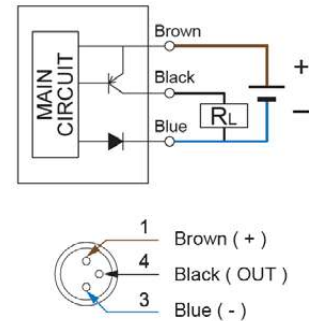
PCS-Reed-3-1A and PCS-Reed-3-M8



PCS-Reed-2-1A



PCS-PNP-3-1A and PCS-PNP-3-M8



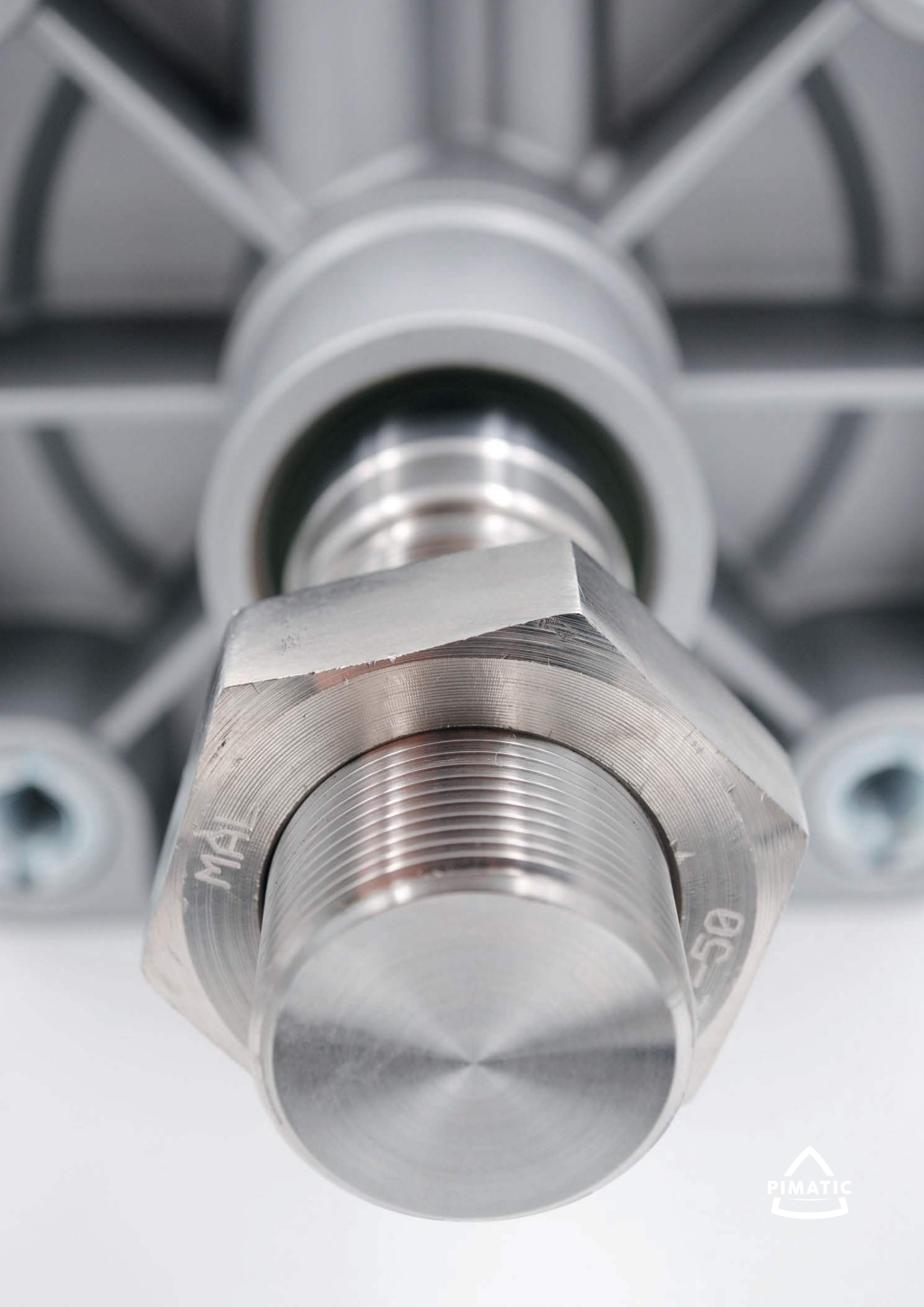
SENSOR TYPES

TYPE	ORDER CODE	SENSOR NAME PLATE	NUMBER OF WIRES	VOLTAGE	SWITCHING CURRENT	CONTACT RATING	CABLE
Reed-switch	PCS-Reed-3-1A	KT-50RP	3-wire	10-30 V AC/DC	500 mA	10 W	5 m
Reed-switch	PCS-Reed-3-M8	KT-50RP	3-wire	10-30 V AC/DC	500 mA	10 W	200 mm + M8 connector
Reed-switch	PCS-Reed-2-1A	KT-50R	2-wire	5-240 V AC/ DC	100 mA	10 W	5 m
PNP-sensor	PCS-PNP-3-1A	KT-50P	3-wire	10-30 V AC/ DC	200 mA	10 W	5 m
PNP-sensor	PCS-PNP-3-M8	KT-50P	3-wire	10-30 V AC/ DC	200 mA	10 W	200 mm + M8 connector

The sensors can be mounted without a bracket to following cylinder series : **SAI, BSAI, ACE, P2720(with profiled barrel)**.
Order code **PCS-REED-2-1A-KS** is a sensor kit including sensor **PCS-REED-2-1A** and mounting brackets for cylinder diameters ø32..320.

MOUNTING BRACKETS

ORDER CODE	CYLINDER DIAMETER		
	P2720R	TSAI	MI
KR-32040	32...40		
KR-50100	50...100		
KR-125	125		
KR-160200	160...200		
KR-250-320	250...320		
KP-10063			10...25
F-TSAI32E		32...40	
F-TSAI50E		50...63	
F-TSAI80E		80...100	



VALVES

PNEUMATIC | QUALITY

In-line mounted valves

- Series 4A and 4V 21
- Mounting sets 23
- Coils and plugs 23

ISO standard valves

- EAV and ESV Series 24
- Mounting plates 26

Mechanically controlled valves 27

Directly controlled solenoid valves

- 3V1, 3V2 and 3V3 Series 29

Valve island 6D Series 30

Pilot operated solenoid valve 8240-series 33

Ball- and butterfly valves 34

Accessories for pneumatic actuators 36

Angle seat valves 37

Coaxial valves 38

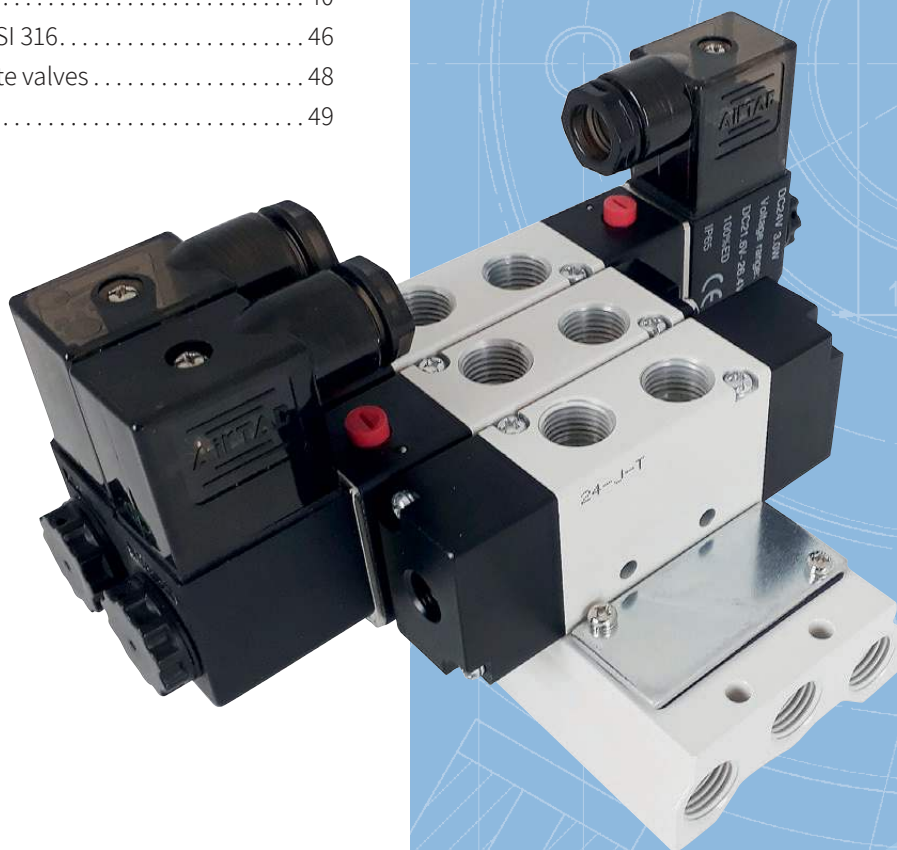
Proportional valves EVD Series 39

Auxiliary valves 40

Auxiliary valves AISI 316 46

Ball valves and gate valves 48

Safety valves 49



In-line mounted valves / Series 4A and 4V

SPECIFICATIONS

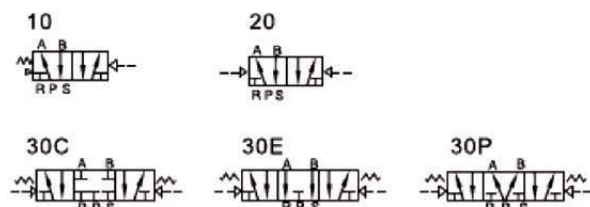
- In-line mounted 5/2 or 5/3 gate valve for cylinder control or similar applications
- Single or group installation
- Materials: Painted aluminium frame, painted zinc-cast ends
- Gaskets: NBR
- Working fluid: Dry or spray-lubricated air or neutral gases, filtration 40µm
- Additional lubrication unnecessary
- Temperature range: -20...+70 °C

ELECTRICAL VALUES

- Electrical connection: Led connector DIN B Pg07, cable diameter 6 to 8 mm
- Protection class IP65
- Control voltages: 12/24VDC, 12/110/220VAC
- Duty cycle 100% ED
- Voltage tolerance: DC ±10%, AC ±15%
- Power requirement: DC: 3W, AC110/220:4.5VA AC12:5VA
- Manual control on electrically controlled models

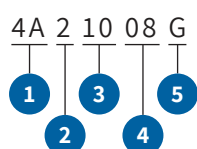
4A200/4A400 SERIES, PRESSURE-CONTROLLED

Valve type and control mode



SERIES	4A21008G 4A22008G	4A230C08G 4A230E08G 4A230P08G	4A41015G 4A42015G	4A430C15G 4A430E15G 4A430P15G
Flow-through opening mm ²	16	12	50	30
Nominal flow dm ³ /s Input/output pressure 6/5 bar	14	11	48	29
Connector size	Input/output G1/4, outlet G1/8		Input/output/outlet G1/2	
Control mode	External control			
Valve type	5/2	5/3	5/2	5/3
Pressure range	1.5-8bar (0.15-0.8MPa)			
Max. operating frequency	5 actions/sec	3 actions/sec	3 actions/sec	

ORDER EXAMPLE



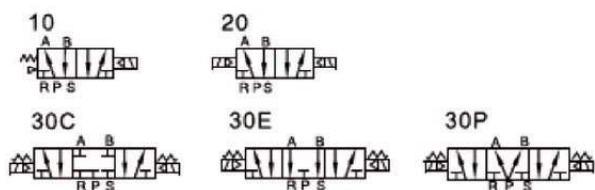
1. Kit, pressure-
2. Size
2: 200 (G1/4)
4: 400 (G1/2)
3. Valve type
10: pressure-spring 5/3
20: pressure-pressure 5/2
30C: pressure-pressure, spring centering, closed centre position
30E: pressure-pressure, spring centering 5/3 open centre position
30P: pressure-pressure, spring centering 5/3 Y-kara

4. Connector size
08: 1/4 (size 200)
15: 1/2 (size 400)
5. Thread type G

In-line mounted valves / Series 4A and 4V

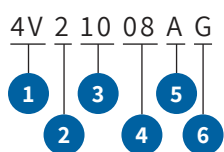
4V200/4V400 SERIES, ELECTRIC

Valve type and control mode



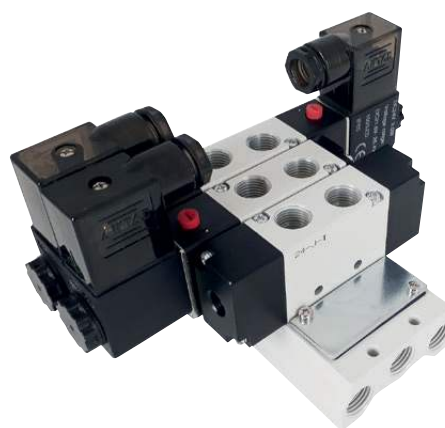
SERIES	4V210-08 4V220-08	4V230C-08 4V230E-08 4V230P-08	4V410-15 4V420-15	4V430C-15 4V430E-15 4V430P-15
Flow-through opening mm ²	16	12	50	30
Working fluid	Dry or spray-lubricated air or neutral gases, filtration 40µm			
Connector size	Input/output G1/4, outlet G1/8		Input/output/outlet G1/2	
Type of action	Electrical			
Lubrication (Note 1)	Additional			
Valve type	5/2	5/3	5/2	5/3
Pressure range	1.5-8bar (0.15-0.8MPa)			
Temperature range	-20...+70 °C			
Max. operating frequency	5 actions/sec	3 actions/sec	3 actions/sec	
Voltage range	AC:-/+15% DC:-/+10%			
Power requirement:	110/220VAC:4,5VA 24VAC:5VA 12/24VDC:3W			
Duty cycle	100%ED			
Insulation class	B			
Protection class	IP65			
Electrical connection	Led connector DINB Pg07, cable diameter 6 to 8 mm			

ORDER EXAMPLE



1. Kit, electrically
2. Size
2: 200 (G1/4)
4: 400 (G1/2)
3. Valve type
10: electric-spring 5/3
20: electric-electric 5/2
30C: electric-electric, spring centering, closed centre position
30E: electric-electric, spring centering 5/3 open centre position
30P: electric-electric, spring centering 5/3 Y-spindle
4. Connector size
08: 1/4 (koko 200)
15: 1/2 (koko 400)
5. Voltage
A: 220VAC
B: 24VDC
C: 110VAC
E: 24VAC
F: 12VDC
6. Thread type G

In-line mounted valves / mounting sets



ORDER NUMBERS FOR MOUNTING PLATES

Mounting plate kit includes gaskets and screws for valve mounting
Closing plate includes fastening screws

SIZE/SERIES	ORDER CODE	DESCRIPTION	CONNECTOR SIZE Ø
G1/4 4A/4V200 Series	200M4FG	Mounting plate, 4 x 1/4	G1/4
	200M6FG	Mounting plate, 6 x 1/4	G1/4
	200M8FG	Mounting plate, 8 x 1/4	G1/4
	P-200M-R2	Closing plate	
G1/2 4A/4V400 Series	400M4FG	Mounting plate, 4 x 1/2	G1/2
	400M6FG	Mounting plate, 6 x 1/2	G1/2
	400M8FG	Mounting plate, 8 x 1/2	G1/2
	P-400M-R2	Closing plate	

Coils and plugs

080 SERIES COILS FOR VALVE SETS

- 4V100

092 SERIES COILS FOR VALVE SETS

- 3V1
- 4V200
- 4V400
- ESV200 - ESV600



COIL SET	VOLTAGE	ORDER NUMBER	POWER	PLUG	LED PLUG
80	12VDC	CD080F	2,5W		
	24VDC	CD080B	2,8W		
	24VAC	CD080E	4,0VA		
	110VAC	CD080C	3,5VA		
	220VAC	CD080A	3,5VA		
92	12VDC	CD092F	3,0W	122	
	24VDC	CD092B	3,0W		542.C4/24
	24VAC	CD092E	5,0VA		
	110VAC	CD092C	4,5VA		
	220VAC	CD092A	4,5VA		542.C4/24

ISO standard valves / EAV and ESV Series

SPECIFICATIONS

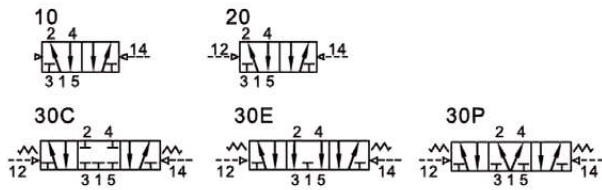
- ISO5599/1 standard 5-way gate valve to be mounted on a sub-base
- Two or three-position for double acting cylinder control or similar applications
- Materials:
 - 200/300/400 series; painted aluminium frame, painted zinc-cast ends
 - 600 series; hard-anodised aluminium frame, anodised zinc-cast ends
- Special gaskets: HNBR
 - high flow rate and long life cycle
- Temperature range: -20...+70 °C
- Lubrication Additional lubrication unnecessary
- Working fluid: Dry or spray-lubricated air / neutral gases, filtration 40 µ

ELECTRICAL VALUES

- Electrical connection: Led connector DIN B Pg07, cable diameter 6 to 8 mm
- Protection class IP65
- Control voltages: 12/24VDC 24/110/220VAC
- Duty cycle 100% ED
- Voltage tolerance: DC ±10%, AC ±15%
- Power requirement: DC: 3W, AC110/220:4.5VA, AC12:5VA
- Manual control on electrically controlled models

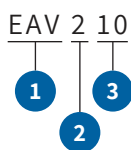
EAV SERIES, PRESSURE-CONTROLLED

Valve type and control mode



EAV SERIES		200	300	400	600
ISO 5599/1 SIZE		ISO1	ISO2	ISO3	ISO4
Flow-through opening mm ²		32	42	69	108
Nominal flow dm ³ /s		25	36	60	116
Input/output pressure 6/5 bar					
Working fluid		Dry or spray-lubricated air / neutral gases, filtration 40µ			
Control mode		External control pressure			
Lubrication		Additional lubrication unnecessary			
Pressure range	single acting	2-10bar (0.2-1.0MPa)			
	double acting	-0.9-10bar (0.09-1.0MPa)			
Control pressure		2-10bar (0.2-1.0MPa)			
Temperature range		-20...+70 °C			
Connection size (mounting plate)		G 1/4	G 3/8	G 1/2	G 3/4
Connection size (connection plate)		G 3/8	G 1/2	G 3/4	G 1

ORDER EXAMPLE

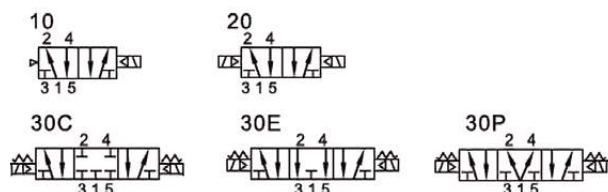


- Series
EAV: ISO standard, pressure control
- Size
2:200 ISO1
3:300 ISO2
4:400 ISO3
6:600 ISO4
- Control mode
10: pressure-int. pressure return 5/2
20: pressure-pressure 5/2
30C: pressure-pressure, spring centering 5/3 closed centre position
30E: pressure-pressure, spring centering 5/3 open centre position
30P: pressure-pressure, spring centering 5/3 Y-spindle

ISO standard valves / EAV and ESV Series

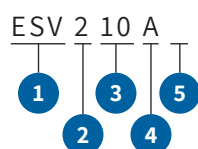
ESV SERIES, ELECTRIC

Valve type and control mode



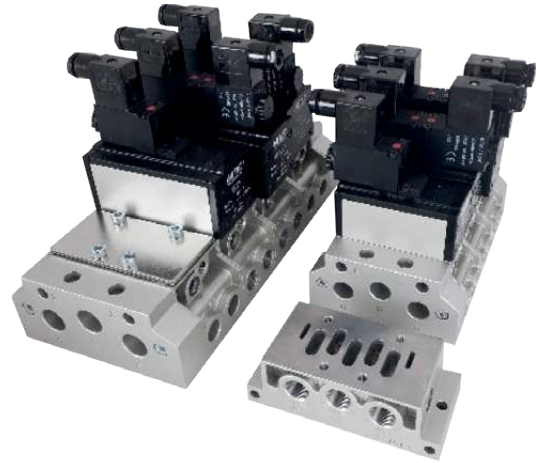
ESV SERIES		200	300	400	600
ISO 5599/1 SIZE		ISO1	ISO2	ISO3	ISO4
Flow-through opening mm ²		32	42	69	108
Nominal flow dm ³ /s Input/output pressure 6/5 bar		25	36	60	116
Working fluid	Dry or spray-lubricated air / neutral gases, filtration 40μ				
Type of action	Pilot valve, internal control pressure (external control pressure on order)				
Lubrication	Additional lubrication unnecessary				
Pressure range	2-10bar(0.2-1.0Mpa)				
Control pressure (External control pressure)	2-10bar (0.2-1.0MPa)				
Temperature range	-20...+70 °C				
Operating speed (5 bar) open/ closed	10/20 models	33/41mS	42/55mS	50/68mS	55/85mS
	30C/E/P models	38/50mS	50/62mS	50/68mS	55/85mS
Voltage range	AC:-/+15% DC:-/+10%				
Power requirement:	110/220VAC:4,5VA 24VAC:5VA 12/24VDC:3W				
Duty cycle	100%ED				
Insulation class	B				
Protection class	IP65				
Electrical connection:	Led connector DINB Pg07, cable diameter 6 to 8mm				
Connection size (mounting plate)		G 1/4	G 3/8	G 1/2	G 3/4
Connection size (connection plate)		G 3/8	G 1/2	G 3/4	G 1

ORDER EXAMPLE



- 1. Series**
ESV: ISO standard, electric control
- 2. Size**
2:200 ISO1
3:300 ISO2
4:400 ISO3
6:600 ISO4
- 3. Control mode**
10: electric-int. pressure return 5/2
20: electric-electric 5/2
30C: electric-electric, spring centering 5/3 closed centre position
30E: electric-electric, spring centering 5/3 open centre position
30P: electric-electric, spring centering 5/3 Y-spindle
- 4. Voltage**
A: 230VAC
B: 24VDC
C: 110VAC
E: 24VAC
F: 12VDC
- 5. Type of action**
Empty: Internal control pressure
W: External control pressure

ISO standard valves / Mounting plates



ORDER NUMBERS FOR MOUNTING PLATES

SIZE	ORDER CODE	DESCRIPTION	CONNECTOR SIZE Ø
ISO1	ESV201MG	Single mounting plate	G1/4, side connections
	ESV202MG	Group mounting plate	G1/4, side connections
	ESV202MGB	Group mounting plate	G1/4, bottom connections
	ESV203MG	Group plate end set (pair)	G3/8
	P-ESV200M-R2	Cover plate	
ISO2	ESV301MG	Single mounting plate	G3/8, side connections
	ESV302MG	Group mounting plate	G3/8, side connections
	ESV302MGB	Group mounting plate	G3/8, bottom connections
	ESV303MG	Group plate end set (pair)	G1/2
	P-ESV300M-R2	Cover plate	
ISO3	ESV401MG	Single mounting plate	G1/2, side connections
	ESV402MG	Group mounting plate	G1/2, side connections
	ESV402MGB	Group mounting plate	G1/2, bottom connections
	ESV403MG	Group plate end set (pair)	G3/4
	P-ESV400M-R2	Cover plate	
ISO4	ESV601MG	Single mounting plate	G3/4, side connections
	ESV602MG	Group mounting plate	G3/4, side connections
	ESV602MGB	Group mounting plate	G3/4, bottom connections
	ESV603MG	Group plate end set (pair)	G1
	P-ESV600M-R2	Cover plate	

Mechanically controlled valves



ZM3 SERIES

- Mechanically controlled 3/2 in-line valve
- Available for NO or NC operation
- Anodised aluminium frame
- Steering head rotatable in 90° increments
- Steering lever/roller can be changed to operate in both or only one direction
- Thread size: G1/8
- Nominal flow: 5.3 dm³/s
- Pressure range: -1-10 bar (-0.1-1.0 MPa)
- Temperature range: -20...+70 °C
- Working fluid: Dry or spray-lubricated air and neutral gases, filtration 40 µm



M3 AND M5 SERIES

- Mechanically controlled 5/2 and 5/2 v in-line valve
- 3/2 valve can be engaged for NO or NC operation
- Painted aluminium frame
- Thread size: G1/8
- Nominal flow: 3/2: 6.7 dm³/s
5/2: 5.0 dm³/s
- Pressure range: 0-10 bar (0-1.0 MPa)
- Temperature range: -20...+70 °C
- Working fluid: Dry or spray-lubricated air and neutral gases, filtration 40 µm



3L AND 4L SERIES

- Pull knob 3/2 and 5/2 in-line valve
- 3/2 valve can be engaged for NO or NC operation
- Can be installed on panel
- Painted aluminium frame
- Thread size: G1/8
- Nominal flow: 7.8 dm³/s
- Pressure range: 0-10 bar (0-1.0 MPa)
- Temperature range: -20...+70 °C
- Working fluid: Dry or spray-lubricated air and neutral gases, filtration 40 µm



4H SERIES

- Mechanically controlled 5/2 and 5/3 in-line valve
- Can be installed on panel
- Painted aluminium frame
- Thread size: G1/8 and G1/4
- Nominal flow: G1/8: 15 dm³/s
G1/4: 21 dm³/s
- Pressure range: 0-10 bar (0-1.0 MPa)
- Temperature range: -20...+70 °C
- Working fluid: Dry or spray-lubricated air and neutral gases, filtration 40 µm

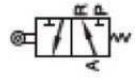
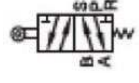
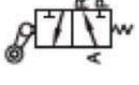
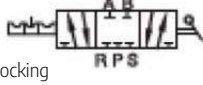
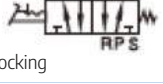


4F SERIES

- Foot pedal 5/2 valve, locking and spring return models
- Aluminium frame, painted plastic protective casing
- Thread size: G1/4
- Pressure range: 0-10 bar (0-1.0 MPa)
- Temperature range: -20...+70 °C
- Working fluid: Dry or spray-lubricated air and neutral gases, filtration 40 µm

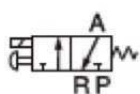
Mechanically controlled valves

ORDER NUMBERS

SPIRAL SIZE	STEERING MODE	ORDER NUMBER	STEERING MODE	ORDER NUMBER
G1/8	Roller spring 	ZM3R06G	Adjustable roller spring 	ZM3J06G
G1/8	Adjustable lever spring 	ZM3P06G		
G1/8	Roller spring 	M3L11006G	Roller spring 	M5L11006G
G1/8	Lever roller spring 	M3R11006G	Lever roller spring 	M5R11006G
G1/8	Pull knob locking 	3L11006G	Pull knob locking 	4L11006G
G1/8	Lever locking 	4H21006G	Lever spring 	4HA21006G
G1/8	Lever locking 	4H230C06G	Lever spring 	4HA230C06G
G1/8	Lever locking 	4H230E06G	Lever spring 	4HA230E06G
G1/4	Lever locking 	4H31008G	Lever spring 	4HA31008G
G1/4	Lever locking 	4H330C08G	Lever spring 	4H330E08G
G1/4	Lever locking 	4HA330C08G	Lever spring 	4HA330E08G
G1/4	Foot pedal locking 	4F21008LFG	Foot pedal spring 	4F21008FG

Directly controlled solenoid valves 3V1, 3V2 and 3V3 Series

3V1 SERIES



SPECIFICATIONS

- Directly controlled, closed normally 3/2 valve for single or group installations
- Frame: Painted aluminium
- Gaskets: NBR
- Pressure range: 0...8 bar(0...0.8 MPa)
- Temperature range: -20...+70 °C
- Connector size: G1/8 (outlet M5)
- Flow-through opening: (Ø 1.2 mm) 1.1 mm

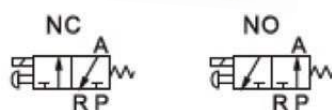
ELECTRICAL VALUES

- Electrical connection: Led connector DIN B Pg07, cable diameter 6 to 8 mm
- Protection class IP65
- Control voltages: 12/24VDC, 24/110/220VAC
- Duty cycle 100% ED
- Voltage tolerance: DC ±10%, AC ±15%
- Power requirement: DC: 3W, AC 24:5VA 110/220:4.5VA
- Manual control

ORDER CODE

- Valve: **3V106*G**
*use voltage code instead: A:220VAC, B:24VDC, C:110VAC, E:24VAC, F:12VDC
- Order codes for installation kits:
3V1-P30 Starter Kit
(1 pcs per group)
3V1-P31 Extension kit
(number of valves -1 pcs per group)
- Installation bracket: **3V1-P32**

3V2 SERIES



SPECIFICATIONS

- Directly controlled, normally closed or open 3/2 valve for single installations
- Frame: Anodised aluminium
- Gaskets: NBR
- Pressure range: 0...8 bar(0...0.8 MPa)
- Temperature range: -20...+70 °C
- Connector size: G1/8
- Flow-through opening: (Ø 2.0 mm) 3.2 mm²

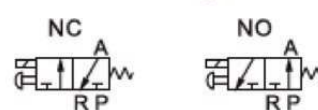
ELECTRICAL VALUES

- Electrical connection: Led connector DIN B Pg07, cable diameter 6 to 8 mm
- Protection class IP65
- Control voltages: 12/24VDC, 24/110/220VAC
- Duty cycle 100% ED
- Voltage tolerance: DC ±10%, AC ±15%
- Power requirement: DC: 7W, AC: 8.5VA
- Manual control

ORDER CODE

- NC valve: **3V206NC*G**
- NO valve: **3V206NO*G**
*use voltage code instead: A: 220VAC, B: 24VDC, C: 110VAC, E: 24VAC, F: 12VDC

3V3 SERIES



SPECIFICATIONS

- Directly controlled, normally closed or open 3/2 valve for single installations
- Frame: Anodised aluminium
- Gaskets: NBR
- Pressure range: 0...8 bar(0...0.8 MPa)
- Temperature range: -20...+70 °C
- Connector size: G1/4
- Flow-through opening: (Ø 3.7 mm) 11 mm²

ELECTRICAL VALUES

- Electrical connection: Led connector DIN B Pg07, cable diameter 6 to 8 mm
- Protection class IP65
- Control voltages: 12/24VDC, 24/110/220VAC
- Duty cycle 100% ED
- Voltage tolerance: DC ±10%, AC ±15%
- Power requirement: DC: 6.5, AC: 10VA
- Manual control

ORDER CODE

- NC valve: **3V308NC*G**
- NO valve: **3V308NO*G**
*use voltage code instead: A: 220VAC, B: 24VDC, C: 110VAC, E: 24VAC, F: 12VDC

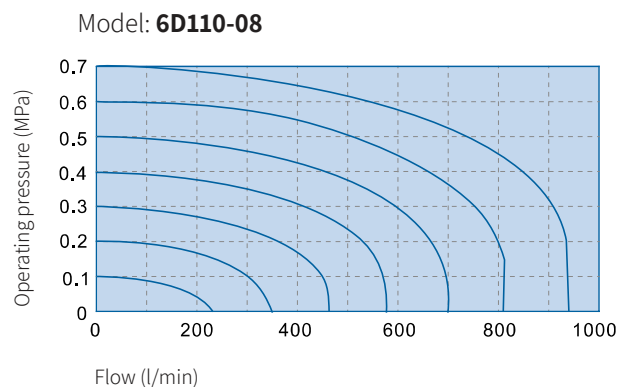
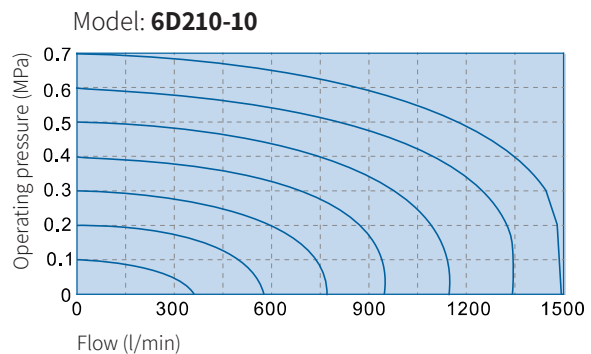
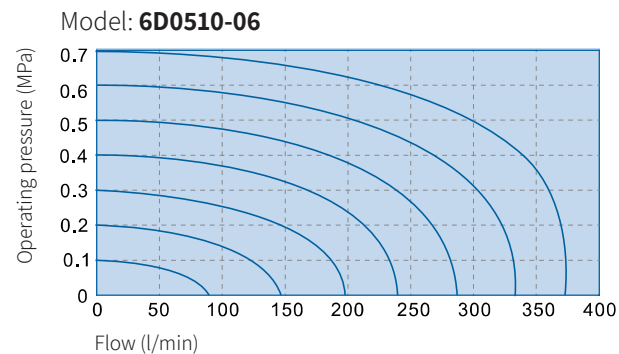
Valve island 6D Series

SPECIFICATIONS

- Reduced setup time and maintenance time
- Dual centralized inlet and outlet ports with push in fittings
- Centralized outlet ports with push in fittings for easy piping
- Fast and easy cabling via Sub-D connector (25-pin or 37-pin)
- Flip-able Sub-D connector for horizontal and vertical cabling
- Software tool for easy 3D modeling
- Saves costs
- Fieldbus communication (please contact our sales department for further information)
- Three valve sizes for different flowrates
- Valves have integrated manual locking device (push and turn) as a standard feature
- Direct mounting to panel or DIN-rail without any additional mounting accessories
- Wide selection of different valve types 5/2, 5/3, double 3/2, blocking plate, valve with individual inlet pressure
- Pressure range 0,2-8 bar (maximum pressure 12bar)
- Media: pressurized air (filtered 40 µm)
- Temperature range -20...+70 °C
- Voltage 12VDC or 24VDC
- Maximum number of valve stations 33 (36 coils)



FLOW CHART



ORDER EXAMPLE (BASE PLATE WITH 25-PIN SUB-D-CONNECTOR)

6D1H 8F J06

1 2 3

1. Series
6D05H = 6D0500-series
6D1H = 6D100-series
6D2H = 6D200-series
2. Number of stations
3F = 3 stations
4F = 4 stations
...21F = 21 stations
3. Tube size
J04 = Ø4
J06 = Ø6
J08 = Ø8
J10 = Ø10



ORDER EXAMPLE (BASE PLATE WITH 37 PIN-SUB-D-CONNECTOR)

6DW1H 8F J06

1 2 3

1. Series
6DW05H = 6DW0500-series
6DW1H = 6DW100-series
6DW2H = 6DW200-series
2. Number of stations
13F = 13 stations
14F = 14 stations
...33F = 33 stations
3. Tube size
J04 = Ø4
J06 = Ø6
J08 = Ø8
J10 = Ø10



ORDER EXAMPLE (5/2 JA 5/3 VALVES)

6D 1 20 B

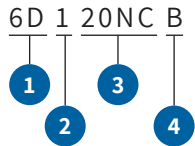
1 2 3 4

1. Series
6D = 6D series
2. Valve size
05 = 0500-series
1 = 100-series
2 = 200-series
3. Valve type
10 = 5/2 mostable
20 = 5/2 bistable
30C = 5/3 closed middle position
30E = 5/3 exhaust middle position
30P = 5/3 pressurized middle position
4. Voltage
B = 24VDC
F = 12VDC



Ps! Pimatic stock item is 6D100 series

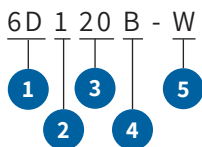
ORDER EXAMPLE (DOUBLE 3/2 VALVES)



1. 6D=6D-series
2. Valve size
05= 0500-series
1=100-series
2=200-series
3. Valve type
20NC=double 3/2 (NC-NC)
20NO=double 3/2 (NO-NO)
4. Voltage
B=24VDC
F=12VDC

Ps! Pimatic stock item is 6D100 series

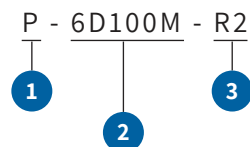
ORDER EXAMPLE (5/2 JA 5/3 VALVES WITH EXTERNAL PILOT PRESSURE OR EXTERNAL PRESSURE)



1. 6D = 6D-series
2. Valve size
05 = 0500-series
1 = 100-series
2 = 200-series
3. Valve type
10 = 5/2 mostable
20 = 5/2 bistable
30C = 5/3 closed middle position
30E = 5/3 exhaust middle position
30P = 5/3 pressurized middle position
4. Voltage
B = 24VDC
F = 12VDC
5. Inlet pressure
W = External pilot type
E = Individual inlet type
R = Individual inlet type

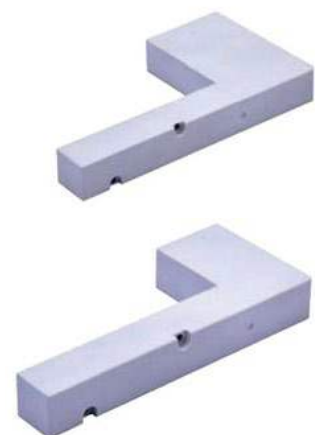


ORDER EXAMPLE (BLOCKING PLATES)



1. P= Accessories
2. Series:
05= 0500-series
1=100-series
2=200-series
3. R2= 6D series blocking plate

Ps! Pimatic stock item is 6D100 series blocking plate (including screw bolts).



Sub-D connector with 2m cable

25-Pin Female-Female connectors: F-DSUB25S200

37-Pin Female-Male connectors: F-DSUB37M500

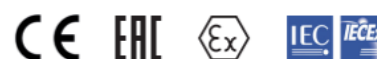
Fieldbus protocols which are currently available:

PROFINET and Ethernet/IP, Ether CAT, IO-Link (More Fieldbus protocols coming soon, please contact our sales department)

Pilot operated solenoid valve 8240 Series, Normally closed

SPECIFICATIONS

- Media: Water, air, oil ja inert gases
- Operation: Normally closed (NC)
- Port size G1/4", G3/8", 1/2", G3/4", G1", G1 1/4", G1 1/2", G2"
- Minimum operating pressure 0,1 bar
- Mounting position: optional, preferable solenoid vertical on top
- Fluid temperature -10...+90°C (ambient temperature 10...+50°C)
- Body material brass (CW617N), Diaphragm NBR, internal parts stainless steel and PVDF
- Solenoid interchangeable without tools (Click-on)
- Ex-approval available upon request



PORT SIZE G	ORDER CODE (NC)	OPERATING PRESSURE
1/4"	8240000.9100.00000	0,1...16bar
3/8"	8240100.9100.00000	0,1...16bar
1/2"	8240200.9100.00000	0,1...16bar
3/4"	8240300.9100.00000	0,1...16bar
1"	8240400.9100.00000	0,1...16bar
1 1/4"	8240500.9100.00000	0,1...10bar*
1 1/2"	8240600.9100.00000	0,1...10bar*
2"	8240700.9100.00000	0,1...10bar*
	Coil 24VDC 0000000.9100.02400	
	Coil 230VAC 0000000.9100.23050	

* 0,1...16bar available upon request

2-way ball valves with pneumatic actuator

SPECIFICATIONS

- Material of valve body: Brass (nickel plated)
- Working temperature -20...+150°C
- Material of seals PTFE and FKM O-rings
- Product code includes valve body and actuator
- Ex-approval available upon request



DN	THREAD	PRESSURE RATNG	PRODUCT CODE (DOUBLE ACTING ACTUATOR)	PRODUCT CODE (SPRING RETURN ACTUATOR)
10	3/8"	PN64	D101H003	SG101H003
15	1/2"	PN64	D101H004	SG101H004
20	3/4"	PN50	DG101H005	SG101H005
25	1"	PN50	DG101H006	SG101H006
32	1 1/4"	PN40	DG101H007	SG101H007
40	1 1/2"	PN40	DG101H008	SG101H008
50	2"	PN32	DG101H009	SG101H009
65	2 1/2"	PN25	DG101H010	SG101H010
80	3"	PN25	DG101H011	SG101H011

2-way butterfly valve with pneumatic actuator

SPECIFICATIONS

- Materials: Body valve, cast iron, epoxy coated, Disc: AISI316, Liner: NBR
- Wafer construction (mounting between flanges)
- Working temperature -23...+82°C
- Product code includes valve body and actuator
- Available up to Dn600.
- Ex-approved version available upon request



DN	THREAD	PRESSURE RATNG	PRODUCT CODE (DOUBLE ACTING ACTUATOR)	PRODUCT CODE (SPRING RETURN ACTUATOR)
50	Wafer	PN16	DG376XN69	SG376XN69
65	Wafer	PN16	DG376XN70	SG376XN70
80	Wafer	PN16	DG376XN71	SG376XN71
100	Wafer	PN16	DG376XN72	SG376XN72
125	Wafer	PN16	DG376XN73	SG376XN73
150	Wafer	PN16	DG376XN74	SG376XN74
200	Wafer	PN10	DG376KN75	SG376KN75
250	Wafer	PN10	DG376KN76	SG376KN76
300	Wafer	PN10	DG376KN77	SG376KN77

2-way ball valves with AISI316 valve body and pneumatic actuator

SPECIFICATIONS

- Material of valve body: AISI316
- Working temperature -20...+180°C
- Material of seals PTFE and FKM O-rings
- Product code includes valve body and actuator
- Ex-approval available upon request



DN	THREAD	PRESSURE RATNG	PRODUCT CODE (DOUBLE ACTING ACTUATOR)	PRODUCT CODE (SPRING RETURN ACTUATOR)
8	1/4"	PN63	DG424H402	SG424H402
10	3/8"	PN63	DG424H403	SG424H403
15	1/2"	PN63	DG424H404	SG424H404
20	3/4"	PN63	DG424H405	SG424H405
25	1"	PN63	DG424H406	SG424H406
32	1 1/4"	PN63	DG424H407	SG424H407
40	1 1/2"	PN63	DG424H408	SG424H408
50	2"	PN63	DG424H409	SG424H409
65	2 1/2"	PN63	DG424H410	SG424H410
80	3"	PN63	DG424H411	SG424H411
100	4"	PN63	DG424H412	SG424H412

2-way ball valves for high pressure applications with pneumatic actuator

SPECIFICATIONS

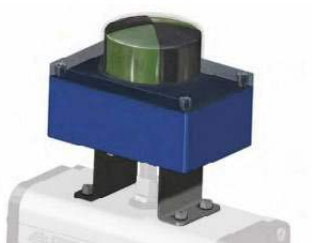
- Material of valve body: Carbon steel (AISI316 body available upon request)
- Working temperature -20...+80°C
- Material of seals NBR
- Product code includes valve body and actuator
- Ex-approval available upon request



DN	THREAD	PRESSURE RATNG	PRODUCT CODE (DOUBLE ACTING ACTUATOR)	PRODUCT CODE (SPRING RETURN ACTUATOR)
10	3/8"	PN400	DHA5BABAP03AFCA0	SHA5BABAP03AFEAO
15	1/2"	PN400	DHA5BABAP04AFDA0	SHA5BABAP04AFGA0
20	3/4"	PN320	DHA5BABAP05AFEAO	SHA5BABAP05AFHA0
25	1"	PN320	DHA5BABAP06AFGA0	SHA5BABAP06AFIA0

Accessories for pneumatic actuators

OPTICAL INDICATOR



LIMIT SWITCHES (PROXIMITY OR ELECTROMECHANICAL)



PNEUMATIC POSITIONER 4-20MA, HART AND EX-APPROVAL ALSO AVAILABLE



NAMUR-VALVE



VOLTAGE	PRODUCT CODE (MONOSTABLE)
230/50-60	ER8188A5
110/50-60	ER8188A4
24VDC	ER8188C2

ELECTRIC ACTUATORS



MANUAL OPERATED VALVES

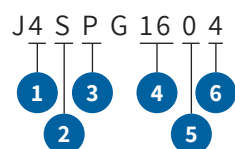
Angle seat valves

SPECIFICATIONS

- Pneumatically controlled 2/2 valve
- A pneumatic cylinder which moves PTFE gasket to and from sealing plate
- Coating machined to bronze or AISI 316 frame
- Frame design for good flow values and operation with shock absorbers activated
- Self-tightening gasket set guarantees a long lifecycle
- Actuator can be rotated 360 degrees
- An optical position indicator and NAMUR connection are standard on the actuator
- Optional actuator position sensors or limiter
- Pressure range: 0...16 bar (0...1.6 MPa), with steam 0...10 bar (Dependent on valve size and design)
- Temperature range: -10...+180 °C
- Ambient temperature range: -10...+60 °C
- Working fluid: Dry or spray-lubricated air or neutral gases



ORDER EXAMPLE



- 1. Frame**
4 = AISI 316 (NET INOX)
9 = RG5 (bronze)
- 2. Actions**
S = NC normally closed, flow direction 2-->1 (standard)
C = NC normally closed, flow direction 1-->2
A = NO normally open, flow direction 2-->1
D = DA double acting
- 3. Actuator**
0 = Manual
P = PA 66 + GF 30% (standard)
- 4. Actuator size**
00 = manual control
14 = DN40
16 = DN50
18 = DN63
21 = DN90
23 = DN100
- 5. Connection (bronze frame has only threaded connection 0)**
0 = threaded connection ISO 228/1
9 = welding coupling ISO 4200
I = welding coupling ISO 2037
D = welding coupling DIN 11 852 2
E = welding coupling DIN 11 852 3
6 = flange joint UNI 6093 and 2229
A = flange joint ANSI 150 RF
P = reduced flange
T = triclamp ISO 2852
U = triclamp USA 3A
- 6. Valve size**
3 = DN15 (3/8")
4 = DN15 (1/2")
5 = DN20 (3/4")
6 = DN25 (1")
7 = DN32 (1 1/4")
8 = DN40 (1 1/2")
9 = DN50 (2")

MATERIALS

	J4 AISI 316	J9 BRONZE
Valve frame	AISI 316 (NET INOX)	Pronssi RG5
Sleeve	AISI 316 (NET INOX)	Messinki
Spindle	AISI 316L	AISI 316
Valve plate	AISI 316L	AISI 316
Valve plate gasket	PTFE	PTFE
Actuator	Polyamide PA 66 + GF 30%	Polyamide PA 66 + GF 30%
Threaded sleeves	AISI 303	AISI 303
Piston	Nickel-plated brass	Nickel-plated brass



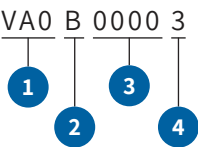
Coaxial valves

SPECIFICATIONS

- Pressure operated inline 2 way seat valve
- Valve body and spool made of nickel-plated brass
- Seals and temperature range: NBR -20...+80 °C
- EPDM and FKM (-20...+150 °C
- Pressure range: 0...10 bar (1,0 MPa)
- Vacuum operation: max. 740 mmHg
- Pilot pressure : 3...8 bar (double acting), 4,2...8 bar (spring returned)
- Control media: Pressurized air (lubrication is not needed)



ORDER EXAMPLE



1. Valve
VA0 = spring returned, normal open
VC0 = spring returned, normal closed
VD0 = double acting
2. Seals
B = NBR
V = FKM
E = EPDM
3. Options
0000 = standard
M000 = one limit switch
4. Valve size
3 = G 3/8 DN10
4 = G 1/2 DN15
5 = G 3/4 DN20
6 = G 1 DN25
7 = G 1 1/4 DN32
8 = G 1 1/2 DN40
9 = G 2 DN50

ORDER CODES

THREAD	NOMINAL SIZE MM	SPRING RETURNED NORMLLY OPEN ORDER CODE	SPRING RETURNED NORMALLY CLOSED ORDER CODE	DOUBLE ACTING ORDER CODE
G 3/8	10	VA0B00003	VC0B00003	VD0B00003
G 1/2	15	VA0B00004	VC0B00004	VD0B00004
G 3/4	20	VA0B00005	VC0B00005	VD0B00005
G 1	25	VA0B00006	VC0B00006	VD0B00006
G 1 1/4	32	VA0B00007	VC0B00007	VD0B00007
G 1 1/2	40	VA0B00008	VC0B00008	VD0B00008
G 2	50	VA0B00009	VC0B00009	VD0B00009

Proportional valves EVD Series

EVD-SARJA

- Analogically or digitally controlled pressure regulating valve
- Digital control enables the use of a pressure regulator with PLC without a D/A converter
- Clear LED display for secondary pressure
- Output message as analog or switch data (PNP or NPN)
- Pressure regulator with a zero point and adjustment range adjustable
- Connection with a D-SUB connector, connection of connector on top or from rear of the controller
- Working fluid: Oil-free, dry compressed air



SPECIFICATIONS

TYPE	EVD-1100	EVD-1500	EVD-1900	EVD-3100	EVD-3500	EVD-3900
Maximum supply pressure	16 bar	7 bar	10 bar	16 bar	7 bar	10 bar
Pressure range	0-10 bar	0-5 bar	0-9 bar	0-10 bar	0-5 bar	0-9 bar
Operating voltage	24VDC ±10%					
Temperature range	5-50 °C					
Max. flow	60 NI/min	400 NI/min	400 NI/min	700 NI/min	1500 NI/min	1500 NI/min
Control message, analog	4-20mA 0-5V,0-10V					
Control message, digital	10 bit, also available IO-Link					
Output message	0-5 VDC, limits					
Connector size	G1/4"			G3/8"		
Hysteresis *	<0,5%					
Repetition accuracy *	<0,3%					
Linearity *	±0,3%					

* Maximum from secondary pressure

Auxiliary valves

NON-RETURN VALVES PC01 AND MV33 SERIES

- Valve between lines for limiting flow direction
- Pressure range: 2 to 10 bar
- Temperature range: -10...+70 °C
- Working fluid: Filtered (40 µm) compressed air or neutral gases, with or without spray lubrication
- Frame: Nickel-plated brass
- Gaskets: NBR



PC01

MV33

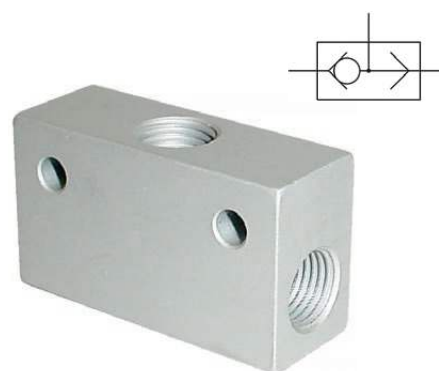
Manufacturing programme

INTERNAL THREAD - INTERNAL THREAD	
CONNECTOR SIZE Ø	ORDER NUMBER
M5	PC01-M5
G 1/8	PC01-1/8
G 1/4	PC01-1/4
G 3/8	PC01-3/8
G 1/2	PC01-1/2
G 3/4	PC01-3/4
G 1	PC01-1
G 1 1/4	PC01-1 1/4
G 1 1/2	PC01-1 1/2
G 2	PC01-2

THREADED CONNECTOR, FREE FLOW DIRECTION FROM CONNECTOR TO THREAD	
CONNECTION SIZE TUBE/THREAD	ORDER NUMBER
ø 4, M5	MV3304M5
ø 4, G1/8	MV330418
ø 6, G1/8	MV330618
ø 6, G1/4	MV330614
ø 8, G1/8	MV330818
ø 8, G1/4	MV330814
ø 10, G1/4	MV331014
ø 10, G3/8	MV331038
ø 12, G1/2	MV331212

SHUTTLE VALVES PC04 SERIES

- Tube-mounted valve for selecting two alternative control impulses
- Pressure range: 2 to 10 bar
- Temperature range: -10...+70 °C
- Working fluid: Filtered (40 µm) compressed air or neutral gases, with or without spray lubrication
- Frame: Anodised aluminium
- Gaskets: NBR



Manufacturing programme

CONNECTOR SIZE Ø	ORDER NUMBER
G 1/8	PC04-1/8
G 1/4	PC04-1/4
G 1/2	PC04-1/2

Auxiliary valves

QUICK EXHAUST AND OUTLET VALVES VSR SERIES AND MV22 SERIES

- Tube-mounted valve for fast discharge of back pressure
- Pressure range: 2 to 10 bar
- Temperature range: -10...+70 °C
- Working fluid: Filtered (40 µm) compressed air or neutral gases, with or without spray lubrication
- Frame: Nickel-plated brass
- Gaskets: NBR



Manufacturing programme

CONNECTOR SIZE Ø	ORDER NUMBER	EXTERNAL-INTERNAL THREAD ORDER NUMBER	EXTERNAL THREAD – CONNECTOR ORDER NUMBER
M5	VSR-M5		
G 1/8	VSR-1/8		
G 1/4	VSR-1/4	MV221414-RA	MV220814-MA
G 3/8	VSR-3/8	MV223030-RA	MV221038-MA
G 1/2	VSR-1/2	MV221212-RA	MV221212-MA
G 3/4	VSR-3/4		

HOSE BREAK VALVES MV45 SERIES

- A valve installed in the cylinder connection opening to prevent movement of the cylinder in case of hose breakage
- A separate banjo ring, e.g. MA350814, can be fitted to the valve
- Different models from a range of connectors
- Pressure range: 2 to 10 bar
- Temperature range: -10...+70 °C
- Working fluid: Filtered (40 µm) compressed air or neutral gases, with or without spray lubrication
- Frame: Nickel-plated brass
- Gaskets: NBR



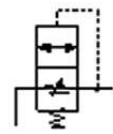
Manufacturing programme / required control pressure

CONNECTOR SIZE Ø FRAME/PULSE	ORDER NUMBER	STEERING PRESSURE BAR				
		2	4	6	8	10
		WORKING PRESSURE BAR				
G 1/8 / M 5	MV450018	1.5	2	3	3.5	4
G 1/4 / M 5	MV450014	1.5	2	3	3.5	4
G 3/8 / G 1/8	MV450038	1.5	2	3	3.5	4
G 1/2 / 1/4	MV450012	1.5	2	3	3.5	4

Auxiliary valves

SLOW FILL VALVES MV50 SERIES

- Adjustable slow fill valve for valve connection opening
- Pressurises the system in a controlled manner
- Complete opening pressure is 2/3 of the supply pressure
- Pressure range: 3 to 10 bar
- Temperature range: 0...+70 °C
- Working fluid: Filtered (40 µm) compressed air or neutral gases, with or without spray lubrication
- Frame: Nickel-plated brass
- Gaskets: NBR

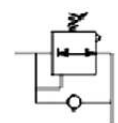


Manufacturing programme

CONNECTOR SIZE Ø	ORDER NUMBER	FLOW (6 BAR)
G 1/4	MV500014	1,800 NI/min
G 3/8	MV500038	2,400 NI/min
G 1/2	MV500012	2,900 NI/min

ENERGY SAVING VALVES MV47 SERIES

- Pressure regulator installed in the valve connection opening. Adjusts the working pressure. A separate banjo ring, e.g. MA350814, can be fitted to the valve. Different models from a range of connectors.
- Pressure range: 0 to 10 bar
- Temperature range: 0...+70 °C
- Working fluid: Filtered (40 µm) compressed air or neutral gases, with or without spray lubrication
- Frame: Nickel-plated brass
- Gaskets: NBR



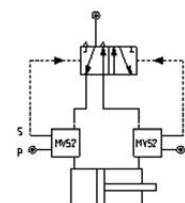
Manufacturing programme

CONNECTOR SIZE Ø	ORDER NUMBER
G 1/8	MV470018
G 1/4	MV470014

Auxiliary valves

PRESSURE DROPS SENSOR MV52 SERIES

- Sensor to be installed in the cylinder connection opening. When the secondary pressure in the cylinder decreases, a control pulse is given to the valve.
- Pressure range: 3 to 10 bar
- Temperature range: -10...+70 °C
- Working fluid: Filtered (40 µm) compressed air or neutral gases, with or without spray lubrication
- Frame: Nickel-plated brass
- Gaskets: NBR and PU



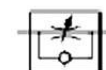
Manufacturing programme

CONNECTOR SIZE Ø	ORDER NUMBER
G 1/8	MV520018
G 1/4	MV520014
G 3/8	MV520038

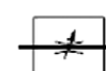
OPERATING PRESSURE BAR	SHIFT PRESSURE BAR
3	0.3
4	0.5
5	0.65
6	0.9
7	1
8	1.2
9	1.4
10	1.6

RESISTORS / ONE-WAY RESTRICTORS PC02 AND PC03 SERIES

- A resistor valve for flow control to be installed between the lines, and a one-way restrictor to control the flow in one direction, the other direction through the non-return valve.
- Pressure range: 0 to 10 bar
- Temperature range: 0...+70 °C
- Working fluid: Filtered (40 µm) compressed air or neutral gases, with or without spray lubrication
- Frame: Anodised aluminium
- Gaskets: NBR



PC02



PC03

Manufacturing programme

CONNECTOR SIZE Ø	ORDER NUMBER RESISTOR VALVE	ORDER NUMBER ONE-WAY RESTRICTOR
G 1/8	PC03-1/8	PC02-1/8
G 1/4	PC03-1/4	PC02-1/4
G 3/8	PC03-3/8	PC02-3/8
G 1/2	PC03-1/2	PC02-1/2
G 3/4	PC03-3/4	PC02-3/4

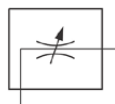
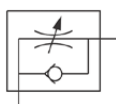
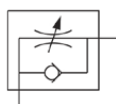
* G3/4 is not as shown in the illustration

Auxiliary valves

RESISTORS / ONE-WAY RESTRICTORS, BANJO BOLT AND FITTING MODELS MV15 SERIES

- Valve connected to cylinder or valve connection opening for flow adjustment
- Range of one-way restrictors for connecting to a cylinder (C) or a valve (V) and to an adjustable choke (B)
- A separate banjo ring, e.g. MA350814, can be fitted to the valve
- Different models from a range of connectors
- Pressure range: 0 to 10 bar
- Temperature range 0... +70 °C
- Working fluid: Filtered (40 µm) compressed air or neutral gases
- Frame: Nickel-plated brass
- O-rings: NBR
- Level gaskets: Nylon

Manufacturing programme



CONNECTOR SIZE Ø	C	V	B
M 5	x	x	x
G 1/8	x	x	x
G 1/4	x	x	x
G 3/8	x	x	x
G 1/2	x		x



DISCHARGE CHOKES

- Resistor valve with a suppressor to be installed in the valve outlets to control the pull current
- Nickel-plated brass frame
- Dampener is sintered bronze (MV14) or aluminium (HDV)
- Temperature range: -20...+70 °C
- Pressure range: 0...10 bar (0...1.0 MPa)
- Working fluid: Dry or spray-lubricated air or neutral gases

Manufacturing programme

CONNECTOR SIZE Ø	ORDER NUMBER
M 5	MV 1400M5
G 1/8	MV 140018
G 1/4	MV 140014
G 3/8	MV 140038
G 1/2	HDV-1/2



MV



HDV

DAMPENERS AND VENTILATORS

- To reduce the volume of the outgoing air
- PS dampener, aluminium frame, damping section AISI316
- MV ventilator, nickel-plated brass frame, damping section AISI304

THREAD SIZE	ORDER NUMBER	
M 5	PS-M5	
G 1/8	PS-1/8	MV110018
G 1/4	PS-1/4	MV110014
G 3/8	PS-3/8	MV110038
G 1/2	PS-1/2	MV110012
G 1	PS-1	



PS



MV

Auxiliary valves

RESISTORS / ONE-WAY RESTRICTORS MV34, MV35 AND MV38 SERIES

- Acetal plastic valve for flow control
- Pressure range: 0 to 10 bar
- Temperature range: 0...+70 °C
- Working fluid: Filtered (40 µm) compressed air or neutral gases, with or without spray lubrication
- Frame: Acetal plastic, threads of nickel-plated brass
- Gaskets: NBR



MV34

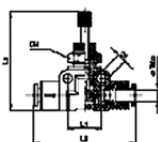


MV35



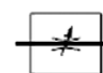
MV38

Manufacturing programme

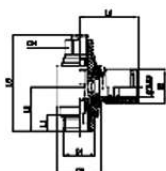


MV34

Resistor or one-way restrictor to be installed between the tubes.

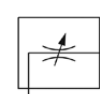
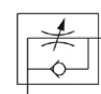
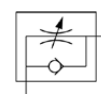


ORDER NUMBER	U	B
MV340004/...	x	x
MV340006/...	x	x
MV340008/...	x	x



MV38

Resistor or one-way restrictor to be installed in the connection opening. Cylinder (C) and valve model (V) in the manufacturing programme.



ORDER NUMBER	C	V	B
MV3804M5/...	x	x	x
MV380418/...	x	x	x
MV3806M5/...	x	x	x
MV380618/...	x	x	x
MV380614/...	x	x	x
MV380818/...	x	x	x
MV380814/...	x	x	x
MV380838/...	x	x	x
MV381014/...	x	x	x
MV381038/...	x	x	x

Auxiliary valves AISI 316

RESISTORS / ONE-WAY RESTRICTORS AISI PC02 AND PC03 SERIES

- A resistor valve for flow control to be installed between the lines, and a one-way restrictor to control the flow in one direction, the other direction through the non-return valve.
- Pressure range: 0 to 10 bar
- Temperature range: -10...+150 °C
- Working fluid: Filtered (40 µm) compressed air or neutral gases, with or without spray lubrication
- Frame: AISI316L
- Gaskets: FPM (Viton)

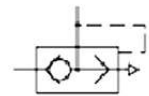


Manufacturing programme

CONNECTOR SIZE Ø	ORDER NUMBER RESISTOR VALVE	ORDER NUMBER ONE-WAY RESTRICTOR
G 1/8	PC03-1/8-AISI	PC02-1/8-AISI
G 1/4	PC03-1/4-AISI	PC02-1/4-AISI

QUICK DISCHARGE VALVES AISI VX22 SERIES

- Tube-mounted valve for fast discharge of back pressure
- Pressure range: 2 to 10 bar
- Temperature range: -10...+150 °C
- Working fluid: Filtered (40 µm) compressed air or neutral gases, with or without spray lubrication
- Frame: AISI316L
- Dampener: AISI316
- Retaining ring: C70 zinc-plated
- Gaskets: FPM (Viton)



Manufacturing programme

CONNECTOR SIZE Ø	ORDER NUMBER
G 1/4	VX221414
G 3/8	VX223838
G 1/2	VX221212

Auxiliary valves AISI 316

NON-RETURN VALVES AISI VX SERIES

- Valve between lines for limiting flow direction
- Pressure range: 2 to 10 bar
- Temperature range: -10...+150 °C
- Working fluid: Filtered (40 µm) compressed air or neutral gases, with or without spray lubrication
- Frame: AISI316L
- Gaskets: FPM (Viton)



Manufacturing programme

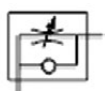
CONNECTOR SIZE Ø	ORDER NUMBER
G 1/8	VX230018
G 1/4	VX230014
G 1/2	VX230012

RESISTORS / ONE-WAY RESTRICTORS, BANJO FITTING AND BOLT MODELS AISI VX15 SERIES

- Valve connected to cylinder or valve connection opening for flow adjustment
- Range of one-way restrictors for connecting to a cylinder (C) or a valve (V) and to an adjustable choke (B)
- A separate banjo ring, e.g. MX350814, can be fitted to the valve
- Different models from a range of connectors
- Frame: AISI316
- O-rings: FPM (Viton)
- Level gaskets: PTFE



Manufacturing programme



CONNECTOR SIZE Ø	VX15.../C	VX15.../V	VX15.../B
G 1/8	x	x	x
G 1/4	x	x	x

Ball valves and gate valves

BALL VALVES

- Full opening 2/2 or 3/2 ball valve
- 3/2 valves with T or L drilling
- Frame: Nickel-plated brass
- Ball: Hard chrome-plated brass
- Gaskets: Teflon
- Handle: Stainless steel, aluminium or plastic
- Temperature range: -20...+80 °C, -20...+60 °C model 2351
- Pressure range: 25 to 64 bar, depending on model and size
- Working fluid: Dry or spray-lubricated air, neutral gases



Manufacturing programme

ACTIONS	VALVE KIT	CONNECTOR SIZES								
		G 1/8	G 1/4	G 3/8	G 1/2	G 3/4	G 1	G 1 1/4	G 1 1/2	G 2
		ORDER NUMBERS								
2/2	301		301-1/4	301-3/8	301-1/2	301-3/4	301-1	301-1 1/4	301-1 1/2	
2/2 with secondary loss	2351		2351N202	2351N203	2351N204	2351N205	2351N206	2351N207	2351N208	2351N209

BALL VALVES AND GATE VALVES, SERIES MV24, MV25, MV26 AND VX24, VX25



MV24/MV25

2/2 ball valve

- Frame: Nickel-plated brass
- Ball: Hard chrome-plated brass
- Gaskets: PTFE/NBR
- Lever: ABS plastic
- Temperature range: -20...+80 °C
- Pressure range: 0 to 10 bar



VX24/VX25

2/2 ball valve

- Frame: AISI316
- Ball: AISI316
- Gaskets: PTFE/FPM
- Lever: AISI316
- Temperature range: -20...+150 °C
- Pressure range: 0 to 10 bar



MV26

Gate valve

- Frame: Nickel-plated brass
- Slide: Anodised aluminium
- Gaskets: NBR (also available with FPM)
- Temperature range: 0...+70 °C
- Pressure range: 0 to 10 bar

CONNECTOR SIZE Ø	ORDER NUMBER				
	MV24 BALL VALVE INTERNAL INNER THREAD	MV25 BALL VALVE INTERNAL EXTERNAL THREAD	VX24 BALL VALVE INTERNAL INNER THREAD	VX25 BALL VALVE INTERNAL EXTERNAL THREAD	MV26 GATE VALVE INTERNAL INNER THREAD
M5					MV2600M5
G 1/8	MV240018	MV250018	VX240018	VX250018	MV260018
G 1/4	MV240014	MV250014	VX240014	VX250014	MV260014
G 3/8	MV240038	MV250038	VX240038	VX250038	MV260038
G 1/2	MV240013	MV250012	VX240012	VX250012	MV260012

Safety valves

SAFETY VALVES

- Tube-mounted safety valve to protect system components from excessive pressure
- Frame and adjustable parts: Brass
- Spring: G1/4 steel, G1/2 stainless steel
- Gaskets: G1/4 NBR, G1/2 PU
- Temperature range: -10...+90 °C
- Working fluid: Dry or spray-lubricated compressed air and neutral gases



2VS / 2VS-12



6084

Manufacturing programme

ORDER NUMBER	CONNECTOR SIZE Ø	PRESSURE RANGE, BAR
2VS	G 1/4	3...7
2VS-12	G 1/4	8...12
6084	G 1/2	4...14

AIR PREPARATION

PNEUMATIC | QUALITY

Air preparation GA Series

- Base components..... 51
 - Brackets and mounting accessories 53
- Pressure gauges 54
- Pressure switches MSA Series 55



Air preparation GA Series

SPECIFICATIONS

- Modular service kit for handling compressed air
- Materials: Frame: Aluminium
Cup: Polycarbonate (G1/4–1/2), metal (G1)
- Pressure range 1.5–9 bar
- Temperature range: Filter –5 °C to +70 °C, regulator –20 °C to +70 °C
- Filter degree: Standard 40 µm, on order 5 µm
- Wall mount as standard on maintenance device
- Pressure regulators have a gauge as a standard accessory



BASE COMPONENTS



FILTER		
ORDER NUMBER	CONNECTOR SIZE Ø	FLOW dm ³ /s
GAF20008G	G1/4	25
GAF40015G	G1/2	75
GAF600C25AG	G1	170



PRESSURE REGULATOR			
ORDER NUMBER	CONNECTOR SIZE Ø	FLOW dm ³ /s	GAUGE
GAR20008SG	G1/4	25	Fixed
GAR40015SG	G1/2	80	Fixed
GAR60025SG	G1	130	Fixed

On order 0 to 4 bar L. On order with a non-return valve K.



SPRAY-LUBRICATION DEVICE		
ORDER NUMBER	CONNECTOR SIZE Ø	FLOW dm ³ /s
GAL20008G	G1/4	40
GAL40015G	G1/2	140
GAL600C25G	G1	230



FILTER REGULATOR			
ORDER NUMBER	CONNECTOR SIZE Ø	FLOW dm ³ /s	GAUGE
GAFR20008SG	G1/4	25	Fixed
GAFR40015SG	G1/2	80	Fixed
GAFR60025SG	G1	130	Fixed

Air preparation GA Series

BASE COMPONENTS



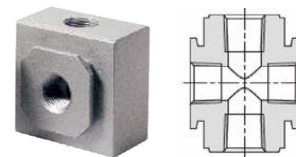
OIL SEPARATION FILTER			
ORDER NUMBER	CONNECTOR SIZE Ø	FLOW dm ³ /s	FILTRATION
GPF20008MG	G1/4	11	0.3 µm
GPF20008DG	G1/4	10	0.01 µm
GPF40015MG	G1/2	50	0.3 µm
GPF40015DG	G1/2	38	0.01 µm



SHUTDOWN VALVE			
ORDER NUMBER	CONNECTOR SIZE Ø	OUTLET	NOTE!
GZ20008G	G1/4	G1/4	Lockable
GZ40015G	G1/2	G1/2	Lockable



SLOW FILL / QUICK DRAIN VALVE			
ORDER NUMBER	CONNECTOR SIZE Ø	OUTLET	NOTE!
GV20008C	G1/4	G1/4	Lockable
GZ40015G	G1/2	G1/2	Lockable



DIVIDER	
ORDER NUMBER	CONNECTOR SIZE Ø
GA20008G	G1/4
GA40015G	G1/2
GA60025G	G1

Air preparation GA Series

BRACKETS AND SPARE PARTS



T-BRACKET	
ORDER NUMBER	CONNECTOR SIZE Ø
GA200T-P1	G1/4
GA400T-P1	G1/2
GA600T-P1	G1



L-BRACKET	
ORDER NUMBER	CONNECTOR SIZE Ø
GA200L-P1	G1/4
GA400L-P1	G1/2
GA600L-P1	G1



U-FASTENER	
ORDER NUMBER	CONNECTOR SIZE Ø
GA200U-P1	G1/4
GA400U-P1	G1/2
GA600U-P1	G1

SPARE PARTS

SPARE PARTS (GAF,GAR AND GAFR SERIES)		
ORDER CODE	DESCRIPTION	COMPATIBLE WITH SERIES
F-PR210B	Pressure gauge 0-10 bar	GA200
F-PR310B	Pressure gauge 0-10 bar	GA300, GA400 and GA600
GAF200-004-01	Filter element 40 µm	GA200
GAF200-004-02	Filter element 5 µm	GA200
GAF400-004-01	Filter element 40 µm	GA400
GAF400-004-02	Filter element 5 µm	GA400
GAF600-004-01	Filter element 40 µm	GA600
GAF600-004-02	Filter element 5 µm	GA600

Precision pressure regulator and pressure gauges

PRECISION PRESSURE REGULATOR

- Supply pressure max. 10 bar
- Sensitivity 0.2% of adjustment range
- Repetition accuracy 0.5 % of adjustment range

ORDER NUMBER	CONNECTOR SIZE Ø	PRESSURE RANGE	AIR CONSUMPTION
GPR30008HG	G1/4	0.05–2 bar	≤ 4 l/min
GPR30008HG	G1/4	0.1–4 bar	≤ 4 l/min
GPR30008HG	G1/4	0.1–8 bar	≤ 4 l/min
GPR40015HG	G1/2	0.1–2 bar	≤ 11.5 l/min
GPR40015HG	G1/2	0.1–4 bar	≤ 11.5 l/min
GPR40015HG	G1/2	0.1–8 bar	≤ 11.5 l/min



GAUGES

- Accuracy class: 2.5
- Materials: Case: Plastic
Measuring body: Brass



GAUGE	WIRE MOUNTING	FRONT FLANGE MOUNTING
MT40-4	MT40-4-P	MT40-4-L
MT40-10	MT40-10-P	MT40-10-L
	MT60-4-P	MT60-4-L
	MT60-10-P	MT60-10-L

Pressure switches MSA Series

SPECIFICATIONS

- MSA pressure switch is an adjustable switch for pneumatic applications with NO and NC functionalities
- Frame is anodised aluminium
- Contactors are silver-plated Ag.CdO
- Film is HNBR and plug is Nylon
- Maximum supply voltage: 250 VAC
- Power duration: 6A resistive 220 VAC
4A resistive 24 VDC
2A inductive 24 VDC
- Insulation class: Group C-VDE 0110
- Protection class IP65 plugged in
- Temperature range: -10...+80 °C
- Maximum frequency: 120 actions per minute
- Lifecycle: Over 1 million connections



ORDER NUMBERS

ORDER NUMBER	TYPE	PRESSURE RANGE	TOLERANCE	MAXIMUM PRESSURE	CONNECTION	PROTECTIVE CAP ORDER NUMBER
30523511	Shift contact	1 to 10 bar	± 0.2 bar	30 bar	G1/8	CAP 3

FITTINGS

Plug connectors MA Series	57
Plug connectors MB Series	60
Compression connectors MC Series	62
Plug connectors MX Series AISI 316	64
Compression connectors CX Series AISI 316 ...	66
Fitting RX Series AISI 316	67
Plug connectors HP Series	68
Compression fittings MO Series	69
Fitting RA Series	70
Quick connectors GU Series	73
Brake connectors MT Series	75
Brake connectors RT Series	76
Multi-tube connectors	77
Tubes and hoses	78



Plug connectors MA Series

SPECIFICATIONS

- The frame and release ring are nickel-plated brass
- The claw ring is AISI 301
- Gaskets: NBR
- Pressure range: max. 20 bar
- Vacuum operation: 750 mmHg
- Tubes: PA11, PA12, PA6, PUR (98 Shore A)
- Temperature range: -20...+80 °C



MA SERIES CONNECTORS AND ORDER NUMBERS



**MA-12 DIRECT OUTPUT CONNECTOR,
CYLINDRICAL THREAD**

TYPE	
MA 12 04 M5	MA 12 08 14
MA 12 06 M5	MA 12 08 38
MA 12 04 18	MA 12 08 12
MA 12 04 14	MA 12 10 14
MA 12 06 M12x1.25	MA 12 10 38
MA 12 06 M12x1.5	MA 12 10 12
MA 12 06 18	MA 12 12 14
MA 12 06 14	MA 12 12 38
MA 12 08 18	MA 12 12 12



**MA-13 DIRECT OUTPUT CONNECTOR,
INTERIOR THREAD**

TYPE	
MA 13 04 18	MA 13 12 38
MA 13 06 18	MA 13 12 12
MA 13 06 14	
MA 13 08 18	
MA 13 08 14	
MA 13 08 38	
MA 13 10 14	
MA 13 10 38	
MA 13 10 12	



**MA-16 ADJUSTABLE ANGLE OUTPUT CONNECTOR,
CYLINDRICAL THREAD**

TYPE	
MA 16 04 M5	MA 16 08 14
MA 16 04 18	MA 16 08 38
MA 16 04 14	MA 16 08 12
MA 16 06 M5	MA 16 10 14
MA 16 06 M12X1.25	MA 16 10 38
MA 16 06 M12X1.5	MA 16 10 12
MA 16 06 18	MA 16 12 14
MA 16 06 14	MA 16 12 38
MA 16 08 18	MA 16 12 12



**MA-17 ADJUSTABLE ANGLE OUTPUT CONNECTOR,
INTERNAL THREAD**

TYPE	
MA 17 04 18	
MA 17 06 18	
MA 17 06 14	
MA 17 08 18	
MA 17 08 14	
MA 17 10 14	
MA 17 10 38	

Plug connectors MA Series

MA SERIES CONNECTORS AND ORDER NUMBERS



MA-18 ADJUSTABLE ANGLE OUTPUT CONNECTOR, CYLINDRICAL THREAD	
TYPE	
MA 18 04 M5	MA 18 08 14
MA 18 04 18	MA 18 10 14
MA 18 06 M5	MA 18 10 38
MA 18 06 18	MA 18 12 38
MA 18 06 14	MA 18 12 12
MA 18 08 18	



MA-19 ADJUSTABLE ANGLE OUTPUT CONNECTOR, CYLINDRICAL THREAD, HIGH	
TYPE	
MA 19 04 18	
MA 19 06 18	
MA 19 06 14	
MA 19 08 18	
MA 19 08 14	



MA-21 ADJUSTABLE T CONNECTOR, CYLINDRICAL THREAD	
TYPE	
MA 21 04 18	MA 21 08 38
MA 21 04 14	MA 21 10 14
MA 21 06 18	MA 21 10 38
MA 21 06 14	MA 21 12 38
MA 21 08 18	MA 21 12 12
MA 21 08 14	



MA-22 ADJUSTABLE T CONNECTOR, CYLINDRICAL THREAD	
TYPE	
MA 22 04 M5	MA 22 08 14
MA 22 04 18	MA 22 10 14
MA 22 06 M5	MA 22 10 38
MA 22 06 18	MA 22 12 38
MA 22 06 14	MA 22 12 12
MA 22 08 18	



MA-24 ADJUSTABLE ANGLE T-OUTPUT CONNECTOR, CYLINDRICAL THREAD	
TYPE	
MA 24 04 18	MA 24 10 14
MA 24 04 14	MA 24 10 38
MA 24 06 18	MA 24 12 38
MA 24 06 14	MA 24 12 12
MA 24 08 18	
MA 24 08 14	



MA-25 REDUCTION CONNECTOR	
TYPE	
MA 25 04 06	MA 25 06 12
MA 25 04 08	MA 25 08 10
MA 25 04 10	MA 25 08 12
MA 25 04 12	MA 25 10 12
MA 25 06 08	
MA 25 06 10	



MA-26 EXTENSION CONNECTOR	
TYPE	
MA 26 04 00	MA 26 10 08
MA 26 06 00	MA 26 12 00
MA 26 06 04	
MA 26 08 00	
MA 26 08 06	
MA 26 10 10	



MA-27 GROMMET CONNECTOR	
TYPE	
MA 27 04 04	
MA 27 06 06	
MA 27 08 08	
MA 27 10 10	
MA 27 12 12	



MA-28 ANGLE EXTENSION CONNECTOR	
TYPE	
MA 28 04 04	
MA 28 06 06	
MA 28 08 08	
MA 28 10 10	
MA 28 12 12	



MA-29 T CONNECTOR	
TYPE	
MA 29 04 04	
MA 29 06 06	
MA 29 08 08	
MA 29 10 10	
MA 29 12 12	



MA-30 ALUMINIUM GASKET	
TYPE	
MA 30 00 M5	
MA 30 00 18	
MA 30 00 14	
MA 30 00 38	
MA 30 00 12	



MA-31 BANJO BOLT	
TYPE	
MA 31 00 M5	
MA 31 00 18	
MA 31 00 14	
MA 31 00 38	
MA 31 00 12	

Plug connectors MA Series

MA SERIES CONNECTORS AND ORDER NUMBERS



MA-32 DOUBLE BANJO RING	
TYPE	
MA 32 00 18	
MA 32 00 14	
MA 32 00 38	
MA 32 00 12	



MA-35 L BANJO RING	
TYPE	
MA 35 04 M5	MA 35 08 14
MA 35 04 M5/R	MA 35 08 38
MA 35 04 18	MA 35 10 14
MA 35 06 18	MA 35 10 38
MA 35 06 14	MA 35 12 38
MA 35 08 18	MA 35 12 12



MA-36 T BANJO RING	
TYPE	
MA 36 04 M5	MA 36 08 38
MA 36 04 18	MA 36 10 14
MA 36 06 18	MA 36 10 38
MA 36 06 14	MA 36 12 38
MA 36 08 18	MA 36 12 12
MA 36 08 14	



MA-37 Y CONNECTOR	
TYPE	
MA 37 04 04	
MA 37 06 06	
MA 37 08 08	
MA 37 10 10	
MA 37 12 12	



MA-38 THREADED NIPPLE	
TYPE	
MA 38 04 M5	MA 38 08 18
MA 38 04 18	MA 38 08 14
MA 38 04 14	MA 38 10 14
MA 38 06 M5	MA 38 10 38
MA 38 06 18	MA 38 12 38
MA 38 06 14	MA 38 12 12



MA-39 EXTENSION NIPPLE	
TYPE	
MA 39 00 04	
MA 39 00 06	
MA 39 00 08	
MA 39 00 10	
MA 39 00 12	



MA-40 PLUG	
TYPE	
MA 40 00 04	
MA 40 00 06	
MA 40 00 08	
MA 40 00 10	
MA 40 00 12	

Plug connectors MB Series

SPECIFICATIONS

- Frame and release ring are acetal plastic
- Threads are acetal plastic or brass
- The claw ring is stainless steel
- Gaskets: NBR
- Pressure range: max. 18 bar
- Vacuum operation: 750 mmHg
- Tubes: PA11, PA12, PA6, PUR (98 Shore A)
- Temperature range: -20...+70 °C



MB SERIES CONNECTORS AND ORDER NUMBERS



MB-12 DIRECT OUTPUT CONNECTOR, CYLINDRICAL THREAD	
TYPE	
MB 12 04 18	MB 12 10 14
MB 12 06 18	MB 12 10 38
MB 12 06 14	
MB 12 08 18	
MB 12 08 14	
MB 12 08 38	



MB-13 THREADED NIPPLE	
TYPE	
MB 13 04 18	MB 13 10 14
MB 13 06 18	MB 13 10 38
MB 13 06 14	
MB 13 08 18	
MB 13 08 14	
MB 13 08 38	



MB-14 ANGLE CONNECTOR	
TYPE	
MB 14 04 00	
MB 14 06 00	
MB 14 08 00	
MB 14 10 00	
MB 14 12 00	



MB-15 T CONNECTOR	
TYPE	
MB 15 04 00	
MB 15 06 00	
MB 15 08 00	
MB 15 10 00	
MB 15 12 00	



MB-18 ADJUSTABLE ANGLE OUTPUT CONNECTOR	
TYPE	
MB 18 04 M5	MB 18 08 14
MB 18 04 18	MB 18 08 38
MB 18 04 14	MB 18 10 14
MB 18 06 M5	MB 18 10 38
MB 18 06 18	MB 18 12 12
MB 18 06 14	MB 18 12 38
MB 18 08 18	



MB-19 ADJUSTABLE ANGLE OUTPUT CONNECTOR, CYLINDRICAL THREAD	
TYPE	
MB 19 04 M5	MB 19 08 14
MB 19 04 18	MB 19 08 38
MB 19 04 14	MB 19 10 14
MB 19 06 M5	MB 19 10 38
MB 19 06 18	
MB 19 06 14	
MB 19 08 18	



MB-20 ADJUSTABLE ANGLE CONNECTOR, CYLINDRICAL THREAD	
TYPE	
MB 20 04 M5	MB 20 08 38
MB 20 04 18	MB 20 10 14
MB 20 06 M5	MB 20 10 38
MB 20 06 18	
MB 20 06 14	
MB 20 08 18	
MB 20 08 14	



MB-22 ADJUSTABLE T CONNECTOR, CYLINDRICAL THREAD	
TYPE	
MB 22 04 M5	MB 22 08 14
MB 22 04 18	MB 22 08 38
MB 22 04 14	MB 22 10 14
MB 22 06 M5	MB 22 10 38
MB 22 06 18	
MB 22 06 14	
MB 22 08 18	

Plug connectors MB Series

MB SERIES CONNECTORS AND ORDER NUMBERS



**MB-24 ADJUSTABLE
T CONNECTOR, CYLINDRI-
CAL THREAD**

TYPE	
MB 24 04 M5	MB 24 08 18
MB 24 04 18	MB 24 08 14
MB 24 04 14	MB 24 08 38
MB 24 06 M5	MB 24 10 14
MB 24 06 18	MB 24 10 38
MB 24 06 14	



**MB-25 EXTENSION
CONNECTOR**

TYPE	
MB 25 04 00	MB 25 10 08
MB 25 06 00	
MB 25 06 04	
MB 25 08 00	
MB 25 08 06	
MB 25 10 00	



**MB-26 REDUCTION
CONNECTOR**

TYPE	
MB 26 04 06	MB 26 08 10
MB 26 04 08	MB 26 08 12
MB 26 04 10	MB 26 10 12
MB 26 06 08	
MB 26 06 10	
MB 26 06 12	



**MB-27 EXPANSION
CONNECTOR**

TYPE	
MB 27 06 04	
MB 27 08 06	



MB-28 BANJO RING

TYPE	
MB 28 04 M5	MB 28 08 38
MB 28 04 18	MB 28 10 14
MB 28 06 18	MB 28 10 38
MB 28 06 14	
MB 28 08 18	
MB 28 08 14	



MB-29 Y CONNECTOR

TYPE	
MB 29 04 04	
MB 29 06 06	
MB 29 08 08	
MB 29 10 10	



MB-30 Y NIPPLE

TYPE	
MB 30 04 04	
MB 30 04 06	
MB 30 04 08	
MB 30 06 06	
MB 30 08 08	



**MB-31 Y CONNECTOR,
CYLINDRICAL THREAD**

TYPE	
MB 31 04 M5	MB 31 08 14
MB 31 04 18	MB 31 08 38
MB 31 04 14	
MB 31 06 18	
MB 31 06 14	
MB 31 08 18	



**MB-32 EXTENSION
NIPPLE**

TYPE	
MB 32 04 00	
MB 32 06 00	
MB 32 08 00	
MB 32 10 00	



MB-33 PLUG

TYPE	
MB 33 04 00	
MB 33 06 00	
MB 33 08 00	
MB 33 10 00	



MB-42 GASKET

TYPE	
MB 42 00 M5	
MB 42 00 18	
MB 42 00 14	
MB 42 00 38	
MB 42 00 12	

Compression connectors MC Series

SPECIFICATIONS

- Material: Nickel-plated brass
- Pressure range: max. 15 bar
- Tubes: PE, PA, PUR
- Temperature range: -18...+70 °C



MC SERIES CONNECTORS AND ORDER NUMBERS



MC-11 DIRECT OUTPUT CONNECTOR, TAPER THREAD	
TYPE	
MC 11 04 18	MC 11 10 18
MC 11 05 18	MC 11 10 14
MC 11 06 18	MC 11 10 38
MC 11 06 14	MC 11 10 12
MC 11 06 38	MC 11 12 38
MC 11 08 18	MC 11 12 12
MC 11 08 14	MC 11 15 12
MC 11 08 38	



MC-13 DIRECT OUTPUT CONNECTOR, INTERNAL THREAD	
TYPE	
MC 13 05 18	MC 13 12 38
MC 13 06 18	
MC 13 06 14	
MC 13 08 18	
MC 13 08 14	
MC 13 08 38	
MC 13 10 14	
MC 13 10 38	



MC-14 EXTENSION CONNECTOR	
TYPE	
MC 14 05 00s	
MC 14 06 00	
MC 14 08 00	
MC 14 10 00	
MC 14 12 00	
MC 14 15 00	



MC-15 GROMMET CONNECTOR	
TYPE	
MC 15 05 00s	
MC 15 06 00	
MC 15 08 00	
MC 15 10 00	
MC 15 12 00	
MC 15 15 00	



MC-16 ANGLE OUTPUT CONNECTOR, TAPER THREAD	
TYPE	
MC 16 04 M5	MC 16 08 38
MC 16 04 18	MC 16 10 18
MC 16 05 18	MC 16 10 14
MC 16 06 18	MC 16 10 38
MC 16 06 14	MC 16 12 38
MC 16 06 38	MC 16 12 12
MC 16 08 18	MC 16 15 12
MC 16 08 14	



MC-17 ANGLE OUTPUT CONNECTOR, INTERNAL THREAD	
TYPE	
MC 17 05 18	
MC 17 06 18	
MC 17 06 14	
MC 17 08 18	
MC 17 08 14	
MC 17 10 14	
MC 17 12 38	



MC-18 ANGLE EXTENSION CONNECTOR	
TYPE	
MC 18 05 00	
MC 18 06 00	
MC 18 08 00	
MC 18 10 00	
MC 18 12 00	
MC 18 15 00	



MC-19 T CONNECTOR	
TYPE	
MC 19 05 00	
MC 19 06 00	
MC 19 08 00	
MC 19 10 00	
MC 19 12 00	
MC 19 15 00	

Compression connectors MC Series

MC SERIES CONNECTORS AND ORDER NUMBERS



**MC-20 T CONNECTOR,
TAPER THREAD**

TYPE	
MC 20 05 18	MC 20 10 38
MC 20 06 18	MC 20 12 38
MC 20 06 14	MC 20 12 12
MC 20 08 18	MC 20 15 12
MC 20 08 14	
MC 20 10 14	



**MC-21 T CONNECTOR,
TAPER THREAD**

TYPE	
MC 21 05 18	MC 21 10 38
MC 21 06 18	MC 21 12 38
MC 21 06 14	MC 21 12 12
MC 21 08 18	MC 21 15 12
MC 21 08 14	
MC 21 10 14	



**MC-22 CROSS
CONNECTOR**

TYPE	
MC 22 05 00	
MC 22 06 00	
MC 22 08 00	
MC 22 10 00	



MC-23 BANJO RING

TYPE	
MC 23 05 M5	MC 23 06 14
MC 23 05 5R	MC 23 08 18
MC 23 05 18	MC 23 08 14
MC 23 06 M5	MC 23 08 38
MC 23 06 5R	MC 23 10 14
MC 23 06 18	MC 23 10 38



**MC-24 DOUBLE
BANJO RING**

TYPE	
MC 24 05 M5	MC 24 08 14
MC 24 05 18	MC 24 08 38
MC 24 06 M5	MC 24 10 14
MC 24 06 18	MC 24 10 38
MC 24 06 14	
MC 24 08 18	



**MC-29 ADJUSTABLE
DIRECT OUTPUT
CONNECTOR**

TYPE	
MC 29 06 18	
MC 29 06 14	
MC 29 08 18	
MC 29 08 14	
MC 29 10 14	



**MC-30 ADJUSTABLE
ANGLE OUTPUT
CONNECTOR**

TYPE	
MC 30 06 18	
MC 30 06 14	
MC 30 08 18	
MC 30 08 14	
MC 30 10 14	
MC 30 10 38	



**MC-31 ADJUSTABLE
T CONNECTOR,
CYLINDRICAL THREAD**

TYPE	
MC 31 06 18	
MC 31 06 14	
MC 31 08 18	
MC 31 08 14	
MC 31 10 14	
MC 31 10 38	

Plug connectors MX Series AISI 316

SPECIFICATIONS

- Frame and release ring: AISI 316 L
- Claw ring: AISI 301
- Gaskets: Viton
- Pressure range: max. 20 bar
- Vacuum operation: 750 mmHg
- Tubes: PVDF, PTFE, AISI
- Temperature range: -20...+180 °C



MX SERIES CONNECTORS AND ORDER NUMBERS



MX-11 DIRECT OUTPUT CONNECTOR, TAPER THREAD	
TYPE	
MX 11 04 18	MX 11 10 14
MX 11 04 14	MX 11 10 38
MX 11 06 18	MX 11 12 38
MX 11 06 14	MX 11 12 12
MX 11 08 18	
MX 11 08 14	



MX-12 DIRECT OUTPUT CONNECTOR, CYLINDRICAL	
TYPE	
MX 12 04 M5	MX 12 08 14
MX 12 04 18	MX 12 10 14
MX 12 06 M5	MX 12 10 38
MX 12 06 18	MX 12 12 38
MX 12 06 14	MX 12 12 12
MX 12 08 18	



MX-14 ANGLE OUTPUT CONNECTOR, TAPER THREAD	
TYPE	
MX 14 04 18	
MX 14 06 18	
MX 14 06 14	
MX 14 08 18	
MX 14 08 14	
MX 14 10 14	



MX-15 ADJUSTABLE ANGLE OUTPUT CONNECTOR, TAPER THREAD	
TYPE	
MX 15 04 18	MX 15 10 38
MX 15 06 18	MX 15 12 38
MX 15 06 14	MX 15 12 12
MX 15 08 18	
MX 15 08 14	
MX 15 10 14	



MX-16 ADJUSTABLE ANGLE OUTPUT CONNECTOR, CYLINDRICAL THREAD	
TYPE	
MX 16 04 M5	MX 16 08 14
MX 16 04 18	MX 16 10 14
MX 16 06 M5	MX 16 10 38
MX 16 06 18	MX 16 12 38
MX 16 06 14	MX 16 12 12
MX 16 08 18	



MX-20 ADJUSTABLE T OUTPUT CONNECTOR, TAPER THREAD	
TYPE	
MX 20 04 18	MX 20 10 38
MX 20 06 18	
MX 20 06 14	
MX 20 08 18	
MX 20 08 14	
MX 20 10 14	



MX-21 ADJUSTABLE T OUTPUT CONNECTOR, CYLINDRICAL THREAD	
TYPE	
MX 21 04 M5	MX 21 10 14
MX 21 04 18	MX 21 10 38
MX 21 06 18	
MX 21 06 14	
MX 21 08 18	
MX 21 08 14	



MX-25 REDUCTION CONNECTOR	
TYPE	
MX 25 04 06	
MX 25 06 08	
MX 25 08 10	

Plug connectors MX Series AISI 316

MX SERIES CONNECTORS AND ORDER NUMBERS



MX-26 EXTENSION CONNECTOR	
TYPE	
MX 26 04 00	
MX 26 06 00	
MX 26 08 00	
MX 26 10 00	
MX 26 12 00	



MX-27 GROMMET CONNECTOR	
TYPE	
MX 27 04 04	
MX 27 06 06	
MX 27 08 08	
MX 27 10 10	
MX 27 12 12	



MX-28 ANGLE EXTENSION CONNECTOR	
TYPE	
MX 28 04 04	
MX 28 06 06	
MX 28 08 08	
MX 28 10 10	
MX 28 12 12	



MX-29 T CONNECTOR	
TYPE	
MX 29 04 04	
MX 29 06 06	
MX 29 08 08	
MX 29 10 10	
MX 29 12 12	



MX-30 GASKET	
TYPE	
MX 30 00 18	
MX 30 00 14	



MX-31 BANJO BOLT	
TYPE	
MX 31 00 18	
MX 31 00 14	
MX 31 00 38	
MX 31 00 12	



MX-35 BANJO RING	
TYPE	
MX 35 04 18	MX 35 10 38
MX 35 06 18	MX 35 12 38
MX 35 06 14	MX 35 12 12
MX 35 08 18	
MX 35 08 14	
MX 35 10 14	

Compression connectors CX Series AISI 316

SPECIFICATIONS

- Material: AISI 316
- Pressure range: max. 25 bar
- Tubes: PTFE
- Temperature range: -40...+250 °C



CX SERIES CONNECTORS AND ORDER NUMBERS



CX-11 DIRECT OUTPUT CONNECTOR, TAPER THREAD	
TYPE	
CX 11 06 18	CX 11 10 14
CX 11 06 14	CX 11 10 38
CX 11 08 18	
CX 11 08 14	



CX-14 ANGLE OUTPUT CONNECTOR, TAPER THREAD	
TYPE	
CX 14 06 18	CX 14 10 14
CX 14 06 14	
CX 14 08 18	
CX 14 08 14	



CX-20 T OUTPUT CONNECTOR, TAPER THREAD	
TYPE	
CX 20 06 18	CX 20 10 14
CX 20 06 14	
CX 20 08 18	
CX 20 08 14	



CX-23 T OUTPUT CONNECTOR, TAPER THREAD	
TYPE	
CX 23 06 18	CX 23 10 14
CX 23 06 14	
CX 23 08 18	
CX 23 08 14	



CX-26 EXTENSION CONNECTOR	
TYPE	
CX 26 06 00	
CX 26 08 00	
CX 26 10 00	



CX-28 ANGLE CONNECTOR	
TYPE	
CX 28 06 00	
CX 28 08 00	
CX 28 10 00	



CX-29 T CONNECTOR	
TYPE	
CX 29 06 00	
CX 29 08 00	
CX 29 10 00	

Fitting RX Series AISI 316

SPECIFICATIONS

- Material: AISI 316 L
- Gaskets: Viton
- Pressure range: max. 150 bar
- Temperature range: -40...+200 °C



RX SERIES CONNECTORS AND ORDER NUMBERS



**RX-12 DOUBLE NIPPLE,
TAPER THREAD**

TYPE	
RX 12 18 18	RX 12 38 38
RX 12 18 14	RX 12 38 12
RX 12 14 14	RX 12 12 12
RX 12 14 38	



RX-13 MUFFLER

TYPE	
RX 13 00 18	
RX 13 00 14	
RX 13 00 38	
RX 13 00 12	



**RX-14 REDUCTION
NIPPLE, TAPER THREAD**

TYPE	
RX 14 18 14	RX 14 14 12
RX 14 18 38	RX 14 38 12
RX 14 18 12	
RX 14 14 38	



**RX-15 REDUCTION
NIPPLE, CYLINDRICAL
THREAD**

TYPE	
RX 15 M5 18	
RX 15 18 14	
RX 15 14 38	



**RX-21 ANGLE COUPLING,
INTERNAL THREAD**

TYPE	
RX 21 18 18	
RX 21 14 14	
RX 21 38 38	
RX 21 12 12	



**RX-22 ANGLE OUTPUT
COUPLING**

TYPE	
RX 22 18 18	
RX 22 14 14	
RX 22 38 38	
RX 22 12 12	



**RX-23 T COUPLING,
INTERNAL THREAD**

TYPE	
RX 23 18 18	
RX 23 14 14	
RX 23 38 38	
RX 23 12 12	



**RX-24 T OUTPUT
COUPLING**

TYPE	
RX 24 18 18	
RX 24 14 14	
RX 24 38 38	
RX 24 12 12	



**RX-35 ANGLE COUPLING,
EXTERNAL THREAD**

TYPE	
RX 35 18 18	
RX 35 14 14	
RX 35 38 38	
RX 35 12 12	



RX-43 HEX PLUG

TYPE	
RX 43 00 18	
RX 43 00 14	
RX 43 00 38	
RX 43 00 12	



**RX-46 HEX PLUG,
O-RING**

TYPE	
RX 46 00 18	
RX 46 00 14	
RX 46 00 38	
RX 46 00 12	

Plug connectors HP Series

SPECIFICATIONS

- HP Series plug connectors are used especially in central lubrication systems
- Material: Brass
- Gaskets: NBR
- Pressure range: max. 150 bar
- Tubes: Nylon, PA6-6
- Temperature range: -20...+80 °C



HP SERIES CONNECTORS AND ORDER NUMBERS



HP-11 DIRECT OUTPUT CONNECTOR, TAPER THREAD	
TYPE	
HP 11 04 18	HP 11 06 14
HP 11 04 M6x0.75*	HP 11 06 M6x1
HP 11 04 M6x1	HP 11 06 M8x1
HP 11 04 M8x1	HP 11 06 M10x1
HP 11 04 M10x1	
HP 11 06 18	

* M6x0.75 with cylindrical thread



HP-14 ANGLE OUTPUT CONNECTOR, TAPER THREAD	
TYPE	
HP 14 04 18	HP 14 06 M8x1
HP 14 04 M6x1	HP 14 06 M10x1
HP 14 04 M8x1	
HP 14 04 M10x1	
HP 14 06 18	
HP 14 06 M6x1	



HP-18 ADJUSTABLE ANGLE OUTPUT CONNECTOR, TAPER THREAD	
TYPE	
HP 18 04 18	HP 18 06 14
HP 18 04 M6x0.75*	HP 18 06 M6x1
HP 18 04 M6x1	HP 18 06 M8x1
HP 18 04 M8x1	HP 18 06 M10x1
HP 18 04 M10x1	
HP 18 06 18	

* M6x0.75 with cylindrical thread

Compression fittings MO Series

SPECIFICATIONS

- Material: Nickel-plated brass
- Pressure range: max. 60 bar
- Tubes: Copper, aluminium, PA and Nylon 6 with support sleeve MO23
- Temperature range: -40...+150 °C



MO SERIES CONNECTORS AND ORDER NUMBERS



MO-11 BEAD CONNECTOR, DIRECT OUTPUT, TAPER THREAD	
TYPE	
MO 11 06 18	MO 11 10 14
MO 11 06 14	MO 11 10 38
MO 11 08 18	MO 11 12 38
MO 11 08 14	MO 11 12 12
MO 11 08 38	MO 11 15 12



MO-13 DIRECT OUTPUT CONNECTOR, INTERNAL THREAD	
TYPE	
MO 13 06 18	MO 13 10 38
MO 13 06 14	
MO 13 08 18	
MO 13 08 14	
MO 13 10 14	



MO-14 EXTENSION CONNECTOR	
TYPE	
MO 14 06 00	
MO 14 08 00	
MO 14 10 00	
MO 14 12 00	
MO 14 15 00	



MO-16 ANGLE OUTPUT CONNECTOR, TAPER THREAD	
TYPE	
MO 16 06 18	MO 16 10 38
MO 16 06 14	MO 16 12 38
MO 16 08 18	MO 16 12 12
MO 16 08 14	MO 16 15 12
MO 16 10 14	



MO-17 ANGLE EXTENSION CONNECTOR	
TYPE	
MO 17 06 00	
MO 17 08 00	
MO 17 10 00	
MO 17 12 00	
MO 17 15 00	



MO-18 T CONNECTOR	
TYPE	
MO 18 06 00	
MO 18 08 00	
MO 18 10 00	
MO 18 12 00	
MO 18 15 00	



MO-19 T CONNECTOR, TAPER THREAD	
TYPE	
MO 19 06 18	MO 19 10 38
MO 19 06 14	MO 19 12 38
MO 19 08 18	MO 19 12 12
MO 19 08 14	MO 19 15 12
MO 19 10 14	



MO-20 T CONNECTOR, TAPER THREAD	
TYPE	
MO 20 06 18	MO 20 10 38
MO 20 06 14	MO 20 12 38
MO 20 08 18	MO 20 12 12
MO 20 08 14	MO 20 15 12
MO 20 10 14	



MO-22 BEAD	
TYPE	
MO 22 06 75	
MO 22 08 75	
MO 22 10 95	
MO 22 12 95	
MO 22 15 10	



MO-23 BUSHING	
TYPE	
MO 23 06 12	
MO 23 08 14	
MO 23 10 16	
MO 23 12 18	
MO 23 15 20	



MO-25 BANJO RING	
TYPE	
MO 25 06 18	
MO 25 06 14	
MO 25 08 18	
MO 25 08 14	

Fitting RA Series

SPECIFICATIONS

- Material: Nickel-plated brass
- Gaskets: NBR
- Pressure range: max. 60 bar
- Temperature range: -40...+150 °C



RA SERIES CONNECTORS AND ORDER NUMBERS



RA011 DOUBLE NIPPLE, CYLINDRICAL THREAD	
TYPE	
RA 011 M5 M5	RA 011 1/4 1/2
RA 011 M5 1/8	RA 011 3/8 3/8
RA 011 1/8 1/8	RA 011 3/8 1/2
RA 011 1/8 1/4	RA 011 1/2 1/2
RA 011 1/8 3/8	
RA 011 1/4 1/4	
RA 011 1/4 3/8	



RA012 KAKSOISNIPPA, TAPER THREAD	
TYPE	
RA 012 1/8 1/8	RA 012 3/8 1/2
RA 012 1/8 1/4	RA 012 1/2 1/2
RA 012 1/8 3/8	RA 012 1/2 3/4
RA 012 1/4 1/4	RA 012 3/4 3/4
RA 012 1/4 3/8	RA 012 3/4 1
RA 012 1/4 1/2	RA 012 1 1
RA 012 3/8 3/8	



RA013 MUFFLER	
TYPE	
RA 013 M5	
RA 013 1/8	
RA 013 1/4	
RA 013 3/8	
RA 013 1/2	
RA 013 3/4	
RA 013 1	



RA014 REDUCTION NIPPLE, TAPER THREAD	
TYPE	
RA 014 1/8 1/4	RA 014 1/2 1
RA 014 1/8 3/8	RA 014 3/4 1
RA 014 1/8 1/2	
RA 014 1/4 3/8	
RA 014 1/4 1/2	
RA 014 3/8 1/2	
RA 014 1/2 3/4	



RA015 REDUCTION NIPPLE, CYLINDRICAL THREAD	
TYPE	
RA 015 M5 1/8	RA 015 1/2 3/4
RA 015 1/8 1/4	RA 015 3/4 1
RA 015 1/8 3/8	
RA 015 1/8 1/2	
RA 015 1/4 3/8	
RA 015 1/4 1/2	
RA 015 3/8 1/2	



RA016 CONVERSION NIPPLE, TAPER THREAD	
TYPE	
RA 016 1/8 1/8	RA 016 1/2 1/2
RA 016 1/8 1/4	
RA 016 1/4 1/4	
RA 016 1/4 3/8	
RA 016 1/4 1/2	
RA 016 3/8 3/8	
RA 016 3/8 1/2	



RA017 CONVERSION NIPPLE, CYLINDRICAL THREAD	
TYPE	
RA 017 M5 1/8	RA 017 3/8 1/2
RA 017 1/8 1/8	RA 017 1/2 1/2
RA 017 1/8 1/4	
RA 017 1/4 1/4	
RA 017 1/4 3/8	
RA 017 1/4 1/2	
RA 017 3/8 3/8	



RA018 REDUCTION MUFFLER	
TYPE	
RA 018 M5 1/8	
RA 018 1/8 1/4	
RA 018 1/8 3/8	
RA 018 1/4 3/8	
RA 018 1/4 1/2	
RA 018 3/8 1/2	
RA 018 1/2 3/4	

Fitting RA Series

RA SERIES CONNECTORS AND ORDER NUMBERS



RA019 PLUG

TYPE	
RA 019 M5	
RA 019 1/8	
RA 019 1/4	
RA 019 3/8	
RA 019 1/2	
RA 019 3/4	
RA 019 1	

RA020 PLUG,
INTERNAL THREAD

TYPE	
RA 020 1/8	
RA 020 1/4	
RA 020 3/8	
RA 020 1/2	
RA 020 3/4	
RA 020 1	

RA021 ANGLE COUPLING,
INTERNAL THREAD

TYPE	
RA 021 1/8 1/8	
RA 021 1/4 1/4	
RA 021 3/8 3/8	
RA 021 1/2 1/2	

RA-022 ANGLE OUTPUT
COUPLING

TYPE	
RA 022 1/8 1/8	
RA 022 1/4 1/4	
RA 022 3/8 3/8	
RA 022 1/2 1/2	
RA 022 3/4 3/4	
RA 022 1 1	

RA023 T COUPLING,
INTERNAL THREAD

TYPE	
RA 023 1/8 1/8	
RA 023 1/4 1/4	
RA 023 3/8 3/8	
RA 023 1/2 1/2	

RA024 T OUTPUT
COUPLING

TYPE	
RA 024 1/8 1/8	
RA 024 1/4 1/4	
RA 024 3/8 3/8	
RA 024 1/2 1/2	
RA 024 3/4 3/4	
RA 024 1 1	

RA025 T ANGLE OUTPUT
COUPLING

TYPE	
RA 025 1/8 1/8	
RA 025 1/4 1/4	
RA 025 3/8 3/8	
RA 025 1/2 1/2	



RA026 CROSS COUPLING

TYPE	
RA 026 1/8 1/8	
RA 026 1/4 1/4	
RA 026 3/8 3/8	



RA029 DIVIDER

TYPE	
RA 029 1/8	
RA 029 1/4	
RA 029 3/8	
RA 029 1/2	



RA030 HOSE NIPPLE

TYPE	
RA 030 7 1/8	RA 030 12 3/8
RA 030 7 1/4	RA 030 12 1/2
RA 030 8 1/8	RA 030 17 3/8
RA 030 9 1/8	RA 030 17 1/2
RA 030 9 1/4	
RA 030 9 3/8	
RA 030 12 1/4	

RA035 ANGLE COUPLING,
EXTERNAL THREAD

TYPE	
RA 035 1/8 1/8	
RA 035 1/4 1/4	
RA 035 3/8 3/8	
RA 035 1/2 1/2	
RA 035 3/4 3/4	
RA 035 1 1	

RA036 T OUTPUT
COUPLING

TYPE	
RA 036 1/8 1/8	
RA 036 1/4 1/4	
RA 036 3/8 3/8	
RA 036 1/2 1/2	
RA 036 3/4 3/4	
RA 036 1 1	

Fittings RA Series

RA SERIES CONNECTORS AND ORDER NUMBERS



RA039 EXTENSION NIPPLE	
TYPE	
RA 039 1/8 22	
RA 039 1/8 42	
RA 039 1/4 35	
RA 039 1/4 51	



RA040 Y OUTPUT	
TYPE	
RA 040 1/8	
RA 040 1/4	
RA 040 3/8	
RA 040 1/2	



RA041 Y OUTPUT	
TYPE	
RA 041 1/8	
RA 041 1/4	
RA 041 3/8	
RA 041 1/2	



RA042 BANJO RING, INTERNAL THREAD	
TYPE	
RA 042 5,1 M5	
RA 042 10 1/8	
RA 042 13,2 1/4	
RA 042 17 3/8	
RA 042 21 1/2	



RA043 HEX PLUG	
TYPE	
RA 043 1/8	
RA 043 1/4	
RA 043 3/8	
RA 043 1/2	



RA044 THROUGH COUPLING	
TYPE	
RA 044 M5	
RA 044 1/8	
RA 044 1/4	
RA 044 3/8	
RA 044 1/2	



RA045 T COUPLING	
TYPE	
RA 045 1/8 1/8	
RA 045 1/4 1/4	
RA 045 3/8 3/8	
RA 045 1/2 1/2	



RA046 HEX PLUG, O-RING	
TYPE	
RA 046 1/8	
RA 046 1/4	
RA 046 3/8	
RA 04 1/2	



HOSE CUTTER 2-20 MM	
TYPE	
TCUT0001	



HOSE CUTTER REPLACEMENT KIT	
TYPE	
TCUT0101	

Quick connectors GU Series

SPECIFICATIONS

- Material: Nickel-plated brass
- Gaskets: NBR
- Pressure range: max. 15 bar
- Temperature range: -20...+80 °C
- Sizes:
 - 20 Series, DN 2.5 mm = 5 mm²
 - 21 Series, DN 5 mm = 20 mm²
 - 26 Series, DN 7.5 mm = 20 mm²



GU SERIES CONNECTORS AND ORDER NUMBERS



GUXX-11	
TYPE	
GU 20-11 00 M5	GU 26-11 00 38
GU 20-11 00 18	GU 26-11 00 12
GU 21-11 00 18	
GU 21-11 00 14	
GU 26-11 00 14	



GUXX-12	
TYPE	
GU 20-12 00 M5	GU 26-12 00 38
GU 20-12 00 18	GU 26-12 00 12
GU 21-12 00 18	
GU 21-12 00 14	
GU 26-12 00 14	



GUXX-13	
TYPE	
GU 20-13 03 00	GU 26-13 09 00
GU 20-13 04 00	GU 26-13 13 00
GU 21-13 04 00	
GU 21-13 06 00	
GU 26-13 06 00	



GUXX-15	
TYPE	
GU 20-15 04 00	GU 26-15 08 00
GU 20-15 05 00	GU 26-15 10 00
GU 20-15 06 00	
GU 21-15 06 00	
GU 21-15 08 00	



GUXX-20	
TYPE	
GU 20-20 00 M5	GU 26-20 00 38
GU 20-20 00 18	GU 26-20 00 12
GU 21-20 00 18	
GU 21-20 00 14	
GU 26-20 00 14	



GUXX-21	
TYPE	
GU 20-21 00 M5	GU 26-21 00 38
GU 20-21 00 18	GU 26-21 00 12
GU 21-21 00 18	
GU 21-21 00 14	
GU 26-21 00 14	



GUXX-22	
TYPE	
GU 20-22 03 00	GU 26-22 08 00
GU 20-22 04 00	GU 26-22 09 00
GU 21-22 04 00	GU 26-22 10 00
GU 21-22 06 00	GU 26-22 13 00
GU 26-22 06 00	



GUXX-23	
TYPE	
GU 20-23 04 00	GU 26-23 06 00
GU 20-23 05 00	GU 26-23 08 00
GU 20-23 06 00	GU 26-23 10 00
GU 21-23 06 00	
GU 21-23 08 00	



GUXX-24	
TYPE	
GU 21-24 06 00	
GU 21-24 08 00	
GU 26-24 06 00	
GU 26-24 08 00	
GU 26-24 10 00	



GUXX-25	
TYPE	
GU 21-25 00 18	
GU 21-25 00 14	
GU 26-25 00 14	
GU 26-25 00 38	



GUXX-26	
TYPE	
GU 21-26 06 00	
GU 21-26 08 00	
GU 26-26 06 00	
GU 26-26 08 00	
GU 26-26 10 00	

Brake connectors MT Series

SPECIFICATIONS

TÜV approved DIN74324 connectors for pneumatic brakes

- Frame: Brass
- Internal tube: Ø 6–12, PA6.6
Ø 15–18 brass
- Gaskets: NBR
- Claw ring: Brass
- Dust gasket: EPDM
- Pressure range 0–16 bar
- Temperature -50...+100 °C
- Tubes: PA12 DIN74324 or
DIN 73378



MT SERIES CONNECTORS AND ORDER NUMBERS



MT-12 DIRECT OUTPUT CONNECTOR, CYLINDRICAL THREAD		
TYPE		
MT 12 06 M10x1	MT 12 08 M22x1.5	MT 12 12 M22x1.5
MT 12 06 M12x1.5	MT 12 10 M12x1.5	MT 12 15 M16x1.5
MT 12 06 M14x1.5	MT 12 10 M14x1.5	MT 12 15 M22x1.5
MT 12 06 M16x1.5	MT 12 10 M16x1.5	MT 12 16 M16x1.5
MT 12 08 M10x1	MT 12 10 M22x1.5	MT 12 16 M22x1.5
MT 12 08 M12x1.5	MT 12 12 M12x1.5	MT 12 18 M22x1.5
MT 12 08 M14x1.5	MT 12 12 M14x1.5	
MT 12 08 M16x1.5	MT 12 12 M16x1.5	



MT-13 DIRECT OUTPUT CONNECTOR, INTERNAL THREAD		
TYPE		
MT 13 06 M10x1		
MT 13 06 M16x1.5		
MT 13 08 M10x1		



MT-16 ADJUSTABLE ANGLE OUTPUT CONNECTOR, CYLINDRICAL THREAD		
TYPE		
MT 16 06 M10x1	MT 16 08 m22x1.5	MT 16 12 M22x1.5
MT 16 06 M12x1.5	MT 16 10 M12x1.5	MT 16 15 M16x1.5
MT 16 06 M14x1.5	MT 16 10 M14x1.5	MT 16 15 M22x1.5
MT 16 06 M16x1.5	MT 16 10 M16x1.5	MT 16 16 M16x1.5
MT 16 08 M10x1	MT 16 10 M22x1.5	MT 16 16 M22x1.5
MT 16 08 M12x1.5	MT 16 12 M12x1.5	MT 16 18 M22x1.5
MT 16 08 M14x1.5	MT 16 12 M14x1.5	
MT 16 08 M16x1.5	MT 16 12 M16x1.5	



MT-21 ADJUSTABLE T OUTPUT CONNECTOR, CYLINDRICAL THREAD		
TYPE		
MT 21 06 M10x1	MT 21 08 M22x1.5	MT 21 12 M22x1.5
MT 21 06 M12x1.5	MT 21 10 M12x1.5	MT 21 15 M16x1.5
MT 21 06 M14x1.5	MT 21 10 M14x1.5	MT 21 15 M22x1.5
MT 21 06 M16x1.5	MT 21 10 M16x1.5	MT 21 16 M16x1.5
MT 21 08 M10x1	MT 21 10 M22x1.5	MT 21 16 M22x1.5
MT 21 08 M12x1.5	MT 21 12 M12x1.5	MT 21 18 M22x1.5
MT 21 08 M14x1.5	MT 21 12 M14x1.5	
MT 21 08 M16x1.5	MT 21 12 M16x1.5	

Brake connectors MT Series

MT SERIES CONNECTORS AND ORDER NUMBERS



MT-24 ADJUSTABLE ANGLE T-OUTPUT CONNECTOR, CYLINDRICAL THREAD

TYPE		
MT 24 06 M10x1	MT 24 08 M22x1.5	MT 24 12 M22x1.5
MT 24 06 M12x1.5	MT 24 10 M12x1.5	MT 24 15 M16x1.5
MT 24 06 M14x1.5	MT 24 10 M14x1.5	MT 24 15 M22x1.5
MT 24 06 M16x1.5	MT 24 10 M16x1.5	MT 24 16 M16x1.5
MT 24 08 M10x1	MT 24 10 M22x1.5	MT 24 16 M22x1.5
MT 24 08 M12x1.5	MT 24 12 M12x1.5	MT 24 18 M22x1.5
MT 24 08 M14x1.5	MT 24 12 M14x1.5	
MT 24 08 M16x1.5	MT 24 12 M16x1.5	



MT-26 EXTENSION CONNECTOR

TYPE		
MT 26 06 06		
MT 26 08 08		
MT 26 10 10		
MT 26 12 12		
MT 26 15 15		
MT 26 16 16		
MT 26 18 18		



MT-28 ANGLE CONNECTOR

TYPE		
MT 28 06 06	MT 28 15 15	
MT 28 08 08	MT 28 16 16	
MT 28 10 10	MT 28 18 18	
MT 28 12 12		



MT-29 T CONNECTOR

TYPE		
MT 29 06 06	MT 29 15 15	
MT 29 08 08	MT 29 16 16	
MT 29 10 10	MT 29 18 18	
MT 29 12 12		



TREL REMOVAL TOOL

TYPE		
TREL-1	6-12 mm	
TREL-2	15-18 mm	

Brake connectors RT Series

RT SERIES CONNECTORS AND ORDER NUMBERS



RT-15 REDUCTION NIPPLE
TYPE
RT 15 M12 x 1.5 M16 x 1.5
RT 15 M12 x 1.5 M22 x 1.5
RT 15 M16 x 1.5 M22 x 1.5



RT-22 ADJUSTABLE ANGLE COUPLING
TYPE
RT 22 M16 x 1.5 M16 x 1.5
RT 22 M16 x 1.5 M22 x 1.5
RT 22 M22 x 1.5 M22 x 1.5



RT-23 T COUPLING
TYPE
RT 23 M16 x 1.5 M16 x 1.5
RT 23 M22 x 1.5 M22 x 1.5



RT-24 ADJUSTABLE T COUPLING
TYPE
RT 24 M12 x 1.5 M16 x 1.5
RT 24 M16 x 1.5 M16 x 1.5
RT 24 M16 x 1.5 M22 x 1.5
RT 24 M22 x 1.5 M22 x 1.5



RT-30 HOSE NIPPLE
TYPE
RT 30 12.5 M16 x 1.5
RT 30 12.5 M22 x 1.5



RT-46 PLUG, O-RING
TYPE
RT 46 00 M12 x 1.5
RT 46 00 M16 x 1.5
RT 46 00 M22 x 1.5

VT SERIES CONNECTORS AND ORDER NUMBERS



VT-90 DRAIN VALVE
TYPE
VT 90 00 M22 x 1.5



VT-91 MEASUREMENT NIPPLE
TYPE
VT 91 00 M16 x 1.5
VT 91 00 M22 x 1.5

Multi-tube connectors

SPECIFICATIONS

- Allows simultaneous disconnection and coupling of several tubes, for example when moving machines
- The connector flange has a guide to prevent incorrect connection
- Multi-tube connectors use plug connectors
- AO Series with non-return valves

Materials A and AO series

- Casing: PARA (Ixef® 1022)
- Connector plate: PARA (Ixef® 1023)
- Gaskets: NBR
- Connector body: Brass
- Working pressure: A Series max. 15 bar, AO Series max. 7 bar, B Series max. 10 bar
- Temperature range: -20...+70 °C
- Tubes: PA11, PA12, PA6, PE, PU (98 Shore A)

Materials B Series

- Frame: Aluminium
- Nuts: POM
- Guide: Brass
- Connectors: POM



MANUFACTURING PROGRAMME

A



B



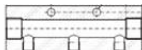
MODEL	TUBE SIZE, OUTER DIAMETER	NUMBER OF CONNECTORS
A113	4	12
	6	10
	8	8
A213	4	20
	6	14
	8	10
A313	6	20
A013 *)	6	6
	8	4
B113	4	12
	6	10
	8	8

*) Multi-tube connector with non-return valve, maximum working pressure is 7 bar

DIVIDERS

- Material: Anodised aluminium

JK 1



JK 2



INPUT	OUTPUTS (PCS)	OUTPUTS	ORDER NUMBER
1/4	3	1/8	JK1-1/4-3 x 1/8
1/4	4	1/8	JK1-1/4-4 x 1/8
1/4	5	1/8	JK1-1/4-5 x 1/8
1/4	6	1/8	JK1-1/4-6 x 1/8
3/8	3	1/4	JK1-3/8-3 x 1/8
3/8	4	1/4	JK1-3/8-4 x 1/8
3/8	5	1/4	JK1-3/8-5 x 1/8

INPUT	OUTPUTS (PCS)	OUTPUTS	ORDER NUMBER
1/4	3+3	1/8	JK2-1/4-6 x 1/8
1/4	4+4	1/8	JK2-1/4-8 x 1/8
1/4	5+5	1/8	JK2-1/4-10 x 1/8
3/8	2+2	1/4	JK2-3/8-4 x 1/4
3/8	3+3	1/4	JK2-3/8-6 x 1/4
3/8	4+4	1/4	JK2-3/8-8 x 1/4
3/8	5+5	1/4	JK2-3/8-10 x 1/4

Tubes and hoses

PA12 POLYAMIDE TUBES

- Semi-hard, flexible tube for pneumatics, hydraulics, fuels, lubrication systems, etc.
- Colourful PA tubes are UV-protected and halogen-free
- Operating temperature: -40 °...+80 °C
- Inventory Colors: Natural and Blue
- Order Colors: Black, red, yellow, green, and silver



PRESSURE RESISTANCE TABLE BAR (SAFETY FACTOR 3)

	DIAMETER								
	4/2	5/3	6/4	8/6	10/7	10/8	12/9	12/10	15/12.5
Pressure resistance, bar	44	33	26	19	23	14	19	12	12
Operating temperature 23 °C									
Compression size m	100	100	100	50	50	50	100	50	50
DIN 74324 (black)	x	x	x	x	x	x	x		
DIN 73378 (other colours)	x	x	x	x	x	x	x		

ORDER EXAMPLE PA 12 6/4 SININEN (blue)

PA12 BRAKE LINES

- Millimetre-long for use in braking systems in vehicles
- DIN 74324 pneumatic tubes
- Braking tubes are UV-protected and halogen-free
- Standard Color: Black



DIN 74324

	DIAMETER					
	6/4	8/6	10/8	12/9	16/12	18/14
Pressure resistance, bar	36	25	20	25	20	20
Operating temperature 23 °C						
Compression size m	100	50	50	100	100	100

ORDER EXAMPLE PA 12 6/4 DIN74324

Tubes and hoses

SPARK-RESISTANT TUBES

- 3 different tubes according to application and protection needs
- More resistant to spark load than a normal tube



ORDER CODE

SELF-EXTINGUISHING MATERIAL	DIAMETER				
	MS-TPU2X4	MS-TPU3.5X6	MS-TPU5.5X8	MS-TPU6X10	MS-TPU8X12
Pressure resistance bar / Operating temperature 23 °C	22	17	12	16	13

DOUBLE LAYER, SLEEVE PU, TUBE PA12	DIAMETER				
	DS-PA2X4	DS-PA4X6	DS-PA6X8	DS-PA7.5X10	DS-PA9X12
Pressure resistance bar / Operating temperature 23 °C	44	26	19	19	19

TRIPLE LAYER SLEEVE PU, TUBE PA12, PBT IN THE CENTRE	DIAMETER				
	TS-PA2.5X4	TS-PA4X6	TS-PA6X8	TS-PA7.5X10	TS-PA9X12
Pressure resistance bar / Operating temperature 23 °C	30	26	19	19	19

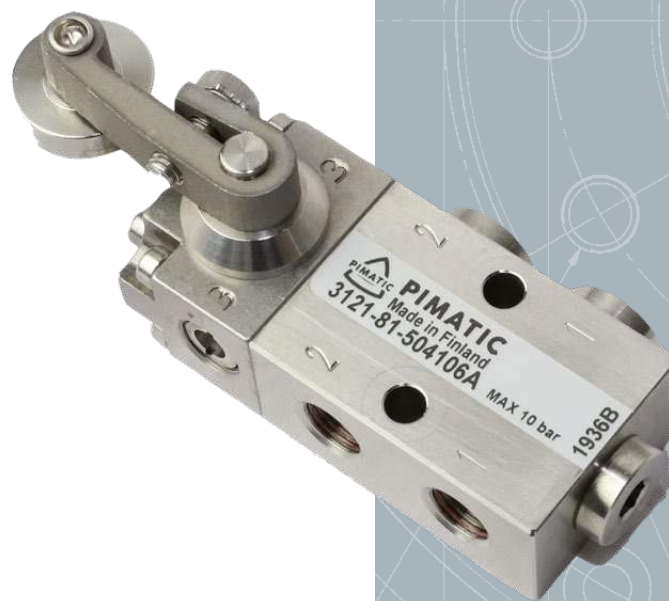
MULTI-TUBE CABLES

- Multi-tube cables are black PVC or lines protected with a blue PU sleeve
- PA or PU tubes can be used as lines



CUSTOMIZED PRODUCTS

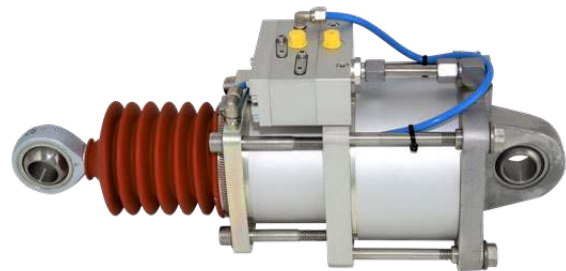
In addition to these standard components, we design and manufacture numerous customized products to fulfill our customers individual requirements. Our designers are dedicated professionals, and we use latest design tools which allow us to perform flow simulations and pressure drop analyses, in which cases the products are optimized specifically for our customers' applications. We also have an advanced test laboratory where we test all our new products, so they meet our customers' requirements, even the most challenging ones. We manufacture numerous special valves and pneumatic cylinders assemblies, pneumatic blocks and valve cabinets for several global OEM's who always rely on Pimatic's top quality. From two following pages you can find some examples of our special solutions.



Special cylinders



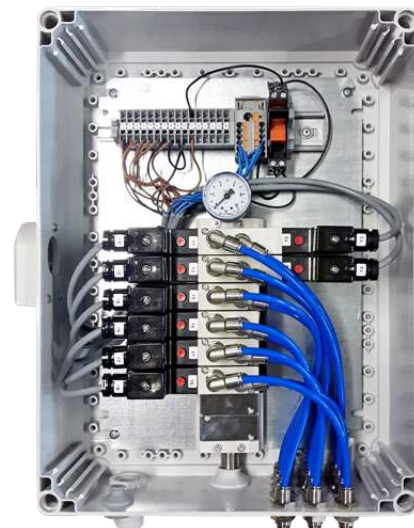
Cylinder assemblies



Solutions
for mobile applications



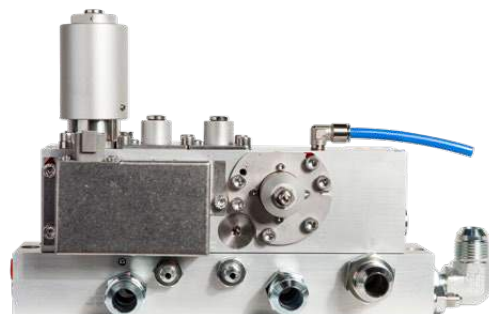
Valve assemblies



Special valves



Valve blocks









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