

HYDRAQUIP pneumatic solutions



Linden
HOSE & ADAPTORS LTD





Pneumatic Solutions

Hydraquip has a long history of supplying high quality pneumatic components along with the design and build of fully customised control solutions. Our technical staff have the system design expertise to proceed from initial customer enquiries and ideas to fully operational turnkey systems, including the integration of electronic and pneumatic components to give the best solution for your control application. Technology and experience allows us to create complex pneumatic solutions in a short lead time. If what you require is not in stock at your local trade counter we offer a next day delivery on thousands of pneumatic components.

Features

- Full range of interchangeable ISO standard cylinders & valves
- Components tested in extreme conditions according to technical & environmental requirements demanded
- Capacity, duration, weight, explosion proof, strength & mechanical resistance tests available
- Highly reliable precision measuring tools, enabling accurate verification of product conformity
- Products & kits ready for installation
- High performance components

Benefits

- Vast range of over 9,000 pneumatic components
- All fast moving product lines available on a next day basis
- Hydraquip branches offering a full UK distribution network
- Air leak surveys to identify & resolve wasted air to reduce costs
- Turnkey pneumatic systems design, build, install & commission
- Pre assembled kits of components
- Fully customised control solutions
- Control cabinets & with pre-cabled systems
- Component kit assembly available on a short lead time reducing downtime
- Kanban/line feed deliveries
- Pneumatic specialists available to provide technical assistance and support
- Extensive range of components for use in the following industries: Assembly & Robotics, Automotive, Electronic Systems, Food & Beverage, Life Science, Packaging, Plastic & Rubber, Textile Machinery, & Woodworking Machinery



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1 > Movement



International Standard Cylinders



1 / 2 Series 16, 24 and 25
Mini-Cylinders and Accessories
CETOP RP-52-P
DIN/ISO 6432



1 / 4 Series 40
Cylinders and Accessories
ISO 15552
DIN/ISO 6431 / VDMA 24562



1 / 6 Series 41
Cylinders Aluminium Profile and
Accessories
DIN/ISO 6431 / VDMA 24562



1 / 8 Series 60
Cylinders and Accessories
ISO 15552
DIN/ISO 6431 / VDMA 24562



1 / 10 Series 61
Cylinders - Aluminium Profile
and Accessories
ISO 15552
DIN/ISO 6431 / VDMA 24562



1 / 12 Series 6PF
Cylinders - Aluminium Profile
and Accessories
ISO 15552
DIN/ISO 6431 / VDMA 24562



1 / 14 Series 32
Compact Magnetic Cylinders
ISO 21287



1 / 15 Series 32
Compact Magnetic Cylinders
(Tandem and Multi-Position
Versions)
ISO 21287



1 / 16 Series 45
Guide Units

Compact Cylinders



1 / 17 Series QN
Short-Stroke Cylinders



1 / 17 Series QP - QPR
Short-Stroke Cylinders



1 / 18 Series 31 Compact
Magnetic Cylinders



1 / 19 Series 31 Compact Magnetic
Cylinders (Tandem and
Multi-Position Versions)

Guided Cylinders



1 / 20 Series QCT and QCB
Cylinders with Integrated Guide



1 / 21 Series QCTF - QCBF
Slide Units



1 / 22 Series QX
Twin Rod Cylinders

Non Standard Cylinders



1 / 23 Series 14
Compact Mini-Cylinders

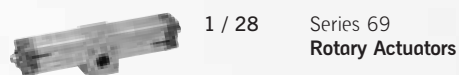


1 / 24 Series 27 Roundline
Cylinders and Accessories



1 / 26 Series 42
Cylinders and Accessories

Rotary Cylinders



1 / 28 Series 69
Rotary Actuators



1 / 29 Series 30
Rotary Actuators



1 / 30 Series ARP
Rotary Actuators

Grippers



1 / 31 Series CGA
Angular Grippers



1 / 31 Series CGSN
180° Angular Grippers



1 / 31 Series CGP
Parallel Grippers



1 / 31 Series CGB-L
Guided Type Parallel Grippers



1 / 32 Series CGLN
Wide Opening Parallel Grippers



1 / 32 Series CGC
3-Finger Gripper, Centric

Rodless Cylinders



1 / 33 Series 50 Rodless
Cylinders and Accessories



1 / 35 Series 52 Rodless
Cylinders and Accessories

Stainless Steel Cylinders



1 / 38 Series 90 Stainless Steel
Cylinders and Accessories
ISO 15552
DIN/ISO 6431 / VDMA 24562



1 / 40 Series 94 and 95 Stainless Steel
Cylinders and Accessories
CETOP RP-52-P / DIN/ISO 6432



1 / 42 Series 97 Stainless Steel
Cylinders and Accessories

Proximity switches



1 / 44 Series SKR, CST, CSV
Magnetic Proximity Switches and
Brackets



1 / 45 Series CSB - CSC
Magnetic Proximity Switches



1 / 45 Series CSN Magnetic
Proximity Switches

Additional Cylinder Accessories



1 / 46 Series 43
Hydrochecks



1 / 47 Series 60/61
Valve Mounting Bracket



1 / 48 Series RL
Rod Locks
ISO 6431 / VDMA/ISO 6432



1 / 49 Series SA
Shock Absorbers

Series 16, 24 and 25 Mini-Cylinders

Single-acting and double-acting - Cetop RP52-P DIN/ISO 6432

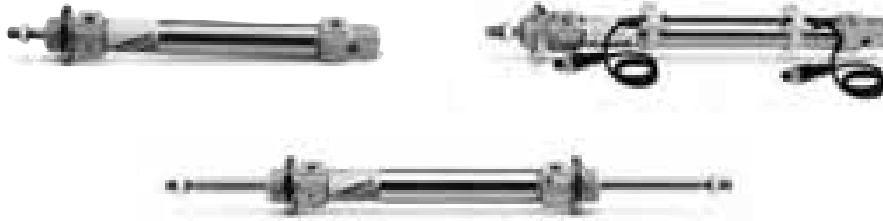
Series 16: Ø8, Ø10, Ø12

Series 24: Ø16, Ø20, Ø25 - magnetic

Series 25: Ø16, Ø20, Ø25 - magnetic cushioned



The Camozzi ISO mini-cylinder range is available in three different versions to suit the requirements of the design engineer.



Double-acting and Single-acting (through rod and non-standard strokes available on request)

STANDARD STROKES FOR MINICYLINDERS SERIES 16, 24 AND 25

- Double-acting
- * Single-acting

Series	16	16	16	24	24	24	25	25	25
	Ø8	Ø10	Ø12	Ø16	Ø20	Ø25	Ø16	Ø20	Ø25
Standard Stroke									
10	■*	■*	■*	■*	■*	■*	■	■	■
25	■*	■*	■*	■*	■*	■*	■	■	■
40	■*	■*	■*	■*	■*	■*	■	■	■
50	■*	■*	■*	■*	■*	■*	■	■	■
80	■	■	■	■	■	■	■	■	■
100	■	■	■	■	■	■	■	■	■
125	■	■	■	■	■	■	■	■	■
160	■	■	■	■	■	■	■	■	■
200	■	■	■	■	■	■	■	■	■
250			■	■	■	■	■	■	■
300				■	■	■	■	■	■
320				■	■	■	■	■	■
400				■	■	■	■	■	■
500				■	■	■	■	■	■

CODING EXAMPLE

24	N	2	A	16	A	100	-
24	SERIES: 16 = non-magnetic 24 = magnetic 25 = magnetic adjustable cushioning			16	BORE: 8, 10, 12, 16, 20, 25mm		
N	VERSION: N = standard			A	TYPE OF BRACKET: A = standard (screw with ring + lock nut for rod) RL = cylinder with rod lock Ø20 - Ø25		
2	OPERATION: 1 = single-acting (front spring) 2 = double-acting 3 = double-acting (through rod) 7 = single-acting (through rod)			100	STROKE: (see table)		
A	MATERIALS: A = rolled stainless steel AISI 303 rod, stainless steel AISI 304 tube, anodized AL end-blocks			-	SPECIAL: to be specified V = Rod Seal Viton		

NOTE: All cylinders are supplied complete with nose nut and nut for rod. The accessories are supplied separately.

Technical Data

Type of Construction

Piston cylinder - rolled construction, single-acting, double-acting, through-rod.

Magnetic or non-magnetic

Media

Compressed air (filtered), with or without lubrication

Operating Pressure

1 bar to 10 bar (double-acting)
2 bar to 10 bar (single-acting)

Operating Temperature

0°C to +80°C
(with dry air -20°C to +80°C)

Materials

Cylinder Barrel: Stainless steel

End Blocks: Cast aluminium

Nose Seals: Polyurethane

Other Seals: NBR

Piston Rod: Stainless steel

Piston Rod Lock Nut: Zinc-plated steel

Nose Nut: Zinc-plated steel

Cushioning

Series 16 and 24 -

End of stroke buffers

Series 25 - End of stroke buffers with adjustable pneumatic cushioning

Bore Sizes

8, 10, 12, 16, 20, 25mm

Stroke Lengths

Standard - see table

Non-standard - on request

Speed

Min 10mm/sec. (no load)

Max 1000mm/sec. (no load)

Connections

Ø8, Ø10, Ø12, Ø16 - M5

Ø20, Ø25 - 1/8

Mountings

Comprehensive range of ISO

mounting brackets

- see page 1/3

Cylinder Guides

See page 1/16

Cylinder Piston Force and Air Consumption

Refer to appendix pages 17-20

Cylinder Breakdown Service

Same day breakdown service on all

standard and non-standard cylinders

Additional Options

Adjustable cushioning -

series 25 only

Cylinder sensors - see page 1/44

Piston rod accessories -

see page 1/3

Viton seals - Non-standard available

only on request

Rod Lock Units - see page 1/48

Special Requests

For assistance, contact our technical

office or your local Camozzi distributor.

Series 16, 24, and 25 Accessories



Foot Mounts (pair)	
∅	
B-8-10	8-10
B-12-16	12-16
B-20-25	20-25



Front/Rear Flange Mount	
∅	
E-8-10	8-10
E-12-16	12-16
E-20-25	20-25



Rear Trunnion Bracket	
∅	
I-8-10	8-10
I-12-16	12-16
I-20-25	20-25



Rod Fork End	
∅	
G-8-10	8-10
G-12-16	12-16
G-20	20
G-25-32	25



Swivel Ball Joint	
∅	
GA-8-10	8-10
GA-12-16	12-16
GA-20	20
GA-32	25



Piston Rod Socket Joint	
∅	
GY-12-16	12-16
GY-20	20
GY-32	25



Piston Rod Lock Nut	
∅	
U-8-10	8-10
U-12-16	12-16
U-20	20
U-25-32	25



Nose Nut	
∅	
V-8-10	8-10
V-12-16	12-16
V-20-25	20-25



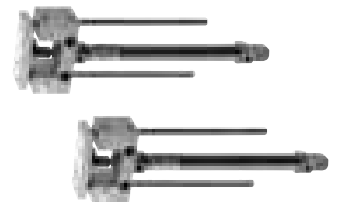
Self Aligning Rod	
∅	
GK-20	20
GK-25-32	25



Coupling Piece	
∅	
GKF-20	20
GKF-25-32	25



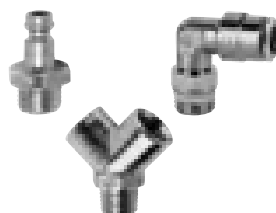
For Magnetic Proximity Switches
See pages 1/44 and 45



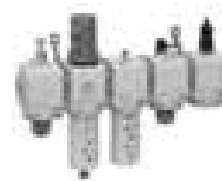
For Guides
See page 1/16



For Valves
See 2 (Control)



For Fittings
See 4 (Connection)



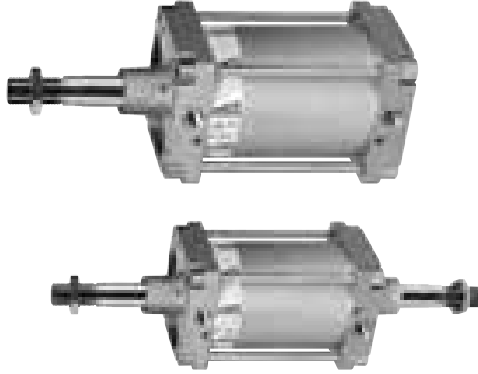
For FRL's
See 3 (Treatment)



For Rod Locks
See page 1/48

Series 40 Cylinders

Double-acting, cushioned, magnetic
 Ø160, Ø200, Ø250, Ø320
 ISO 15552 - DIN/ISO 6431 - VDMA 24562



Double-acting (through rod and non-standard strokes available on request)

STANDARD STROKES FOR CYLINDERS SERIES 40

■ Double-acting

	Ø160	Ø200	Ø250	Ø320
Standard Stroke				
50	■	■	■	■
80	■	■	■	■
100	■	■	■	■
150	■	■	■	■
200	■	■	■	■
300	■	■	■	■
400	■	■	■	■
500	■	■	■	■
600	■	■	■	■
700	■	■	■	■
800	■	■	■	■
900	■	■	■	■
1000	■	■	■	■

For cylinders over 1000mm stroke and other versions, please contact our sales office or your local Camozzi distributor.

CODING EXAMPLE

40	M	2	L	160	A	0200	-
40	SERIES: 40			160	BORE: 160, 200, 250, 320mm		
M	VERSION: M = standard, magnetic			A	TYPE OF BRACKET: A = standard F = cylinder with centre trunnion		
2	OPERATION: 2 = double-acting (front and rear cushions) 3 = double-acting (no cushion) 4 = double-acting (rear cushions) 5 = double-acting (front cushion) 6 = double-acting (through-rod with front and rear cushions)			0200	STROKE: (see table)		
L	MATERIALS: L = rolled stainless steel rod - anodised aluminium round tube - NBR seals -nuts and tie-rods zinc-plated steel				= standard V = FKM rod seals W = all FKM seals +130°C C = PU coated cylinder. Colour: Grey* (___) = extended piston rod ___mm *Version C: available on request.		

NOTE: Rod nuts and accessories are supplied separately

Technical Data

Type of Construction

Piston cylinder with tie-rods.
 Double-acting and through-rod.
 Magnetic as standard

Media

Compressed air (filtered), with or without lubrication

Operating Pressure

Min 1 bar to max 10 bar

Operating Temperature

0°C to +80°C.
 (with dry air -20°C to +80°C)

Materials

Cylinder barrel: Anodised aluminium tube
 End blocks: Cast aluminium
 Seals: NBR
 Piston rod: Stainless steel
 Piston rod lock nut: Zinc-plated steel
 Tie-rods: Zinc-plated steel
 Tie-rods nuts: Zinc-plated steel

Cushioning

End of stroke buffers with adjustable pneumatic cushioning

Bore Sizes

160, 200, 250, 320mm

Stroke Lengths

Standard - see tables
 Non-standard - on request

Speed

Min 10mm/sec. (no load)
 Max 500mm/sec. (no load)

Connections

Ø160, Ø200 - 3/4
 Ø250, Ø320 - 1

Mountings

Comprehensive range of ISO/VDMA mounting brackets
 - see page 1/5

Cylinder Piston Force and Air Consumption

Refer to appendix pages 17-20

Cylinder Breakdown Service

Same day breakdown service for Ø160 and Ø200 options

Additional Options

Cylinder sensors - see page 1/44
 Piston rod accessories - see page 1/5
 Viton seals*
 *Non-standard available only on request

Seal Kits available on request

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.

Series 40 and 41 Accessories



Foot Mount (pair)	
∅	
B-41-160	160
B-41-200	200
B-41-250	250



Front and Rear Flange	
∅	
D-E-41-160	160
D-E-41-200	200
D-E-41-250	250



Front and Rear Female Trunnion	
∅	
C-H-41-160	160
C-H-41-200	200
C-H-41-250	250



Rear Trunnion, Male	
∅	
L-41-160	160
L-41-200	200
L-41-250	250



Centre Trunnion	
∅	
F-160	160
F-200	200
F-250	250



90° Swivel Trunnion	
∅	
ZS-160	160
ZS-200	200



Swivel Combination	
∅	
C+L+S 160	160
C+L+S 200	200
C+L+S 250	250



Counter Bracket for Centre Trunnion	
∅	
BF-160-200	160-200



Rod Fork End	
∅	
G-160-200	160-200
G-250	250



Swivel Ball Joint	
∅	
GA-160-200	160-200
GA-250	250



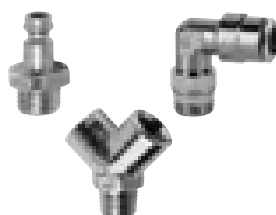
Clevis Pin	
∅	
S-160-200	160-200
S-250	250



Piston Rod Lock Nut	
∅	
U-160-200	160-200
U-250	250



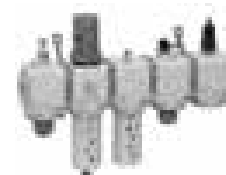
For Valves
See 2 (Control)



For Fittings
See 4 (Connection)



For Magnetic Proximity Switches
See pages 1/44 and 45



For FRL's
See 3 (Treatment)

Series 41 Cylinders - Aluminium Profile

Double-acting cushioned, magnetic
 Ø160, Ø200
 DIN/ISO 6431 - VDMA 24562



Double-acting (through rod and non-standard strokes available on request)

STANDARD STROKES FOR CYLINDERS SERIES 41

■ Double-acting

	Ø160	Ø200
Standard Stroke		
50	■	■
80	■	■
100	■	■
150	■	■
200	■	■
300	■	■
400	■	■
500	■	■
600	■	■
700	■	■
800	■	■
900	■	■
1000	■	■

For cylinders over 1000mm stroke and other versions, please contact our sales office or your local Camozzi distributor.

CODING EXAMPLE

41	M	2	P	160	A	0200	-
41	SERIES: 41		160	BORE: 160, 200mm			
M	VERSION: M = standard, magnetic		A	TYPE OF DESIGN: A = tie-rods F = cylinder with centre trunnion			
2	OPERATION: 2 = double-acting (front and rear cushions) 3 = double-acting (no cushion) 4 = double-acting (rear cushions) 5 = double-acting (front cushion) 6 = double-acting (through-rod with front and rear cushions)		0200	STROKE: (see table)			
P	MATERIALS: P = rolled stainless steel rod NBR seals, nuts and tie-rods zinc-plated steel				= standard V = FKM rod seals W = all FKM seals +130°C C = PU coated cylinder. Colour: Grey* (_ _) = extended piston rod _ _ _ mm *Version C: available on request.		

NOTE: Rod nuts and accessories are supplied separately

Technical Data

Type of Construction

Piston cylinder with tie-rods.
 Double-acting and through-rod.
 Magnetic as standard

Media

Compressed air (filtered), with or without lubrication

Operating Pressure

Min 1 bar to max 10 bar

Operating Temperature

0°C to +80°C.
 (with dry air -20°C to +80°C)

Materials

Cylinder barrel: Anodised aluminium extrusion
 End blocks: Cast aluminium
 Seals: NBR
 Piston rod: Stainless steel
 Piston rod lock nut: Zinc-plated steel
 Tie-rods: Zinc-plated steel
 Tie-rods nuts: Zinc-plated steel

Cushioning

End of stroke buffers with adjustable pneumatic cushioning

Bore Sizes

160, 200mm

Stroke Lengths

Standard - see tables
 Non-standard - on request

Speed

Min 10mm/sec. (no load)
 Max 500mm/sec. (no load)

Connections

Ø160, Ø200 - 3/4

Mountings

Comprehensive range of ISO/VDMA mounting brackets
 - see page 1/7

Cylinder Piston Force and Air Consumption

Refer to appendix pages 17-20

Additional Options

Cylinder sensors - see page 1/44
 Piston rod accessories
 - see page 1/7

Viton seals*

*Non-standard available only on request

Seal Kits available on request

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.

Series 40 and 41 Accessories



Foot Mount (pair)	
∅	
B-41-160	160
B-41-200	200



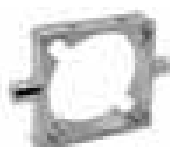
Front and Rear Flange	
∅	
D-E-41-160	160
D-E-41-200	200



Front and Rear Female Trunnion	
∅	
C-H-41-160	160
C-H-41-200	200



Rear Trunnion, Male	
∅	
L-41-160	160
L-41-200	200



Centre Trunnion	
∅	
F-41-160	160
F-41-200	200



90° Swivel Trunnion	
∅	
ZS-160	160
ZS-200	200



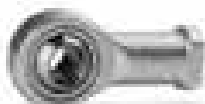
Swivel Combination	
∅	
C+L+S 160	160
C+L+S 200	200



Counter Bracket for Centre Trunnion	
∅	
BF-160-200	160-200



Rod Fork End	
∅	
G-160-200	160-200



Swivel Ball Joint	
∅	
GA-160-200	160-200



Clevis Pin	
∅	
S-160-200	160-200



Piston Rod Lock Nut	
∅	
U-160-200	160-200



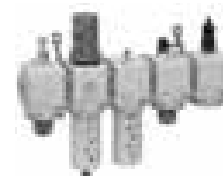
For Valves
See 2 (Control)



For Fittings
See 4 (Connection)



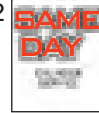
For Magnetic Proximity Switches
See pages 1/44 and 45



For FRL's
See 3 (Treatment)

Series 60 Cylinders

Single and double-acting, magnetic, cushioned. ISO 15552 - DIN/ISO 6431 - VDMA 24562
 Standard, low friction and low temperature versions
 Ø32, Ø40, Ø50, Ø63, Ø80, Ø100, Ø125 .
 Example of assembly with a valve on page 1/47



Double-acting and Single-acting (through rod and non-standard strokes available on request)

STANDARD STROKES FOR CYLINDERS SERIES 60

- Double-acting
- * Single-acting

	Ø32	Ø40	Ø50	Ø63	Ø80	Ø100	Ø125
Standard Stroke							
25	■*	■*	■*	■*	■*		
50	■*	■*	■*	■*	■*	■*	■*
75	■*	■*	■*	■*	■*	■*	■*
80	■	■	■	■	■	■	■
100	■	■	■	■	■	■	■
125	■	■	■	■	■	■	■
150	■	■	■	■	■	■	■
160	■	■	■	■	■	■	■
200	■	■	■	■	■	■	■
250	■	■	■	■	■	■	■
300	■	■	■	■	■	■	■
320	■	■	■	■	■	■	■
400	■	■	■	■	■	■	■
500	■	■	■	■	■	■	■
600	■	■	■	■	■	■	■
700	■	■	■	■	■	■	■
800	■	■	■	■	■	■	■
900	■	■	■	■	■	■	■
1000	■	■	■	■	■	■	■

For cylinders over 1000mm stroke and other versions, please contact our sales office or your local Camozzi distributor.

CODING EXAMPLE

60	M	2	L	050	A	0200
60	SERIES: 60 = from Ø32 - 125 DIN/ISO 15552			050	BORE: 32, 40, 50, 63, 80, 100, 125mm	
M	VERSION: M = magnetic N = non magnetic L = Low friction, magnetic			A	CONSTRUCTION: A = standard with lock nut for rod RL = cylinder with rod lock F = cylinder with centre trunnion	
2	OPERATION: 1 = single-acting (front spring) 2 = double-acting (front and rear cushions) 3 = double-acting (no cushion) 4 = double-acting (rear cushions) 5 = double-acting (front cushion) 6 = double-acting (through-rod with front and rear cushions) 7 = single-acting (through-rod)			0200	STROKE: (see table)	
L	MATERIALS: L = rolled stainless steel rod AISI 420B - anodised aluminium round tube - NBR seals - nuts and tie-rods zinc-plated steel - rod seals polyurethane			= standard V = FKM rod seal N = tandem R = NBR rod seal W = all FKM seals +130°C C = PU coated cylinder. Colour: Grey* L = low friction version without rod seal (rear supply only)** (_ _) = extended piston rod _ _ _ mm G = with brass rod scraper (chrome plated stainless steel AISI 420B rod, NBR rod seal) [Ø 125 excepted]		

60M2L = standard version in stock (32 - 125)

Note: All cylinder are supplied with rod nuts. The accessories are supplied separately

Technical Data

Type of Construction

Piston cylinder with tie-rods.
 Single-acting, double-acting and through-rod. Magnetic as standard

Media

Compressed air (filtered), with or without lubrication

Operating Pressure

Min 1 bar to max 10 bar

Operating Temperature

Standard and low friction: 0°C to +80°C. (with dry air -20°C)
 Low temperature: (-40°C version): -40°C to 60°C (with dry air -40°C)
 Low temperature: (-50°C version): -50°C to 60°C (with dry air -50°C)

Materials

Cylinder barrel: Anodised aluminium tube
 End blocks: Cast aluminium
 Seals: NBR
 Piston rod: Stainless steel
 Piston rod lock nut: Zinc-plated steel
 Tie-rods: Zinc-plated steel
 Tie-rods nuts: Zinc-plated steel

Cushioning

End of stroke buffers with adjustable pneumatic cushioning

Bore Sizes

32, 40, 50, 63, 80, 100, 125mm

Stroke Lengths

Standard - see tables
 Non-standard - on request

Speed

Min 10mm/sec. (no load)
 Max 1000mm/sec. (no load)

Connections

Ø32 - 1/8
 Ø40, Ø50 - 1/4
 Ø63, Ø80 - 3/8
 Ø100, Ø125 - 1/2

Mountings

Comprehensive range of ISO/VDMA mounting brackets - see page 1/9

Cylinder Guides

See page 1/16

Cylinder Piston Force and Air Consumption

Refer to appendix pages 17-20

Cylinder Breakdown Service

Same day breakdown service on all standard and non-standard cylinders

Additional Options

Cylinder sensors - see page 1/44
 Piston rod accessories - see page 1/9
 Viton seals*

*Non-standard available only on request

Rod Lock Units - see page 1/48
 Seal Kits available on request

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.

Series 60 Accessories



Foot Mounts (pair)	
	∅
B-41-32	32
B-41-40	40
B-41-50	50
B-41-63	63
B-41-80	80
B-41-100	100
B-41-125	125



Front and Rear Flange	
	∅
D-E-41-32	32
D-E-41-40	40
D-E-41-50	50
D-E-41-63	63
D-E-41-80	80
D-E-41-100	100
D-E-41-125	125



Rear Trunnion, Female	
	∅
C-41-32	32
C-41-40	40
C-41-50	50
C-41-63	63
C-H-41-80	80
C-H-41-100	100
C-H-41-125	125



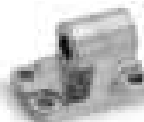
Rear Trunnion, Male	
	∅
L-41-32	32
L-41-40	40
L-41-50	50
L-41-63	63
L-41-80	80
L-41-100	100
L-41-125	125



Front Trunnion, Female	
	∅
H-41-32	32
H-41-40	40
H-41-50	50
H-60-63	63
C-H-41-80	80
C-H-41-100	100
C-H-41-125	125



Centre Trunnion	
	∅
F-32	32
F-40	40
F-50	50
F-63	63
F-80	80
F-100	100
F-125	125



90° Swivel Trunnion (to CETOP RP 107P)	
	∅
ZC 32	32
ZC 40	40
ZC 50	50
ZC 63	63
ZC 80	80
ZC 100	100
ZC 125	125



Rear Trunnion Ball Joint	
	∅
R-41-32	32
R-41-40	40
R-41-50	50
R-41-63	63
R-41-80	80
R-41-100	100



Counter Bracket for Centre Trunnion	
	∅
BF-32	32
BF-40-50	40-50
BF-63-80	63-80
BF-100-125	100-125



Rod Fork End	
	∅
G-25-32	32
G-40	40
G-50-63	50-63
G-80-100	80-100
G-41-125	125



Swivel Ball Joint	
	∅
GA-32	32
GA-40	40
GA-50-63	50-63
GA-80-100	80-100
GA-41-125	125



Piston Rod Socket Joint	
	∅
GY-32	32
GY-40	40
GY-50-63	50-63
GY-80-100	80-100



Clevis Pin	
	∅
S-32	32
S-40	40
S-50	50
S-63	63
S-80	80
S-100	100
S-125	125



Piston Rod Lock Nut	
	∅
U-25-32	32
U-40	40
U-50-63	50-63
U-80-100	80-100
U-41-125	125



Self Aligning Rod	
	∅
GK-25-32	32
GK-40	40
GK-50-63	50-63
GK-80-100	80-100



Coupling Piece	
	∅
GKF-25-32	32
GKF-40	40
GKF-50-63	50-63
GKF-80-100	80-100
GKF-125	125

Series 61 Cylinders - Aluminium Profile

Single and double-acting, magnetic, cushioned. ISO 15552 - DIN/ISO 6431 - VDMA 24562
 Standard, low friction and low temperature versions
 Ø 32, Ø40, Ø50, Ø63, Ø80, Ø100, Ø125
 Example of assembly with a valve on page 1/47



Double-acting and Single-acting (through rod and non-standard strokes available on request)

STANDARD STROKES FOR CYLINDERS SERIES 61

- Double-acting
- * Single-acting

	Ø32	Ø40	Ø50	Ø63	Ø80	Ø100	Ø125
Standard Stroke							
25	■*	■*	■*	■*	■*		
50	■*	■*	■*	■*	■*	■*	■*
75	■*	■*	■*	■*	■*	■*	■*
80	■	■	■	■	■	■	■
100	■	■	■	■	■	■	■
125	■	■	■	■	■	■	■
150	■	■	■	■	■	■	■
160	■	■	■	■	■	■	■
200	■	■	■	■	■	■	■
250	■	■	■	■	■	■	■
300	■	■	■	■	■	■	■
320	■	■	■	■	■	■	■
400	■	■	■	■	■	■	■
500	■	■	■	■	■	■	■
600	■	■	■	■	■	■	■
700	■	■	■	■	■	■	■
800	■	■	■	■	■	■	■
900	■	■	■	■	■	■	■
1000	■	■	■	■	■	■	■

For cylinders over 1000mm stroke and other versions, please contact our sales office or your local Camozzi distributor.

CODING EXAMPLE

61	M	2	P	050	A	0200	-
----	---	---	---	-----	---	------	---

61	SERIES: 61 = from Ø32 - 125 DIN/ISO 15552	050	BORE: 32, 40, 50, 63, 80, 100, 125mm
M	VERSION: M = magnetic N = non magnetic L = Low friction, magnetic	A	CONSTRUCTION: A = standard with rod nut RL = cylinder with rod lock
2	OPERATION: 1 = single-acting (front spring) 2 = double-acting (front and rear cushions) 3 = double-acting (no cushion) 4 = double-acting (rear cushions) 5 = double-acting (front cushion) 6 = double-acting (through-rod with front and rear cushions) 7 = single-acting (through-rod)	0200	STROKE: (see table)
P	MATERIALS: P = rolled stainless steel rod, AISI 420B anodised profile aluminium tube NBR seals - rod seals polyurethane, nuts and tie-rods zinc-plated steel		= standard V = FKM rod seal N = tandem R = NBR rod seal W = all FKM seals +130°C C = PU coated cylinder. Colour: Grey* L = low friction version without rod seal (rear supply only)** (_ _) = extended piston rod _ _ _ mm G = with brass rod scraper (chrome plated stainless steel AISI 420B rod, NBR rod seal) [Ø 125 excepted] *Version C: available on request. **The possibility to order the cylinder without piston rod seal, further reduces the friction force.

61M2P = standard version in stock (32 - 125)

Note: All cylinder are supplied with rod nuts. The accessories are supplied separately

Technical Data

Type of Construction

Piston cylinder with tie-rods.
 Single-acting, double-acting and through-rod. Magnetic as standard

Media

Compressed air (filtered), with or without lubrication

Operating Pressure

Min 1 bar to max 10 bar

Operating Temperature

Standard and low friction: 0°C to +80°C. (with dry air -20°C)
 Low temperature: (-40°C version): -40°C to 60°C (with dry air -40°C)
 Low temperature: (-50°C version): -50°C to 60°C (with dry air -50°C)

Materials

Cylinder barrel: Anodised aluminium extrusion
 End blocks: Cast aluminium
 Seals: NBR
 Piston rod: Stainless steel
 Piston rod lock nut: Zinc-plated steel
 Tie-rods: Zinc-plated steel
 Tie-rods nuts: Zinc-plated steel

Cushioning

End of stroke buffers with adjustable pneumatic cushioning

Bore Sizes

32, 40, 50, 63, 80, 100, 125mm

Stroke Lengths

Standard - see tables
 Non-standard - on request

Speed

Min 10mm/sec. (no load)
 Max 1000mm/sec. (no load)

Connections

Ø32 - 1/8
 Ø40, Ø50 - 1/4
 Ø63, Ø80 - 3/8
 Ø100, Ø125 - 1/2

Mountings

Comprehensive range of ISO/VDMA mounting brackets - see page 1/11

Cylinder Guides

See page 1/16

Cylinder Piston Force and Air Consumption

Refer to appendix pages 17-20

Cylinder Breakdown Service

Same day breakdown service on all standard and non-standard cylinders

Additional Options

Cylinder sensors - see page 1/44
 Piston rod accessories - see page 1/11
 Viton seals*

*Non-standard available only on request

Rod Lock Units - see page 1/48
 Seal Kits available on request

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.

Series 61 Accessories



Foot Mounts (pair)	
	∅
B-41-32	32
B-41-40	40
B-41-50	50
B-41-63	63
B-41-80	80
B-41-100	100
B-41-125	125



Front and Rear Flange	
	∅
D-E-41-32	32
D-E-41-40	40
D-E-41-50	50
D-E-41-63	63
D-E-41-80	80
D-E-41-100	100
D-E-41-125	125



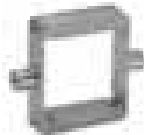
Rear Trunnion, Female	
	∅
C-41-32	32
C-41-40	40
C-41-50	50
C-41-63	63
C-H-41-80	80
C-H-41-100	100
C-H-41-125	125



Rear Trunnion, Male	
	∅
L-41-32	32
L-41-40	40
L-41-50	50
L-41-63	63
L-41-80	80
L-41-100	100
L-41-125	125



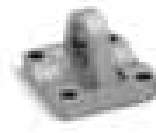
Front Trunnion, Female	
	∅
H-41-32	32
H-41-40	40
H-41-50	50
H-60-63	63
C-H-41-80	80
C-H-41-100	100
C-H-41-125	125



Centre Trunnion	
	∅
F-61-32	32
F-61-40	40
F-61-50	50
F-61-63	63
F-61-80	80
F-61-100	100
F-61-125	125



90° Swivel Trunnion (to CETOP RP 107P)	
	∅
ZC-32	32
ZC-40	40
ZC-50	50
ZC-63	63
ZC-80	80
ZC-100	100
ZC-125	125



Trunnion Ball Joint	
	∅
R-41-32	32
R-41-40	40
R-41-50	50
R-41-63	63
R-41-80	80
R-41-100	100
R-41-125	125



Counter Bracket for Centre Trunnion	
	∅
BF-32	32
BF-40-50	40-50
BF-63-80	63-80
BF-100-125	100-125



Rod Fork End	
	∅
G-25-32	32
G-40	40
G-50-63	50-63
G-80-100	80-100
G-41-125	125



Swivel Ball Joint	
	∅
GA-32	32
GA-40	40
GA-50-63	50-63
GA-80-100	80-100
GA-41-125	125



Piston Rod Socket Joint	
	∅
GY-32	32
GY-40	40
GY-50-63	50-63
GY-80-100	80-100



Clevis Pin	
	∅
S-32	32
S-40	40
S-50	50
S-63	63
S-80	80
S-100	100
S-125	125



Piston Rod Lock Nut	
	∅
U-25-32	32
U-40	40
U-50-63	50-63
U-80-100	80-100
U-41-125	125



Self Aligning Rod	
	∅
GK-25-32	25-32
GK-40	40
GK-50-63	50-63
GK-80-100	80-100



Coupling Piece	
	∅
GKF-25-32	32
GKF-40	40
GKF-50-63	50-63
GKF-80-100	80-100
GKF-125	125

Series 6PF Cylinders - Positioning Feedback

Double-acting low friction, magnetic ISO 15552
 Ø50, Ø63, Ø80, Ø100, Ø125



Technical Data

PNEUMATIC SECTION

Type of Construction

Inner tie-rods

Media

Filtered air class 5.4.4 according to ISO 8573-1. If lubricated air is used, it is recommended to use oil ISO VG32. Once applied the lubrication should never be interrupted

Operating Pressure

Min 0.1 bar to max 10 bar

Operating Temperature

0°C to +80°C. (with dry air -20°C)

Materials

As coding

Cushioning

None

Bore Sizes

50, 63, 80, 100, 125mm

Stroke Lengths (min - max)

50 - 500mm (step 50mm)

Speed

Min 5mm/sec. (no load)

Max 1000mm/sec. (no load)

Max Acceleration

10m/sec²

Max 1000mm/sec. (no load)

Connections

Ø50 - 1/4

Ø63, Ø80 - 3/8

Ø100, Ø125 - 1/2

Mountings

front and rear flange foot mounts
 front / rear / swivel / intermediate
 trunnion

Linearity

0.1% of the stroke

Repeatability

0.03% of the stroke

Hysteresis

<di 0.5mm

ELECTRICAL SECTION

Electrical Connection

Male connector M 12 4 poles, IP 67
 (EN 60529)

Max Input Voltage

40V (stroke 50mm)

60V (strokes from 100 to 500mm)

Max Recommended Cursor Current

<di 0.1 µA

Electrical Resistance

5 kohm for strokes from 50 to 300mm

10 kohm for strokes from 350 to 500mm

Tolerance on Resistance

+/- 20%

Max Dissipation (40°C)

1W for stroke 50mm

2W for stroke 100mm

3W for strokes from 150 to 500mm

Additional Options

Cylinder sensors - see page 1/44

Piston rod accessories - see page 1/13

STANDARD STROKES FOR CYLINDERS SERIES 61

■ Double-acting, low friction

	Ø50	Ø63	Ø80	Ø100	Ø125
Standard Stroke					
50	■	■	■	■	■
100	■	■	■	■	■
150	■	■	■	■	■
200	■	■	■	■	■
250	■	■	■	■	■
300	■	■	■	■	■
350	■	■	■	■	■
400	■	■	■	■	■
450	■	■	■	■	■
500	■	■	■	■	■

CODING EXAMPLE

6PF	3	P	050	A	0200
6PF	SERIES: 6PF = from Ø50 - 125		050	BORE: 50, 63, 80, 100, 125mm	
3	OPERATION: 3 = double-acting, low friction (no cushion)		A	CONSTRUCTION: A = standard with rod nut RL= cylinder with rod lock	
			0200	STROKE: (see table)	
P	MATERIALS: P = NBR seals, sintered bronze rod guide bush, chrome plated steel rod, acetal resin piston guide element, nickel plated brass extrusion profile, aluminium rear endcap, neodymium magnetic actuator			= standard P = PU rod seal V = FKM rod seal L = without rod seal (rear supply only)* G = with brass rod scraper (___) = extended piston rod ___mm *The possibility to order the cylinder without piston rod seal further reduces the friction force.	

Series 6PF Accessories



Foot Mounts (pair)	
	∅
B-41-32	32
B-41-40	40
B-41-50	50
B-41-63	63
B-41-80	80
B-41-100	100
B-41-125	125



Front and Rear Flange	
	∅
D-E-41-32	32
D-E-41-40	40
D-E-41-50	50
D-E-41-63	63
D-E-41-80	80
D-E-41-100	100
D-E-41-125	125



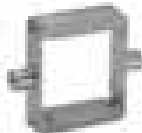
Rear Trunnion, Female	
	∅
C-41-32	32
C-41-40	40
C-41-50	50
C-41-63	63
C-H-41-80	80
C-H-41-100	100
C-H-41-125	125



Rear Trunnion, Male	
	∅
L-41-32	32
L-41-40	40
L-41-50	50
L-41-63	63
L-41-80	80
L-41-100	100
L-41-125	125



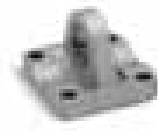
Front Trunnion, Female	
	∅
H-41-32	32
H-41-40	40
H-41-50	50
H-60-63	63
C-H-41-80	80
C-H-41-100	100
C-H-41-125	125



Centre Trunnion	
	∅
F-61-32	32
F-61-40	40
F-61-50	50
F-61-63	63
F-61-80	80
F-61-100	100
F-61-125	125



90° Swivel Trunnion (to CETOP RP 107P)	
	∅
ZC-32	32
ZC-40	40
ZC-50	50
ZC-63	63
ZC-80	80
ZC-100	100
ZC-125	125



Trunnion Ball Joint	
	∅
R-41-32	32
R-41-40	40
R-41-50	50
R-41-63	63
R-41-80	80
R-41-100	100
R-41-125	125



Counter Bracket for Centre Trunnion	
	∅
BF-32	32
BF-40-50	40-50
BF-63-80	63-80
BF-100-125	100-125



Rod Fork End	
	∅
G-25-32	32
G-40	40
G-50-63	50-63
G-80-100	80-100
G-41-125	125



Swivel Ball Joint	
	∅
GA-32	32
GA-40	40
GA-50-63	50-63
GA-80-100	80-100
GA-41-125	125



Piston Rod Socket Joint	
	∅
GY-32	32
GY-40	40
GY-50-63	50-63
GY-80-100	80-100



Clevis Pin	
	∅
S-32	32
S-40	40
S-50	50
S-63	63
S-80	80
S-100	100
S-125	125



Piston Rod Lock Nut	
	∅
U-25-32	32
U-40	40
U-50-63	50-63
U-80-100	80-100
U-41-125	125



Self Aligning Rod	
	∅
GK-25-32	25-32
GK-40	40
GK-50-63	50-63
GK-80-100	80-100



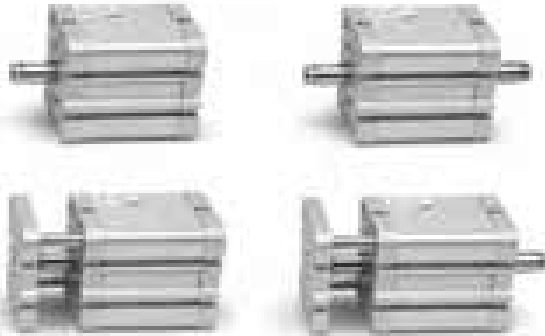
Coupling Piece	
	∅
GKF-25-32	32
GKF-40	40
GKF-50-63	50-63
GKF-80-100	80-100
GKF-125	125

Series 32 Compact Magnetic Cylinders

Series 32M-32F: Single and Double-acting
 Series 32R: Double-acting, non-rotating
 Ø20, Ø25, Ø32, Ø40, Ø50, Ø63, Ø80, Ø100
 ISO 21287



The Camozzi Series 32 cylinder range has been designed to be installed within confined spaces. These cylinders are suitable for use with feet and with brackets.



Double-acting, Single-acting and Non-rotating (through rod and non-standard strokes available on request)

STANDARD STROKES FOR CYLINDERS SERIES 32

- Double-acting
- ✕ Single-acting
- Non-rotating

	Ø20	Ø25	Ø32	Ø40	Ø50	Ø63	Ø80	Ø100
Standard Stroke								
5	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●				
10	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●
15	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●
20	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●
25	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●
30	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●
40	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●
50	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●
60			■ ●	■ ●	■ ●	■ ●	■ ●	■ ●
75			■ ●	■ ●	■ ●	■ ●	■ ●	■ ●
80			■ ●	■ ●	■ ●	■ ●	■ ●	■ ●
100			■ ●	■ ●	■ ●	■ ●	■ ●	■ ●

CODING EXAMPLE

32	M	2	A	032	A	050	-
32	SERIES: 32 compact magnetic			032	BORE: 20, 25, 32, 40, 50, 63, 80, 100mm		
M	VERSION: M = male rod thread F = female rod thread R = non-rotation with flange			A	CONSTRUCTION: A = standard		
2	OPERATION: 1 = single-acting front spring 2 = double-acting 3 = double-acting through-rod 4 = single-acting rear spring			050	STROKE: (see table)		
A	MATERIALS: A = Anodized aluminium body, end-blocks and piston, PU rod seal, end-covers OR and piston seal			-	SPECIAL: V = rod seals in viton W = seals in viton for high temperatures (140°C) double acting non magnetic		

NOTE: Rod nuts and accessories are supplied separately.

Technical Data

Type of Construction
 Compact piston cylinder. Single-acting, double-acting, through-rod and non-rotating (double-acting only). Magnetic as standard

Media
 Compressed air (filtered), with or without lubrication

Operating Pressure
 1 bar to 10 bar (double-acting)
 2 bar to 10 bar (single-acting)

Operating Temperature
 0°C to +80°C.
 (with dry air -20°C to +80°C)

Materials
 Cylinder barrel: Anodised aluminium extrusion
 End blocks: Cast aluminium
 Seals: Polyurethane
 Piston Rod: Stainless steel
 Piston Rod Lock Nut: Zinc-plated steel
 Cap Screw: Zinc plated steel

Cushioning
 End of stroke buffers

Bore Sizes
 20, 25, 32, 40, 50, 63, 80, 100mm

Stroke Lengths
 Standard - see table.
 Non-standard- on request

Speed
 Min 10mm/sec. (no load)
 Max 1000mm/sec. (no load)

Connections
 Ø20, 25 - M5
 Ø32, 40, 50, 63, 80 - 1/8
 Ø100 - 1/4

Mountings
 Comprehensive range of mounting brackets - see page 1/15

Cylinder Piston Force and Air Consumption
 Refer to appendix pages 17-20

Cylinder Breakdown Service
 Same day breakdown service on all standard and non-standard cylinders

Additional Options
 Male or female threaded piston rods.
 Cylinder sensors - see page 1/44
 Viton seals*
 *Non-standard available only on request
 Seal Kits available on request

Special Requests
 For assistance, contact our technical office or your local Camozzi distributor

Notes
 Intermediate brackets for mounting cylinders back to back are available on request.

Series 32 Compact Magnetic Cylinders Tandem and Multi-position Versions

Series 32M-32F: Single and double-acting, magnetic
 Ø25, Ø40, Ø63, Ø100
 ISO 21287



Tandem
 Joined piston rods to increase thrust



Multi-position
 Upto 3 cylinders of different stroke lengths can be joined together



CODING EXAMPLE

32	M	2	A	040	A	050	N	2
-----------	----------	----------	----------	------------	----------	------------	----------	----------

32 SERIES: 32 compact magnetic								
M VERSION: M = male rod thread F = female rod thread	040 BORE: 25, 40, 63, 100mm			N TANDEM AND MULTI-POSITION:				
2 OPERATION: 2 = double-acting	A CONSTRUCTION: A = standard			2 STAGES (only for tandem) 2 = 2 stages				
A MATERIALS: A = anodized aluminium body, end-blocks and piston, PU rod seal, end-covers OR and piston seal	050 STROKE tandem stroke in mm multi-position X1mm/X2mm							

Series 32 Accessories

Foot Mounts (pair)	Rear Trunnion, Female	Front Trunnion, Female	Rear and Front Flange
Ø	Ø	Ø	Ø
B-32-20 20	C-41-32 32	H-41-32 32	D-E-32-20 20
B-31-25 25	C-41-40 40	H-41-40 40	D-E-32-25 25
B-41-32 32	C-41-50 50	H-41-50 50	D-E-41-32 32
B-41-40 40	C-H-41-63 63	H-60-63 63	D-E-41-40 40
B-41-50 50	C-H-41-80 80	C-H-41-80 80	D-E-41-50 50
B-41-63 63	C-H-41-100 100	C-H-41-100 100	D-E-41-63 63
B-41-80 80			D-E-41-80 80
B-41-100 100			D-E-41-100 100

90° Swivel Combination for Female Trunnion	Rear Trunnion Ball Joint	90° Swivel Trunnion (to CETOP RP 107P)	90° Swivel Combination for Trunnion
Ø	Ø	Ø	Ø
L-32-20 20	R-41-32 32	ZC 32 32	I-20-25 20
L-32-25 25	R-41-40 40	ZC 40 40	I-20-25 25
L-41-32 32	R-41-50 50	ZC 50 50	
L-41-40 40	R-41-63 63	ZC 63 63	
L-41-50 50	R-41-80 80	ZC 80 80	
L-41-63 63	R-41-100 100	ZC 100 100	
L-41-80 80			
L-41-100 100			

Clevis Pin	Rod Fork End	Swivel Ball Joint	Piston Rod Socket Joint
Ø	Ø	Ø	Ø
S-32 32	G-12-16 12	GA-12-16 12	GY-12-16 12
S-40 40	G-20 16	GA-20 16	GY-20 16
S-50 50	G-25-32 20-40	GA-32 20-40	GY-32 20-40
S-63 63	G-40 50-63	GA-40 50-63	GY-40 50-63
S-80 80	G-50-63 80	GA-50-63 80	GY-50-63 80
S-100 100	G-80-100 100	GA-80-100 100	GY-80-100 100

Piston rod lock nut, centring sleeve and centring pin also available

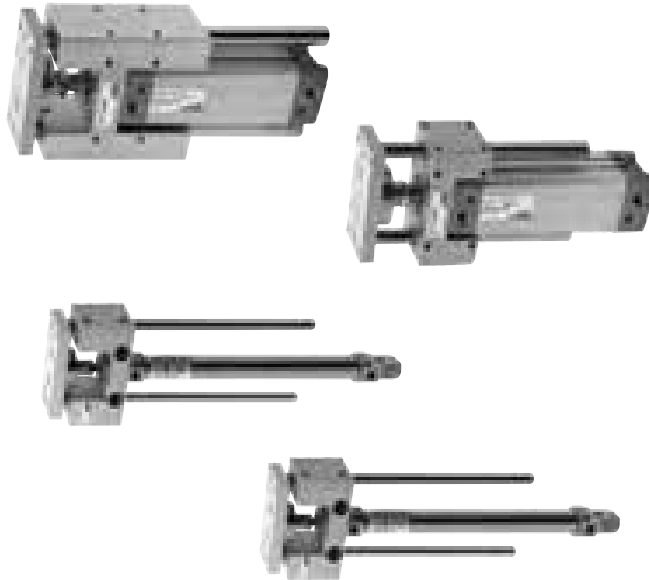
See full catalogue or CD rom for all dimensions.
 For technical advice contact our sales office or your local Camozzi distributor.

Series 45 Guide Units

For cylinders DIN/ISO 6432: Ø12, Ø16, Ø20, Ø25
 For cylinders DIN/ISO 6431: Ø32, Ø40, Ø50, Ø63, Ø80, Ø100



The Camozzi Series 45 are available in three different models depending on the applicable loads.



Technical Data

Type of Construction
 U and H

Media
 NUT and NHT without lubrication.
 NHB requires lubrication

Operating Temperature
 0°C to +80°C.
 (with dry air -20°C to +80°C)

Materials
 Body: anodised aluminium body
 Rods: Stainless steel and hardened steel
 Coupling: Flexible stainless steel
 Plate: anodised aluminium

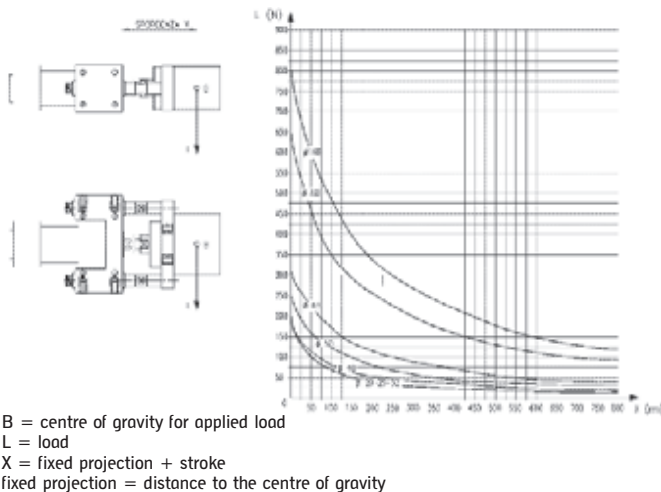
Stroke Lengths
 Made to measure

Breakdown Service
 Same day breakdown service on all standard and non-standard Guide Units

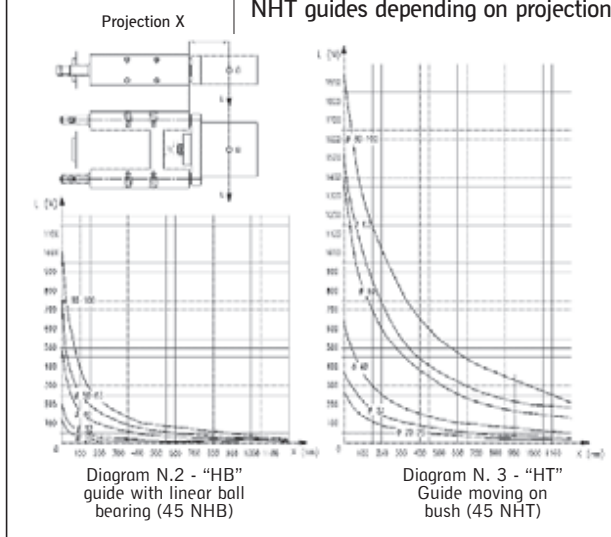
Special Requests
 For assistance, contact our technical office or your local Camozzi distributor.

MOVEMENT

Applicable loads on 45 NUT guides depending on projection



Applicable loads on 45 NHB and NHT guides depending on projection



CODING EXAMPLE

45	N	UT	050	A	0100
45 SERIES: 45		UT OPERATION: UT = "U" self lubricating guide HT = "H" self lubricating guide HB = "H" ball guide		A MATERIAL: A = anodised aluminium body stainless steel columns for UT and HT hardened steel for HB	
N VERSION: N = standard		050 BORE: 12, 16, 20, 25, 32, 40, 50, 63, 80, 100mm		0100 STROKE: in mm	

Series QN Short-Stroke Cylinders

Single-acting
 Ø8, Ø12, Ø20, Ø32, Ø50, Ø63

The Camozzi short-stroke cylinder range has been designed to be installed within confined spaces.

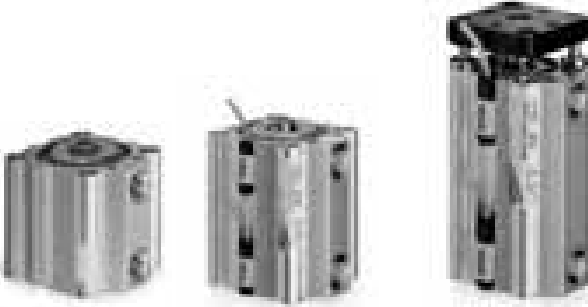


QN1A	
Ø	Stroke
8	4
12	4
	10
20	4
	10
32	5
	10
	25
50	10
	25
63	10
	25

Technical Data	
Type of Construction Compact	Stroke Lengths See table
Media Compressed air (filtered), with or without lubrication	Mountings By means of holes in body
Operating Pressure 2 bar to 10 bar	Cylinder Piston Force and Air Consumption Refer to appendix pages 17-20
Operating Temperature 0°C to +80°C. (with dry air -20°C)	Cushioning None
Materials Aluminium Body: NBR seals Other: Stainless steel and OT58	Special Requests For assistance, contact our technical office or your local Camozzi distributor.
Bore Sizes 8, 12, 20, 32, 50, 63mm	

Series QP-QPR Short-Stroke Cylinders

Series QP: Single and double-acting, magnetic
 Series QPR: Double-acting magnetic, non-rotating
 Ø12, Ø16, Ø20, Ø25, Ø32, Ø40, Ø50, Ø63, Ø80, Ø100



STANDARD STROKE FOR COMPACT MAGNETIC CYLINDERS										
	Ø12	Ø16	Ø20	Ø25	Ø32	Ø40	Ø50	Ø63	Ø80	Ø100
Standard Stroke										
5	■*●	■*●	■*●	■*●	■*●	■*●	■*●	■*●	■*●	■*●
10	■*●	■*●	■*●	■*●	■*●	■*●	■*●	■*●	■*●	■*●
15	■*●	■*●	■*●	■*●	■*●	■*●	■*●	■*●	■*●	■*●
20	■*	■*●	■*●	■*●	■*●	■*●	■*●	■*●	■*●	■*●
25	■*●	■*●	■*●	■*●	■*●	■*●	■*●	■*●	■*●	■*●
30	■●	■●	■●	■●	■●	■●	■●	■●	■●	■●
35	■	■●	■●	■●	■●	■●	■●	■●	■●	■●
40	■	■●	■●	■●	■●	■●	■●	■●	■●	■●
45	■	■●	■●	■●	■●	■●	■●	■●	■●	■●
50		■●	■●	■●	■●	■●	■●	■●	■●	■●
60		■●	■●	■●	■●	■●	■●	■●	■●	■●
75		■●	■●	■●	■●	■●	■●	■●	■●	■●
80		■●	■●	■●	■●	■●	■●	■●	■●	■●
100		■●	■●	■●	■●	■●	■●	■●	■●	■●

Technical Data	
Type of Construction Compact profile (QP), compact with non rotating guides (QPR)	
Media Compressed air (filtered), with or without lubrication	
Operating Pressure 1 bar to 10 bar (double-acting) 2 bar to 10 bar (single-acting)	
Operating Temperature 0°C to +80°C. (with dry air -20°C)	
Materials Aluminium Body Anodised, NBR seals, rolled stainless steel rod	
Bore Sizes 12, 16, 20, 25, 32, 40, 50, 63, 80, 100	
Stroke Lengths See table	
Mountings By means of holes in body	
Cylinder Piston Force and Air Consumption Refer to appendix pages 17-20	
Cushioning None	
Special Requests For assistance, contact our technical office or your local Camozzi distributor.	

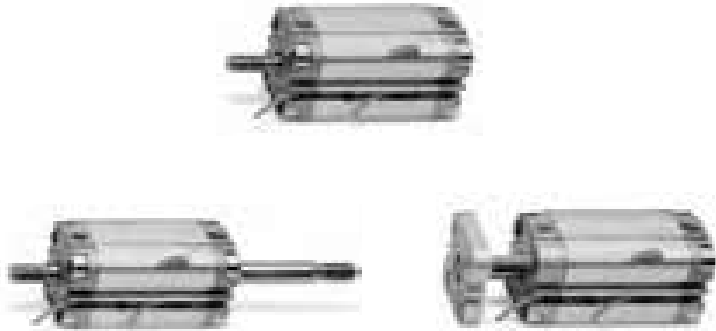
NOTE: Foot (model B) and Male Trunnion (model L) brackets available on request. Ø32, 40, 50, 63, 80, 100mm

Series 31 Compact Magnetic Cylinders

Single-acting and Double-acting (31M-31F)
 Double-acting, non-rotating (31R)
 Ø12, Ø16, Ø20, Ø25,
 Ø32, Ø40, Ø50, Ø63, Ø80, Ø100 UNITOP



The Camozzi Series 31 cylinder range has been designed to be installed within confined spaces. These cylinders are suitable for use with feet and with brackets.



Double-acting, Single-acting and Non-rotating (through rod and non-standard strokes available on request)

STANDARD STROKES FOR CYLINDERS SERIES 31

- Double-acting
- * Single-acting
- Non-rotating

	Ø12	Ø16	Ø20	Ø25	Ø32	Ø40	Ø50	Ø63	Ø80	Ø100
Standard Stroke										
5	■*●	■*●	■*●	■*●	■*●	■*●				
10	■*●	■*●	■*●	■*●	■*●	■*●	■*●	■*●	■*●	■*●
15	■*	■*●	■*●	■*●	■*●	■*●	■*●	■*●	■*●	■*●
20	■*	■*●	■*●	■*●	■*●	■*●	■*●	■*●	■*●	■*●
25	■*	■*●	■*●	■*●	■*●	■*●	■*●	■*●	■*●	■*●
30	■*	■*	■*	■*	■*	■*	■*	■*	■*	■*
40	■*	■*	■*	■*	■*	■*	■*	■*	■*	■*
50			■*	■*	■*	■*	■*	■*	■*	■*
60					■*	■*	■*	■*	■*	■*
75					■*	■*	■*	■*	■*	■*
80					■*	■*	■*	■*	■*	■*
100					■*	■*	■*	■*	■*	■*

CODING EXAMPLE

31	M	2	A	032	A	050	-
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31	SERIES: 31	032	BORE: 12, 16, 20, 25, 32, 40, 50, 63, 80, 100mm
M	VERSION: M = male rod thread F = female rod thread R = non-rotation with flange	A	CONSTRUCTION: A = standard
2	OPERATION: 1 = single-acting front spring 2 = double-acting 3 = double-acting through-rod 4 = single-acting rear spring	050	STROKE: (see table)
A	MATERIALS: A = rolled stainless steel rod AISI 303, tube profile aluminium		= standard S = special V = rod seal FKM W = seals in FKM for high temperatures (140°) double-acting, non magnetic

NOTE: Rod nuts and accessories are supplied separately.

Technical Data

Type of Construction
 Compact piston cylinder. Single-acting, double-acting, through-rod and non-rotating (double-acting only). Magnetic as standard

Media
 Compressed air (filtered), with or without lubrication

Operating Pressure
 1 bar to 10 bar (double-acting)
 2 bar to 10 bar (single-acting)

Operating Temperature
 0°C to +80°C.
 (with dry air -20°C to +80°C)

Materials
 Cylinder barrel: Anodised aluminium extrusion
 End blocks: Cast aluminium
 Seals: Polyurethane
 Piston Rod: Stainless steel
 Piston Rod Lock Nut: Zinc-plated steel
 Cap Screw: Zinc plated steel

Cushioning
 End of stroke buffers

Bore Sizes
 12, 16, 20, 25, 32, 40, 50, 63, 80, 100mm

Stroke Lengths
 Standard - see table.
 Non-standard- on request

Speed
 Min 10mm/sec. (no load)
 Max 1000mm/sec. (no load)

Connections
 Ø12, 16, 20, 25 - M5
 Ø32, 40, 50, 63, 80 - 1/8
 Ø100 - 1/4

Mountings
 Comprehensive range of mounting brackets - see page 1/19

Cylinder Piston Force and Air Consumption
 Refer to appendix pages 17-20

Cylinder Breakdown Service
 Same day breakdown service on all standard and non-standard cylinders

Additional Options
 Male or female threaded piston rods.
 Cylinder sensors - see page 1/44
 Viton seals*
 *Non-standard available only on request
 Seal Kits available on request

Special Requests
 For assistance, contact our technical office or your local Camozzi distributor

Notes
 Intermediate brackets for mounting cylinders back to back are available on request.

Series 31 Compact Magnetic Cylinders Tandem and Multi-position Versions

Double-acting (31M-31F)

Ø12, Ø16, Ø20, Ø25, Ø32, Ø40, Ø50, Ø63, Ø80, Ø100

Tandem

Joined piston rods to increase thrust



Multi-position

Upto 3 cylinders of different stroke lengths can be joined together



CODING EXAMPLE

31	M	2	A	032	A	050	N	2
-----------	----------	----------	----------	------------	----------	------------	----------	----------

31 SERIES: 31	A MATERIALS: A = rolled stainless steel rod AISI 303 - AL tube profile	050 STROKE: - tandem stroke in mm - multi-position X1mm/X2mm* * insert strokes without the initial 0
M VERSION: M = male rod thread F = female rod thread R = non-rotating with flange only double-acting	032 BORE: 12, 16, 20, 25, 32, 40, 50, 63, 80, 100mm	N TANDEM AND MULTI-POSITION:
2 OPERATION: 2 = double-acting	A CONSTRUCTION: A = standard	2 STAGES: (only for tandem) 2 = 2 stages 4 = 4 stages 3 = 3 stages

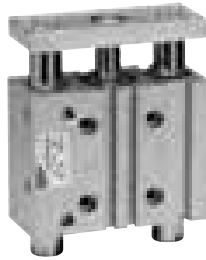
Series 31 Accessories

Foot Mounts (pair)	Rear and Front Flange	Rear Trunnion, Female	Rear Trunnion, Male
Ø	Ø	Ø	Ø
B-31-12-16 12-16	D-E-31-12-16 12-16	C-31-32 32	L-31-12-16 12
B-31-20 20	D-E-31-20 20	C-31-40 40	L-31-12-16 16
B-31-25 25	D-E-31-25 25	C-31-50 50	L-31-20 20
B-31-32 32	D-E-31-32 32	C-31-63 63	L-31-25 25
B-31-40 40	D-E-31-40 40	C-31-80 80	
B-31-50 50	D-E-31-50 50	C-31-100 100	
B-31-63 63	D-E-31-63 63		
B-31-80 80	D-E-31-80 80		
B-31-100 100	D-E-31-100 100		
90° Swivel Combination for Female Trunnion	90° Swivel Combination for Trunnion	Rod Fork End	Swivel Ball Joint
Ø	Ø	Ø	Ø
ZC-32 32	I-12-16 12	G-12-16 12	GA-12-16 12
ZC-40 40	I-12-16 16	G-20 16	GA-20 16
ZC-50 50	I-20-25 20	G-25-32 20-40	GA-32 20-40
ZC-63 63	I-20-25 25	G-40 50-63	GA-40 50-63
ZC-80 80		G-50-63 80	GA-50-63 80
ZC-100 100		G-80-100 100	GA-80-100 100
Piston Rod Socket Joint	Piston Rod Lock Nut	Self Aligning Rod	Coupling Piece
Ø	Ø	Ø	Ø
GY-12-16 12	U-12-16 12	GK-20 16	GKF-20 16
GY-20 16	U-20 16	GK-25-32 20-25-32-40	GKF-25-32 20-25-32-40
GY-32 20-40	U-25-32 20-40	GK-40 50-63	GKF-40 50-63
GY-40 50-63	U-40 50-63	GK-50-63 80	GKF-50-63 80
GY-50-63 80	U-50-63 80	GK-80-100 100	GKF-80-100 100
GY-80-100 100	U-80-100 100		

Series QCT and QCB Cylinders with Integrated Guide

Double-acting, magnetic piston, guided
 ø20, ø25, ø32, ø40, ø50, ø63

The Camozzi QC compact cylinders are designed to be used in applications where space is limited and when the load must be guided to prevent rotation.



Double-acting QCT Type

STANDARD STROKES FOR CYLINDERS SERIES QC

■ Double-acting

	ø20	ø25	ø32	ø40	ø50	ø63
Standard Stroke						
20	■	■				
25			■	■	■	■
30	■	■				
40	■	■				
50	■	■	■	■	■	■
75	■	■	■	■	■	■
100	■	■	■	■	■	■
125	■	■	■	■	■	■
150	■	■	■	■	■	■
175	■	■	■	■	■	■
200	■	■	■	■	■	■

Note: Non standard models available only on request.

For these strokes (e.g. stroke 35) please consider the size of the nearest standard stroke.

CODING EXAMPLE

QC	T	2	A	020	A	050	-
QC	SERIES: QC		020		BORE: 20, 25, 32, 40, 50, 63mm		
T	VERSION: T = sintered bronze bushes B = linear ball bearings		A		TYPE OF DESIGN: A = standard		
2	OPERATION: 2 = double-acting		050		STROKE: (see table)* * Non standard models available only on request. For these strokes (e.g. stroke 35) please consider the size of the nearest standard strokes.		
A	MATERIALS: A = anodised aluminium body, stainless steel piston rod, stainless steel QCT columns, hardened steel QCB columns		-		SPECIAL: to be specified		

Technical Data

Type of Construction

Compact guided
 QCT - Sintered bronze bushes
 QCB - Linear ball bearings

Media

Clean air, non lubricated. If lubricated oil is used, it is recommended to use oil ISOVG32. Once applied the lubrication should never be interrupted

Operating Pressure

Min 1 bar to max 10 bar

Operating Temperature

0°C to +80°C.
 (with dry air -20°C to +80°C)

Materials

Body: anodised aluminium
 Front Mounting Plate: Zinc plated steel
 Piston Rod: Stainless steel AISI 303
 QCT Columns: Stainless Steel 420B
 QCB Columns: Hardened Steel C50

Bore Sizes

20, 25, 32, 40, 50, 63mm

Stroke Lengths

Standard, see table

Speed

Min 50mm/sec. (no load)
 Max 500mm/sec. (no load)

Connections

1/8

Mountings

Threaded and non-threaded holes in the body

Cylinder Piston Force and Air Consumption

Refer to appendix pages 17-20

Additional Options

Cylinder sensors - see page 1/44

Special Requests

For assistance, contact our technical office or your local Camozzi distributor

Series QCTF - QCBF Slide Units

Double-acting, magnetic piston, with double bearing and flanges
 ø20, ø25, ø32, ø40



Technical Data

Type of Construction

Compact guided with extended guide rods and double bearings/flanges
 QCTF - Sintered bronze bushes
 QCBF - Linear ball bearings

Media

Clean air, non lubricated. If lubricated oil is used, it is recommended to use oil ISOVG32. Once applied the lubrication should never be interrupted

Operating Pressure

Min 1 bar to max 10 bar

Operating Temperature

0°C to +80°C.
 (with dry air -20°C to +80°C)

Materials

Body: anodised aluminium
 Flanges: Zinc plated steel
 Piston Rod: Stainless steel AISI 303
 QCTF Columns: Stainless Steel 420B
 QCBF Columns: Hardened Steel C50

Cushioning

See cylinder coding series QCTF and QCBF

Bore Sizes

20, 25, 32, 40mm

Stroke Lengths

Standard, see table

Speed

Min 50mm/sec
 Max 500mm/sec

Connections

1/8

Mountings

Threaded and non threaded holes in the body

Cylinder Piston Force and Air Consumption

Refer to appendix pages 17-20

Additional Options

Cylinder sensors - see page 1/44

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.

STANDARD STROKE FOR SERIES QCTF AND QCBF

- Cushioning type A and C
- * Cushioning type B

	ø20	ø25	ø32	ø40
Standard Stroke				
20	■	■		
25			■	■
30	■	■		
40	■	■		
50	■	■	■	■
75	■*	■*	■	■
100	■*	■*	■*	■*
125	■*	■*	■*	■*
150	■*	■*	■*	■*
175	■*	■*	■*	■*
200	■*	■*	■*	■*

Note: Non standard models available only on request.

For these strokes (e.g. stroke 35) please consider the size of the nearest standard stroke.

CODING EXAMPLE

QC	T	F	2	A	020	A	050
QC	SERIES: QC			A	MATERIALS A = anodised aluminium body, stainless steel piston rod, stainless steel columns (QCT), hardened steel columns (QCB)		
T	TYPE OF BEARING T = sintered bronze bushes B = linear ball bearings			020	BORE 20, 25, 32, 40mm		
F	INSTALLATION TYPE F = body mounted with moving flanges			A	CUSHION A = fixed mechanical cushion (standard) B = two shock absorbers located on the body C = one shock absorber located on the rear flange		
2	OPERATION 2 = double acting			050	STROKE (see table)		

Series QX Twin Rod Cylinders

Double-acting, magnetic, guided
 Ø10x2, 16x2, 20x2, 25x2, 32x2



Technical Data

Type of Construction

Compact non magnetic, double acting
 QXT - Sintered bronze bushes
 QXB - Linear ball bearings

Media

Clean air, non lubricated. If lubricated oil is used, it is recommended to use oil ISOVG32. Once applied the lubrication should never be interrupted

Operating Pressure

Min 2.5 bar to max 8 bar

Operating Temperature

0°C to +80°C.
 (with dry air -20°C to +80°C)

Materials

Body and Flanges:
 Anodised aluminium
 Piston Rod:
 QXT: Stainless steel AISI 303
 QXB: Hardened steel C50

Bore Sizes

10, 16, 20, 25, 32mm

Stroke Lengths

Standard, see table

Connections

Ø10, 16, 20, 25 - M5
 Ø32 - 1/8

Mountings

Threaded holes in the body

Cylinder Piston Force and Air Consumption

Refer to appendix pages 17-20

Additional Options

Cylinder sensors - see page 1/44

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.

STANDARD STROKES FOR CYLINDERS SERIES QX

■ Double - acting

	Ø10	Ø16	Ø20	Ø25	Ø32
Standard Stroke					
10	■	■	■	■	■
20	■	■	■	■	■
30	■	■	■	■	■
40	■	■	■	■	■
50	■	■	■	■	■
75	■	■	■	■	■
100		■	■	■	■

CODING EXAMPLE

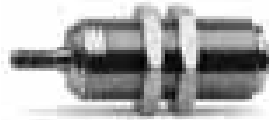
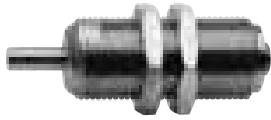
QX	T	2	A	020	A	050
QX	SERIES: QX			020	BORE 10, 16, 20, 25, 32mm	
T	VERSION T = sintered bronze bushes B = linear ball bearings		A		TYPE OF DESIGN A = standard	
2	OPERATION 2 = double acting (1 flange) radial pressure supply 3 = through-rod (double-flange), radial pressure supply		050		STROKE (see table)	
A	MATERIALS A = anodised aluminium body, rolled stainless steel piston 303 piston rod					

Series 14 Compact Mini-Cylinders

Single-acting

Ø6, Ø10, Ø16: Stroke 5, 10, 15mm
with Super-Rapid fitting 4mm and M5 connection.

The Camozzi Series 14 cylinder range has been designed to be installed in very small spaces. The cylinders are designed to be bulkhead mounted either individually or in banks.



Single-acting

Non Threaded Piston Rod - Threaded Connection		
	Ø	Stroke
14N1M06A05	6	5
14N1M06A10	6	10
14N1M06A15	6	15
14N1M10A05	10	5
14N1M10A10	10	10
14N1M10A15	10	15
14N1M16A05	16	5
14N1M16A10	16	10
14N1M16A15	16	15

Single-acting

Threaded Piston Rod - Threaded Connection		
	Ø	Stroke
14N1M06B05	6	5
14N1M06B10	6	10
14N1M06B15	6	15
14N1M10B05	10	05
14N1M10B10	10	10
14N1M10B15	10	15
14N1M16B05	16	05
14N1M16B10	16	10
14N1M16B15	16	15

Single-acting

Non Threaded Piston Rod - Super-Rapid Connection		
	Ø	Stroke
14N1A06A05	6	5
14N1A06A10	6	10
14N1A06A15	6	15
14N1A10A05	10	5
14N1A10A10	10	10
14N1A10A15	10	15
14N1A16A05	16	5
14N1A16A10	16	10
14N1A16A15	16	15

Single-acting

Threaded Piston Rod - Super-Rapid Connection		
	Ø	Stroke
14N1A06B05	6	5
14N1A06B10	6	10
14N1A06B15	6	15
14N1A10B05	10	5
14N1A10B10	10	10
14N1A10B15	10	15
14N1A16B05	16	5
14N1A16B10	16	10
14N1A16B15	16	15

Technical Data

Type of Construction

Compact piston cylinder
Single-acting only
Non-magnetic

Media

Compressed air (filtered), with or without lubrication

Operating Pressure

Min 1 bar to max 8 bar

Operating Temperature

0°C to +80°C.
(with dry air -20°C to +80°C)

Materials

Body: Nickel-plated brass
Seals: NBR
Piston Rod: Stainless steel

Bore Sizes

6, 10, 16mm

Stroke Lengths

See table

Connections

4mm push-in tube or M5 thread connection

Mountings

By threaded body

Cylinder Piston Force and Air

Consumption

Refer to appendix pages 17-20

Special Requests

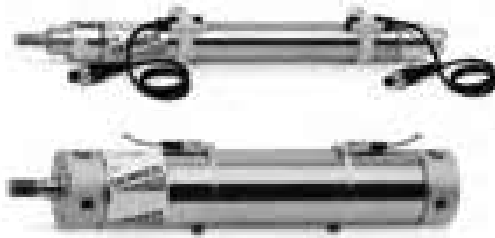
For assistance, contact our technical office or your local Camozzi distributor.

Series 27 Roundline Cylinders

Double-acting, Magnetic
 Ø20, Ø25, Ø32, Ø40, Ø50, Ø63



The Camozzi Series 27 cylinder range has been designed incorporating reduced dimensions and clean lines, suitable for a wide range of industrial applications.



Double-acting only (non-standard strokes available on request)

STANDARD STROKES FOR CYLINDERS SERIES 27

■ Double-acting

	Ø20	Ø25	Ø32	Ø40	Ø50	Ø63
Standard Stroke						
10	■	■	■	■	■	■
25	■	■	■	■	■	■
40	■	■	■	■	■	■
50	■	■	■	■	■	■
80	■	■	■	■	■	■
100	■	■	■	■	■	■
125	■	■	■	■	■	■
160	■	■	■	■	■	■
200	■	■	■	■	■	■
250	■	■	■	■	■	■
300	■	■	■	■	■	■
320	■	■	■	■	■	■
400	■	■	■	■	■	■
500	■	■	■	■	■	■

Mod. M



Bore Sizes: 20, 25, 32, 40

Mod. T



Bore Sizes: 20, 25, 32, 40

Mod. U



Bore Sizes: 20, 25, 32, 40, 50, 63

CODING EXAMPLE

27	M	2	A	20	A	0050	-
27	SERIES: 27			20	BORE: 20, 25, 32, 40, 50, 63mm		
M	VERSION: M = Standard rear end housing, trunnion hole, side port T = End ported rear housing U = Side ported rear housing			A	TYPE OF DESIGN: A = standard		
2	OPERATION: 2 = double-acting			0050	STROKE: (see table)		
A	MATERIALS: A = rolled stainless steel rod-stainless steel tube			-	SPECIAL: to be specified		

Technical Data

Type of Construction

Piston cylinder - rolled construction
 Double-acting. Magnetic as standard

Media

Compressed air (filtered), with or without lubrication

Operating Pressure

Min 1 bar to Max 10 bar

Operating Temperature

0°C to +80°C.
 (with dry air -20°C to +80°C)

Materials

Cylinder barrel: Stainless steel
 End Blocks: Cast aluminium
 Seals: NBR / Polyurethane
 Piston Rod: Stainless steel
 Piston Lock Nut: Zinc-plated steel
 Nose Nut: Zinc-plated steel

Cushioning

End of stroke buffers

Bore Sizes

20, 25, 32, 40, 50, 63mm

Stroke Lengths

Standard - see table.
 Non-standard - on request

Speed

Min 10mm/sec. (no load)
 Max 1000mm/sec. (no load)

Connections

Ø20, 25, 32, 40 - 1/8
 Ø50, 63 - 1/4
 NB: Connections are not spot-faced

Mountings

Cylinder feet or rear trunnion brackets
 - see page 1/25 for all sizes.
 Bulkhead mounting Ø20 to Ø40 inclusive - threaded holes in end blocks Ø50 and Ø63 only
 Trunnion pins Ø50 and Ø63 only.

Cylinder Guides

See page 1/16

Cylinder Piston Force and Air Consumption

Refer to appendix pages 17-20

Cylinder Breakdown Service

Same day breakdown service on all standard and non-standard cylinders

Additional Options

Cylinder sensors - see page 1/44
 Piston rod accessories
 - see page 1/25
 Viton seals*
 *Non-standard available only on request

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.

Series 27 Accessories



Foot Mounts (single)	
	∅
B-27-20	20
B-27-25	25
B-27-32	32
B-27-40	40



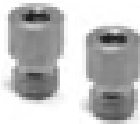
Foot Mounts (pair)	
	∅
B-27-50	50
B-27-63	63



Rear Trunnion Bracket	
	∅
I-27-20	20
I-27-25	25
I-27-32	32
I-27-40	40



Rear Trunnion Bracket (pair)	
	∅
I-27-50	50
I-27-63	63



Threaded Trunnion Pin	
	∅
T-42-50	50
T-42-63	63



Rod Fork End	
	∅
G-20	20
G-25-32	25-32
G-40	40-50
G-50-63	63



Swivel Ball Joint	
	∅
GA-20	20
GA-32	25-32
GA-40	40-50
GA-50-63	63



Piston Rod Socket Joint	
	∅
GY-20	20
GY-32	25-32
GY-40	40-50
GY-50-63	63



Piston Rod Lock Nut	
	∅
U-20	20
U-25-32	25-32
U-40	40-50
U-50-63	63



Nose Nut	
	∅
V-12-16	20
V-27-25	25
V-20-25	32
V-42-32	40



Self Aligning Rod	
	∅
GK-20	16
GK-25-32	25-32
GK-40	40-50
GK-50-63	63



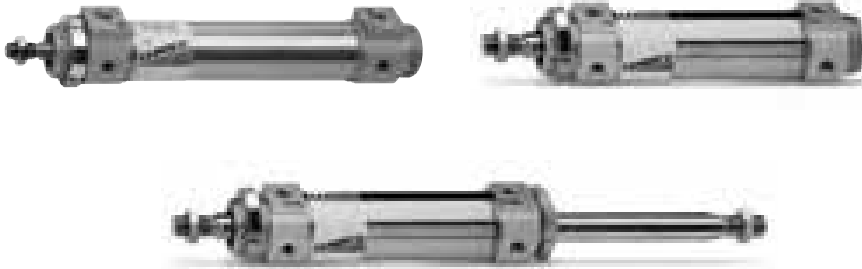
Coupling Piece	
	∅
GKF-20	20
GKF-25-32	25-32
GKF-40	40-50
GKF-50-63	63

Series 42 Cylinders

Single-acting and double-acting, magnetic
 Ø32, Ø40, Ø50, Ø63 cushioned



The Camozzi Series 42 cylinders have been designed without tie rods to assure an extremely clean design



Double-acting and Single-acting (through rod and non-standard strokes available on request)

STANDARD STROKES FOR CYLINDERS SERIES 42

- Double-acting
- * Single-acting

	Ø32	Ø40	Ø50	Ø63
Standard Stroke				
25	■*	■*	■*	■*
50	■*	■*	■*	■*
75	■*	■*	■*	■*
80	■	■	■	■
100	■	■	■	■
125	■	■	■	■
150	■	■	■	■
160	■	■	■	■
200	■	■	■	■
250	■	■	■	■
300	■	■	■	■
320	■	■	■	■
400	■	■	■	■
500	■	■	■	■

Technical Data

Type of Construction
 Compact - flanged

Media
 Compressed air (filtered), with or without lubrication

Operating Pressure
 Min 1 bar to max 10 bar (double action)
 Min 2 bar to max 10 bar (single action)

Operating Temperature
 0°C to +80°C.
 (with dry air -20°C to +80°C)

Materials
 End Blocks: Aluminium

Cushioning
 End of stroke buffers with adjustable pneumatic cushioning

Bore Sizes
 32, 40, 50, 63mm

Stroke Lengths
 Standard - see tables
 Non-standard - on request

Speed
 Min 10mm/sec. (no load)
 Max 1000mm/sec. (no load)

Connections
 Ø32 - 1/8
 Ø40, 50 - 1/4
 Ø63 - 3/8

Mountings
 Front flange, rear flange, feet, front and rear trunnion, threaded pins

Cylinder Piston Force and Air Consumption
 Refer to appendix pages 17-20

Cylinder Breakdown Service
 Same day breakdown service on all standard and non-standard cylinders

Additional Options
 Cylinder sensors - see page 1/44
 Piston rod accessories - see page 1/27
 Viton seals*
 *Non-standard available only on request

Special Requests
 For assistance, contact our technical office or your local Camozzi distributor.

CODING EXAMPLE

42	M	2	N	050	A	0200	-
42 SERIES: 42	M VERSION: M = standard, magnetic	2 OPERATION: 1 = single-acting (front spring) 2 = double-acting (front and rear cushions) 3 = double-acting (no cushion) 4 = double-acting (rear cushions) 5 = double-acting (front cushion) 6 = double-acting (through-rod with front and rear cushions) 7 = single-acting (through-rod)	N MATERIALS: N = Stainless steel AISI 420B rod - stainless steel AISI 304 tube - NBR seals	050 BORE: 32, 40, 50, 63mm	A TYPE OF DESIGN A = standard (screw with ring V + lock nut for rod U)	0200 STROKE: (see table)	- SPECIAL: to be specified

42M2N = standard version available on stock.

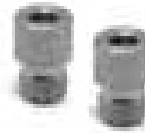
Series 42 Accessories



Foot Mount (pair)	
\emptyset	
P-42-32	32
P-42-40	40
P-42-50	50
P-42-63	63



Trunnion	
\emptyset	
I-42-32	32
I-42-40	40
I-42-50	50
I-42-63	63



Bracket with Threaded Pins (a pair)	
\emptyset	
T-42-32	32
T-42-40	40
T-42-50	50
T-42-63	63



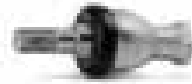
Nose Nut	
\emptyset	
V-42-32	32
V-42-40	40
V-42-50-63	50-63



Rod Fork End	
\emptyset	
G-25-32	32
G-40	40
G-50-63	50-63



Swivel Ball Joint	
\emptyset	
GA-32	32
GA-40	40
GA-50-63	50-63



Piston Rod Socket Joint	
\emptyset	
GY-32	32
GY-40	40
GY-50-63	50-63



Piston Rod Lock Nut	
\emptyset	
U-25-32	32
U-40	40
U-50-63	50-63



Self Aligning Rod	
\emptyset	
GK-25-32	32
GK-40	40
GK-50-63	50-63



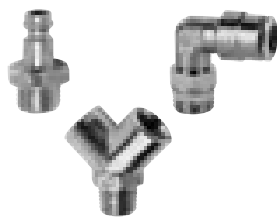
Coupling Piece	
\emptyset	
GKF-25-32	32
GKF-40	40
GKF-50-63	50-63



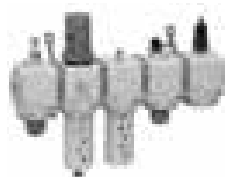
For Valves
See 2 (Control)



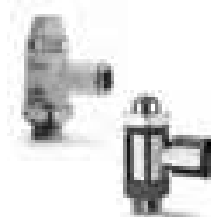
For Magnetic Proximity Switches
See pages 1/44 and 45



For Fittings
See 4 (Connection)



For FRL's
See 3 (Treatment)



For Flow Control
See pages 2/88-93



For Tubing
See 10 (Tubing)

Series 69 Rotary Actuators

Double-acting, Magnetic
 Ø32, Ø40, Ø50, Ø63, Ø80, Ø100, Ø125

The Camozzi Series 69 Rotary Cylinders can be used in extreme conditions with optimum results, due to the design and materials used.

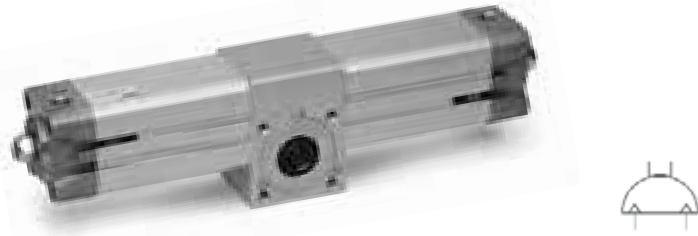


TABLE SHOWING OUTPUT TORQUES IN Nm (THEORETICAL)

Bore	32	40	50	63	80	100	125
Torque moment (Nm)							
1 bar	1.2	2.25	3.9	7.3	15.7	26.35	51.0
2 bar	2.4	4.5	7.8	14.6	31.4	52.70	102.0
3 bar	3.6	6.75	11.7	21.9	47.1	79.05	153.0
4 bar	4.8	9.0	15.6	29.2	62.8	105.40	204.0
5 bar	6.0	11.25	19.5	36.5	78.5	131.75	255.0
6 bar	7.2	13.5	23.4	43.8	94.2	158.10	306.0
7 bar	8.4	15.75	27.3	51.1	109.9	184.45	357.0
8 bar	9.6	18.0	31.2	58.4	125.6	210.80	408.0
9 bar	10.8	20.25	35.1	65.7	141.3	237.15	459.0
10bar	12.0	22.5	39.0	73.0	157.0	263.50	510.0

Technical Data

Type of Construction
 With internal tie-rods

Media

Clean air, non lubricated. If lubricated oil is used, it is recommended to use oil ISOVG32. Once applied the lubrication should never be interrupted

Operating Pressure

Min 0.5 bar to max 10 bar

Operating Temperature

0°C to +80°C
 (with dry air -20°C to +80°C)

Materials

Body: Aluminium
 End Blocks: Aluminium
 Tube: Aluminium
 Seals: NBR
 Rack: Steel
 Rack guide shoe: acetal resin
 Pinion: Hardened steel

Bore Sizes

32, 40, 50, 63, 80, 100, 125mm

Standard Rotation Angles

90°, 180°, 270°, 360°

Connections

Ø32 - 1/8
 Ø40, Ø50 - 1/4
 Ø63, Ø80 - 3/8
 Ø100, Ø125 - 1/2

Mountings

Threaded holes in central body

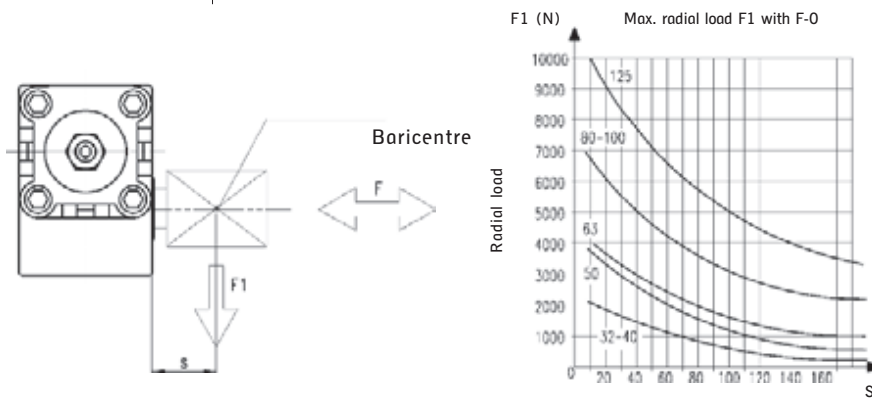
Additional Options

Cylinder sensors - see page 1/44

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.

Applicable Loads



AXIAL LOAD F MAX WITH F1=0

ØCyl.	32	40	50	63	80	100	125
F (N)	100	100	120	120	200	250	300

CODING EXAMPLE

69	-	050	/	090	-	F
----	---	-----	---	-----	---	---

69	SERIES: 69	090	ROTATIONAL ANGLES: 90°, 180°, 270°, 360°
050	BORE: 32, 40, 50, 63, 80, 100, 125mm	F	PINION: F = Female M = Male

Series 30 Rotary Actuators

Standard rotation angles 90° and 180°

Cushioned and non-cushioned.

Ø50, Ø63, Ø80, Ø100

The Camozzi Series 30 Rotary Cylinders are constructed from profiled aluminium, their compact dimensions and clean lines give a good aesthetic appearance.



Technical Data

Type of Construction

Profile

Media

Clean air, with or without lubrication. If lubricated oil is used, it is recommended to use oil ISOVG32. Once applied the lubrication should never be interrupted

Operating Pressure

Min 0.5 bar to max 10 bar

Operating Temperature

0°C to +50°C.
(with dry air -20°C to +50°C)

Materials

Body and End Blocks: Aluminium profile

Seals: NBR

Other Parts: Hardened steel

Cushioning

See Rotary Cylinder coding Series 30

Bore Sizes

50, 63, 80, 100mm

Standard Rotation Angles

90° - 180°

Connections

Ø50, Ø63 - 1/8

Ø80 - 1/4

Ø100 - 3/8

Mountings

Threaded holes in central body

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.

TABLE OF GENERATED WORK IN Nm (THEORETICAL)

Bore	50	63	80	100
Work in Nm				
1 bar	2.08	4.40	7.10	16.63
2 bar	4.16	8.80	14.19	33.27
3 bar	6.24	13.20	21.29	49.90
4 bar	8.32	17.61	28.39	66.54
5 bar	10.40	22.01	35.49	83.17
6 bar	12.48	26.41	42.58	99.80
7 bar	14.55	30.81	49.68	116.44
8 bar	16.63	35.21	56.78	133.07
9 bar	18.71	39.61	63.87	149.07
10 bar	20.79	44.01	70.97	166.34

CODING EXAMPLE

30	-	050	/	090	-	3
30	SERIES: 30		090	ROTATIONAL ANGLES: 90°, 180°		
050	BORE: 50, 63, 80, 100mm		3	Not cushioned		

Series ARP Rotary Actuators

Model: "Rack & Pinion"

Rotational angles: 90°

Sizes: 001 - 003 - 005 - 010 - 012 - 020 - 035 - 055 - 070 - 100 - 150 - 250 - 400



CODING EXAMPLE

ARP - 001 - 1A A - F0300 - A EX

ARP » SERIES

001 » SIZE

001 = torque force 9 Nm	055 = torque force 597 Nm
003 = torque force 24 Nm	070 = torque force 825 Nm
005 = torque force 50 Nm	100 = torque force 1122 Nm
010 = torque force 100 Nm	150 = torque force 1655 Nm
012 = torque force 120 Nm	250 = torque force 2648 Nm
020 = torque force 200 Nm	400 = torque force 4800 Nm
035 = torque force 370 Nm	

1A » OPERATION

1A = single-acting, minimum pressure of 4 bar
1B = single-acting, minimum pressure of 5 bar
1C = single-acting, minimum pressure of 5,5 bar
1D = single-acting, minimum pressure of 6 bar
2A = double-acting

PNEUMATIC SYMBOLS (see appendix page 9)

CD17
CD17
CD17
CD17
CD19

A » ROTATION ANGLE

A = 90°

F0300 » INTERFACE FOR FLANGE (ISO 5211)

F0300 = flange holes F03
F0305 = flange holes F03 + flange holes F05
F0400 = flange holes F04
F0507 = flange holes F05 + flange holes F07
F0700 = flange holes F07
F0710 = flange holes F07 + flange holes F10
F1200 = flange holes F12
F1400 = flange holes F14
F1600 = flange holes F16
F1625 = flange holes F16 + flange holes F25

A » MATERIALS

A = standard anodized
C = CNI Kanigen type nickel-plating
W = all seals in FKM (130°C)

EX » ATEX CERTIFIED PRODUCT

Accessories

Switch box Mod. SBT (standard) and SIP (ATEX version)

Mod. SIP: intrinsic safety
Atex version with protection
modes Ex II 2 G/D
EEx ia IIC T6 for zones
classified as 1, 2, 21 and 22.

Mod.
SBT-012H0-2H
SIP702L0-2H



Switch box Mod. SBA (standard) and SIM (ATEX version)

Mod. SIP: intrinsic safety
Atex version with protection
modes Ex II 2 G/D
EEx ia IIC T6 for zones
classified as 1, 2, 21 and 22.

Mod.
SBA-0120N-2H
SIM702LN-2H



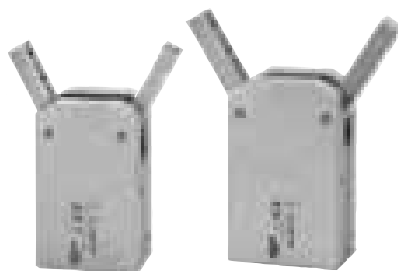
Series CGA and CGSN 180° Angular Grippers

Magnetic

Ø10, Ø16, Ø20, Ø25, Ø32

Series CGA angular grippers are available in 5 different sizes. They open and close at angles between -10° and +30°

The 180° opening at Series CGSN grippers allows wide working areas. The link mechanism used ensures a high gripping force.



Part Number	Ø
CGA-10	10
CGA-16	16
CGA-20	20
CGA-25	25
CGA-32	32

Part Number	Ø
CGSN-16	16
CGSN-20	20
CGSN-25	25
CGSN-32	32

Technical Data

Media

Filtered compressed air

Operating Pressure

CGA: Min 1.5 bar to max 7 bar

CGSN: Min 1.0 bar to max 7 bar

Operating Temperature

CGA: 0°C to +80°C.

CGSN: -10°C to +60°C.

Materials

Body: Aluminium

End Cover and Piston:

CGA: Brass CGSN: Stainless Steel

Piston Rods: Stainless Steel

Rod Pin: Steel, Seals: NBR

Grippers: CGA: Alloy Steel

CGSN: Nickel Plated Steel

Bore Sizes

CGA: 10, 16, 20, 25, 32mm

CGSN: 16, 20, 25, 32mm

Connections

M5 (CGA-10: M3)

Cylinder Piston Force and Air Consumption

See full catalogue or CD rom

Additional Options

Cylinder sensors - see page 1/45

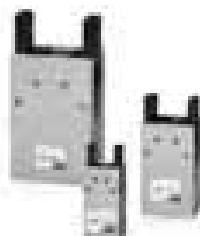
Series CGP Parallel Grippers and CGB-L Guided Type Parallel Grippers

Magnetic

Ø10, Ø16, Ø20, Ø25, Ø32

Camozzi Series CGP Parallel Grippers generate from the cylinders thrust side a closing action, resulting in a higher gripping force.

Camozzi Series CGB-L Guided Type Parallel Grippers are equipped with a guided mechanism that offers high repeatability.



Part Number	Ø
CGP-10	10
CGP-16	16
CGP-20	20
CGP-25	25
CGP-32	32

Part Number	Ø	
CGB-L-16	16	Wide finger
CGB-S-16*	16	Narrow finger
CGB-L-20	20	Wide finger
CGB-S-20*	20	Narrow finger
CGB-L-25	25	Wide finger
CGB-S-25*	25	Narrow finger
CGB-L-32	32	Wide finger
CGB-S-32*	32	Narrow finger

Technical Data

Media

Filtered compressed air

Operating Pressure

Min 1.5 bar to max 7 bar

Operating Temperature

0°C to +80°C.

(with dry air -20°C to +80°C)

Materials

Body: Aluminium

End Cover and Piston: Brass

Piston Rods: Stainless Steel

Rod Pin: Steel

Seals: NBR

Grippers: Alloy Steel

Bore Sizes

CGP: 10, 16, 20, 25, 32mm

CGB-L: 16, 20, 25, 32mm

Connections

M5 (CGP-10: M3)

Cylinder Piston Force and Air Consumption

See full catalogue or CD rom

Additional Options

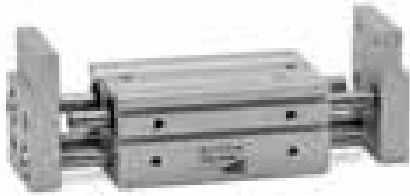
Cylinder sensors - see page 1/45

*Only on request

Series CGLN Wide Opening Parallel Grippers

Magnetic
 Ø10, Ø16, Ø20, Ø25, Ø32

The Camozzi Series CGLN Wide Opening Parallel Grippers are of compact design with a high gripping force.



CODING EXAMPLE			
CGLN	-	20	40
CGLN	SERIES: CGLN		
20	VERSION: 10= Ø10mm 16= Ø16mm 20= Ø20mm 25= Ø25mm 32= Ø32mm		
40	STROKE: (see table)		

Part Number	Ø	Stroke
CGLN-10-020	10	20
CGLN-10-040	10	40
CGLN-10-060	10	60
CGLN-16-030	16	30
CGLN-16-060	16	60
CGLN-16-080	16	80
CGLN-20-040	20	40
CGLN-20-080	20	80
CGLN-20-100	20	100
CGLN-25-050	25	50
CGLN-25-100	25	100
CGLN-25-120	25	120
CGLN-32-070	32	70
CGLN-32-120	32	120
CGLN-32-160	32	160

Technical Data

Media
 Filtered compressed air

Operating Pressure
 CGLN: Min 1 bar to max 7 bar
 (Min 1.5 bar to max 7 bar Ø10)

Operating Temperature
 CGLN: -10°C to +60°C.
 (with dry air -20°C to +60°C).

Materials
 CGLN:
 Body: Aluminium
 Piston Rod: Stainless Steel
 Fingers: Aluminium
 Seals: NBR

Bore Sizes
 CGLN: 10, 16, 20, 25, 32mm

Stroke Lengths
 See table

Connections
 M5 (CGLN-32: 1/8)

Cylinder Piston Force and Air Consumption
 See full catalogue or CD rom

Additional Options
 Cylinder sensors - see page 1/45

Special Requests
 For assistance, contact our technical office or your local Camozzi distributor.

Series CGC 3-Finger Gripper, Centric

Magnetic
 Ø32, Ø45, Ø58, Ø77, Ø98

The Camozzi Series CGC is of compact design, which allows the combination of a high gripping force and long stroke.

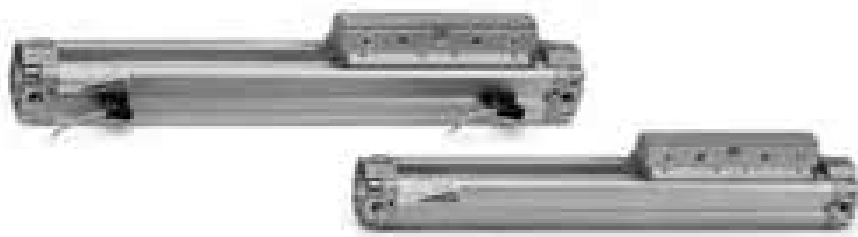


CODING EXAMPLE			
CGC	-	050	-
CGC	SERIES: CGC		
050	VERSION: 050 = Ø32mm 064 = Ø45mm 080 = Ø58mm 100 = Ø77mm 125 = Ø98mm		
C = spring-packaged pressure plate (on demand)			

Part Number	Ø
CGC-050	32
CGC-064	45
CGC-080	58
CGC-100	77
CGC-125	98

Series 50 Rodless Cylinders

Double-acting, Magnetic
 Ø16, Ø25, Ø32, Ø40, Ø50, Ø63, Ø80



CODING EXAMPLE							
50	M	2	P	50	A	0500	
50	SERIES: 50	50	BORE: 16, 25, 32, 40, 50, 63, 80mm	M	VERSION: M = magnetic standard	A	TYPE OF MOUNTING A = standard B = feet BH = intermediate feet CF = floating bracket
2	OPERATION: 2 = double-acting cushioned standard carriage	0500	STROKE: Min 100mm - Max 4000mm	P	MATERIALS: P = anodized AL profile tube - PU and NBR seals - standard carriage U = anodized AL profile tube - PU and NBR seals - flanged carriage		

Note: All accessories are supplied separately.

Technical Data

Type of Construction
 Rodless with integral carriage

Media
 Compressed air (filtered), with or without lubrication

Operating Pressure
 Min 1 bar to max 8 bar

Operating Temperature
 0°C to +50°C.
 (with dry air -10°C to +50°C)

Materials
 Body: Aluminium
 Seals: Polyurethane and NBR
 End covers: Aluminium
 Piston and Barrel: Aluminium

Cushioning
 Adjustable pneumatic cushioning

Bore Sizes
 16, 25, 32, 40, 50, 63, 80mm

Stroke Lengths
 On request, max. 4000mm

Speed
 Min 10mm/sec. (no load)
 Max 1000mm/sec. (no load)

Connections
 Ø16 - M5
 Ø25 - 1/8
 Ø32, Ø40, Ø50 - 1/4
 Ø63 - 3/8
 Ø80 - 1/2

Mountings
 Foot mounted

Cylinder Piston Force and Air Consumption
 Refer to appendix pages 17-20

Cylinder Breakdown Service
 Same day breakdown service on all standard and non-standard cylinders

Additional Options
 Cylinder sensors - see page 1/44
 Seal Kits available on request

Special Requests
 For assistance, contact our technical office or your local Camozzi distributor

Series 52 Rodless cylinders also available.
 Please see page 1/35 for more details

Series 50 Cylinder Accessories



Foot Mounts (pair)	
	Ø
B-50-16	16
B-50-25	25
B-50-32	32
B-50-40	40
B-50-50	50
B-50-63	63
B-50-80	80



Intermediate Foot Mounts	
	Ø
BH-50-16	16
BH-50-25	25
BH-50-32	32
BH-50-40	40
BH-50-50	50
BH-50-63	63
BH-50-80	80

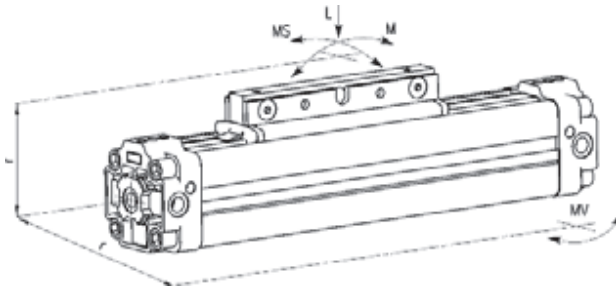


Floating Bracket	
	Ø
CF-50-25	25
CF-50-32	32
CF-50-40	40
CF-50-50	50
CF-50-63	63
CF-50-80	80



For Magnetic Proximity Switches
 See pages 1/44 and 45

Maximum Permitted Loads and Torque Forces

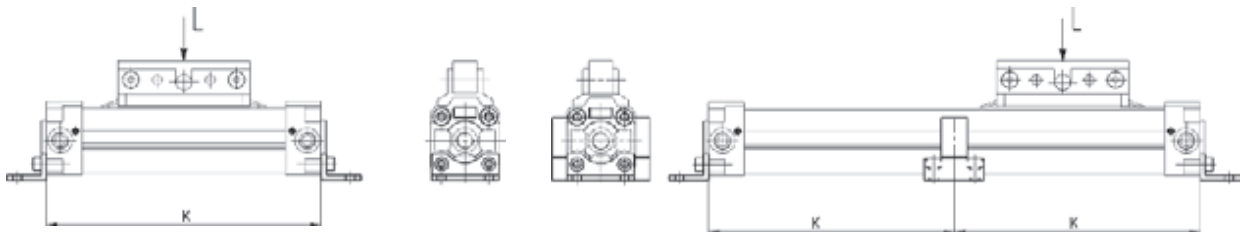


$M = F \times b$
 $MS = F \times b$
 $MV = F \times b$

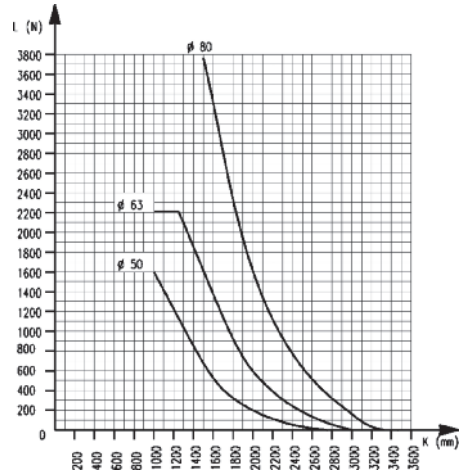
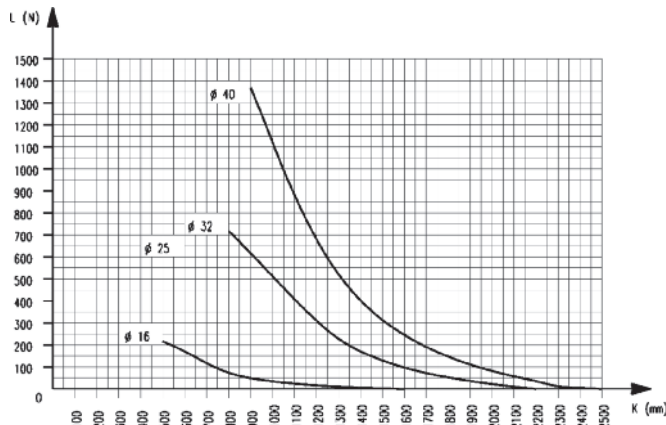
	Max. load permitted (N)	Max. bending torque force permitted (Nm)	Max. bending torque force permitted (Nm)	Torsional torque force permitted (Nm)
$\varnothing_{cyl.}$	L	M	Ms	Mv
16	218	3.1	0.5	1
25	660	12.4	1.9	5
32	720	30	4	8
40	1370	39	4	9
50	1600	122	11	16
63	2210	190	19	26
80	3770	305	30	47

Note: Loads and bending torque are valid if applied separately.

Loads According to Supports' Distance



Note: The charts below have been made according to a max. distance of 0.5 mm/Load (N). Once the load and the cylinder diameter have been fixed, the charts reported below give the k values beyond which it is necessary to put an intermediate feet.



Series 52 Rodless Cylinders

Double-acting, Magnetic, cushioned
 Ø25, Ø32, Ø40, Ø50, Ø63



CODING EXAMPLE						
52	M	2	P	40	A	0500
52	SERIES: 52	40	BORE: 25, 32, 40, 50, 63mm			
M	VERSION: M = standard G = with slide bearing R = with roller bearing (only Ø25 - 32 - 40)	A	TYPE OF MOUNTING: A = standard			
2	OPERATION: 2 = double-acting, cushioned 8 = double-acting, cushioned, with air supply from one side only	0500	STROKE: Up to 6000mm			
P	MATERIALS: P = anodised AL profile tube, NBR and Polyurethane seals, standard carriage C = anodised AL profile, NBR and Polyurethane seals, short carriage					

Note: All accessories are supplied separately.

Technical Data

Type of Construction

Rodless with integral carriage

Media

Compressed air (filtered), with or without lubrication

Operating Pressure

Min 1 bar to max 8 bar

Operating Temperature

0°C to +50°C.
(with dry air -10°C to +50°C)

Materials

Body: Aluminium
 Seals: Polyurethane and NBR
 End covers: Aluminium
 Piston and Barrel: Aluminium

Cushioning

Adjustable pneumatic cushioning

Bore Sizes

25, 32, 40, 50, 63mm

Stroke Lengths

On request, max. 4000mm

Speed

Min 10mm/sec. (no load)
 Max 1000mm/sec. (no load)

Connections

Ø25 - 1/8
 Ø32, Ø40, Ø50 - 1/4
 Ø63 - 3/8

Mountings

Foot mounted

Cylinder Piston Force and Air Consumption

Refer to appendix pages 17-20

Additional Options

Cylinder sensors - see page 1/44
 Seal Kits available on request

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.

For full dimensional details please contact our sales office

Series 52 Cylinder Accessories



Intermediate Foot Mounts	
	Ø
B-52-25	25
B-52-32	25
B-52-40	32
B-52-50	40
B-52-63	50



Foot Mounts for use for with BH	
	Ø
BA-52-25	25
BA-52-32	32
BA-52-40	40
BA-52-50	50
BA-52-63	63



Intermediate Bracket	
	Ø
BH-52-25	25
BH-52-32	32
BH-52-40	40
BH-52-50	50
BH-52-63	63



Self-compensating Adaptor	
	Ø
CF-52-25-32	25
CF-52-25-32	32
CF-52-40	40
CF-52-50-63	50
CF-52-50-63	63

Loads and Torque Forces Ø25, Ø32

COMPLEX LOADS

If more than one force and torque is applied simultaneously, they have to be calculated according to the following formula:

$$L/L(\max) + Ls/Ls(\max) + M/M(\max) + Ms/Ms(\max) + Mv/Mv(\max) \leq 1.$$

For models 52M, the load and torque values refer to the center of the tube. For models 52G/52R the load and torque values refer to the centre point of the external guide. It is also necessary for these models to guarantee on the fixing surface a max 0.1 flatness's value.

The load and torque values refer to a velocity of: Models 52M/52G/52M/52G ≤ 0.2 m/s, models 52R ≤ 2 m/s.

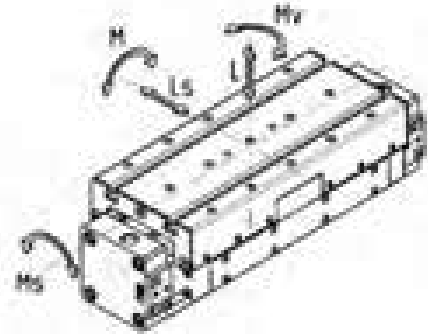
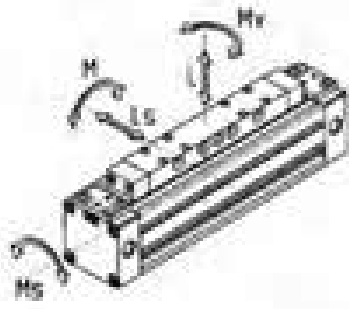


Table showing the maximum permitted loads and torque forces

Part Number	L Max (N)	Ls Max (N)	M Max (Nm)	Ms Max (Nm)	Mv Max (Nm)	Mass at 0 mm stroke (kg)	Additional mass per 100 mm (kg)
52M2P25A - 52M8P25A	270	-	13	2.5	11	0.88	0.30
52M2C25A - 52M8C25A	270	-	8	2	7	0.62	0.30
52G2P25A - 52G8P25A	580	580	23	10	23	1.31	0.30
52G2C25A - 52G8C25A	340	340	9	5	9	0.88	0.30
52R2P25A - 52R8P25A	850	1300	65	35	105	1.97	0.42
52R2C25A - 52R8C25A	850	1300	29	35	64	1.33	0.42
52M2P32A - 52M8P32A	300	-	30	3	24	1.40	0.39
52M2C32A - 52M8C32A	300	-	15	3	12	0.96	0.39
52G2P32A - 52G8P32A	850	850	33	15	33	2.09	0.39
52G2C32A - 52G8C32A	460	460	14	6.5	14	1.35	0.39
52R2P32A - 52R8P32A	900	1500	79	40	125	2.96	0.48
52R2C32A - 52R8C32A	900	1500	36	40	76	1.91	0.48

Loads and Torque Forces Ø40, Ø50, Ø63

COMPLEX LOADS

If more than one force and torque is applied simultaneously, they have to be calculated according to the following formula:

$$L/L(\max) + Ls/Ls(\max) + M/M(\max) + Ms/Ms(\max) + Mv/Mv(\max) \leq 1.$$

For models 52M, the load and torque values refer to the centre of the tube. For models 52G/52R the load and torque values refer to the center point of the guide.

The load and torque values refer to a velocity of: Models 52M/52G ≤ 0.2 m/s Models 52R ≤ 2 m/s
If the velocity exceeds 0.2m/s for the models 52M/52G, the load and torque values have to be multiplied by the coefficients according to the table.

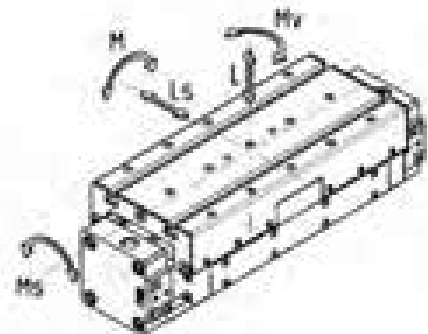
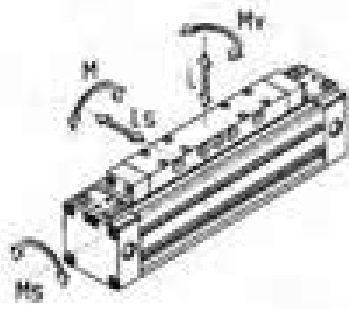
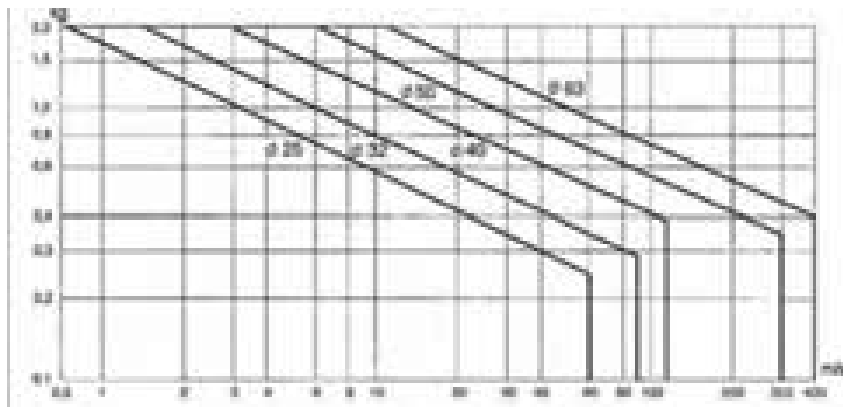


Table showing the maximum permitted loads and torque forces

Part Number	L Max (N)	Ls Max (N)	M Max (Nm)	Ms Max (Nm)	Mv Max (Nm)	Mass at 0 mm stroke (kg)	Additional mass per 100 mm (kg)
52M2P40A - 52M8P40A	650	-	60	4	54	2.41	0.52
52M2C40A - 52M8C40A	650	-	30	4	27	1.65	0.52
52G2P40A - 52G8P40A	1120	1120	60	25	60	3.58	0.52
52G2C40A - 52G8C40A	600	600	25	11	25	2.30	0.52
52R2P40A - 52R8P40A	1200	2000	190	67	118	5.89	0.74
52R2C40A - 52R8C40A	1200	2000	85	67	72	3.84	0.74
52M2P50A - 52M8P50A	800	-	80	17	74	5.30	0.96
52M2C50A - 52M8C50A	800	-	38	17	32	3.50	0.96
52G2P50A - 52G8P50A	1550	1500	200	70	200	7.28	0.96
52G2C50A - 52G8C50A	820	800	60	40	60	4.63	0.96
52M2P63A - 52M8P63A	1400	-	110	17	100	8.10	1.32
52M2C63A - 52M8C63A	1400	-	50	17	48	5.40	1.32
52G2P63A - 52G8P63A	2200	2000	300	102	300	11.02	1.32
52G2C63A - 52G8C63A	1100	1100	105	56	105	7.10	1.32

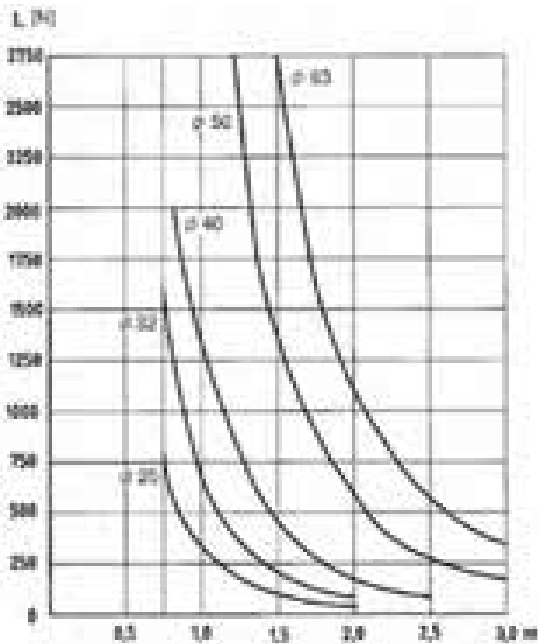
End Cushion Diagram



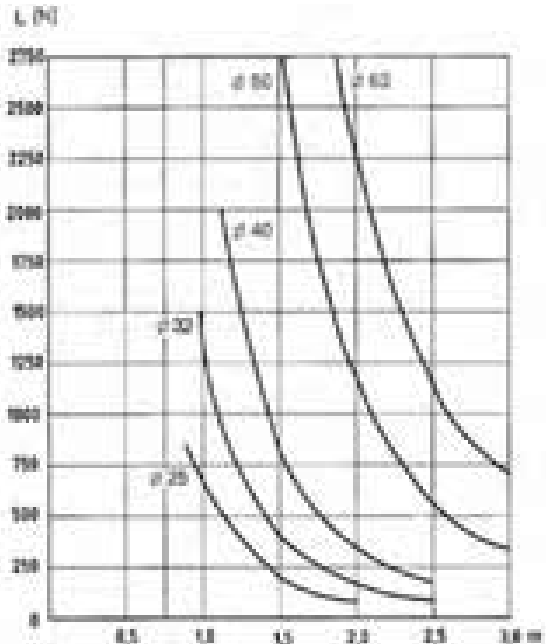
The end cushion regulating screw has to be regulated to obtain a smooth movement at the end of stroke. In those applications which have different values than the ones stated in the diagram, external shock-absorbers have to be used. The shock-absorber should be centrally located with respect to the centre of the mass. The diagram applies for horizontal operations.

Correction coefficient, loads speed - coefficient:
 0.2 m/s - 1
 0.3 m/s - 0.75
 0.4 m/s - 0.5
 0.5 m/s - 0.4
 0.75 m/s - 0.27
 1 m/s - 0.2

Loads According to Supports Distance



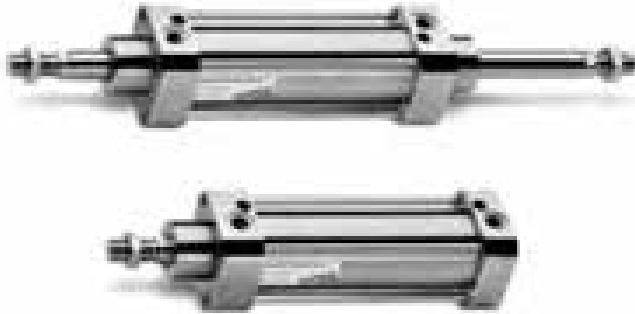
DEFLECTION 0.5 mm
 The charts have been made according to a max. deflection of 0.5 mm and 1 mm when a load (N) is applied. The charts give the max distance between two supports in order to stay within the deflection range given.



DEFLECTION 1 mm
 The charts have been made according to a max. deflection of 0.5 mm and 1 mm when a load (N) is applied. The charts give the max distance between two supports in order to stay within the deflection range given.

Series 90 Stainless Steel Cylinders AISI 316

Single and double-acting, cushioned, magnetic
 Ø32, Ø40, Ø50, Ø63, Ø80, Ø100, Ø125
 ISO 15552 - DIN/ISO 6431 - VDMA 24562



Double-acting (through rod and non-standard strokes available on request)

STANDARD STROKES FOR CYLINDERS SERIES 90

■ Double-acting

	Ø32	Ø40	Ø50	Ø63	Ø80	Ø100	Ø125
Standard Stroke							
25	■	■	■	■	■	■	
50	■	■	■	■	■	■	■
75	■	■	■	■	■	■	■
80	■	■	■	■	■	■	■
100	■	■	■	■	■	■	■
125	■	■	■	■	■	■	■
150	■	■	■	■	■	■	■
160	■	■	■	■	■	■	■
200	■	■	■	■	■	■	■
250	■	■	■	■	■	■	■
300	■	■	■	■	■	■	■
320	■	■	■	■	■	■	■
400	■	■	■	■	■	■	■
500	■	■	■	■	■	■	■

Technical Data

Type of Construction

Piston cylinder with tie-rods.
 Single-acting, double-acting and through-rod. Magnetic as standard

Media

Compressed air (filtered), with or without lubrication

Operating Pressure

Min 1 bar to max 10 bar

Operating Temperature

0°C to +80°C.
 (with dry air -20°C to +80°C)

Materials

Stainless Steel AISI 316, (SS 2343) end blocks, barrel, piston rod, tie rod and NBR seals

Cushioning

End of stroke buffers with adjustable pneumatic cushioning

Bore Sizes

32, 40, 50, 63, 80, 100, 125mm

Stroke Lengths

Standard - see tables
 Non-standard - on request

Speed

Min 10mm/sec. (no load)
 Max 1000mm/sec. (no load)

Connections

Ø32 - 1/8
 Ø40, Ø50 - 1/4
 Ø63, Ø80 - 3/8
 Ø100, Ø125 - 1/2

Mountings

Comprehensive range of ISO/VDMA AISI 303/304 mounting brackets - see page 1/39

Cylinder Piston Force and Air Consumption

Refer to appendix pages 17-20

Additional Options

Cylinder sensors - see page 1/44
 Piston rod accessories - see page 1/39

Viton seals*

*Non-standard available only on request

Seal Kits available on request

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.

CODING EXAMPLE

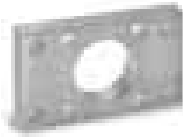
90	M	2	A	050	A	0200	-
90	SERIES: 90			050	BORE: 32, 40, 50, 63, 80, 100, 125mm		
M	VERSION: M = standard, magnetic			A	TYPE OF DESIGN: A = tie-rods		
2	OPERATION: 1 = single-acting (front spring) 2 = double-acting (front and rear cushions) 6 = double-acting (through-rod with front and rear cushions)			0200	STROKE: (see table)		
A	MATERIALS: A = Stainless Steel AISI 316 (SS 2343), NBR seals V = Stainless Steel AISI 316 (SS 2343), viton seals			-	SPECIAL: to be specified V = rod seals viton		

NOTE: Rod nuts and accessories are supplied separately

Series 90 Accessories



Foot Mounts (pair)	
	∅
B-90-32	32
B-90-40	40
B-90-50	50
B-90-63	63
B-90-80	80
B-90-100	100
B-90-125	125
Stainless steel 304	



Front and Rear Flange	
	∅
D-E-90-32	32
D-E-90-40	40
D-E-90-50	50
D-E-90-63	63
D-E-90-80	80
D-E-90-100	100
D-E-90-125	125
Stainless steel 304	



Rear Trunnion, Female	
	∅
C-H-90-32	32
C-H-90-40	40
C-H-90-50	50
C-H-90-63	63
C-H-90-80	80
C-H-90-100	100
C-H-90-125	125
Stainless steel 304	



Rear Trunnion, Male	
	∅
L-90-32	32
L-90-40	40
L-90-50	50
L-90-63	63
L-90-80	80
L-90-100	100
L-90-125	125
Stainless steel 304	



Front Trunnion, Female	
	∅
C+L+S-90-32	32
C+L+S-90-40	40
C+L+S-90-50	50
C+L+S-90-63	63
C+L+S-90-80	80
C+L+S-90-100	100
C+L+S-90-125	125
Stainless steel 304	



90° Swivel Trunnion (to CETOP RP 107P)	
	∅
ZC-90-32	32
ZC-90-40	40
ZC-90-50	50
ZC-90-63	63
ZC-90-80	80
ZC-90-100	100
ZC-90-125	125
Stainless steel 304	



Rod Fork End	
	∅
G-90-25-32	32
G-90-40	40
G-90-50-63	50-63
G-90-80-100	80-100
G-90-125	125
Stainless steel 303, ISO 8140	



Clevis Pin	
	∅
S-90-32	32
S-90-40	40
S-90-50	50
S-90-63	63
S-90-80	80
S-90-100	100
S-90-125	125
Stainless steel 303	



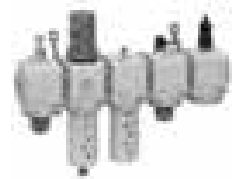
Swivel Ball Joint	
	∅
GA-90-25-32	32
GA-90-40	40
GA-90-50-63	50-63
GA-90-80-100	80-100
GA-90-125	125
Stainless steel 304, ISO 8139	



Piston Rod Lock Nut	
	∅
U-90-25-32	32
U-90-40	40
U-90-50-63	50-63
U-90-80-100	80-100
U-90-125	125
Stainless steel 304, UNI 5589	



For Magnetic Proximity Switches	
See pages 1/44 and 45	



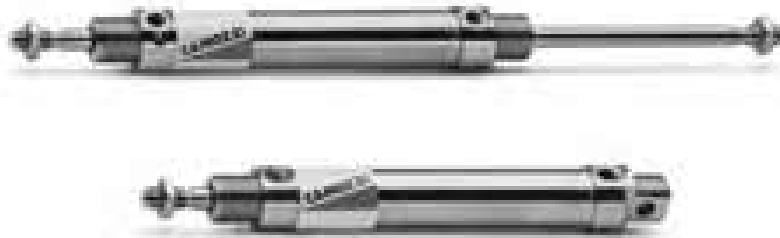
For FRL's	
See 3 (Treatment)	

Series 94 and 95 Stainless Steel Mini-Cylinders AISI 316

Single and double-acting, magnetic - CETOP RP52-P DIN/ISO 6432

Series 94: Ø16, Ø20, Ø25

Series 95: Ø25, cushioned



Double-acting and Single-acting (through rod and non-standard strokes available on request)

STANDARD STROKES FOR CYLINDERS SERIES 94 AND 95

- Double-acting
- * Single-acting

Series	94 Ø16	94 Ø20	94 Ø25	95 Ø25
Standard Stroke				
10	■ *	■ *	■ *	■
25	■ *	■ *	■ *	■
40	■ *	■ *	■ *	■
50	■ *	■ *	■ *	■
80	■	■	■	■
100	■	■	■	■
125	■	■	■	■
160	■	■	■	■
200	■	■	■	■
250		■	■	■
300		■	■	■
320			■	■
400			■	■
500			■	■

CODING EXAMPLE

94	N	2	A	16	A	100	-
94	SERIES: 94= magnetic 95= magnetic, cushioned			16	BORE: 16, 20, 25mm		
N	VERSION: N = standard, magnetic			A	TYPE OF DESIGN: A = standard (locking ring for end cap + lock nut for rod)		
2	OPERATION: 1 = single-acting (front spring) 2 = double-acting 3 = double-acting (through-rod)			100	STROKE: (see table)		
A	MATERIALS: A = Stainless Steel AISI 316 viton rod seals others NBR V = Stainless Steel AISI 316 all viton seals			-	SPECIAL: to be specified V = rod seals viton		

NOTE: Accessories are supplied separately

Technical Data

Type of Construction

Compact - Flanged
Magnetic as standard

Media

Compressed air (filtered), with or without lubrication

Operating Pressure

Min 1 bar to max 10 bar

Operating Temperature

0°C to +80°C.
(with dry air -20°C to +80°C)

Materials

Stainless Steel AISI 316
end blocks, barrel, piston rod and NBR seals
Ø16-25 barrel AISI 304

Cushioning

Series 94 - end of stroke buffers
Series 95 - end of stroke buffers with adjustable pneumatic cushioning

Bore Sizes

16, 20, 25mm

Stroke Lengths

Standard - see tables
Non-standard - on request

Speed

Min 10mm/sec. (no load)
Max 500mm/sec. (no load)

Connections

Ø16 - M5
Ø20, Ø25 - 1/8

Mountings

Comprehensive range of ISO/VDMA
AISI 303/304 mounting brackets - see page 1/41

Cylinder Piston Force and Air Consumption

Refer to appendix pages 17-20

Additional Options

Cylinder sensors - see page 1/44
Piston rod accessories

- see page 1/41

Viton seals*

*Non-standard available only on request

Seal Kits available on request

Seal Kits available on request

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.

Series 94-95 Accessories



Foot Mounts (pair)	
∅	
B-94-12-16	16
B-94-20-25	20-25
Stainless steel 304	



Front/Rear Flange Mount	
∅	
E-94-12-16	16
E-94-20-25	20-25
Stainless steel 304	



Rear Trunnion Bracket	
∅	
I-94-12-16	16
I-94-20-25	20-25
Stainless steel 304	



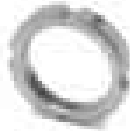
Rod Fork End	
∅	
G-94-12-16	16
G-94-20	20
G-90-25-32	25
Stainless steel 303	



Swivel Ball Joint	
∅	
GA-94-12-16	16
GA-94-20	20
GA-90-25-32	25
Stainless steel 304	



Piston Rod Lock Nut	
∅	
U-94-12-16	16
U-94-20	20
U-90-25-32	25
Stainless steel 304	



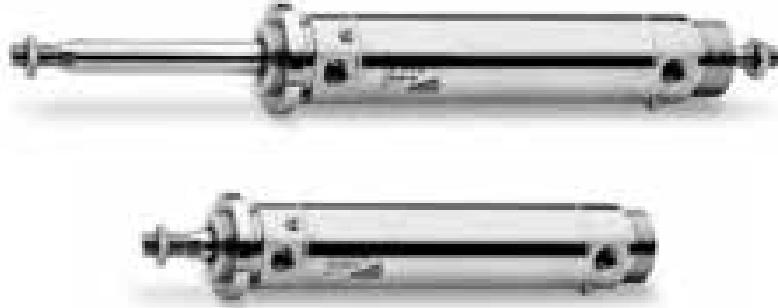
Nose Nut	
∅	
U-90-50-63	16
V-94-20-25	20-25
Stainless steel 304	



For Magnetic Proximity Switches	
See pages 1/44 and 45	

Series 97 Stainless Steel Cylinders

Single-acting and double-acting, cushioned, magnetic
 Ø32, Ø40, Ø50, Ø63 cushioned



Double-acting and Single-acting (through rod and non-standard strokes available on request)

STANDARD STROKES FOR CYLINDERS SERIES 97

- Double-acting
- * Single-acting

	Ø32	Ø40	Ø50	Ø63
Standard Stroke				
25	■*	■*	■*	■*
50	■*	■*	■*	■*
75	■	■	■	■
80	■	■	■	■
100	■	■	■	■
125	■	■	■	■
150	■	■	■	■
160	■	■	■	■
200	■	■	■	■
250	■	■	■	■
300	■	■	■	■
320	■	■	■	■
400	■	■	■	■
500	■	■	■	■

CODING EXAMPLE

97	M	2	A	050	A	0200
97	SERIES: 97			050	BORE: 32, 40, 50, 63mm	
M	VERSION: M = standard, magnetic			A	TYPE OF DESIGN: A = standard (locking ring for end cap V + lock nut for rod U)	
2	OPERATION: 1 = single-acting (front spring) 2 = double-acting (front and rear cushions) 6 = double-acting, through-rod with front and rear cushions (T and A versions only)			0200	STROKE: (see table)	
A	MATERIALS: A = Stainless Steel AISI 304 - PU seals V = Stainless Steel AISI 304 - FKM seals			= standard V = rod seal in FKM		

NOTE: Accessories are supplied separately

Technical Data

Type of Construction

The end blocks are screwed to the tube with an intermediate Teflon ring

Media

Filtered air, without lubrication.

If lubricated air is used, it is recommended to use oil ISOVG32.

Once applied the lubrication should never be interrupted

Operating Pressure

Min 1 bar to max 10 bar

Operating Temperature

0°C to +80°C.

(with dry air -20°C to +80°C)

Materials

Stainless Steel AISI 304

end blocks, barrel, piston rod and NBR seals

Cushioning

End of stroke buffers with adjustable pneumatic cushioning

Bore Sizes

32, 40, 50, 63mm

Stroke Lengths

Standard - see tables

Non-standard - on request

Speed

Min 10mm/sec. (no load)

Max 1000mm/sec. (no load)

Connections

Ø32 - 1/8

Ø40, Ø50 - 1/4

Ø63 - 3/8

Mountings

Comprehensive range of ISO/VDMA

AISI 303/304/316 mounting brackets

- see page 1/43

Cylinder Piston Force and Air Consumption

Consumption

Refer to appendix pages 17-20

Additional Options

Cylinder sensors - see page 1/44

Piston rod accessories

- see page 1/43

Viton seals*

*Non-standard available only on request

Seal Kits available on request

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.

Series 97 Accessories



Foot Mounts (pair)	
	∅
B-97-32	32
B-97-40	40
B-97-50	50
B-97-63	63
Stainless steel 304	



Trunnion	
	∅
I-97-32	32
I-97-40	40
I-97-50	50
I-97-63	63
Stainless steel 304	



Rear Female Trunnion Bracket	
	∅
C-H-90-32	32
C-H-90-40	40
C-H-90-50	50
C-H-90-63	63
Stainless steel 316	



Tight Rear Female Trunnion Bracket	
	∅
CR-90-32	32
CR-90-40	40
CR-90-50	50
CR-90-63	63
Stainless steel 316	



Male Trunnion Bracket with swivel Ball Joint	
	∅
R-90-32	32
R-90-40	40
R-90-50	50
R-90-63	63
Stainless steel 316	



90° Male Trunnion Bracket with Swivel Ball Joint	
	∅
ZCR-90-32	32
ZCR-90-40	40
ZCR-90-50	50
ZCR-90-63	63
Stainless steel 316	



Rod Fork End	
	∅
G-90-25-32	32
G-90-40	40
G-90-50-63	50-63
Stainless steel 303, ISO 8140	



Swivel Ball Joint	
	∅
GA-90-32	32
GA-90-40	40
GA-90-50-63	50-63
Stainless steel 304, ISO 8139	



Piston Rod Lock Nut	
	∅
U-90-25-32	32
U-90-40	40
U-90-63	50-63
Stainless steel 304, ISO 4035	



Nose Nut	
	∅
V-97-32	32
V-97-40	40
V-97-50-63	50-63
Stainless steel 304	



Clevis Pin	
	∅
S-90-32	32
S-90-40	40
S-90-50	50
S-90-63	63
Stainless steel 303	



Antirotating Clevis Pin	
	∅
SR-90-32	32
SR-90-40	40
SR-90-50	50
SR-90-63	63
Stainless steel 304, ISO 8139	



For Magnetic Proximity Switches
See pages 1/44 and 45

Magnetic Proximity Switches and Brackets

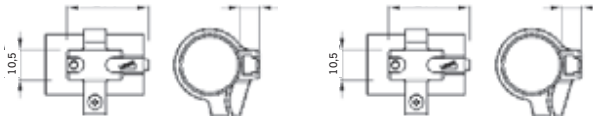
The Camozzi Series SKR - CSV are designed to fit into the grooves provided in the profile barrel of "compact" and "rodless" cylinders or on the surface of roundline and tie rod cylinders by using mounting bands or brackets



Part Number	Description
SKR2C01200	T slot reed, 2 wires, 5 - 130v AC/DC
CSV-220	V slot reed, 2 wires, 10 - 110v AC/DC
SKR3C01200	T slot reed, 3 wires, 5 - 30v AC/DC
CSV-232	V slot reed, 3 wires, 5 - 30v AC/DC
SKH3C01200	T slot hall effect, 3 wires, PNP, 10 - 30v DC
CSV-332	V slot hall effect, 3 wires, PNP, 10 - 27v DC
SKR6C01300	T slot reed, 2 wires, 5 - 230v AC/DC (3m cable)

Part Number	Description
SKR2C01M8	T slot reed, 2 wires with M8 connector, 5 - 50v AC/DC
CSV-250N	V slot reed, 2 wires with M8 connector, 10 - 110v AC/DC
SKR3C01M8	T slot reed, 3 wires with M8 connector, 5 - 30v AC/DC
CSV-262	V slot reed, 3 wires with M8 connector, 5 - 30v AC/DC
SKH3C01M8	T slot hall effect, 3 wires with M8 connector, PNP, 10 - 30v DC
CSV-362	V slot hall effect, 3 wires with M8 connector, PNP, 10 - 30v DC
AG08B3C25050	M8 female, 3 pole, 5m extension lead

Note: 2 & 3 wire reed switches listed are N.O. with a 2 metre long cable. Alternatives can be quoted on request. Reed switches fitted with an M8 connector are N.O. with a 0.3 metres long cable.
For the correct function of Proximity Switches they must only be used with the relevant bracket where applicable.

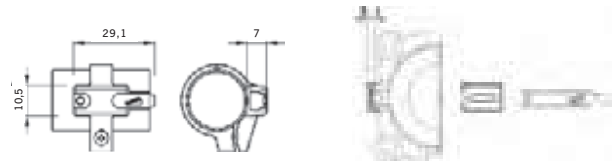


Series	∅	Part Number
24-25	16	SF16
24-25	20	SF20
24-25	25	SF25
Bracket for use with T slot type switch		

Series	∅	Part Number
27	16	SF16
27	20	SF20
27	25	SF25
27	32	S-CST 06
27	40	S-CST 07
27	50	S-CST 08
27	63	S-CST 09
Bracket for use with T slot type switch		

Series	∅	Description
31	12-100	Direct Mounting
Direct mounting with T slot type switch, no bracket required		

Series	∅	Description
32	20-100	Direct Mounting
Direct mounting with T slot type switch, no bracket required		



Series	∅	Part Number
42	32	S-CST 06
42	40	S-CST 07
42	50	S-CST 08
42	63	S-CST 09
Bracket for use with T slot type switch		

Series	∅	Part Number
50	16-25	Direct Mounting*
50	32-80	SZR12**
*with CSV type switch		
**with T slot type switch		

Series	∅	Description
52	25-63	Direct Mounting
Direct mounting with T slot type switch, no bracket required		

Series	∅	Part Number
60	32-63	SCT32
60	80-100	SCT80
60	125	S-CST 27
40	160-200	S-CST 28
Bracket for use with T slot type switch		



Series	∅	Part Number
60+45N	32-63	S-CST 45N1
60+45N	80-100	S-CST 45N2
Bracket for use with T slot type switch		

Series	∅	Description
61	32-125	Direct Mounting
Direct mounting with T slot type switch, no bracket required		

Series	∅	Description
69	32	Direct Mounting
Direct mounting with T slot type switch, no bracket required		



Series	∅	Description
QP	12-16	Direct Mounting*
QP	20-100	SZR12**
QPR	12-16	Direct Mounting*
QPR	20-100	SZR12**
*with CSV type switch		
**with T slot type switch		

Series CSB - CSC Magnetic Proximity Switches

Reed Switch

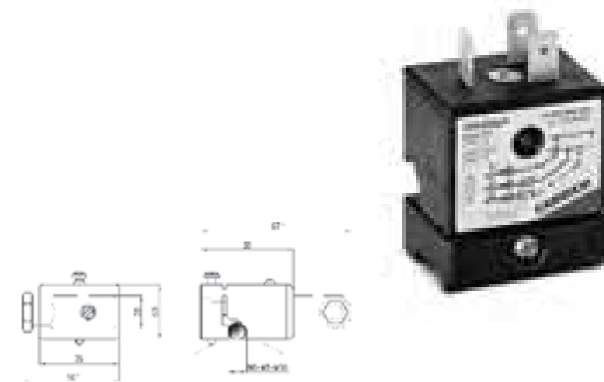
The Camozzi Series CSB - CSC Magnetic Proximity Switch define the position of the magnetic piston. When the internal contact is actuated by a magnetic field, the sensors complete an electrical circuit and provide an output signal to actuate directly a solenoid valve or a PLC.

Part Number		Technical Data
CSB-D-220		Operating Temperature -10°C to +60°C
CSB-H-220		Materials Body: Plastic encapsulating epoxy resin
CSC-D-220		Mountings Directly into the grooves
CSC-H-220		Special Requests For assistance, contact our technical office or your local Camozzi distributor.
<p>*CSB type suit CGA, CGB, CGC and CGP type grippers. **CSC type suit CGLN, CGSN and QX type grippers.</p>		

CODING EXAMPLE

CS	B	-	D	2	2	0
CS	SERIES: CS = Magnetic		2	2 = reed		
B	B = Square shape C = Round shape		20	2 = 2 wires (only reed)		
D	D = straight lead H = lead 90°					

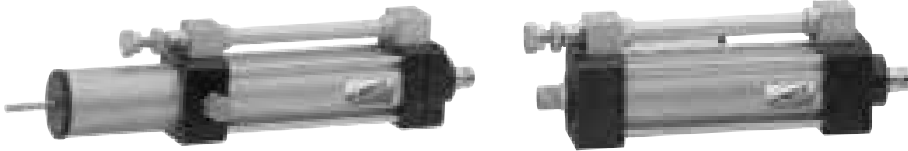
Series CSN Magnetic Proximity Switches

	Technical Data
Part Number	Operating Temperature -25°C to +75°C
CSN-2032-0	Materials Glass reinforced nylon
Part Number	Mountings Bracket for tie rod Ø6 - Ø10
S21 For cylinders series 40 Ø160, Ø200, Ø250	Voltage For 12 to 220V AC and DC
S53 For cylinders series 41 Ø160, Ø200	Protection IP54/IP65 with connector DIN 43650
	Electrical Connection DIN 43650 connector, model KB132000139
	Max Current 1.5 A
	Max Load 20 W DC - 30 VA AC
	Actuating Time ≤ 2 ms
	Actuating Tolerance ± 1mm
	Type of Contact NO (normally open)
	Signalling Integrated red LED

Series 43 Hydrochecks

Skip - Stop Function
Ø40

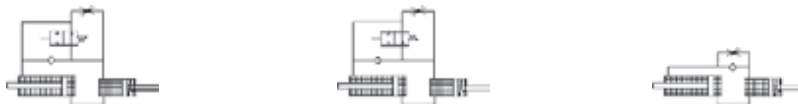
The Camozzi series 43 comes complete with an oil surge tank which ensures automatic equalisation. Speed variation is obtained by means of an incorporated flow regulator designed to allow comprehensive and constant use.



Part Number
43N-LTO-40-50
43N-LTO-40-100
43N-LTO-40-150
43N-LTO-40-200

Part Number
43N-LTB-40-50
43N-LTB-40-100
43N-LTB-40-150
43N-LTB-40-200

Part Number
43N-PTV-40-50
43N-PTV-40-100
43N-PTV-40-150
43N-PTV-40-200



Part Number
43N-PSA-40-50
43N-PSA-40-100
43N-PSA-40-150
43N-PSA-40-200

Part Number
43N-LTA-40-50
43N-LTA-40-100
43N-LTA-40-150
43N-LTA-40-200

Part Number
43N-PTO-40-50
43N-PTO-40-100
43N-PTO-40-150
43N-PTO-40-200



Part Number
43N-PTB-40-50
43N-PTB-40-100
43N-PTB-40-150
43N-PTB-40-200

Part Number
43N-PSV-40-50
43N-PSV-40-100
43N-PSV-40-150
43N-PSV-40-200

Part Number
43N-LTV-40-50
43N-LTV-40-100
43N-LTV-40-150
43N-LTV-40-200



Part Number
43N-PTA-40-50
43N-PTA-40-100
43N-PTA-40-150
43N-PTA-40-200

Part Number
43N-PSO-40-50
43N-PSO-40-100
43N-PSO-40-150
43N-PSO-40-200

Part Number
43N-PSB-40-50
43N-PSB-40-100
43N-PSB-40-150
43N-PSB-40-200

Technical Data

Type of Construction
With tie-rods

Media
Special hydraulic oil (contact our engineers)

Operating Pressure
Min 1 max 10 bar

Operating Temperature
-10°C to +70°C

Bore Size
40mm

Stroke Lengths
Standard - see tables
Non-standard - on request

Speed
Min 14mm/min
Max 15mm/min
(in non regulated direction)

Controllable Load
Max 500kg
(Including inertia of moving masses)

Special Requests
For assistance, contact our technical office or your local Camozzi distributor

Note
Controllable load 500kg max
(including inertia of moving).

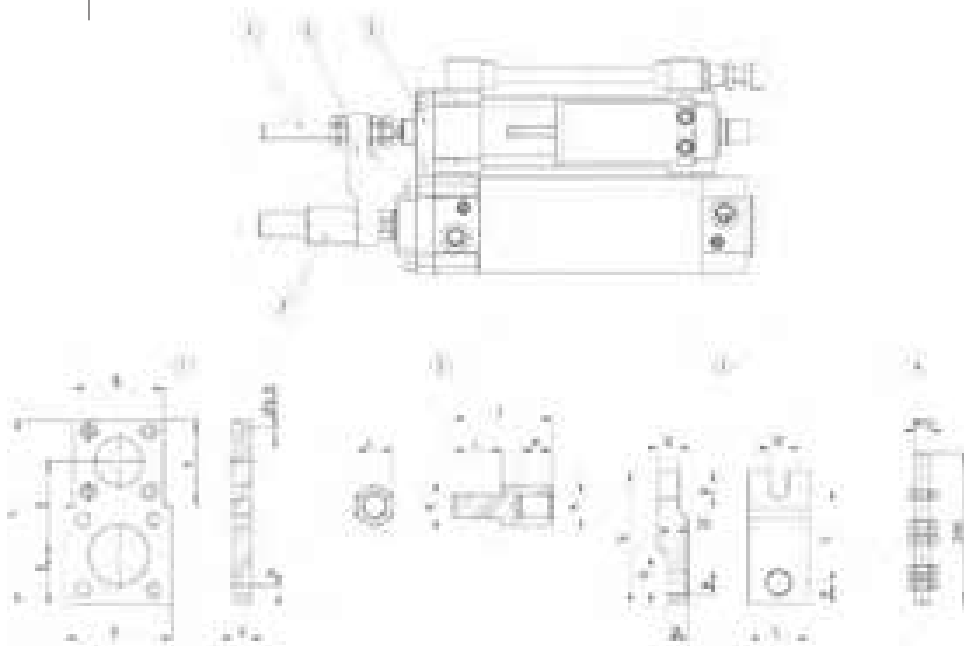
CODING EXAMPLE

43	N	-	P	S	O	-	40	-	200
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43 SERIES: 43									
N N = standard S = special			S S = thrust (rod return regulated) T = traction (rod thrust regulated)				40 BORE: 40mm		
P L = tank in series P = tank parallel			O A = SKIP valve B = SKIP + STOP valve V = STOP valve O = standard				200 STROKE in mm		

Part Number 43N-PNP. Pump for refilling hydrocheck speed regulator

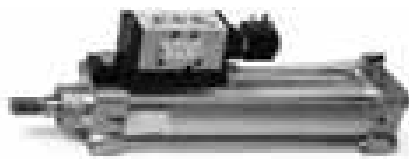
Accessories for Hydrochecks Series 43 - Connecting Kit



Part Number	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
43N-40-40	60	-	110	26.5	56	-	12	7	19	47	M12 x 1.25	24	14	80	25	25	14	12	40
43N-40-50	70	60	122	32.52	62	57	12	9	24	65	M16 x 1.5	32	20	88	32	25	14	14	40
43N-40-63	80	60	132	37.5	67	57	20	9	24	65	M16 x 1.5	32	20	93	32	25	14	14	40
43N-40-80	100	60	152	47.5	77	57	20	11	30	78	M20 x 1.5	40	25	107	-	-	-	18	50

Series 60/61 Valve Mounting Bracket

Example of assembly Series 60



Part Number	Mounting Bracket	
PCV-32	32	for mounting valves series 4, 1/4
PCV-40-50	40 - 50	for mounting valves series 4, 1/4
PCV-63-80	63 - 80	for mounting valves series 4, 1/4

Note: Fittings and valve supplied separately

Example of assembly Series 61



Part Number	Mounting Bracket	
PCV-61-K3		for mounting solenoid valves Series 3, 1/8
PCV-61-K4		for mounting solenoid valves Series 4, 1/4
PCV-61-K8		for mounting solenoid valves Series 4, 1/8
PCV-61-KE		for mounting solenoid valves Series E

Note: Fittings and valve supplied separately

Series RL Rod Locks

Ø20, Ø25, Ø32, Ø40, Ø50, Ø63, Ø80, Ø100, Ø125

For ISO 6431/VDMA and ISO 6432 cylinders

The Camozzi Series RL are of compact dimensions allowing units to be fitted on cylinders where space is limited.



Standard, complete with cartridge and housing
RLC-24-20
RLC-24-25
RLC-41-32
RLC-41-40
RLC-41-50
RLC-41-63
RLC-41-80
RLC-41-100
RLC-41-125

Cartridge only
RLB-24-20
RLB-24-25
RLB-41-32
RLB-41-40
RLB-41-50
RLB-41-63
RLB-41-80
RLB-41-100
RLB-41-125

Technical Data

Type of Construction
Compact

Operating Pressure
Min 3 max 10 bar

Operating Temperature
0°C to +80°C.
(with dry air 0°C to -80°C)

Materials
Housing: anodised aluminium
Clamp: Brass
Seals: NBR

Cylinder diameter
Ø20, Ø32, Ø40, Ø50, Ø63, Ø80, Ø100, Ø125

Connections
Ø20, Ø25, Ø32 - M5
Ø40, Ø50, Ø63, Ø80, Ø100, Ø125 - 1/8

Special Requests
For assistance, contact our technical office or your local Camozzi distributor

Note
Cylinders must be ordered with a piston rod extension in order to fit rod locks. See table

Caution!
The rod lock should not be used to "brake" the piston rod in dynamic conditions and must only be applied when movement has ceased.

HOLDING FORCE (STATIC LOAD)										
Ø	20	25	32	40	50	63	80	100	125	
holding force N.	300	400	650	1100	1600	2500	4000	6300	8800	

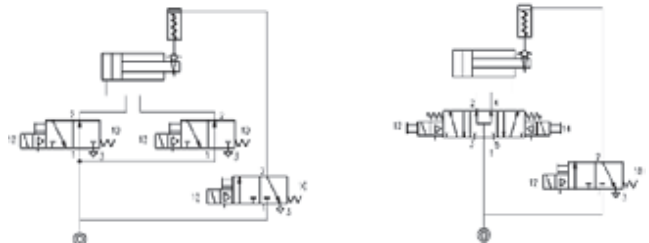
MINIMUM OPERATIONAL STROKES										
Ø	20	25	32	40	50	63	80	100	125	
extension	+46	+46	+40	+43	+57	+57	+80	+80	+125	

Scheme of Operation

Pneumatic control



Electropneumatic control



CODING EXAMPLE

RLC	-	41	-	32
RLC SERIES RLC = standard, complete with cartridge and housing RLB = cartridge only		41 CYLINDER SERIES 24 = for Series 24 and 25 41 = for Series 60 and 61		32 CYLINDER BORE 20, 25, 32, 40, 50, 63, 80, 100, 125mm

Series SA Shock Absorbers

Self compensating

M8x1, M10x1, M12x1, M14x1.5, M20x1.5, M25x1.5, M27x1.5

The Camozzi Series SA Shock Absorbers are used to provide impact and noise absorption when stopping objects in motion

Part Number	Size	Stroke
SA-0806 W	M8x1	6mm
SA-0806	M8x1	6mm
SA-1007 W	M10x1	7mm
SA-1007	M10x1	7mm
SA-1210 W	M12x1	10mm
SA-1210	M12x1	10mm
SA-1412 W	M14x1.5	12mm
SA-1412	M14x1.5	12mm
SA-2015 W	M20x1.5	15mm
SA-2015	M20x1.5	15mm
SA-2525 W	M25x1.5	25mm
SA-2525	M25x1.5	25mm
SA-2725 W	M27x1.5	25mm
SA-2725	M27x1.5	25mm



Technical Data

Type of Construction

Hydraulic shock absorber, self compensating

Operating Temperature

-10°C to +80°C

Materials

Body: Steel, black coated
Piston Rod: Carbon steel, chrome plated
Piston: Carbon steel
Seals: NBR

Stroke Lengths

See Shock absorbers coding SA

Mountings

Threaded Body

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.

CODING EXAMPLE

SA		0806	
SA	SERIES: SA	0806	SIZE/STROKE 0806 = size M8x1 stroke 6 mm 1007 = size M10x1 stroke 7 mm 1210 = size M12x1 stroke 10 mm 1412 = size M14x1,5 stroke 12 mm 2015 = size M20x1,5 stroke 15 mm 2525 = size M25x1,5 stroke 25 mm 2725 = size M27x1,5 stroke 25 mm
			OPTION None = Standard, with cap W = Without cap* * on request

NOTE: The shock absorbers are supplied complete with 2 mounting nuts.

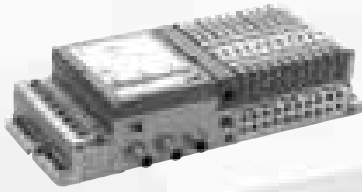
ADJUSTED STROKE NUT

- A = Initial position
- B = Final position
- 1 = Impact object
- 2 = Adjusted stroke nut
- 3 = Shock absorber
- 4 = Fixing screw
- 5 = Stroke
- 6 = Stroke length



Mod.	ØA	B	C	D	E	F
SA-08SC (for SA-0806)	10.5	14	9	M8X1	11	12.7
SA-10SC (for SA-1007)	12	16	10	M10X1	13	14.7
SA-12SC (for SA-1210)	14.5	20	13	M12X1	16	18.5
SA-14SC (for SA-1412)	25.8	20	15	M14X1	19	21.9
SA-20SC (for SA-2015)	27.8	35	20	M20X1.5	26	30
SA-25SC (for SA-2525)	5.8	45	30	M25X1.5	32	37
SA-27SC (for SA-2725)	20.7	65	50	M27X1.5	32	37





2 / 2 Technical Data

Directly and Indirectly Operated 2/2 - 3/2 Solenoid Valves

	2 / 11	Series K8 Directly Operated Mini-Solenoid Valves	
	2 / 12	Series K Directly Operated Mini-Solenoid Valves	
	2 / 13	Series KN Mini-Solenoid Valves	
	2 / 14	Series KN High Flow Mini-Solenoid Valves	▶
	2 / 15	Series W Directly Operated Mini-Solenoid Valves	
	2 / 16	Series P Directly Operated Mini-Solenoid Valves	
	2 / 17	Series PN Directly operated Mini-Solenoid Valves	
	2 / 18	Series PD Directly Operated Solenoid Valves	▶
	2 / 19	Series PL Directly Operated Solenoid Valves	▶
	2 / 20	Series A Directly Operated Solenoid Valves	
	2 / 21	Series 6 Directly Operated Solenoid Valves	
	2 / 22	Series CFB Stainless Steel Solenoid Valves	▶


Solenoid Valves/Pneumatic Valves

	2 / 23	Series E Valves and Solenoid Valves	
	2 / 28	Series EN Valves and Solenoid Valves	
	2 / 33	Series 3 and 4 Electropneumatically Operated Valves	
	2 / 39	Series 3 and 4 Pneumatically Operated Valves	
	2 / 44	Series 9 Electropneumatically and Pneumatically Operated Valves ISO 5599/1	
	2 / 46	Series NA NAMUR Valves	
	2 / 47	U7* - U7*EX - G7* - A8* G93 - H8* Solenoid Coils	
	2 / 48	Solenoid DIN Connectors Solenoids	
Valve Islands			
	2 / 52	Series 3 Valve Island Plug-In	
	2 / 58	Series 3 Fieldbus Valve Islands	
	2 / 61	Series Y Valve Islands	
	2 / 65	Series H Valve Islands	
	2 / 69	Series F Valve Islands	▶
	2 / 72	Series CP2, CC2, CD2 Individual Fieldbus Node	
	2 / 74	Connectors for Valve Islands	

Mechanical and Manual Valves

	2 / 76	Series 2 Mechanically Operated Minivalves
	2 / 76	Series 1 and 3 Mechanically Operated Valves
	2 / 78	Series 3 and 4 Mechanically Operated Sensor Valves
	2 / 79	Series 2 and 3 Pneumatic and Electrical - Foot Operated Pedal
	2 / 80	Series 2 Manually Operated Console Minivalves
	2 / 82	Series 1, 3, 4 and VMS Manually Operated Valves
	2 / 84	Series 2 Mini-Handle Valves

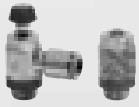

Logic Valves

	2 / 85	Series 2L Basic Logic Valves Pneumatically Operated Amplifier Sender and Receiver Elements
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Automatic Valves

	2 / 86	Series SCS, VNR, VSC and VSO Automatic Valves
	2 / 87	Series VBO and VBU Blocking Valves

Flow Control Valves

	2 / 88	Series SCU, MCU, SVU, MVU, SCO and MCO Flow Regulators
	2 / 90	Series PSCU, PMCU, PSVU, PMVU, PSCO and PMCO Flow Regulators
	2 / 91	Series GSCU, GMCU, GSVU, GMVU, GSCO and GMCO Flow Regulators


Flow Control Valves - continued

	2 / 92	Series TMCU, TMVU and TMCO Flow Regulators
	2 / 92	Series RFU and RFO Flow Regulators
	2 / 93	Series 28 Flow Regulators






Pressure Switches and Vacuum Switches

	2 / 94	Series PM Adjustable-Diaphragm Pressure Switches, Transducer and Pressure Indicator
	2 / 95	Series SWM Electronic Miniature Vacuum Switches
	2 / 95	Series SWE and SWD Electronic Vacuum/Pressure Switches
	2 / 96	Series SWDN, SWC and SWCN Electronic Vacuum/Pressure Switches

Silencers

	2 / 98	Silencers Series 2901, 2903, 2921, 2931, 2938, 2939, SP, SCO and RSW Silencers
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Proportional Technology

	2 / 99	Series ER100 and Series ER200 Digital Electro-pneumatic regulators
	2 / 101	Series LR Servo Valves
	2 / 102	Series K8P Electronic Proportional Micro Regulator
	2 / 104	Series AP Directly Operated Proportional Valves
	2 / 106	Series MX-PRO Electronic Proportional Regulator

Technical Data

Flow rates, minimum and maximum operating pressure

Series K8 Directly Operated Solenoid Valves

Part Number	QN (NI/min) (6 bar ΔP 1 bar)	Operating Pressures	Kv (l/min)	Page
K8000-303-K**	5	1 - 7 bar	0.08	11
K8000-403-K**	5	1 - 7 bar	0.08	11
K8000-503-K**	5	1 - 7 bar	0.08	11
K8000-603-K**	5	1 - 7 bar	0.08	11

Series K Directly Operated Mini-Solenoid Valves

Part Number	QN (NI/min) (6 bar ΔP 1 bar)	Operating Pressures	Kv (l/min)	Page
K000-303-K**	10	0 - 7 bar	0.15	12
K000-403-K**	10	0 - 5 bar	0.15	12

Series KN Directly Operated Mini-Solenoid Valves

Part Number	QN (NI/min) (6 bar ΔP 1 bar)	Operating Pressures	Kv (l/min)	Page
KN000-303-K**	10	0 - 7 bar	0.15	13

Series KN High Flow

Part Number	QN (NI/min) (6 bar ΔP 1 bar)	Operating Pressures	Kv (l/min)	Page
KN000-305-F**	25	3 - 7 bar	0.39	14
KN000-306-F**	25	0 - 3 bar	0.39	14

Series W Directly Operated Mini-Solenoid Valves

Part Number	QN (NI/min) (6 bar ΔP 1 bar)	Operating Pressures	Page
W000-403-W**	23	0 - 5 bar	15
W000-405-W**	15	0 - 10 bar	15
W000-303-W**	35	0 - 7 bar	15
W000-305-W**	25	0 - 10 bar	15

Series P Directly Operated Mini-Solenoid Valves

Part Number	QN (NI/min) (6 bar ΔP 1 bar)	Operating Pressures	Page
P000-301-P5*	14	0 - 10 bar	16
P000-305-P5*	25	0 - 10 bar	16
P000-306-P5*	35	0 - 10 bar	16
P000-303-P5*	35	0 - 7 bar	16
P000-405-P5*	15	0 - 10 bar	16
P000-403-P5*	23	0 - 5 bar	16

Series PN Directly Operated Mini-Solenoid Valves

Part Number	QN (NI/min) (6 bar ΔP 1 bar)	Operating Pressures	Kv (l/min)	Page
PN000-301-P53	12	0 - 10 bar	0.19	17

Series PD

Part Number	QN (NI/min) (6 bar ΔP 1 bar)	Operating Pressures	Page
PD000-2A1-R53	25	0 - 12 bar	18
PD000-2A2-R55	35	0 - 12 bar	18
PD000-2A3-R55	45	0 - 7 bar	18
PD000-2A4-R58	85	0 - 6 bar	18
PD000-2A5-R58	125	0 - 4 bar	18
PD000-2C1-R53	25	0 - 12 bar	18
PD000-2C2-R55	35	0 - 12 bar	18
PD000-2C3-R55	45	0 - 7 bar	18
PD000-2C4-R58	85	0 - 6 bar	18
PD000-2C5-R58	125	0 - 4 bar	18
PD000-2E1-R53	25	0 - 12 bar	18
PD000-2E2-R55	35	0 - 12 bar	18
PD000-2E3-R55	45	0 - 7 bar	18

Series PL

Part Number	QN (NI/min) (6 bar ΔP 1 bar)	Operating Pressures	Kv (l/min)	Page
PL000-303-PL23	35	3 - 8 bar	0.54	19
PL000-503-PL23	35	3 - 8 bar	0.54	19
PL000-306-PL23	24*	-0.9 - 3 bar	0.54	19
PL000-506-PL23	24*	-0.9 - 3 bar	0.54	19

*Flow measurement at 3 bar ΔP1

Technical Data

Flow rates, minimum and maximum operating pressure

Series A Directly Operated Solenoid Valves

Part Number	Operating Pressures				Page
	QN (Nl/min)	Solenoid 3W	Solenoid 4-5W	Solenoid 3.5VA	
Valve function 2/2 NC					
A321-0C2-*	50	-0.9 - 8 bar	-0.9 - 15 bar	-0.9 - 15 bar	20
A321-1C2-*	55	-0.9 - 8 bar	-0.9 - 15 bar	-0.9 - 15 bar	20
A321-1D2-*	100	-0.9 - 4 bar	-0.9 - 9 bar	-0.9 - 9 bar	20
A321-1E2-*	130	-0.9 - 1 bar	-0.9 - 6 bar	-0.9 - 6 bar	20
Valve function 2/2 NO					
A322-0C2-*	70	2 - 10 bar	-0.9 - 10 bar	-0.9 - 10 bar	20
A322-1C2-*	80	2 - 10 bar	-0.9 - 10 bar	-0.9 - 10 bar	20

Valve function 3/2 NC

A331-0C2-*	50	2 - 10 bar	-0.9 - 10 bar	-0.9 - 10 bar	20
A331-1C2-*	60	2 - 10 bar	-0.9 - 10 bar	-0.9 - 10 bar	20
A331-3C2-*	55	2 - 10 bar	-0.9 - 10 bar	-0.9 - 10 bar	20
A331-4C2-*	55	2 - 10 bar	-0.9 - 10 bar	-0.9 - 10 bar	20
A431-1C2-*	50	2 - 10 bar	2 - 10 bar	2 - 10 bar	20
A531-BC2-*	40	2 - 10 bar	-0.9 - 10 bar	-0.9 - 10 bar	20
A631-AC2-*	40	2 - 10 bar	-0.9 - 10 bar	-0.9 - 10 bar	20
AA31-0C2-*	55	2 - 10 bar	-0.9 - 10 bar	-0.9 - 10 bar	20
AA31-0C3-*	55	2 - 8 bar	-0.9 - 8 bar	-0.9 - 8 bar	20
AA31-CC2-*	55	2 - 10 bar	-0.9 - 10 bar	-0.9 - 10 bar	20
AA31-CC3-*	55	2 - 8 bar	-0.9 - 8 bar	-0.9 - 8 bar	20

Valve function 3/2 NO

A332-0C2-*	55	-0.9 - 7 bar	-0.9 - 7 bar	-0.9 - 7 bar	20
A332-1C2-*	50	-0.9 - 7 bar	-0.9 - 7 bar	-0.9 - 7 bar	20
A333-0C2-*	60	-0.9 - 7 bar	-	-0.9 - 10 bar	20
A333-1C2-*	60	-0.9 - 7 bar	-	-0.9 - 10 bar	20
AA33-0C2-*	55	-0.9 - 7 bar	-	-0.9 - 10 bar	20
AA33-0C3-*	65	-0.9 - 7 bar	-	-0.9 - 8 bar	20
AA33-CC2-*	55	-0.9 - 7 bar	-	-0.9 - 8 bar	20
AA33-CC3-*	65	-0.9 - 7 bar	-	-0.9 - 8 bar	20

Series 6 Directly Operated Solenoid Valves

Part Number	QN (Nl/min)	Operating Pressures		Page
		Solenoid DC	Solenoid AC	
638-150-A6*	130	0 - 10 bar	-	21
648-150-A6*	80	0 - 8 bar	0 - 6 bar	21
638M-101-A6*	120	0 - 10 bar	0 - 10 bar	21
63CM-101-A6*	108	0 - 10 bar	0 - 10 bar	21
600-450-A6*	106	0 - 10 bar	0 - 10 bar	21
600-457-A6*	106	0 - 10 bar	0 - 10 bar	21
623-15E-A6*	230	0 - 15 bar	0 - 15 bar	21
623-15F-A6*	333	0 - 14 bar	0 - 14 bar	21
623-15G-A6*	520	0 - 6 bar	0 - 6 bar	21

Series CFB

Part Number	Orifice ØD (mm)	Kv (m³/h with water)	Minimum Pilot Pressure	Page
CFB-D21A-...X-*	1.5	0.08	0 - 25 bar	22
CFB-D21B-...X-*	2	0.10	0 - 22 bar	22
CFB-D21C-...X-*	2.5	0.14	0 - 15 bar	22
CFB-D22B-...X-*	2	0.10	0 - 22 bar	22
CFB-D22C-...X-*	2.5	0.14	0 - 15 bar	22
CFB-D22E-...X-*	3	0.18	0 - 10 bar	22
CFB-D23E-...X-*	3	0.18	0 - 10 bar	22
CFB-D23F-...X-*	4	0.28	0 - 6 bar	22
CFB-D24E-...X-*	3	0.18	0 - 10 bar	22
CFB-D24F-...X-*	4	0.28	0 - 6 bar	22

Series E Valves - with outlets on the body

Part Number	Flow Rate Nl/min	Operating Pressures	Minimum Pilot Pressure	Page
E521-36	200	2.5 - 7 bar	2.5 bar	23
E521-C36	200	2.5 - 7 bar	2.5 bar	23
E521-33	200	-0.9 - 7 bar	1 bar	23
E521-C33	200	-0.9 - 7 bar	1 bar	23
E621-33	200	-0.9 - 7 bar	2 bar	23
E621-C33	200	-0.9 - 7 bar	2 bar	23
E721-33	200	-0.9 - 7 bar	2 bar	23
E721-C33	200	-0.9 - 7 bar	2 bar	23
E821-33	200	-0.9 - 7 bar	2 bar	23
E821-C33	200	-0.9 - 7 bar	2 bar	23
E521-16-10-K1*	200	2.5 - 7 bar	-	23
E521-11-10-K1*	200	1 - 7 bar	-	23
E621-11-10-K1*	200	2 - 7 bar	-	23
E721-11-10-K1*	200	2 - 7 bar	-	23
E821-11-10-K1*	200	2 - 7 bar	-	23

Series E Valves - base mounted body

Part Number	Flow Rate Nl/min	Operating Pressures	Minimum Pilot Pressure	Page
E520-36	280	2.5 - 7 bar	2.5 bar	24
E520-C36	280	2.5 - 7 bar	2.5 bar	24
E520-33	280	-0.9 - 7 bar	1 bar	24
E520-C33	280	-0.9 - 7 bar	1 bar	24
E620-33	280	-0.9 - 7 bar	2 bar	24
E620-C33	280	-0.9 - 7 bar	2 bar	24
E720-33	280	-0.9 - 7 bar	2 bar	24
E720-C33	280	-0.9 - 7 bar	2 bar	24
E820-33	280	-0.9 - 7 bar	2 bar	24
E820-C33	280	-0.9 - 7 bar	2 bar	24
E520-16-10-K1*	280	2 - 7 bar	-	24
E520-11-10-K1*	280	2 - 7 bar	-	24
E620-11-10-K1*	280	2 - 7 bar	-	24
E720-11-10-K1*	280	2 - 7 bar	-	24
E820-11-10-K1*	280	2 - 7 bar	-	24

*See coding example

Technical Data

Flow rates, minimum and maximum operating pressure

Series EN Solenoid Valves				
Part Number	Flow Rate NI/min	Operating Pressures	Minimum Pilot Pressure	Page
EN531-36	550	-0.9 - 10 bar	2.5	28
EN551-36	920	-0.9 - 10 bar	2.5	28
EN531-33	550	-0.9 - 10 bar	2	28
EN551-33	920	-0.9 - 10 bar	2	28
EN631-33	550	-0.9 - 10 bar	3	28
EN651-33	920	-0.9 - 10 bar	3	28
EN731-33	550	-0.9 - 10 bar	3	28
EN751-33	920	-0.9 - 10 bar	3	28
EN831-33	550	-0.9 - 10 bar	3	28
EN851-33	920	-0.9 - 10 bar	3	28
EN531-16-P*	550	2.5 - 10 bar	-	28
EN551-16-P*	920	2.5 - 10 bar	-	28
EN531-16-W*	550	2.5 - 10 bar	-	28
EN551-16-W*	920	2.5 - 10 bar	-	28
EN531-E16-P*	550	-0.9 - 10 bar	2.5	28
EN551-E16-P*	920	-0.9 - 10 bar	2.5	28
EN531-E16-W*	550	-0.9 - 10 bar	2.5	28
EN551-E16-W*	920	-0.9 - 10 bar	2.5	28
EN531-11-P*	550	2 - 10 bar	-	28
EN551-11-P*	920	2 - 10 bar	-	28
EN531-11-W*	550	2 - 10 bar	-	28
EN551-11-W*	920	2 - 10 bar	-	28
EN531-E11-P*	550	-0.9 - 10 bar	2	28
EN551-E11-P*	920	-0.9 - 10 bar	2	28
EN531-E11-W*	550	-0.9 - 10 bar	2	28
EN551-E11-W*	920	-0.9 - 10 bar	2	28
EN531-16-PN*	550	2.5 - 10 bar	-	28
EN551-16-PN*	920	2.5 - 10 bar	-	28
EN531-E16-PN*	550	-0.9 - 10 bar	2.5	28
EN551-E16-PN*	920	-0.9 - 10 bar	2.5	28
EN531-11-PN*	550	2 - 10 bar	-	28
EN551-11-PN*	920	2 - 10 bar	-	28
EN531-E11-PN*	550	-0.9 - 10 bar	2	28
EN551-E11-PN*	920	-0.9 - 10 bar	2	28
EN631-11-P*	550	3 - 10 bar	-	29
EN651-11-P*	920	3 - 10 bar	-	29
EN631-11-W*	550	3 - 10 bar	-	29
EN651-11-W*	920	3 - 10 bar	-	29
EN731-11-P*	550	3 - 10 bar	-	29
EN751-11-P*	920	3 - 10 bar	-	29
EN731-11-W*	550	3 - 10 bar	-	29
EN751-11-W*	920	3 - 10 bar	-	29
EN831-11-P*	550	3 - 10 bar	-	29
EN851-11-P*	920	3 - 10 bar	-	29
EN831-11-W*	550	3 - 10 bar	-	29
EN851-11-W*	920	3 - 10 bar	-	29
EN631-E11-P*	550	-0.9 - 10	3	29
EN651-E11-P*	920	-0.9 - 10	3	29
EN631-E11-W*	550	-0.9 - 10	3	29
EN651-E11-W*	920	-0.9 - 10	3	29

*See coding example

Series EN Solenoid Valves				
Part Number	Flow Rate NI/min	Operating Pressures	Minimum Pilot Pressure	Page
EN731-E11-P*	550	-0.9 - 10 bar	3	29
EN751-E11-P*	920	-0.9 - 10 bar	3	29
EN731-E11-W*	550	-0.9 - 10 bar	3	29
EN751-E11-W*	920	-0.9 - 10 bar	3	29
EN831-E11-P*	550	-0.9 - 10 bar	3	29
EN851-E11-P*	920	-0.9 - 10 bar	3	29
EN831-E11-W*	550	-0.9 - 10 bar	3	29
EN851-E11-W*	920	-0.9 - 10 bar	3	29
EN631-11-PN*	550	3 - 10 bar	-	29
EN651-11-PN*	920	3 - 10 bar	-	29
EN731-E11-PN*	550	-0.9 - 10 bar	3	29
EN751-11-PN*	920	3 - 10 bar	-	29
EN831-11-PN*	550	3 - 10 bar	-	29
EN851-11-PN*	920	3 - 10 bar	-	29
EN631-E11-PN*	550	-0.9 - 10 bar	3	29
EN651-E11-PN*	920	-0.9 - 10 bar	3	29
EN731-E11-PN*	550	-0.9 - 10 bar	3	29
EN751-E11-PN*	920	-0.9 - 10 bar	3	29
EN831-E11-PN*	550	-0.9 - 10 bar	3	29
EN851-E11-PN*	920	-0.9 - 10 bar	3	29
EN530-36	610	2.5 - 10 bar	2.5	30
EN550-36	1000	2 - 10 bar	2.5	30
EN530-33	610	-0.9 - 10 bar	2	30
EN550-33	1000	-0.9 - 10 bar	2	30
EN630-33	610	-0.9 - 10 bar	3	30
EN650-33	1000	-0.9 - 10 bar	3	30
EN730-33	610	-0.9 - 10 bar	3	30
EN750-33	1000	-0.9 - 10 bar	3	30
EN830-33	610	-0.9 - 10 bar	3	30
EN850-33	1000	-0.9 - 10 bar	3	30
EN530-16-P*	610	2.5 - 10 bar	-	30
EN550-16-P*	1000	2.5 - 10 bar	-	30
EN530-16-W*	610	2.5 - 10 bar	-	30
EN550-16-W*	1000	2.5 - 10 bar	-	30
EN530-E16-P*	610	-0.9 - 10 bar	2.5	30
EN550-E16-P*	1000	-0.9 - 10 bar	2	30
EN530-E16-W*	610	-0.9 - 10 bar	2.5	30
EN550-E16-W*	1000	-0.9 - 10 bar	2	30
EN530-11-P*	610	2 - 10 bar	-	30
EN550-11-P*	1000	2 - 10 bar	-	30
EN530-11-W*	610	2 - 10 bar	-	30
EN550-11-W*	1000	2 - 10 bar	-	30
EN530-E11-P*	610	-0.9 - 10 bar	2	30
EN550-E11-P*	1000	-0.9 - 10 bar	2	30
EN530-E11-W*	610	-0.9 - 10 bar	2	30
EN550-E11-W*	1000	-0.9 - 10 bar	2	30
EN530-16-PN*	610	2.5 - 10 bar	-	30
EN550-16-PN*	1000	2.5 - 10 bar	-	30
EN530-E16-PN*	610	-0.9 - 10 bar	2.5	30
EN550-E16-PN*	1000	-0.9 - 10 bar	2.5	30

Technical Data

Flow rates, minimum and maximum operating pressure

Series EN Solenoid Valves				
Part Number	Flow Rate Nl/min	Operating Pressures	Minimum Pilot Pressure	Page
EN530-11-PN*	610	2 - 10 bar	-	30
EN550-11-PN*	1000	2 - 10 bar	-	30
EN530-E11-PN*	610	-0.9 - 10 bar	2	30
EN550-E11-PN*	1000	-0.9 - 10 bar	3	30
EN630-11-P*	610	3 - 10 bar	-	31
EN650-11-P*	1000	3 - 10 bar	-	31
EN630-11-W*	610	3 - 10 bar	-	31
EN650-11-W*	1000	3 - 10 bar	-	31
EN730-11-P*	610	3 - 10 bar	-	31
EN750-11-P*	1000	3 - 10 bar	-	31
EN730-11-W*	610	3 - 10 bar	-	31
EN750-11-W*	1000	3 - 10 bar	-	31
EN830-11-P*	610	3 - 10 bar	-	31
EN850-11-P*	1000	3 - 10 bar	-	31
EN830-11-W*	610	3 - 10 bar	-	31
EN850-11-W*	1000	3 - 10 bar	-	31
EN630-E11-P*	610	-0.9 - 10 bar	3	31
EN650-E11-P*	1000	-0.9 - 10 bar	3	31
EN630-E11-W*	610	-0.9 - 10 bar	3	31
EN650-E11-W*	1000	-0.9 - 10 bar	3	31
EN730-E11-P*	610	-0.9 - 10 bar	3	31
EN750-E11-P*	1000	-0.9 - 10 bar	3	31
EN730-E11-W*	610	-0.9 - 10 bar	3	31
EN750-E11-W*	1000	-0.9 - 10 bar	3	31
EN830-E11-P*	610	-0.9 - 10 bar	3	31
EN850-E11-P*	1000	-0.9 - 10 bar	3	31
EN830-E11-W*	610	-0.9 - 10 bar	3	31
EN850-E11-W*	1000	-0.9 - 10 bar	3	31
EN630-11-PN*	610	3 - 10 bar	-	31
EN650-11-PN*	1000	3 - 10 bar	-	31
EN730-11-PN*	610	3 - 10 bar	-	31
EN750-11-PN*	1000	3 - 10 bar	-	31
EN830-11-PN*	610	3 - 10 bar	-	31
EN850-11-PN*	1000	3 - 10 bar	-	31
EN630-E11-PN*	610	-0.9 - 10 bar	3	31
EN650-E11-PN*	1000	-0.9 - 10 bar	3	31
EN730-E11-PN*	610	-0.9 - 10 bar	3	31
EN750-E11-PN*	1000	-0.9 - 10 bar	3	31
EN830-E11-PN*	610	-0.9 - 10 bar	3	31
EN850-E11-PN*	1000	-0.9 - 10 bar	3	31

Series 3 and 4 Electropneumatically Operated Valves				
Part Number	Flow Rate Nl/min	Operating Pressures	Minimum Pilot Pressure	Page
338-015-02-*	700	2.5 - 10 bar	-	33
338L-015-02-*	700	2.5 - 10 bar	-	33
348-015-02-*	700	2.5 - 10 bar	-	33
348L-015-02-*	700	2.5 - 10 bar	-	33
338-011-02-*	700	1.5 - 10 bar	-	33
338L-011-02-*	700	1.5 - 10 bar	-	33
338D-015-02-*	700	2.5 - 10 bar	-	33
348D-015-02-*	700	2.5 - 10 bar	-	33
338D-E15-02-*	700	-0.9 - 10 bar	2.5 bar	33
348D-E15-02-*	700	-0.9 - 10 bar	2.5 bar	33
398D-015-02-*	700	2.5 - 10 bar	-	33
398D-E15-02-*	700	-0.9 - 10 bar	2.5 bar	33
358-015-02-*	700	2.5 - 10 bar	-	33
358-E15-02-*	700	-0.9 - 10 bar	2.5 bar	33
358-016-02-*	700	2.5 - 10 bar	-	33
358-011-02-*	700	1.5 - 10 bar	-	33
358-E11-02-*	700	-0.9 - 10 bar	1.5 - 10 bar	33

Series 3 and 4 Electropneumatically Operated Valves				
Part Number	Flow Rate Nl/min	Operating Pressures	Pilot Pressure	Page
368-011-02-*	700	2 - 10 bar	-	34
368-E11-02-*	700	-0.9 - 10 bar	2 - 10 bar	34
378-011-02-*	700	2 - 10 bar	-	34
378-E11-02-*	700	-0.9 - 10 bar	2 - 10 bar	34
388-011-02-*	700	2 - 10 bar	-	34
388-E11-02-*	700	-0.9 - 10 bar	2 - 10 bar	34
334-015-02-*	1300	2.5 - 10 bar	-	34
334-E15-02-*	1300	-0.9 - 10 bar	2.5 - 10 bar	34
344-015-02-*	1300	2.5 - 10 bar	-	34
344-E15-02-*	1300	-0.9 - 10 bar	2.5 - 10 bar	34
334-011-02-*	1300	2.5 - 10 bar	-	34
334-E11-02-*	1300	-0.9 - 10 bar	2.5 - 10 bar	34
334D-015-02-*	1200	2.5 - 10 bar	-	35
334D-E15-02-*	1200	-0.9 - 10 bar	2.5 - 10 bar	35
344D-015-02-*	1050	2.5 - 10 bar	-	35
344D-E15-02-*	1050	-0.9 - 10 bar	2.5 - 10 bar	35
394D-015-02-*	1050	2 - 10 bar	-	35
394D-E15-02-*	1050	-0.9 - 10 bar	2.5 - 10 bar	35
354-015-02-*	1300	2.5 - 10 bar	-	35
354-E15-02-*	1300	-0.9 - 10 bar	2.5 - 10 bar	35
354-011-02-*	1300	2.5 - 10 bar	-	35
354-E11-02-*	1300	-0.9 - 10 bar	2.5 - 10 bar	35
364-011-02-*	1200	2.5 - 10 bar	-	36
364-E11-02-*	1200	-0.9 - 10 bar	2.5 - 10 bar	36
374-011-02-*	1200	2.5 - 10 bar	-	36
374-E11-02-*	1200	-0.9 - 10 bar	2.5 - 10 bar	36
384-011-02-*	1200	2.5 - 10 bar	-	36
384-E11-02-*	1200	-0.9 - 10 bar	2.5 - 10 bar	36
438-015-22-*	650	2.5 - 10 bar	-	36

*See voltage coding

Technical Data

Flow rates, minimum and maximum operating pressure

Series 3 and 4 Electropneumatically Operated Valves				
Part Number	Flow Rate Nl/min	Operating Pressures	Minimum Pilot Pressure	Page
438-016-22-*	650	2.5 - 10 bar	-	36
438-011-22-*	650	2 - 10 bar	-	36
458-015-22-*	650	2.5 - 10 bar	-	36
458-016-22-*	650	2.5 - 10 bar	-	36
458-011-22-*	650	2 - 10 bar	-	36
468-011-22-*	600	2 - 10 bar	-	37
478-011-22-*	600	2 - 10 bar	-	37
434-015-22-*	1250	2 - 10 bar	-	37
434-016-22-*	1250	2 - 10 bar	-	37
434-011-22-*	1250	2 - 10 bar	-	37
454-015-22-*	1250	2.5 - 10 bar	-	37
454-016-22-*	1250	2.5 - 10 bar	-	37
454-011-22-*	1250	2 - 10 bar	-	37
454-V15-22-*	1250	2.5 - 10 bar	-	37
454-V16-22-*	1250	2.5 - 10 bar	-	37
454-V11-22-*	1250	2 - 10 bar	-	37
464-011-22-*	1250	3 - 10 bar	-	37
474-011-22-*	1250	3 - 10 bar	-	37
452C-015-50-A6*	2500	2.5 - 10 bar	-	38
452C-016-50-A6*	2500	2.5 - 10 bar	-	38
452C-011-50-A6*	2500	2 - 10 bar	-	38

Series 3 and 4 Pneumatically Operated Valves				
Part Number	Flow Rate Nl/min	Operating Pressures	Minimum Pilot Pressure	Page
338-035	700	-0.9 - 10 bar	2.5 bar	39
338L-035	700	-0.9 - 10 bar	2.5 bar	39
334-035	1300	-0.9 - 10 bar	3 bar	39
338-033	700	-0.9 - 10 bar	1.5 bar	39
338L-033	700	-0.9 - 10 bar	1.5 bar	39
334-033	1300	-0.9 - 10 bar	2.5 bar	39
358-035	700	-0.9 - 10 bar	2.5 bar	39
354-035	1300	-0.9 - 10 bar	3 bar	39
358-033	700	-0.9 - 10 bar	1.5 bar	39
354-033	1300	-0.9 - 10 bar	2.5 bar	39
368-033	700	-0.9 - 10 bar	2.5 bar	39
364-033	1200	-0.9 - 10 bar	2.5 bar	39
378-033	700	-0.9 - 10 bar	2.5 bar	39
374-033	1050	-0.9 - 10 bar	2.5 bar	39
388-033	700	-0.9 - 10 bar	2.5 bar	39
384-033	1050	-0.9 - 10 bar	2.5 bar	39
338D-035	700	-0.9 - 10 bar	2.5 bar	39
334D-035	1050	-0.9 - 10 bar	2.5 bar	39
348D-035	700	-0.9 - 10 bar	2.5 bar	39
344D-035	1050	-0.9 - 10 bar	2.5 bar	39
398D-035	700	-0.9 - 10 bar	2.5 bar	39
394D-035	1050	-0.9 - 10 bar	2.5 bar	39
438-35	700	-0.9 - 10 bar	2.5 bar	39
458-35	700	-0.9 - 10 bar	2.5 bar	39
438-33	700	-0.9 - 10 bar	2 bar	39

*See voltage coding


Series 3 and 4 Pneumatically Operated Valves				
Part Number	Flow Rate Nl/min	Operating Pressures	Minimum Pilot Pressure	Page
438-34	700	-0.9 - 10 bar	2 bar	39
458-33	700	-0.9 - 10 bar	2 bar	39
458-34	700	-0.9 - 10 bar	2 bar	39
434-35	1250	-0.9 - 10 bar	2.5 bar	40
454-35	1250	-0.9 - 10 bar	2.5 bar	40
434-33	1250	-0.9 - 10 bar	2 bar	40
434-34	1250	-0.9 - 10 bar	2 bar	40
454-33	1250	-0.9 - 10 bar	2 bar	40
454-34	1250	-0.9 - 10 bar	2 bar	40
468-33	700	-0.9 - 10 bar	2.5 bar	40
464-33	1250	-0.9 - 10 bar	2.5 bar	40
474-33	1200	-0.9 - 10 bar	2.5 bar	40
452C-35	2500	-0.9 - 10 bar	2.5 bar	40
452C-33	2500	-0.9 - 10 bar	2 bar	40
452C-34	2500	-0.9 - 10 bar	2 bar	40

Series 9 Electropneumatically and Pneumatically Operated Valves				
Part Number	Flow Rate Nl/min	Operating Pressures	Minimum Pilot Pressure	Page
951-000-P15-23-*	900	2.5 - 10 bar	-	44
952-000-P15-23-*	1610	2.5 - 10 bar	-	44
953-000-P15-23-*	4350	2.5 - 10 bar	-	44
951-000-P16-23-*	900	2.5 - 10 bar	-	44
952-000-P16-23-*	1610	2.5 - 10 bar	-	44
953-000-P16-23-*	4350	2.5 - 10 bar	-	44
951-000-P11-23-*	900	2.5 - 10 bar	-	44
952-000-P11-23-*	1610	2.5 - 10 bar	-	44
953-000-P11-23-*	4350	2.5 - 10 bar	-	44
961-000-P11-23-*	900	2.5 - 10 bar	-	44
962-000-P11-23-*	1610	2.5 - 10 bar	-	44
963-000-P11-23-*	4350	2.5 - 10 bar	-	44
971-000-P11-23-*	900	2.5 - 10 bar	-	44
972-000-P11-23-*	1610	2.5 - 10 bar	-	44
973-000-P11-23-*	4350	2.5 - 10 bar	-	44
951-000-33	900	2 - 10 bar	2 bar	44
952-000-33	1610	2 - 10 bar	2 bar	44
953-000-33	4350	2 - 10 bar	2 bar	44
951-000-34	900	2 - 10 bar	2 bar	44
952-000-34	1610	2 - 10 bar	2 bar	44
953-000-34	4350	2 - 10 bar	2 bar	44
951-000-35	900	2.5 - 10 bar	2.5 bar	44
952-000-35	1610	2.5 - 10 bar	2.5 bar	44
953-000-35	4350	2.5 - 10 bar	2.5 bar	44
961-000-33	900	2.5 - 10 bar	2 bar	44
962-000-33	1610	2.5 - 10 bar	2 bar	44
963-000-33	4350	2.5 - 10 bar	2 bar	44
971-000-33	900	2.5 - 10 bar	2 bar	44
972-000-33	1610	2.5 - 10 bar	2 bar	44
973-000-33	4350	2.5 - 10 bar	2 bar	44

*See voltage coding

Technical Data

Flow rates, minimum and maximum operating pressure

Series NA NAMUR Valves				
Part Number	Flow Rate NI/min	Operating Pressures	Minimum Pilot Pressure	Page
NA54N-15-02-*	1000	2 - 10 bar	-	46
NA34N-15-02-*	1000	2 - 10 bar	-	46
NA44N-15-02-*	1000	2 - 10 bar	-	46
NA54N-11-02-*	1000	1 - 10 bar	-	46
NA34N-11-02-*	1000	1 - 10 bar	-	46
NA54N-33	1000	-0.9 - 10 bar	2.5 bar	46
NA64N-33	1000	-0.9 - 10 bar	2.5 bar	46
NA74N-33	1000	-0.9 - 10 bar	2.5 bar	46
NA84N-33	1000	-0.9 - 10 bar	2.5 bar	46
NA54N-35	1000	-0.9 - 10 bar	2.5 bar	46
NA64N-11-02-*	1000	1.5 - 10 bar	-	46
NA74N-11-02-*	1000	1.5 - 10 bar	-	46
NA84N-11-02-*	1000	1.5 - 10 bar	-	46
Series 3 Valve Island				
See individual valve codes Section 2/5 for flow rate and operating pressures				
Series Y Valve Island				
Part Number	Flow Rate NI/min	Operating Pressures	Pilot Pressure	Page
All Series Y	800	-0.9 - 10 bar	3 - 7 bar	61
Series H Valve Island				
Part Number	Flow Rate NI/min	Operating Pressures	Pilot Pressure	Page
Series H 10.5mm	400	-0.9 - 10 bar	3 - 7 bar	65
Series H 21mm	700	-0.9 - 10 bar	3 - 7 bar	65
Series F Valve Island 				
Part Number	Flow Rate NI/min	Operating Pressures	Pilot Pressure	Page
Series F 12mm	250	-0.9 - 10 bar	3 - 7 bar	69
Series F 14mm	500	-0.9 - 10 bar	3 - 7 bar	69

*Actuating Force at 6 bar

Series 2 Mechanically Operated Minivalves				
Part Number	Flow Rate NI/min	Operating Pressures	Actuating Force*	Page
235-945	60	2 - 8 bar	6 N	76
234-945	60	2 - 8 bar	6 N	76
245-945	60	2 - 8 bar	6 N	76
244-945	60	2 - 8 bar	6 N	76
235-985	60	2 - 8 bar	6 N	76
234-985	60	2 - 8 bar	6 N	76
245-985	60	2 - 8 bar	6 N	76
244-985	60	2 - 8 bar	6 N	76
235-955	60	2 - 8 bar	4 N	76
234-955	60	2 - 8 bar	4 N	76
245-955	60	2 - 8 bar	4 N	76
244-955	60	2 - 8 bar	4 N	76
235-965	60	2 - 8 bar	6 N	76
234-965	60	2 - 8 bar	6 N	76
245-965	60	2 - 8 bar	6 N	76
244-965	60	2 - 8 bar	6 N	76
Series 1 and 3 Mechanically Operated Valves				
Part Number	Flow Rate NI/min	Operating Pressures	Actuating Force*	Page
338-945	700	-0.9 - 10 bar	32 N	76
358-945	700	-0.9 - 10 bar	35 N	76
338-955	700	-0.9 - 10 bar	15 N	76
358-955	700	-0.9 - 10 bar	17 N	76
338-965	700	-0.9 - 10 bar	15 N	77
358-965	700	-0.9 - 10 bar	16 N	77
138-945	500	0 - 10 bar	70 N	77
148-945	500	0 - 10 bar	70 N	77
158-945	500	0 - 10 bar	120 N	77
138-955	500	0 - 10 bar	36 N	77
158-955	500	0 - 10 bar	92 N	77
138-965	500	0 - 10 bar	41 N	77
134-945	1250	0 - 10 bar	64 N	77
154-945	1250	0 - 10 bar	147 N	77
134-955	1250	0 - 10 bar	41 N	77
154-955	1250	0 - 10 bar	110 N	77

*Actuating Force at 6 bar

Technical Data

Flow rates, minimum and maximum operating pressure

Series 3 and 4 Mechanically Operated Sensor Valves				
Part Number	Flow Rate NI/min	Operating Pressures	Actuating Force*	Page
338-D15-9A5	700	4 - 10 bar	2 N	78
348-D15-9A5	700	4 - 10 bar	2 N	78
358-D15-9A5	700	4 - 10 bar	2 N	78
458-015-194	650	2.5 - 8 bar	6 N	78
458-011-294	650	2 - 8 bar	6 N	78
454-015-194	1250	2.5 - 8 bar	6 N	78
454-011-294	1250	2 - 8 bar	6 N	78
458-015-195	650	2.5 - 8 bar	4 N	78
458-011-295	650	2 - 8 bar	4 N	79
454-015-195	1250	2.5 - 8 bar	4 N	79
454-011-295	1250	2 - 8 bar	4 N	79

Series 2 and 3 Pneumatic and Electrical - Foot Operated Pedal				
Part Number	Flow Rate NI/min	Operating Pressures	Actuating Force*	Page
354N-925	650	2.5 - 8 bar	17 N	79
3E2-925	-	-	-	79
235-925	60	2 - 8 bar	-	79
234-925	60	2 - 8 bar	-	79

Series 2 Manually Operated Console Minivalves				
Part Number	Flow Rate NI/min	Operating Pressures	Actuating Force*	Page
235-895	60	2 - 8 bar	7 N	80
234-895	60	2 - 8 bar	7 N	80
235-975	60	2 - 8 bar	7 N	80
234-975	60	2 - 8 bar	7 N	80
235-972	60	2 - 8 bar	7 N	80
234-972	60	2 - 8 bar	7 N	80
235-905	60	2 - 8 bar	-	80
234-905	60	2 - 8 bar	-	80
235-990	60	2 - 8 bar	-	81
234-990	60	2 - 8 bar	-	81
285-870	60	2 - 8 bar	-	81
284-870	60	2 - 8 bar	-	81
235-904	60	2 - 8 bar	-	81
234-904	60	2 - 8 bar	-	81
235-000	60	2 - 8 bar	-	81
234-000	60	2 - 8 bar	-	81
245-000	60	2 - 8 bar	-	81
244-000	60	2 - 8 bar	-	81
285-000	60	2 - 8 bar	-	81
284-000	60	2 - 8 bar	-	81
234-9054	60	2 - 8 bar	-	81

*Actuating Force at 6 bar

Series 1, 3, 4 and VMS Manually Operated Valves				
Part Number	Flow Rate NI/min	Operating Pressures	Actuating Force*	Page
338-990	700	-0.9 - 10 bar	18 N	82
358-990	700	-0.9 - 10 bar	18 N	82
338-895	700	-0.9 - 10 bar	35 N	82
338-896	700	-0.9 - 10 bar	35 N	82
338-897	700	-0.9 - 10 bar	35 N	82
358-895	700	-0.9 - 10 bar	35 N	82
358-896	700	-0.9 - 10 bar	35 N	82
358-897	700	-0.9 - 10 bar	35 N	82
338-975	700	-0.9 - 10 bar	35 N	82
338-976	700	-0.9 - 10 bar	35 N	82
338-977	700	-0.9 - 10 bar	35 N	82
358-975	700	-0.9 - 10 bar	35 N	82
358-976	700	-0.9 - 10 bar	35 N	82
358-977	700	-0.9 - 10 bar	35 N	82
338-910	700	-0.9 - 10 bar	6 N	82
338-915	700	-0.9 - 10 bar	35 N	82
358-910	700	-0.9 - 10 bar	6 N	82
358-915	700	-0.9 - 10 bar	35 N	82
338-900	700	-0.9 - 10 bar	6 N	82
338-905	700	-0.9 - 10 bar	35 N	82
358-900	700	-0.9 - 10 bar	5 N	82
358-905	700	-0.9 - 10 bar	22 N	82
368-900	500	-0.9 - 10 bar	5 N	82
368-905	500	-0.9 - 10 bar	20 N	82
378-900	500	-0.9 - 10 bar	5 N	82
378-905	500	-0.9 - 10 bar	20 N	82
434-910	1250	-0.9 - 10 bar	10 N	83
434-915	1250	-0.9 - 10 bar	37 N	83
454-910	1250	-0.9 - 10 bar	10 N	83
454-915	1250	-0.9 - 10 bar	37 N	83
434-900	1250	-0.9 - 10 bar	5 N	83
434-905	1250	-0.9 - 10 bar	37 N	83
454-900	1250	-0.9 - 10 bar	5 N	83
454-905	1250	-0.9 - 10 bar	37 N	83
464-900	1250	-0.9 - 10 bar	5 N	83
464-905	1250	-0.9 - 10 bar	10 N	83
474-900	1250	-0.9 - 10 bar	5 N	83
474-905	1250	-0.9 - 10 bar	10 N	83
138-900	500	0 - 10 bar	25 N	83
134-900	1250	0 - 10 bar	30 N	83
158-900	500	0 - 10 bar	45 N	83
154-900	1250	0 - 10 bar	55 N	83
138-935	500	0 - 10 bar	38 N	83
134-935	1250	0 - 10 bar	40 N	83

*Actuating Force at 6 bar

Series 1, 3, 4 and VMS Manually Operated Valves				
Part Number	Flow Rate NI/min P-A	Flow Rate NI/min A-R	Operating Pressures	Page
VMS-105-M5	140	145	0 - 8 bar	83
VMS-118-1/8	600	740	0 - 8 bar	83
VMS-114-1/4	1200	1780	0 - 8 bar	83
VMS-138-3/8	2100	1830	0 - 8 bar	83
VMS-112-1/2	3350	4030	0 - 8 bar	83
VMS-134-3/4	5350	5000	0 - 8 bar	83

Technical Data

Flow rates, minimum and maximum operating pressure

2

Series 2L Basic Logic Valves				
Part Number	Flow Rate (6 bar Δ P 1 bar)	Operating Pressures		Page
All Logic Valves	70	2 - 8 bar		85

Series SCS, VNR, VSC and VSO Automatic Valves				
Part Number	Flow Rate Nl/min	Operating Pressures	Min. Actuation Pressure	Page
SCS-668-06	800	0.2 - 10 bar	0.2 bar	86
VNR-205-M5	50	1 - 10 bar	1 bar	86
VNR-210-1/8	600	0.2 - 10 bar	0.2 bar	86
VNR-843-07	1400	0.2 - 10 bar	0.2 bar	86
VNR-238-3/8	3000	0.02 - 10 bar	0.02 bar	86
VNR-212-1/2	5800	0.02 - 10 bar	0.02 bar	86
VNR-234-3/4	8000	0.06 - 10 bar	0.06 bar	86
VSO-425-M5	50	100	1 bar	86
VSO-426-04	50	100	1 bar	86
VSC-588-1/8	650	1000	0.5 bar	86
VSC-544-1/4	1100	2300	0.3 bar	86
VSC-522-1/2	4500	6700	0.2 bar	86

For Technical Data on Flow Control Valves see full Camozzi Catalogue or contact our sales office for further details.

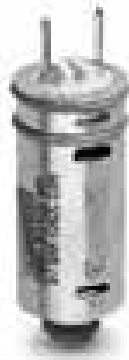
Series K8P Electronic Proportional Micro Regulator		
Part Number	Operating Pressures	Page
K8P-0-D5*2-0	0 - 10 bar	102
K8P-0-E5*2-0	0 - 3 bar	102
K8P-L-E5*2-0	0 - 3 bar	102
K8P-L-D5*2-0	0 - 10 bar	102
K8P-S-D5*2-0	0 - 10 bar	102
K8P-S-E5*2-0	0 - 3 bar	102
K8P-T-D5*2-0	0 - 10 bar	102
K8P-T-E5*2-0	0 - 3 bar	102

Series AP			
Part Number	Max Pressures (bar)	Kv (l/min)	Page
Size 16mm			
AP-6210-DR2-GP*	10 bar	0.4	104
AP-6210-FR2-GP*	8 bar	0.5	104
AP-6210-HR2-GP*	6 bar	0.65	104
AP-6210-LR2-GP*	4 bar	1.2	104
Size 22mm			
AP-7211-FR2-U7*	10 bar	0.5	104
AP-7211-HR2-U7*	8 bar	0.65	104
AP-7211-LR2-U7*	6 bar	1.0	104
AP-7211-NR2-U7*	5 bar	1.6	104
AP-7211-QR2-U7*	4 bar	2.0	104
Size 16mm - body in PVDF			
AP-6210-DR2-GP*	10 bar	0.4	104
AP-6210-FR2-GP*	8 bar	0.5	104
AP-6210-HR2-GP*	6 bar	0.65	104
AP-6210-LR2-GP*	4 bar	1.2	104

Series K8 Directly Operated Mini-Solenoid Valves

2/2 - 3/2 way

Normally Closed (NC) and Normally Open (NO)



Part Number (3/2)
K8000-303-K23
K8000-403-K23

Part Number (2/2)
K8000-503-K23
K8000-603-K23

Technical Data

Type of Construction
Direct acting poppet type

Media
Filtered air, class 5.4.4 according to ISO 8573-1, inert gas

Operating Pressure
See technical data page 2/2

Flow Rate
See technical data page 2/2

Kv
See technical data page 2/2

Operating Temperature
0°C to +50°C

Protection Class
IP00

Response Time (ISO 12238)
ON <10 msec - OFF <10 msec

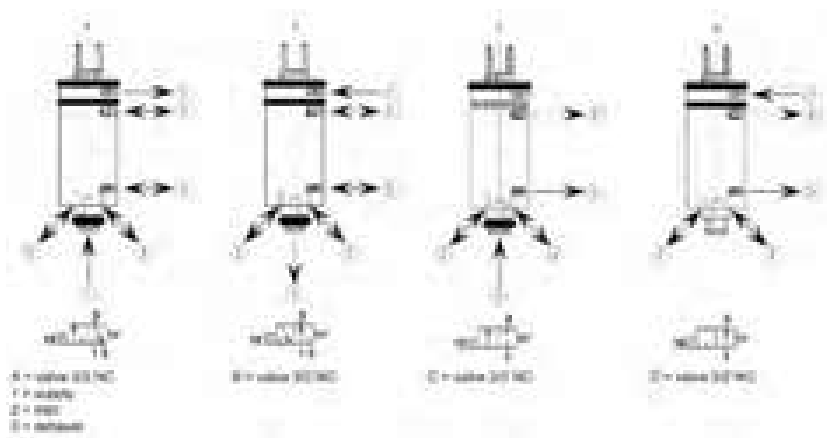
Materials
Body: Brass - stainless steel- PBT technopolymer
Seals: FKM (EPDM on demand)
Internal parts: stainless steel

Installation
In any position

Special Requests
For assistance, contact our technical office or your local Camozzi distributor.

CODING EXAMPLE

K8	0	00	-	3	0	3	-	K	2	3
K8 SERIES: K8				3 N° WAY - FUNCTIONS: 0 = single base 3 = 3 ways NC 4 = 3 ways NO 5 = 2 ways NC 6 = 2 ways NO				K MATERIALS: K = <None>		
0 BODY DESIGN: 0 = single valve				0 MATERIALS AND SEALS: 0 = poppet, FKM seals				2 CONNECTION TYPE: 2 = pin interface size 4mm		
00 N° OF POSITIONS: 00 = valve without seat				3 NOMINAL DIAMETER: 3 = 0.5				3 SOLENOID VOLTAGE: 1 = 6V DC (0.6 W) 2 = 12V DC (0.6 W) 3 = 24V DC (0.6 W)		



Connector



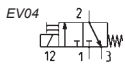
Part Number
120-803 with 300mm cable
120-806 with 600mm cable

Series K Directly Operated Mini-Solenoid Valves

3/2 Way N.C. or N.O.
Connection: M5.

The Camozzi range of Series K Directly Operated Solenoid Valves can work with dry or lubricated air.

90° Elec Connections

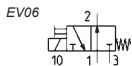


Part Number

K000-303-K13

K000-303-K23

K000-303-K33



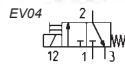
Part Number

K000-403-K13

K000-403-K23

K000-403-K33

In-line Elec Connections

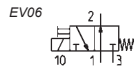


Part Number

K000-303-KB3

K000-303-KC3

K000-303-KD3



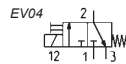
Part Number

K000-403-KB3

K000-403-KC3

K000-403-KD3

300mm Twin Wire

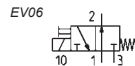


Part Number

K000-303-KF3

K000-303-KG3

K000-303-KH3



Part Number

K000-403-KF3

K000-403-KG3

K000-403-KH3

Technical Data

Type of Construction

Direct acting poppet type

Media

Filtered air, class 5.4.4 according to ISO 8573-1, inert gas

Operating Pressure

See technical data page 2/2

Flow Rate

See technical data page 2/2

Kv

See technical data page 2/2

Operating Temperature

0°C to +50°C

Materials

Body: PBT technopolymer
Seals: NBR (FKM on demand)
Internal parts: Stainless steel

Protection Class

IP50

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.

Note: Supplied with gasket, fixing screws and an interface for N.O. valves to mount to single base or manifold

CODING EXAMPLE

K	0	00	-	3	0	3	-	K	2	3
---	---	----	---	---	---	---	---	---	---	---

K SERIES: K	3 N° WAY - FUNCTIONS: 0 = manifold or single base 3 = 3 ways N.C. 4 = 3 ways N.O. 5 = 3 ways N.C. electric part revolved by 180° 6 = 3 ways N.O. electric part revolved by 180°	K ENCAPSULATING MATERIAL: K = PBT body, HNBR poppet F = PBT body, FKM poppet
0 BODY DESIGN: 0 = single sub-base 1 = manifold	0 CONNECTIONS: 0 = interface 2 = M5 side outlets	2 CONNECTION TYPE: 1 = conn. 90° with protection and LED 2 = conn. 90° with protection * 3 = connection 90° * B = in-line conn. with protection and LED * C = in-line conn. with protection * D = in-line connection * F = cable (300mm) with protection and LED * G = cable (300mm) with protection * H = cable (300mm) only
00 N° OF POSITIONS: 00 = interface 01 = single base (only M5) 02-99 = manifold number of positions	3 NOMINAL DIAMETER: 3 = 0.65	3 SOLENOID VOLTAGE: * 1 = 6V DC * 2 = 12V DC * 3 = 24V DC

Excluder tap



Part Number Thread

K000-TP M5 Ports

Single Sub-base



Part Number Thread

K001-02 M5 Ports

Manifold Part N°: K1**-02



Part Number Thread

K1*-02 M5 Ports

* = No of connections

Solenoid Connector



Part Number

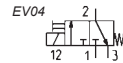
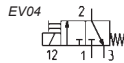
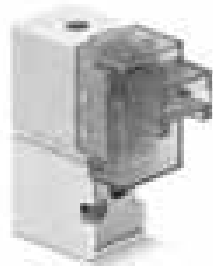
121-803 with 300mm cable

121-806 with 600mm cable

121-810 with 1000mm cable

Series KN Directly Operated Solenoid Valves

3/2 way Normally Closed (NC)
ISO 15218 Interface



Part Number
KN000-303-K13

Part Number
KN000-303-KB13

Technical Data

Type of Construction
Direct acting poppet type

Media
Filtered air class 5.4.4 according to ISO 8573-1, inert gas

Operating Pressure
See technical data page 2/2

Flow Rate
See technical data page 2/2

Kv
See technical data page 2/2

Operating Temperature
0°C to +50°C

Response Time
ON <10 msec - OFF <10 msec

Manual Override
Monostable button

Protection Class
IP50

Materials
Body: PBT technopolymer
Seals: HNBR, NBR (FKM on demand)
Internal Parts: Stainless steel

Special Requests
For assistance, contact our technical office or your local Camozzi distributor.

CODING EXAMPLE

KN	0	00	-	3	0	3	-	K	1	3
----	---	----	---	---	---	---	---	---	---	---

KN SERIES: KN		
0 BODY DESIGN: 0 = single valve	0 CONNECTIONS: 0 = single valve	1 CONNECTION TYPE: 1 = 90° connection with protection and led B = in-line connection with protection and led
00 N° OF POSITIONS: 00 = interface	3 NOMINAL DIAMETER: 3 = Ø 0.65mm	3 SOLENOID VOLTAGE: 2 = 12V DC 3 = 24V DC (1.3 W) inrush (0.25W holding) other voltages are available on request
3 N° WAY - FUNCTIONS: 3 = 3/2 ways NC	K MATERIALS: K = PBT body, HNBR poppet, NBR other seals F = PBT body, FKM poppet, NBR other seals	VERSIONS: = with screws for plastic (standard) M = with screws for metal

Solenoid Connector

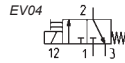
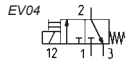


Part Number
121-803 with 300mm cable
121-806 with 600mm cable
121-810 with 1000mm cable

New

Series KN High Flow Directly Operated Solenoid Valves

3/2 way Normally Closed (NC)
ISO 15218 Interface



Part Number

KN000-305-F18

KN000-306-F18

Part Number

KN000-305-FB8

KN000-306-FB8

CODING EXAMPLE

KN	0	00	-	3	0	5	-	F	1	8	
----	---	----	---	---	---	---	---	---	---	---	--

KN	SERIES: KN										
0	BODY DESIGN: 0 = single valve			0 CONNECTIONS: 0 = single valve			1 CONNECTION TYPE: 1 = 90° connection with protection and led B = in-line connection with protection and led				
00	N° OF POSITIONS: 00 = interface			5 NOMINAL DIAMETER: 5 = Ø 1.1mm 6 = Ø 1.1mm			8 SOLENOID VOLTAGE: 2 = 12V DC 8 = 24V DC (4W) inrush (1W holding)				
3	N° WAY - FUNCTIONS: 3 = 3/2 ways NC			F MATERIALS: F = PBT body, FKM poppet, NBR other seals (FKM upon request)			FIXING: = with screws for plastic (standard) M = with screws for metal				

Technical Data

Type of Construction

Direct acting poppet type

Media

Filtered air, class 5.4.4 according to ISO 8573-1, inert gas

Operating Pressure

See technical data page 2/2

Flow Rate

See technical data page 2/2

Kv

See technical data page 2/2

Operating Temperature

0°C to +50°C

Response Time

ON <10 msec - OFF <10 msec

Manual Override

Monostable button

Protection Class

IP50

Materials

Body: PBT technopolymer
Seals: FKM, NBR (FKM on demand)
Internal Parts: Stainless Steel

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.

Solenoid Connector



Part Number

121-803 with 300mm cable

121-806 with 600mm cable


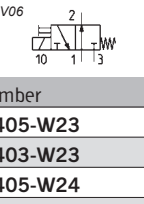
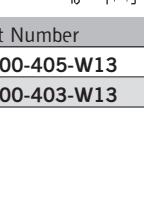
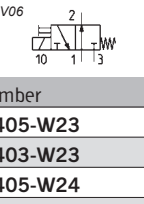
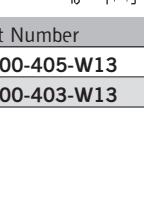
121-810 with 1000mm cable

Series W Directly Operated Mini-Solenoid Valves

3/2 Way N.C. or N.O.

Connection: M5 (for single base), Ø3mm and Ø4mm cartridge (for manifolds). Electrical connection according to DIN 43650

The Camozzi range of Series W Directly Operated Mini-Solenoid Valves can work with dry or lubricated air.

2 pin elec connections	2 wire elec connections	Accessories	Technical Data									
 <p>EV04</p> 	 <p>EV04</p> 		<p>Type of Construction Direct acting poppet type</p> <p>Media Filtered air, class 5.4.4 according to ISO 8573-1, inert gas</p> <p>Operating Pressure See technical data page 2/2</p> <p>Flow Rate See technical data page 2/2</p> <p>Kv 0.22 to 0.54 (l/min)</p> <p>Operating Temperature 0°C to +50°C.</p> <p>Response Time ON <10 msec - OFF <15 msec</p> <p>Manual Override Monostable button</p> <p>Protection Class IP65 with connector</p> <p>Materials Body: PBT technopolymer Seals: PU, NBR, (FKM on demand) Internal Parts: Stainless Steel</p> <p>Special Requests For assistance, contact our technical office or your local Camozzi distributor.</p>	<p>Part Number</p> <p>W000-305-W23</p> <p>W000-303-W23</p> <p>W000-305-W24</p> <p>W000-303-W24</p>	<p>Part Number</p> <p>W000-305-W13</p> <p>W000-303-W13</p>	<p>Part Number</p> <p>KC136000B7</p>	 <p>EV06</p> 	 <p>EV06</p> 		<p>Part Number</p> <p>W000-405-W23</p> <p>W000-403-W23</p> <p>W000-405-W24</p> <p>W000-403-W24</p>	<p>Part Number</p> <p>W000-405-W13</p> <p>W000-403-W13</p>	
<p>Part Number</p> <p>W000-305-W23</p> <p>W000-303-W23</p> <p>W000-305-W24</p> <p>W000-303-W24</p>	<p>Part Number</p> <p>W000-305-W13</p> <p>W000-303-W13</p>	<p>Part Number</p> <p>KC136000B7</p>										
 <p>EV06</p> 	 <p>EV06</p> 											
<p>Part Number</p> <p>W000-405-W23</p> <p>W000-403-W23</p> <p>W000-405-W24</p> <p>W000-403-W24</p>	<p>Part Number</p> <p>W000-405-W13</p> <p>W000-403-W13</p>											

Note: For manifolds please refer to Series P valves see page 2/16

Note: Supplied with gasket, fixing screws and an interface for N.O. valves to mount to single base or manifold

CODING EXAMPLE

W	0	00	-	3	0	3	-	W	2	3
W SERIES: W				3 N° WAY - FUNCTIONS: 0 = manifold or single base 3 = 3 ways N.C. 4 = 3 ways N.O. 5 = 3 ways N.C. electric part revolved by 180° 6 = 3 ways N.O. electric part revolved by 180°				W MATERIALS: W = technopolymer PBT body, FKM poppet seal, other seals in NBR (FKM on demand)		
0 BODY DESIGN: 0 = single sub-base (only M5) or interface 01 = single manifold 02 = double manifold				0 CONNECTIONS: 0 = interface MANIFOLD CONNECTIONS (for series W, P and PN): 2 = M5 side connection 3 = Ø3 tube side connection 4 = Ø4 tube side connection 6 = M5 rear connection 7 = Ø3 tube rear connection 8 = Ø4 tube rear connection				2 CONNECTION TYPE: 1 = cables 300mm (only 24V DC) 2 = 2 faston (24V - 48V DC)		
00 N° OF POSITIONS: 00 = interface 01 = single base (M5 only) 02-99 = manifold number of positions				3 NOMINAL DIAMETER: Nominal Diameter Max. Pressure 1 = Ø0.8 (1W) 10 bar (NC) 24V only 3 = Ø1.5 (2W) 7 bar (NC) 5 bar (NO) 5 = Ø1.1 NC (2W) 10 bar (NC) Ø0.9 NO (2W) 10 bar (NO)				3 SOLENOID VOLTAGE: 2 = 12V DC 3 = 24V DC 4 = 48V DC		



Series P Directly Operated Mini-Solenoid Valves

3/2 Way N.C. or N.O.

Connection: M5 (for single base), Ø3mm and Ø4mm cartridge (for manifolds).
ISO 15218 Interface

2

The Camozzi range of Series P Directly Operated Mini-Solenoid Valves can work with dry or lubricated air.

Part Number		Part Number	
P000-301-P53		P000-405-P53	
P000-303-P53		P000-403-P53	
P000-305-P53			
P000-306-P53			

Technical Data

Type of Construction
Direct acting poppet type

Media
Filtered air, class 5.4.4 according to ISO 8573-1, inert gas

Operating Pressure
See technical data page 2/2

Flow Rate
See technical data page 2/2

Kv
0.22 to 0.54 (l/min)

Operating Temperature
0°C to +50°C

Response Time
ON <10 msec - OFF <15 msec

Manual Override
Monostable button

Protection Class
IP65 with connector

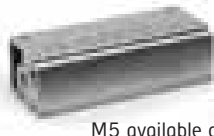
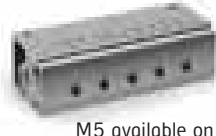

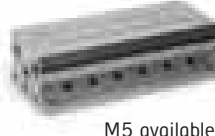
Materials
Body: PBT technopolymer
Seals: FKM, NBR (FKM on demand)
Internal Parts: Stainless Steel

Special Requests
For assistance, contact our technical office or your local Camozzi distributor.

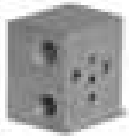



CODING EXAMPLE

P	0	00	-	3	0	3	-	P	5	3
P	SERIES: P									
0	BODY DESIGN: 0 = single sub-base or interface 1 = single manifold 2 = double sided manifold				3			NOMINAL DIAMETER: Nominal Diameter Max. Pressure 1 = Ø0.8 (1W) 10 bar (NC) 24V only 3 = Ø1.5 (2W) 7 bar (NC) 5 bar (NO) 5 = Ø1.1 NC (2W) 10 bar (NC) Ø0.9 NO (2W) 10 bar (NO) 6 = Ø1.5 NC (2W) 3 bar (NC)* *Voltage tolerance +10% -25%		
00	N° OF SEGMENTS: 00 = interface 01 = single base (M5 only) 02-99 = manifold number of positions				P			MATERIAL: P = technopolymer PBT body, FKM poppet seal, other seals in NBR (FKM on demand)		
3	N° OF CONNECTIONS AND FUNCTIONS: 0 = manifold or single base 3 = 3-ways N.C. 4 = 3-ways N.O. 5 = 3-ways N.C. electric part revolved by 180° 6 = 3-ways N.O. electric part revolved by 180°				5			SOLENOID DIMENSION: 5 = 3 faston size 9.4mm		
0	CONNECTIONS: 0 = interface (for single valve only) MANIFOLD CONNECTIONS (for series W, P and PN): 2 = M5 side connection 3 = Ø3 tube side connection 4 = Ø4 tube side connection 6 = M5 rear connection 7 = Ø3 tube rear connection 8 = Ø4 tube rear connection				3			SOLENOID VOLTAGE: B = 24V 50/60 Hz C = 48V 50/60 Hz D = 110V 50/60 Hz 2 = 12V DC 3 = 24V DC 4 = 48V DC 6 = 110V DC		

Manifolds

<p>Single manifold rear outlets</p>  <p>*7 = Ø3 *8 = Ø4 M5 available on request</p>	<p>Single manifold front outlets</p>  <p>*3 = Ø3 *4 = Ø4 M5 available on request</p>	<p>Double-sided manifold rear outlets</p>  <p>*7 = Ø3 *8 = Ø4 M5 available on request</p>	<p>Double-sided manifold front outlets</p>  <p>*3 = Ø3 *4 = Ø4 M5 available on request</p>
--	---	---	---

Part Number	Part Number	Part Number	Part Number
P102-0* (2 valves)	P102-0* (2 valves)	P204-0* (4 valves)	P204-0* (4 valves)
P103-0* (3 valves)	P103-0* (3 valves)	P206-0* (6 valves)	P206-0* (6 valves)
P104-0* (4 valves)	P104-0* (4 valves)	P208-0* (8 valves)	P208-0* (8 valves)
P105-0* (5 valves)	P105-0* (5 valves)	P210-0* (10 valves)	P210-0* (10 valves)
P106-0* (6 valves)	P106-0* (6 valves)	P212-0* (12 valves)	P212-0* (12 valves)

			
Part Number Thread	Part Number Thread	Part Number Cable Entry	Part Number Cable Length
P001-02 M5 Ports	P000-TP M5 Ports	KD136000B7 PG7	MD134000PA01300 3m

Series PN Directly Operated Mini-Solenoid Valves

3/2 way Normally Closed (NC).

The solenoid valves can be mounted on a single base (with M5 ports) as well as on manifolds (with M5 ports or cartridge Ø 3 and 4).



EV04



Part Number
PN000-301-P53

CODING EXAMPLE

PN	0	00	-	3	0	1	-	P	5	3
----	---	----	---	---	---	---	---	---	---	---

PN	SERIES: PN		
0	BODY DESIGN: 0 = single sub-base 1 = single manifold 2 = double sided manifold	1	NOMINAL DIAMETER: Nominal Diameter Max. Pressure 1 = Ø0.8 (1W) 10 bar (NC) 24V only
00	N° OF POSITIONS: 00 = interface 01 = single base (M5 only) 02-99 = manifold number of positions	P	ENCAPSULATING MATERIAL: P = PBT body, PU poppet seal
3	N° OF FUNCTIONS: 0 = manifold or single base 3 = 3 ways NC	5	SOLENOID DIMENSION: 5 = 3 faston size 9.4mm
0	CONNECTIONS: 0 = interface (for single valve only) MANIFOLD CONNECTIONS (for series W, P and PN): 2 = M5 side connection 3 = Ø3 tube side connection 4 = Ø4 tube side connection 6 = M5 rear connection 7 = Ø3 tube rear connection 8 = Ø4 tube rear connection	3	SOLENOID VOLTAGE: 3 = 24V DC 4 = 48V DC 6 = 110V DC 7 = 205V DC
			VERSIONS: = standard for the mounting on plastic interfaces M = with screw for the mounting on metal interfaces (on demand)

Technical Data	
Type of Construction	Direct acting poppet type
Media	Filtered air, class 5.4.4 according to ISO 8573-1, inert gas
Operating Pressure	See technical data page 2/2
Flow Rate	See technical data page 2/2
Kv	See technical data page 2/2
Operating Temperature	0°C to +50°C
Protection Class	IP65 with connector
Materials	Body: PBT technopolymer Seals: PU, NBR, (FKM on demand) Internal Parts: Stainless Steel
Special Requests	For assistance, contact our technical office or your local Camozzi distributor.

Manifolds

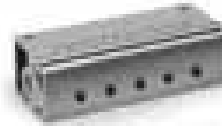
Single manifold rear outlets



*7= Ø3
*8= Ø4

M5 available on request

Single manifold front outlets



*3= Ø3
*4= Ø4

M5 available on request

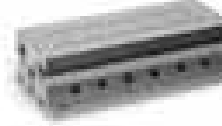
Double-sided manifold rear outlets



*7= Ø3
*8= Ø4

M5 available on request

Double-sided manifold front outlets



*3= Ø3
*4= Ø4

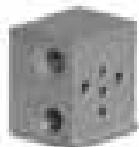
M5 available on request

Part Number
P102-0* (2 valves)
P103-0* (3 valves)
P104-0* (4 valves)
P105-0* (5 valves)
P106-0* (6 valves)

Part Number
P102-0* (2 valves)
P103-0* (3 valves)
P104-0* (4 valves)
P105-0* (5 valves)
P106-0* (6 valves)

Part Number
P204-0* (4 valves)
P206-0* (6 valves)
P208-0* (8 valves)
P210-0* (10 valves)
P212-0* (12 valves)

Part Number
P204-0* (4 valves)
P206-0* (6 valves)
P208-0* (8 valves)
P210-0* (10 valves)
P212-0* (12 valves)



Part Number	Thread
P001-02	M5 Ports

Part Number	Thread
P000-TP	M5 Ports

Part Number	Cable Entry
KD136000B7	PG7

Part Number	Cable Length
MD134000PA01300	3m

Series PD Directly Operated Solenoid Valves

2/2 Way Normally Closed (NC).

2

The Camozzi range of Series PD directly operated solenoid valves can work with dry or lubricated air.



Part Number
PD000-2A1-R53
PD000-2A2-R55
PD000-2A3-R55
PD000-2A4-R58
PD000-2A5-R58

Part Number
PD000-2C1-R53
PD000-2C2-R55
PD000-2C3-R55
PD000-2C4-R58
PD000-2C5-R58

Part Number
PD000-2E1-R53
PD000-2E2-R55
PD000-2E3-R55

Technical Data

Type of Construction

Direct acting poppet type

Media

Filtered air, class 5.4.4 according to ISO 8573-1, inert gas

Operating Pressure

See technical data page 2/2

Flow Rate

See technical data page 2/2

Kv

0.39 to 1.93(l/min)

Operating Temperature

0°C to +50°C

Nominal Diameter

Ø0.8 - Ø1.5mm

Response Time

ON <10 msec - OFF <15 msec

Materials

Body: Brass, anodized aluminium

Seals: NBR (FKM on demand)

Internal Parts: Stainless Steel

Protection Class

IP65 with connector

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.

CODING EXAMPLE

PD	0	00	-	2	A	1	-	R	5	3
----	---	----	---	---	---	---	---	---	---	---

PD	SERIES: PD
0	BODY DESIGN: 0 = single body
00	N° OF SEGMENTS: 00 = interface
2	N° OF CONNECTIONS AND FUNCTIONS: 2 = 2-ways N.C.
A	BODY MATERIALS AND CONNECTIONS: A = aluminium body, rear pneumatic interface C = aluminium body, low pneumatic interface E = Brass body, M5 connection (for ø up to 1.6mm)
1	NOMINAL DIAMETER: Nominal Diameter 1 = Ø0.8 2 = Ø1.2 3 = Ø1.6 4 = Ø2 5 = Ø2.5
R	MATERIAL: R = NBR F = FKM (on request)
5	TYPE OF ELECTRICAL CONNECTION: 5 = 3 faston pitch 9.4mm
3	SOLENOID VOLTAGE: 1 = 12V DC 1W 2 = 12V DC 2W 3 = 24V DC 1W 5 = 24V DC 2W 8 = 24V DC 4W
	VERSIONS: = standard with screw for metal P = with screw for plastics



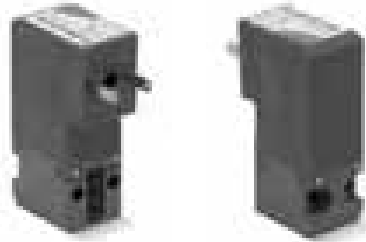
Part Number	Cable Entry
KD136000B7	PG7

Part Number	Cable Length
MD134000PA01300	3m

Series PL Directly Operated Solenoid Valves

3/2 Way Normally Closed (NC).

The solenoid valves can be mounted on a single base (with M5 ports) as well as on manifolds (with M5 ports or cartridge \varnothing 3 and 4).



Part Number
PL00-303-PL23
PL00-503-PL23
PL00-306-PL23
PL00-506-PL23

Technical Data

Type of Construction
Direct acting poppet type

Media
Filtered air class 5.4.4 according to ISO 8573-1, inert gas

Operating Pressure
See technical data page 2/2

Flow Rate
See technical data page 2/2

Kv
See technical data page 2/2

Operating Temperature
0°C to +50°C

Response Time
ON <10 msec - OFF <15 msec

Materials
Body: PBT technopolymer
Seals: FKM, NBR
Internal Parts: Stainless Steel, NBR

Protection Class
IP65 with connector

Special Requests
For assistance, contact our technical office or your local Camozzi distributor.

CODING EXAMPLE

PL	0	00	-	3	0	3	-	PL	2	3
----	---	----	---	---	---	---	---	----	---	---

PL	SERIES: PN
0	BODY DESIGN: 0 = single sub-base (M5 only) 1 = single manifold 2 = double sided manifold
00	N° OF POSITIONS: 00 = interface 01 = single base (M5 only) 02-99 = manifold number of positions
3	N° OF FUNCTIONS: 0 = manifold or single base 3 = 3 ways NC 5 = 3 ways NC electric part revolved by 180°
0	CONNECTIONS: 0 = interface (for single valve only) MANIFOLD CONNECTIONS 2 = M5 side connection 3 = \varnothing 3 tube side connection 4 = \varnothing 4 tube side connection 6 = M5 rear connection 7 = \varnothing 3 tube rear connection 8 = \varnothing 4 tube rear connection
3	NOMINAL DIAMETER: 3 = \varnothing 1.5 6 = \varnothing 1.5 NC (for use with vacuum)
PL	MATERIAL: P = technopolymer PBT body, FKM poppet seal, other seals in NBR
2	SOLENOID DIMENSION: 2 = 3 faston size 9.4mm
3	SOLENOID VOLTAGE: 2 = 12V DC 3 = 24V DC

Manifolds

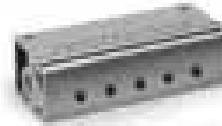
Single manifold rear outlets



*7= \varnothing 3
*8= \varnothing 4

M5 available on request

Single manifold front outlets



*3= \varnothing 3
*4= \varnothing 4

M5 available on request

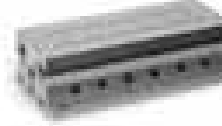
Double-sided manifold rear outlets



*7= \varnothing 3
*8= \varnothing 4

M5 available on request

Double-sided manifold front outlets



*3= \varnothing 3
*4= \varnothing 4

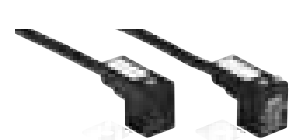
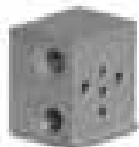
M5 available on request

Part Number
P102-0* (2 valves)
P103-0* (3 valves)
P104-0* (4 valves)
P105-0* (5 valves)
P106-0* (6 valves)

Part Number
P102-0* (2 valves)
P103-0* (3 valves)
P104-0* (4 valves)
P105-0* (5 valves)
P106-0* (6 valves)

Part Number
P204-0* (4 valves)
P206-0* (6 valves)
P208-0* (8 valves)
P210-0* (10 valves)
P212-0* (12 valves)

Part Number
P204-0* (4 valves)
P206-0* (6 valves)
P208-0* (8 valves)
P210-0* (10 valves)
P212-0* (12 valves)



Part Number	Thread
P001-02	M5 Ports

Part Number	Thread
P000-TP	M5 Ports

Part Number	Cable Entry
KD136000B7	PG7

Part Number	Cable Length
MD134000PA01300	3m

Series A Directly Operated Solenoid Valves

2/2 Way, 3/2 Way NC and NO. Monostable, bistable (with magnetic memory)
 Connection: M5, 1/8, Ø4mm cartridge.

The Camozzi range of Series A Directly Operated Solenoid Valves can be used with dry or lubricated air.



Part Number	Thread	Function	Symbol
A321-OC2-*	M5	2/2 N.C.	EV01
A321-1C2-*	1/8	2/2 N.C.	EV01
A321-1D2-*	1/8	2/2 N.C.	EV01
A321-1E2-*	1/8	2/2 N.C.	EV01
A322-OC2-*	M5	2/2 N.O.	EV02
A322-1C2-*	1/8	2/2 N.O.	EV02

Part Number	Thread	Function	Symbol
A331-OC2-*	M5	3/2 N.C.	EV03
A331-1C2-*	1/8	3/2 N.C.	EV03
A332-OC2-*	M5	3/2 N.O.	EV09
A332-1C2-*	1/8	3/2 N.O.	EV09
A333-OC2-*	M5	3/2 N.O. in line	EV05
A333-1C2-*	1/8	3/2 N.O. in line	EV05

Technical Data

Type of Construction
 Direct acting poppet type

Media
 Filtered air class 5.4.4 according to ISO 8573-1, inert gas

Operating Pressure
 See technical data page 2/3

Flow Rate
 See technical data page 2/3

Kv
 0.62 to 2.0 (l/min)

Operating Temperature
 0°C to +60°C (with dry air -20°C to +60°C)

Protection Class
 IP65 with connector

Materials
 Body: Nickel-plated brass - PBT
 technopolymer, Seals: HNBR, FKM
 Internal Parts: Stainless Steel

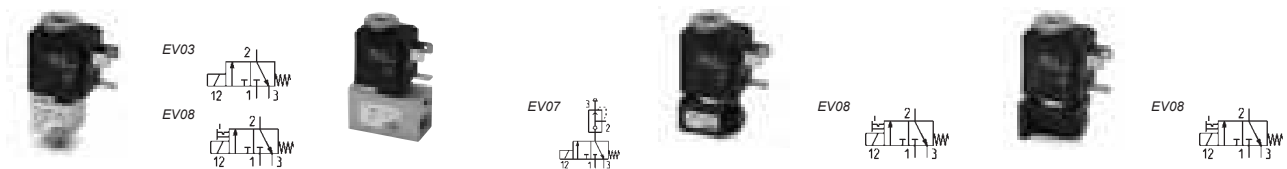
Additional Options
 Seal Kits available on request

Special Requests
 For assistance, contact our technical office or your local Camozzi distributor.



Part Number	Thread	Function	Symbol
AA31-OC2-*	1/8-M5	3/2 N.C.	EV08
AA31-CC2-*	1/8-Ø4	3/2 N.C.	EV08
AA31-OC3-*	1/8-M5	3/2 N.C.	EV08
AA31-CC3-*	1/8-Ø4	3/2 N.C.	EV08

Part Number	Thread	Function	Symbol
AA33-OC2-*	1/8-M5	3/2 N.C. in line	EV05
AA33-CC2-*	1/8-Ø4	3/2 N.C. in line	EV05
AA33-OC3-*	1/8-M5	3/2 N.C. in line	EV05
AA33-CC3-*	1/8-Ø4	3/2 N.C. in line	EV05



Part Number	Thread	Function
A331-3C2-*	M5 - 1/8	3/2 N.C.
A331-4C2-*	M5 - 1/8	3/2 N.C.

Part Number	Thread	Function
A431-1C2-*	1/8	3/2 N.C.

Part Number	Interface	Function
A631-AC2-*	OR	3/2 N.C.

Part Number	Interface	Function
A531-BC2-*	OR	3/2 N.C.

*Coil sold separately, see page 2/47

CODING EXAMPLE

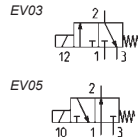
A	3	3	1	-	0	C	2	-	U	7	7
---	---	---	---	---	---	---	---	---	---	---	---

A SERIES: 3 BODY DESIGN: 1 = base (24 x 24 mm) interface rotatable through 360° 2 = base (24 x 24 mm) fixed interface 3 = threaded body 4 = rapid exhaust body 5 = base with ISO standard interface, fixed 6 = base (16 x 16 mm) interface rotatable through 360° For other options please contact our sales office.	O CONNECTIONS: <table border="1"> <thead> <tr> <th></th> <th>1</th> <th>2</th> <th>3</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>M5</td> <td>M5</td> <td>M5</td> </tr> <tr> <td>1</td> <td>1/8</td> <td>1/8</td> <td>M5</td> </tr> <tr> <td>3</td> <td>M5</td> <td>1/8 male</td> <td>M5</td> </tr> <tr> <td>4</td> <td>M5</td> <td>1/8 male</td> <td>M5 with manual override</td> </tr> <tr> <td>A</td> <td>swivel O-ring interface</td> <td>-</td> <td>M5</td> </tr> <tr> <td>B</td> <td>fixed O-ring interface</td> <td>-</td> <td>M5</td> </tr> <tr> <td>C</td> <td>cartridge Ø4</td> <td>-</td> <td>-</td> </tr> </tbody> </table>		1	2	3	0	M5	M5	M5	1	1/8	1/8	M5	3	M5	1/8 male	M5	4	M5	1/8 male	M5 with manual override	A	swivel O-ring interface	-	M5	B	fixed O-ring interface	-	M5	C	cartridge Ø4	-	-	U SOLENOID MATERIAL: G = Nylon U = PET A = PPS H = PA6VO
	1	2	3																															
0	M5	M5	M5																															
1	1/8	1/8	M5																															
3	M5	1/8 male	M5																															
4	M5	1/8 male	M5 with manual override																															
A	swivel O-ring interface	-	M5																															
B	fixed O-ring interface	-	M5																															
C	cartridge Ø4	-	-																															
3 N° OF CONNECTIONS: 2 = 2 way 3 = 3 way	C NOMINAL DIAMETER: C = Ø1.5 D = Ø2 E = Ø2.5	7 SOLENOID DIMENSIONS: 7 = 22 x 22 8 = 30 x 30 9 = 22 x 58																																
1 FUNCTION: 1 = NC (normally closed) 3 = NO (in line) 2 = NO (normally open)	2 BODY MATERIAL: 2 = nickel-plated brass 3 = technopolymer	7 SOLENOID VOLTAGE: See page 2/047																																

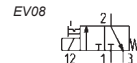
Series 6 Directly Operated Solenoid Valves

2/2 Way, 3/2 Way, NC and NO Monostable.
 Connection: 1/8, 3/8, Ø4mm cartridge.

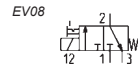
The Camozzi range of Series 6 Directly Operated Solenoid Valves can be used with dry or lubricated air.



Part Number	Thread	Function
638-150-A6*	1/8	N.C.
648-150-A6*	1/8	N.O.



Part Number	Thread	Function
638M-101-A6*	1/8	N.C.
63CM-101-A6*	1/8 - Ø4	N.C.



Part Number	Interface	Function
600-450-A6*	Rotatable	N.C.
600-457-A6*	Fixed	N.C.



Part Number	Thread	Function
623-15E-A6*	3/8	N.C.
623-15F-A6*	3/8	N.C.
623-15G-A6*	3/8	N.C.

Technical Data
Type of Construction
 Direct acting poppet type
Media
 Filtered air, class 5.4.4 according to ISO 8573-1, inert gas
Operating Pressure
 See technical data page 2/3
Flow Rate
 See technical data page 2/3
Kv
 1.2 to 8.0 (l/min)
Operating Temperature
 0°C to +80°C
 (with dry air -20°C to +80°C)
Protection Class
 IP65 with connector
Materials
 Body: Nickel-plated brass - anodized aluminium, Seals: NBR (FKM on demand), Internal Parts: Stainless Steel
Additional Options
 Seal Kits available on request
Special Requests
 For assistance, contact our technical office or your local Camozzi distributor.

*See voltage coding

CODING EXAMPLE

6	3	8	M	-	105	-	A	6	B
---	---	---	---	---	-----	---	---	---	---

6	SERIES: 6	105	TYPE OF DESIGN OF BASE: 150 = threaded body 450 = base with rotatable interface 457 = base with fixed interface 101 = single manifold 102 = 2 - part manifold 103 = 3 - part manifold 104 = 4 - part manifold 105 = 5 - part manifold 106 = 6 - part manifold	107 = 7 - part manifold 108 = 8 - part manifold 109 = 9 - part manifold 110 = 10 - part manifold 111 = 11 - part manifold 112 = 12 - part manifold 113 = 13 - part manifold 114 = 14 - part manifold 115 = 15 - part manifold
3	N° OF CONNECTIONS AND FUNCTIONS: 0 = interface 1 = 2 way NO 2 = 2 way NC 3 = 3 way NC 4 = 3 way NO	A	COIL MATERIALS: A = PPS	
8	CONNECTIONS: 0 = Interface 3 = 3/8 8 = 1/8 C = cartridge Ø4	6	SOLENOID DIMENSIONS: 6 = 32 x 32	
M	M = Manifold	B	SOLENOID VOLTAGE: B = 24V 50/60 Hz C = 48V 50/60 Hz D = 110V 50/60 Hz E = 220V 50/60 Hz 2 = 12V DC 3 = 24V DC 4 = 48V DC 6 = 110VDC	

Series CFB Stainless Steel Solenoid Valves

2/2 Way Normally Closed (NC).



Technical Data

Type of Construction

Direct acting poppet type - servo-assisted with diaphragm

Media

Air, water, liquid and gaseous fluids with max viscosity 37 cSt (5° E)

Operating Pressure

See technical data page 2/3

Kv

See technical data page 2/3

Operating Temperature

-10°C to +140°C.

Response Time

ON <15 msec - OFF <25 msec

Protection Class

IP65 with connector

Materials

Body: Stainless steel 316L
Seals: FKM (EPDM on demand)
Internal Parts: Stainless steel

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.

Part Number	Connection	24V AC 50 Hz	110V AC 50/60 Hz	220/230V AC 50/60 Hz	12V DC	24V DC
CFB-D21A-...X-*	1/8	B8B (15VA)	B8D (15VA)	B8E (15VA)	B82 (19W)	B83 (19W)
CFB-D21B-...X-*	1/8	B8B (15VA)	B8D (15VA)	B8E (15VA)	B82 (19W)	B83 (19W)
CFB-D21C-...X-*	1/8	B8B (15VA)	B8D (15VA)	B8E (15VA)	B82 (19W)	B83 (19W)
CFB-D22B-...X-*	1/4	B8B (15VA)	B8D (15VA)	B8E (15VA)	B82 (19W)	B83 (19W)
CFB-D22C-...X-*	1/4	B8B (15VA)	B8D (15VA)	B8E (15VA)	B82 (19W)	B83 (19W)
CFB-D22E-...X-*	1/4	B8B (15VA)	B8D (15VA)	B8E (15VA)	B82 (19W)	B83 (19W)
CFB-D23E-...X-*	3/8	B8B (15VA)	B8D (15VA)	B8E (15VA)	B82 (19W)	B83 (19W)
CFB-D23F-...X-*	3/8	B8B (15VA)	B8D (15VA)	B8E (15VA)	B82 (19W)	B83 (19W)
CFB-D24E-...X-*	1/2	B8B (15VA)	B8D (15VA)	B8E (15VA)	B82 (19W)	B83 (19W)
CFB-D24F-...X-*	1/2	B8B (15VA)	B8D (15VA)	B8E (15VA)	B82 (19W)	B83 (19W)

CODING EXAMPLE

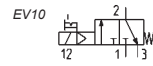
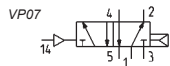
CFB	-	D	2	1	A	-	W	X	-	B8	E
-----	---	---	---	---	---	---	---	---	---	----	---

CFB SERIES: CFB	1 CONNECTIONS: 1 = 1/8 2 = 1/4 3 = 3/8 4 = 1/2	X BODY MATERIAL: X = Stainless Steel
D OPERATION: D = direct	A NOMINAL DIAMETER: Nominal Diameter A = 1.5mm B = 2mm C = 2.5mm E = 3mm F = 4mm	B8 SOLENOID DIMENSION: B8 = 30mm
2 N° OF POSITIONS: 2 = 2/2-way NC	W SEAL MATERIALS: W = FKM E = EPDM (on demand)	E SOLENOID VOLTAGE: B = 24V AC 50Hz D = 110V AC 50/60Hz E = 230V AC 50/60Hz 2 = 12V DC 3 = 24V DC

Series E Valves

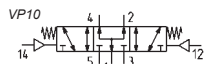
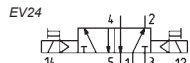
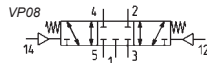
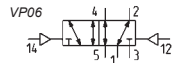
With outlets on the body
For individual or manifold assembly
10.5mm

The Camozzi range of Series E Valves have been designed to allow high flows with small overall dimensions.



Part Number	Connection
E521-36	M5
E521-C36	4mm

Part Number	Connection
E521-16-10-K10	M5



Part Number	Connection	Symbol
E521-33	M5	VP06
E521-C33	M5	VP06
E621-33	M5	VP08
E621-C33	M5	VP08
E721-33	M5	VP09
E721-C33	M5	VP09
E821-33	M5	VP10
E821-C33	M5	VP10

Part Number	Connection	Symbol
E521-11-10-K10	M5	EV24
E621-11-10-K10	M5	EV27
E721-11-10-K10	M5	EV31
E821-11-10-K10	M5	EV35

Technical Data

Type of Construction

Spool type

Media

Filtered air 5 micron or lower, without lubrication. If lubricated air is used, it is recommended to use oil ISO VG32. Once applied, the lubrication should never be interrupted.

Operating Pressure

See technical data page 2/3

Flow Rate

See technical data page 2/3

Operating Temperature

0°C to +50°C
(with dry air -20°C to +60°C)

Materials

Body: Aluminium
Spools and Sub-Bases: Aluminium
End Covers: Technopolymer
Seals: NBR

Connections

M5, 1/8, 4mm, 6mm, 8mm, 10mm

Mountings

By means of M4 screws

Additional Options

Seal Kits available on request

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.

CODING EXAMPLE

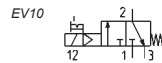
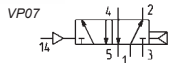
E	5	2	1	-	11	-	10	-	K	1	3
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E SERIES: E	1 BODY TYPE: 1 = body with threaded plate	K SOLENOID TYPE: K
5 FUNCTION: 2 = 5/2 supply from the exhausts 5 = 5/2 6 = 5/3 centre closed 7 = 5/3 centre open 8 = 5/3 pressure centre	11 ACTUATION: 11 = electro-pneumatic, bistable 16 = electro-pneumatic, monostable 33 = pneumatic bistable - tube Ø3 36 = pneumatic monostable - tube Ø3 C33 = pneumatic bistable - tube Ø4 C36 = pneumatic monostable - tube Ø4	1 SOLENOID DIMENSIONS: 1 = 10x10
2 SIZE: 2 = Sizes 10.5	10 INTERFACE: 10	3 SOLENOID VOLTAGE: 1 = 6V DC 2 = 12V DC 3 = 24V DC

Series E Valves

Base mounted body
For individual or manifold assembly
10.5mm

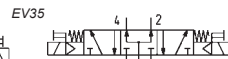
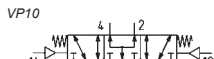
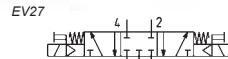
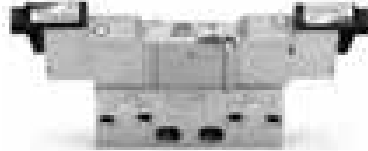
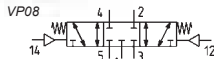
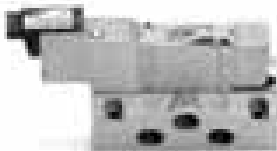
The Camozzi range of Series E Valves have been designed to allow high flows with small overall dimensions.



Part Number
E520-36
E520-C36

Part Number
E520-16-10-K1*

*See voltage coding



Part Number	Symbol
E520-33	VP06
E520-C33	VP06
E620-33	VP08
E620-C33	VP08
E720-33	VP09
E720-C33	VP09
E820-33	VP10
E820-C33	VP10

Part Number	Symbol
E520-11-10-K1*	EV10
E620-11-10-K1*	EV27
E720-11-10-K1*	EV31
E820-11-10-K1*	EV35

Technical Data

Type of Construction
Balanced spool type

Media
Filtered air 5 micron or lower, without lubrication. If lubricated air is used, it is recommended to use oil ISO VG32. Once applied, the lubrication should never be interrupted.

Operating Pressure
See technical data page 2/3

Flow Rate
See technical data page 2/3

Operating Temperature
0°C to +50°C

Materials
Body: Aluminium
Spools and Sub-Bases: Aluminium
End Covers: Technopolymer
Seals: NBR

Mountings
By feet or screws to sub-bases

Additional Options
Seal Kits available on request

Special Requests
For assistance, contact our technical office or your local Camozzi distributor.

Note: Base not included

CODING EXAMPLE

E	5	2	0	-	11	-	10	-	K	1	3
---	---	---	---	---	----	---	----	---	---	---	---

E SERIES: E	0 BODY TYPE: 0 = body for sub-base	K SOLENOID TYPE: K = solenoid (10x10)
5 FUNCTION: 2 = 5/2 supply from the exhausts 5 = 5/2 6 = 5/3 centre closed 7 = 5/3 centre open 8 = 5/3 pressure centre	11 ACTUATION: 11 = electro-pneumatic, bistable 16 = electro-pneumatic, monostable 33 = pneumatic bistable - tube Ø3 36 = pneumatic monostable - tube Ø3 * C33 = pneumatic bistable - tube Ø4 * C36 = pneumatic monostable - tube Ø4 311 = electro-pneumatic bistable on subbase or manifold 316 = electro-pneumatic monostable on subbase or manifold 333 = pneumatic bistable on sub-base or manifold 336 = pneumatic monostable on sub-base or manifold	1 SOLENOID DIMENSIONS: 1 = 10x10
2 SIZE: 2 = Sizes 10.5	10 INTERFACE: 10	3 SOLENOID VOLTAGE: * 1 = 6V DC 3 = 24V DC * 2 = 12V DC

*on request.

Series E Sub-Bases and Manifolds for Valves

Connections: 1/8

Single sub base for base mounted valves. Size 10.5



Technical Data

Type of Construction

Machined aluminium extrusion

Materials

Aluminium

Connections

See sub-base and manifold coding Series E

Mountings

By means of screws supplied with valves

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.

Part Number	Size	Connection: 1, 3, 5, 2 and 4	Connection: 82, 84, 12 and 14
E520-0101	10.5	1/8	M5

Connections: 1/8

Manifolds for valves with outlets on the body.

Size 10.5



Part Number	Size	Connection: 1, 3, 5	Connection: 82, 84	Number of Positions					
E521-10**	10.5	1/8	M5	02	04	06	08	10	12

Series E Sub-Bases and Manifolds for Valves

Connections: 1/8

Manifolds for base mounted valves.
Size 10.5



Part Number	Size	Connection: 1, 3, 5	Connection: 2, 4	Connection: 82, 84	Number of Positions					
E520-21**	10.5	1/8	M5	M5	02	04	06	08	10	12

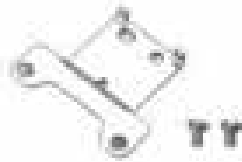
** = Number of positions

CODING EXAMPLE

E5	2	1	-	1	0	04
E5 SERIES: E5		1 BODY TYPE: 0 = body for sub-base assembly 1 = body with threads or tube connection			0 CONNECTIONS: 0 = for valves with outlets on the body 1 = threaded C = tube 4 (size 10,5)	
2 SIZE: 2 = Size 10.5		1 TYPE OF SUB-BASE: 0 = single sub-base with side outlets 1 = manifold for threaded valve 2 = manifold for body mounted valve 3 = manifold for threaded valve with externally supplied pilots 4 = manifold for body mounted valve with externally supplied pilots			04 N° OF POSITIONS: 01 = single 03, 04, 06, 08, 10, 12 = multiple	

NOTE: When constructing manifolds with 10 or more stations, it is recommended, in order to reduce the risk of pressure drop within the assembly, that pressure is supplied to connection 1 at each end of the block. The exhaust connection 3 and 5 at each end should also be utilized (size 10.5 and 16mm). The same provision should be made for 5 station manifolds of the 19mm valves. Manifolds complete with connections for external pilot supply are available on request.

Series E Accessories for Valves



Part Number	
B1-E521	for valves size 10.5
Horizontal feet for valves with outlets on the body.	



Part Number	
B2-E521	for valves size 10.5
Vertical feet for valves with outlets on the body (monostable only).	



Threaded valves	
Part Number	Size
TP-E521	10.5
TP-E520	10.5
Blanking plate for manifolds.	



Part Number	
PCF-E520	
Suitable for all manifolds	
Mounting brackets for DIN rail channel DIN EN 50022 (7.5 x 35 with 1mm).	



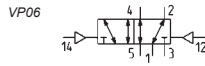
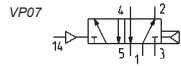
Threaded valves	
Part Number	Size
PCP-E521	10.5
PCP-E520	10.5
Intermediate plate for manifolds for valves with separate supply in 1.	



Threaded valves	
Part Number	Size
PCS-E521	10.5
PCS-E520	10.5
Intermediate plate for manifolds for valves with separate supply in 3 and 5.	

Series EN Valves and Solenoid Valves

5/2 way, 5/3 way CC - CO - CP
 With outlets on the body - For individual or manifold assembly
 Size 16 - 19 mm



Part Number
EN531-36
EN551-36

Part Number
EN531-33
EN551-33

Technical Data

Type of Construction

Spool type

Media

Filtered air, without lubrication.
 If lubricated air is used, it is recommended to use oil ISO VG32.
 Once applied, the lubrication should never be interrupted.

Operating Pressure

See technical data page 2/4

Flow Rate

See technical data page 2/4

Operating Temperature

0°C to +50°C

Materials

Body: Aluminium
 Spools and Sub-Bases: Aluminium
 End Covers: Technopolymer
 Seals: NBR

Connections

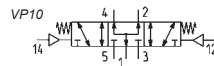
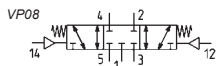
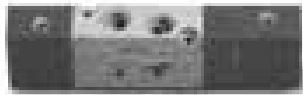
1/8, 1/4

Mountings

By feet or screws to sub-bases

Additional Options

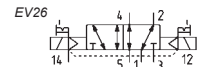
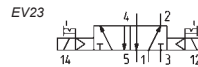
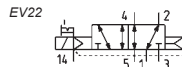
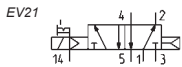
Seal Kits available on request



Part Number
EN631-33
EN651-33

Part Number
EN731-33
EN751-33

Part Number
EN831-33
EN851-33

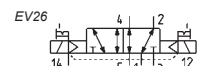
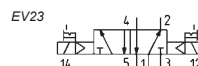
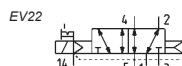
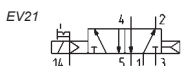


Part Number
EN531-16-P*
EN551-16-P*
EN531-16-W*
EN551-16-W*

Part Number
EN531-E16-P*
EN551-E16-P*
EN531-E16-W*
EN551-E16-W*

Part Number
EN531-11-P*
EN551-11-P*
EN531-11-W*
EN551-11-W*

Part Number
EN531-E11-P*
EN551-E11-P*
EN531-E11-W*
EN551-E11-W*



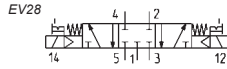
Part Number
EN531-16-PN*
EN551-16-PN*

Part Number
EN531-E16-PN*
EN551-E16-PN*

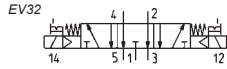
Part Number
EN531-11-PN*
EN551-11-PN*

Part Number
EN531-E11-PN*
EN551-E11-PN*

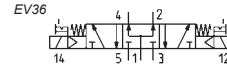
Series EN Valves and Solenoid Valves



Part Number
EN631-11-P*
EN651-11-P*
EN631-11-W*
EN651-11-W*



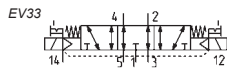
Part Number
EN731-11-P*
EN751-11-P*
EN731-11-W*
EN751-11-W*



Part Number
EN831-11-P*
EN851-11-P*
EN831-11-W*
EN851-11-W*



Part Number
EN631-E11-P*
EN651-E11-P*
EN631-E11-W*
EN651-E11-W*



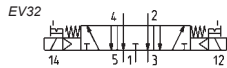
Part Number
EN731-E11-P*
EN751-E11-P*
EN731-E11-W*
EN751-E11-W*



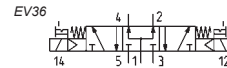
Part Number
EN831-E11-P*
EN851-E11-P*
EN831-E11-W*
EN851-E11-W*



Part Number
EN631-11-PN*
EN651-11-PN*



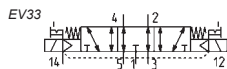
Part Number
EN731-11-PN*
EN751-11-PN*



Part Number
EN831-11-PN*
EN851-11-PN*



Part Number
EN631-E11-PN*
EN651-E11-PN*



Part Number
EN731-E11-PN*
EN751-E11-PN*



Part Number
EN831-E11-PN*
EN851-E11-PN*

CODING EXAMPLE

EN	5	3	1	-	11	-	PN3
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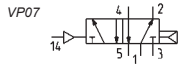
<p>EN SERIES: EN</p>	<p>3 SIZES: 3 = 16mm 5 = 19mm</p>	<p>11 ACTUATION: 11 = electro-pneumatic, bistable 16 = electro-pneumatic, monostable 33 = pneumatic bistable 36 = pneumatic monostable</p>	<p>E11 = electro-pneumatic, bistable with external servo-pilot supply E16 = electro-pneumatic, monostable with external servo-pilot supply</p>
<p>5 FUNCTION 5 = 5/2 6 = 5/3 Centre Closed 7 = 5/3 Centre Open 8 = 5/3 Pressure Centre</p>	<p>1 BODY TYPE: 1 = body with threaded plate</p>	<p>PN3 TYPE OF SOLENOID PN3 = 24V DC - 1W PN4 = 48V DC - 2W PN6 = 110V DC - 2W PN7 = 230V - 2W</p>	<p>P13 = 24V DC - 1W P54 = 48V DC - 2W P56 = 110V DC - 2W W53 = 24V DC - 2W W54 = 48V DC - 2W</p>

In case of applications with alternate current, use a bridge rectifier connector

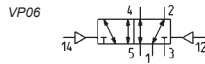
Series EN Valves and Solenoid Valves

2

5/2 way, 5/3 way CC - CO - CP
For manifold assembly
Size 16 - 19 mm



Part Number
EN530-36
EN550-36



Part Number
EN530-33
EN550-33

Technical Data

Type of Construction

Spool type

Media

Filtered air, without lubrication.

If lubricated air is used, it is

recommended to use oil ISO VG32.

Once applied, the lubrication should

never be interrupted.

Operating Pressure

See technical data page 2/4

Flow Rate

See technical data page 2/4

Operating Temperature

0°C to +50°C

Materials

Body: Aluminium

Spools and Sub-Bases: Aluminium

End Covers: Technopolymer

Seals: NBR

Connections

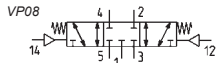
1/8, 1/4

Mountings

By feet or screws to sub-bases

Additional Options

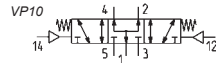
Seal Kits available on request



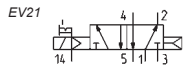
Part Number
EN630-33
EN650-33



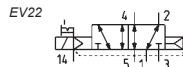
Part Number
EN730-33
EN750-33



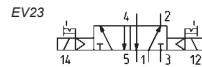
Part Number
EN830-33
EN850-33



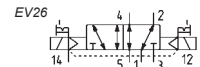
Part Number
EN530-16-P*
EN550-16-P*
EN530-16-W*
EN550-16-W*



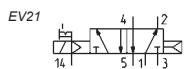
Part Number
EN530-E16-P*
EN550-E16-P*
EN530-E16-W*
EN550-E16-W*



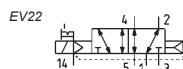
Part Number
EN530-11-P*
EN550-11-P*
EN530-11-W*
EN550-11-W*



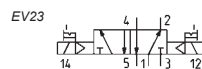
Part Number
EN530-E11-P*
EN550-E11-P*
EN530-E11-W*
EN550-E11-W*



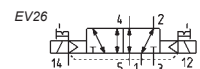
Part Number
EN530-16-PN*
EN550-16-PN*



Part Number
EN530-E16-PN*
EN550-E16-PN*



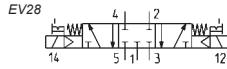
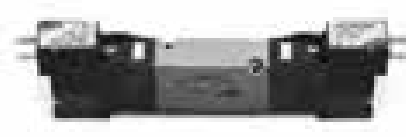
Part Number
EN530-11-PN*
EN550-11-PN*



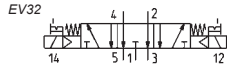
Part Number
EN530-E11-PN*
EN550-E11-PN*

CONTROL

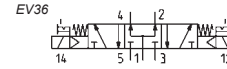
Series EN Valves and Solenoid Valves



Part Number
EN630-11-P*
EN650-11-P*
EN630-11-W*
EN650-11-W*



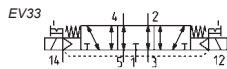
Part Number
EN730-11-P*
EN750-11-P*
EN730-11-W*
EN750-11-W*



Part Number
EN830-11-P*
EN850-11-P*
EN830-11-W*
EN850-11-W*



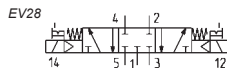
Part Number
EN630-E11-P*
EN650-E11-P*
EN630-E11-W*
EN650-E11-W*



Part Number
EN730-E11-P*
EN750-E11-P*
EN730-E11-W*
EN750-E11-W*



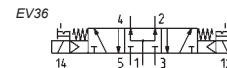
Part Number
EN830-E11-P*
EN850-E11-P*
EN830-E11-W*
EN850-E11-W*



Part Number
EN630-11-PN*
EN650-11-PN*



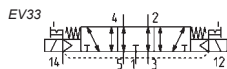
Part Number
EN730-11-PN*
EN750-11-PN*



Part Number
EN830-11-PN*
EN850-11-PN*



Part Number
EN630-E11-PN*
EN650-E11-PN*



Part Number
EN730-E11-PN*
EN750-E11-PN*



Part Number
EN830-E11-PN*
EN850-E11-PN*

CODING EXAMPLE

EN	5	3	0	-	11	-	PN3
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<p>EN SERIES: EN</p>	<p>3 SIZES: 3 = 16mm 5 = 19mm</p>	<p>11 ACTUATION: 11 = electro-pneumatic, bistable 16 = electro-pneumatic, monostable 33 = pneumatic bistable 36 = pneumatic monostable</p>	<p>E11 = electro-pneumatic, bistable with external servo-pilot supply E16 = electro-pneumatic, monostable with external servo-pilot supply</p>
<p>5 FUNCTION 5 = 5/2 6 = 5/3 Centre Closed 7 = 5/3 Centre Open 8 = 5/3 Pressure Centre</p>	<p>0 BODY TYPE: 0 = body for sub-base</p>	<p>PN3 TYPE OF SOLENOID PN3 = 24V DC - 1W PN4 = 48V DC - 2W PN6 = 110V DC - 2W PN7 = 230V - 2W</p>	<p>P13 = 24V DC - 1W P54 = 48V DC - 2W P56 = 110V DC - 2W W53 = 24V DC - 2W W54 = 48V DC - 2W</p>

In case of applications with alternate current, use a bridge rectifier connector

Series EN Accessories



Sub-base for valves size 16 and 19 (with outlets on the body)

Part Number	No. of Valve Positions	Part Number	No. of Valve Positions
EN531-1002	2	EN551-1002	2
EN531-1003	3	EN551-1003	3
EN531-1004	4	EN551-1004	4
EN531-1005	5	EN551-1005	5
EN531-1006	6	EN551-1006	6
EN531-1008	8	EN551-1008	8
EN531-1010	10	EN551-1010	10
EN531-1012	12	EN551-1012	12

Manifold for valves size 16 and 19 (with outlets on the manifold)

Part Number	No. of Valve Positions	Part Number	No. of Valve Positions
EN530-2102	2	EN550-2102	2
EN530-2103	3	EN550-2103	3
EN530-2104	4	EN550-2104	4
EN530-2105	5	EN550-2105	5
EN530-2106	6	EN550-2106	6
EN530-2108	8	EN550-2108	8
EN530-2110	10	EN550-2110	10
EN530-2112	12	EN550-2112	12



Blanking plate for manifolds (with outlets on the body)

Part Number	Size
TP-EN531	16
TP-EN551	19

Blanking plate for manifolds - base mounted valves

Part Number	Size
TP-EN530	16
TP-EN550	19

Connectors 24DC PN with led for solenoid P and PN



Part Number	Cable Length
125-503-2	2m
125-503-5	5m

Conn. V-AC PN with bridge rectifier for solenoid P and PN



Part Number	Cable Length
125-903-2	2m
125-903-5	5m

In-line connectors with cable



Part Number	Cable Length
125-553-2	2m
125-553-5	5m

Connectors DIN 43650



Part Number	Description
KD136000B7	Black Connector PG7 9.4mm Pin Spacing
KC136000B7	Black Connector PG7 8mm Pin Spacing

Mounting brackets

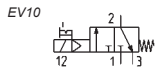


Part Number
PCF-EN531

Series 3 and 4 Electropneumatically Operated Valves

Connections: Series 3 - 1/8, 1/4, 3/2 - way, 5/2 - way, 5/3 - way and 2 x 3/2 - way
 Series 4 - 1/8, 1/4 and 1/2, 3/2, 5/2 and 5/3 - way

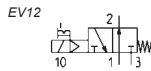
3/2 - way single solenoid valve - 1/8
 - N.C. and N.O.



Part Number
338-015-02-*
338L-015-02-*
(For use with CNVL bases)

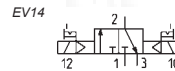
*Coil sold separately, page 2/47

3/2 - way double solenoid valve - 1/8



Part Number
348-015-02-*
348L-015-02-*
(For use with CNVL bases)

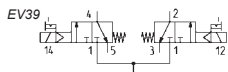
*Coil sold separately, page 2/47



Part Number
338-011-02-*
338L-011-02-*
(For use with CNVL bases)

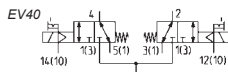
*Coil sold separately, page 2/47

2 x 3/2 - way double solenoid valve - 1/8
 - N.C. and N.O.



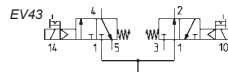
Part Number
338D-015-02-*

*Coil sold separately, page 2/47



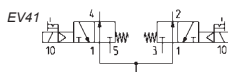
Part Number
338D-E15-02-*

*Coil sold separately, page 2/47

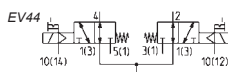


Part Number
398D-015-02-*

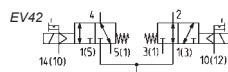
*Coil sold separately, page 2/47



Part Number
348D-015-02-*

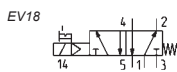


Part Number
348D-E15-02-*



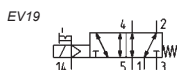
Part Number
398D-E15-02-*

5/2 - way single solenoid valve - 1/8



Part Number
358-015-02-*

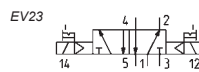
*Coil sold separately, page 2/47



Part Number
358-E15-02-*

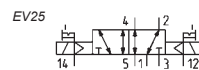
See full catalogue or CD rom for all dimensions.
 For technical advice contact our sales office or your local Camozzi distributor.

5/2 - way double solenoid valve - 1/8



Part Number
358-011-02-*

*Coil sold separately, page 2/47



Part Number
358-E11-02-*

Technical Data

Type of Construction
 Spool-type (indirectly operated)

Media
 Filtered air, without lubrication. If lubricated air is used, it is recommended to use oil ISO VG32. Once applied the lubrication should never be interrupted

Operating Pressure
 See technical data page 2/5

Flow Rate
 See technical data page 2/5

Operating Temperature
 0°C to +60°C.
 (with dry air -20°C to +60°C)

Materials
 Body: Aluminium
 Spool: Stainless Steel
 Seals: NBR

Connections
 1/8, 1/4, 1/2

Mountings
 Through holes in valve body

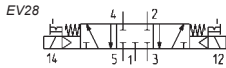
Additional Options
 Seal Kits available on request

Special Requests
 For assistance, contact our technical office or your local Camozzi distributor.

Series 3 Electropneumatically Operated Valves

2

5/3 - way double solenoid valve - 1/8 - centres closed, centres open and pressure centres

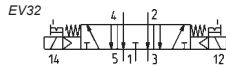


Part Number
368-011-02-*



Part Number
368-E11-02-*

*Coil sold separately, page 2/47

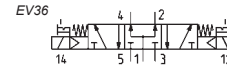


Part Number
378-011-02-*

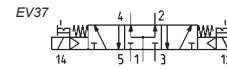


Part Number
378-E11-02-*

*Coil sold separately, page 2/47



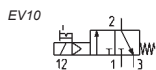
Part Number
388-011-02-*



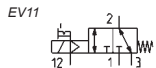
Part Number
388-E11-02-*

*Coil sold separately, page 2/47

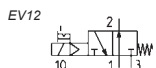
3/2 - way single solenoid valve - 1/4 - N.C. and N.O.



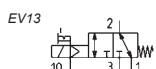
Part Number
334-015-02-*



Part Number
334-E15-02-*



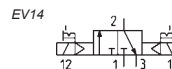
Part Number
344-015-02-*



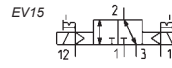
Part Number
344-E15-02-*

*Coil sold separately, page 2/47

3/2 - way double solenoid valve - 1/4

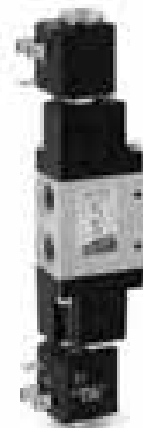


Part Number
334-011-02-*



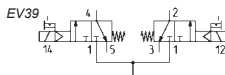
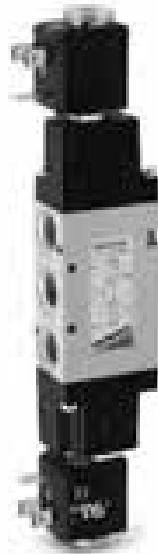
Part Number
334-E11-02-*

*Coil sold separately, page 2/47

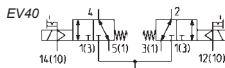


Series 3 Electropneumatically Operated Valves

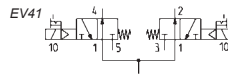
2 x 3/2 - way double solenoid valve - 1/4 - N.C. and N.O.



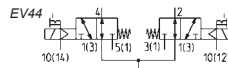
Part Number
334D-015-02-*



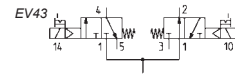
Part Number
334D-E15-02-*
*Coil sold separately, page 2/47



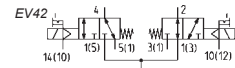
Part Number
344D-015-02-*



Part Number
344D-E15-02-*
*Coil sold separately, page 2/47



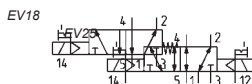
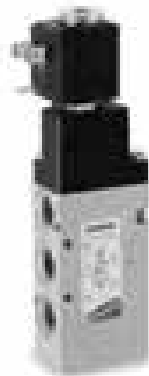
Part Number
394D-015-02-*



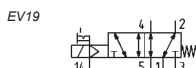
Part Number
394D-E15-02-*
*Coil sold separately, page 2/47

5/2 - way single solenoid valve - 1/4

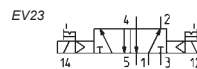
5/2 - way double solenoid valve - 1/4



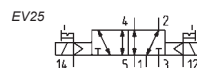
Part Number
354-015-02-*



Part Number
354-E15-02-*
*Coil sold separately, page 2/47



Part Number
354-011-02-*

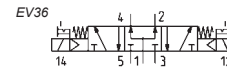
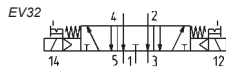
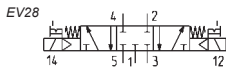


Part Number
354-E11-02-*
*Coil sold separately, page 2/47



Series 3 Electropneumatically Operated Valves

5/3 - way double solenoid valve - 1/4 - centres closed, centres open and pressure centres



Part Number

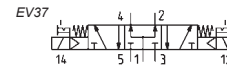
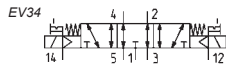
364-011-02-*

Part Number

374-011-02-*

Part Number

384-011-02-*



Part Number

364-E11-02-*

Part Number

374-E11-02-*

Part Number

384-E11-02-*

*Coil sold separately, page 2/47

*Coil sold separately, page 2/47

*Coil sold separately, page 2/47

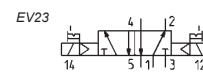
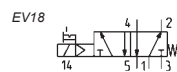
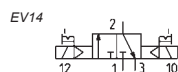
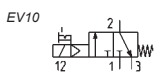
Series 4 Electropneumatically Operated Valves

3/2 - way single solenoid valve - 1/8 - N.C.

3/2 - way double solenoid valve - 1/8 - N.C.

5/2 - way single solenoid valve - 1/8

5/2 - way double solenoid valve - 1/8



Part Number

438-015-22-*

Part Number

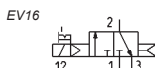
438-011-22-*

Part Number

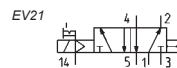
458-015-22-*

Part Number

458-011-22-*



*Coil sold separately, page 2/47



*Coil sold separately, page 2/47

Part Number

438-016-22-*

Part Number

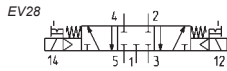
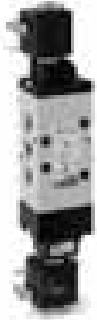
458-016-22-*

*Coil sold separately, page 2/47

*Coil sold separately, page 2/47

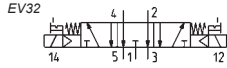
Series 4 Electropneumatically Operated Valves

5/3 - way double solenoid valve - 1/8 - centres closed



Part Number

468-011-22-*

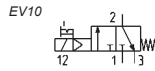


Part Number

478-011-22-*

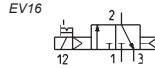
*Coil sold separately, page 2/47

3/2 - way single solenoid valve - 1/4 - N.C.



Part Number

434-015-22-*

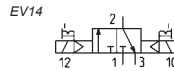


Part Number

434-016-22-*

*Coil sold separately, page 2/47

3/2 - way double solenoid valve - 1/4 - N.C.

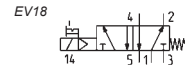


Part Number

434-011-22-*

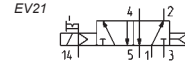
*Coil sold separately, see page 2/47

5/2 - way single solenoid valve - 1/4



Part Number

454-015-22-*

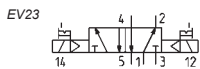


Part Number

454-016-22-*

*Coil sold separately, page 2/47

5/2 - way double solenoid valve - 1/4

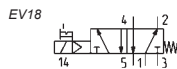
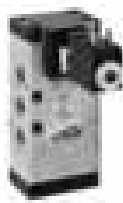


Part Number

454-011-22-*

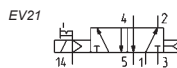
*Coil sold separately, page 2/47

5/2 - way single vertical solenoid valve - 1/4



Part Number

454-V15-22-*

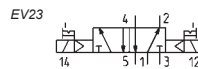


Part Number

454-V16-22-*

*Coil sold separately, page 2/47

5/2 - way double vertical solenoid valve - 1/4

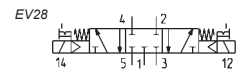


Part Number

454-V11-22-*

*Coil sold separately, page 2/47

5/3 - way double solenoid valve - 1/4 - centres closed and centre open



Part Number

464-011-22-*



Part Number

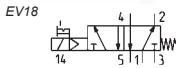
474-011-22-*

*Coil sold separately, page 2/47

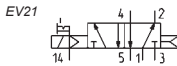
Series 4 Electropneumatically Operated Valves

2

5/2 - way single solenoid valve - 1/2

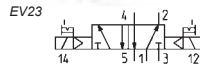
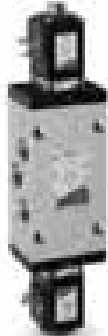


Part Number
452C-015-50-A6*



Part Number
452C-016-50-A6*
*Coils included, please state voltage

5/2 - way double solenoid valve - 1/2



Part Number
452C-011-50-A6*
*Coils included, please state voltage



For Manifolds
See 2/41



For Electrical Din Connection
See page 2/48

CONTROL

CODING EXAMPLE

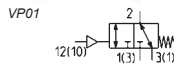
3	3	8	D	-	015	-	22	-	U	7	7
3 SERIES: 3 and 4					D D = double valve (2x3/2) (series 3) L = for manifold assembly (only for 3/2 1/8) (series 3)			U SOLENOID MATERIAL U = PET G = PA A6 = PPS (series 4 1/2 only) A7 = PPS (series 3 only) A8 = PPS (series 3 only) H8 = PA 6 V0			
3 N° OF WAYS/POSITIONS * 3 = 3/2 N.C. * 4 = 3/2 N.O. 5 = 5/2 6 = 5/3 C. closed 7 = 5/3 C. open 8 = 5/3 C. pressure (series 3 only) 9 = 1x 3/2NC + 1x-3/2NO (series 3 only)					015 ACTUATION O11 = double solenoid (horizontal solenoids) V11 = double solenoid (vertical solenoids) (series 4 1/4 only) O15 = single solenoid, spring return (horizontal solenoids) V15 = single solenoid, spring return (vertical solenoid) (series 4 1/4 only) O16 = single solenoid, pneumatic spring return (horizontal solenoid) V16 = single solenoid, pneumatic spring return (vertical solenoid) (series 4 1/4 only) E11 = double solenoid external servo-command (series 3 only) E15 = single solenoid, external servo-command (series 3 only) O15 = single solenoid external servo-command O33 = pneumatic pneumatic O34 = pneumatic differential (series 4 only) O35 = pneumatic spring			7 SOLENOID DIMENSIONS 6 = 32 x 32 only 1/2 7 = 22 x 22 8 = 30 x 30 9 = 22 x 58			
8 CONNECTIONS 8 = 1/8 4 = 1/4 2C = 1/2 (series 4 only)					22 SOLENOID INTERFACE O2 = mech. sol. 22 x 22 - (series 3 only) 22 = mech. sol. 22 x 22 - (series 4 only) 50 = mech. sol. 32 x 32 - (series 4 1/2 only)			7 SOLENOID VOLTAGE: See page 2/47			

Series 3 and 4 Pneumatically Operated Valves

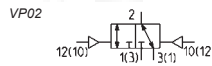
Series 3: 1/8, 3/2-way and 5/2-way

Series 4: 1/8, 1/4 and 1/2

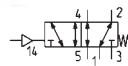
3/2, 5/2 and 5/3-way



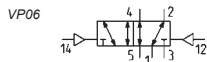
Part Number
338-035
338L-035 (For use with CNVL bases)
334-035



Part Number
338-033
338L-033 (For use with CNVL bases)
334-033



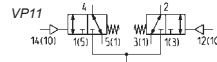
Part Number
358-035
354-035



Part Number
358-033
354-033



Part Number
368-033
364-033
VP09
378-033
374-033
VP10
388-033
384-033



Part Number
338D-035
334D-035
VP12
348D-035
344D-035
VP13
398D-035
394D-035

Technical Data

Type of Construction

With spool

Media

Filtered air, without lubrication. If lubricated air is used, it is recommended to use oil ISO VG32. Once applied the lubrication should never be interrupted.

Operating Pressure

See technical data page 2/6

Flow Rates

See technical data page 2/6

Operating Temperature

0°C to +80°C.
(with dry air -20°C to +60°C)

Materials

Body: Aluminium
Spool: Stainless steel
Seals: NBR

Threaded Connections

1/8, 1/4, 1/2

Mountings

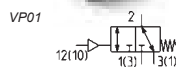
Through holes in valve body

Additional Options

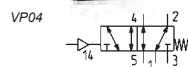
Seal Kits available on request

Special Requests

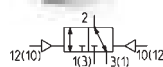
For assistance, contact our technical office or your local Camozzi distributor.



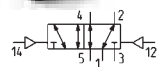
Part Number
438-35



Part Number
458-35



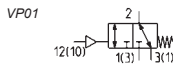
Part Number
438-33
VP03
438-34



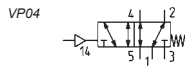
Part Number
458-33
VP05
458-34

Series 3 and 4 Pneumatically Operated Valves

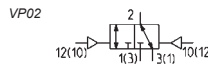
2



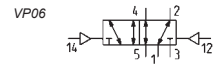
Part Number
434-35



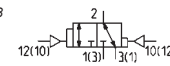
Part Number
454-35



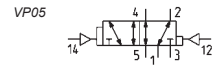
Part Number
434-33



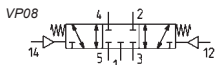
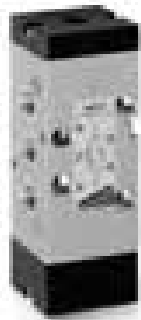
Part Number
454-33



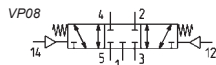
Part Number
434-34



Part Number
454-34



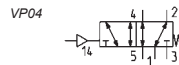
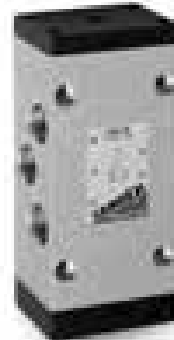
Part Number
468-33



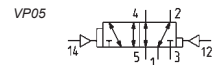
Part Number
464-33



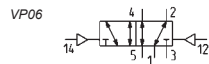
Part Number
474-33



Part Number
452C-35



Part Number
452C-34

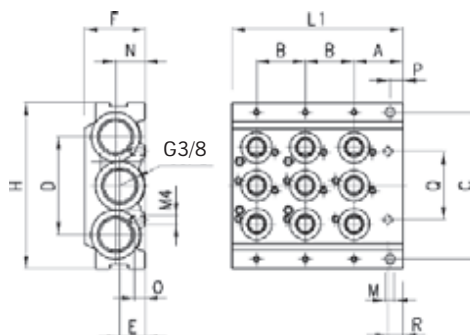


Part Number
452C-33

CODING EXAMPLE

3	5	8	-	035
3	SERIES: 3, 4	8	CONNECTIONS 8 = 1/8 4 = 1/4 2C = 1/2	
5	N° OF WAYS/POSITIONS 3 = 3/2 5 = 5/2 6 = 5/3 C.C. 7 = 5/3 C.O.	035	ACTUATION/RETURN 033 = pneumatic / pneumatic (series 3) 33 = pneumatic / pneumatic (series 4) 34 = pneumatic / differential (series 4) 35 = pneumatic / spring (series 4) 035 = pneumatic / spring (series 3)	

Series 3 Modular Manifolds - 1/8 and 1/4

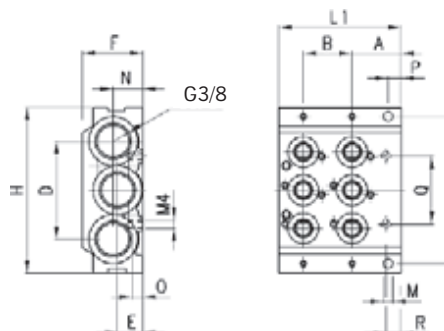


Basic Module with Three Positions

CNVL-3H3 to suit series 3, 1/8

CNVL-4H3 to suit series 3, 1/4

The packaging contains the following items: 3 O-rings, 2 Fixing Screws and 2 Junction plugs per station.

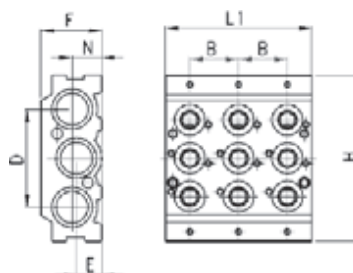


Basic Module with Two Positions

CNVL-3H2 to suit series 3, 1/8

CNVL-4H2 to suit series 3, 1/4

The packaging contains the following items: 3 O-rings, 2 Fixing Screws and 2 Junction plugs per station.



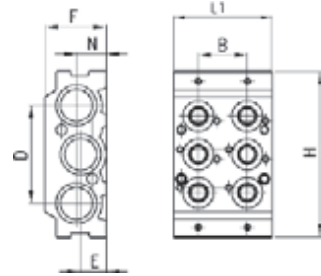
Expansion Module with Three Positions

CNVL-3I3 to suit series 3, 1/8

CNVL-4I3 to suit series 3, 1/4

The packaging contains the following items: 3 O-rings, 2 Fixing Screws and 2 Junction plugs.

Series 3 Modular Manifolds - 1/8 and 1/4

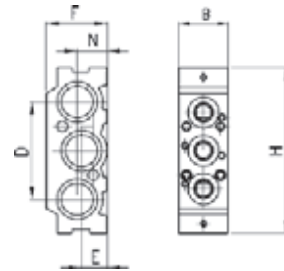


Expansion Module with Two Positions

CNVL-312 to suit series 3, 1/8

CNVL-412 to suit series 3, 1/4

The packaging contains the following items: 3 O-rings, 2 Fixing Screws and 2 Junction plugs.

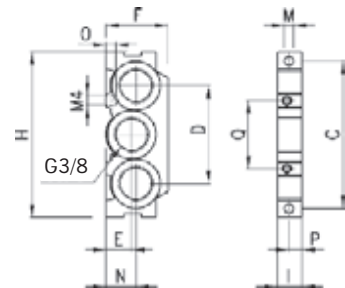


Expansion Module with One Position

CNVL-311 to suit series 3, 1/8

CNVL-411 to suit series 3, 1/4

The packaging contains the following items: 3 O-rings, 2 Fixing Screws and 2 Junction plugs.



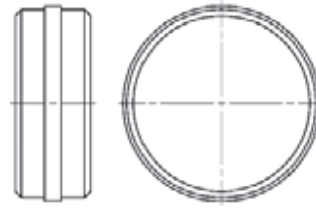
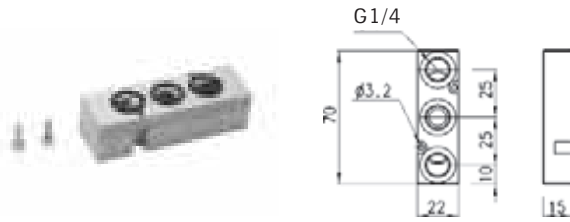
Terminal Module

CNVL-3H to suit series 3, 1/8

CNVL-4H to suit series 3, 1/4

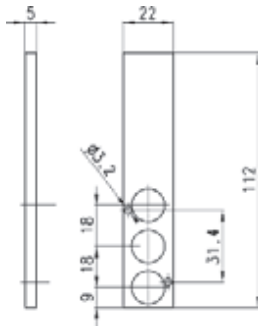
The packaging contains the following items: 2 Junction plugs per station.

Accessories



Intermediate plate for manifolds with outlets
CNVL-3P
CNVL-4P
The packaging contains the following items: 3 O-rings and 2 Fixing Screws

Part Number	
CNVL-3H-TP	
CNVL-4H-TP	
Code for Plug-in Versions	
T	Supply (1) + exhaust (3 and 5)
U	Supply (1)
J	Exhausts (3 and 5)

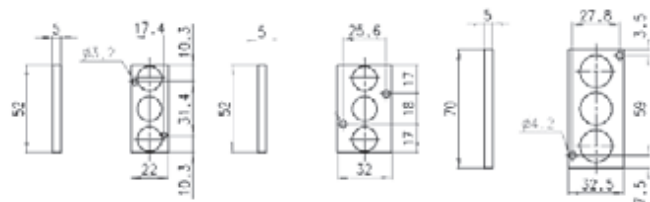
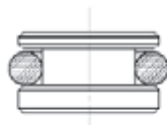


Excluder
CNVL/1L Code L
The packaging contains the following items: 3 O-rings and 2 Fixing Screws

Interface Module Manifolds between 1/4 and 1/8 (Series 3)
CNVL-4H-3H



Part Number: **CNVL/1** Part Number: **CNVL/2** Part Number: **CNVL/3**



Blanking Plug for CNVL... Manifolds. For use with 3/2- way valves
TCNVL/3 for 1/8
TCNVL/5 for 1/4

Blanking Plate for Manifolds with outlets
CNVL/1 For Series 3 - 1/8
CNVL/2 For Series 4 - 1/8
CNVL/3 For Series 4 - 1/4
CNVL/4 For Series 3 - 1/4

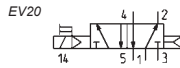
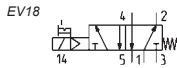
Series 9 Electropneumatically and Pneumatically Operated Valves

Assembly with sub-base (ISO 5599/1 Standards)
 Size 1, 2 and 3
 5/2 and 5/3 way CC CO



2

CONTROL



Part Number
951-000-P15-23-*
952-000-P15-23-*
953-000-P15-23-*

*Coil sold separately, page 2/47

Part Number
951-000-P16-23-*
952-000-P16-23-*
953-000-P16-23-*

*Coil sold separately, page 2/47

Technical Data

Type of Construction

Spool-type (Servo controlled)

Media

Filtered air, without lubrication. If lubricated air is used, it is recommended to use oil ISO VG32. Once applied the lubrication should never be interrupted

Operating Pressure

See technical data page 2/6

Flow Rates

See technical data page 2/6

Operating Temperature

0°C to +60°C. (with dry air -20°C to +60°C)

Materials

Body: Aluminium
 Spool: Stainless steel
 Seal: NBR

Mountings

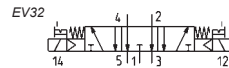
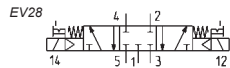
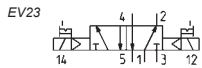
Threaded holes in sub-base

Additional Options

Seal Kits available on request

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.



Part Number
951-000-P11-23*
952-000-P11-23*
953-000-P11-23*

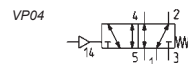
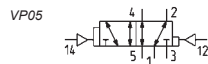
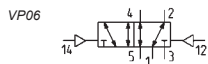
*Coil sold separately, page 2/47

Part Number
961-000-P11-23*
962-000-P11-23*
963-000-P11-23*

*Coil sold separately, page 2/47

Part Number
971-000-P11-23*
972-000-P11-23*
973-000-P11-23*

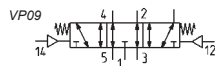
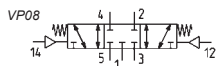
*Coil sold separately, page 2/47



Part Number
951-000-33
952-000-33
953-000-33

Part Number
951-000-34
952-000-34
953-000-34

Part Number
951-000-35
952-000-35
953-000-35



Part Number
961-000-33
962-000-33
963-000-33

Part Number
971-000-33
972-000-33
973-000-33



CODING EXAMPLE

9 5 1 - C 1 B - P16 - 23 - U 7 7 - S

9 SERIES: 9	1 CONNECTIONS (OUTLETS): Size 1 = 1/4 Size 2 = 3/8 Size 3 = 1/2	U SOLENOID MATERIAL: U = PPS A8 = PPS G = Nylon H8 = PA6VO
5 NO OF WAYS/POSITIONS: 5 = 5/2 6 = 5/3 Closed centres 7 = 5/3 Open centres	B N° OF SUB-BASE: A = 1 *K = 9 *B = 2 *L = 10 *C = 3 *M = 11 *D = 4 *N = 12 *E = 5 *P = 13 *F = 6 *R = 14 *G = 7 *S = 15 *H = 8	7 SOLENOID DIMENSIONS: 7 = 22 x 22 8 = 30 x 30 9 = 22 x 58
1 SIZE: 1 = Size 1 2 = Size 2 3 = Size 3	P16 ACTUATION: 33 = pneumatic, pneumatic return 34 = pneumatic, differential pneumatic return 35 = pneumatic, mechanical spring return P11 = double solenoid (horizontal solenoids) P15 = single solenoid, spring return (horizontal solenoids) P16 = solenoid, pneumatic spring return (horizontal solenoids)	7 SOLENOID VOLTAGE: See solenoids page 2/47
C SUB-BASE: C = ISO (manifold outlets) F = ISO (single sub-base, side connections) G = ISO (single sub-base, rear connections) N = ISO (front outlet interface) N1A = front outlet sub-base	23 SOLENOID INTERFACE: 23 = A531 - BC2	

Complete with two end-blocks Part Number 90-H** or 90*-HN*.

Sub-base for Series 9



Single Sub-base with Side Outlets	
Size	
901-F1A	1
902-F2A	2
903-F3A	3



Single Sub-base with Rear Outlets	
Size	
901-G1A	1
902-G2A	2
903-G3A	3



Manifold sub-base with common exhausts and inlet with outlet connection on rear	
Size	
901-C1A	1
902-C2A	2
903-C3A	3



End Block for manifold Sub-base	
Size	
901-H1*	1
902-H2*	2
903-H3*	3
*Pair	



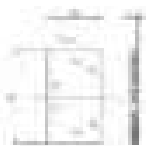
End Block with Front Outlet	
Size	
901-N1	1
902-N2	2
903-N3	3



Manifold Sub-base with common inlet and exhaust connection and with outlet connection on the front	
Size	
901-N1A	1



End Block for manifold bases with front outlets	
Size	
901-HN1	1



Cover Plate for Unused Positions	
901-TP	



Mounting	
901-C1A-TP	
902-C2A-TP	



Separation Joint	
901-N1A-T	



Separation Joint	
901-N1A/TP	

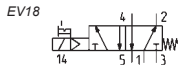
Series NA NAMUR Valves

Connection: 1/4

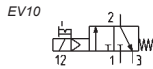
Electropneumatically operated 3/2, 5/2, 5/3 way with interface according to NAMUR standard

2

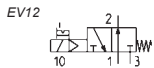
CONTROL



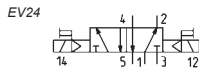
Part Number
NA54N-15-02-*



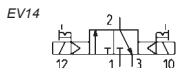
Part Number
NA34N-15-02-*



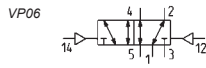
Part Number
NA44N-15-02-*



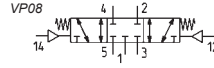
Part Number
NA54N-11-02-*



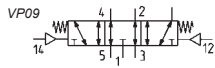
Part Number
NA34N-11-02-*



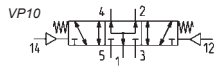
Part Number
NA54N-33



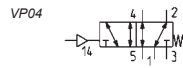
Part Number
NA64N-33



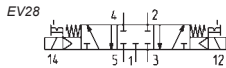
Part Number
NA74N-33



Part Number
NA84N-33



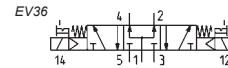
Part Number
NA54N-35



Part Number
NA64N-11-02-*



Part Number
NA74N-11-02-*



Part Number
NA84N-11-02-*



Technical Data

Type of Construction

Spool type (pilot operated)

Media

Filtered air, without lubrication. If lubricated air is used, it is recommended to use oil ISO VG32. Once applied, the lubrication should never be interrupted.

Operating Pressure

See technical data page 2/7

Flow Rates

See technical data page 2/7

Operating Temperature

0°C to +60°C.
(with dry air -20°C to +60°C)

Materials

Body: Aluminium
Spool: Stainless Steel
Seals: NBR

Connections

2, 4 = NAMUR 1, 3, 5 = 1/4

Mountings

Through 2 Ø5 holes in valve body

Additional Options

Seal Kits available on request

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.

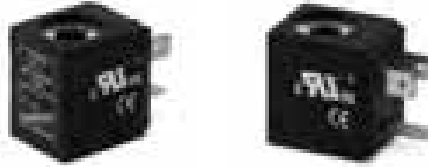
*Coil sold separately, page 2/47

CODING EXAMPLE

NA	5	4N	15	02	U	7	7
NA SERIES: NAMUR					U SOLENOID MATERIAL U = PPS H = Self-extinguishing nylon Explosion-proof (30 x 30)* G = PA * on request		
5 N° N° WAY/POSITIONS 3 = 3/2 4 = 3/2 N.A. 5 = 5/2 6 = 5/3 C.C. 7 = 5/3 C.A. 8 = 5/3 pressure centres	15 ACTUATION 11 = double solenoid 15 = single solenoid spring return 33 = pneumatic / pneumatic 35 = pneumatic / spring		7 SOLENOID DIMENSIONS 7 = 22 x 22 8 = 30 x 30 9 = 22 x 22 with memory				
4N CONNECTIONS 4 = 1/4 supply NAMUR Standards	02 SOLENOID INTERFACE 02 = mech. sol. 22 x 22		7 SOLENOID VOLTAGE: See page 2/47				

U7* - U7*EX - G7* - A8* - G93 - B* - H8 Solenoid Coils

Solenoids for electropneumatically operated valves Series A-3-4-9-NA
Version A and B
Connection according to DIN 43650 and DIN 40050 standards



Solenoid Voltages U7			
U7H	24V	50/60 Hz	3.5VA
	12V	DC	3.1W
U7K	110V	AC 50/60Hz	4.3VA
	125V	AC 50/60Hz	5.5VA
U7J	230V	50/60Hz	3.5VA
	240V	50/60Hz	4VA
U79	48V	DC	3.1W
U710	110V	DC	3.2W
U77	24V	DC	3.1W
	48V	50/60Hz	3.5VA
U7F	380V	50/60Hz	7VA
U72	12V	DC	5W
U73	24V	DC	5W
U74	48V	DC	5.3W
U76	110V	DC	4.2W

Solenoid Voltages G7			
G7H	24V	50/60 Hz	3.5VA
	12V	DC	3.1W
G7K	110V	AC 50/60Hz	4.3VA
	125V	AC 50/60Hz	5.5VA
G7J	230V	50/60Hz	3.5VA
	240V	50/60Hz	4VA
G79	48V	DC	3.1W
G710	110V	DC	3.2W
G77	24V	DC	3.1W
	48V	50/60HZ	3.5VA
G7F	380V	50/60HZ	7VA
G72	12V	DC	5W
G73	24V	DC	5W
G74	48V	DC	5.3W
G76	110V	DC	4.2W



Solenoid Voltages A80			
A8B	24V	50/60 Hz	5VA
A8D	110V	50/60 Hz	5VA
A8E	220V	50/60Hz	5VA
A83	24V	DC	4W

Solenoid Voltages G90	
G93	24V

New



Solenoid Voltages B7		
B7B	24 V - 50/60 Hz	9 VA
B7D	110 V - 50/60 Hz	9 VA
B7E	230 V - 50/60 Hz	9 VA
B72	12 V - DC	10 W
B73	24 V - DC	10 W

Solenoid Voltages B8		
B8B/B8BK	24 V - 50 Hz	15 VA
B8D/B8DK	110 V - 50/60 Hz	15 VA
B8E/B8EK	230 V - 50/60 Hz	15 VA
B82/B82K	12 V - DC	19 W
B83/B83K	24 V - DC	19 W

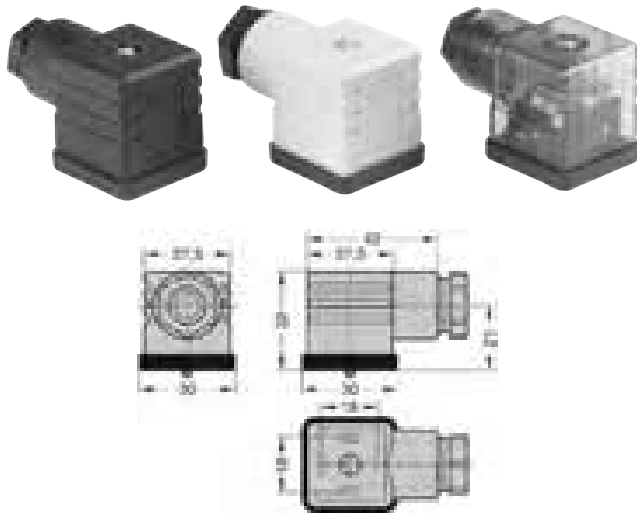
Solenoid Voltages B9		
B9B	24 V - 50 Hz	29 VA
B9D	110 V - 50/60 Hz	29 VA
B9E	230 V - 50 Hz	29 VA
B92	12 V - DC	30 W
B93	24 V - DC	30 W

Explosion proof coils available on request

Solenoid DIN Connectors

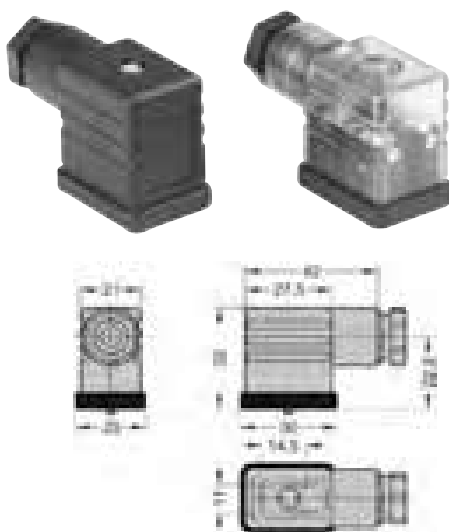
With cable gland entry and conforming to EN175301-803 (Formerly DIN43650)

The Camozzi range of DIN connectors with cable gland entry offers flexibility and are suitable for a wide variety of applications.



Form A (18mm pin spacing) Part Number	Type (LED Voltage AC/DC)	Cable Entry
KA132000B9	Black Connector	PG9
KA132000A9	Grey Connector	PG9
KA132V54T9	Transparent (24V LED)	PG9
KA132V55T9	Transparent (115V LED)	PG9
KA132V56T9	Transparent (230V LED)	PG9

Use with Camozzi Series 4 valves - 1/2, Series 6 and A80 coils



Industrial Form B (11mm pin spacing) Part Number	Type (LED Voltage AC/DC)	Cable Entry
KB132000B9	Black Connector	PG9
KB132V54T9	Transparent (24V LED)	PG9
KB132V55T9	Transparent (115V LED)	PG9
KB132V56T9	Transparent (230V LED)	PG9

Use with Camozzi Series A, Series AP, Series 3, Series 4 ISO valves and NAMUR valves

Technical Data

Type

Connector with cable gland entry: standard, mini and micro

Operating Temperature

-40°C to +90°C.

Materials

Connectors: Polyamide (glass fibre reinforced)

Profile gasket: NBR standard (Form A and B)

Flat gasket: NBR standard (Form C)

Screw: Form A and B - M3 x 32mm

Industrial Form C - M3 x 28mm

Form C - M2.5 x 28mm

Insulation Group

VDE 0110 1/89 - Class C

Voltage

Up to 250V AC or DC unless otherwise stated

Other voltages available on request

Current

10A (nominal) 16A (max) - Form A and B

6A (nominal) 10A (max) - Form C

Contact Resistance

≤4m Ω

Protection Rating

IP65 (when correctly assembled with fixing screw and gasket supplied)

Cable Gland Size

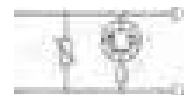
PG7 cable diameter 4 - 6mm

PG9 cable diameter 6 - 8mm

LED Circuit Function

Where an LED is required, the standard control circuit contains an amber bipolar LED to confirm supply voltage, and VDR (varistor) which protects the supply and load from over voltage.

The circuit can be used for AC or DC supply at the stated voltage



Options

LED in amber, red or green

Additional control circuit functions available.

Gaskets in profile or flat Form.

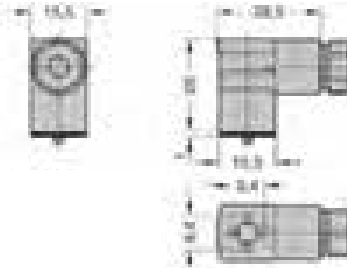
For solenoid connectors with moulded cable, see pages 2/50 and 51

For proximity switches, see page 1/44

Special Requests

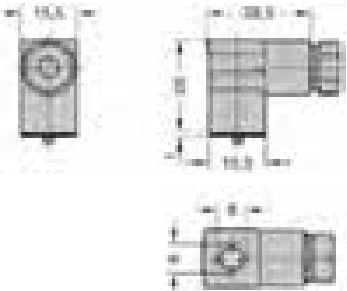
For assistance, contact our technical office or your local Camozzi distributor.

Solenoid DIN Connectors



Industrial Form C (9.4mm pin spacing)	Type	Cable
Part Number	(LED Voltage AC/DC)	Entry
KD136000B7	Black Connector	PG7
KD136V54T7	Transparent (24V LED)	PG7
KD136V55T7	Transparent (115V LED)	PG7
KD136V56T7	Transparent (230V LED)	PG7

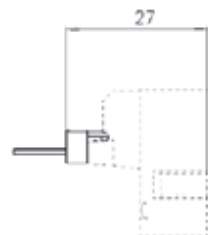
Use with Camozzi Series E and P valves



Form C (8mm pin spacing)	Type	Cable
Part Number	(LED Voltage AC/DC)	Entry
KC136000B7	Black Connector	PG7
KC136V54T7	Transparent (24V LED)	PG7
KC136V55T7	Transparent (115V LED)	PG7
KC136V56T7	Transparent (230V LED)	PG7

Use with Camozzi Series W valves

Solenoid Connectors



Part Number	
121-803	with 300 mm cable
121-806	with 600 mm cable
121-810	with 1000 mm cable

Use with Camozzi Series K and Series E (sizes 10.5mm) valves

Technical Data

Type

Connector with cable gland entry: standard, mini and micro

Operating Temperature

-40°C to +90°C

Materials

Connectors: Polyamide (glass fibre reinforced)
 Profile gasket: NBR standard (Form A and B)
 Flat gasket: NBR standard (Form C)
 Screw: Form A and B - M3 x 32mm
 Industrial Form C - M3 x 28mm
 Form C - M2.5 x 28mm

Insulation Group

VDE 0110 1/89 - Class C

Voltage

Up to 250V AC or DC unless otherwise stated

Other voltages available on request

Current

10A (nominal) 16A (max) - Form A and B

6A (nominal) 10A (max) - Form C

Contact Resistance

≤4m Ω

Protection Rating

IP65 (when correctly assembled with fixing screw and gasket supplied)

Cable Gland Size

PG7 cable diameter 4 - 6mm
 PG9 cable diameter 6 - 8mm

LED Circuit Function

Where an LED is required, the standard control circuit contains an amber bipolar LED to confirm supply voltage, and VDR (varistor) which protects the supply and load from over voltage.

The circuit can be used for AC or DC supply at the stated voltage



Options

LED in amber, red or green

Additional control circuit functions available.

Gaskets in profile or flat Form.

For solenoid connectors with moulded cable, see pages 2/50 and 51

For proximity switches, see page 1/44

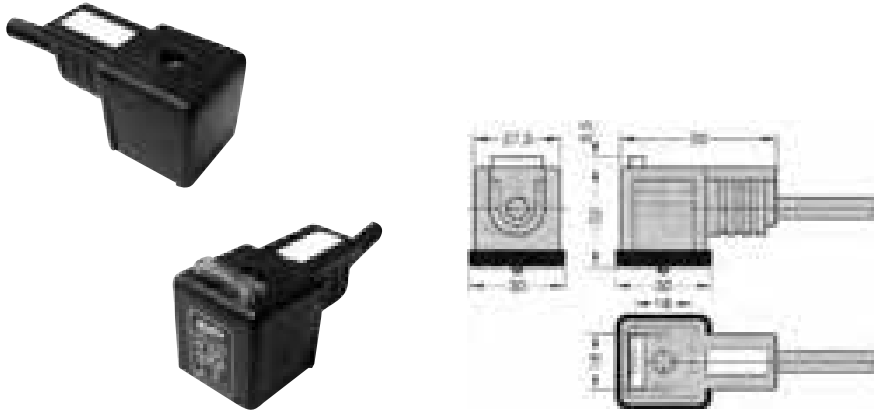
Special Requests

For assistance, contact our technical office or your local Camozzi distributor.

Solenoid DIN Connectors - with Moulded Cable

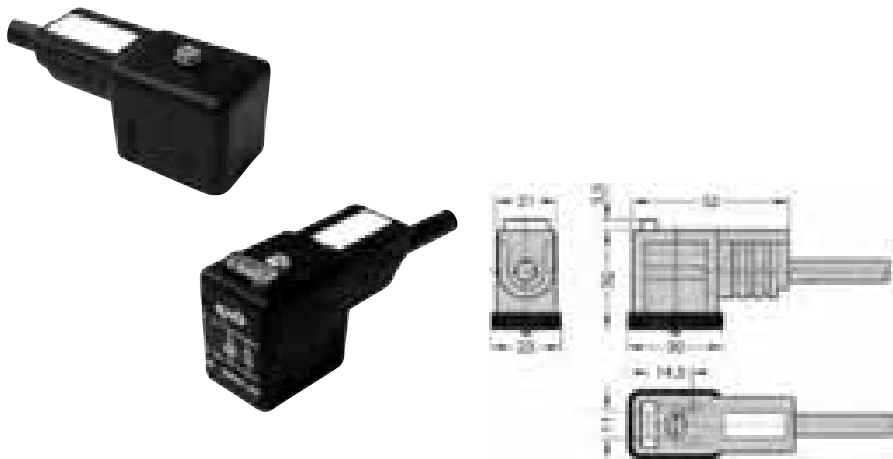
Moulded cable assemblies EN175301-803 (Formerly DIN43650)

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



Form A (18mm pin spacing) Double Earth Part Number	Type (LED Voltage AC/DC)	Cable Length
MA134000PA05100	Cable Connector only	1M
MA134000PA05300	Cable Connector only	3M
MA634V54PA05100	Cable Connector (24V LED)	1M
MA634V54PA05300	Cable Connector (24V LED)	3M
MA634V55PA05100	Cable Connector (115V LED)	1M
MA634V55PA05300	Cable Connector (115V LED)	3M
MA634V56PA05100	Cable Connector (230V LED)	1M
MA634V56PA05300	Cable Connector (230V LED)	3M

Use with Camozzi Series 4 valves - 1/2, series 6 and A80 coils



Industrial Form B (11mm pin spacing) 12 O'Clock Earth Part Number	Type (LED Voltage AC/DC)	Cable Length
MB135000PA05100	Cable Connector only	1M
MB135000PA05300	Cable Connector only	3M
MB635V54PA05100	Cable Connector (24V LED)	1M
MB635V54PA05300	Cable Connector (24V LED)	3M
MB635V55PA05100	Cable Connector (115V LED)	1M
MB635V55PA05300	Cable Connector (115V LED)	3M
MB635V56PA05100	Cable Connector (230V LED)	1M
MB635V56PA05300	Cable Connector (230V LED)	3M

Use with Camozzi Series A, series AP, series 3, series 4 and ISO valves

Technical Data

Type

Moulded cable connectors: Standard, mini and micro

Operating Temperature

-40°C to +90°C

Materials

Connectors: TPU
Cable: PVC standard
Integrated gasket: TPU
Screw: Form A and B - M3 x 28mm
Industrial Form C M3 x 23mm
Form C M2.5 x 23mm

Insulation Group

VDE 0110 1/89 - Class C

Voltage

Up to 250V AC or DC unless otherwise stated Other voltages available on request

Current

5A - Form A and B
3A - Form C

Contact Resistance

≤4m Ω

Protection Rating

IP67

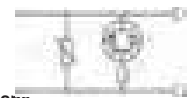
Standard Cable

3 x 0.75mm² conductors PVC HO5 VVF (Form A and B)
3 x 0.50mm² conductors PVC HO3 VVF (Form C)

LED Circuit Function

Where an LED is required, the standard control circuit contains an amber bipolar LED to confirm supply voltage, and VDR (varistor) which protects the supply and load from over voltage.

The circuit can be used for AC or DC supply at the stated voltage.



Options

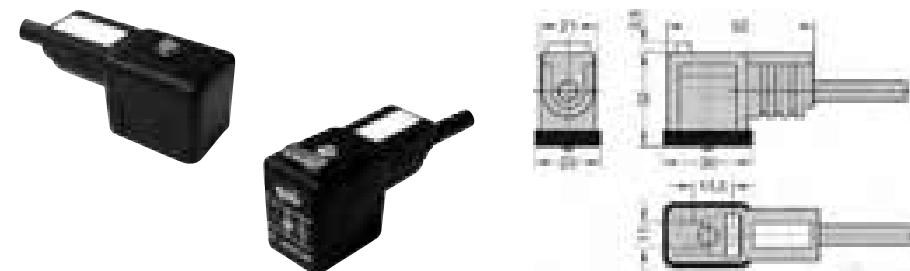
Additional cable types and lengths.
LED in amber, red or green.
Additional control circuit functions available.

For solenoid connectors with cable gland entry, pages 2/48 and 49.
For proximity switches, see page 1/44

Special Requests

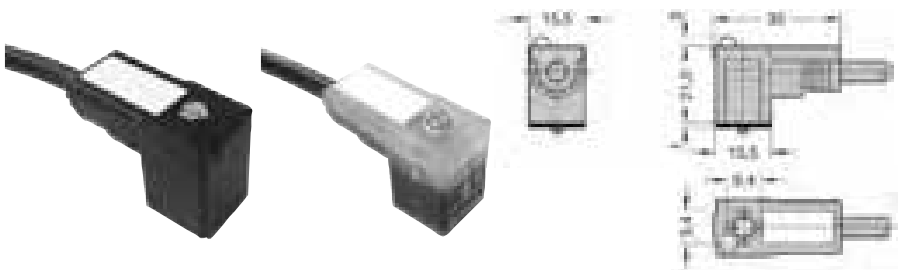
For assistance, contact our technical office or your local Camozzi distributor.

Solenoid DIN Connectors - with moulded cables



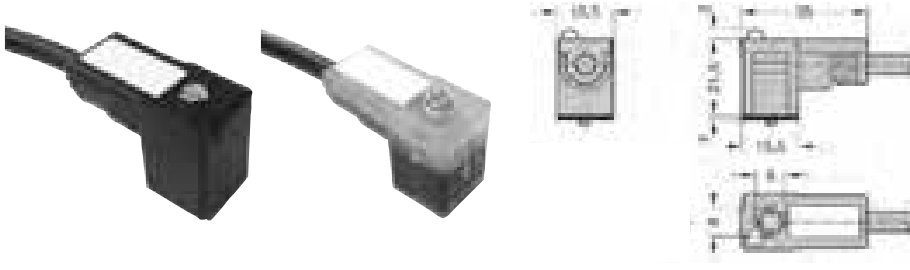
Industrial Form B (11mm pin spacing) 6 O'Clock Earth	Type	Cable Length
Part Number	(LED Voltage AC/DC)	
MB136000PA05100	Cable Connector only	1M
MB136000PA05300	Cable Connector only	3M
MB636V54PA05100	Cable Connector (24V LED)	1M
MB636V54PA05300	Cable Connector (24V LED)	3M
MB636V55PA05100	Cable Connector (115V LED)	1M
MB636V55PA05300	Cable Connector (115V LED)	3M
MB636V56PA05100	Cable Connector (230V LED)	1M
MB636V56PA05300	Cable Connector (230V LED)	3M

Use with Camozzi Series A, series AP, Series 3, Series 4 and ISO valves and NAMUR Valves



Industrial Form C (9.4mm pin spacing) Double Earth	Type	Cable Length
Part Number	(LED Voltage AC/DC)	
MD134000PA01100	Cable Connector only	1M
MD134000PA01300	Cable Connector only	3M
MD634V54TA01100	Cable Connector (24V LED)	1M
MD634V54TA01300	Cable Connector (24V LED)	3M
MD634V55TA01100	Cable Connector (115V LED)	1M
MD634V55TA01300	Cable Connector (115V LED)	3M
MD634V56TA01100	Cable Connector (230V LED)	1M
MD634V56TA01300	Cable Connector (230V LED)	3M

Use with Camozzi Series E, and Series P valves



Industrial Form C (8mm pin spacing) Double Earth	Type	Cable Length
Part Number	(LED Voltage AC/DC)	
MC134000PA01100	Cable Connector only	1M
MC134000PA01300	Cable Connector only	3M
MC634V54TA01100	Cable Connector (24V LED)	1M
MC634V54TA01300	Cable Connector (24V LED)	3M
MC634V55TA01100	Cable Connector (115V LED)	1M
MC634V55TA01300	Cable Connector (115V LED)	3M
MC634V56TA01100	Cable Connector (230V LED)	1M
MC634V56TA01300	Cable Connector (230V LED)	3M

Use with Camozzi Series W valves

Technical Data

Type
Moulded cable connectors: Standard, mini and micro

Operating Temperature
-40°C to +90°C.

Materials
Connectors: TPU
Cable: PVC standard
Integrated gasket: TPU
Screw: Forms A and B - M3 x 28mm
Industrial Form C M3 x 23mm
Form C M2.5 x 23mm

Insulation Group
VDE 0110 1/89 - Class C

Voltage
Up to 250V AC or DC unless otherwise stated Other voltages available on request

Current
5A - Form A and B
3A - Form C

Contact Resistance
≤4m Ω

Protection Rating
IP67

Standard Cable
3 x 0.75mm² conductors PVC HO5 VVF (Form A and B)
3 x 0.50mm² conductors PVC HO3 VVF (Form C)

LED Circuit Function
Where an LED is required, the standard control circuit contains an amber bipolar LED to confirm supply voltage, and VDR (varistor) which protects the supply and load from over voltage.

The circuit can be used for AC or DC supply at the stated voltage.



Options
Additional cable types and lengths.
LED in amber, red or green.
Additional control circuit functions available.
For solenoid connectors with cable gland entry, pages 2/48 and 49.
For proximity switches, see page 1/44

Special Requests
For assistance, contact our technical office or your local Camozzi distributor.

Series 3 Valve Island Plug-In

Plug-In for electro-pneumatically operated valves Series 3
1/8, 3/2, 5/2, and 5/3 way



Technical Data

Construction

Spool type

Valve group

Ways / Pos. 5/2 - 5/3 C.C. C.O. C.P.
- 2x3/2 N.O. - 2x3/2 N.C. - 1 3/2
N.O.+1 3/2 N.C.

Materials

Aluminium body, stainless steel
spool, seals in NBR

Mounting

Through holes in the valve body

Connection

1/8

Installation

In any position

Operating temperature

0 to 60°C (with dry air at -20°C)

Nominal flow

Rate*Qn 700 Nl/min

Nominal diameter

7 mm

Fluid

Filtered air, without lubrication. If
lubricated air is used, it is
recommended to use ISO VG32 oil,
and to never interrupt the lubrication.

Signalling

LED

Voltage

24 V DC

Voltage tolerances

+/- 10%

Duty cycle

ED 100%

Class of insulation

Class H

Protection class

IP 65

Power consumption

3W

Power supply Connector

SUB-D 25 poles IP65

CODING EXAMPLE

3P	8	-	E	AB	-	3B3M	-	U	7	7
3P	SERIES: Series 3 PLUG-IN			AB	CONFIGURATION OF PNEUMATIC AND ELECTRIC MODULES see table page 2/53		7	SOLENOID DIMENSIONS 7 = 22 x 22		
8	CONNECTION: 8 = 1/8			3B3M	VALVE COMPOSITION see table page 2/53		7	SOLENOID VOLTAGE 7 = 24 V DC		
E	N° VALVE POSITIONS see table page 2/53			G	SOLENOID MATERIAL G = Nylon U = PET		SPECIAL = standard S = special to be specified			

Table for the configuration of the modularity of the series 3 plug-in

The letter represents the number of valve positions	Number of valve positions, showing the combination of the modules from which the valve island is built	Position of the D-SUB and the number of valves to which it is connected		Configuration code	
		LEFT	RIGHT	positions	configuration
A = 2 pos.	[2]	-	2	A	A-A
	(2)	2	-	A	A-B
B = 3 pos.	[3]	-	3	B	A-A
	(3)	3	-	B	A-B
C = 4 pos.	[2] [2]	-	4	C	A-A
	(2) (2)	4	-	C	A-B
D = 5 pos.	[3] [2]	-	5	D	A-A
	(3) (2)	5	-	D	A-B
	[2] [3]	-	5	D	A-C
	(2) (3)	5	-	D	A-D
E = 6 pos.	[3] [3]	-	6	E	A-A
	(3) (3)	6	-	E	A-B
	[2] [2] [2]	-	6	E	B-A
	(2) (2) (2)	6	-	E	B-B
F = 7 pos.	[2] [3] [2]	-	7	F	A-A
	(2) (3) (2)	7	-	F	A-B
	[2] [2] [3]	-	7	F	B-A
	(2) (2) (3)	7	-	F	B-B
	[3] [2] [2]	-	7	F	B-C
	(3) (2) (2)	7	-	F	B-D
G = 8 pos.	[3] [3] [2]	-	8	G	A-A
	(3) (3) (2)	8	-	G	A-B
	[2] [3] [3]	-	8	G	A-C
	(2) (3) (3)	8	-	G	A-D
	[2] [2] [2] [2]	-	8	G	B-A
	(2) (2) (2) (2)	8	-	G	B-B
	[3] [2] [3]	-	8	G	B-C
	(3) (2) (3)	8	-	G	B-D
H = 9 pos.	[3] [3] [3]	-	9	H	A-A
	(3) (3) (3)	9	-	H	A-B
	[3] [2] [2] [2]	-	9	H	B-A
	(3) (2) (2) (2)	9	-	H	B-B
	[2] [3] [2] [2]	-	9	H	B-C
	(2) (3) (2) (2)	9	-	H	B-D
	[2] [2] [3] [2]	-	9	H	B-E
	(2) (2) (3) (2)	9	-	H	B-F
I = 10 pos.	[2] [2] [2] [3]	-	9	H	B-G
	(2) (2) (2) (3)	9	-	H	B-H
I = 10 pos.	[2] [3] [3] [2]	-	10	I	A-A
	(2) (3) (3) (2)	10	-	I	A-B
J = 11 pos.	[2] [3] [3] [3]	-	11	J	A-A
	(2) (3) (3) (3)	11	-	J	A-B
	[3] [3] [3] [2]	-	11	J	A-C
	(3) (3) (3) (2)	11	-	J	A-D
K = 12 pos.	[3] [3] [3] [3]	3	9	K	A-A
	(3) (3) [3] [3]	6	6	K	A-B
	(3) (3) (3) [3]	9	3	K	A-C
L = 13 pos.	(2) [3] [3] [3] [2]	2	11	L	A-A
	(2) (3) [3] [3] [2]	5	8	L	A-B
	(2) (3) (3) [3] [2]	8	5	L	A-C
	(2) (3) (3) (3) [2]	11	2	L	A-D
M = 14 pos.	(2) (3) [3] [3] [3]	5	9	M	A-A
	(2) (3) (3) [3] [3]	8	6	M	A-B
	(2) (3) (3) (3) [3]	11	3	M	A-C
	(3) [3] [3] [3] [2]	3	11	M	A-D
	(3) (3) [3] [3] [2]	6	8	M	A-E
	(3) (3) (3) [3] [2]	9	5	M	A-F
N = 15 pos.	(3) (3) [3] [3] [3]	6	9	N	A-A
	(3) (3) (3) [3] [3]	9	6	N	A-B
O = 16 pos.	(2) (3) [3] [3] [3] [2]	5	11	O	A-A
	(2) (3) (3) [3] [3] [2]	8	8	O	A-B
	(2) (3) (3) (3) [3] [2]	11	5	O	A-C
P = 17 pos.	(2) (3) (3) [3] [3] [3]	8	9	P	A-A
	(2) (3) (3) (3) [3] [3]	11	6	P	A-B
	(3) (3) [3] [3] [3] [2]	6	11	P	A-C
	(3) (3) (3) [3] [3] [2]	9	8	P	A-D
Q = 18 pos.	(3) (3) (3) [3] [3] [3]	9	9	Q	A-A
R = 19 pos.	(2) (3) (3) [3] [3] [3] [2]	8	11	R	A-A
	(2) (3) (3) (3) [3] [3] [2]	11	8	R	A-B
S = 20 pos.	(2) (3) (3) (3) [3] [3] [3]	11	9	S	A-A
	(3) (3) (3) [3] [3] [3] [2]	9	11	S	A-B
T = 21 pos.*	(3) (3) [3] [3] [3] [3] [3]	10	11	T	A-A
	(3) (3) (3) [3] [3] [3] [3]	11	10	T	A-B
U = 22 pos.	(2) (3) (3) (3) [3] [3] [3] [2]	11	11	U	A-A

*On the valve island with 21 valve positions, electric and pneumatic modularity do not correspond

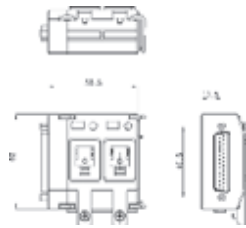
Series 3 Plug-In Functioning of Solenoid Valves



Mod.	Function	Actuation	Pilot supply	Working pressure (bar)	Pilot pressure (bar)	Code
338D-015-02	2 x 3/2 NC	solenoid/spring	Internal	2,5 - 10	-	C
348D-015-02	2 x 3/2 NO	solenoid/spring	Internal	2.5 - 10	-	A
398D-015-02	1 3/2 NC + 1 3/2 NO	solenoid/spring	Internal	2.5 - 10	-	G
358-015-02	5/2 monostable	solenoid/spring	Internal	2.5 - 10	-	M
358-011-02	5/2 bistable	solenoid/solenoid	Internal	1.5 - 10	-	B
368-011-02	5/3 CC	solenoid/solenoid	Internal	2 - 10	-	H
378-011-02	5/3 CO	solenoid/solenoid	Internal	2 - 10	-	K
388-011-02	5/3 CP	solenoid/solenoid	Internal	2 - 10	-	N
338D-E15-02	2 x 3/2 NC	solenoid/spring	External	-0.9 - 10	2.5 - 10	Q
348D-E15-02	2 x 3/2 NO	solenoid/spring	External	-0.9 - 10	2.5 - 10	R
398D-E15-02	1 3/2 NC + 1 3/2 NO	solenoid/spring	External	-0.9 - 10	2.5 - 10	S
358-E15-02	5/2 monostable	solenoid/spring	External	-0.9 - 10	2.5 - 10	D
358-E11-02	5/2 bistable	solenoid/solenoid	External	-0.9 - 10	1.5 - 10	Y
368-E11-02	5/3 CC	solenoid/solenoid	External	-0.9 - 10	2 - 10	V
378-E11-02	5/3 CO	solenoid/solenoid	External	-0.9 - 10	2 - 10	Z
388-E11-02	5/3 CP	solenoid/solenoid	External	-0.9 - 10	2 - 10	W
CNVL/1L	free position (electrical and pneumatic cover)	-	-	-	-	L
CNVL-3P1	plate for supply and outlets	-	-	-	-	X
CNVL-3H-TP (x1)	diaphragm for supply (1)	-	-	-	-	U
CNVL-3H-TP (x2)	diaphragm for outlets (3-5)	-	-	-	-	J
CNVL-3H-TP (x3)	diaphragm for supply (1) and outlets (3-5)	-	-	-	-	T

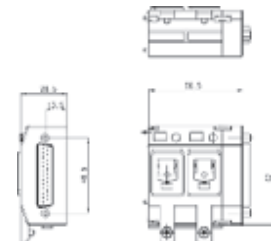
Electrical Modules

To be mounted with manifold CNVL-3H2



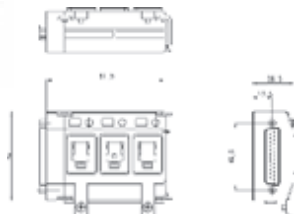
Part Number
3PAC-R-LS2

To be mounted with manifold CNVL-3H2



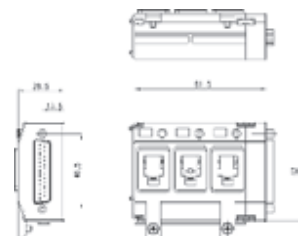
Part Number
3PAC-R-RS2

To be mounted with manifold CNVL-3H3



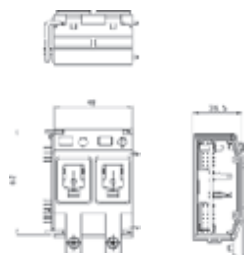
Part Number
3PAC-R-LS3

To be mounted with manifold CNVL-3H3



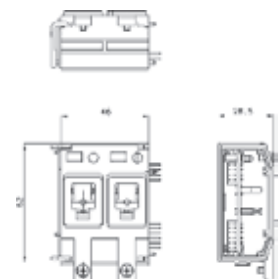
Part Number
3PAC-R-RS3

To be mounted with manifold CNVL-3H2



Part Number
3PAC-R-LI2

To be mounted with manifold CNVL-3H2

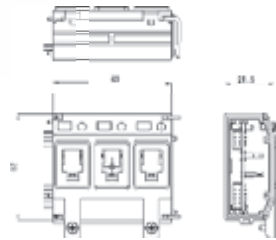


Part Number
3PAC-R-RI2

Electrical Modules

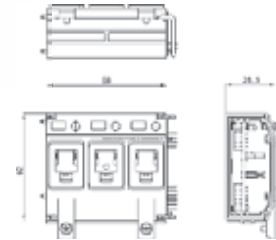
2

To be mounted with manifold CNVL-3I3



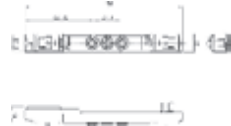
Part Number
3PAC-R-LI3

To be mounted with manifold CNVL-3I3



Part Number
3PAC-R-RI3

For valves with two solenoids



Part Number
3PAC-R-IF1

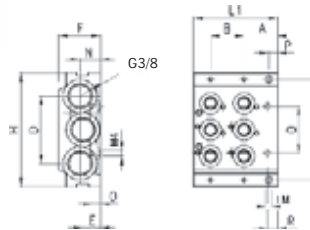
End cap for electric module



Part Number
3PAC-R-TP1

CONTROL

Modular Manifolds for Series 3, 1/8 and 1/4

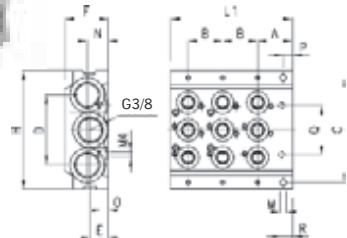


Basic Module with Two Positions

CNVL-3H2 to suit series 3, 1/8

CNVL-4H2 to suit series 3, 1/4

The packaging contains the following items: 3 O-rings, 2 Fixing Screws and 2 Junction plugs per station.

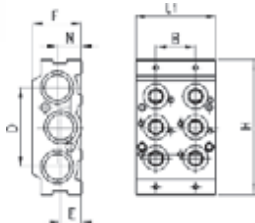


Basic Module with Three Positions

CNVL-3H3 to suit series 3, 1/8

CNVL-4H3 to suit series 3, 1/4

The packaging contains the following items: 3 O-rings, 2 Fixing Screws and 2 Junction plugs per station.

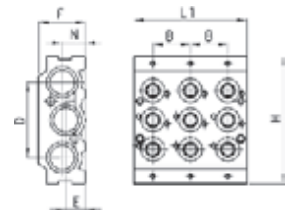


Expansion Module with Two Positions

CNVL-3I2 to suit series 3, 1/8

CNVL-4I2 to suit series 3, 1/4

The packaging contains the following items: 3 O-rings, 2 Fixing Screws and 2 Junction plugs.

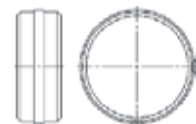


Expansion Module with Three Positions

CNVL-3I3 to suit series 3, 1/8

CNVL-4I3 to suit series 3, 1/4

The packaging contains the following items: 3 O-rings, 2 Fixing Screws and 2 Junction plugs.



Excluder

CNVL/1L Code L

The packaging contains the following items: 3 O-rings and 2 Fixing Screws

Part Number

CNVL/3P1

Part Number

CNVL-3H-TP

CNVL-4H-TP

Code for Plug-in Versions

T Supply (1) + exhaust (3 and 5)

U Supply (1)

J Exhausts (3 and 5)

2

Series 3 Valve Island Fieldbus

Fieldbus system combined with electro-pneumatically operated valves Series 3 ports G1/8

Interface with: Profibus-DP, CANopen, DeviceNet

Valve functions: 2x3/2, 5/2 and 5/3 way CO CC CP

Conforms with standards EN-61326-1 and EN-61010-1



Technical Data

Construction

Spool type

Valve Functions

5/2 - 5/3 C.C. C.O. C.P. - 2x3/2 N.O.
- 2x3/2 N.C. - 1 3/2 N.O.+1 3/2
N.C.

Materials

Aluminium body, stainless steel
spool, seals in NBR, technopolymer

Connection

Valve = 1/8 - Manifold = 3/8

Mounting

Through holes in the valve body

Operating Temperature

0 to 50°C

Nominal Flow Rate

Qn 700 NI/min

FieldBus Protocol

3F8: Profibus-DP - 3R8: DeviceNet -
3G8: CANopen

FieldBus Signalling Led

3F8: 1 led green RUN, 1 led red
DIA, 1 led red BF

3R8: 1 led green IO, 1 led red NS, 1
led red MS

3G8: 1 led green RUN, 1 led red
DIA, 1 led red BF

Valve Signalling Led

LED (yellow)

Logical Supply Voltage

24 V DC (-15% / +20% with no
connected inputs, or consider the
connected inputs supply range)

Power Supply Voltage

24 V DC (for the tolerance, consider
the total loads of the connected
inputs)

Duty Cycle

ED 100%

Maximum Number of Nodes

3F8: 32/127 - 3R8: 64 - 3G8: 127

Maximum Baud Rate

3F8: 12 Mbit/sec - 3R8: 500
Kbit/sec - 3G8: 1 Mbit/sec

CODING EXAMPLE

3F | **8** | - | **2A** | - | **BC** | - | **EBB** | - | **BCT2M2B** | - | **U77**

3F

CONNECTION:
3F = Profibus-DP
3R = DeviceNet
3G = CANopen

BC

ELECTRIC OUTPUTS
MODULES
0 = no module
B = 4 outputs M12 duo
C = 8 outputs SUB-D 37pin
D = 16 outputs SUB-D 37pin
E = 24 outputs SUB-D 37pin
F = 32 outputs SUB-D 37pin

U77 SOLENOID TYPE

Material	Dimension	Voltage
G = PA	7 = 22x22	7 = 24V DC
U = PET		

8

SOLENOID VALES CONNECTIONS:
8 = 1/8

EBB

VALVE COMPOSITION
see table page 2/59

2A

ELECTRIC INPUTS MODULES
0 = no module
A = module 8 input M8

BCT2M2B

VALVES FUNCTIONS
see table page 2/59

VERSIONS

= standard
S = special (to be specified)

Table for the configuration of valve island series 3 fieldbus

The letter represents the number of valve positions	Number of valve positions, showing the combination of the modules from which the valve island is built	Configuration code n° of positions	Configuration code of the sub-base
A = 2 pos.	(2)	A	A-B
B = 3 pos.	(3)	B	A-B
C = 4 pos.	(2) (2)	C	A - B
D = 5 pos.	(3) (2)	D	A-B
	(2) (3)	D	A-D
E = 6 pos.	(3) (3)	E	A-B
	(2) (2) (2)	E	B-B
F = 7 pos.	(2) (3) (2)	F	A-B
	(2) (2) (3)	F	B-B
	(3) (2) (2)	F	B-D
G = 8 pos.	(3) (3) (2)	G	A-B
	(2) (3) (3)	G	A-D
	(2) (2) (2) (2)	G	B-B
	(3) (2) (3)	G	B-D
H = 9 pos.	(3) (3) (3)	H	A-B
	(3) (2) (2) (2)	H	B-B
	(2) (3) (2)(2)	H	B-D
	(2) (2) (3) (2)	H	B-F
	(2) (2) (2) (3)	H	B-H

The valve island code is always read from left to right, the electrical module is positioned on top of the pneumatic manifold, as on the photo on page 2/58. It is also possible to create 2 or more pressure/exhaust zones in the valve island by inserting the diaphragm Mod. CNVL-TP between the modules.

Series 3 Functioning of Solenoid Valves



Mod.	Function	Actuation	Pilot supply	Working pressure (bar)	Pilot pressure (bar)	Code
338D-015-02	2 x 3/2 NC	solenoid/spring	Internal	2.5 - 10	-	C
348D-015-02	2 x 3/2 NO	solenoid/spring	Internal	2.5 - 10	-	A
398D-015-02	1 3/2 NC + 1 3/2 NO	solenoid/spring	Internal	2.5 - 10	-	G
358-015-02	5/2 monostable	solenoid/spring	Internal	2.5 - 10	-	M
358-011-02	5/2 bistable	solenoid/solenoid	Internal	1.5 - 10	-	B
368-011-02	5/3 CC	solenoid/solenoid	Internal	2 - 10	-	H
378-011-02	5/3 CO	solenoid/solenoid	Internal	2 - 10	-	K
388-011-02	5/3 CP	solenoid/solenoid	Internal	2 - 10	-	N
338D-E15-02	2 x 3/2 NC	solenoid/spring	External	-0.9 - 10	2.5 - 10	Q
348D-E15-02	2 x 3/2 NO	solenoid/spring	External	-0.9 - 10	2.5 - 10	R
398D-E15-02	1 3/2 NC + 1 3/2 NO	solenoid/spring	External	-0.9 - 10	2.5 - 10	S
358-E15-02	5/2 monostable	solenoid/spring	External	-0.9 - 10	2.5 - 10	D
358-E11-02	5/2 bistable	solenoid/solenoid	External	-0.9 - 10	1.5 - 10	Y
368-E11-02	5/3 CC	solenoid/solenoid	External	-0.9 - 10	2 - 10	V
378-E11-02	5/3 CO	solenoid/solenoid	External	-0.9 - 10	2 - 10	Z
388-E11-02	5/3 CP	solenoid/solenoid	External	-0.9 - 10	2 - 10	W
CNVL/1L	free position (electrical and pneumatic cover)	-	-	-	-	L
CNVL-3P1	plate for supply and outlets	-	-	-	-	X
CNVL-3H-TP (x1)	diaphragm for supply (1)	-	-	-	-	U
CNVL-3H-TP (x2)	diaphragm for outlets (3-5)	-	-	-	-	J
CNVL-3H-TP (x3)	diaphragm for supply (1) and outlets (3-5)	-	-	-	-	T

Series Y Valve Island

Pneumatic Part: Modules of 2, 4 and 8 valve positions
 Electrical connections: Individual, multipole, or fieldbus connection.
 Profibus DP (CanOpen, DeviceNet and ASI under preparation)



For further detail please see our full catalogue

Individual connection

The electrical connection is made by means of single connectors directly on each individual pilot valve.

The modules from which the valve island is composed can be of 2, 4, 6 or 8 valve positions, joined together with the channels 1/11 and 3/5 either separated from each other with seal type T (diaphragm) or joined with seal type P (through). This solution has no limit to the number of valve positions, even if it is advisable to insert an intermediate plate for supplementary inlets and exhaust after every 8 positions.

The manual override and the signalling LED are located on the pilot valves.



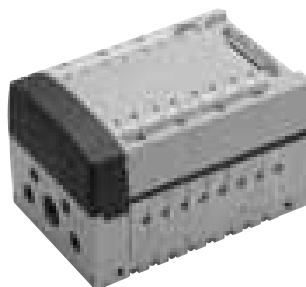
Valve Island with individual connection

Multipole connection

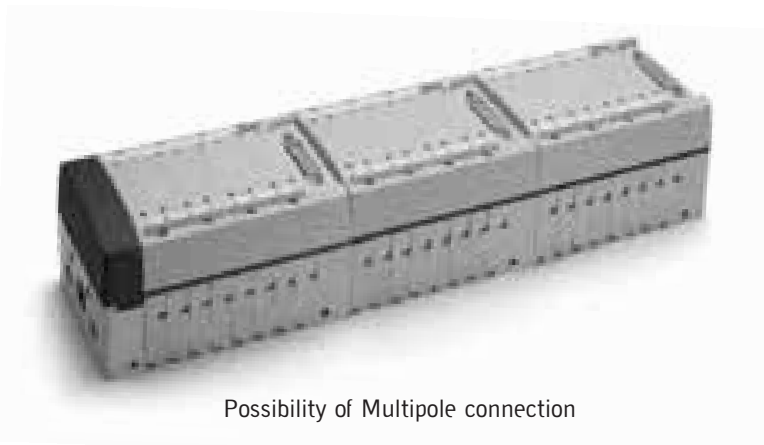
The Multipole version is available in two sizes, with 4, 6 or 8 valve positions. These can be freely equipped with either monostable or bistable valves.

It is possible to join two or more valve islands simply by removing one terminal plate from each valve island and replacing them with one intermediate plate for supplementary inlets and exhaust Mod.X

The valve island can be composed of modules of 2, 4, 6 or 8 valve positions joined together with the channels 1/11 and 3/5, either separated from each other with seal type T (diaphragm) or joined together with seal type P (through).



Valve Island with Multipole connection



Possibility of Multipole connection

Technical Data

Type of Construction

Spool type

Media

Filtered air 5 micron or lower, without lubrication. If lubricated air is used, it is recommended to use oil ISO VG32. Once applied the lubrication should never be interrupted

Flow Rates

See technical data page 2/7

Operating Pressure

See technical data page 2/7

Pilot Pressure

See technical data page 2/7

Flow Rate

800 Nl/min

Operating Temperature

0°C to +50°C.

Materials

Spool: Aluminium

Cartridge: brass

Seals: NBR

Connections

Outlets 2 and 4 = 1/8

Inlets 1 and 11 = 1/4

Pilot connections 12/14 and

respective exhaust 82/84 = 1/8

Outlets 3/5 = 1/2 in line connections

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.

Fieldbus Connection

2

The initial module always has 8 positions. It is only the initial module to which the Fieldbus, (Profibus DP and other protocols) and electrical supply (24V DC) is connected. Each initial module can accommodate up to 32 coils distributed between the initial and the expansion modules.

It recognises the position of the coils automatically assigning them an address, following a certain sequence.

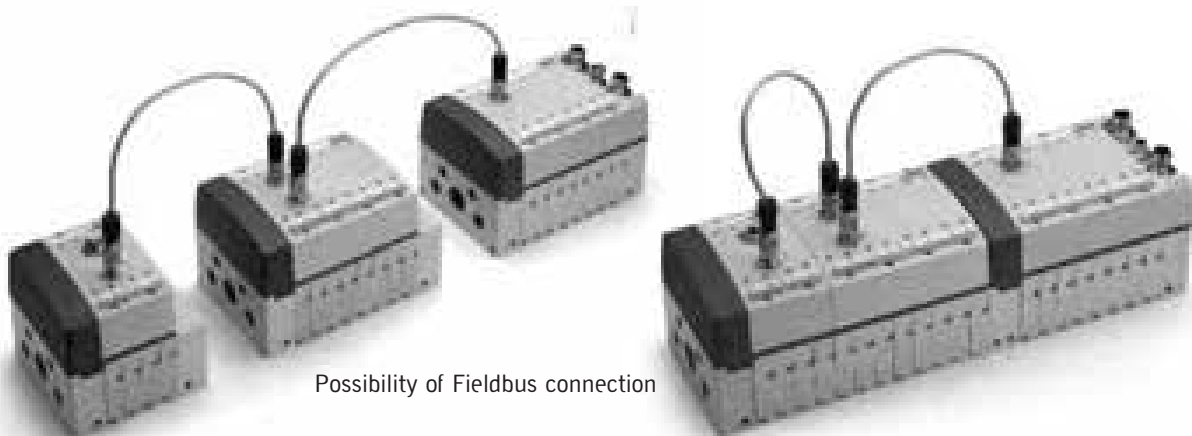
Through a serial interface (RS232), located on the main module it is possible to connect a PC or Palm Pilot to the valve island.

Using a PC or an external Palm Pilot it is possible to:

- set the address of the fieldbus node without using switches
- manually set the internal addresses of the signals to the coils, changing the initial address settings created.
- manually activate or deactivate each outlet individually, by passing the main program while it is active and running.



Initial module

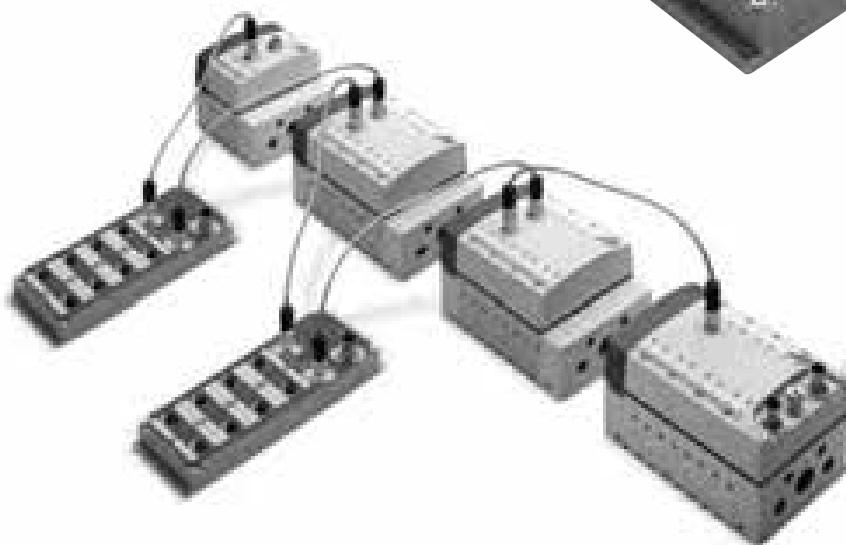
Valve Island with Fieldbus connection
(expansion module 8 positions
for single assembly)Valve Island with Fieldbus connection
(expansion module 4 positions
for single assembly)Valve Island with Fieldbus connection
(expansion module 2 positions
for single assembly)Valve Island with Fieldbus connection
(expansion module 8 positions
for combined assembly)Valve Island with Fieldbus connection
(expansion module 4 positions
for combined assembly)Valve Island with Fieldbus connection
(expansion module 2 positions
for combined assembly)

Possibility of Fieldbus connection

Electrical digital input module ME-1600 DL

The Digital Input Module allows for connection of 16 electrical input signal via M12 industry standard connections. The M12 connections are a 5 pole (4+PE) version with 2 input signals per connector position. The input module can be positioned at any point of the fieldbus.

A maximum of 3 input modules can be connected to the initial module, for a total of 48 inputs.



Filtering Elements

For those applications where the air quality is unknown, it is advised to supply the whole island or the pilot valve zone with filtering elements according to class 3 of table DIN ISO 8573-1.

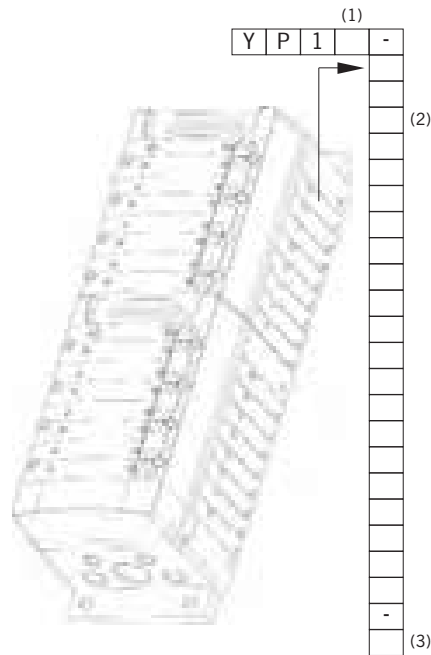
- Filter model:
- MC104-F10
- MX2-3/8-F10
- MX2-1/2-F10
- N108-F10
- N104-F10



Please refer to Section 3 for more information on FRL's

AIR QUALITY CLASS ACCORDING TO STANDARD DIN ISO 8573-1				
Class	Solid bodies	Max. dimension of the particles	Water contents dew-point	Oil quantity max. concentration mg/m ³
1		0.1 μ	-70°C	0.01
2		1 μ	-40°C	0.1
3		5 μ	-20°C	1
4		15 μ	+3°C	5
5		40 μ	+7°C	25

Configuration example



(1) Type of Electrical Connection	(2) Valve Type Selection	(3) Selection of Terminal Plates	Code
Individual	-	-	K
Multipole (PNP)	-	-	M
Profibus-Dp	-	-	P
Device-Net	-	-	D
Can-Open	-	-	C
Expansion	-	-	E
-	5/2 Monostable	-	M
-	5/2 Bistable	-	B
-	5/3 CC	-	V
-	2 x 2/2 1 NO + 1 N.C.	-	I
-	2 x 2/2 N.C.	-	E
-	2 X 2/2 N.O.	-	F
-	2 x 3/2 1 N.O. + 1 N.C.	-	G
-	2 x 3/2 N.C.	-	C
-	2 x 3/2 N.O.	-	A
-	Free position	-	L
-	Additional supply module from 2 and 4	-	W
-	Diaphragm seal (modules separation)	-	T
-	Through seal (modules separation)	-	P
-	Diaphragm seal (modules and cover separation)	-	T/
-	Through seal (modules and cover separation)	-	P/
-	Diaphragm seal 3/5 opened	-	U
-	Diaphragm seal 3/5-11 opened	-	H
-	Diaphragm seal 1-11 opened	-	N
-	Diaphragm seal 3/5 opened, (modules and cover separation)	-	U/
-	Module with 2 positions and 3/5-11 closed	-	K
-	Module with 2 positions and 3/5-11 closed	-	R
-	Module with 2 positions and 1-11 closed	-	O
-	Module with 2 positions and 3/5 closed	-	Q
-	Additional supply module	-	X
-	-	in common 1/11 - 12/14 individual 82/84 - 3/5	A
-	-	in common 1/11 individual 12/14 - 82/84 - 3/5	B
-	-	individual 1/11 - 12/14 - 82/84 - 3/5	C
-	-	in common 1/11 - 12/14 individual 82/84 - 3/5	D
-	-	in common 1/11 individual 12/14 - 82/84 - 3/5	E
-	-	individual 1/11 - 12/14 - 82/84 - 3/5	F
-	-	in common 1/11 - 12/14 individual 82/84 - 3/5	G
-	-	in common 1/11 individual 12/14 - 82/84 - 3/5	H
-	-	individual 1/11 - 12/14 - 82/84 - 3/5	J
-	-	modules without terminal plate	Z

Series H Valve Island

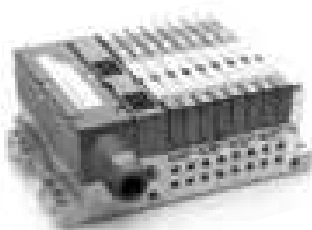
Valve Island with Pneumatics and Electronics integrated

Available versions: Multipole (PNP and NPN) and Fieldbus (Profibus-DP, DeviceNet, CANopen)

Valve functions: 2x2/2; 2x3/2; 5/2; 5/3 CC

DeviceNet PROFIBUS
CANopen

Series H Valve Island - Multipole and Expandable Fieldbus



Multipole version

In this configuration Series H can be connected rapidly and safely thanks to the multipole connection with wired cable of sizes of 3 & 5 m (standard).



Expandable Fieldbus version

This version enables a direct interface to fieldbus systems such as: Profibus-DP, DeviceNet and CANopen.
The various types of electrical and pneumatic elements that can be connected, and the possibility to decentralise the expansion Islands gives this model extreme flexibility.

Technical Data

PNEUMATIC SECTION

Construction

spool with seals

Valve Functions

5/2 monostable and bistable
5/3 C.C. 2 x 2/2 N.O.
2 x 2/2 N.C. 1 x 2/2 N.C.+ 1 x N.O.
2 x 3/2 N.C. 2 x 3/2 N.O.
1 x 3/2 N.C.+ 1 x 3/2 N.O.

Materials

Aluminium spool and HNBR seals, brass cartridges, technopolymer body and end covers, aluminium subbase other NBR seals

Connection

Inlets 2 and 4, size 1 = M7 or tube Ø4 or tube Ø6

Inlets 2 and 4, size 2 = 1/8 or tube Ø6 or tube Ø8

Supply, size 1 = 1/4 or tube Ø8

Supply, size 2 = 1/4 or tube Ø10

Pilot, size 1 and 2 = M7

Exhausts 3 and 5, size 1 and 2 =

1/4 or with silencer

Exhausts 82 and 84, size 1 and 2 = M7 or with silencer

Temperature

0 to 50°C

Media

Filtered air class 5.4.4 according to ISO 8573.1

If lubrication is necessary use only oil with maximum viscosity 32 Cst.

Dimensions/Sizes

10.5 mm, 21 mm

Flow Rates

See technical data page 2/7

Operating Pressure

See technical data page 2/7

Pilot Pressure

See technical data page 2/7

Mounting Position

Any position

INPUTS SECTION

Voltage

24 V DC +/- 10%
(directly supplied by the Valve Island)

Power Consumption

10 mA

Working Temperature

0 to 50°C

Protection

Against overload (400 mA every 4 sensors)

Protection Class

IP 65

Max. N° of connection inputs

64

Max. N° connection inputs Modules

8

ELECTRIC SECTION

Voltage

24 V DC +/- 10%
(directly supplied by the Valve Island)

Power Consumption

0.5 W per coil

Duty Cycle

ED 100%

Protection Class

IP65

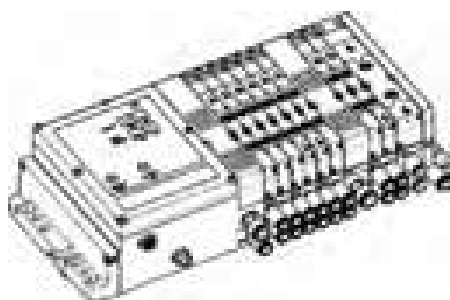
Max. N° of coils multipole

32

Max. N° of coils - fieldbus

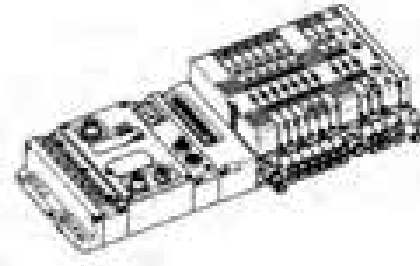
64

Series H Valve Island - Expansion and Individual Fieldbus



Fieldbus Expansion (local fieldbus) version

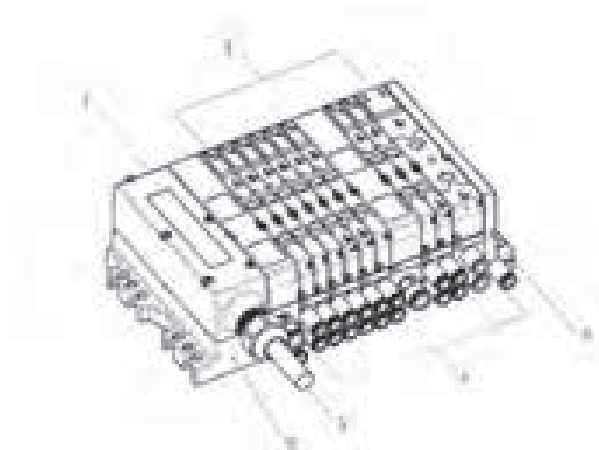
The Expansion islands can handle electrical and pneumatic outlets up to a 50 m distance from the Island that interfaces directly to the Fieldbus net. These expansions communicate with the expandable fieldbus unit (above) through a local fieldbus (Cam.I.Net) and are connected through pre-wired cables (9 poles) of different lengths.



Individual Fieldbus version

The individual fieldbus version consists of an island that enables the handling of 64 Inputs and 64 Outputs. It does not enable the handling of the Expansions but it can be equipped with all peripheral elements of the expandable versions. The whole electronic system can be used in other types of Valve islands.

Coding example - Multipole version

**(1) HP SIZE**

10,5	1
21	2
Mixed (10.5 + 21)	5

(2) ELECTRICAL CONNECTION

Multipole 25 pin PNP	M
Multipole 25 pin NPN	N
Multipole 37 pin PNP	H
Multipole 37 pin NPN	L

(3) CABLE LENGTH

03 m	03
05 m	05
10 m	10
15 m	15
20 m	20
25 m	25
30 m	30
Length to be defined in meters	X

(4) SUB-BASES AND SEALS

Threaded M7	A
Fittings for tube Ø4	B
Fittings for tube Ø6	C
Channel 1; 3; 5 closed - threaded M7	D
Channel 1; 3; 5 closed - cartridge Ø4	E
Channel 1; 3; 5 closed - cartridge Ø6	F
Channel 3; 5 closed - threaded M7	G
Channel 3; 5 closed - cartridge Ø4	H
Channel 3; 5 closed - cartridge Ø6	I
Channel 1 closed - threaded M7	L
Channel 1 closed - cartridge Ø4	M
Channel 1 closed - cartridge Ø6	N
Sub-base for valves size 2	
Threaded G1/8	Q
Fittings for tube Ø6	R
Fittings for tube Ø8	S
Supplem. pressure and exhaust	
Supplem. pressure supply and exhaust	X
Supplem. pressure supply and exhaust with integrated silencer	Y
Sub-base for electrical supply	

(4) SUB-BASES AND SEALS

Module for electrical power supply separ. + suppl. inlet press.	K
Seals	
Diaphr. seal - channel 1; 3; 5	T
Diaphr. seal - channel 1	U
Diaphr. seal - channel 3; 5	V

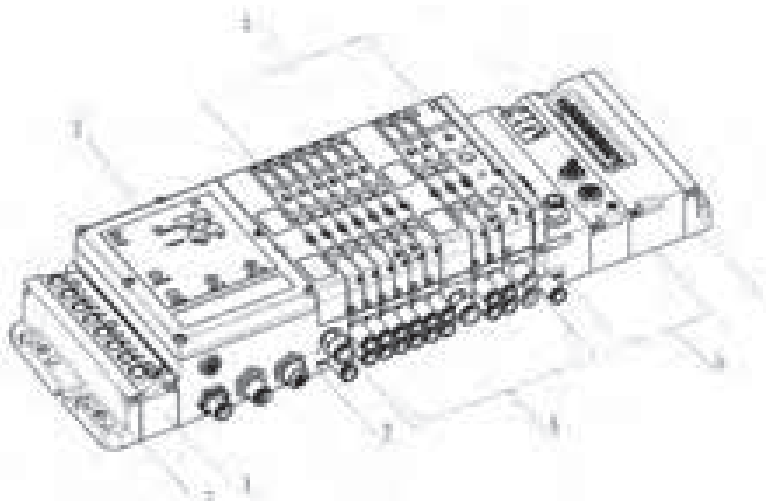
(5) SOLENOID VALVE

5/2 Monostable	M
5/2 Bistable	B
5/3 CC	V
2 x 3/2 NC	C
2 x 3/2 NO	A
1 x 3/2 NC + 1 x 3/2 NO	G
2 x 2/2 NC	E
2 x 2/2 NO	F
1 x 2/2 NC + 1 x 2/2 NO	I
Free position	L
Valves with integr. pressure reg. online 1 (size only)	
5/2 Monostable	N
5/2 Bistable	P
5/3 CC	Q
2 x 3/2 NC	R
2 x 3/2 NO	S
1 x 3/2 NC + 1 x 3/2 NO	T
2 x 2/2 NC	U
2 x 2/2 NO	X
1 x 2/2 NC + 1 x 2/2 NO	Y

(6) TERMINAL PLATES

1; 12/14 in common 3/5; 82/84 threaded ports	A
1; 12/14 separate 3/5; 82/84 threaded ports	B
1; 12/14 in common 3/5; 82/84 with integrated silencer	C
1; 12/14 separate 3/5; 82/84 with integrated silencer	D
Terminal plates with cartridges Ø8 for size 1	
1; 12/14 in common 3/5; 82/84 conveyable	E
1; 12/14 separate 3/5; 82/84 conveyable	F
1; 12/14 in common 3/5; 82/84 with integrated silencer	G
1; 12/14 separate 3/5; 82/84 with integrated silencer	H
Terminal plates with cartridges Ø10 for size 2 and 5	
1; 12/14 in common 3/5; 82/84 conveyable	I
1; 12/14 separate 3/5; 82/84 conveyable	L
1; 12/14 in common 3/5; 82/84 with integrated silencer	M
1; 12/14 separate 3/5; 82/84 with integrated silencer	N

Coding example - Fieldbus version



(1) HP PASSO	
10,5	1
21	2
Mixed (10,5 + 21)	5

(2) ELECTRICAL CONNECTOR	
Profibus-DP (expandable)	P
CANopen (expandable)	C
DeviceNet (expandable)	D
Only for P-C-D expansion	E

(3) INPUT MODULES	
Without inputs	O
Input module - 8 digital (8xM8)	A

(4) OUTPUT MODULES	
Without inputs	O
Right terminal+outputs(don't use on vers. F)	X
Right terminal with el.supply+outputs (don'tuse on vers. F)	Y
4 outputs M12 duo	B
8 outputs SUB-D37 pin	C
16 outputs SUB-D37 pin	D
24 outputs SUB-D37 pin	E

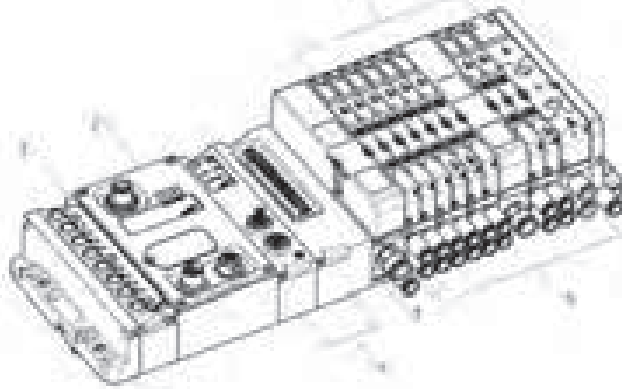
(5) SUB-BASES AND SEALS	
Threaded M7	A
Fittings for tube Ø4	B
Fittings for tube Ø6	C
Channel 1; 3; 5 closed - threaded M7	D
Channel 1; 3; 5 closed - cartridge Ø4	E
Channel 1; 3; 5 closed - cartridge Ø6	F
Channel 3; 5 closed - threaded M7	G
Channel 3; 5 closed - cartridge Ø4	H
Channel 3; 5 closed - cartridge Ø6	I
Channel 1 closed - threaded M7	L
Channel 1 closed - cartridge Ø4	M
Channel 1 closed - cartridge Ø6	N
Sub-base for valves size 2	
Threaded G1/8	Q
Fittings for tube Ø6	R
Fittings for tube Ø8	S
Supplem. pressure and exhaust	

(5) SUB-BASES AND SEALS	
Supplem. pressure supply and exhaust	X
Supplem. pressure supply and exhaust with integrated silencer	Y
Sub-base for electrical supply	
Electrical supply separ. + supply inlet pressure	K
Seals	
Diaphr. seal - channel 1; 3; 5	T
Diaphr. seal - channel 1	U
Diaphr. seal - channel 3; 5	V

(6) SOLENOID VALVE	
5/2 Monostable	M
5/2 Bistable	B
5/3 CC	V
2 x 3/2 NC	C
2 x 3/2 NO	A
1 x 3/2 NC + 1 x 3/2 NO	G
2 x 3/2 NC	E
2 x 3/2 NO	F
1 x 2/2 NC + 1 x 2/2 NO	I
Free position	L
Valves with integr. pressure reg. online 1 (size only)	
5/2 Monostable	N
5/2 Bistable	P
5/3 CC	Q
2 x 3/2 NC	R
2 x 3/2 NO	S
1 x 3/2 NC + 1 x 3/2 NO	T
2 x 2/2 NC	U
2 x 2/2 NO	X
1 x 2/2 NC + 1 x 2/2 NO	Y

(7) TERMINAL PLATES	
1; 12/14 in common 3/5; 82/84 threaded ports	A
1; 12/14 separate 3/5; 82/84 threaded ports	B
1; 12/14 in common 3/5; 82/84 with integrated silencer	C
1; 12/14 separate 3/5; 82/84 with integrated silencer	D
Terminal plates with cartridges Ø8 for size 1	
1; 12/14 in common 3/5; 82/84 conveyable	E
1; 12/14 separate 3/5; 82/84 conveyable	F
1; 12/14 in common 3/5; 82/84 with integrated silencer	G
1; 12/14 separate 3/5; 82/84 with integrated silencer	H
Terminal plates with cartridges Ø10 for size 2 and 5	
1; 12/14 in common 3/5; 82/84 conveyable	I
1; 12/14 separate 3/5; 82/84 conveyable	L
1; 12/14 in common 3/5; 82/84 with integrated silencer	M
1; 12/14 separate 3/5; 82/84 with integrated silencer	N

Coding example - Individual version

**(1) HP SIZE**

10.5	1
21	2
Mixed (10.5 + 21)	5

(2) ELECTRICAL CONNECTION

Profibus-Dp	F
CANopen	G
DeviceNet	R

(3) INPUT MODULES

Without inputs	O
Input module - 8 digital (8xM8)	A

(4) OUTPUT MODULES

Without inputs	O
Right terminal+outputs(don't use on vers. F)	X
Right terminal with el.supply+outputs (don'tuse on vers. F)	Y
4 outputs M12 duo	B
8 outputs SUB-D37 pin	C
16 outputs SUB-D37 pin	D
24 outputs SUB-D37 pin	E

(5) SUB-BASES AND SEALS

Threaded M7	A
Fittings for tube Ø4	B
Fittings for tube Ø6	C
Channel 1; 3; 5 closed - threaded M7	D
Channel 1; 3; 5 closed - cartridge Ø4	E
Channel 1; 3; 5 closed - cartridge Ø6	F
Channel 3; 5 closed - threaded M7	G
Channel 3; 5 closed - cartridge Ø4	H
Channel 3; 5 closed - cartridge Ø6	I
Channel 1 closed - threaded M7	L
Channel 1 closed - cartridge Ø4	M
Channel 1 closed - cartridge Ø6	N
Sub-base for valves size 2	
Threaded G1/8	Q
Fittings for tube Ø6	R
Fittings for tube Ø8	S
Supplem. pressure and exhaust	

(5) SUB-BASES AND SEALS

Supplem. pressure supply and exhaust	X
Supplem. pressure supply and exhaust with integrated silencer	Y
Sub-base for electrical supply	
Module for electrical power supply separ. + suppl. inlet press.	K
Seals	
Diaphr. - channel 1; 3; 5	T
Diaphr. - channel 1	U
Diaphr. - channel 3; 5	V

(6) SOLENOID VALVE

5/2 Monostable	M
5/2 Bistable	B
5/3 CC	V
2 x 3/2 NC	C
2 x 3/2 NO	A
1 x 3/2 NC + 1 x 3/2 NO	G
2 x 2/2 NC	E
2 x 2/2 NO	F
1 x 2/2 NC + 1 x 2/2 NO	I
Free position	L
Valves with integr. pressure reg. online (size 2)	
5/2 Monostable	N
5/2 Bistable	P
5/3 CC	Q
2 x 3/2 NC	R
2 x 3/2 NO	S
1 x 3/2 NC + 1 x 3/2 NO	T
2 x 2/2 NC	X
1 x 2/2 NC + 1 x 2/2 NO	Y

(7) TERMINAL PLATES

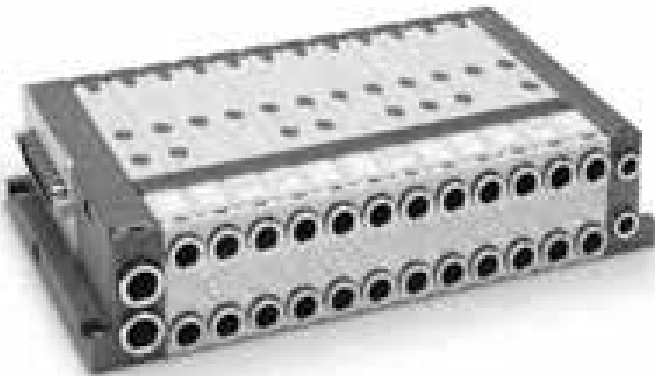
1; 12/14 in common 3/5; 82/84 threaded ports	A
1; 12/14 separate 3/5; 82/84 threaded ports	B
1; 12/14 in common 3/5; 82/84 with integrated silencer	C
1; 12/14 separate 3/5; 82/84 with integrated silencer	D
Terminal plates with cartridges Ø8 for size 1	
1; 12/14 in common 3/5; 82/84 conveyable	E
1; 12/14 separate 3/5; 82/84 conveyable	F
1; 12/14 in common 3/5; 82/84 with integrated silencer	G
1; 12/14 separate 3/5; 82/84 with integrated silencer	H
Terminal plates with cartridges Ø10 for size 2 and 5	
1; 12/14 in common 3/5; 82/84 conveyable	I
1; 12/14 separate 3/5; 82/84 conveyable	L
1; 12/14 in common 3/5; 82/84 with integrated silencer	M
1; 12/14 separate 3/5; 82/84 with integrated silencer	N

Series F Valve Island

Multipole integrated electrical connection (PNP)

Valve functions: 2x2/2; 2x3/2; 5/2; 5/3 CC

The use of technopolymer in this series has allowed the realisation of a valve island which is characterised by small dimensions, high flow and reduced weight. The reduced dimensions, its flexibility during assembly as well as the wide range of valve functions make Series F a highly innovative product which is suitable for many applications.



Technical Data

PNEUMATIC SECTION

Type of Construction

spool with seals

Valve Functions

5/2 monostable and bistable

5/3 C.C. 2 x 2/2 N.O.

2 x 2/2 N.C. 1 x 2/2 N.C. + 1 x N.O.

2 x 3/2 N.C. 2 x 3/2 N.O.

1 x 3/2 N.C. + 1 x 3/2 N.O.

Materials

Aluminium spool and HNBR seals, brass cartridges, technopolymer body and end covers, aluminium subbase other NBR seals

Connection

Inlets 2 and 4, size 1 (12mm)

= tube Ø4; Ø6

Inlets 2 and 4, size 2 (14mm)

= tube Ø4; Ø6; Ø8

Supply 1, size 1 and 2

= tube Ø8, Ø10

Servo pilot 12/14, size 1 and 2

= tube Ø6

Exhausts 3/5, size 1 and 2

= tube Ø8; Ø10

Exhausts 82/84, size 1 and 2

= tube Ø6

Temperature

0 to 50°C

Media

Filtered air class 5.4.4 according to ISO 8573.1

If lubrication is necessary use only oil with maximum viscosity 32 Cst.

Dimensions/Sizes

12mm, 14mm

Flow Rates

See technical data page 2/7

Operating Pressure

See technical data page 2/7

Pilot Pressure

See technical data page 2/7

Mounting Position

Any position

ELECTRIC SECTION

Voltage

24 V DC +/- 10%

Power Consumption

0.6 W per coil

Duty Cycle

ED 100%

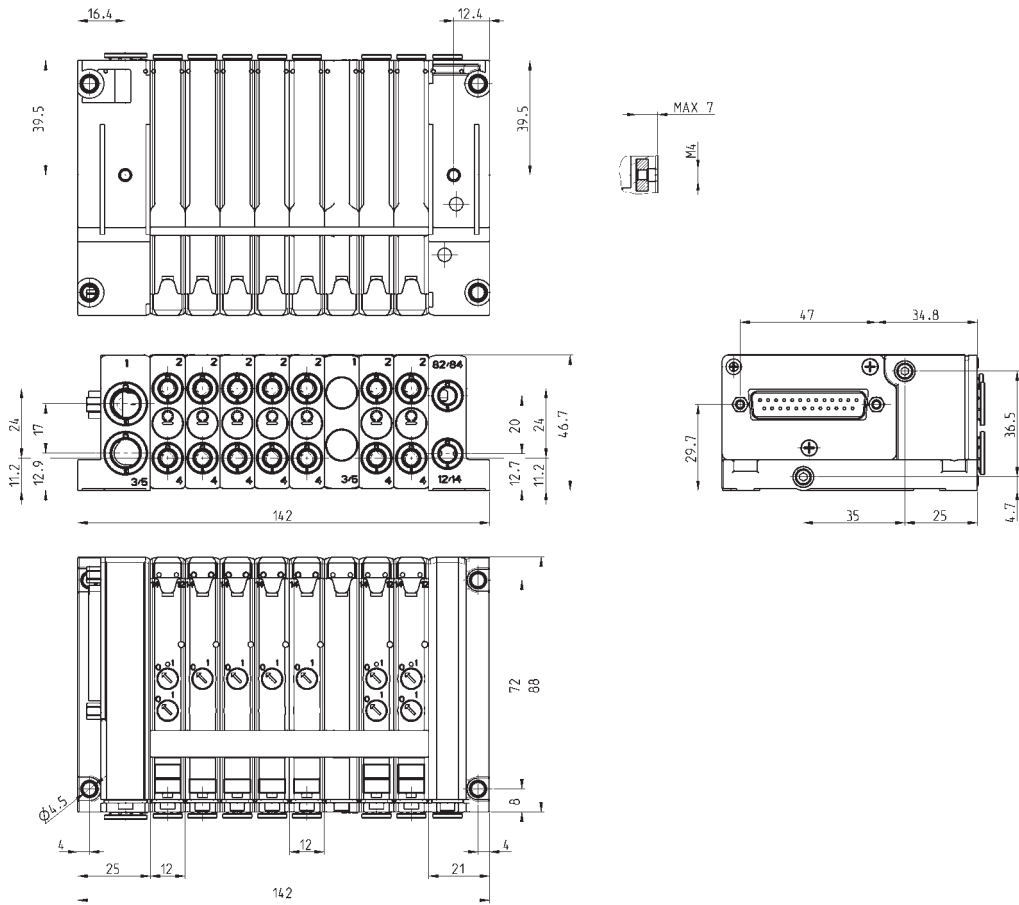
Protection Class

IP40

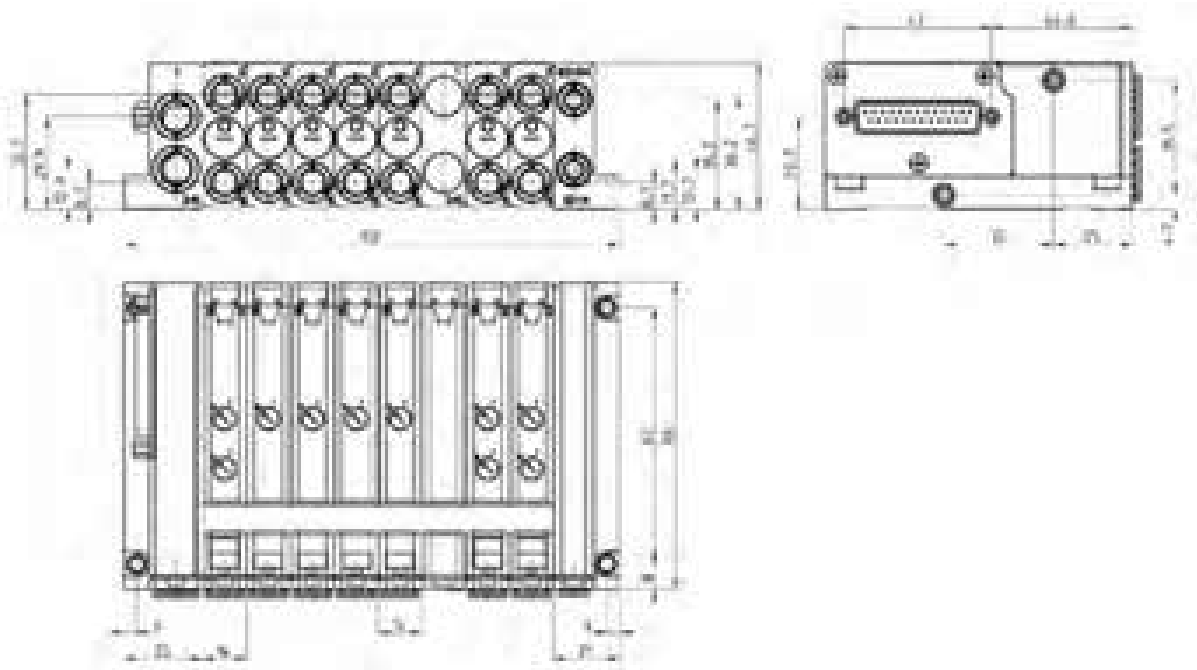
Max. N° of coils multipole

24 (monostable)

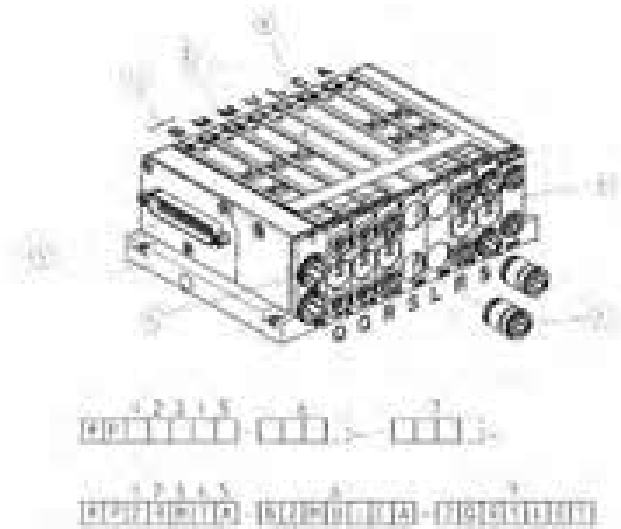
Multipole version - dimensions of size 1



Multipole version - dimensions of size 2



Coding example - Multipole



(1) FP SIZE		(5) TYPE OF SERVO-PILOT	
12 mm	1	Internal	A
14 mm	2	External	B
(2) MANUAL OVERRIDE		(6) TYPE OF SOLENOID VALVE OR PLATE	
Pressure	P	5/2 Monostable	M
Push and turn	R	5/2 Bistable	B
(3) ELECTRICAL OVERRIDE		2x3/2 NC	C
Multipole	M	2x3/2 NO	A
(4) CARTRIDGES FOR LEFT TERMINAL		3/2 NC + 3/2 NO	G
Ø8	S	2x2/2 NC	E
Ø10	T	2x2/2 NO	F
Free position	L	2/2 NC + 2/2 NO	I
		5/3 CC	V
		Free position	L
		Supplementary power supply and exhaust	X
		Separated power supply and exhaust	T
		Separated power supply, supplementary exhaust	U
		Supplementary power supply, separated exhaust	K

CODING EXAMPLE

F | **P** | **2** | **R** | **M** | **T** | **A** | **-** | **B2MULCA** | **-** | **2QRSLRS**

F	SERIES: F	B2MULCA	TYPE OF SOLENOID VALVES AND ADDITIONAL PLATES *
P	TYPE: P = pneumatic A = accessories		M = 5/2 monostable E = 2x2/2 NC X = supplementary power supply and exhaust B = 5/2 bistable F = 2x2/2 NO T = separated power supply and exhaust C = 2x3/2 NC I = 2/2 NC + 2/2 NO U = separated power supply, supplementary exhaust A = 2x3/2 NO V = 5/3 CC K = supplementary power supply, separated exhaust G = 3/2 NC + 3/2 NO L = free position
2	SIZE: 1 = 12mm 2 = 14mm		
R	MANUAL OVERRIDE: P = pressure actuation control R = actuation control with push & turn device		
M	ELECTRICAL CONNECTION: M = multipole		
T	CARTRIDGES FOR LEFT TERMINAL: S = tube Ø8 T = tube Ø10	2QRSLRS	CARTRIDGES FOR SOLENOID VALVES AND ADDITIONAL PLATES *
A	TYPE OF SERVO-PILOT: A = internal B = external Note: the cartridges for the right terminal are for tube Ø 6.		Q = tube Ø 4 S = tube Ø 8 R = tube Ø 6 L = free position
-			

* NOTE: in case of identical and consecutive codes, in the choices "type of solenoid valves and additional plates" and "cartridges for solenoid valves and additional plates", letters have to be substituted with numbers. With the choice "cartridges for solenoid valves and additional plates" both connections (2 and 4) (1 and 3/5) are defined.

Examples: FP2RM TA-MBCCMULMMMBB-QQRSSLRRRQR
FP2RM TA-MB2CMUL3M2B-2QR2SL3RQ2R

Series CP2, CC2 and CD2 Individual Fieldbus node

Interface with: Profibus-DP; CANopen and DeviceNet



Technical Data

Number of Digital Output
64

Number of Digital Input
64

Absorption
Maximum Input 1.5 A
Maximum Output 3 A

Signalling Led
CP2: 1 led green RUN, 1 led red DIA, 1 led red BF
CD2: 1led green 10, 1 led red NS, 1led red MS
CC2: 1 led green RUN, 1led red DIA, 1 led red BF

FieldBus Protocol
CP2: 1 Profibus-DP
CD2: DeviceNet
CC2: CANopen

Maximum of nodes
CP2: 32/127
CD2: 64
CC2: 127

Maximum Baud Rate
CP2: 12 Mbit/sec
CD2: 500 Kbit/sec
CC2: 1 Mbit/sec

Logical Supply Voltage
24 V DC (-15% / + 20%)

Power Supply Voltage
24 V DC (for the tolerance, consider the total loads of the connected inputs)

Protection
Overload and reverse polarity

Protection Class
IP65

Conform with Standards
EN-61326-1 EN-61010-1

Operating Temperature
0 to 50°C

Materials
Aluminium

Weight
250g

Dimensions
130 x 68mm

CODING EXAMPLE - SUB BASE - ACCESSORIES

CP2	-	3A	-	BC
CP2	SERIES: CP2 = Profibus-DP CC2 = CANopen CD2 = DeviceNet		BC	0 = no module nB = numbers of modules 4 output M12 duo nC = numbers of modules 8 output sub-d 37 pin nD = numbers of modules 16 output sub-d 37 pin nE = numbers of modules 24 output sub-d 37 pin nF = numbers of modules 32 output sub-d 37 pin (es. 3 modules A + 2 modules E = 3A2E)
3A	0 = no module nA = numbers of modules 8 input (n = 1 to 8)* *not for DeviceNet version			

Fieldbus modules - Characteristics

2

Bus-In Bus-Out system for connection to the Fieldbus network. Double electrical supplies (one for control and the other for power).

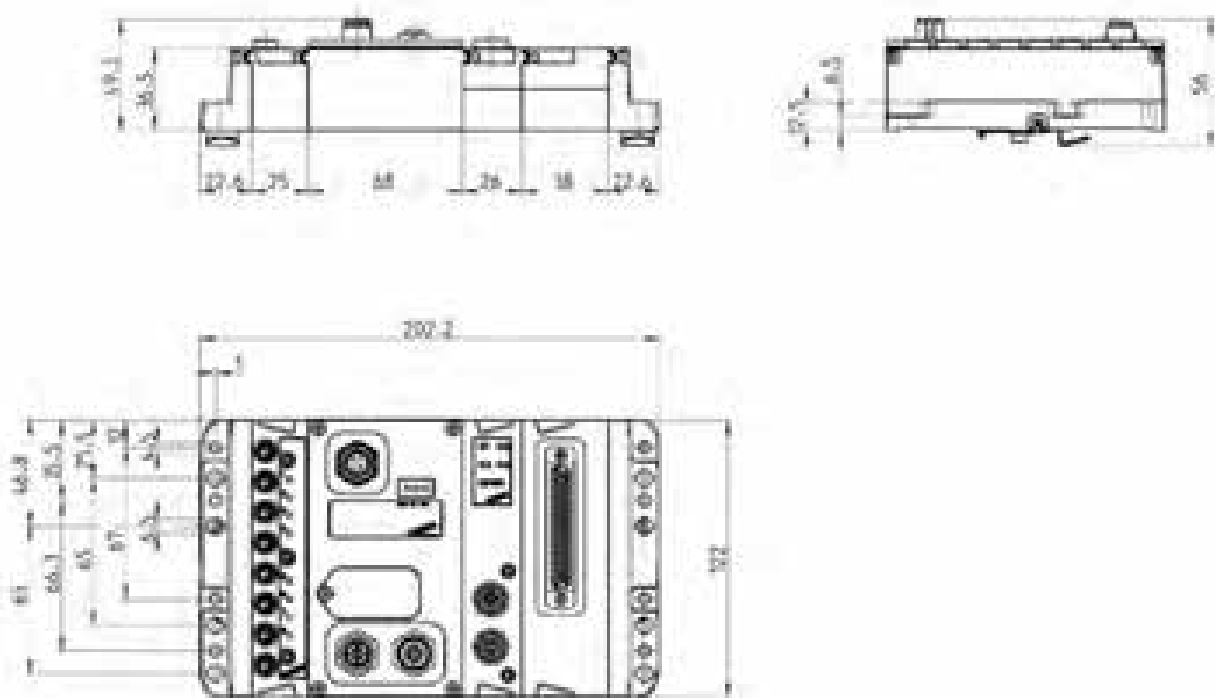
Addressing via rotary switches. Leds indicating the working state. Handling of a max n° of 64 inputs and 64 outputs. Electrical connections on the same side as the pneumatic connections.

The output modules can be positioned on the right hand side of the node and they provide either 2 x M12 or 37 pole Sub-D connection.

In the same way it is possible to position the input modules on the left hand side, which provide 8 inputs with M8 connection.

All elements can be easily inserted because of their direct connection to the plate. It is possible to use this node directly integrated on pneumatic solutions such as Series 3 and H. Each node is part of the serial system.

Manuals and configuration files are available on our website: www.camozzi.com in the Section Products/Download.



Connectors for Valve Islands

2

Straight connectors with cable for 3 Plug-In and Y Multipole and F



Part Number	Part Number
G3X-3	G4X-3
G3X-5	G4X-5
G3X-10	G4X-10

Angular connectors with cable for 3 Plug-In and Y Multipole and F



Part Number
G4X1-3
G4X1-5

Connection cables for digital output modules ME-XXXX-DD that can be connected to Series Y Multipole and Series 3 Plug-In and F



Part Number
G4X-G9W-3
G4X-G9W-5

Connection cable for digital output modules ME-XXXX-DD that can be connected to Series H Multipole



Part Number
G4X1-H-G9W-3
G4X1-H-G9W-5

Power supply female connectors M12 4 poles. Compatible with: Series 3 Fieldbus, Series Y, Series H, Series CX2



Part Number
CS-LF04HB

Power supply angular female connector M12 4 poles. Compatible with: Series 3 Fieldbus, Series Y, Series H, Series CX2



Part Number
CS-LR04HB

Bus-In straight female connectors M12/M12B 5 poles. Compatible with: Series 3 Fieldbus, Series Y, Series H, Series CX2



Part Number
CS-MF05HC
CS-LF05HC

Bus-In angular female connectors M12/M12B 5 poles. Compatible with: Series 3 Fieldbus, Series Y, Series H, Series CX2



Part Number
CS-MR05HC
CS-LR05HC

Bus-Out straight male connectors M12/M12B 5 poles. Compatible with: Series 3 Fieldbus, Series H and Series CX2.



Part Number
CS-MM05HC
CS-LM05HC

Bus-Out angular male connectors M12/M12B 5 poles. Compatible with: Series 3 Fieldbus, Series H and Series CX2.



Part Number
CS-MS05HC
CS-LS05HC

Male connectors M12/M12B with terminal resistance. Compatible with: Series 3 Fieldbus, Series H and Series CX2.



Part Number
CS-MQ05HO
CS-LP05HO

Male connector M9 with terminal resistance Cam.I.Net Compatible with: Series 3 Fieldbus, Series H and Series CX2.



Part Number
CS-FP05HO

Profibus-DP data line tee Connection cable for Expansion Modules Series Y



Part Number
CS-AA03EC

CANOpen / DeviceNet data line tee Connection cable for Expansion Modules Series Y and H



Part Number
CS-AA05EC

Straight male connector DUO M12 5 poles. For the connection of digital input modules ME-1600-DL and digital output modules ME-0004-DL.



Part Number
CS-LD05HF

Angular male connector DUO M12 5 poles New. For the connection of digital input modules ME-1600-DL and digital output modules ME-0004-DL.



Part Number
CS-LH05HF

Programming cable Series Y



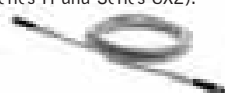
Part Number	Part Number
CS-FZ03AD-C500	

Expansion cable Series Y and H



Part Number
CS-FW05HE-D025
CS-FW05HE-D100
CS-FW05HE-D250
CS-FW05HE-D500
CS-FW05HE-DA00

Extension with female/male connector M8 3 poles. For the connection of digital input modules ME-0008-DC (see the section Series 3 Fieldbus, Series H and Series CX2).



Part Number
CS-DW03HB-C250
CS-DW03HB-C500

USB SERIAL converter for programming cable. For Series Y



Part Number
G8X3-G8W-1

Connectors for Individual connection Series Y



Part Number
121-803
121-806
121-810

Blanking plug for modules Series 3 Fieldbus, H and CX2



Part Number
CS-DFTP
CS-LFTP

Mounting brackets for DIN rail Series 3 Fieldbus, Y, H, F and CX2 The following is supplied: 2x plates, 2x screws



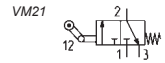
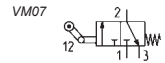
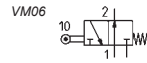
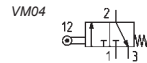
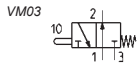
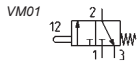
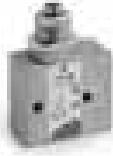
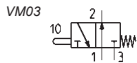
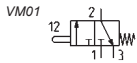
Part Number
PCF-E520

Series 2 Mechanically Operated Minivalves

3/2

Connections: M5, Ø4mm cartridge

For technical specifications and flow rates see page 2/7



Plunger		
235-945	M5-NC	VM01
234-945	4mm-NC	VM01
245-945	M5-NO	VM03
244-945	4mm-NO	VM03

Panel Mounted Plunger		
235-985	M5-NC	VM01
234-985	4mm-NC	VM01
245-985	M5-NO	VM03
244-985	4mm-NO	VM03

Roller Lever		
235-955	M5-NC	VM04
234-955	4mm-NC	VM04
245-955	M5-NO	VM06
244-955	4mm-NO	VM06

One-Way Trip		
235-965	M5-NC	VM07
234-965	4mm-NC	VM07
245-965	M5-NO	VM21
244-965	4mm-NO	VM21

CODING EXAMPLE

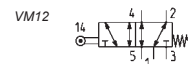
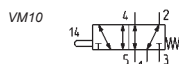
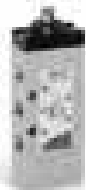
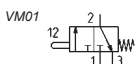
2	3	4	-	94	5
2	SERIES: 2				
3	FUNCTION: 3 = 3/2-way NC 4 = 3/2-way NO on request		94	ACTUATION: 94 = plunger 95 = roller/lever 96 = unidirectional lever 98 = plunger, panel mounting	
4	CONNECTIONS: 4 = Ø4mm cartridge 5 = M5		5	RESETTING: 5 = Spring return	

Series 1 and 3 Mechanically Operated Valves

Series 1, 3/2-way and 5/2-way Connections: 1/8 and 1/4

Series 3, 3/2-way and 5/2-way Connections: 1/8

For technical specifications and flow rates see page 2/7



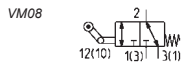
Plunger 1/8" 3/2	
338-945	

Plunger 1/8" 5/2	
358-945	

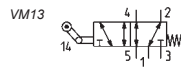
Roller/Lever 1/8" 3/2	
338-955	

Roller/Lever 1/8" 5/2	
358-955	

Series 1 and 3 Mechanically Operated Valves



Roller/Lever One-Way Trip 1/8" 3/2
338-965



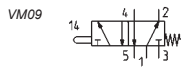
Roller/Lever One-Way Trip 1/8 5/2
358-965



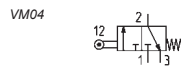
Plunger 1/8" 3/2 N.C.
138-945



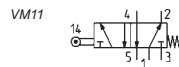
Plunger 1/8" 3/2 N.O.
148-945



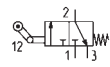
Plunger 1/8" 5/2
158-945



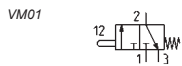
Roller/Lever 1/8" 3/2
138-955



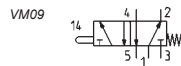
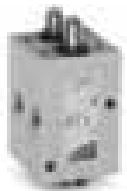
Roller/Lever 1/8" 5/2
158-955



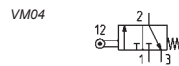
Roller/Lever One-Way Trip 1/8" 3/2
138-965



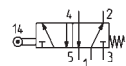
Plunger 1/4" 3/2
134-945



Plunger 1/4" 5/2
154-945



Roller/Lever 1/4" 3/2
134-955



Roller/Lever 1/4" 5/2
154-955

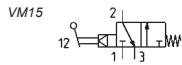
CODING EXAMPLE

3	3	8	-	94	5
<p>3 SERIES: 1, 3</p>		<p>3 FUNCTION: 3 = 3/2 way N.C. 4 = 3/2 way N.O. 5 = 5/2 way</p>		<p>94 ACTUATION: 94 = plunger 95 = roller/lever 96 = unidirectional roller/lever</p>	
<p>8 CONNECTIONS: 8 = 1/8 4 = 1/4 only Series 1</p>		<p>5 RESETTING: 5 = spring return</p>			

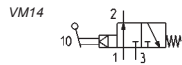
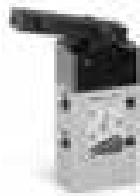
Series 3 and 4 Mechanically Operated Sensor Valves

3/2 and 5/2
Connections: 1/8", 1/4"

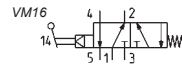
For technical specifications and flow rates see page 2/8



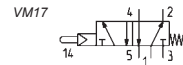
Lever 1/8" 3/2 N.C.
338-D15-9A5



Lever 1/8" 3/2 N.O.
348-D15-9A5



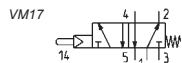
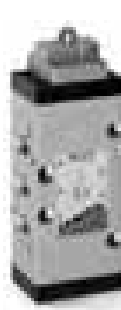
Lever 1/8" 5/2
358-D15-9A5



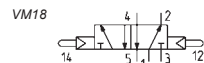
Plunger 1/8" 5/2
458-015-194



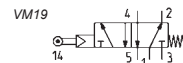
Double Plunger 1/8" 5/2
458-011-294



Plunger 1/4" 5/2
454-015-194

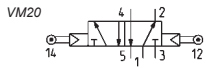


Double Plunger 1/4" 5/2
454-011-294

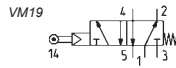


Roller/Lever 1/8" 5/2
458-015-195

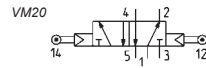
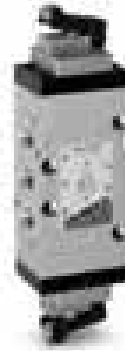
Series 3 and 4 Mechanically Operated Sensor Valves



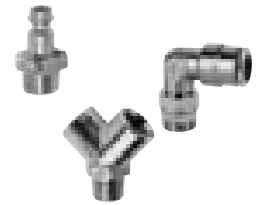
Double Roller/Lever 1/8" 5/2
458-011-295



Roller/Lever 1/4" 5/2
454-015-195



Double Roller/Lever 1/4" 5/2
454-011-295



For Fittings
See 4 (Connection)

CODING EXAMPLE

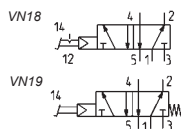
3	3	8	-	D15	-	9A5
3	SERIES: 3, 4					
3	FUNCTION: 3 = 3/2 way N.C. 4 = 3/2 way N.O. 5 = 5/2 way C.A		D15	D15 = pressure drop/spring 015 = pressure/spring 011 = pressure/pressure		
8	CONNECTIONS: 8 = 1/8 4 = 1/4		9A5	RESETTING: 9A5 = lever sensor, spring return 194 = plunger sensor, spring return 294 = plunger sensor, bistable 195 = roller/lever, spring return 295 = roller/lever, bistable		

Series 2 and 3 Pneumatic and Electrical - Foot Operated Pedal

1/4 , 5/2 way (pneumatic).
with NC/NO contacts (electrical).

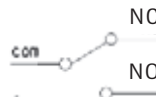
For technical specifications and flow rates see page 2/8

Pneumatic Pedal



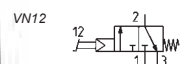
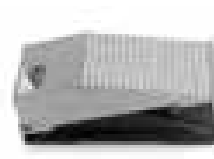
Foot Pedal 1/4" 5/2
354N-925

Electrical Pedal



Foot Pedal
3E2-925

Pneumatic Pedal



Foot Operated Valve 3/2
235-925 (M5)
234-925 (4mm)

Series 2 Manually Operated Console Minivalves

3/2 and 5/3

Connections: M5, Ø4mm cartridge

For technical specifications and flow rates see page 2/8



Push Button	
200-895	Ø22



Palm Switch Spring Return	
200-975	Ø22



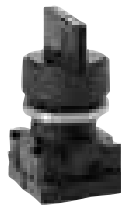
Palm Switch Twist Unlock	
200-972	Ø22



Joystick Spring Return	
200-905	Ø22



2-Position Selector	
200-990	Ø22



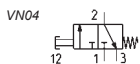
3-Position Selector	
200-870	Ø22



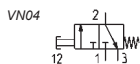
Key Switch	
200-904	Ø22



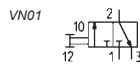
Push Button 3/2	
235-895	M5
234-895	4mm



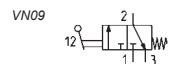
Palm Switch Spring Return 3/2	
235-975	M5
234-975	4mm



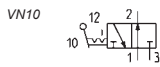
Palm Switch Twist Unlock 3/2	
235-972	M5
234-972	4mm



Joystick Spring Return 3/2	
235-905	M5
234-905	4mm

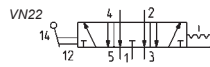


Series 2 Manually Operated Console Minivalves



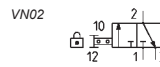
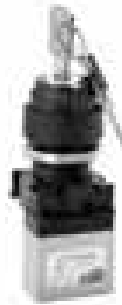
2-Position Selector 3/2

235-990	M5
234-990	4mm



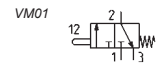
3-Position Selector 5/3

285-870	M5
284-870	4mm



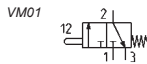
Key Switch 3/2

235-904	M5
234-904	4mm



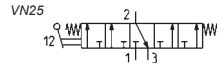
Valve for use with Operators

235-000	M5-NC	VM01
234-000	4mm-NC	VM01
245-000	M5-N0	VM03
244-000	4mm-N0	VM03



Minivalves

285-000	M5
284-000	4mm



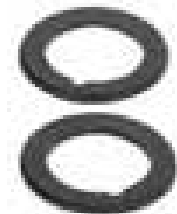
Joystick 1/8" 3/2

234-9054	
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Bracket

210-000	Single
220-000	Double



Adaptor

200-2230	
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CODING EXAMPLE

2	3	4	-	97	5
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2 SERIES: 2			
3 FUNCTION: 3 = 3/2 way NC 4 = 3/2 way NO 8 = 5/3 way CO	97 MODE OF OPERATION*: 87 = 3 - position selector 89 = push button 97 = palm-switch 90 = joystick 99 = 2 - position selector 92 = pedal 904 = key 2 positions		
4 CONNECTIONS: 4 = Ø4mm cartridge 5 = M5	5 RESETTING: 5 = spring return 0 = stable 2 = latching-twist to release 54 = joy stick		

Series 1, 3, 4 and VMS Manually Operated Valves

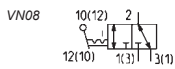
Series 1, 3 and 4, 3/2, 5/2 and 5/3

Connections: 1/8" - 1/4"

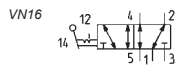
VMS Series, 3/2

Connections: 1/8" - 1/4" - 3/8" - 1/2", 3/4"

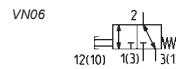
For technical specifications and flow rates see page 2/8



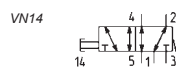
Switch 1/8" 3/2
338-990



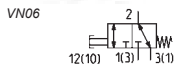
Switch 1/8" 5/2
358-990



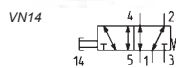
Push Button 1/8" 3/2
338-895 (Black)
338-896 (Green)
338-897 (Red)



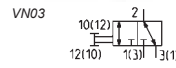
Push Button 1/8" 5/2
358-895 (Black)
358-896 (Green)
358-897 (Red)



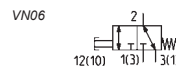
Palm Switch 1/8" 3/2
338-975 (Black)
338-976 (Green)
338-977 (Red)



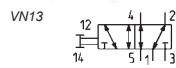
Palm Switch 1/8" 5/2
358-975 (Black)
358-976 (Green)
358-977 (Red)



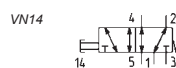
Knob 1/8" 3/2
338-910



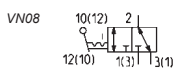
Knob 1/8" 3/2
338-915



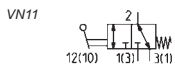
Knob 1/8" 5/2
358-910



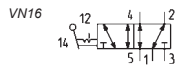
Knob 1/8" 5/2
358-915



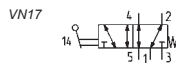
Lever 1/8" 3/2
338-900



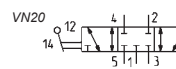
Lever 1/8" 3/2
338-905



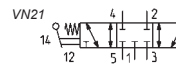
Lever 1/8" 5/2
358-900



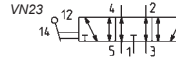
Lever 1/8" 5/2
358-905



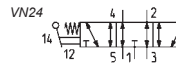
Lever 1/8" 5/3
368-900



Lever 1/8" 5/3
368-905

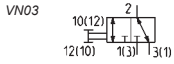


Lever 1/8" 5/3
378-900

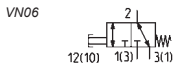


Lever 1/8" 5/3
378-905

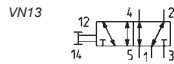
Series 1, 3, 4 and VMS Manually Operated Valves



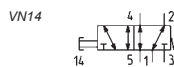
Knob 1/4" 3/2
434-910



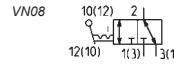
Knob 1/4" 3/2
434-915



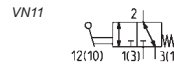
Knob 1/4" 5/2
454-910



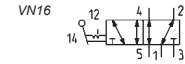
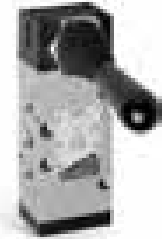
Knob 1/4" 5/2
454-915



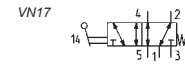
Lever 1/4" 3/2
434-900



Lever 1/4" 3/2
434-905



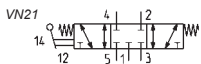
Lever 1/4" 5/2
454-900



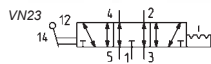
Lever 1/4" 5/2
454-905



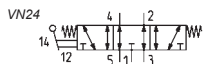
Lever 1/4" 5/3
464-900



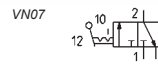
Lever 1/4" 5/3
464-905



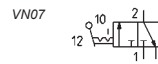
Lever 1/4" 5/3
474-900



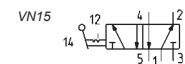
Lever 1/4" 5/3
474-905



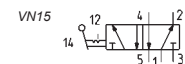
Lever 1/8" 3/2
138-900



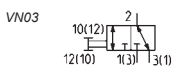
Lever 1/4" 3/2
134-900



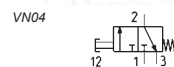
Lever 1/8" 5/2
158-900



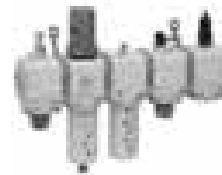
Lever 1/4" 5/2
154-900



Slide Valve
VMS-105-M5
VMS-118-1/8
VMS-114-1/4
VMS-138-3/8
VMS-112-1/2
VMS-134-3/4



Lever 1/8" 3/2
138-935
VN04
Lever 1/4" 3/2
134-935



For FRL's
See 3 (Treatment)




For Fittings
See 4 (Connection)

CODING EXAMPLE				
3	5	8	-	900
3	SERIES: 1, 3, 4	8	CONNECTIONS: 8 = 1/8 4 = 1/4	
5	FUNCTION: 3 = 3/2 way NC 5 = 5/2 way 6 = 5/3 way C.C. 7 = 5/3 way C.O.	900	ACTUATION: 895 = push button, monostable, black 896 = push button, monostable, green 897 = push button, monostable, red 900 = lever, bistable 905 = lever, monostable 910 = knob, bistable	915 = knob, monostable 935 = digital monostable 975 = palm-switch, monostable, black 976 = palm-switch, monostable, green 977 = palm-switch, monostable, red 990 = switch, bistable


Series 2 Mini-Handle Valves

Handle with incorporated micro valve 3/2 NC
Handle with incorporated micro switch



VN04
12 2 1 13

VN05
10 2 1 13



COM NC
NO

Handle with incorporated micro valve		Handle with incorporated micro switch	
234-885	VN04	234-88E	
244-885	VN05		


GENERAL DATA			
Construction	poppet-type (closed centres)	Actuating force	at 6 bar 13N
Valve group	way/pos. 3/2 ways N.C.	Construction	switch device
Nominal diameter	2.5 mm	Electrical connections	3 wires ø external 2.2mm internal section 0.5 length 30 cm N.C. = black wire N.O. = blue wire
Fixing	N°2 holes M5	Fixing	N° 2 holes M5
Connections	push in cartridge ø4	Mounting	in any position
Installation	in any position	Operating temperature	0°C - 70°C
Operating temperature	0 - 70°C (-20°C with dry air)	Protection class	IP40
Operating pressure	2 to 8 bar	Activation stroke	2mm
Nominal flow rate	60 NI/min. (6 bar p1)	Actuating force	5 N
Fluid	Filtered air, without lubrication. If lubricated air is used, it is recommended to use ISO VG32 oil. Once applied the lubrication should never be interrupted.		





ELECTRICAL CHARACTERISTICS					
Part Number	Voltage	Non-inductive load		Inductive load	
		Resist. N.C. / N.O.	Lamp N.C. / N.O.	N.C. / N.O.	Motor N.C./N.O.
234-88E	125VAC	5A	1.5 A / 0.7 A	3 A	2.5 A / 1.3 A
	250 VAC	3A	1 A / 0.5 A	2 A	1.5 A / 0.8 A
	8 VDC	5A	2 A	5 A / 4 A	3 A
	14 VDC	5A	2 A	4 A	3 A
	30 VDC	4A	2 A	3 A	3 A
	125 VDC	0.4A	0.05 A	0.4 A	0.05 A
	250 VDC	0.2A	0.03 A	0.2 A	0.03 A
234-88E	The above-mentioned values refer to steady-state-current	The inductive load refers to power factor = 0,4 in AC. and a time constant of 7 msec max. in DC.	Lamp load has an inrush current of 10 times the steady-state current.	Motor load has an inrush current of 6 times the steady-state current.	If the switch is used in a DC circuit and is subjected to a surge connect a surge suppressor across the switch.

Series 2L Basic Logic Valves

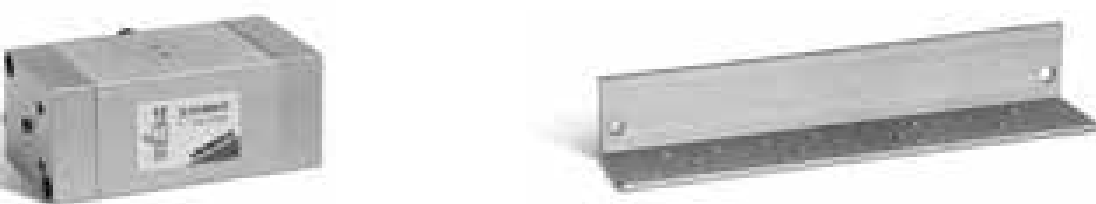
(OR - AND - YES - NOT - MEMORY)
 Ø4mm cartridge

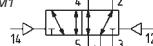
For technical specifications see page 2/9



<p>ORO1</p> 	<p>AND1</p> 	<p>YES1</p> 	<p>NOT1</p> 
<p>OR 2LR-SB4-B</p>	<p>AND 2LD-SB4-B</p>	<p>YES 2LS-SB4-B</p>	<p>NOT 2LT-SB4-B</p>

Series 2L Basic Logic Valves



<p>Memory 2LM-SB4-B</p>	<p>MEM1</p> 	<p>Right-Angled Bracket 2LQ-8A</p>
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Series 2L Pneumatically Operated Amplifier Valve



3/2 monostable
 Connections: 1/8 - Pilot M5



<p>AMP1</p> 	<p>Part Number 2LA-AM</p>
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Series 2L Sender and Receiver Elements

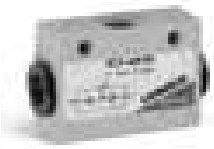


<p>Receiver 2LB-SR</p>	<p>2LB2</p> 	<p>Sender 2LB-SE</p>	<p>2LB1</p> 
----------------------------	--	--------------------------	---

Series SCS, VNR, VSC and VSO Automatic Valves

Unidirectional valves VNR
 Quick exhaust valves VSC - VSO
 Shuttle valve SCS
 Connections: M5, 1/8, 1/4, 1/2

Ø4mm cartridge
 For technical specifications see page 2/9



ORO1



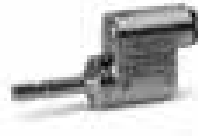
Shuttle Valve 1/8"
SCS-668-06



VNR1



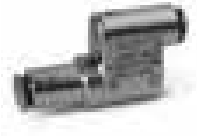
Non Return Valve
VNR-205-M5
VNR-210-1/8
VNR-843-07
VNR-238-3/8
VNR-212-1/2
VNR-234-3/4



VSC1



Quick Exhaust Valve
VS0-425-M5



VSC1



Quick Exhaust Valve
VS0-426-04



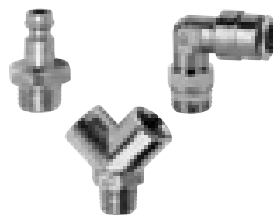
VSC1



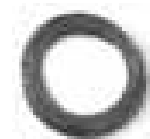
Quick Exhaust Valve
VSC 588-1/8
VSC 544-1/4
VSC 522-1/2



For Cylinders
 See 1 (Movement)



For Fittings
 See 4 (Connection)



For Tubing
 See 10 (Tubing)

Series VBO, VBU Blocking Valves

Unidirectional and bidirectional 1/8, 1/4, 3/8, 1/2
Nominal diameters 5,5 - 8 - 11.



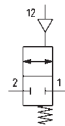
VBU1



Unidirectional
VBU 1/8
VBU 1/4
VBU 3/8
VBU 1/2



VBO1

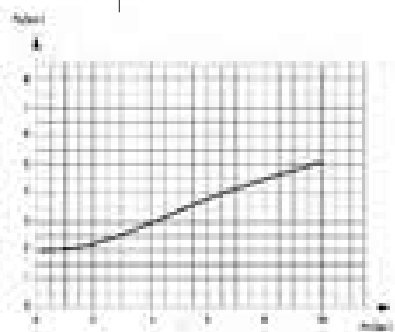


Bidirectional
VBO 1/8
VBO 1/4
VBO 3/8
VBO 1/2

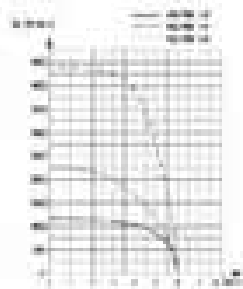
CODING EXAMPLE

VB	U	-	1/8
VB SERIES: VB	U VERSIONS: U = unidirectional O = bidirectional		1/8 CONNECTIONS: 1/8, 1/4, 3/8, 1/2

Unidirectional and Bidirectional Blocking Valves

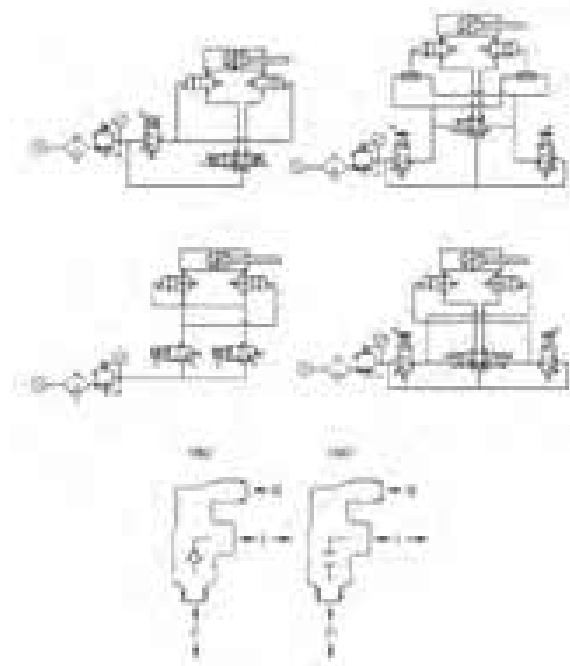


PILOT PRESSURE: This diagram shows the relation between working pressure (Px) and pilot pressure required in order to operate the valve (Py).
The opening pressure of the unidirectional valve is 0,3 bar.



FLOW RATE
Flow Q (NI/min.)
N.B.: Q is determined with an inlet pressure of 6 bar.

Application Schemes



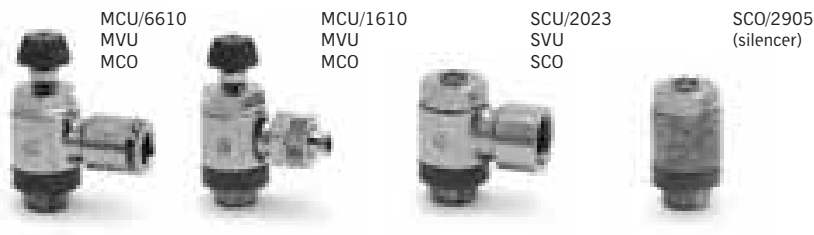
Series SCU, MCU, SVU, MVU, SCO, MCO Flow Control Valves

Unidirectional and bidirectional
banjo flow controllers
Connections: M5, 1/8, 1/4, 3/8, 1/2

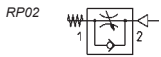
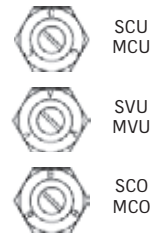
2

CONTROL

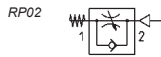
AVAILABLE BANJO FLOW CONTROLLERS



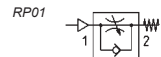
TYPES



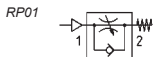
Unidirectional Cylinder Mount
SCU 602 - M5
SCU 604 - 1/8
SCU 606 - 1/4
SCU 608 - 3/8
Ring Connector required see page 2/89



Unidirectional Cylinder Mount
MCU 702 - M5
MCU 704 - 1/8
MCU 706 - 1/4
MCU 708 - 3/8
Ring Connector required see page 2/89



Unidirectional Valve Mount
SVU 602 - M5
SVU 604 - 1/8
SVU 606 - 1/4
Ring Connector required see page 2/89



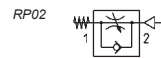
Unidirectional Valve Mount
MVU 702 - M5
MVU 704 - 1/8
MVU 706 - 1/4
Ring Connector required see page 2/89



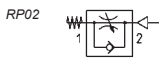
Bidirectional
SCO 602 - M5
SCO 604 - 1/8
SCO 606 - 1/4
Ring Connector required see page 2/89



Bidirectional
MCO 702 - M5
MCO 704 - 1/8
MCO 706 - 1/4
Ring Connector required see page 2/89

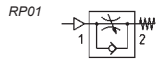


Unidirectional Cylinder Mount
SCU 610 - 1/2
Pre-assembled with ring connector

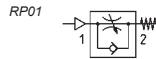


Unidirectional Cylinder Mount
MCU 710 - 1/2
Pre-assembled with ring connector

Series SCU, MCU, SVU, MVU, SCO, MCO Flow Control Valves



Unidirectional Valve Mount
SVU 610 - 1/2
 Pre-assembled with ring connector



Unidirectional Valve Mount
MVU 710 - 1/2
 Pre-assembled with ring connector



Bidirectional
SCO 610 - 1/2
 Pre-assembled with ring connector



Bidirectional
MCO 710 - 1/2
 Pre-assembled with ring connector

Flow Control Valves with Silencer Series RSW

Part Number
RSW 1/8
RSW 1/4
RSW 1/2



Silencing Bush Series 2905

Part Number
2905 1/8
2905 1/4
2905 3/8



For use with SCO and MCO flow control valves

CODING EXAMPLE

M	CU	7	02	-	M5
----------	-----------	----------	-----------	----------	-----------

M	ACTUATION: M = Manual S = Screwdriver	CU	ASSEMBLY: CU = on cylinders unidirectional VU = on valves unidirectional CO = bidirectional	02	NOMINAL DIAMETER: 02 = Ø 1.5 max 04 = Ø 2 max 06 = Ø 4 max 08 = Ø 7 max 10 = Ø 12 max
7	VERSIONS: 6 = needle (screwdriver operated) 7 = needle (manual operated)	M5	CONNECTIONS: M5, 1/8, 1/4, 3/8, 1/2		



Single Banjo Ring Connector
6610 4 - M5
6610 4 - M6•
6610 4 - 1/8
6610 5 - M5
6610 5 - M6•
6610 5 - 1/8
6610 6 - M5
6610 6 - M6•
6610 6 - 1/8
6610 6 - 1/4
6610 8 - 1/8
6610 8 - 1/4
6610 8 - 3/8
6610 10 - 1/4*
6610 10 - 3/8*
6610 12 - 1/2*



Single Banjo Ring Connector
1610 5/3 - M5
1610 5/3 - M6•
1610 5/3 - 1/8
1610 6/4 - M5
1610 6/4 - M6•
1610 6/4 - 1/8
1610 6/4 - 1/4
1610 6/4 - 3/8
1610 8/6 - 1/8
1610 8/6 - 1/4
1610 8/6 - 3/8
1610 10/8 - 1/8*
1610 10/8 - 1/4*
1610 10/8 - 3/8*
1610 10/8 - 1/2*
1610 12/10 - 3/8*
1610 12/10 - 1/2*
1610 15/12.5 - 1/2*



Banjo Ring Connector
2023 M5 - M5
2023 M5 - M6•
2023 1/8 - 1/8
2023 1/4 - 1/4*
2023 3/8 - 3/8*



Single Banjo Ring Connector
1170 6 - 1/8
1170 6 - 1/4
1170 8 - 1/8*

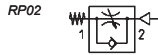
* Banjo ring connectors are only suitable for assemble with type 1635 banjo bolts

* Banjo ring connector required for M5 versions of SCU, MCO, SVU, MVU, SCO and MCO

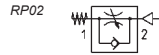
Flow control valves

Series PSCU, PMCU, PSVU, PMVU, PSCO and PMCO

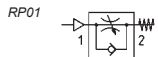
Unidirectional and bidirectional flow control valves
Flow Regulators with banjo in technopolymer
Ports 1/8, 1/4, 3/8



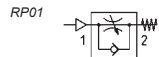
Part Number
PSCU 604-1/8-4
PSCU 604-1/8-6
PSCU 604-1/8-8
PSCU 606-1/4-6
PSCU 606-1/4-8
PSCU 606-1/4-10
PSCU 608-3/8-10
PSCU 608-3/8-12



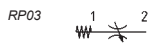
Part Number
PMCU 704-1/8-4
PMCU 704-1/8-6
PMCU 704-1/8-8
PMCU 706-1/4-6
PMCU 706-1/4-8
PMCU 706-1/4-10
PMCU 708-3/8-10
PMCU 708-3/8-12



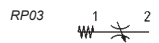
Part Number
PSVU 604-1/8-4
PSVU 604-1/8-6
PSVU 604-1/8-8
PSVU 606-1/4-6
PSVU 606-1/4-8
PSVU 606-1/4-10
PSVU 608-3/8-10
PSVU 608-3/8-12



Part Number
PMVU 704-1/8-4
PMVU 704-1/8-6
PMVU 704-1/8-8
PMVU 706-1/4-6
PMVU 706-1/4-8
PMVU 706-1/4-10
PMVU 708-3/8-10
PMVU 708-3/8-12

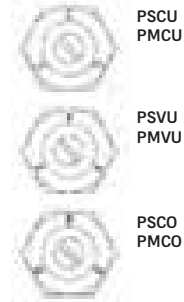


Part Number
PSCO 604-1/8-4
PSCO 604-1/8-6
PSCO 604-1/8-8
PSCO 606-1/4-6
PSCO 606-1/4-8
PSCO 606-1/4-10
PSCO 608-3/8-10
PSCO 608-3/8-12



Part Number
PMCO 704-1/8-4
PMCO 704-1/8-6
PMCO 704-1/8-8
PMCO 706-1/4-6
PMCO 706-1/4-8
PMCO 706-1/4-10
PMCO 708-3/8-10
PMCO 708-3/8-12

TYPES



PSCU - PMCU = assembly directly on the cylinders
PSVU - PMVU = assembly directly on the valves
PSCO - PMCO = assembly directly on the cylinders or valves

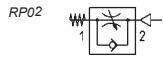
CODING EXAMPLE

P	M	CU	7	04	-	1/8	-	4
----------	----------	-----------	----------	-----------	----------	------------	----------	----------

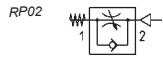
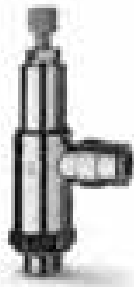
P	SERIES: P							
M	ACTUATION: M = Manual S = Screwdriver	04	NOMINAL DIAMETER: 04 = Ø 2mm max 06 = Ø 4mm max 08 = Ø 4mm max					
CU	ASSEMBLY: CU = on cylinders unidirectional VU = on valves unidirectional CO = bidirectional	1/8	CONNECTIONS: 1/8 1/4 3/8					
7	VERSIONS: 6 = needle (screwdriver operated) 7 = needle (manual operated)	4	TUBE: 4 = Ø 4mm 10 = Ø 10mm 6 = Ø 6mm 12 = Ø 12mm 8 = Ø 8mm					

Series GSCU, GMCU, GSVU, GMVU, GSCO, GMCO Flow Control Valves

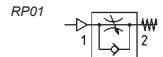
Unidirectional and bidirectional M5, 1/8 and 1/4
banjo flow controllers
Nominal diameters 1.5 - 3.5 and 5



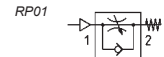
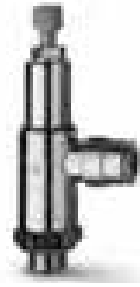
Unidirectional Cylinder Mounted
GSCU 813-M5-3
GSCU 814-M5-4
GSCU 803-1/8-6
GSCU 804-1/8-8
GSCU 805-1/4-8
GSCU 806-1/4-10
Pre-assembled with ring connector



Unidirectional Cylinder Mounted
GMCU 913-M5-3
GMCU 914-M5-4
GMCU 903-1/8-6
GMCU 904-1/8-8
GMCU 905-1/4-8
GMCU 906-1/4-10
Pre-assembled with ring connector

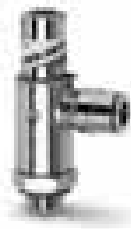


Unidirectional Valve Mounted
GSVU 813-M5-3
GSVU 814-M5-4
GSVU 803-1/8-6
GSVU 804-1/8-8
GSVU 805-1/4-8
GSVU 806-1/4-10
Pre-assembled with ring connector

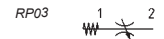
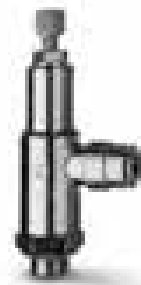


Unidirectional Valve Mounted
GMVU 913-M5-3
GMVU 914-M5-4
GMVU 903-1/8-6
GMVU 904-1/8-8
GMVU 905-1/4-8
GMVU 906-1/4-10
Pre-assembled with ring connector

Bidirectional
GSCO 813-M5-3
GSCO 814-M5-4
GSCO 803-1/8-6
GSCO 804-1/8-8
GSCO 805-1/4-8
GSCO 806-1/4-10
Pre-assembled with ring connector



Bidirectional
GMCO 913-M5-3
GMCO 914-M5-4
GMCO 903-1/8-6
GMCO 904-1/8-8
GMCO 905-1/4-8
GMCO 906-1/4-10
Pre-assembled with ring connector

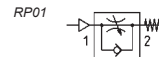
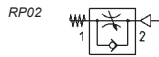


CODING EXAMPLE

GM	CU	9	03	-	1/8	-	6
GM	ACTUATION: GM = manual GS = screwdriver	9	VERSIONS: 8 = needle (screwdriver operated) 9 = needle (manually operated)		1/8	CONNECTIONS: M5, 1/8, 1/4	
CU	ASSEMBLY: CU = on cylinders unidirectional VU = on valves unidirectional CO = bidirectional	03	NOMINAL DIAMETER: size Ø tube 13 = 1.5 3 14 = 1.5 4 03 = 3.5 6 04 = 3.5 8 05 = 5 8 06 = 5 10		6	Ø TUBE: 3, 4, 6, 8, 10	

Series TMCU – TMVU – TMCU Flow control valves

Unidirectional and bidirectional 1/8, 1/4, 3/8, 1/2
Banjo flow controllers nominal diameters Ø 2 - 3.8 - 5.8 - 8 mm



	A	B
TMCU 972-1/8-4	1/8	4
TMCU 974-1/8-6	1/8	6
TMCU 974-1/4-6	1/4	6
TMCU 976-1/4-8	1/4	8
TMCU 976-3/8-8	3/8	8
TMCU 978-3/8-10	3/8	10
TMCU 978-1/2-10	1/2	10

	A	B
TMVU 972-1/8-4	1/8	4
TMVU 974-1/8-6	1/8	6
TMVU 974-1/4-6	1/4	6
TMVU 976-1/4-8	1/4	8
TMVU 976-3/8-8	3/8	8
TMVU 978-3/8-10	3/8	10
TMVU 978-1/2-10	1/2	10

	A	B
TMCO 972-1/8-4	1/8	4
TMCO 974-1/8-6	1/8	6
TMCO 974-1/4-6	1/4	6
TMCO 976-1/4-8	1/4	8
TMCO 976-3/8-8	3/8	8
TMCO 978-3/8-10	3/8	10
TMCO 978-1/2-10	1/2	10

CODING EXAMPLE

TM	CU	9	74	-	1/8	-	6
----	----	---	----	---	-----	---	---

TM	ACTUATION: TM = manual	9	VERSIONS: 9 = needle (manually operated)	1/8	CONNECTIONS: 1/8, 1/4, 3/8, 1/2
CU	ASSEMBLY: CU = on cylinders unidirectional VU = on valves unidirectional CO = bidirectional	74	NOMINAL DIAMETER: size Ø tube 72 = 2 4 74 = 3.8 6 76 = 5.8 8 78 = 8	6	Ø TUBE: 4, 6, 8, 10

Series RFU, RFO in Line Flow Control Valves

Panel or wall-mounted flow controllers
Unidirectional RFU and bidirectional RFO Connections: M5, 1/8, 1/4
Nominal diameter: M5 = 1.5, 1/8 = 2 and 3mm, 1/4 = 4 and 6mm

Unidirectional Thread		Bidirectional Thread
RFU 452 M5		RFO 352 M5
RFU 482 1/8		RFO 382 1/8
RFU 483 1/8		RFO 383 1/8
RFU 444 1/4		RFO 344 1/4
RFU 446 1/4		RFO 346 1/4
RFU 466 3/8		RFO 367 3/8
RFU 477 1/2		RFO 377 1/2



CODING EXAMPLE

RF	U4	8	2
----	----	---	---

RF	SERIES: RF	8	CONNECTIONS: 8 = 1/8, 5 = M5, 4 = 1/4, 6 = 3/8, 7 = 1/2
U4	FUNCTION: U4 = unidirectional O3 = bidirectional	2	NOMINAL DIAMETER: 2 = Ø2 max 4 = Ø4 max 3 = Ø3 max 6 = Ø6 max 7 = Ø7 max

Series 28 Flow Control Valves

Connections: 1/8, 1/4, 3/8, 1/2



In Line	
2810	1/8
2810	1/4
2810	3/8
2810	1/2



In Line	
2820	1/8
2820	1/4
2820	3/8
2820	1/2



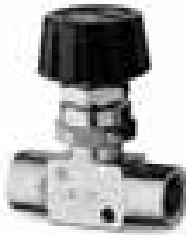
In Line	
2830	1/8
2830	1/4
2830	3/8
2830	1/2



Panel Mounted	
2819	1/8
2819	1/4



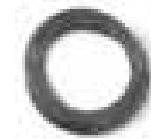
Panel Mounted	
2829	1/8
2829	1/4



Panel Mounted	
2839	1/8
2839	1/4
2839	3/8
2839	1/2



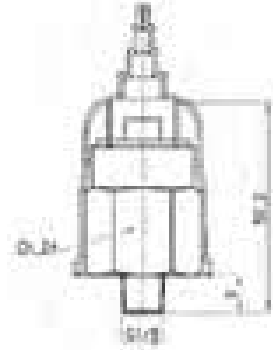
For Fittings	
See 4 (Connection)	



For Tubing	
See 10 (Tubing)	

Series PM Adjustable-Diaphragm Pressure Switches

Normally closed (NC) or open (NO).
Connections: 1/8.



Pressure Switch	Max.Voltage	Max Power	Service Type	Insulation Voltage	Symbol
PM11-NC	48 V AC DC	24 VA	Heavy	500V	PMNC
PM11-NA	48 V AC DC	24 VA	Heavy	500V	PMNA

NC = The pressure switch opens an electric contact when it reaches the fixed pressure.
NA = The pressure switch closes an electric contact when it reaches the fixed pressure.

PMNC

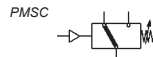


PMNA



Series PM Pressure Switch with Exchange Contacts

Normally closed or open
Connections: 1/4.

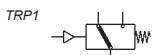


Pressure Switch	Max.Voltage	Operating Temperature	Actuation Time	Regulation Area	Hysteresis
PM11-SC	250 V AC	-25°C	>0.1 ms	2-10 Bar	15%
	30 V DC	+85°C			

SC = Contacts of exchange For electrical connector to suit PM11-SC, Please use KA132000B9

Series TRP Electro-Pneumatic Transducer

Normally closed or open
connection for tube 4/2.



Part Number

TRP-8

Series 2950 Pressure indicator

Connections: M5.

SEG1



Part Number

2950 M5

Series SWM Electronic Miniature Vacuum Switches

These vacuum switches are used in measuring ranges between 1 and 0 bar



CODING EXAMPLE

SW	M	-	VAO	-	T6
----	---	---	-----	---	----

SW SERIES: SW = transducer

VAO OUTPUT SIGNAL:
VAO = analog output
VD6 = digital output
with switching point
set to -600 mbar

M VERSION:
M = micro

T6 CONNECTION:
T6 = with diam.
6 mm plug in tube
M5 = male thread M5

Series SWE Electronic Vacuum/Pressure Switches

These vacuum sensors are available with analog and digital output



CODING EXAMPLE

SW	E	-	V00	-	P	A
----	---	---	-----	---	---	---

SW SERIES: SW = transducer

E VERSION:
E = electronic

P POLARITY:
P = PNP

V00 MEASUREMENT RANGE:
V00 = from -1 to 0 bar
U10 = from -1 to 10 bar
(only for E version)

A PNEUMATIC
CONNECTION:
A = 1/8 external male
thread and M5 internal
female thread.

Series SWD Electronic Vacuum/Pressure Switches

High precision, easy to use



CODING EXAMPLE

SW	D	-	V00	-	P	A
----	---	---	-----	---	---	---

SW SERIES: SW = transducer

D VERSION:
D = electronic with
digital display

P POLARITY:
P = PNP

V00 MEASURING RANGE:
V00 = from -1 to 0 bar
P10 = from 0 to 10 bar

A PNEUMATIC
CONNECTION:
A = 1/8 external male
thread and M5 internal
female thread.

2

Series SWDN Electronic Vacuum/Pressure Switches

With digital display
High precision, easy to use



Part Number

SWDN-V01-P3-2

SWDN-V01-P4-2

SWDN-V01-P4-M

SWDN-P10-P3-2

SWDN-P10-P4-2

SWDN-P10-P4-M

CODING EXAMPLE

SWDN	-	V01	-	P3	-	2
------	---	-----	---	----	---	---

SWDN

SERIES: SWDN

P3

TYPE OF ELECTRIC

CONNECTION:

P3 = 2 PNP outputs

+ 1 analog output

1 - 5 V DC

(this version is available

with 5-pole cable only)

V01

MEASURING RANGE:

V01 = from -1 bar to

1 bar

P10 = from 0 bar to

10 bar

2

ELECTRIC CONNECTION:

2 = cable of 2 meters

M = M8 4 pin connector

Series SWC Electronic Vacuum/Pressure Switches

High precision, easy to use



Part Number

SWC-V00-P

SWC-P10-P

CODING EXAMPLE

SW	C	-	V00	-	P
----	---	---	-----	---	---

SW

SERIES:

SW = transducer

V00

MEASURING RANGE:

V00 = from -1 to 0 bar

P10 = 0 to 10 bar

C

VERSION:

C = cube shape with
digital display**P**

POLARITY:

P = PNP

Series SWCN Electronic Vacuum/Pressure Switches

With digital display
High precision, easy to use



Part Number
SWCN-V01-P3-2
SWCN-V01-P4-2
SWCN-V01-P4-M
SWCN-P10-P3-2
SWCN-P10-P4-2
SWCN-P10-P4-M

CODING EXAMPLE

SWCN	V01	P3	2
SWCN SERIES: SW = transducer		P3 TYPE OF ELECTRIC CONNECTION: P3=2 PNP outputs + 1 analog output 1 - 5 V DC (this version is available with 5-pole cable only) P4 = 2 PNP outputs	
V01 MEASURING RANGE: V01 = from -1 to 1 bar P10 = from 0 to 10 bar		2 ELECTRIC CONNECTION: 2 = cable of 2 meters M = M8 4 pin connector	

Series SWE, SWD, SWDN, SWC and SWCN Accessories

Series SWE, SWD, SWDN, SWC, SWCN,



Connector		
Part Number	Function	Cable Length
CS-DF04EG-E200	Straight connector M8 4 poles straight IP65	2 mt
CS-DF04EG-E500	Straight connector M8 4 poles straight IP65	5 mt
CS-DR04EG-E200	90° connector M8 4 poles straight IP65	2 mt
CS-DR04EG-E500	90° connector M8 4 poles straight IP65	5 mt



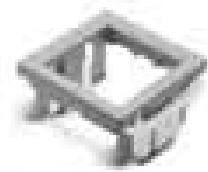
Bracket
SWD-B



Bracket
SWC-E



Panel mounting set
SWC-B



Panel mounting set
SWC-F



Bracket
SWCN-B



Bracket
SWCN-F



Bracket
SWCN-FP

Series 2901, 2903, 2921, 2931, 2938, 2939, SP, RSW Silencers

Connections: M5, 1/8, 1/4, 3/8, 1/2, 3/4, 1

CONTROL



Part Number	Flow Rate NI/min	Noise db (A)
2901 1/8	700	75
2901 1/4 - 17	1000	78
2901 1/4 - 22	1600	92
2901 3/8	1500	76
2901 1/2	3400	86
2901 3/4	4100	87
2901 1	7600	88



Part Number	Flow Rate NI/min	Noise db (A)
2903 1/8	700	74



Part Number	Flow Rate NI/min	Noise db (A)
2921 1/8	1550	78
2921 1/4	2400	79
2921 3/8	4800	84
2921 1/2	6800	84
2921 3/4	12700	78
2921 1	>15000	80



Part Number	Flow Rate NI/min	Noise db (A)
2931 M5	450	69
2931 M7	1130	76
2931 1/8	1819	83
2931 1/4	2675	85
2931 3/8	4863	83
2931 1/2	7085	84
2931 3/4	12733	78
2931 1	>15000	82



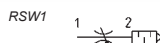
Part Number	Flow Rate NI/min	Noise db (A)
2938 M5	546	67
2938 1/8	1441	65
2938 1/4	2752	79
2938 3/8	4735	73
2938 1/2	8534	86



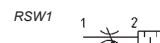
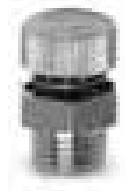
Part Number	Flow Rate NI/min	Noise db (A)
2939 4	335	80
2939 6	632	79
2939 8	1229	89
2939 10	2650	87



Part Number	Flow Rate NI/min	Noise db (A)
SP 1/8		
SP 1/4		
SP 3/8		
SP 1/2		



Part Number	Flow Rate NI/min	Noise db (A)
SCO 604-1/8+2905	1/8	
SCO 606-1/4+2905	1/4	



Part Number	Flow Rate NI/min	Noise db (A)
RSW 1/8	410	
RSW 1/4	650	
RSW 1/2	1590	

Series ER100 Digital Electro-Pneumatic Regulators

Connections: 1/4



Please contact the Camozzi sales office for full technical information

CODING EXAMPLE

ER	1	04	-	5	0	AN
ER SERIES: ER		04 CONNECTIONS: 04 = 1/4			0 INPUT: 0 = 0 - 10 V DC 1 = 0 - 5 V DC 2 = 4 - 20 mA P = Parallel 10 bit	
	1 SIZE: 1 = size 1		5 WORKING PRESSURE: 5 = 0 - 5 bar 9 = 0.5 - 9 bar			AN OUTPUT: AN = 1 - 5 V analog, error (NPN) AP = 1 - 5 V analog, error (PNP) SN = switch (NPN), error (NPN) SP = switch (PNP), error (PNP)

MODELS

ER104-50AP ER104-50SP	ER104-52AP ER104-52SP	ER104-5PSP ER104-90AP	ER104-90SP ER104-92AP	ER104-92SP ER104-9PSP
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Accessories

Bracket
Floor installation type



Part Number

ER1-B1

Bracket
Wall installation type



Part Number

ER1-B2

Series ER200 Digital Electro-Pneumatic Regulators

Ports 1/4 and 3/8

2

CONTROL



Please contact the Camozzi sales office for full technical information

CODING EXAMPLE

ER	2	04	-	5	0	AN
ER	SERIES: ER	04	CONNECTIONS: 04 = 1/4 38 = 3/8	0	INPUT: 0 = 0 - 10 V DC 1 = 0 - 5 V DC 2 = 4 - 20 mA P = Parallel 10 bit	
2	SIZE: 2 = size 2	5	WORKING PRESSURE: 5 = 0 - 5 bar 9 = 0.5 - 9 bar	AN	OUTPUT: AN = 1 - 5 V analog, error (NPN) AP = 1 - 5 V analog, error (PNP) SN = switch (NPN), error (NPN) SP = switch (PNP), error (PNP)	

MODELS

ER238-50AP ER238-50SP	ER238-52AP ER238-52SP	ER238-5PSP ER238-90AP	ER238-90SP ER238-92AP	ER238-92SP ER238-9PSP
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

Accessories

Bracket
Floor installation type mounting

Part Number

ER2-B1

Bracket
Wall installation type mounting

Part Number

ER2-B2

Cable and connector for regulator
with analog Input

Part Number

G8X1-1

G8X1-3

Cable and connector for regulator
with parallel Input

Part Number

G8X2-1

G8X2-3

Series LR Servo Valves

<p>Flow control LRWA0 3/3 way servo valves</p> 	<p>Flow control LRWA4 3/3 way servo valves</p> 	<p>Flow control LRWA2 3/3 way directly operated servo valves</p> 
<p>Pressure control LRPA4 3/3 way servo valves</p> 	<p>Positioning control of pneumatic cylinders LRXA4 3/3 way servo valves</p> 	<p>Digital proportional servo valve LRWD2 3/3 way directly operated servo valves</p> 






New

CODING EXAMPLE

L R W A 2 - 3 4 - 1 - A - 00

L	SERIES: L = Proportional servo valves		
R	TECHNOLOGY: R = rotating spool	2	MODEL: 0 = cartridge with fixation slot (LRWA only) 2 = compact DIN-RAIL 4 = with sub-base (LRWA only)
W	VERSION: W = flow control	3	FUNCTION: 3 = 3 way
A	ELECTRONICS: A = analogue D = digital (LRWD2 only)	4	DIAMETER: 4 = 4mm 6 = 6mm
		1	INPUT SIGNAL: 1 = +/- 10 V 2 = 0-10 V 3 = 0-20 MA 4 = +/- 5 V (LRWA only) 4 = 4-20mA (LRWD2 only)
		A	FEEDBACK SIGNAL: A = internal encoder
		00	CABLE: 00 = no cable (LRWA2, LRWA4 and LRWD2) 05 = 0.5m (LRWA0 only) 10 = 1m (LRWA0 only) 20 = 2m (LRWA0 only)

Accessories

				
Fitting block LRA0C-3	Connector CS-PM07CB	Connector CS-PM04CB	Connector CS-PF07CB	Cables CS-LF05HB-D200/D500 CS-LR05HB-D200/D500

Series K8P Electronic Proportional Micro Regulator

Proportional regulator for pressure control

Series K8P electronic proportional micro regulators have evolved from our Series K8 mini-solenoid valves.

Series K8P regulators guarantee excellent pressure regulation, fast response times, self regulation and low energy consumption. Series K8P is a high performance proportional pressure regulator which is suitable for use in all applications where high precision, quick response times and low consumption are required.

The K8P regulator adjusts the outlet pressure through the operation of two K8 monostable valves according to the inlet signal (from 0 to 10 V DC) and to the retroactivity of the internal pressure sensor.

A self-adjusting function has been integrated into the regulator control algorithm to guarantee the highest levels of performance apart from the volume connected.



Part Number

K8P-0-D5*2-0

K8P-0-E5*2-0

K8P-L-E5*2-0

K8P-L-D5*2-0

K8P-S-D5*2-0

K8P-S-E5*2-0

K8P-T-D5*2-0

K8P-T-E5*2-0

Note to the table

*according to the type of command desired, insert:

2 (0-10 V DC) or

3 (4-20mA)

Technical Data

Media

Inert gas

Max Inlet Pressure

11 bar (0.5 - 10 bar)

4 bar (0.15 - 3 bar)

Analogical Input

0-10 V DC 4-20mA Ripple \leq 0.2%

Analogical Output

0.5-9.5V (feedback)

Maximum Flow

Inlet P 10 bar - regulated P6 bar 12 l/min

Inlet P 4 bar - regulated P3 bar 6 l/min

Operating Pressure

See technical data page 2/9

Supply/Use

24 V- ~1W

Function

3/2 NC

Linearity

\leq \pm 1% FS

Hysteresis

\pm 0.5% FS

Repeatability

\pm 0.5% FS

Minimal Set Point Change

50mV => 50 mB (10 bar)

- 100mV => 30 mB (3bar)

Electrical Connection

M8 4 Pin (male)

Series K8P Electronic Proportional Micro Regulator - Dimensions

MALE CONNECTOR M8 4 POLES

Pin 1: +24 V DC (Power supply)

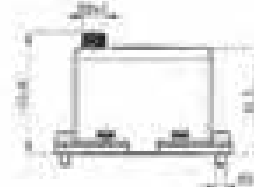
Pin 2: Command analogical signal 0-10 V DC or 4-20 mA

Pin 3: 0 V (Ground) common also for the command signal

Pin 4: Output analogical signal (according to the regulated pressure)

5 red LED

6 green LED



CODING EXAMPLE

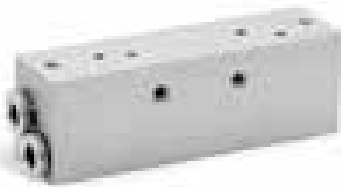
K8P	-	0	-	D	5	2	2	-	0
-----	---	---	---	---	---	---	---	---	---

K8P SERIES: K8P	
0 BODY DESIGN: 0 = Stand alone S = Standard Sub-base L = Light Sub-base T = Light Sub-base for the pressure remote reading	2 OUTPUT SIGNAL: 2 = 0-10 V
D WORKING PRESSURE: D = 0 -10 bar E = 0 - 3 bar	0 CABLE LENGTH: 0 = without cable 2F = straight cable, 2 m 2R = right angle cable (90°), 2 m 5F = straight cable, 5 m 5R = right angle cable (90°), 5 m
5 VALVE FUNCTIONS 5 = 2-way NC	
2 COMMAND: 2 = 0-10 V DC 3 = 4-20 mA	APPLICATIONS The K8P proportional regulator can be used as a pilot valve to control the opening of high flow valves or to check the high flow pressure regulators proportionally (version with sub-base for the pressure remote reading). It enables proportional control of power in lifting systems and can be used with inert gas to maintain a constant pressure in pneumatic cylinders or expansion valve chambers. It has also been designed to maintain a constant pressure during the pulling power applied to the wires in winding machines, to modulate pressure during the smoothing process in woodworking machines or to adjust the opening of diaphragm valves.

Sub-bases

Standard Sub-base

Note: the use of a silencer on the exhaust is recommended*
*Mod. 2939 4



Part Number

K8P-AS

Light Sub-base

Note: the use of a silencer on the exhaust is recommended*
*Mod. 2931 M5
Mod. 2938 M5
Mod. 2901 M5



Part Number

K8P-AL

Light Sub-base for the pressure remote reading

Note: the use of a silencer on the exhaust is recommended*
*Mod. 2931 M5
Mod. 2938 M5
Mod. 2901 M5

In the version Light sub-base for the pressure remote reading it is also possible to use the fixing bracket B2-E531



Part Number

K8P-AT

Series K8P Accessories

Mounting Bracket for DIN rail (7.5mm x 35mm - width 1)

Supplied with:
1x plate
1x screw M4x6 UNI 5931
Note: this accessory cannot be used with the light sub-base version.

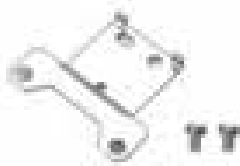


Part Number

PCF-K8P

Bracket for Horizontal Mounting

Supplied with:
1x mounting bracket
2x screws M3x8 UNI 5931



Part Number

K8P-B1

Circular M8 4-pole connectors, Female

With PU sheathing, non shielded cable. Protection class: IP65



Part Number	Type of Connector	Cable Length (m)
CS-DF04EG-E200	straight	2
CS-DF04EG-E500	straight	5
CS-DR04EG-E200	right angle (90°)	2
CS-DR04EG-E500	right angle (90°)	5

Series AP Directly Operated Proportional Valves

2/2-way proportional valves, NC
Size 16 - 22 mm

Series AP directly operated 2/2-way proportional solenoid valves, NC, with nominal diameters range from 0.8 to 2.4mm, can be used where an open loop flow control is required, with gas mixtures, to control free flows or blows, or emptying chambers using vacuum.

The proportional valves Series AP have been manufactured to optimise and reduce friction and stick-slip effects.

The output flow is proportional to the control signal.

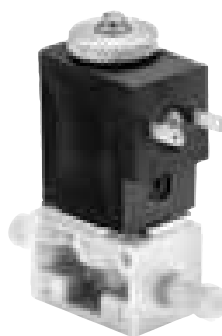
As they can work also in vacuum, a minimum working pressure is not required.



16mm



22mm



16mm PVDF

For connectors see page 2/48 - 2/51

Technical Data

Type of Construction

Proportional directly operated

Media

inert gas

Operating Pressure

See technical data page 2/9

Kv

See technical data page 2/9

Operating Temperature

0°C to +60°C

Materials

Body: Brass / PVDF

(for size 16mm only)

Seals: NBR

Connections

M5 - 1/8

Hysteresis

16mm size <7% 22mm size <5%

Repeatability

16mm size <5% 22mm size <3%

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.

Series AP Proportional Valves - Size 16mm

Part Number	Connection 1	Connection 2	Function	Orifice Ø (mm)	Kv (l/min)	Pressure Max (bar)
AP-6210-DR2-GP*	M5	M5	2/2 N.C.	0.8	0.4	10
AP-6210-FR2-GP*	M5	M5	2/2 N.C.	1	0.5	8
AP-6210-HR2-GP*	M5	M5	2/2 N.C.	1.2	0.65	6
AP-6210-LR2-GP*	M5	M5	2/2 N.C.	1.6	1.2	4

Series AP Proportional Valves - Size 22mm

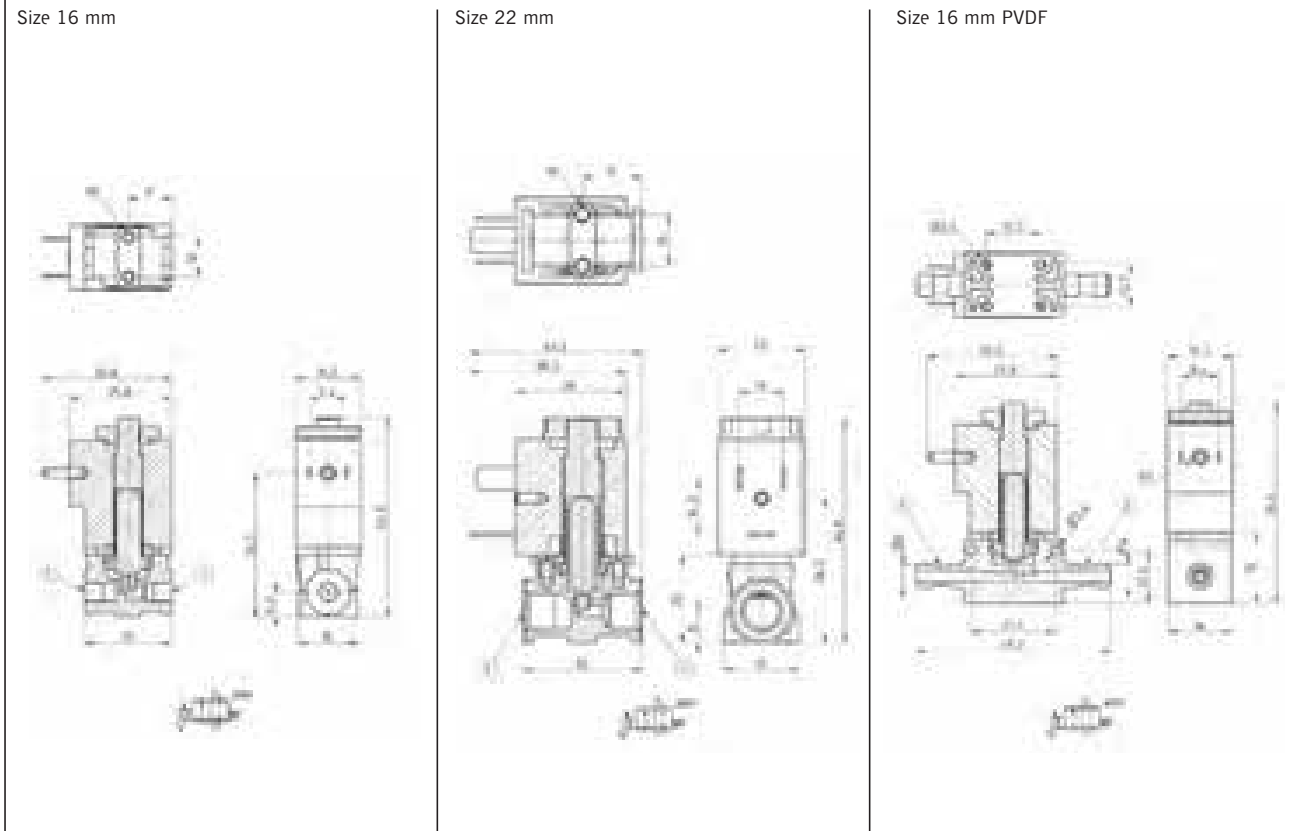
Pressure Part Number	Connection 1	Connection 2	Function	Orifice Ø (mm)	Kv (l/min)	Pressure Max (bar)
AP-7211-FR2-U7*	1/8	1/8	2/2 N.C.	1	0.5	10
AP-7211-HR2-U7*	1/8	1/8	2/2 N.C.	1.2	0.65	8
AP-7211-LR2-U7*	1/8	1/8	2/2 N.C.	1.6	1.0	6
AP-7211-NR2-U7*	1/8	1/8	2/2 N.C.	2	1.6	5
AP-7211-QR2-U7*	1/8	1/8	2/2 N.C.	2.4	2.0	4

Series AP Proportional Valves - Size 16mm - body in PVDF

Part Number	Connection 1	Connection 2	Function	Orifice Ø (mm)	Kv (l/min)	Pressure Max (bar)
AP-621L-DR3-GP*	Ø6**	Ø6**	2/2 N.C.	0.8	0.4	10
AP-621L-FR3-GP*	Ø6**	Ø6**	2/2 N.C.	1	0.5	8
AP-621L-HR3-GP*	Ø6**	Ø6**	2/2 N.C.	1.2	0.65	6
AP-621L-LR3-GP*	Ø6**	Ø6**	2/2 N.C.	1.6	1.2	4

Series AP Directly Operated Proportional Valves

Proportional valves Series AP



CODING EXAMPLE

AP - 7 2 1 1 - L R 2 - G 7 11

AP	SERIES: AP	
7	BODY: 6 = Size 16 mm 7 = Size 22 mm	R SEALS MATERIAL: R = NBR
2	NUMBER OF WAYS 2 = 2-way	2 BODY MATERIAL: 2 = brass 3 = technopolymer (for size 16mm only)
1	VALVE FUNCTIONS 1 = NC	G ENCAPSULATING MATERIAL G = PA (for size 16mm only) U = PET (for size 22mm only)
1	CONNECTIONS: 0 = M5 (for size 16mm only) 1 = 1/8 (for size 22mm only) L = bar fittings (technopolymer body only)	7 SOLENOID DIMENSIONS P = 16x26 DIN EN 175301-803-C (for size 16mm only) 7 = 22x22 DIN 43650 B (for size 22mm only)
L	NOMINAL DIAMETER: D = ø 0.8 mm (for size 16mm only) F = ø 1mm H = ø 1.2mm L = ø 1.6mm N = ø 2mm (for size 22mm only) Q = ø 2.4mm (for size 22mm only)	11 SOLENOID VOLTAGE H = 12 V DC 3 W (for size 16mm only) 7 = 24 V DC 3 W (for size 16mm only) 11 = 24 V DC 6.5 W (for size 22mm only) 12 = 12 V DC 6.5 W (for size 22mm only)

New

Series MX-PRO Electronic Proportional Regulator

G1/2

Modular - Available with built-in pressure gauges or ports for gauges



Part Number

MX2-1/2-RCV204

MX2-1/2-MCV204

Technical Data

Type of Construction

Modular, compact, diaphragm type

Media

Filtered air, class 5.4.4 according to ISO 8573-1, inert gas

Flow Rate

See full catalogue

Working Temperature

From 0°C to +50°C

Inlet Pressure

0 - 11 bar (10 bar)

0 - 4 bar (3 bar)

Outlet Pressure

0.5 - 10 bar

0.15 - 3 bar

Overpressure exhaust

With relieving (standard)

Without relieving

Analogical input

0-10 V DC Ripple ≤0.2%

4 - 20mA

Analogical output

0.5 - 9.5 V DC (feedback)

Supply / Consumption

19-28 V DC - ~1 W

Protection Class

IP51 with connector

Electrical Connection

M8 4 Pin (male)

Materials

Body: Aluminium

Covering: Polyacetal

Valve Holder Plug: Polyacetal

Upper Base: Aluminium

Lower Spring: Zinc-Plated Steel

Diaphragm: NBR

Seals: NBR

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.

CODING EXAMPLE

MX	2	-	1/2	-	R	CV	2	0	4	-	LH
----	---	---	-----	---	---	----	---	---	---	---	----

MX	SERIES: MX	R	TYPE OF REGULATOR: R = Pressure regulator M = Manifold pressure regulator (G1/2 only)	0	DESIGN TYPE: 0 = relieving (standard) 1 = without relieving
2	SIZE: 2 = G1/2	CV	COMMAND: CV = electrical command 0-10 V DC CA = electrical command 4-20 mA	4	PRESSURE GAUGE: 0 = without pressure gauge (with threaded connection for gauges) 2 = with built-in pressure gauge 0-6 and working pressure 0.15 - 3 bar 4 = with built-in pressure gauge 0-12 and working pressure 0.5 - 10 bar (standard)
1/2	CONNECTIONS: 1/2 = G1/2	2	OPERATING PRESSURE (1 bar = 14.5psi): 1 = 0.15 - 3 bar 2 = 0.5 - 10 bar (standard)	LH	FLOW DIRECTION: = from left to right (standard) LH = from right to left

3 > Treatment












3



Modular FRL Units - 3/8, 1/2, 3/4 and 1

	3 / 2	Series MX Filters
	3 / 2	Series MX Activated Carbon Filters
	3 / 3	Series MX Coalescing Filters
	3 / 4	Series MX Pressure Regulators
	3 / 5	Series MX Lubricators
	3 / 6	Series MX Filter-Regulators
	3 / 8	Series MX Lockable Isolation 3/2-Way Valves
	3 / 8	Series MX Soft Start Valves
	3 / 9	Series MX Take-off Blocks
	3 / 9	Series MX Assembled FRL

Modular FRL Units - 1/4

	3 / 14	Series MC Filters
	3 / 14	Series MC Coalescing Filters
	3 / 15	Series MC Pressure Regulators
	3 / 15	Series MC Lubricators
	3 / 16	Series MC Filter-Regulators
	3 / 16	Series MC Lockable Isolation 3/2-Way Valves
	3 / 17	Series MC 3/2 Valve Pneumatically or Electropneumatically Operated
	3 / 17	Series MC Soft Start Valves
	3 / 17	Series MC Take-off Blocks
	3 / 18	Series MC Assembled FRL
	3 / 22	Series MC Assembly Manifold Regulators

TREATMENT




Pressure Regulators

	3 / 23	Series CLR Micro Pressure Regulators
	3 / 24	Series M Pressure Micro Regulator
	3 / 24	Series T Pressure Micro Regulators

FRL Units - 1/8 and 1/4

	3 / 25	Series N Filters and Coalescing Filters
	3 / 26	Series N Pressure Regulators
	3 / 26	Series N Lubricators
	3 / 27	Series N Filter/Regulators

Pressure Gauges and Accessories for Air Treatment

	3 / 27	Pressure Gauges
	3 / 28	Series MX, MC, M, N, and T Accessories for Air Treatment
	3 / 30	Series MX, MC and N Functioning Condensate Drains

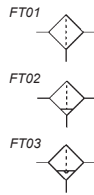
Series MX Filters

Connections: MX2=3/8, 1/2, 3/4 MX3=3/4, 1

Modular

Bowl with technopolymer cover and bayonet-type mounting

3



CODING EXAMPLE

MX	2	-	3/8	-	F	0	0
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MX SERIES: MX	F F = filter
2 SIZE: 2 = 3/8 - 1/2 - 3/4 3 = 3/4 - 1	0 FILTERING ELEMENT: 0 = 25µm (standard) 1 = 5µm
3/8 CONNECTIONS: 3/8, 1/2, 3/4, 1	0 DRAINING OF CONDENSATE: 0 = semi-automatic manual drain (standard) 3 = automatic drain 5 = depressuring drain, protected 8 = no drain with connection 1/8 see page 3/30

	MX2			MX3	
25 micron	3/8	1/2	3/4	3/4	1
Semi Auto Drain	MX2-3/8-F00	MX2-1/2-F00	MX2-3/4-F00	MX3-3/4-F00	MX3-1-F00
Automatic Drain	MX2-3/8-F03	MX2-1/2-F03	MX2-3/4-F03	MX3-3/4-F03	MX3-1-F03
Depressurisation Drain Protected	MX2-3/8-F05	MX2-1/2-F05	MX2-3/4-F05	MX3-3/4-F05	MX3-1-F05
Connection 1/8	MX2-3/8-F08	MX2-1/2-F08	MX2-3/4-F08	MX3-3/4-F08	MX3-1-F08
	MX2			MX3	
5 micron	3/8	1/2	3/4	3/4	1
Semi Auto Drain	MX2-3/8-F10	MX2-1/2-F10	MX2-3/4-F10	MX3-3/4-F10	MX3-1-F10
Automatic Drain	MX2-3/8-F13	MX2-1/2-F13	MX2-3/4-F13	MX3-3/4-F13	MX3-1-F13
Depressurisation Drain Protected	MX2-3/8-F15	MX2-1/2-F15	MX2-3/4-F15	MX3-3/4-F15	MX3-1-F15
Connection 1/8	MX2-3/8-F18	MX2-1/2-F18	MX2-3/4-F18	MX3-3/4-F18	MX3-1-F18

Series MX Activated Carbon Filters

Connections: MX2=3/8, 1/2, 3/4 MX3=3/4, 1

Modular

Bowl with technopolymer cover and bayonet-type mounting



CODING EXAMPLE

MX	2	-	3/8	-	FCA
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MX SERIES: MX	FCA Activated carbon filter
2 SIZE: 2 = 3/8 - 1/2 - 3/4 3 = 3/4 - 1	
3/8 CONNECTIONS: 3/8, 1/2, 3/4, 1	


	MX2			MX3	
Activated Carbon Filters	3/8	1/2	3/4	3/4	1
	MX2-3/8-FCA	MX2-1/2-FCA	MX2-3/4-FCA	MX3-3/4-FCA	MX3-1-FCA


Series MX Coalescing Filters


Connections: MX2=3/8, 1/2, 3/4 MX3=3/4, 1


Modular

Bowl with technopolymer cover and bayonet-type mounting



FA01 

FA02 

FA03 

CODING EXAMPLE

MX	2	-	3/8	-	FC	0	0
-----------	----------	----------	------------	----------	-----------	----------	----------

MX	SERIES: MX	FC	FC = coalescing filter
2	SIZE: 2 = 3/8 - 1/2 - 3/4 3 = 3/4 - 1	0	FILTERING ELEMENT: 0 = 0.01µm (standard) 1 = 1µm
3/8	CONNECTIONS: 3/8, 1/2, 3/4, 1	0	DRAINING OF CONDENSATE: 0 = semi-automatic manual drain (standard) 3 = automatic drain 5 = depressuring drain, protected 8 = no drain with connection 1/8 see page 3/30

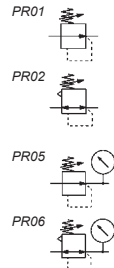
	MX2			MX3	
0.01 micron	3/8	1/2	3/4	3/4	1
Semi Auto Drain	MX2-3/8-FC00	MX2-1/2-FC00	MX2-3/4-FC00	MX3-3/4-FC00	MX3-1-FC00
Automatic Drain	MX2-3/8-FC03	MX2-1/2-FC03	MX2-3/4-FC03	MX3-3/4-FC03	MX3-1-FC03
Depressurisation Drain Protected	MX2-3/8-FC05	MX2-1/2-FC05	MX2-3/4-FC05	MX3-3/4-FC05	MX3-1-FC05
Connection 1/8	MX2-3/8-FC08	MX2-1/2-FC08	MX2-3/4-FC08	MX3-3/4-FC08	MX3-1-FC08
	MX2			MX3	
1 micron	3/8	1/2	3/4	3/4	1
Semi Auto Drain	MX2-3/8-FC10	MX2-1/2-FC10	MX2-3/4-FC10	MX3-3/4-FC10	MX3-1-FC10
Automatic Drain	MX2-3/8-FC13	MX2-1/2-FC13	MX2-3/4-FC13	MX3-3/4-FC13	MX3-1-FC13
Depressurisation Drain Protected	MX2-3/8-FC15	MX2-1/2-FC15	MX2-3/4-FC15	MX3-3/4-FC15	MX3-1-FC15
Connection 1/8	MX2-3/8-FC18	MX2-1/2-FC18	MX2-3/4-FC18	MX3-3/4-FC18	MX3-1-FC18

Series MX Pressure Regulators

Connections: MX2=3/8, 1/2, 3/4, MX3=3/4, 1

Manifold Connections: 1/2 (MX2 only)

Modular - Available with built-in pressure gauge or connections for external gauge (1/4 connection for MX3, 1/8 connection for MX2)



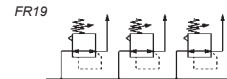
CODING EXAMPLE

MX	2	-	3/8	-	R	0	0	4
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MX	SERIES: MX		
2	SIZE: 2 = 3/8 - 1/2 - 3/4 3 = 3/4 - 1	0	OPERATING PRESSURE: 0 = 0.5 - 10 bar (standard) 4 = 0 - 4 bar 7 = 0.5 - 7 bar (MX2 only)
3/8	CONNECTIONS: 3/8, 1/2, 3/4, 1	0	DESIGN TYPE: 0 = relieving (standard) 1 = without relieving
R	TYPE OF REGULATOR: R = pressure regulator M = manifold pressure regulator (MX2 1/2 only)	4	PRESSURE GAUGE: 0 = without pressure gauge (with threaded connection for gauges) 2 = with built-in pressure gauge 0-6 and working pressure 0 - 4 bar 3 = with built-in pressure gauge 0-10 and working pressure 0 - 7 bar (MX2 only) 4 = with built-in pressure gauge 0-12 and working pressure 0.5 - 10 bar (standard)

	MX2			MX3	
	3/8	1/2	3/4	3/4	1
With port for pressure gauge					
0.5 - 10 bar, relieving	MX2-3/8-R000	MX2-1/2-R000	MX2-3/4-R000	MX3-3/4-R000	MX3-1-R000
0 - 4 bar, relieving	MX2-3/8-R400	MX2-1/2-R400	MX2-3/4-R400	MX3-3/4-R400	MX3-1-R400
0 - 7 bar, relieving (MX2 only)	MX2-3/8-R700	MX2-1/2-R700	MX2-3/4-R700	-	-
0.5 - 10 bar, non-relieving	MX2-3/8-R010	MX2-1/2-R010	MX2-3/4-R010	MX3-3/4-R010	MX3-1-R010
0 - 4 bar, non-relieving	MX2-3/8-R410	MX2-1/2-R410	MX2-3/4-R410	MX3-3/4-R410	MX3-1-R410
0 - 7 bar, non-relieving (MX2 only)	MX2-3/8-R710	MX2-1/2-R710	MX2-3/4-R710	-	-
	MX2			MX3	
With built-in pressure gauge	3/8	1/2	3/4	3/4	1
0.5 - 10 bar, relieving	MX2-3/8-R004	MX2-1/2-R004	MX2-3/4-R004	MX3-3/4-R004	MX3-1-R004
0 - 4 bar, relieving	MX2-3/8-R402	MX2-1/2-R402	MX2-3/4-R402	MX3-3/4-R402	MX3-1-R402
0 - 7 bar, relieving (MX2 only)	MX2-3/8-R703	MX2-1/2-R703	MX2-3/4-R703	-	-
0.5 - 10 bar, non-relieving	MX2-3/8-R014	MX2-1/2-R014	MX2-3/4-R014	MX3-3/4-R014	MX3-1-R014
0 - 4 bar, non-relieving	MX2-3/8-R412	MX2-1/2-R412	MX2-3/4-R412	MX3-3/4-R412	MX3-1-R412
0 - 7 bar, non-relieving (MX2 only)	MX2-3/8-R713	MX2-1/2-R713	MX2-3/4-R713	-	-

Series MX Manifold Pressure Regulators



	MX2			MX3	
With port for pressure gauge	3/8	1/2	3/4	3/4	1
0.5 - 10 bar, relieving	-	MX2-1/2-M000	-	-	-
0 - 4 bar, relieving	-	MX2-1/2-M400	-	-	-
0 - 7 bar, relieving	-	MX2-1/2-M700	-	-	-
0.5 - 10 bar, non-relieving	-	MX2-1/2-M010	-	-	-
0 - 4 bar, non-relieving	-	MX2-1/2-M410	-	-	-
0 - 7 bar, non-relieving	-	MX2-1/2-M710	-	-	-
	MX2			MX3	
With built-in pressure gauge	3/8	1/2	3/4	3/4	1
0.5 - 10 bar, relieving	-	MX2-1/2-M004	-	-	-
0 - 4 bar, relieving	-	MX2-1/2-M402	-	-	-
0 - 7 bar, relieving	-	MX2-1/2-M703	-	-	-
0.5 - 10 bar, non-relieving	-	MX2-1/2-M014	-	-	-
0 - 4 bar, non-relieving	-	MX2-1/2-M412	-	-	-
0 - 7 bar, non-relieving	-	MX2-1/2-M713	-	-	-

Series MX Lubricators

Connections: MX2=3/8, 1/2, 3/4 MX3=3/4, 1
 Modular
 Bowl with technopolymer cover and bayonet-type mounting



CODING EXAMPLE

MX	2	-	3/8	-	L	00
MX	SERIES: MX					
2	SIZE: 2 = 3/8 - 1/2 - 3/4 3 = 3/4 - 1			L	L = lubricator	
3/8	CONNECTIONS: 3/8, 1/2, 3/4, 1			00	DESIGN TYPE: 00 = atomized oil	

	MX2			MX3	
Connection	3/8	1/2	3/4	3/4	1
Part Number	MX2-3/8-L00	MX2-1/2-L00	MX2-3/4-L00	MX3-3/4-L00	MX3-1-L00

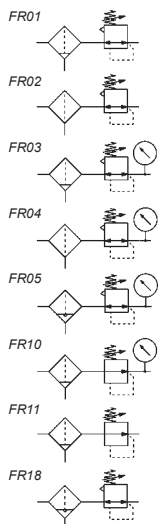
Series MX Filter/Regulator

Connections: MX2=3/8, 1/2, 3/4 MX3=3/4, 1

Modular

Bowl with technopolymer cover and bayonet-type mounting

3



CODING EXAMPLE

MX	2	-	3/8	-	FR	0	0	0	4
-----------	----------	----------	------------	----------	-----------	----------	----------	----------	----------

MX	SERIES: MX	0	0	0	4
2	SIZE: 2 = 3/8 - 1/2 - 3/4 3 = 3/4 - 1	0	0 FILTERING ELEMENT WITH DESIGN TYPE: 0 = 25µm with relieving (standard) 1 = 5µm with relieving 2 = 25µm without relieving 3 = 5µm without relieving		
3/8	CONNECTIONS: 3/8, 1/2, 3/4, 1	0	0 DRAINING OF CONDENSATE: 0 = semi-automatic manual drain (standard) 3 = automatic drain 5 = depressuring drain, protected 8 = no drain with connection 1/8		
FR	FR= filter regulator	4	0 OPERATING PRESSURE: 0 = 0.5 - 10 bar (standard) 4 = 0 - 4 bar 7 = 0.5 - 7 bar (MX2 only)		
		4	4 PRESSURE GAUGE: 0 = without pressure gauge 2 = with built-in pressure gauge 0-6 and working pressure 0-4 bar 3 = with built-in pressure gauge 0-10 and working pressure 0-7 bar (MX2 only) 4 = with built-in pressure gauge 0-12 and working pressure 0.5 - 10 bar (standard)		

	MX2			MX3	
Pressure Regulators - With port for pressure gauge	3/8	1/2	3/4	3/4	1
Semi Auto Drain - Self Relieving					
25 Micron 0.5 - 10 bar	MX2-3/8-FR0000	MX2-1/2-FR0000	MX2-3/4-FR0000	MX3-3/4-FR0000	MX3-1-FR0000
25 Micron 0 - 4 bar	MX2-3/8-FR0040	MX2-1/2-FR0040	MX2-3/4-FR0040	MX3-3/4-FR0040	MX3-1-FR0040
25 Micron 0 - 7 bar (MX2 only)	MX2-3/8-FR0070	MX2-1/2-FR0070	MX2-3/4-FR0070	-	-
Semi Auto Drain - Non-Relieving	3/8	1/2	3/4	3/4	1
25 Micron 0.5 - 10 bar	MX2-3/8-FR2000	MX2-1/2-FR2000	MX2-3/4-FR2000	MX3-3/4-FR2000	MX3-1-FR2000
25 Micron 0 - 4 bar	MX2-3/8-FR2040	MX2-1/2-FR2040	MX2-3/4-FR2040	MX3-3/4-FR2040	MX3-1-FR2040
25 Micron 0 - 7 bar (MX2 only)	MX2-3/8-FR2070	MX2-1/2-FR2070	MX2-3/4-FR2070	-	-
Automatic Drain - Self Relieving	3/8	1/2	3/4	3/4	1
25 Micron 0.5 - 10 bar	MX2-3/8-FR0300	MX2-1/2-FR0300	MX2-3/4-FR0300	MX3-3/4-FR0300	MX3-1-FR0300
25 Micron 0 - 4 bar	MX2-3/8-FR0340	MX2-1/2-FR0340	MX2-3/4-FR0340	MX3-3/4-FR0340	MX3-1-FR0340
25 Micron 0 - 7 bar (MX2 only)	MX2-3/8-FR0370	MX2-1/2-FR0370	MX2-3/4-FR0370	-	-
Automatic Drain - Non-Relieving	3/8	1/2	3/4	3/4	1
25 Micron 0.5 - 10 bar	MX2-3/8-FR2300	MX2-1/2-FR2300	MX2-3/4-FR2300	MX3-3/4-FR2300	MX3-1-FR2300
25 Micron 0 - 4 bar	MX2-3/8-FR2340	MX2-1/2-FR2340	MX2-3/4-FR2340	MX3-3/4-FR2340	MX3-1-FR2340
25 Micron 0 - 7 bar (MX2 only)	MX2-3/8-FR2370	MX2-1/2-FR2370	MX2-3/4-FR2370	-	-
Depressurisation Drain - Self Relieving	3/8	1/2	3/4	3/4	1
25 Micron 0.5 - 10 bar	MX2-3/8-FR0500	MX2-1/2-FR0500	MX2-3/4-FR0500	MX3-3/4-FR0500	MX3-1-FR0500
25 Micron 0 - 4 bar	MX2-3/8-FR0540	MX2-1/2-FR0540	MX2-3/4-FR0540	MX3-3/4-FR0540	MX3-1-FR0540
25 Micron 0 - 7 bar (MX2 only)	MX2-3/8-FR0570	MX2-1/2-FR0570	MX2-3/4-FR0570	-	-
Depressurisation Drain - Non-Relieving	3/8	1/2	3/4	3/4	1
25 Micron 0.5 - 10 bar	MX2-3/8-FR2500	MX2-1/2-FR2500	MX2-3/4-FR2500	MX3-3/4-FR2500	MX3-1-FR2500
25 Micron 0 - 4 bar	MX2-3/8-FR2540	MX2-1/2-FR2540	MX2-3/4-FR2540	MX3-3/4-FR2540	MX3-1-FR2540
25 Micron 0 - 7 bar (MX2 only)	MX2-3/8-FR2570	MX2-1/2-FR2570	MX2-3/4-FR2570	-	-
Connection 1/8 - Self Relieving	3/8	1/2	3/4	3/4	1
25 Micron 0.5 - 10 bar	MX2-3/8-FR0800	MX2-1/2-FR0800	MX2-3/4-FR0800	MX3-3/4-FR0800	MX3-1-FR0800
25 Micron 0 - 4 bar	MX2-3/8-FR0840	MX2-1/2-FR0840	MX2-3/4-FR0840	MX3-3/4-FR0840	MX3-1-FR0840
25 Micron 0 - 7 bar (MX2 only)	MX2-3/8-FR0870	MX2-1/2-FR0870	MX2-3/4-FR0870	-	-
Connection 1/8 - Non-Relieving	3/8	1/2	3/4	3/4	1
25 Micron 0.5 - 10 bar	MX2-3/8-FR2800	MX2-1/2-FR2800	MX2-3/4-FR2800	MX3-3/4-FR2800	MX3-1-FR2800
25 Micron 0 - 4 bar	MX2-3/8-FR2840	MX2-1/2-FR2840	MX2-3/4-FR2840	MX3-3/4-FR2840	MX3-1-FR2840
25 Micron 0 - 7 bar (MX2 only)	MX2-3/8-FR2870	MX2-1/2-FR2870	MX2-3/4-FR2870	-	-

TREATMENT

Series MX Filter/Regulator

3

Pressure Regulators - With built-in pressure gauge	MX2			MX3	
Semi Auto Drain - Self Relieving	3/8	1/2	3/4	3/4	1
25 Micron 0.5 - 10 bar	MX2-3/8-FR0004	MX2-1/2-FR0004	MX2-3/4-FR0004	MX3-3/4-FR0004	MX3-1-FR0004
25 Micron 0 - 4 bar	MX2-3/8-FR0042	MX2-1/2-FR0042	MX2-3/4-FR0042	MX3-3/4-FR0042	MX3-1-FR0042
25 Micron 0 - 7 bar (MX2 only)	MX2-3/8-FR0073	MX2-1/2-FR0073	MX2-3/4-FR0073	-	-
Semi Auto Drain - Non-Relieving	3/8	1/2	3/4	3/4	1
25 Micron 0.5 - 10 bar	MX2-3/8-FR2004	MX2-1/2-FR2004	MX2-3/4-FR2004	MX3-3/4-FR2004	MX3-1-FR2004
25 Micron 0 - 4 bar	MX2-3/8-FR2042	MX2-1/2-FR2042	MX2-3/4-FR2042	MX3-3/4-FR2042	MX3-1-FR2042
25 Micron 0 - 7 bar (MX2 only)	MX2-3/8-FR2073	MX2-1/2-FR2073	MX2-3/4-FR2073	-	-
Automatic Drain - Self Relieving	3/8	1/2	3/4	3/4	1
25 Micron 0.5 - 10 bar	MX2-3/8-FR0304	MX2-1/2-FR0304	MX2-3/4-FR0304	MX3-3/4-FR0304	MX3-1-FR0304
25 Micron 0 - 4 bar	MX2-3/8-FR0342	MX2-1/2-FR0342	MX2-3/4-FR0342	MX3-3/4-FR0342	MX3-1-FR0342
25 Micron 0 - 7 bar (MX2 only)	MX2-3/8-FR0373	MX2-1/2-FR0373	MX2-3/4-FR0373	-	-
Automatic Drain - Non-Relieving	3/8	1/2	3/4	3/4	1
25 Micron 0.5 - 10 bar	MX2-3/8-FR2304	MX2-1/2-FR2304	MX2-3/4-FR2304	MX3-3/4-FR2304	MX3-1-FR2304
25 Micron 0 - 4 bar	MX2-3/8-FR2342	MX2-1/2-FR2342	MX2-3/4-FR2342	MX3-3/4-FR2342	MX3-1-FR2342
25 Micron 0 - 7 bar (MX2 only)	MX2-3/8-FR2373	MX2-1/2-FR2373	MX2-3/4-FR2373	-	-
Depressurisation Drain - Self Relieving	3/8	1/2	3/4	3/4	1
25 Micron 0.5 - 10 bar	MX2-3/8-FR0504	MX2-1/2-FR0504	MX2-3/4-FR0504	MX3-3/4-FR0504	MX3-1-FR0504
25 Micron 0 - 4 bar	MX2-3/8-FR0542	MX2-1/2-FR0542	MX2-3/4-FR0542	MX3-3/4-FR0542	MX3-1-FR0542
25 Micron 0 - 7 bar (MX2 only)	MX2-3/8-FR0573	MX2-1/2-FR0573	MX2-3/4-FR0573	-	-
Depressurisation Drain - Non-Relieving	3/8	1/2	3/4	3/4	1
25 Micron 0.5 - 10 bar	MX2-3/8-FR2504	MX2-1/2-FR2504	MX2-3/4-FR2504	MX3-3/4-FR2504	MX3-1-FR2504
25 Micron 0 - 4 bar	MX2-3/8-FR2542	MX2-1/2-FR2542	MX2-3/4-FR2542	MX3-3/4-FR2542	MX3-1-FR2542
25 Micron 0 - 7 bar (MX2 only)	MX2-3/8-FR2573	MX2-1/2-FR2573	MX2-3/4-FR2573	-	-
Connection 1/8 - Self Relieving	3/8	1/2	3/4	3/4	1
25 Micron 0.5 - 10 bar	MX2-3/8-FR0804	MX2-1/2-FR0804	MX2-3/4-FR0804	MX3-3/4-FR0804	MX3-1-FR0804
25 Micron 0 - 4 bar	MX2-3/8-FR0842	MX2-1/2-FR0842	MX2-3/4-FR0842	MX3-3/4-FR0842	MX3-1-FR0842
25 Micron 0 - 7 bar (MX2 only)	MX2-3/8-FR0873	MX2-1/2-FR0873	MX2-3/4-FR0873	-	-
Connection 1/8 - Non-Relieving	3/8	1/2	3/4	3/4	1
25 Micron 0.5 - 10 bar	MX2-3/8-FR2804	MX2-1/2-FR2804	MX2-3/4-FR2804	MX3-3/4-FR2804	MX3-1-FR2804
25 Micron 0 - 4 bar	MX2-3/8-FR2842	MX2-1/2-FR2842	MX2-3/4-FR2842	MX3-3/4-FR2842	MX3-1-FR2842
25 Micron 0 - 7 bar (MX2 only)	MX2-3/8-FR2873	MX2-1/2-FR2873	MX2-3/4-FR2873	-	-

5 Micron also available on request

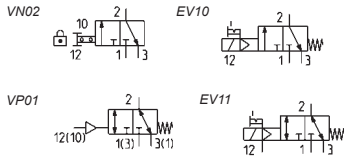
Series MX Lockable Isolation 3/2-Way Valve

Connections: MX2=3/8, 1/2, 3/4 MX3=3/4, 1

Modular

Manual, electro-pneumatic, servo-pilot and pneumatic control

3



CODING EXAMPLE

MX	2	-	3/8	-	V	01
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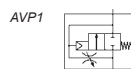
MX SERIES: MX	
2 SIZE: 2 = 3/8 - 1/2 - 3/4 3 = 3/4 - 1	V V = 3/2 way valve
3/8 CONNECTIONS: 3/8, 1/2, 3/4, 1	01 DESIGN TYPE: 01 = lockable manual control 16 = electro-pneumatic control 17 = servo-pilot control 36 = pneumatic control

	MX2			MX3	
	3/8	1/2	3/4	3/4	1
Lockable Manual Control	MX2-3/8-V01	MX2-1/2-V01	MX2-3/4-V01	MX3-3/4-V01	MX3-1-V01
Electro-Pneumatic Control	MX2-3/8-V16	MX2-1/2-V16	MX2-3/4-V16	MX3-3/4-V16	MX3-1-V16
Servo-Pilot Control	MX2-3/8-V17	MX2-1/2-V17	MX2-3/4-V17	MX3-3/4-V17	MX3-1-V17
Pneumatic Control	MX2-3/8-V36	MX2-1/2-V36	MX2-3/4-V36	MX3-3/4-V36	MX3-1-V36

Series MX Soft Start Valve

Connections: MX2=3/8, 1/2, 3/4 MX3=3/4, 1

Modular



CODING EXAMPLE

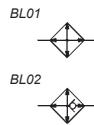
MX	2	-	3/8	-	AV
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MX SERIES: MX	
2 SIZE: 2 = 3/8 - 1/2 - 3/4 3 = 3/4 - 1	AV AV = soft start valve
3/8 CONNECTIONS: 3/8, 1/2, 3/4, 1	

	MX2			MX3	
	3/8	1/2	3/4	3/4	1
Soft Start Valve	MX2-3/8-AV	MX2-1/2-AV	MX2-3/4-AV	MX3-3/4-AV	MX3-1-AV

Series MX Take-off Blocks

Connections: MX2=1/2 MX3=1



CODING EXAMPLE

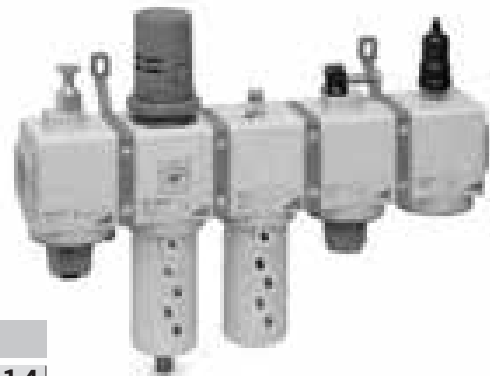
MX	2	-	1/2	-	B	00
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MX	SERIES: MX	
2	SIZE: 2 = 1/2 3 = 1	B = Take-off block
1/2	CONNECTIONS: 1/2, 1	00 DESIGN TYPE: 00 = without no return valve (standard) 01 = with no return valve

	MX2	MX3
Take-off Blocks	- 1/2 -	- 1
Without no return valve	- MX2-1/2-B00 -	- MX3-1-B00
With no return valve	- MX2-1/2-B01 -	- MX3-1-B01

FRL Series MX Assembled

Connections MX2=3/8, 1/2, 3/4 MX3=3/4, 1
Assembly through rapid clamps



The FRL Series MX can be easily assembled through rapid clamps which allow the connection among single components creating an unlimited number of compositions.
The FRL groups Series MX are also available in the already mounted version (with a single code).

CODING EXAMPLE

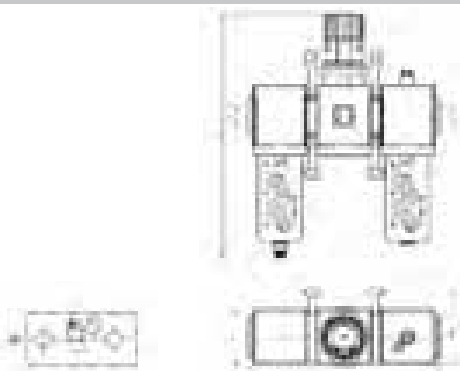
MX	2	-	3/8	-	000014
-----------	----------	----------	------------	----------	---------------

MX	SERIES: MX	
2	SIZE: 2 = 3/8 - 1/2 - 3/4 3 = 3/4 - 1	000014 GROUP COMPOSITION (WITH BUILT IN PRESSURE GAUGE): 000014 = F00 + R004 + L00 000015 = FR0004 + L00 000016 = V01 + FR0004 + L00 000017 = V01 + FR0004 000018 = FR0004 + V16 + AV 000019 = FR0004 + L00 + V16 + AV 000020 = V01 + FR0004 + V16 + AV 000021 = V01 + FR0004 + L00 + V16 + AV + PRESS. NO 000022 = V01 + FR0004 + L00 + V16 + AV + PRESS. NC 000023 = V01 + FR0004 + V16 + AV + PRESS. NO 000024 = V01 + FR0004 + V16 + AV + PRESS. NC GROUP COMPOSITION (WITH EXTERNAL PRESSURE GAUGE): 000025 = F00 + R000 + L00 000026 = FR0000 + L00 000027 = V01 + FR0000 + L00 000028 = V01 + FR0000 000029 = FR0000 + V16 + AV 000030 = FR0000 + L00 + V16 + AV 000031 = V01 + FR0000 + V16 + AV 000032 = V01 + FR0000 + L00 + V16 + AV + PRESS. NO 000033 = V01 + FR0000 + L00 + V16 + AV + PRESS. NC 000034 = V01 + FR0000 + V16 + AV + PRESS. NO 000035 = V01 + FR0000 + V16 + AV + PRESS. NC 000036 = F13 + FC03
3/8	CONNECTIONS: 3/8 = 3/8 1/2 = 1/2 3/4 = 3/4 1 = 1	

Composition of the assembled group 000014 and 000025

Components:

- Filter
- Regulator
- Lubricator
- Pressure Gauge
- Bracket



WITH BUILT IN PRESSURE GAUGE

Part Number	A	B	C	D	F1	F2
MX2-3/8-000014	3/8	289	74.5	210	70	104.5
MX2-1/2-000014	1/2	289	74.5	210	70	104.5
MX2-3/4-000014	3/4	289	74.5	210	70	104.5
MX3-3/4-000014	3/4	345	81	268.5	68	106
MX3-1-000014	1	345	81	268.5	68	106

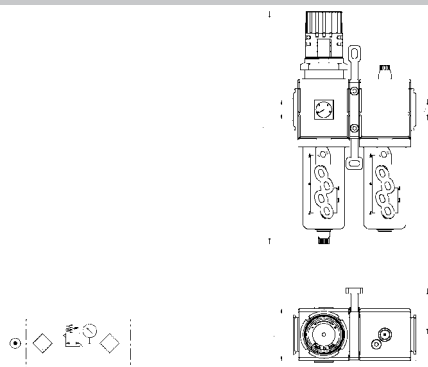
WITH EXTERNAL PRESSURE GAUGE

Part Number	A	B	C	D	F1	F2
MX2-3/8-000025	3/8	289	74.5	210	70	104.5
MX2-1/2-000025	1/2	289	74.5	210	70	104.5
MX2-3/4-000025	3/4	289	74.5	210	70	104.5
MX3-3/4-000025	3/4	345	81	268.5	68	106
MX3-1-000025	1	345	81	268.5	68	106

Composition of the assembled group 000015 and 000026

Components:

- Filter-regulator
- Lubricator
- Pressure Gauge
- Bracket



WITH BUILT IN PRESSURE GAUGE

Part Number	A	B	C	D	F1	F2
MX2-1/2-000015	3/8	289	74.5	140	70	104.5
MX2-3/8-000015	1/2	289	74.5	140	70	104.5
MX2-3/4-000015	3/4	289	74.5	140	70	104.5
MX3-3/4-000015	3/4	345	81	179	68	106
MX3-1-000015	1	345	81	179	68	106

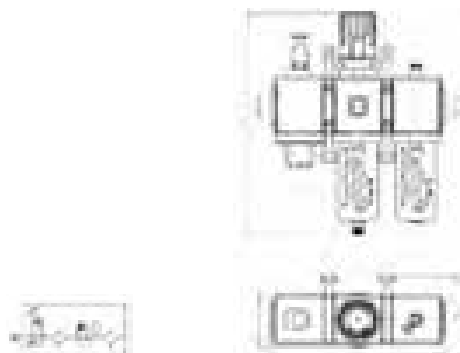
WITH EXTERNAL PRESSURE GAUGE

Part Number	A	B	C	D	F1	F2
MX2-1/2-000026	3/8	289	74.5	140	70	104.5
MX2-3/8-000026	1/2	289	74.5	140	70	104.5
MX2-3/4-000026	3/4	289	74.5	140	70	104.5
MX3-3/4-000026	3/4	345	81	179	68	106
MX3-1-000026	1	345	81	179	68	106

Composition of the assembled group 000016 and 000027

Components:

- Lockable isolation 3/2 valve
- Filter-regulator
- Lubricator
- Pressure Gauge
- Bracket



WITH BUILT IN PRESSURE GAUGE

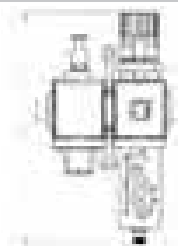
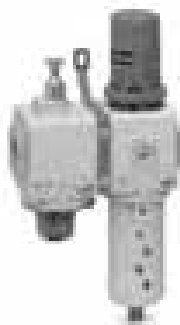
Part Number	A	B	C	D	F1	F2
MX2-3/8-000016	3/8	289	74.5	210	70	104.5
MX2-1/2-000016	1/2	289	74.5	210	70	104.5
MX2-3/4-000016	3/4	289	74.5	210	70	104.5
MX3-3/4-000016	3/4	345	81	268.5	68	106
MX3-1-000016	1	345	81	268.5	68	106

WITH EXTERNAL PRESSURE GAUGE

Part Number	A	B	C	D	F1	F2
MX2-3/8-000027	3/8	289	74.5	210	70	104.5
MX2-1/2-000027	1/2	289	74.5	210	70	104.5
MX2-3/4-000027	3/4	289	74.5	210	70	104.5
MX3-3/4-000027	3/4	345	81	268.5	68	106
MX3-1-000027	1	345	81	268.5	68	106

Composition of the assembled group 000017 and 000028

Components:
 Lockable isolation 3/2 valve
 Filter-regulator
 Pressure Gauge
 Bracket



WITH BUILT IN PRESSURE GAUGE

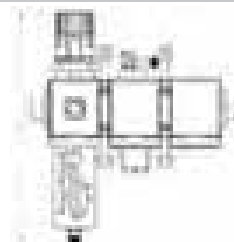
Part Number	A	B	C	D	F1	F2
MX2-3/8-000017	3/8	289	74.5	140	70	104.5
MX2-1/2-000017	1/2	289	74.5	140	70	104.5
MX2-3/4-000017	3/4	289	74.5	140	70	104.5
MX3-3/4-000017	3/4	345	81	179	68	106
MX3-1-000017	1	345	81	179	68	106

WITH EXTERNAL PRESSURE GAUGE

Part Number	A	B	C	D	F1	F2
MX2-3/8-000028	3/8	289	74.5	140	70	104.5
MX2-1/2-000028	1/2	289	74.5	140	70	104.5
MX2-3/4-000028	3/4	289	74.5	140	70	104.5
MX3-3/4-000028	3/4	345	81	179	68	106
MX3-1-000028	1	345	81	179	68	106

Composition of the assembled group 000018 and 000029

Components:
 Filter-regulator
 Lockable isolation 3/2 valve
 Soft start valve
 Pressure Gauge
 Bracket



WITH BUILT IN PRESSURE GAUGE

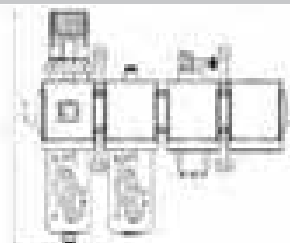
Part Number	A	B	C	D	F1	F2
MX2-3/8-000018	3/8	289	74.5	210	70	104.5
MX2-1/2-000018	1/2	289	74.5	210	70	104.5
MX2-3/4-000018	3/4	289	74.5	210	70	104.5
MX3-3/4-000018	3/4	345	81	268.5	68	106
MX3-1-000018	1	345	81	268.5	68	106

WITH EXTERNAL PRESSURE GAUGE

Part Number	A	B	C	D	F1	F2
MX2-3/8-000029	3/8	289	74.5	210	70	104.5
MX2-1/2-000029	1/2	289	74.5	210	70	104.5
MX2-3/4-000029	3/4	289	74.5	210	70	104.5
MX3-3/4-000029	3/4	345	81	268.5	68	106
MX3-1-000029	1	345	81	268.5	68	106

Composition of the assembled group 000019 and 000030

Components:
 Filter-regulator
 Lubricator
 Soft start valve
 Pressure Gauge
 Bracket



WITH BUILT IN PRESSURE GAUGE

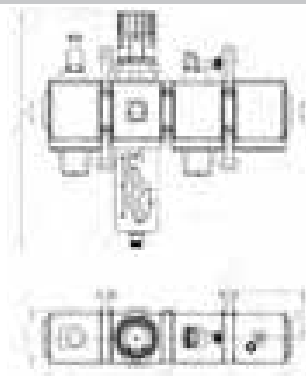
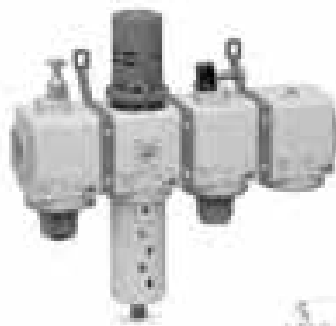
Part Number	A	B	C	D	F1	F2
MX2-3/8-000019	3/8	289	74.5	280	70	104.5
MX2-1/2-000019	1/2	289	74.5	280	70	104.5
MX2-3/4-000019	3/4	289	74.5	280	70	104.5
MX3-3/4-000019	3/4	345	81	358	68	106
MX3-1-000019	1	345	81	358	68	106

WITH EXTERNAL PRESSURE GAUGE

Part Number	A	B	C	D	F1	F2
MX2-3/8-000030	3/8	289	74.5	280	70	104.5
MX2-1/2-000030	1/2	289	74.5	280	70	104.5
MX2-3/4-000030	3/4	289	74.5	280	70	104.5
MX3-3/4-000030	3/4	345	81	358	68	106
MX3-1-000030	1	345	81	358	68	106

Composition of the assembled group 000020 and 000031

- Components:
 Lockable isolation 3/2 valve
 Filter-regulator
 Lockable isolation 3/2 valve
 Soft start valve
 Pressure Gauge
 Bracket



WITH BUILT IN PRESSURE GAUGE

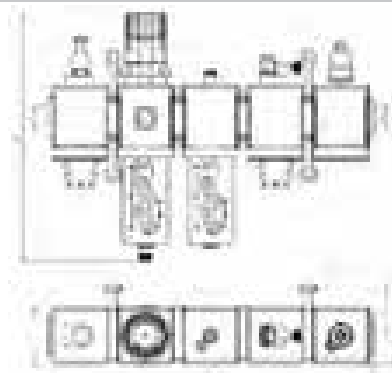
Part Number	A	B	C	D	F1	F2
MX2-3/8-000020	3/8	289	74.5	280	70	104.5
MX2-1/2-000020	1/2	289	74.5	280	70	104.5
MX2-3/4-000020	3/4	289	74.5	280	70	104.5
MX3-3/4-000020	3/4	345	81	358	68	106
MX3-1-000020	1	345	81	358	68	106

WITH EXTERNAL PRESSURE GAUGE

Part Number	A	B	C	D	F1	F2
MX2-3/8-000031	3/8	289	74.5	280	70	104.5
MX2-1/2-000031	1/2	289	74.5	280	70	104.5
MX2-3/4-000031	3/4	289	74.5	280	70	104.5
MX3-3/4-000031	3/4	345	81	358	68	106
MX3-1-000031	1	345	81	358	68	106

Composition of the assembled group 000021 and 000032

- Components:
 Lockable isolation 3/2 valve
 Filter-regulator
 Lubricator
 Lockable isolation 3/2 valve
 Soft start valve + pressure switch (NO)
 Pressure Gauge
 Bracket



WITH BUILT IN PRESSURE GAUGE

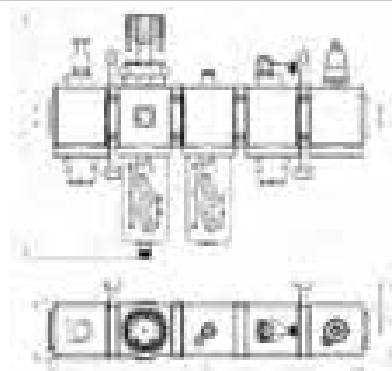
Part Number	A	B	C	D	F1	F2
MX2-3/8-000021	3/8	289	74.5	350	70	104.5
MX2-1/2-000021	1/2	289	74.5	350	70	104.5
MX2-3/4-000021	3/4	289	74.5	350	70	104.5
MX3-3/4-000021	3/4	345	81	447.5	68	106
MX3-1-000021	1	345	81	447.5	68	106

WITH EXTERNAL PRESSURE GAUGE

Part Number	A	B	C	D	F1	F2
MX2-3/8-000032	3/8	289	74.5	350	70	104.5
MX2-1/2-000032	1/2	289	74.5	350	70	104.5
MX2-3/4-000032	3/4	289	74.5	350	70	104.5
MX3-3/4-000032	3/4	345	81	447.5	68	106
MX3-1-000032	1	345	81	447.5	68	106

Composition of the assembled group 000022 and 000033

- Components:
 Lockable isolation 3/2 valve
 Filter-regulator
 Lubricator
 Lockable isolation 3/2 valve
 Soft start valve + pressure switch (NC)
 Pressure Gauge
 Bracket



WITH BUILT IN PRESSURE GAUGE

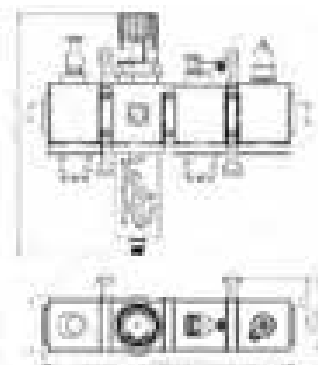
Part Number	A	B	C	D	F1	F2
MX2-3/8-000022	3/8	289	74.5	350	70	104.5
MX2-1/2-000022	1/2	289	74.5	350	70	104.5
MX2-3/4-000022	3/4	289	74.5	350	70	104.5
MX3-3/4-000022	3/4	345	81	447.5	68	106
MX3-1-000022	1	345	81	447.5	68	106

WITH EXTERNAL PRESSURE GAUGE

Part Number	A	B	C	D	F1	F2
MX2-3/8-000033	3/8	289	74.5	350	70	104.5
MX2-1/2-000033	1/2	289	74.5	350	70	104.5
MX2-3/4-000033	3/4	289	74.5	350	70	104.5
MX3-3/4-000033	3/4	345	81	447.5	68	106
MX3-1-000033	1	345	81	447.5	68	106

Composition of the assembled group 000023 and 000034

- Components:
- Lockable isolation 3/2 valve
- Filter-regulator
- Lockable isolation 3/2 valve
- Soft start valve + pressure switch (NO)
- Pressure Gauge
- Bracket



WITH BUILT IN PRESSURE GAUGE

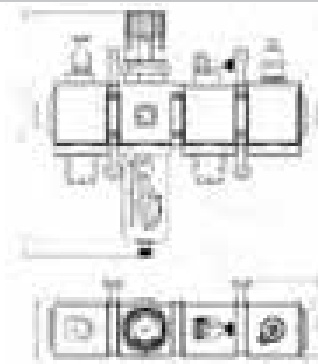
Part Number	A	B	C	D	F1	F2
MX2-3/8-000023	3/8	289	74,5	280	70	104,5
MX2-1/2-000023	1/2	289	74,5	280	70	104,5
MX2-3/4-000023	3/4	289	74,5	280	70	104,5
MX3-3/4-000023	3/4	345	81	358	68	106
MX3-1-000023	1	345	81	358	68	106

WITH EXTERNAL PRESSURE GAUGE

Part Number	A	B	C	D	F1	F2
MX2-3/8-000034	3/8	289	74,5	280	70	104,5
MX2-1/2-000034	1/2	289	74,5	280	70	104,5
MX2-3/4-000034	3/4	289	74,5	280	70	104,5
MX3-3/4-000034	3/4	345	81	358	68	106
MX3-1-000034	1	345	81	358	68	106

Composition of the assembled group 000024 and 000035

- Components:
- Lockable isolation 3/2 valve
- Filter-regulator
- Lockable isolation 3/2 valve
- Soft start valve + pressure switch (NC)
- Pressure Gauge
- Bracket



WITH BUILT IN PRESSURE GAUGE

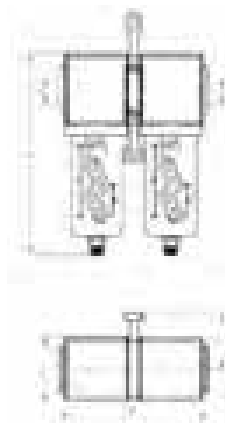
Part Number	A	B	C	D	F1	F2
MX2-3/8-000024	3/8	289	74.5	280	70	104.5
MX2-1/2-000024	1/2	289	74.5	280	70	104.5
MX2-3/4-000024	3/4	289	74.5	280	70	104.5
MX3-3/4-000024	3/4	345	81	358	68	106
MX3-1-000024	1	345	81	358	68	106

WITH EXTERNAL PRESSURE GAUGE

Part Number	A	B	C	D	F1	F2
MX2-3/8-000035	3/8	289	74.5	280	70	104.5
MX2-1/2-000035	1/2	289	74.5	280	70	104.5
MX2-3/4-000035	3/4	289	74.5	280	70	104.5
MX3-3/4-000035	3/4	345	81	358	68	106
MX3-1-000035	1	345	81	358	68	106

Composition of the assembled group 000036

- Components:
- Filter
- Coalescing filter
- Bracket



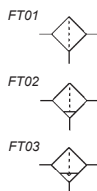
FILTER SET

Part Number	A	B	C	D	F1	F2
MX2-3/8-000036	3/8	210	72	140	70	104.5
MX2-1/2-000036	1/2	210	72	140	70	104.5
MX2-3/4-000036	3/4	210	72	140	70	104.5
MX3-3/4-000036	3/4	231	78	179	68	106
MX3-1-000036	1	231	78	179	68	106

Series MC Filters

Connections: 1/4
 Modular
 With metal bowl and bayonet-type mounting

3



CODING EXAMPLE

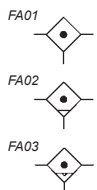
MC	1	04	-	F	0	0
----	---	----	---	---	---	---

MC SERIES: MC	F F = filter
1 SIZE: 1 = 1/4	0 FILTERING ELEMENT: 0 = 25µm (standard) 1 = 5µm
04 CONNECTIONS: 04 = 1/4	0 DRAINING OF CONDENSATE: 0 = normal - semi-automatic (standard) 4 = depressurisation (only 1/4) 5 = depressurisation, protected 8 = connection 1/8 see page 3/30

Semi Auto Drain	1/4
25 micron	MC104 F00
5 micron	MC104 F10
Depressurisation Drain	1/4
25 micron	MC104 F04
5 micron	MC104 F14
Depressurisation Drain Protected	1/4
25 micron	MC104 F05
5 micron	MC104 F15
Connection 1/8	1/4
25 micron	MC104 F08
5 micron	MC104 F18

Series MC Coalescing Filters

Connections: 1/4
 Modular
 With metal bowl and bayonet-type mounting



CODING EXAMPLE

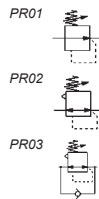
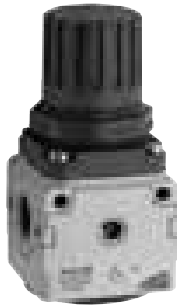
MC	1	04	-	F	B	0
----	---	----	---	---	---	---

MC SERIES: MC	F F = filter
1 SIZE: 1 = 1/4	B FILTERING ELEMENT:
04 CONNECTIONS: 04 = 1/4	0 DRAINING OF CONDENSATE: 0 = normal - semi-automatic (standard) 4 = depressurisation (only 1/4) 5 = depressurisation, protected 8 = connection 1/8, see page 3/30

Coalescing Filter 0.01 Micron	1/4
Semi Auto Drain	MC104 FB0
Depressurisation Drain	MC104 FB4
Depressurisation Drain Protected	MC104 FB5
Connection 1/8	MC104 FB8

Series MC Pressure Regulators

Connections: 1/4
Modular



CODING EXAMPLE

MC	1	04	-	R	0	0
-----------	----------	-----------	----------	----------	----------	----------

MC	SERIES: MC	R	R = regulator
1	SIZE: 1 = 1/4	0	OPERATING PRESSURE: 0 = 0.5 - 10 (standard) 1 = 0 - 4
04	CONNECTIONS: 04 = 1/4	0	DESIGN TYPE: 0 = self-relieving (standard) 1 = non-relieving

Self Relieving	1/4
0.5 - 10 bar	MC104 R00
0 - 4 bar	MC104 R10
Non Relieving	1/4
0.5 - 10 bar	MC104 R01
0 - 4 bar	MC104 R11

Series MC Lubricators

Connections: 1/4
Modular
With metal bowl and bayonet-type mounting



CODING EXAMPLE

MC	1	04	-	L	00
-----------	----------	-----------	----------	----------	-----------

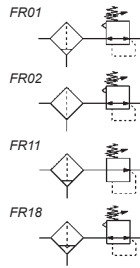
MC	SERIES: MC	L	L = lubricator
1	SIZE: 1 = 1/4	00	DESIGN TYPE: 00 = atomized oil
04	CONNECTIONS: 04 = 1/4		

Part Number	1/4 MC104 L00
-------------	-------------------------

Series MC Filter/Regulator

Connections: 1/4
Compact (modular) with metal bowl and bayonet-type mounting

3



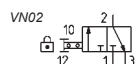
CODING EXAMPLE

MC	1	04	-	D	0	0	-	4
MC	SERIES: MC				0	DRAINING OF CONDENSATE: 0 = - semi-automatic self-relieving (standard) 1 = semi-automatic, non-relieving 4 = depressurisation (only 1/4) 5 = depressurisation, protected 8 = connection 1/8 see page 3/30		
1	SIZE: 1 = 1/4							
04	CONNECTIONS: 04 = 1/4							
D	D = filter/regulator							
0	FILTERING ELEMENT: 0 = 25µm (standard) 1 = 5µm				4	WORKING PRESSURE: = 0.5 - 10 bar 2 = 0 - 2 bar (only 1/4) 4 = 0 - 4 bar 7 = 0.5 - 7 bar (only 1/4)		

Semi Auto Drain Self Relieving	1/4
25 micron	MC104 D00
5 micron	MC104 D10
Semi Auto Drain Non Relieving	1/4
25 micron	MC104 D01
5 micron	MC104 D11
Depressurisation Drain	1/4
25 micron	MC104 D04
5 micron	MC104 D14
Depressurisation Drain Protected	1/4
25 micron	MC104 D05
5 micron	MC104 D15
Connection 1/8	1/4
25 micron	MC104 D08
5 micron	MC104 D18

Series MC Lockable Isolation 3/2-way Valves

Connections: 1/4
Modular



CODING EXAMPLE

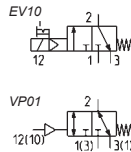
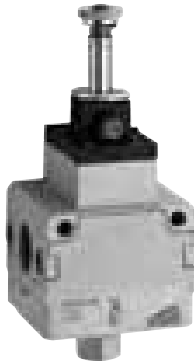
MC	1	04	-	V	01
MC	SERIES: MC				
1	SIZE: 1 = 1/4				V V = 3-way Valve
04	CONNECTIONS: 04 = 1/4				01 DESIGN TYPE: 01 = padlock valve (manual operation)

1/4

Part Number **MC104 V01**

Series MC 3/2 Valve Pneumatically or Electropneumatically Operated

Connections: 1/4
Modular



CODING EXAMPLE

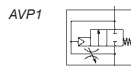
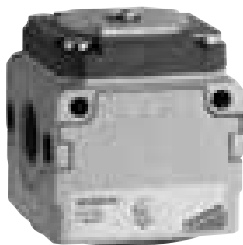
MC	1	04	-	V	16
-----------	----------	-----------	----------	----------	-----------

MC	SERIES: MC	
1	SIZE: 1 = 1/4	V V = 3/2 valve
04	CONNECTIONS: 04 = 1/4	16 DESIGN TYPE: 16 = electropneumatic 36 = pneumatic

	1/4	Symbol
Electropneumatic	MC104 V16	EV10
Pneumatic	MC104 V36	VP01

Series MC Soft Start Valve

Connections: 1/4
Modular



CODING EXAMPLE

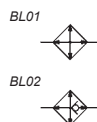
MC	1	04	-	AV
-----------	----------	-----------	----------	-----------

MC	SERIES: MC	
1	SIZE: 1 = 1/4	AV AV = soft start valve
04	CONNECTIONS: 04 = 1/4	

	1/4	
Part Number	MC104 AV	

Series MC Take-off Block

Connections: 1/4



CODING EXAMPLE

MC	2	-	B	-	VNR
-----------	----------	----------	----------	----------	------------

MC	SERIES: MC	
2	SIZE: 1 = 1/4	VNR VERSION: VNR = with non return valve
B	B = take off block	

	1/4	
Part Number	MC1-B	
Part Number	MC1-B-VNR	

FRL Series MC Assembled

Connections: 1/4

The FRL Series MC in the assembled versions are easier to order (one single code) and to mount.



CODING EXAMPLE

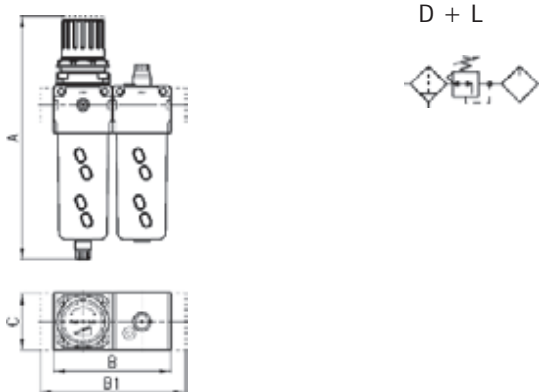
MC	1	04	-	C	-	25	-	FL
----	---	----	---	---	---	----	---	----

MC SERIES: MC			
1 SIZE: 1 = 1/4	C ASSEMBLY GROUP: C = D + L E = V01 + D + L FRL = F + R + L GN = D + L + V16 + AV HNA = V01 + D + L + V16 + AV + PRESS N.A. HNC = V01 + D + L + V16 + AV + PRESS N.C. N = V01 + D PN = D + V16 + AV QN = V01 + D + V16 + AV TN = V01 + D + L + V16 + AV ZNA = V01 + D + V16 + AV + PRESS N.A. ZNC = V01 + D + V16 + AV + PRESS N.C.	25 FILTERING ELEMENT: 5 = 5 μm (upon request) 25 = 25 μm (standard)	
04 CONNECTIONS: 04 = 1/4		FL VERSION: FL = with terminal flanges	

ASSEMBLY GROUP KEY

D Filter-regulator 0-10 bar semi-automatic manual drain filtering element 25μm	F Filter 25 μm
V01 Valve 3/2 way manually operated	R Regulator 0 - 10 bar
V16 Valve 3/2 way electropneumatically operated	AV Soft start valve
L Lubricator	PRESS Pressure switches (defined if N.C. or N.A.)
	F13 Filter 5μm or 25μm with automatic drain

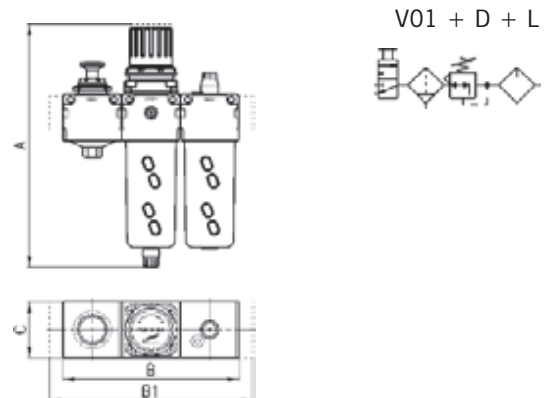
Assembly group C (see above for descriptions)



Including gauge and bracket

DIMENSIONS					
Part Number	A	B	B1	C	Connection
MC104-C-25	193.5	90	-	45	1/4
MC104-C-25-FL	193.5	-	114	45	1/4

Assembly group E (see above for descriptions)

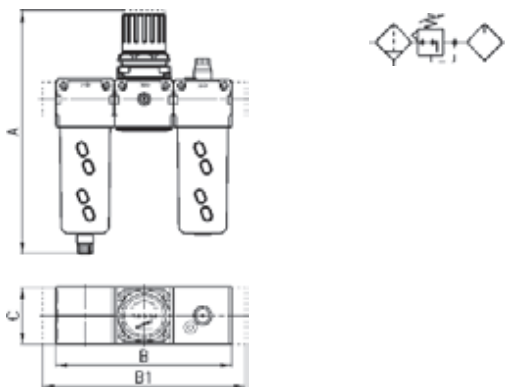


Including gauge and bracket

DIMENSIONS					
Part Number	A	B	B1	C	Connection
MC104-E-25	193.5	135	-	45	1/4
MC104-E-25-FL	193.5	-	159	45	1/4

Assembly group FRL (see page 3/18 for descriptions)

F + R + L



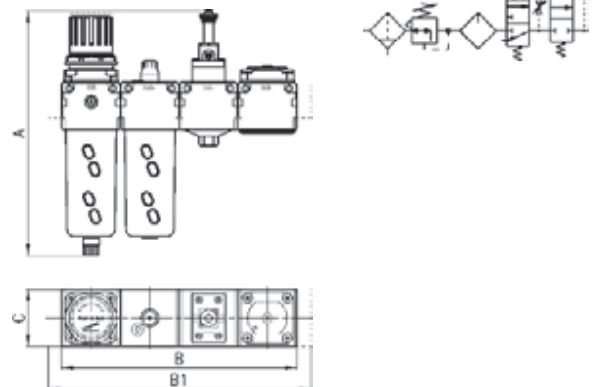
Including gauge and bracket

DIMENSIONS

Part Number	A	B	B1	C	Connection
MC104-FRL-25	193.5	135	-	45	1/4
MC104-FRL-25-FL193.5	-	-	159	45	1/4

Assembly group GN (see page 3/18 for descriptions)

D + L + V16 + AV



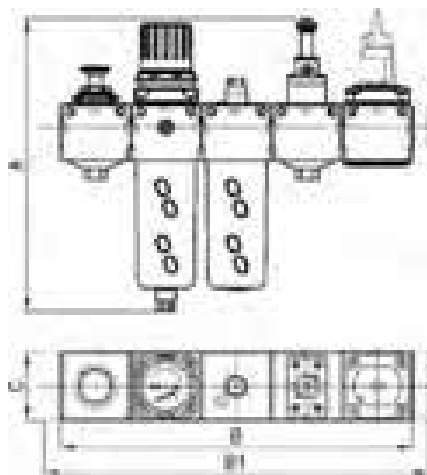
Including gauge and bracket

DIMENSIONS

Part Number	A	B	B1	C	Connection
MC104-GN-25	208	180	-	45	1/4
MC104-GN-25-FL	208	-	204	45	1/4

Assembly group HN...

(see page 3/18 for descriptions)

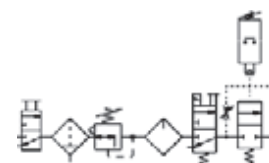


Including gauge and bracket

DIMENSIONS

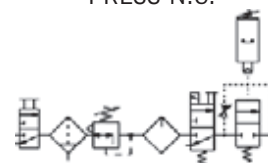
Part Number	A	B	B1	C	Connection
MC104-HN...-25	208	225	-	45	1/4
MC104-HN...-25-FL	208	-	249	45	1/4

V01 + D + L + V16 + AV + PRESS N.A.



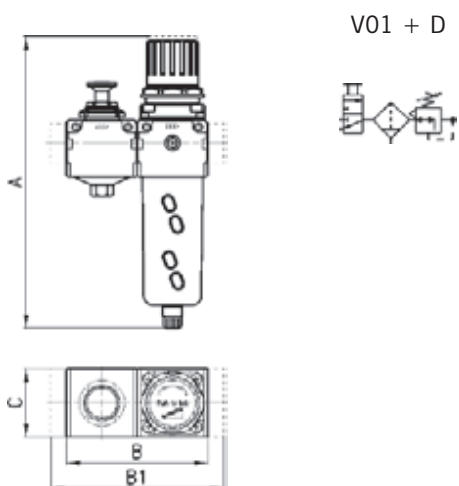
HNA
Pressure switch normally open

V01 + D + L + V16 + AV + PRESS N.C.



HNC
Pressure switch normally closed

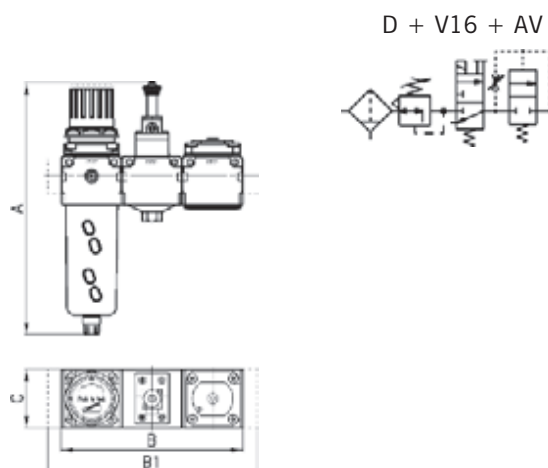
Assembly group N (see page 3/18 for descriptions)



Including gauge and bracket

DIMENSIONS					
Part Number	A	B	B1	C	Connection
MC104-N-25	193.5	90	-	45	1/4
MC104-N-25-FL	193.5	-	114	45	1/4

Assembly group PN (see page 3/18 for descriptions)

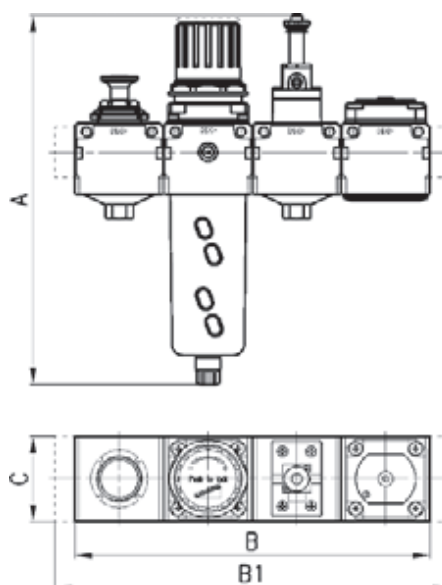
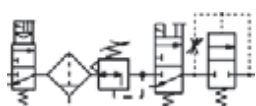


Including gauge and bracket

DIMENSIONS					
Part Number	A	B	B1	C	Connection
MC104-PN-25	208	135	-	45	1/4
MC104-PN-25-FL	208	-	159	45	1/4

Assembly group QN (see page 3/18 for descriptions)

V01 + D + V16 + AV



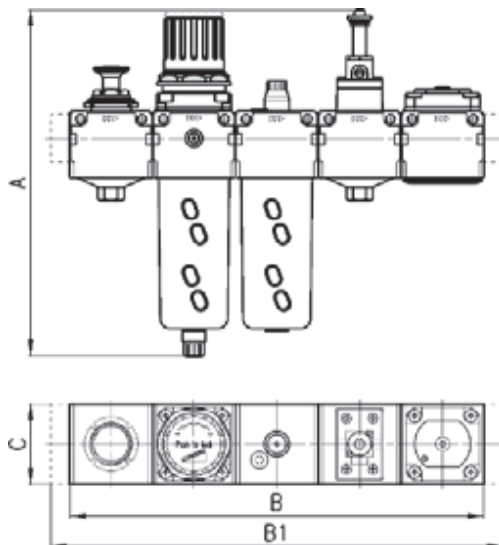
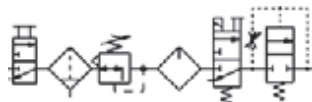
Including gauge and bracket

DIMENSIONS					
Part Number	A	B	B1	C	Connection
MC104-QN-25	208	180	-	45	1/4
MC104-QN-25-FL	208	-	204	45	1/4

Assembly group TN

(see page 3/18 for descriptions)

V01 + D + L + V16 + AV



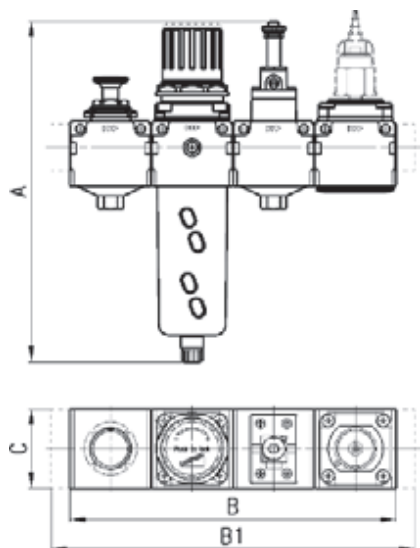
Including gauge and bracket

DIMENSIONS

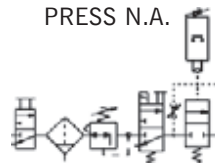
Part number	A	B	B1	C	Connection
MC104-TN-25	208	225	-	45	1/4
MC104-TN-25-FL	208	-	249	45	1/4

Assembly group ZN...

(see page 3/18 for descriptions)

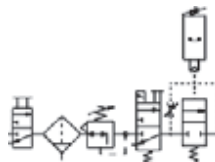


V01 + D + V16 + AV +
PRESS N.A.



ZNA
Pressure switch normally open

V01 + D + V16 + AV + PRESS N.C.



ZNC
Pressure switch normally closed

Including gauge and bracket

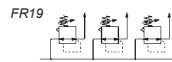
DIMENSIONS

Part number	A	B	B1	C	Connection
MC104-ZN...-25	208	180	-	45	1/4
MC104-ZN...-25-FL	208	-	204	45	1/4

Series MC Assembly Manifold Regulators

Regulators for manifold assembly

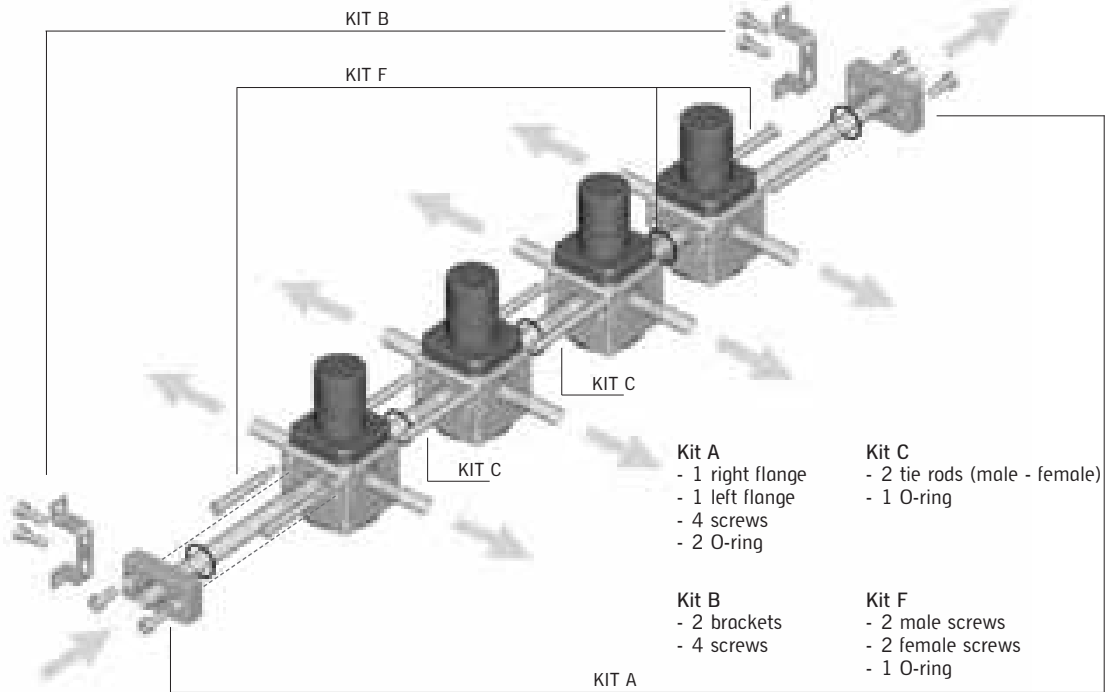
3



CODING EXAMPLE

MC	1	04	-	M	0	0
-----------	----------	-----------	----------	----------	----------	----------

MC SERIES: MC	M M = manifold regulator
1 SIZE: 1 = 1/4	0 OPERATING PRESSURE: 0 = 0.5 - 10 (standard) 1 = 0 - 4
04 CONNECTIONS: 04 = 1/4	0 CONSTRUCTION: 0 = self-relieving (standard) 1 = non-relieving



Manifold Regulator	Kit A	Kit B	Kit C	Kit F
Part Number MC104 M00	MC104-FL	MC104-ST	MC1-TMF	MC1-VMF

Assembly without terminal flanges



Body	Kit
H + H	1 Kit "F"
H + H + H	1 Kit "F" + 1 Kit "C"
H + H + H + H	1 Kit "F" + 2 Kit "C"
H + H + H + H + H	1 Kit "F" + 3 Kit "C"

Assembly with terminal flanges

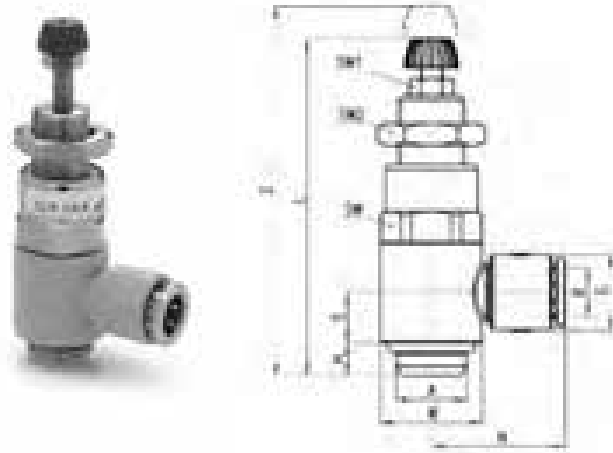


Body	Kit
H + H	1 Kit "A" + 1 Kit "F"
H + H + H	1 Kit "A" + 1 Kit "F" + 1 Kit "C"
H + H + H + H	1 Kit "A" + 1 Kit "F" + 2 Kit "C"
H + H + H + H + H	1 Kit "A" + 1 Kit "F" + 3 Kit "C"

Series CLR Micro Pressure Regulators with Banjo in Technopolymer

Connections: 1/8, 1/4

These Pressure Regulators are supplied complete with banjo, in-line or console mounting



PR03



Technical Data

Type of Construction
Piston regulator

Inlet Pressure
2 to 10 bar

Outlet Pressure
0.5 to 10 bar

Operating Temperature
0°C to +50°C

Nominal Flow
See graphs

Secondary Pressure Relieving
Standard

Materials
Brass , technopolymer, NBR

Connections
1/8 - 1/4

Weight
CLR 1/8 = 35g CLR 1/4 = 50g

Mountings
In-line or panel mounting
(in any position)

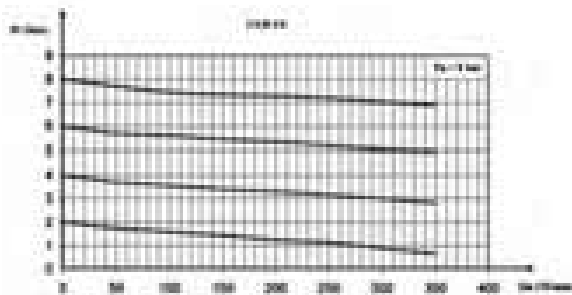
Special Requests
For assistance, contact our technical office or your local Camozzi distributor.

CODING EXAMPLE

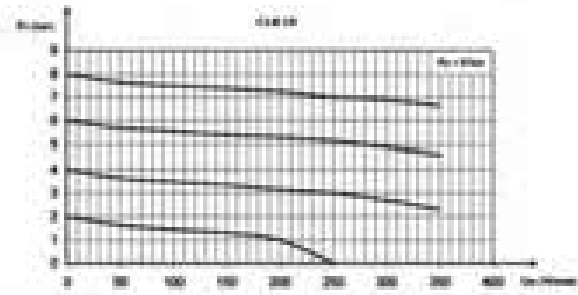
CL	R	1/8	-	4
CL	SERIES: CL	1/8	CONNECTIONS: 1/8, 1/4	
R	R = regulator	4	DIAMETER: Ø4 (1/8 only) Ø6 Ø8	

Part Number	A	B	G	H	L	N	S	W	SW	SW1	SW2	Z
CLR 1/8-4	1/8	4	11.6	5	55	21	7.75	14	14	7	14	42.5
CLR 1/8-6	1/8	6	11.6	5	55	21	7.75	14	14	7	14	42.5
CLR 1/8-8	1/8	8	13.9	5	55	22.5	7.75	14	14	7	14	42.5
CLR 1/4-6	1/4	6	13.9	6	61.5	24.5	9.25	18.6	17	7	17	48
CLR 1/4-8	1/4	8	13.9	6	61.5	24.5	9.25	18.6	17	7	17	4

Flow Diagrams



Flow diagram for models: CLR 1/4
Pa = Inlet pressure (10 Bar)
Pr = Regulated pressure
Qn = Flow

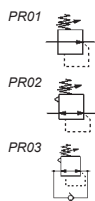


Flow diagram for models: CLR 1/8
Pa = Inlet pressure (10 Bar)
Pr = Regulated pressure
Qn = Flow

Series M Pressure Micro Regulator

Connections: 1/8, 1/4

3



*High relief flow available on request

CODING EXAMPLE

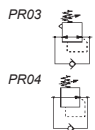
M 0 04 - R 0 0 -

M	SERIES: M		
0	SIZE: 0	0	OPERATING PRESSURE: 0 = 0.5 - 10 bar (standard) 1 = 0 - 4 bar 2 = 0 - 2 bar 7 = 0.5 - 7 bar
04	CONNECTIONS: 08 = 1/8 04 = 1/4	0	DESIGN TYPE: 0 = self-relieving 1 = non-relieving 5 = precise setting
R	R = regulator		REGULATION TYPE: = without high relief flow VS = high relief flow

Self Relieving	1/8	1/4	Non Relieving	1/8	1/4
0.5 - 10 bar	M008 R00	M004 R00	0.5 - 10 bar	M008 R01	M004 R01
0 - 4 bar	M008 R10	M004 R10	0 - 4 bar	M008 R11	M004 R11
Precise Setting	1/8	1/4	Precise Setting	1/8	1/4
0.5 - 10 bar	M008 R05	M004 R05	0 - 4 bar	M008 R15	M004 R15

Series T Pressure Micro Regulator

Connections: 1/8, 1/4



CODING EXAMPLE

T 1 08 - R 0 0

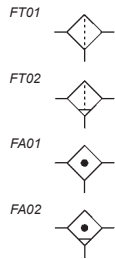
T	SERIES: T		
1	SIZE: 1	0	OPERATING PRESSURE: 0 = 0.5 - 10 bar 1 = 0 - 4 bar 2 = 0 - 2 bar 7 = 0 - 7 bar (standard)
08	CONNECTIONS: 08 = 1/8 04 = 1/4	0	DESIGN TYPE: 0 = self-relieving 1 = non-relieving
R	R = regulator		

Self Relieving	1/8	1/4	Non Relieving	1/8	1/4
0.5 - 10 bar	T108 R00	T104 R00	0.5 - 10 bar	T108 R01	T104 R01
0 - 4 bar	T108 R10	T104 R10	0 - 4 bar	T108 R11	T104 R11
0 - 2 bar	T108 R20	T104 R20	0 - 2 bar	T108 R21	T104 R21
0 - 7 bar	T108 R70	T104 R70	0 - 7 bar	T108 R71	T104 R71

TREATMENT

Series N Filter and Coalescing Filter

Connections: 1/8 and 1/4
with screw-on transparent bowl



CODING EXAMPLE

N	2	04	-	F	0	0
----------	----------	-----------	----------	----------	----------	----------

N	SERIES: N	F	F = filter
2	SIZE: 1 = small bowl 2 = standard bowl	0	FILTERING ELEMENT: 0 = 25µm (standard) 1 = 5µm B = 0.01µm
04	CONNECTIONS: 08 = 1/8 04 = 1/4	0	DRAINING OF CONDENSATE: 0 = manual - semi-automatic 4 = depressurisation 5 = depressurisation, protected 8 = connection 1/8 see 3/30

Semi Auto Drain	1/8 Small Bowl	1/4 Small Bowl	1/8 Standard Bowl	1/4 Standard Bowl
25 micron	N108 F00	N104 F00	N208 F00	N204 F00
5 micron	N108 F10	N104 F10	N208 F10	N204 F10
Depressurisation Drain			1/8 Standard Bowl	1/4 Standard Bowl
25 micron			N208 F04	N204 F04
5 micron			N208 F14	N204 F14
Depressurisation Drain Protected			1/8 Standard Bowl	1/4 Standard Bowl
25 micron			N208 F05	N204 F05
5 micron			N208 F15	N204 F15
Connection 1/8	1/8 Small Bowl	1/4 Small Bowl	1/8 Standard Bowl	1/4 Standard Bowl
25 micron	N108 F08	N104 F08	N208 F08	N204 F08
5 micron	N108 F18	N104 F18	N208 F18	N204 F18
Coalescing Filter 0.01 micron	1/8 Small Bowl	1/4 Small Bowl	1/8 Standard Bowl	1/4 Standard Bowl
Semi Auto Drain	N108 FB0	N104 FB0	N208 FB0	N204 FB0
Depressurisation Drain			N208 FB4	N204 FB4
Depressurisation Drain Protected			N208 FB5	N204 FB5
Connection 1/8	N108 FB8	N104 FB8	N208 FB8	N204 FB8

Series N Pressure Regulator

Connections: 1/8, 1/4

3



CODING EXAMPLE

N	12	04	-	R	0	0
----------	-----------	-----------	----------	----------	----------	----------

N	SERIES: N	R	R = regulator
12	SIZE: 12	0	OPERATING PRESSURE: 0 = 0.5 - 10 bar (standard) 1 = 0 - 4 bar
04	CONNECTIONS: 08 = 1/8 04 = 1/4	0	DESIGN TYPE: 0 = self-relieving 1 = non-relieving

Self Relieving	1/8	1/4	Non Relieving	1/8	1/4
0.5 - 10 bar	N1208 R00	N1204 R00	0.5 - 10 bar	N1208 R01	N1204 R01
0 - 4 bar	N1208 R10	N1204 R10	0 - 4 bar	N1208 R11	N1204 R11

Series N Lubricator

Connections: 1/8, 1/4
with screw-on transparent bowl

CODING EXAMPLE

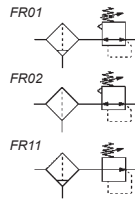
N	2	04	-	L	00
----------	----------	-----------	----------	----------	-----------

N	SERIES: N	L	L = lubricator
2	SIZE: 1 = small bowl 2 = standard bowl	00	DESIGN TYPE: 00 = atomized oil
04	CONNECTIONS: 08 = 1/8 04 = 1/4		

Part Number	Connection
N108 L00	1/8
N104 L00	1/4
N208 L00	1/8
N204 L00	1/4

Series N Filter/Regulator

Connections: 1/8, 1/4
with screw-on transparent bowl



CODING EXAMPLE

N	2	04	-	D	0	0
---	---	----	---	---	---	---

N	SERIES: N	D	D = filter/regulator
2	SIZE: 1 = small bowl 2 = standard bowl	0	FILTERING ELEMENT: 0 = 25µm standard 1 = 5µm
04	CONNECTIONS: 08 = 1/8 04 = 1/4	0	DRAINING OF CONDENSATE: 0 = semi-automatic, self-relieving 1 = semi-automatic, non-relieving 4 = depressurisation, self-relieving 5 = depressurisation, protected 8 = connection 1/8, see 3/30

Semi Auto Drain	1/8 Small Bowl	1/4 Small Bowl	1/8 Standard Bowl	1/4 Standard Bowl
25 micron	N108 D00	N104 D00	N208 D00	N204 D00
5 micron	N108 D10	N104 D10	N208 D10	N204 D10
Depressurisation Drain			1/8 Standard Bowl	1/4 Standard Bowl
25 micron			N208 D04	N204 D04
5 micron			N208 D14	N204 D14
Depressurisation Drain Protected			1/8 Standard Bowl	1/4 Standard Bowl
25 micron			N208 D05	N204 D05
5 micron			N208 D15	N204 D15
Connection 1/8	1/8 Small Bowl	1/4 Small Bowl	1/8 Standard Bowl	1/4 Standard Bowl
25 micron	N108 D08	N104 D08	N208 D08	N204 D08
5 micron	N108 D18	N104 D18	N208 D18	N204 D18

Pressure Gauges

Pressure gauges Ø43 - 53 - 63 mm.
Other Pressure Gauges available on request



Part Number
M043-R06
M043-R12
M053-R12
M063-R12

Part Number
M043-P04
M043-P06
M043-P12
M053-P04
M053-P06
M053-P12
M063-P04
M063-P06
M063-P12

Part Number
M043-F04
M043-F06
M043-F12
M063-F12

Series MX Accessories for FRL

3

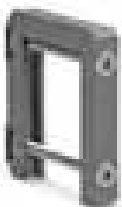
Rapid Clamp Kit for Series MX - Size 2

Kit MX2-X supplied with: 1 rapid clamp, 1 O-ring OR 3125**, 2 hexagonal nuts M5, 2 screws M5x69.

Kit MX2-Z supplied with: 1 rapid clamp, 1 O-ring OR 3125**, 1 hexagonal nut M5, 1 screw M5x69, 1 screw M5x85 for wall fixing.

** it can be ordered separately (cod. 160-39-11/19)

Materials: technopolymer clamp, NBR O-ring, zinc-plated stainless steel nuts and screws.



Part Number
MX2-X
MX2-Z*

*kit with wall fixing screw

Rapid Clamp Kit for Series MX - Size 3

Kit MX3-X supplied with: 1 rapid clamp, 1 O-ring OR 3150 **, 2 square nuts M6, 2 screws M6x75.

Kit MX3-Z supplied with: 1 rapid clamp, 1 O-ring OR 3150 **, 1 square nut M6, 1 screw M6x75, 1 screw M6x90 for wall fixing.

** it can be ordered separately (cod. C401-F33)

Materials: technopolymer clamp, NBR O-ring, zinc-plated stainless steel nuts and screws.



Part Number
MX3-X
MX3-Z

Rapid Clamp Kit with wall fixing brackets for Series MX - Size 2

The kit MX2-Y is supplied with:
1 wall rapid clamp, 1 O-ring OR 3125 **, 2 hexagonal nuts, 2 screws M5x69.

** it can be separately ordered (cod. 160-39-11/19)

Materials: technopolymer clamp, NBR O-ring, zinc-plated stainless steel nuts and screws.



Part Number
MX2-Y

Rapid Clamp Kit with wall fixing brackets for Series MX - Size 3

The kit MX3-Y is supplied with:
1 wall rapid clamp, 1 O-ring OR 3150 **, 2 square nuts M6, 2 screws M6x75

** it can be also separately ordered (cod. C401-F33)

Materials: technopolymer clamp, NBR O-ring, zinc-plated stainless steel nuts and screws.

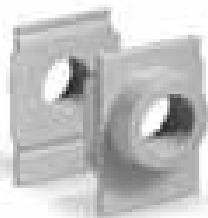


Part Number
MX3-Y

Terminal Flanges (IN/OUT) for Series MX

The kit is supplied with:
- 1 flange INLET side
- 1 flange OUTLET side

Materials: painted aluminium flanges.



Part Number
MX2-3/8-FL
MX2-1/2-FL
MX2-3/4-FL
MX3-3/4-FL
MX3-1-FL

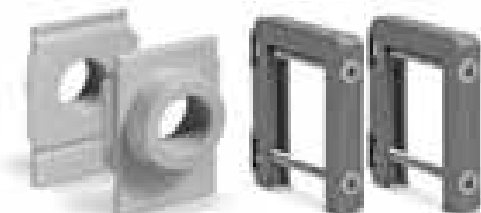
Fixing bracket for regulators Series MX

The kit is supplied with 1 zinc-plated stainless steel bracket



Part Number
MX2-S
MX3-S

Rapid clamps kit + flanges for Series MX



Part Number	Part Number
MX2-3/8-HH	MX3-3/4-HH
MX2-1/2-HH	MX3-1-HH
MX2-3/4-HH	MX3-3/4-JJ*
MX2-3/8-JJ*	MX3-1-JJ*
MX2-1/2-JJ*	
MX2-3/4-JJ*	*kit with wall fixing screw

Rapid clamps kitwith wall fixing brackets + flanges for Series MX



Part Number	Part Number
MX2-3/8-KK	MX3-3/4-KK
MX2-1/2-KK	MX3-1-KK
MX2-3/4-KK	

TREATMENT

MX Pad lock



Part Number
20mm padlock

Series MC, M, N and T

Terminal flanges (pair). Series MC (kit A)
Complete with: N° 4 screws, N° 2 O-Ring



Part Number Connection
MC104-FL 1/4

2 mounting brackets. Series MC (kit B)
For 1/4, 3/8 and 1/2.
Complete with: N° 4 screws M5



Part Number
MC104-ST

Tie-rod for assembling Series MC (kit C)
Male and female tie-rods complete with:
N° 2 tie-rods, N° 1 O-Ring



Part Number Connection
MC1-TMF 1/4

Tie-rod for assembling Series MC (kit D)
Female tie-rods complete with:
N° 2 tie-rods



Part Number Connection
MC1-TFF 1/4

Screw for assembling Series MC (kit E)
Complete with:
N° 2 screws, N° 1 O-Ring



Part Number Connection
MC1-VM 1/4

Screw for assembling Series MC (kit F)
Complete with:
N° 2 male screws, N° 2 female screws, N° 1 O-Ring



Part Number Connection
MC1-VMF 1/4

Mounting bracket Series N
F-L (for 1/8, 1/4).
Complete with: N° 2 screws



Part Number
N204-ST

Mounting bracket. Series MC-M-N
R-D (1/8 - 1/4)



Part Number
C114-ST

Mounting bracket. Series MC-M-N
R-D (1/8 - 1/4)



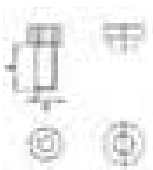
Part Number Connection
C114-ST/1

Mounting bracket. Series MC-M-N
R-D (1/8 - 1/4)



Part Number Connection
C114-ST/2

Screw for assembling Series MC
F-R-L (for C401)
Complete with:
N° 2 screws



Part Number
MC1-VMD

Series MX, MC and N Functioning Condensate Drains

Semi-automatic manual drain

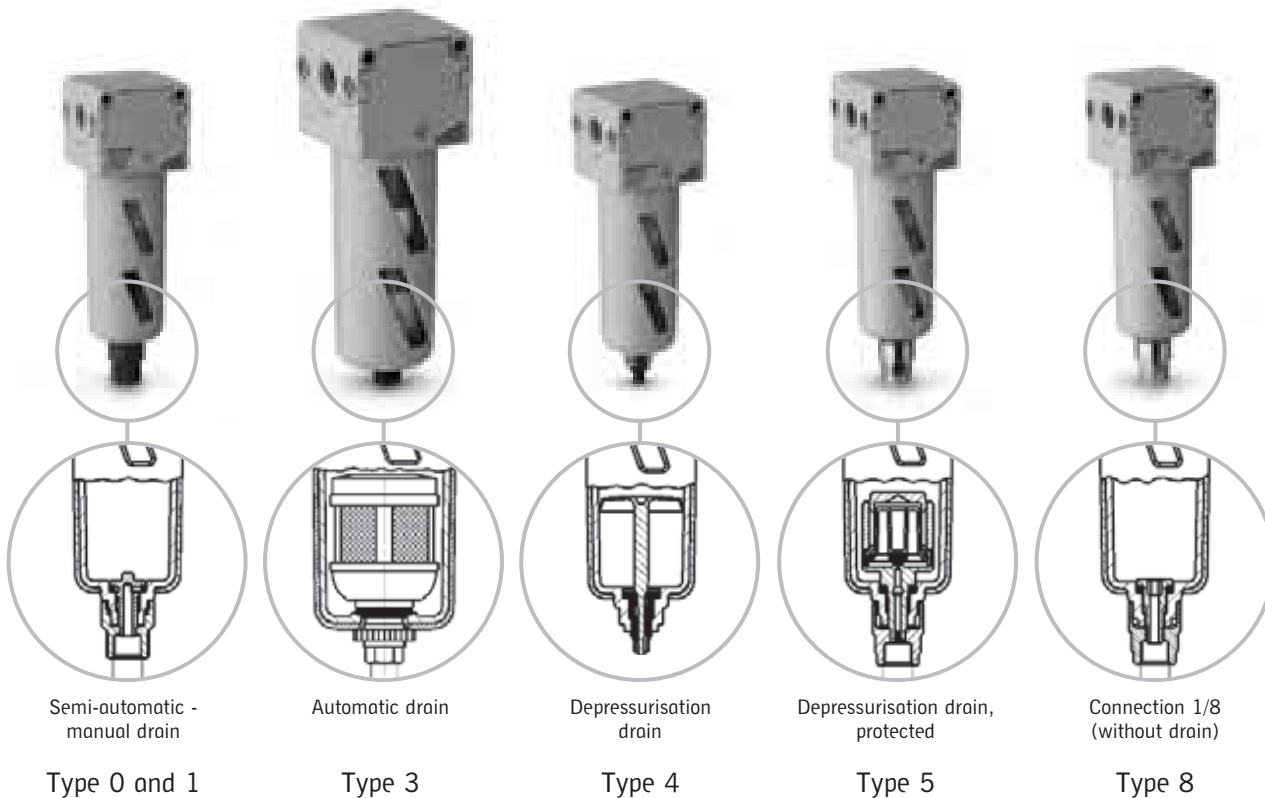
Automatic drain

Depressurisation drain

Depressurisation drain , protected

Connections: 1/8 (without drain)

3



TREATMENT



4 / 2 Technical Data

Super-Rapid Fittings



4 / 3 Series 6000
**Super-Rapid Fittings
For Plastic Tubes**



4 / 9 Series 7000
**Super-Rapid Compact™ Fittings
in Technopolymer**



4 / 13 Series 8000
Dual Seal Push-In Fittings



4 / 14 Series X6000
**Super-Rapid Fittings
in Stainless Steel**

Rapid Fittings



4 / 15

Series 1000
**Rapid Fittings
 for Plastic Tubes**

Quick-Release Couplings



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Series 5000
Quick-Release Couplings

Compression Fittings



4 / 19

Series 1000
Compression Fittings

Air Brake Fittings



4 / 30

Series 9000
C-Truck Air Brake Fittings

Fittings Accessories



4 / 20

Series S2000
Pipe Fittings *Sprint*



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Series 2000
Pipe Fittings



4 / 24

316 Stainless Steel
Pipe Fittings



4 / 26

**Brass Hose Tails
 and Connectors**



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**Aluminium Distribution
 Manifold Blocks**

NPT Fittings



4 / 33

**NPT Push-In
 Fittings and Adaptors**

Technical Data

4

CONNECTION

Media
Push-in Compressed air (brass and technopolymer). Compressed air and water (stainless steel)
Dual Seal Compressed air and any fluids compatible with the materials specified requiring a leak tight seal
Push-on, Compression, Pipe Fittings and Quick Release Couplings Compressed air and other low pressure fluids
C-Truck Compressed air

Tube Options
Push-in Nylon 6, 11, 12, polyurethane, polyethylene and Hytrel polyester
Push-on As push-in + PVC braided
Dual Seal Nylon 6, 11, 12, polyurethane and Hytrel polyester
Compression Nylon 6, 11, 12 with insert 1320 and annealed copper
Quick Release Couplings Nylon, polyurethane, polyethylene, PVC and rubber hose
C-Truck Polyamide (D/d) 4/2, 6/4, 8/6, 10/8, 12/9, 15/12, 16/13 and 18/14

See individual product pages for operating pressures and temperatures.

Additional Options

Vacuum: All Camozzi fittings and Quick Release Couplings are suitable for vacuum applications. Check with Camozzi sales office for further information.

Viton O-rings: Available for most products on request

NPT versions: Available for most products on request

Special Requests

We offer a comprehensive design service to cater for all your special needs. If you cannot find what you need in our catalogue or you have a special request contact the Camozzi sales office with details of your enquiry.

Assembly Notes for Push-in Fittings

Tube ends should be cut square and be free from scoring or burrs.

The tube should be pushed through the collet and into the fitting until the tube end bottoms out.

To release tube, ensure there is no air present and push the collet ring towards the body of the fitting and withdraw the tube.

Materials
Push-in Body: Nickel-plated brass (Series 6000) Technopolymer (Series 7000) Stainless steel 316L (Series X6000) Push-in Collets: Nickel-plated brass (Series 6000) Nickel-plated brass (Series 7000) Collet and Body O-rings: NBR (Series 6000) NBR (Series 7000) Thread Seal: PTFE, NBR, Nylon (Series 6000) NBR (Series 7000) FKM (Series X6000)
Push-on Body: Nickel-plated brass (Series 1000) Body O-rings: NBR Thread Seal: PTFE, Nylon, AL
Dual Seal Push-on Body and gripper: Nickel-plated brass Seals: NBR
Compression Nickel-plated brass
Pipe Fittings Body: Nickel-plated brass or 316 (CF8M) Stainless Steel Thread Seal: PTFE (Series S2000)
Quick-Release Couplings Body: Nickel-plated brass (hardened galvanised steel only for couplings with a '8' as the third number in the code) Seals: NBR
C-Truck Body and collet: Brass Locking nut: brass / zinc-plated steel Insert: brass / technopolymer Seals and protective cap: NBR

Assembly Notes for Compression Fittings

Tube ends should be cut square and concentric. Pass tube through tube nut and into olive.

Position olive so that it is square against the conical face of the body of the fitting.

Run nut onto thread and tighten carefully until olive "bites" onto surface of tube. Do not over tighten as this may result in tube being crushed and the flow being restricted. The use of a tube insert is recommended for plastic tubes.

Assembly Notes for Push-on Fittings

Tube ends should be cut square and be free from scoring or burrs.

Slide nut over tube.

Push the tube onto the nipple until the end reaches the shoulder on the body of the fitting.

Screw nut onto thread until finger tight. For additional security, use spanner to tighten through a quarter turn. Do not over tighten.

Note:

Sprint fittings suitable for use in taper applications

NPT versions available for most products on request.

Series 6000 Super-Rapid Fittings For Plastic Tubes

Tube external diameters: 3, 4, 5, 6, 8, 10, 12, 14, 16 mm

Threaded connections: metric (M3, M5, M6, M7), BSP (G1/8, G1/4, G3/8, G1/2, G3/4), BSPT (R1/8, R1/4, R3/8, R1/2)

Operating pressure: min -0.9 bar - max 16 bar (see data for tubing used)

Operating temperature: Series 6000 Micro: -10°C - +80°C. Series 6000: -20°C - +80°C (see data for tubing used)

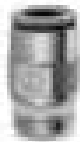
Super-rapid fittings Series 6000 are available in 35 different models.

Super-rapid fittings Series 6000 Micro are available in 14 different models.

Connection and disconnection of the tube can be repeated several times and can be performed without the use of tools.

The extractable internal collet allows the sealing ring (O-ring) to be easily replaced if it is damaged or in case of wear of the rubber compound.

Sprint[®]



Note:
with O-Ring



Male Stud
S6510 4-1/8
S6510 4-1/4
S6510 5-1/8
S6510 5-1/4
S6510 6-1/8
S6510 6-1/4
S6510 6-3/8
S6510 8-1/8
S6510 8-1/4
S6510 8-3/8
S6510 8-1/2
S6510 10-1/4
S6510 10-3/8
S6510 10-1/2
S6510 12-1/4
S6510 12-3/8
S6510 12-1/2
S6510 14-3/8
S6510 14-1/2
S6510 16-1/2
S6510 16-3/4

Male Stud - Parallel
6512 3-M3 ^o
6512 3-M5*
6512 4-M7-M*
6512 4-1/8-M*Y
6512 6-M7-M*
6512 6-1/8-M*Y
6512 8-1/8-M*Y
6512 10-1/4-M*

^o = with mod. 2661 assembled
* = with O-ring assembled
*Y = with O-ring assembled
It can be connected also to valve islands Series Y

Male Stud - Parallel
6512 4-M5
6512 4-M6
6512 4-1/8
6512 4-1/4
6512 5-M5
6512 6-M5
6512 6-1/8
6512 6-1/4
6512 8-1/8
6512 8-1/4
6512 8-3/8
6512 10-1/4
6512 10-3/8
6512 12-1/4
6512 12-3/8

Female Stud
6463 4-M5
6463 4-1/8
6463 5-1/8
6463 6-1/8
6463 6-1/4
6463 8-1/8
6463 8-1/4
6463 10-1/4

Sprint[®]



Note:
with O-Ring

Sprint[®]



Swivel Elbow
S6520 4-1/8
S6520 4-1/4
S6520 5-1/8
S6520 5-1/4
S6520 6-1/8
S6520 6-1/4
S6520 6-3/8
S6520 8-1/8
S6520 8-1/4
S6520 8-3/8
S6520 8-1/2
S6520 10-1/4
S6520 10-3/8
S6520 10-1/2
S6520 12-1/4
S6520 12-3/8
S6520 12-1/2
S6520 14-3/8
S6520 14-1/2

Swivel Elbow - Parallel
6522 3-M3 ^o
6522 3-M5*

Swivel elbow
^o = with mod. 2661 assembled
* = with O-ring assembled

Swivel Elbow - Parallel
6522 4-M5
6522 4-1/8
6522 4-1/4
6522 5-M5
6522 6-M5
6522 6-1/8
6522 6-1/4
6522 8-1/8
6522 8-1/4
6522 8-3/8
6522 10-1/4
6522 10-3/8
6522 12-1/4
6522 12-3/8

Fixed Male Elbow - Taper
S6500 4-1/8
S6500 4-1/4
S6500 5-1/8
S6500 5-1/4
S6500 6-1/8
S6500 6-1/4
S6500 8-1/8
S6500 8-1/4
S6500 8-3/8
S6500 10-1/4
S6500 10-3/8
S6500 12-1/4
S6500 12-3/8

Series 6000 Super-Rapid Fittings For Plastic Tubes

4

CONNECTION

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Extended Swivel Elbow
6525 6-1/8
6525 6-1/4
6525 8-1/8
6525 8-1/4



Banjo Fitting - Parallel
6621 3-M3
6621 3-M5

Adjustable with mod. 2661 assembled



Fixed Male Elbow - Parallel
6501 4-M5

With mod. 2661 assembled

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Swivel Branch Tee
S6430 4-1/8
S6430 5-1/8
S6430 5-1/4
S6430 6-1/8
S6430 6-1/4
S6430 8-1/8
S6430 8-1/4
S6430 8-3/8
S6430 10-1/4
S6430 10-3/8
S6430 10-1/2
S6430 12-1/4
S6430 12-3/8
S6430 12-1/2
S6430 14-1/2



Swivel Branch Tee - Parallel
6432 3-M3 ^o
6432 3-M5*

^o = with mod. 2661 assembled
* = with O-ring assembled



Swivel Branch Tee - Parallel
6432 4-M5
6432 4-1/8
6432 5-M5
6432 6-1/8
6432 6-1/4
6432 8-1/8
6432 8-1/4
6432 8-3/8
6432 10-1/4
6432 10-3/8
6432 12-1/4
6432 12-3/8

Sprint[®]



Swivel Run Tee
S6440 4-1/8
S6440 5-1/8
S6440 6-1/8
S6440 6-1/4
S6440 8-1/8
S6440 8-1/4
S6440 8-3/8
S6440 10-1/4
S6440 10-3/8
S6440 12-3/8
S6440 14-1/2



Swivel Run Tee - Parallel
6442 3-M3 ^o
6442 3-M5*

^o = with mod. 2661 assembled
* = with O-ring assembled

Series 6000 Super-Rapid Fittings For Plastic Tubes



Note:
with O-Ring

Swivel Run Tee - Parallel
6442 4-M5
6442 4-1/8
6442 5-M5
6442 6-1/8
6442 6-1/4
6442 8-1/8
6442 8-1/4
6442 8-3/8
6442 10-1/4
6442 10-3/8
6442 12-1/4
6442 12-3/8



Swivel Y Connector - Parallel

6452 3-M3 ^o
6452 3-M5*

^o = with mod. 2661 assembled
* = with O-ring assembled

Sprint®



Fixed Y Connector - Parallel

6451 4-M5*
6451 6-M5*

Swivel Y Connector

S6450 4-1/8
S6450 6-1/8
S6450 8-1/8
S6450 8-1/4

* = non swivel model with mod. 2661 assembled



Note:
with O-Ring

Single Banjo

6622 4-M5
6622 4-1/8
6622 6-1/8
6622 6-1/4
6622 8-1/8
6622 8-1/4
6622 10-1/4



Note:
with O-Ring

Double Banjo
6632 4-1/8
6632 6-1/8
6632 6-1/4
6632 8-1/8
6632 8-1/4
6632 10-1/4



Double Banjo Ring Connector

6620 4-M5
6620 4-1/8
6620 6-1/8
6620 6-1/4
6620 8-1/8
6620 8-1/4

Assembly with
mod. 1631, 1635



Banjo Bolts

1631 01...
1631 02...
1631 03...

See page 4/17



• Banjo ring connector required for M5 versions of SCU, MCO, SVU, MVU, SCO and MCO
* assembly required with Part Number 1635

Single Banjo Ring

6610 4-M5
6610 4-M6•
6610 4-1/8
6610 5-M5
6610 5-M6•
6610 5-1/8
6610 6-M5
6610 6-M6•
6610 6-1/8
6610 6-1/4
6610 8-1/8
6610 8-1/4
6610 8-3/8
6610 10-1/4*
6610 10-3/8*
6610 12-1/2*

Series 6000 Super-Rapid Fittings For Plastic Tubes

Sprint®



*Note:
with O-Ring



Stem Adaptor
6811 4-M5*
6811 4-1/8
6811 5-1/8
6811 5-1/4
6811 6-1/8
6811 6-1/4
6811 8-1/8
6811 8-1/4
6811 10-1/4
6811 10-3/8
6811 12-3/8
6811 14-1/2

Part Number
S6110 6-1/8
S6110 6-1/4
S6110 8-1/8
S6110 8-1/4
S6110 8-3/8
S6110 10-1/4
S6110 10-3/8
S6110 10-1/2
S6110 12-1/4
S6110 12-3/8
S6110 12-1/2

Bulk Head Connector
6590 3

Bulkhead Connector
6590 4
6590 5
6590 6
6590 8
6590 10
6590 12
6590 14



Tube to Tube Connector
6580 3

Tube to Tube Connector
6580 4
6580 5
6580 6
6580 8
6580 10
6580 12
6580 14

Reduction
6580 6-4
6580 8-6
6580 10-8
6580 12-10

Part Number
6593 6-1/8
6593 6-1/4
6593 8-1/8
6593 8-1/4
6593 10-3/8



Equal Tube Elbow
6550 3

Equal Tube Elbow
6550 4
6550 5
6550 6
6550 8
6550 10
6550 12
6550 14

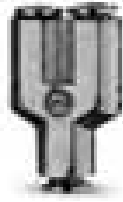
Equal Tube Tee
6540 3

Equal Tube Tee
6540 4
6540 5
6540 6
6540 8
6540 10
6540 12
6540 14

Series 6000 Super-Rapid Fittings For Plastic Tubes



Equal Tube Cross Connector
6600 4
6600 5
6600 6
6600 8
6600 10
6600 12



Equal Tube Y
6560 3



Equal Tube Y
6560 4
6560 6
6560 8
6560 10



Press Fit Cartridge
6700 3



Press Fit Cartridge
6700 4
6700 5
6700 6
6700 8
6700 10



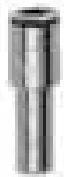
Tube Blanking Cap
6750 4
6750 6
6750 8
6750 10
6750 12



Tube Stem Increaser
6850 6-4
6850 8-6



Tube Stem Reducer
6800 3-4



Tube Stem Reducer
6800 4-5
6800 4-6
6800 4-8
6800 5-6
6800 5-8
6800 6-8
6800 6-10
6800 6-12
6800 8-10
6800 8-12
6800 10-12
6800 10-14
6800 12-14



Straight Stem
6950 4
6950 6
6950 8
6950 10
6950 12
6950 14



Tube to Stem Elbow
6555 4-4
6555 6-6
6555 8-8
6555 10-10



Dust Cover
6708 4
6708 5
6708 6
6708 8
6708 10
6708 12
6708 14

Series 6000 Super-Rapid Fittings For Plastic Tubes



Blanking Plug
6900 3

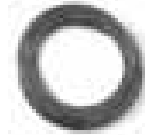


Blanking Plug (plastic)
6900 4
6900 5
6900 6
6900 8
6900 10
6900 12
6900 14



The set includes keys to disconnect tubes with diameters between 4 and 12mm

Part Number
SP



For Tubing
See 10 (Tubing)



For Banjo Bolts
See page 4/17

Series 7000 Super-Rapid *Compact*™ Fittings in Technopolymer

Tube external diameters: 4, 6, 8, 10, 12, 16mm
 Connections: metric (M5, M7), BSP (G1/8, G1/4, G3/8, G1/2, G3/4)
 Operating pressure: min -0.9 bar - max 16 bar (see data for tubing used)
 Operating temperature: -20°C - +60°C (see data for tubing used)

These models have been released in technopolymer, maintaining the same technical characteristics as the existing Camozzi fittings range.

Lightweight, adaptable and they allow for easy maintenance of the collet and the internal seal. All materials, with the exception of the internal seals, can easily be recycled.



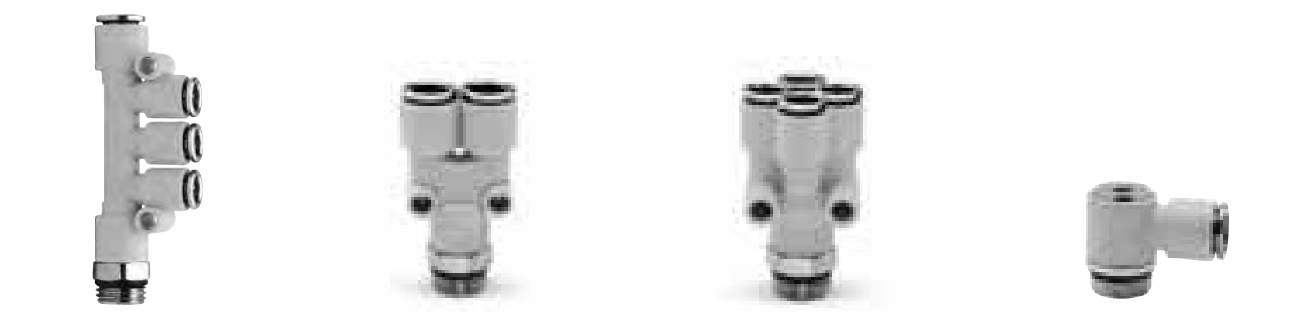
Swivel Elbow
7522 4-M5
7522 4-M7
7522 4-1/8
7522 4-1/4
7522 6-M5
7522 6-M7
7522 6-1/8
7522 6-1/4
7522 8-1/8
7522 8-1/4
7522 8-3/8
7522 10-1/4
7522 10-3/8
7522 10-1/2
7522 12-1/4
7522 12-3/8
7522 12-1/2
7522 16-1/2
7522 16-3/4

Long Swivel Elbow
7526 4-1/8
7526 6-1/8
7526 6-1/4
7526 8-1/8
7526 8-1/4

Swivel Run Tee
7442 4-1/8
7442 6-1/8
7442 6-1/4
7442 8-1/8
7442 8-1/4
7442 8-3/8
7442 10-1/4
7442 10-3/8
7442 12-3/8
7442 12-1/2
7442 16-1/2*
7442 16-3/4*

Swivel Branch Tee
7432 4-M5
7432 4-1/8
7432 6-M5
7432 6-1/8
7432 6-1/4
7432 8-1/8
7432 8-1/4
7432 8-3/8
7432 10-1/4
7432 10-3/8
7432 12-1/4
7432 12-3/8
7432 12-1/2
7432 16-1/2
7432 16-3/4

*model without mounting holes



Swivel Tee Reducer
7542 6-4-1/8
7542 6-4-1/4
7542 8-6-1/8
7542 8-6-1/4
7542 10-8-1/4
7542 10-8-3/8

Male Y
7562 4-1/8
7562 6-1/8
7562 6-1/4
7562 8-1/8
7562 8-1/4
7562 10-1/4
7562 10-3/8

Male Double Y
7572 4-1/8
7572 4-1/4
7572 6-1/8
7572 6-1/4

Swivel Single Banjo
7622 4-1/8
7622 6-1/8
7622 6-1/4
7622 8-1/8
7622 8-1/4
7622 10-1/4
7622 10-3/8
7622 12-3/8

Series 7000 Super-Rapid *Compact* Fittings in Technopolymer

4



Swivel Double Banjo
7652 4-1/8
7652 6-1/8
7652 6-1/4
7652 8-1/8
7652 8-1/4
7652 10-1/4
7652 10-3/8



Single Banjo
7610 4-1/8
7610 6-1/8
7610 6-1/4
7610 8-1/8
7610 8-1/4
7610 10-1/4
7610 10-3/8
7610 12-3/8
Assembly with Mod. 7632 02, 7632 03



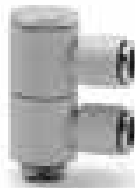
Double Banjo
7640 4-1/8
7640 6-1/8
7640 6-1/4
7640 8-1/8
7640 8-1/4
7640 10-1/4
Assembly with Mod. 7632 02, 7632 03



Double Banjo Stem
7632 02-1/8
7632 02-1/4
7632 02-3/8
Assembly with adjustable fittings Mod. 7610, 7640



Triple Banjo Stem
7632 03-1/8
7632 03-1/4
Assembly with adjustable fittings Mod. 7610, 7640



Double Single Banjo
7612 02-4-1/8
7612 02-6-1/8
7612 02-6-1/4
7612 02-8-1/8
7612 02-8-1/4
7612 02-10-1/4
7612 02-10-3/8
7612 02-12-3/8



Triple Single Banjo
7612 03-4-1/8
7612 03-6-1/8
7612 03-6-1/4
7612 03-8-1/8
7612 03-8-1/4
7612 03-10-1/4



Double Double Banjo
7642 02-4-1/8
7642 02-6-1/8
7642 02-6-1/4
7642 02-8-1/8
7642 02-8-1/4
7642 02-10-1/4



Triple Double Banjo
7642 03-4-1/8
7642 03-6-1/8
7642 03-6-1/4
7642 03-8-1/8
7642 03-8-1/4
7642 03-10-1/4



Reducer
7800 4-6
7800 4-8
7800 6-8
7800 6-10
7800 6-12
7800 8-10
7800 8-12
7800 10-12
7800 10-14



Junction Elbow
7555 4-4
7555 6-6
7555 8-8
7555 10-10
7555 12-12



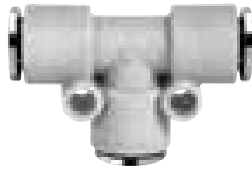
Union Connector
7580 4
7580 6
7580 8
7580 10
7580 12

CONNECTION

Series 7000 Super-Rapid *Compact* Fittings in Technopolymer



Elbow Connector
7550 4
7550 6
7550 8
7550 10
7550 12
7550 16



Tee Connector
7540 4
7540 5
7540 6
7540 8
7540 10
7540 12
7540 16



Multi Tee Reducer
7545 6-4
7545 8-6
7545 10-8



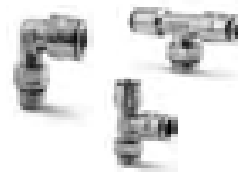
Y Reducer
7560 4
7560 6
7560 8
7560 10
7560 6-4
7560 8-6
7560 10-8



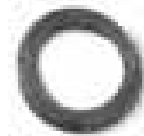
Double Y Reducer
7575 6-4
7575 8-6



Plastic Junction
7950 4
7950 6
7950 8
7950 10
7950 12



For Super-Rapid Fittings
See 4/3 - 4/8



For Tubing
See 10 (Tubing)

Series 8000 Dual Seal Push-In Fittings

Tube external diameters: 4 - 6 - 8 mm (Ø 10 and 12mm available on request)
 Connections: BSP (G1/8, G1/4)
 Operating pressure: min -0.9 bar - max 60 bar (see data for tubing used)
 Operating temperature: -20°C - +80°C

The Camozzi range of dual seal super rapid push in fittings are designed to assist with the assembly of high pressure fluid systems up to 60 bar.
 For technical specifications and assembly notes see page 4/2



Note:
with O-Ring

Male Stud
8512 4-1/8
8512 6-1/8
8512 6-1/4
8512 8-1/8
8512 8-1/4



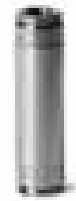
Note:
with O-Ring

Swivel Elbow
8522 4-1/8
8522 6-1/8
8522 6-1/4
8522 8-1/8
8522 8-1/4



Note:
with O-Ring

Swivel Branch Tee
8432 4-1/8
8432 6-1/8
8432 8-1/8
8432 8-1/4



Tube to Tube Connector
8580 4
8580 6
8580 8



Equal Tube Elbow
8550 4
8550 6
8550 8



Equal Tube Tee
8540 4
8540 6
8540 8



For NPT Fittings
See Page 4/33



For Tubing
See 10 (Tubing)

New

Series X6000 Super-Rapid Fittings in 316L Stainless Steel

Tube external diameters: 4, 6, 8, 10, 12mm

Fittings threads: BSP (G1/8, G1/4, G3/8, G1/2) BSPT (R1/8, R1/4, R3/8, R1/2)

Operating pressure: max 18 bar (see data for tubing used)

Operating temperature: -15°C - +100°C (see data for tubing used)

4

Series X6000 fittings in Stainless Steel 316L allow the connection of fluids even in aggressive environments. They are suitable for applications in the pneumatics, fluids, chemical, medical, food and packaging industries.



BSPT Male Connector
X6510 4-1/8
X6510 4-1/4
X6510 6-1/8
X6510 6-1/4
X6510 8-1/8
X6510 8-1/4
X6510 10-1/4
X6510 10-3/8
X6510 10-1/2
X6510 12-1/4
X6510 12-3/8
X6510 12-1/2



BSP Male Connector - Parallel
X6512 4-1/8
X6512 4-1/4
X6512 6-1/8
X6512 6-1/4
X6512 8-1/8
X6512 8-1/4
X6512 10-1/4
X6512 10-3/8
X6512 10-1/2
X6512 12-1/4
X6512 12-3/8
X6512 12-1/2



BSPT Fix Elbow
X6500 4-1/8
X6500 6-1/8
X6500 6-1/4
X6500 8-1/8
X6500 8-1/4
X6500 10-1/4
X6500 10-3/8
X6500 12-1/4
X6500 12-3/8



BSPT Swivel Elbow
X6520 4-1/8
X6520 4-1/4
X6520 6-1/8
X6520 6-1/4
X6520 8-1/8
X6520 8-1/4
X6520 10-1/4
X6520 10-3/8
X6520 12-1/4
X6520 12-3/8
X6520 12-1/2



BSPT Swivel Centre Tee
X6430 4-1/8
X6430 4-1/4
X6430 6-1/8
X6430 6-1/4
X6430 8-1/8
X6430 8-1/4
X6430 10-1/4
X6430 10-3/8
X6430 12-1/4
X6430 12-3/8
X6430 12-1/2



BSP Swivel Elbow - Parallel
X6522 4-1/8
X6522 4-1/4
X6522 6-1/8
X6522 6-1/4
X6522 8-1/8
X6522 8-1/4
X6522 10-1/4
X6522 10-3/8
X6522 12-1/4
X6522 12-3/8
X6522 12-1/2



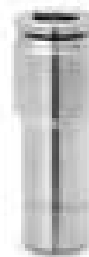
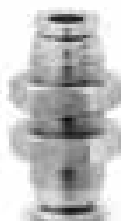
BSP Swivel Centre Tee - Parallel
X6432 4-1/8
X6432 4-1/4
X6432 6-1/8
X6432 6-1/4
X6432 8-1/8
X6432 8-1/4
X6432 10-1/4
X6432 10-3/8
X6432 12-1/4
X6432 12-3/8
X6432 12-1/2



Union Connector
X6580 4
X6580 6
X6580 8
X6580 10
X6580 12

New

Series X6000 Super-rapid Fittings



Elbow Connector
X6550 4
X6550 6
X6550 8
X6550 10
X6550 12

Tee Connector
X6540 4
X6540 6
X6540 8
X6540 10
X6540 12

Bulkhead Union Connector
X6590 4
X6590 6
X6590 8
X6590 10
X6590 12

Reducer Tube/Stem
X6800 4-6
X6800 4-8
X6800 6-8
X6800 6-10
X6800 6-12
X6800 8-10
X6800 8-12
X6800 10-12

Series 1000 Rapid Push-On Fittings For Plastic Tubes

Tube external diameters: 5/3, 6/4, 8/6, 10/8, 12/10, 15/12.5mm

Connections: metric (M5, M6, M12x1, M12x1.25), BSP (G1/8, G1/4, G3/8, G1/2), BSPT (R1/8, R1/4, R3/8, R1/2)

Operating pressure: the nominal pressure of the fittings is always higher than the pressure of the tube

Operating temperature: (see data for tubing used)

The Camozzi range of rapid push-on fittings are designed to assist with the assembly of fluid power components and systems.

For technical specifications and assembly notes see page 4/2



Sprint®



Male Stud - Taper	
1510 5/3-1/8	1510 8/6-1/2
1510 6/4-1/8	1510 10/8-1/8
1510 6/4-1/4	1510 10/8-1/4
1510 6/4-3/8	1510 10/8-3/8
1510 6/4-1/2	1510 10/8-1/2
1510 6/4-M12x1.25	1510 12/10-3/8
1510 8/6-1/8	1510 12/10-1/2
1510 8/6-1/4	1510 15/12.5-1/2
1510 8/6-3/8	

Male Stud - Parallel	
1511 5/3-M5*	1511 8/6-1/4
1511 5/3-M6*	1511 8/6-3/8
1511 5/3-1/8	1511 10/8-1/8
1511 6/4-M5*	1511 10/8-1/4
1511 6/4-M6*	1511 10/8-3/8
1511 6/4-1/8	1511 10/8-1/2
1511 6/4-1/4	1511 12/10-3/8
1511 6/4-3/8	1511 12/10-1/2
1511 8/6-1/8	1511 15/12.5-1/2

* With O-Ring assembled

Series 1000 Rapid Push-On Fittings For Plastic Tubes

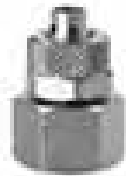
4

CONNECTION

Sprint®



Male Stud Swivel
1560 6/4-1/8
1560 6/4-1/4
1560 8/6-1/8
1560 8/6-1/4
1560 10/8-1/4
1560 10/8-3/8
1560 12/10-3/8



Female Stud
1463 5/3-1/8
1463 6/4-1/8
1463 6/4-1/4
1463 6/4-3/8
1463 8/6-1/8
1463 8/6-1/4
1463 8/6-3/8
1463 10/8-1/8
1463 10/8-1/4
1463 10/8-3/8
1463 10/8-1/2
1463 12/10-3/8

Sprint®

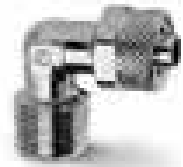


Swivel Elbow - Parallel
1541 6/4-1/8
1541 6/4-1/4
1541 8/6-1/8
1541 8/6-1/4
1541 10/8-1/4



Note: with 2661 Nylon Ring

Fixed Stud Elbow - Parallel
1501 5/3-M5



Fixed Male Elbow - Taper
1500 5/3-1/8
1500 6/4-1/8
1500 6/4-1/4
1500 6/4-3/8
1500 6/4-M12x1.25
1500 8/6-1/8
1500 8/6-1/4
1500 8/6-3/8
1500 8/6-1/2
1500 10/8-1/8
1500 10/8-1/4
1500 10/8-3/8
1500 10/8-1/2
1500 12/10-3/8
1500 12/10-1/2
1500 15/12.5-1/2



Fixed Female Elbow
1493 6/4-1/8
1493 6/4-1/4
1493 8/6-1/8
1493 8/6-1/4
1493 10/8-1/4
1493 12/10-3/8

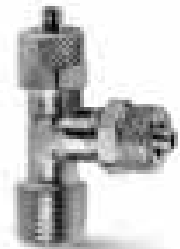
Sprint®



Swivel Branch Tee
1431 6/4-1/8
1431 6/4-1/4
1431 8/6-1/8
1431 8/6-1/4
1431 10/8-1/4

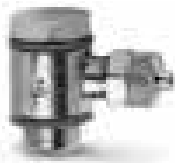


Fixed Branch Tee - Taper
1410 5/3-1/8
1410 6/4-1/8
1410 6/4-1/4
1410 8/6-1/8
1410 8/6-1/4
1410 10/8-1/8
1410 10/8-1/4
1410 10/8-3/8
1410 10/8-1/2
1410 12/10-3/8
1410 12/10-1/2
1410 15/12.5-1/2



Fixed Run Tee - Taper
1420 5/3-1/8
1420 6/4-1/8
1420 6/4-1/4
1420 8/6-1/8
1420 8/6-1/4
1420 10/8-1/8
1420 10/8-1/4

Series 1000 Rapid Push-On Fittings For Plastic Tubes



Note: with 2661 Nylon Ring

Banjo Assemblies
1521 5/3-M5
1521 5/3-1/8
1521 6/4-M5
1521 6/4-1/8
1521 6/4-1/4
1521 6/4-3/8
1521 8/6-1/8
1521 8/6-1/4
1521 8/6-3/8



Note: with 2661 Nylon Ring

Banjo Assemblies
1525 6/4-1/8
1525 6/4-1/4
1525 6/4-3/8
1525 8/6-1/8
1525 8/6-1/4
1525 8/6-3/8
1525 10/8-1/8
1525 10/8-1/4
1525 10/8-3/8
1525 10/8-1/2
1525 12/10-3/8
1525 12/10-1/2
1525 15/12.5-1/2



• Banjo ring connector required for M5 versions of SCU, MCO, SVU, MVU, SCO and MCO

* assembly required with Part Number 1635

Single Banjo Ring Connector
1610 5/3-M5
1610 5/3-M6•
1610 5/3-1/8
1610 6/4-M5
1610 6/4-M6•
1610 6/4-1/8
1610 6/4-1/4
1610 6/4-3/8
1610 8/6-1/8
1610 8/6-1/4
1610 8/6-3/8
1610 10/8-1/8*
1610 10/8-1/4*
1610 10/8-3/8*
1610 10/8-1/2*
1610 12/10-3/8*
1610 12/10-1/2*
1610 15/12.5-1/2*



Double Banjo Ring Connector
1620 6/4-M5
1620 6/4-1/8
1620 6/4-1/4
1620 8/6-1/8
1620 8/6-1/4

Assembly with Mod. 1631-1635



For assembly with banjo fittings Mod. 6610, 6620, 1610, 1620, 1170, 2023

Single Banjo Bolt (up to & incl 8mm)
1631 01-M5*
1631 01-1/8
1631 01-1/4
1631 01-3/8
1631 01-1/2



For assembly with banjo fittings Mod. 6610, 6620, 1610, 1620, 1170, 2023

Double Banjo Bolt (up to & incl 8mm)
1631 02-1/8
1631 02-1/4
1631 02-3/8



For assembly with banjo fittings Mod. 6610, 6620, 1610, 1620, 1170, 2023

Double Banjo Bolt(8mm & above)
1635 02-1/8
1635 02-1/4
1635 02-3/8
1635 02-1/2



For assembly with banjo fittings Mod. 6610, 6620, 1610, 1620, 1170, 2023

Triple Banjo Bolt (up to & incl 8mm)
1631 03-1/8
1631 03-1/4
1631 03-3/8



For assembly with banjo fittings Mod. 6610, 6620, 1610, 1620, 1170, 2023
*Assembled with 1/4 banjo fittings

Single Banjo Bolt (8mm & above)
1635 01-1/8
1635 01-1/4
1635 01-3/8
1635 01-1/2
1635 01-M12x1.25*
1635 01-M12x1.5*

Series 1000 Rapid Push-On Fittings For Plastic Tubes

4



Tube to Tube Connector
1580 5/3
1580 6/4
1580 8/6-6/4
1580 8/6
1580 10/8-6/4
1580 10/8
1580 12/10
1580 15/12.5



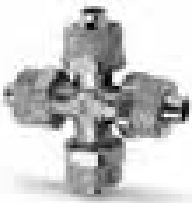
Bulkhead Tube Connector
1590 5/3
1590 6/4-5/3
1590 6/4
1590 8/6-6/4
1590 8/6
1590 10/8
1590 12/10



Equal Tube Elbow
1550 6/4
1550 8/6
1550 10/8
1550 12/10
1550 15/12.5



Equal Tube Tee
1540 5/3
1540 6/4
1540 8/6-6/4
1540 8/6
1540 10/8-6/4
1540 10/8-8/6
1540 10/8
1540 12/10
1540 15/12.5



Equal Tube Cross
1600 6/4
1600 8/6



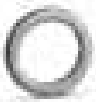
Tube Stem Adaptor
1470 6/4-6
1470 8/6-8



Plastic Blanking Cap
1710 5/3
1710 6/4
1710 8/6
1710 10/8
1710 12/10
Useful for blanking off or testing purposes



Anti Kink Tube Nut
1723 6/4-M10x1
1723 8/6-M12x1
1723 10/8-M14x1
1723 12/10-M16x1
1723 15/12.5-M20x1



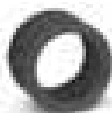
Aluminium Washer
2651 1/8
2651 1/4
2651 3/8
2651 1/2
2651 1



Nylon Washer
2661 M3
2661 M5
2661 M6
2661 1/8
2661 1/4
2661 3/8
2661 1/2



Nylon Spacer 5mm
2665 1/8
2665 1/4
2665 3/8
2665 1/2



Nylon Spacer 9mm
2669 1/8
2669 1/4
2669 3/8
2669 1/2



Tube Nut
1703 5/3-M7x0.75
1703 6/4-M8x0.75
1703 6/4-M10x1
1703 8/6-M12x1
1703 10/8-M14x1
1703 12/10-M16x1
1703 15/12.5-M20x1

Series 1000 Compression Fittings

Tube OD 4 - 6 - 8 - 10 - 12

Connections: 1/8, 1/4, 3/8, 1/2.

Operating pressure: max 40 bar (see data for tubing used)

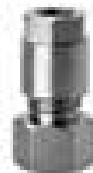
Operating temperature: -20°C - +100°C (see data for tubing used)



The Camozzi range of compression fittings are designed to assist with the assembly of fluid power components and systems. For technical specifications and assembly notes see 4/2



Male Stud - Taper
1050 4-1/8
1050 6-1/8
1050 6-1/4
1050 8-1/8
1050 8-1/4
1050 8-3/8
1050 10-1/4
1050 10-3/8
1050 10-1/2
1050 12-1/4
1050 12-3/8
1050 12-1/2



Female Stud
1063 4-1/8
1063 6-1/8
1063 6-1/4
1063 8-1/8
1063 8-1/4



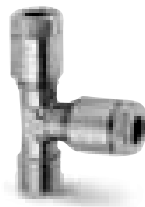
Fixed Male Elbow - Taper
1020 4-1/8
1020 6-1/8
1020 6-1/4
1020 8-1/8
1020 8-1/4
1020 8-3/8
1020 10-1/4
1020 10-3/8
1020 10-1/2
1020 12-1/4
1020 12-3/8
1020 12-1/2



Fixed Female Elbow
1093 4-1/8
1093 6-1/8
1093 6-1/4
1093 8-1/8
1093 8-1/4



Fixed Branch Tee - Taper
1000 4-1/8
1000 6-1/8
1000 8-1/4
1000 10-1/4



Fixed Run Tee - Taper
1010 4-1/8
1010 6-1/8
1010 8-1/4
1010 10-1/4



Tube to Tube Connector
1230 4
1230 6
1230 8
1230 10
1230 12



Bulkhead Connector
1250 4
1250 6
1250 8
1250 10



Equal Tube Elbow
1220 4
1220 6
1220 8
1220 10
1220 12



Equal Tube Tee
1210 4
1210 6
1210 8
1210 10
1210 12

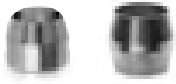


Single Banjo Ring Connector
1170 6-1/8
1170 6-1/4
1170 8-1/8*
* assembly required with Part Number 1635



Tube Nut
1303 4-1/8
1303 6-1/8
1303 8-1/4
1303 10-3/8
1303 12-M18x1.5

Compression Fittings



Olive
1310 4
1310 6
1310 8
1310 10
1310 12-M18*
*biconical



Tube Insert
1320 4
1320 6
1320 8
1320 10

Series S2000 Pipe Fittings *Sprint*[®]

Connections: BSP (G1/8, G1/4, G3/8, G1/2) BSPT (R1/8, R1/4, R3/8, R1/2)
 Operating pressure: 40 bar
 Operating temperature: -40°C - +120°C

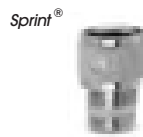
The more popular versions of the Camozzi Pipe Fittings are now available with the unique Camozzi *Sprint*[®] sealing system. For technical specifications and assembly notes see page 4/2



Nipple - Taper
S2500 1/8
S2500 1/4
S2500 3/8
S2500 1/2



Reducing Nipple - Taper
S2510 1/8-1/4
S2510 1/8-3/8
S2510 1/4-3/8
S2510 1/4-1/2
S2510 3/8-1/2



Adaptor - Taper
S2520 1/8-1/8
S2520 1/8-1/4
S2520 1/8-3/8
S2520 1/4-1/4
S2520 1/4-3/8
S2520 1/4-1/2
S2520 3/8-3/8
S2520 3/8-1/2
S2520 1/2-1/2



Reducing Bush - Taper
S2530 1/4-1/8
S2530 3/8-1/8
S2530 1/2-1/8
S2530 3/8-1/4
S2530 1/2-1/4
S2530 1/2-3/8



Swivel Adaptor
2541 1/8-1/8
2541 1/4-1/4
2541 3/8-3/8



Male Elbow - Taper
S2010 1/8
S2010 1/4
S2010 3/8
S2010 1/2



Male/Female Elbow - Taper
S2020 1/8-1/8
S2020 1/4-1/4
S2020 3/8-3/8
S2020 1/2-1/2



Female Run Tee - Taper
S2050 1/8-1/8
S2050 1/4-1/4
S2050 3/8-3/8
S2050 1/2-1/2

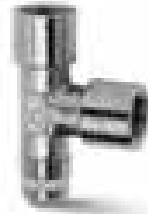
Pipe Fittings *Sprint*[®]

Sprint[®]



Male Branch Tee - Taper
S2060 1/8-1/8
S2060 1/4-1/4
S2060 3/8-3/8
S2060 1/2-1/2

Sprint[®]



Male Run Tee - Taper
S2070 1/8-1/8
S2070 1/4-1/4
S2070 3/8-3/8
S2070 1/2-1/2

Sprint[®]



Equal Male Tee - Taper
S2080 1/8
S2080 1/4
S2080 3/8
S2080 1/2

Sprint[®]



Female Branch - Taper
S2090 1/8-1/8
S2090 1/4-1/4
S2090 3/8-3/8
S2090 1/2-1/2

Sprint[®]



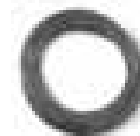
Note:
*with O-Ring

Male Plug
S2612 M7*
S2610 1/8
S2610 1/4
S2610 3/8
S2610 1/2

Sprint[®]



Male Plug - Flush Fitting - Parallel
S2615 1/8
S2615 1/4
S2615 3/8



For Tubing
See 10 (Tubing)

Series 2000 Pipe Fittings

Connections: Metric (M5) BSP (G1/8, G1/4, G3/8, G1/2, G3/4 and G1) BSPT (R1/8, R1/4, R3/8, R1/2, R3/4)
 Operating pressure: 40 bar
 Operating temperature: -40°C - +120°C

The Camozzi range of Pipe Fittings and hose tails are designed to assist with the assembly of fluid power components and systems.

For technical specifications and assembly notes see page 4/2



Nipple - Taper
2500 1/8
2500 1/4
2500 3/8
2500 1/2
2500 3/4
2500 1



Nipple - Parallel
2501 M5
2501 1/8
2501 1/4
2501 3/8
2501 1/2



Reducing Nipple - Taper
2510 1/8-1/4
2510 1/8-3/8
2510 1/4-3/8
2510 1/4-1/2
2510 3/8-1/2
2510 1/2-3/4



Reducing Nipple - Parallel
2511 M5-1/8
2511 1/8-1/4
2511 1/8-3/8
2511 1/4-3/8
2511 1/4-1/2
2511 3/8-1/2

Series 2000 Pipe Fittings

4



Adaptor - Taper
2520 1/8-1/8
2520 1/8-1/4
2520 1/8-3/8
2520 1/4-1/4
2520 1/4-3/8
2520 1/4-1/2
2520 3/8-3/8
2520 3/8-1/2
2520 1/2-1/2



Adaptor - Parallel
2521 M5-1/8
2521 1/8-1/8
2521 1/8-1/4
2521 1/8-3/8
2521 1/4-1/4
2521 1/4-3/8
2521 1/4-1/2
2521 3/8-3/8
2521 3/8-1/2
2521 1/2-1/2



Extension Piece - Parallel
2525 1/8-16
2525 1/8-36
2525 1/4-27
2525 1/4-43



Reducing Bush - Taper
2530 1/4-1/8
2530 3/8-1/8
2530 1/2-1/8
2530 3/8-1/4
2530 1/2-1/4
2530 1/2-3/8
2530 3/4-3/8
2530 3/4-1/2
2530 1-1/2



Reducing Bush - Parallel
2531 1/8-M5
2531 1/4-1/8
2531 3/8-1/8
2531 3/8-1/4
2531 1/2-1/8
2531 1/2-1/4
2531 1/2-3/8



Female Connector
2543 M5
2543 1/8
2543 1/4
2543 3/8
2543 1/2



Female Reducer
2553 M5-1/8
2553 1/8-1/4
2553 1/8-3/8
2553 1/8-1/2
2553 1/4-3/8
2553 1/4-1/2
2553 3/8-1/2



Blanking Plug - Parallel
2611 M5
2611 1/8
2611 1/4
2611 3/8
2611 1/2
2611 1

*Models with through thread



Blanking Plug - Taper
2610 3/4



Blanking Nut - Parallel
2613 1/8
2613 1/4
2613 3/8
2613 1/2



Hose Tail - Parallel
2601 2-M5
2601 4.5-M5
2601 7-1/8
2601 7-1/4
2601 8-1/8
2601 9-1/8
2601 9-1/4
2601 9-3/8
2601 12-1/4
2601 12-3/8
2601 12-1/2
2601 17-3/8
2601 17-1/2



Male Elbow - Taper
2010 1/8
2010 1/4
2010 3/8
2010 1/2
2010 3/4
2010 1



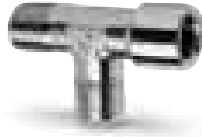
Female Elbow
2013 1/8
2013 1/4
2013 3/8
2013 1/2

See page 4/26 for more hose tails

Series 2000 Pipe Fittings



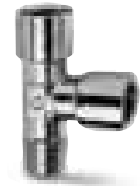
Male/Female Elbow - Taper
2021 M5-M5
2020 1/8-1/8
2020 1/4-1/4
2020 3/8-3/8
2020 1/2-1/2
2020 3/4-3/4
2020 1



Female Run Tee - Taper
2050 1/8-1/8
2050 1/4-1/4
2050 3/8-3/8
2050 1/2-1/2



Male Branch Tee - Taper
2060 1/8-1/8
2060 1/4-1/4
2060 3/8-3/8
2060 1/2-1/2



Male Run Tee - Taper
2070 1/8-1/8
2070 1/4-1/4
2070 3/8-3/8
2070 1/2-1/2



Equal Male Tee - Taper
2080 1/8
2080 1/4
2080 3/8
2080 1/2
2080 3/4
2080 1



Female Branch Tee - Taper
2090 1/8-1/8
2090 1/4-1/4
2090 3/8-3/8
2090 1/2-1/2
2090 3/4-3/4
2090 1



Equal Female Tee
2003 1/8
2003 1/4
2003 3/8
2003 1/2



Y Connector - Taper
2040 1/8-1/8
2040 1/4-1/4
2040 3/8-3/8
2040 1/2-1/2



Female Y Connector
2043 1/8
2043 1/4
2043 3/8
2043 1/2



Female Equal Cross
2033 1/8
2033 1/4
2033 3/8



• Banjo ring connector required for M5 versions of SCU, MCO, SVU, MVU, SCO and MCO
* assembly required with Part Number 1635

Banjo Ring Connector
2023 M5-M5
2023 M5-M6•
2023 1/8-1/8
2023 1/4-1/4*
2023 3/8-3/8*



Bulkhead Fitting Parallel
2593 M16-1/8
2593 M20-1/4
2593 M26-3/8
2593 M28-1/2



Hexagon Locking Nut - BSPP
1253 1/8
1253 1/4
1253 3/8
1253 1/2



Hexagon Locking Nut - Metric
1593 M12x1
1593 M20x1.5



For Aluminium Manifold Blocks
See 4/27

New

316 Stainless Steel Pipe Fittings

Connections: 1/8, 1/4, 3/8, 1/2, 3/4, 1, 1 1/4, 1 1/2, 2, 2 1/2, 3 and 4
 Pressure: 150lb

4

CONNECTION



90° Equal Elbow	
SS100	1/8
SS100	1/4
SS100	3/8
SS100	1/2
SS100	3/4
SS100	1
SS100	1 1/4
SS100	1 1/2
SS100	2
SS100	2 1/2
SS100	3
SS100	4



Equal Tee	
SS110	1/8
SS110	1/4
SS110	3/8
SS110	1/2
SS110	3/4
SS110	1
SS110	1 1/4
SS110	1 1/2
SS110	2
SS110	2 1/2
SS110	3
SS110	4



Equal Cross	
SS120	1/8
SS120	1/4
SS120	3/8
SS120	1/2
SS120	3/4
SS120	1
SS120	1 1/4
SS120	1 1/2
SS120	2



Hexagon Union - 2 piece	
SS130	1/8
SS130	1/4
SS130	3/8
SS130	1/2
SS130	3/4
SS130	1
SS130	1 1/4
SS130	1 1/2
SS130	2
SS130	2 1/2
SS130	3
SS130	4



Threaded Full Socket	
SS140	1/8
SS140	1/4
SS140	3/8
SS140	1/2
SS140	3/4
SS140	1
SS140	1 1/4
SS140	1 1/2
SS140	2
SS140	2 1/2
SS140	3
SS140	4



Threaded Half Socket	
SS150	1/8
SS150	1/4
SS150	3/8
SS150	1/2
SS150	3/4
SS150	1
SS150	1 1/4
SS150	1 1/2
SS150	2
SS150	2 1/2
SS150	3
SS150	4



90° Street Elbow	
SS160	1/8
SS160	1/4
SS160	3/8
SS160	1/2
SS160	3/4
SS160	1
SS160	1 1/4
SS160	1 1/2
SS160	2
SS160	2 1/2
SS160	3



45° Elbow	
SS170	1/8
SS170	1/4
SS170	3/8
SS170	1/2
SS170	3/4
SS170	1
SS170	1 1/4
SS170	1 1/2
SS170	2
SS170	2 1/2
SS170	3
SS170	4



Round Blanking Cap	
SS180	1/8
SS180	1/4
SS180	3/8
SS180	1/2
SS180	3/4
SS180	1
SS180	1 1/4
SS180	1 1/2
SS180	2
SS180	2 1/2
SS180	3
SS180	4



Square Head Plug	
SS190	1/8
SS190	1/4
SS190	3/8
SS190	1/2
SS190	3/4
SS190	1
SS190	1 1/4
SS190	1 1/2
SS190	2
SS190	2 1/2
SS190	3
SS190	4



Hexagon Head Blanking Plug	
SS200	1/8
SS200	1/4
SS200	3/8
SS200	1/2
SS200	3/4
SS200	1
SS200	1 1/4
SS200	1 1/2
SS200	2
SS200	2 1/2
SS200	3
SS200	4



Hexagon Head Lock Nut	
SS210	1/8
SS210	1/4
SS210	3/8
SS210	1/2
SS210	3/4
SS210	1
SS210	1 1/4
SS210	1 1/2
SS210	2
SS210	2 1/2
SS210	3
SS210	4

New

316 Stainless Steel Pipe Fittings



Barrel Nipple	
SS220	1/8
SS220	1/4
SS220	3/8
SS220	1/2
SS220	3/4
SS220	1
SS220	1 1/4
SS220	1 1/2
SS220	2
SS220	3



Hexagon Blanking Cap	
SS230	1/8
SS230	1/4
SS230	3/8
SS230	1/2
SS230	3/4
SS230	1
SS230	1 1/4
SS230	1 1/2
SS230	2
SS230	2 1/2
SS230	3
SS230	4



Equal Hexagon Nipple	
SS240	1/8
SS240	1/4
SS240	3/8
SS240	1/2
SS240	3/4
SS240	1
SS240	1 1/4
SS240	1 1/2
SS240	2
SS240	2 1/2
SS240	3



Hexagon Union - 2 piece	
SS260	1/8
SS260	1/4
SS260	3/8
SS260	1/2
SS260	3/4
SS260	1
SS260	1 1/4
SS260	1 1/2
SS260	2
SS260	4



Hose Tail Adaptor	
SS290	1/8
SS290	1/4
SS290	3/8
SS290	1/2
SS290	3/4
SS290	1
SS290	1 1/4
SS290	1 1/2
SS290	2



Hexagon Reducing Nipple	
SS330	1/4 - 1/8
SS330	3/8 - 1/8
SS330	3/8 - 1/4
SS330	1/2 - 1/8
SS330	1/2 - 1/4
SS330	1/2 - 3/8
SS330	3/4 - 1/4
SS330	3/4 - 3/8
SS330	3/4 - 1/2
SS330	1 - 1/4
SS330	1 - 3/8
SS330	1 - 1/2
SS330	1 - 3/4
SS330	1 1/4 - 1/2
SS330	1 1/4 - 3/4
SS330	1 1/4 - 1
SS330	1 1/2 - 1/2
SS330	1 1/2 - 3/4
SS330	1 1/2 - 1
SS330	1 1/2 - 1 1/4
SS330	2 - 3/4
SS330	2 - 1
SS330	2 - 1 1/4
SS330	2 - 1 1/2



Hexagon Reducing Bush	
SS310	1/4 - 1/8
SS310	3/8 - 1/8
SS310	3/8 - 1/4
SS310	1/2 - 1/8
SS310	1/2 - 1/4
SS310	1/2 - 3/8
SS310	3/4 - 1/8
SS310	3/4 - 1/4
SS310	3/4 - 3/8
SS310	3/4 - 1/2
SS310	1 - 1/4
SS310	1 - 3/8
SS310	1 - 1/2
SS310	1 - 3/4
SS310	1 1/4 - 1/2
SS310	1 1/4 - 3/4
SS310	1 1/4 - 1
SS310	1 1/2 - 1/2
SS310	1 1/2 - 3/4
SS310	1 1/2 - 1
SS310	1 1/2 - 1 1/4
SS310	2 - 3/4
SS310	2 - 1
SS310	2 - 1 1/4
SS310	2 - 1 1/2
SS310	2 1/2 - 1
SS310	2 1/2 - 1 1/4
SS310	2 1/2 - 1 1/2
SS310	3 - 1 1/2
SS310	3 - 2
SS310	3 - 2 1/2
SS310	4 - 2
SS310	4 - 2 1/2
SS310	4 - 3

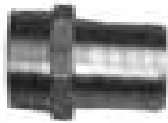


Reducing Socket	
SS320	1/4 - 1/8
SS320	3/8 - 1/8
SS320	3/8 - 1/4
SS320	1/2 - 1/8
SS320	1/2 - 1/4
SS320	1/2 - 3/8
SS320	3/4 - 1/8
SS320	3/4 - 1/4
SS320	3/4 - 3/8
SS320	3/4 - 1/2
SS320	1 - 1/4
SS320	1 - 3/8
SS320	1 - 1/2
SS320	1 - 3/4
SS320	1 1/4 - 1/2
SS320	1 1/4 - 3/4
SS320	1 1/4 - 1
SS320	1 1/2 - 1/2
SS320	1 1/2 - 3/4
SS320	1 1/2 - 1
SS320	1 1/2 - 1 1/4
SS320	2 - 3/4
SS320	2 - 1
SS320	2 - 1 1/4
SS320	2 - 1 1/2
SS320	2 1/2 - 1
SS320	2 1/2 - 1 1/4
SS320	2 1/2 - 1 1/2
SS320	2 1/2 - 2
SS320	3 - 1 1/2
SS320	3 - 2
SS320	3 - 2 1/2
SS320	4 - 2
SS320	4 - 2 1/2
SS320	4 - 3

4

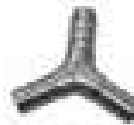
Brass Hose Tails and Connectors

Connections: 1/8 - 3/16 - 1/4 - 5/16 - 3/8 - 1/2 - 3/4 - 1
 Brass hose tails and connectors.



Male Hose Connector	Taper Thread	Hose ID	(mm)	Length (mm)
2700 2/2	1/8 BSPT	1/8"	(3)	30
2700 2/3	1/8 BSPT	3/16"	(5)	40
2700 2/4	1/8 BSPT	1/4"	(6)	40
2700 2/5	1/8 BSPT	5/16"	(8)	40
2700 2/6	1/8 BSPT	3/8"	(10)	42
2700 2/8	1/8 BSPT	1/2"	(12)	42
2700 4/2	1/4 BSPT	1/8"	(3)	34
2700 4/3	1/4 BSPT	3/16"	(5)	42
2700 4/4	1/4 BSPT	1/4"	(6)	42
2700 4/5	1/4 BSPT	5/16"	(8)	42
2700 4/6	1/4 BSPT	3/8"	(10)	42
2700 4/8	1/4 BSPT	1/2"	(12)	44
2700 4/10	1/4 BSPT	5/8"	(16)	44
2700 4/12	1/4 BSPT	3/4"	(18)	44
2700 6/3	3/8 BSPT	3/16"	(5)	39
2700 6/4	3/8 BSPT	1/4"	(6)	44
2700 6/5	3/8 BSPT	5/16"	(8)	44
2700 6/6	3/8 BSPT	3/8"	(10)	56
2700 6/8	3/8 BSPT	1/2"	(12)	56
2700 6/10	3/8 BSPT	5/8"	(16)	57
2700 6/12	3/8 BSPT	3/4"	(19)	59
2700 8/3	1/2 BSPT	3/16"	(5)	43
2700 8/4	1/2 BSPT	1/4"	(6)	43
2700 8/5	1/2 BSPT	5/16"	(8)	43
2700 8/6	1/2 BSPT	3/8"	(10)	60
2700 8/8	1/2 BSPT	1/2"	(12)	60
2700 8/10	1/2 BSPT	5/8"	(16)	60
2700 8/12	1/2 BSPT	3/4"	(19)	60
2700 8/16	1/2 BSPT	1"	(25)	60
2700 12/4	3/4 BSPT	1/4"	(6)	48
2700 12/5	3/4 BSPT	5/16"	(8)	48
2700 12/6	3/4 BSPT	3/8"	(10)	48
2700 12/8	3/4 BSPT	1/2"	(12)	63
2700 12/10	3/4 BSPT	5/8"	(16)	63
2700 12/12	3/4 BSPT	3/4"	(19)	63
2700 12/16	3/4 BSPT	1"	(25)	63

Hose Repair Connector	Hose ID	(mm)	x	Hose ID	(mm)
2780 3/3	3/16"	(5)	x	3/16"	(5)
2780 4/4	1/4"	(6)	x	1/4"	(6)
2780 5/5	5/16"	(8)	x	5/16"	(8)
2780 6/4	3/8"	(10)	x	1/4"	(6)
2780 6/6	3/8"	(10)	x	3/8"	(10)
2780 8/6	1/2"	(10)	x	3/8"	(10)
2780 8/8	1/2"	(12)	x	1/2"	(12)
2780 10/10	5/8"	(16)	x	5/8"	(16)
2780 12/8	3/4"	(19)	x	1/2"	(12)
2780 12/12	3/4"	(19)	x	3/4"	(19)
2780 16/12	1"	(25)	x	3/4"	(19)
2780 16/16	1"	(25)	x	1"	(25)



Hose Repair Connector "Y"	
	Hose ID
2760 04	1/4"
2760 05	5/16"
2760 06	3/8"
2760 08	1/2"

Hose Repair Connector "T"	
	Hose ID
2740 03	3/16"
2740 04	1/4"
2740 05	5/16"
2740 06	3/8"
2740 08	1/2"



Worm Drive Clips - Mild Steel		
	Min ID	Max ID
WDC-1	9	12
WDC-2	11	16
WDC-3	13	20
WDC-4	14	22
WDC-5	17	25
WDC-6	22	30
WDC-7	25	35
WDC-8	30	40

4

CONNECTION

Aluminium Distribution Manifold Blocks

Connections: 1/4 - 1/8 - 3/8 - 1/2

Aluminium manifold blocks to assist with the assembly of fluid power components and systems.
Other sizes and connections of manifolds can be supplied on request.

Aluminium Single-Sided Manifold



1/4" Inlet x 1/8" Outlet	No of Outlets
3053 1/4-3L-1/8	3
3053 1/4-4L-1/8	4
3053 1/4-5L-1/8	5
3053 1/4-6L-1/8	6

3/8" Inlet x 1/4" Outlet	No of Outlets
3053 3/8-3L-1/4	3
3053 3/8-4L-1/4	4
3053 3/8-5L-1/4	5
3053 3/8-6L-1/4	6

1/2" Inlet x 3/8" Outlet	No of Outlets
3053 1/2-3L-3/8	3
3053 1/2-4L-3/8	4
3053 1/2-5L-3/8	5
3053 1/2-6L-3/8	6

Aluminium Double-Sided Manifold



1/4" Inlet x 1/8" Outlet	No of Outlets
3043 1/4-3D-1/8	3+3
3043 1/4-4D-1/8	4+4
3043 1/4-5D-1/8	5+5
3043 1/4-6D-1/8	6+6

3/8" Inlet x 1/4" Outlet	No of Outlets
3043 3/8-3D-1/4	3+3
3043 3/8-4D-1/4	4+4
3043 3/8-5D-1/4	5+5
3043 3/8-6D-1/4	6+6

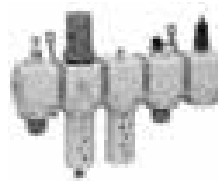
1/2" Inlet x 3/8" Outlet	No of Outlets
3043 1/2-3D-3/8	3+3
3043 1/2-4D-3/8	4+4
3043 1/2-5D-3/8	5+5
3043 1/2-6D-3/8	6+6



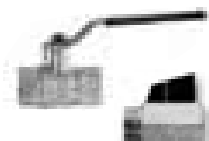
Aluminium Distribution Block
3033 1/8
3033 1/4
3033 3/8
3033 1/2



For Cylinders
See 1 (Movement)



For FRL's
See 3 (Treatment)



For Ball Valves
See 6 (Ball Valves and Non Return Valves)

Series 5000 Camozzi Quick-Release Couplings

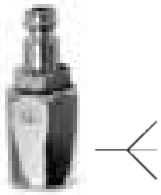
Nominal diameters: Ø 5 - 7 mm. Plastic tubes 6/4, 8/6, 10/8; Rubber hoses 6x14 - 8x17 - 10x19 - 13x23
 Connections: G1/8, G1/4, G3/8, G1/2
 Operating pressure: min -0.99 bar - max 12 bar
 Operating temperature: 0°C - +80°C (with dry air -20°C)

The Camozzi range of quick release couplings are designed to assist with the assembly of fluid power components and systems.

For technical specifications see page 4/2

Socket - Male - Thread - Parallel	Socket - Bulkhead Fixing - Parallel	Socket - Female Thread	Socket - Tube Connector - Rapid Fitting
5051 1/8	5052 1/8	5053 1/8	5054 6/4
5051 1/4	5052 1/4	5053 1/4	5054 8/6
5081 1/4	5082 1/4	5083 1/4	5084 8/6
5081 3/8		5083 3/8	5084 10/8
5081 1/2		5083 1/2	
Socket - Bulkhead Tube - Rapid Fitting	Socket - Hose Tube	Socket - Hose Female	Socket - Anti Kink Tube Nut
5055 6/4	5056 06	5057 6x14	5058 6/4
5055 8/6	5056 09	5087 6x14	5058 8/6
	5086 09	5087 8x17	5088 8/6
	5086 12	5087 10x19	5088 10/8
		5087 13x23	
Plug - Male Thread - Parallel	Plug - Female Thread	Plug - Tube Connector - Rapid Fitting	Plug - Hose Tail
5150 1/8	5350 1/8	5450 6/4	5650 06
5150 1/4	5350 1/4	5450 8/6	5650 09
5180 1/4	5380 1/4	5480 8/6	5680 06
5180 3/8	5380 3/8	5480 10/8	5680 09
5180 1/2	5380 1/2		5680 12

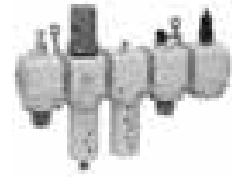
Series 5000 Camozzi Quick-Release Couplings



Plug - Hose Female
5750 6x14
5780 6x14
5780 8x17
5780 13x23



Plug - Anti Kink Tube Nut - Rapid Fitting
5850 6/4
5850 8/6
5880 8/6
5880 10/8



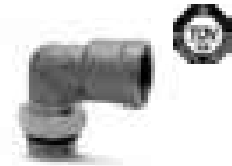
For FRL's
See 3 (Treatment)

Series 9000 C-Truck Air Brake Fittings

New Sizes

Tube external diameters: 4, 6, 8, 10, 12, 15, 16 and 18mm.
 DIN 74324:1996, DIN EN ISO 9227:2006, DIN EN 60068-2-6:1996. NPT versions available on request
 Operating pressure: 0 - 16 bar
 Operating temperature: -50°C - +100°C (see data for tubing used)

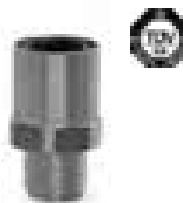
Series C-Truck fittings have been designed for use in the pneumatic braking systems on commercial vehicles and are certified to TUV standards. The range has been designed so that assembly of the tube and fitting is made easy. All fittings are supplied preassembled and are therefore ready to use.



Male Stud	Tube	Thread
9512 6-M10x1	6/4	M10x1
9512 6-M12x1.5	6/4	M12x1.5
9512 6-M14x1.5	6/4	M14x1.5
9512 6-M16x1.5	6/4	M16x1.5
9512 8-M10x1	8/6	M10x1
9512 8-M12x1.5	8/6	M12x1.5
9512 8-M14x1.5	8/6	M14x1.5
9512 8-M16x1.5	8/6	M16x1.5
9512 8-M22x1.5	8/6	M22x1.5
9512 10-7 M12x1.5	10/7	M12x1.5
9512 10-7 M16x1.5	10/7	M16x1.5
9512 10-7 M22x1.5	10/7	M22x1.5
9512 10-M12x1.5	10/8	M12x1.5
9512 10-M16x1.5	10/8	M16x1.5
9512 10-M18x1.5	10/8	M18x1.5
9512 10-M22x1.5	10/8	M22x1.5
9512 12-M12x1.5	12/9	M12x1.5
9512 12-M14x1.5	12/9	M14x1.5
9512 12-M16x1.5	12/9	M16x1.5
9512 12-M22x1.5	12/9	M22x1.5
9512 15-M16x1.5	15/12	M16x1.5
9512 15-M22x1.5	15/12	M22x1.5
9512 15-11 M16x1.5	15/11	M16x1.5
9512 15-11 M22x1.5	15/11	M22x1.5
9512 16-M22x1.5	16/13	M22x1.5
9512 16-12 M16x1.5	16/12	M16x1.5
9512 16-12 M22x1.5	16/12	M22x1.5
9512 18-M22x1.5	18/14	M22x1.5

Service Fitting	Tube	Thread
D6512 4-M10x1*	4/2	M10x1

* = supplied without insert



Male Stud	Tube	Thread
9510 6-02	6/4	1/8 NPTF
9510 05-02	8/6	1/8 NPTF

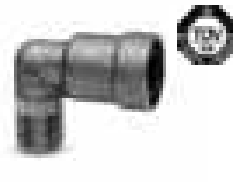
Swivel Elbow	Tube	Thread
9502 6-M10x1	6/4	M10x1
9502 6-M12x1.5	6/4	M12x1.5
9502 6-M16x1.5	6/4	M16x1.5
9502 8-M10x1	8/6	M10x1
9502 8-M12x1.5	8/6	M12x1.5
9502 8-M14x1.5	8/6	M14x1.5
9502 8-M16x1.5	8/6	M16x1.5
9502 8-M22x1.5	8/6	M22x1.5
9502 10-7 M12x1.5	10/7	M12x1.5
9502 10-7 M16x1.5	10/7	M16x1.5
9502 10-7 M22x1.5	10/7	M22x1.5
9502 10-M12x1.5	10/8	M12x1.5
9502 10-M16x1.5	10/8	M16x1.5
9502 10-M22x1.5	10/8	M22x1.5
9502 12-M12x1.5	12/9	M12x1.5
9502 12-M16x1.5	12/9	M16x1.5
9502 12-M22x1.5	12/9	M22x1.5
9502 15-M16x1.5	15/12	M16x1.5
9502 15-M22x1.5	15/12	M22x1.5
9502 15-11 M16x1.5	15/11	M16x1.5
9502 15-11 M22x1.5	15/11	M22x1.5
9502 16-M22x1.5	16/13	M22x1.5
9502 16-12 M16x1.5	16/12	M16x1.5
9502 16-12 M22x1.5	16/12	M22x1.5
9502 18-M22x1.5	18/14	M22x1.5

New Sizes

Series 9000 C-Truck Air Brake Fittings



Female Stud	Tube	Thread
9463 6-M10x1	6/4	M10x1
9463 6-M16x1.5	6/4	M16x1.5
9463 8-M10x1	8/6	M10x1



Fixed Male Elbow	Tube	Thread
9500 6-02	6/4	1/8 NPTF
9500 05-02	8/6	1/8 NPTF



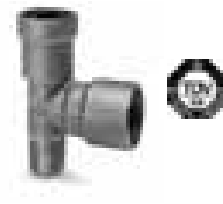
Swivel Branch Tee	Tube	Thread
9412 6-M10x1	6/4	M10x1
9412 6-M12x1.5	6/4	M12x1.5
9412 6-M16x1.5	6/4	M16x1.5
9412 8-M12x1.5	8/6	M12x1.5
9412 8-M16x1.5	8/6	M16x1.5
9412 8-M22x1.5	8/6	M22x1.5
9412 10-7M12x1.5	10/7	M12x1.5
9412 10-7 M16x1.5	10/7	M16x1.5
9412 10-7 M22x1.5	10/7	M22x1.5
9412 10-M16x1.5	10/8	M16x1.5
9412 10-M22x1.5	10/8	M22x1.5
9412 12-M12x1.5	12/9	M12x1.5
9412 12-M16x1.5	12/9	M16x1.5
9412 12-M22x1.5	12/9	M22x1.5
9412 15-M16x1.5	15/12	M16x1.5
9412 15-M22x1.5	15/12	M22x1.5
9412 15-11 M16x1.5	15/11	M16x1.5
9412 15-11 M22x1.5	15/11	M22x1.5



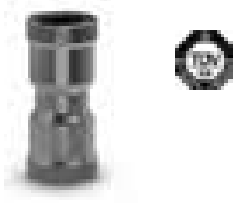
Branch Tee	Tube	Thread
9410 6-02	6/4	1/8 NPTF
9410 05-02	8/6	1/8 NPTF



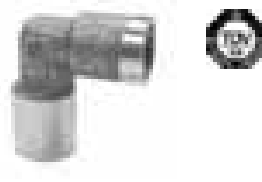
Swivel Run Tee	Tube	Thread
9422 6-M10x1	6/4	M10x1
9422 6-M12-1.5	6/4	M12x1.5
9422 6-M16x1.5	6/4	M16x1.5
9422 8-M12x1.5	8/6	M12x1.5
9422 8-M16x1.5	8/6	M16x1.5
9422 8-M22x1.5	8/6	M22x1.5
9422 10-M16x1.5	10/8	M16x1.5
9422 10-M22x1.5	10/8	M22x1.5
9422 12-M12x1.5	12/9	M12x1.5
9422 12-M16x1.5	12/9	M16x1.5
9422 12-M22x1.5	12/9	M22x1.5
9422 15-M16x1.5	15/12	M16x1.5
9422 15-M22x1.5	15/12	M22x1.5



Run Tee	Tube	Thread
9420 6-02	6/4	1/8 NPTF
9420 05-02	8/6	1/8 NPTF



Tube to Tube Connector	Tube
9580 6	6/4
9580 8	8/6
9580 10-7	10/7
9580 10	10/8
9580 12	12/9
9580 15-11	15/11
9580 16-12	16/12
9580 18-14	18/14

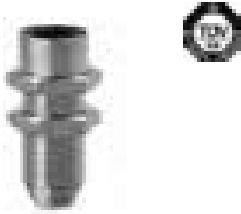


Elbow	Tube
9550 6	6/4
9550 8	8/6
9550 10	10/8
9550 12	12/9

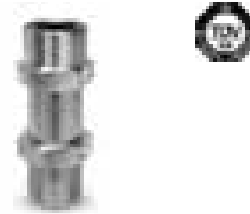


Equal Tube Tee	Tube
9540 6	6/4
9540 8	8/6
9540 10-7	10/7
9540 10	10/8
9540 12	12/9
9540 15-11	15/11

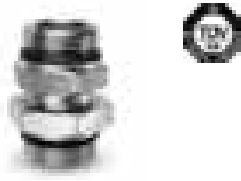
Series 9000 C-Truck Air Brake Fittings



Bulkhead	Tube	Thread
9590 8-M18x1.5	8/6	M18x1.5
9590 12-M18x1.5	12/9	M18x1.5



Bulkhead	Tube A	Tube B	Thread
9592 8-8-M18x1	8/6	8/6	M18x1
9592 12-8-M18x1	12/8	8/6	M18x1



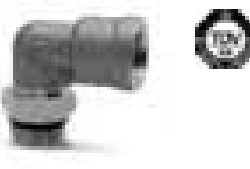
Bulkhead Adaptor	Thread A	Thread B
D2512 M22x1.5-M16x1.5	M22x1.5	M16x1.5
D2502 M22x1.5-M22x1.5	M22x1.5	M22x1.5



Hose Tail	Tube	Thread
D2602 12-M16x1.5	12.5	M16x1.5
D2602 12-M22x1.5	12.5	M22x1.5



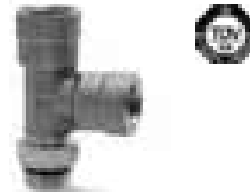
Blanking Plug	Thread
D2612 M12x1.5	M12x1.5
D2612 M16x1.5	M16x1.5
D2612 M22x1.5	M22x1.5



Male Female Elbow	Male Thread	Female Thread
D2022 M16x1.5-M16x1.5	M16x1.5	M16x1.5
D2022 M16x1.5-M22x1.5	M22x1.5	M16x1.5
D2022 M22x1.5-M22x1.5	M22x1.5	M22x1.5



Male Female Tee	Female Thread	Male Thread
D2062 M16x1.5-M12x1.5	M16x1.5	M12x1.5
D2062 M16x1.5-M16x1.5	M16x1.5	M16x1.5
D2062 M16x1.5-M22x1.5	M16x1.5	M22x1.5
D2062 M22x1.5-M22x1.5	M22x1.5	M22x1.5



Male Female Tee	Female Thread	Male Thread
D2072 M16x1.5-M12x1.5	M16x1.5	M12x1.5
D2072 M16x1.5-M16x1.5	M16x1.5	M16x1.5
D2072 M16x1.5-M22x1.5	M16x1.5	M22x1.5
D2072 M22x1.5-M22x1.5	M22x1.5	M22x1.5



Equal Female Tee	Thread
D2003 M16x1.5	M16x1.5
D2003 M22x1.5	M22x1.5



Test Point	Thread A	Thread B
VPC M16x1.5-M16x1.5	M16x1.5	M16x1.5
VPC M22x1.5-M16x1.5	M22x1.5	M16x1.5



Bleed Point	Thread
VDC M22x1.5	M22x1.5



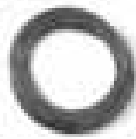
Disconnection Key	Tube
DRK 6	6
DRK 8	8
DRK 10	10
DRK 12	12
DRK 15	15
DRK 16	16
DRK 18	18



Tube Cutters
PNZ-12
PNZ-25



PNZP-12



For Tubing
See 10 (Tubing)



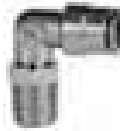
For Fitting Boxes
See 4/28

NPT Push-In Fittings and Adaptors

Tube OD: 1/4 - 3/8 - 1/2

Connections: NPTF 1/8, 1/4, 3/8, 1/2

We have included a small range of popular items for illustration purposes. A full range of NPT fittings is available on request. Please ask for our full NPT Catalogue. For technical specifications see page 4/2





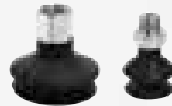
Suction Pads



5 / 2 Series VTCF
Flat Suction Pads (round)



5 / 2 Series VTOF
Flat Suction Pads (oval)

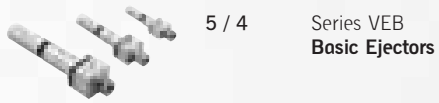


5 / 3 Series VTCL
(1.5 fold) Bellow Suction Pads
(round)



5 / 3 Series VTCN
(2.5 fold) Bellow Suction Pads
(round)

Ejectors



5 / 4

Series VEB
Basic Ejectors



5 / 4

Series VEBL
Basic Ejectors



5 / 5

Series VED
Inline Ejectors



5 / 5

Series VEDL
Inline Ejectors



5 / 6

Series VEC
Compact Ejectors



5 / 7

Series VEM
Compact Ejectors

Accessories



5 / 8

Series NPF
Flexible Suction Pad Mountings



5 / 8

Series NPM - NPR
**Spring Plungers
(non rotating)**



5 / 8

Series VNV
Check Valves

Filters



5 / 9

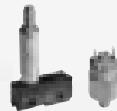
Series FVD
Inline Vacuum Filters



5 / 9

Series FVT
Vacuum Cup Filters

Vacuum Switches



See 2 / 94
Pressure switches and vacuum switches

Series VTCF Flat Suction Pads (round)

Universal suction pads in NBR or Silicone, ideal for a wide range of applications.
Diameters from 3.5 to 95 mm with thread size M3, M5, 1/8, 1/4, both male and female.



CODING EXAMPLE

VT	C	F	-	0035	N	-	M3	M
VT	SERIES: VT = Suction Pad							
C	SHAPE: C = round	0035	DIAMETERS: 0035 = 3.5 mm 0300 = 30.0 mm 0050 = 5.0 mm 0350 = 35.0 mm 0080 = 8.0 mm 0400 = 40.0 mm 0100 = 10.0 mm 0500 = 50.0 mm 0150 = 15.0 mm 0600 = 60.0 mm 0200 = 20.0 mm 0800 = 80.0 mm 0250 = 25.0 mm 0950 = 95.0 mm			M3	THREAD SIZE: M3 M5 1/8 1/4	
F	VERSION: F = flat	N	MATERIALS: N = NBR S = silicone			M	THREAD: M = male F = female	

Series VTOF Flat Suction Pads (oval)

Flat suction pads in NBR or Silicone which thanks to their oval shape can be used to handle narrow and long workpieces.
Diameters from 7x3.5 to 60x20 mm with thread size M3, M5, 1/8, 1/4, both male and female.



CODING EXAMPLE

VT	O	F	-	0070-035	N	-	M3	M
VT	SERIES: VT							
O	SHAPE: O = oval	0070-035	DIAMETERS: 0070-035 = 7.0 x 3.5 mm 0150-050 = 15.0 x 5.0 mm 0180-060 = 18.0 x 6.0 mm 0300-100 = 30.0 x 10.0 mm 0450-150 = 45.0 x 15.0 mm 0600-200 = 60.0 x 20.0 mm			M3	THREAD SIZE: M3 M5 1/8 1/4	
F	VERSION: F = flat	N	MATERIALS: N = NBR S = silicone			M	THREAD: M = male F = female	

Series VTCL (1.5 folds) Bellows Suction Pads (round)

Bellows suction pads available in NBR or Silicone which allow an optimal damping when placed on the workpiece.
Diameters from 11 to 53 mm with thread size M5, 1/8, 1/4, both male and female.



CODING EXAMPLE

VT	C	L	-	110	N	-	M5	M
VT	Series: VT = suction pad							
C	SHAPE: C = round	110	DIAMETERS: 110 = 11.0mm 250 = 25.0mm 140 = 14.0mm 330 = 33.0mm 160 = 16.0mm 430 = 43.0mm 200 = 20.0mm 530 = 53.0mm				M5	THREAD SIZE: M5 1/8 1/4
L	VERSION: L = bellows 1.5 folds	N	MATERIALS: N = NBR S = Silicone				M	THREAD: M = male F = female

Series VTCN (2.5 folds) Bellows Suction Pads (round)

Bellows suction pads available in NBR or Silicone, are suitable to handle uneven workpiece surfaces or workpiece with major height differences.
Diameters from 5 to 52 mm with thread size M5, 1/8, 1/4, both male and female.



CODING EXAMPLE

VT	C	N	-	050	N	-	M5	M
VT	SERIES: VT							
C	SHAPE: C = round	050	DIAMETERS: 050 = 5.0 mm 200 = 20.0 mm 070 = 7.0 mm 250 = 25.0 mm 090 = 9.0 mm 320 = 32.0 mm 120 = 12.0 mm 420 = 42.0 mm 140 = 14.0 mm 520 = 52.0 mm 180 = 18.0 mm				M5	THREAD SIZE: M5 1/8 1/4
N	VERSION: N = 2.5 bellows	N	MATERIALS: N = NBR S = silicone				M	THREAD: M = male F = female

Series VEB Basic Ejectors

Basic ejectors with no moving parts, based on the Venturi principle.
Version "L" for porous workpieces, version "H" for high vacuum value.



CODING EXAMPLE

VE	B	-	05	H
VE	SERIES: VE = vacuum ejector		05	NOZZLE DIAMETER (mm): 05 = 0.5 mm 20 = 2 mm 07 = 0.7 mm 25 = 2.5 mm 10 = 1 mm 30 = 3 mm 15 = 1.5 mm
B	VERSION: B = basic		H	SUCTION TYPE: H = high vacuum L = high suction rate

Series VEBL Basic Ejectors

Basic ejectors in technopolymer without moving parts, based on the Venturi principle.
Different sizes available, with internal nozzle from 0.5 to 2.5 mm
and with suction rate from 8 to 207 l/min.



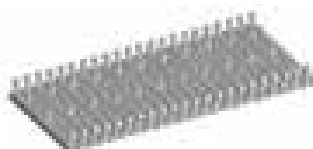
CODING EXAMPLE

VE	BL	-	10H	-	T2
VE	SERIES: VE = Vacuum ejector		10H	NOZZLE DIAMETER (mm): 05H = 0.5 mm 15H = 1.5 mm 07H = 0.7 mm 20H = 2 mm 10H = 1 mm 25H = 2.5 mm	
BL	VERSION: BL = basic light		T2	TYPE OF CONNECTION (ON SUPPLY SIDE): T1 = plier - tube Ø4 T3 = plier - tube Ø8 T2 = plier - tube Ø6	

Accessories

Bracket-Foot

VEBL-ST



Fixing Elements

VEBL-PCF



Series VED Inline Ejectors

Vacuum ejectors without moving parts, based on the Venturi principle, used for direct installation on suction pads.



CODING EXAMPLE

VE		D	-	07
VE	SERIES: VE = Vacuum ejector	D	VERSION: D = in line	07 NOZZLE DIAMETER: 07 = 0.7 mm 09 = 0.9 mm

Series VEDL Inline Ejectors

Vacuum compact ejectors in technopolymer without moving parts, based on the Venturi principle, used for direct installation on suction pads.
Available in two sizes with internal nozzle of 0.5 and 0.7 mm and with suction rate from 8 to 16 l/min.



CODING EXAMPLE

VE		DL	-	05	-	T1
VE	SERIES: VE = Vacuum ejector			05	NOZZLE DIAMETER (mm): 05 = 0.5 mm 07 = 0.7 mm	
		DL	VERSION: DL = Inline light			T1 TYPE OF CONNECTION (ON SUPPLY SIDE): T1 = plier - tube Ø4

Series VEC Compact Ejectors

Vacuum generators with integrated valves and monitoring system.
Possibility to command suction and blow-off individually without using external valves.



CODING EXAMPLE

VE	C	-	10	C	-	2	-	RD
VE	SERIES: VE = Vacuum ejector		10	NOZZLE DIAMETER: 10 = 1.0 mm 15 = 1.5 mm 20 = 2.0 mm 25 = 2.5 mm		2	VERSION: 2 = with Blow-off valve	
C	VERSION: C = compact		C	VALVE FUNCTION: C = NC (suction OFF when not activated) A = NO (suction ON when not activated)		RD	VALVE TYPE: RD = with air saving system and digital vacuum switch (with display)* RE = with air saving system and electronic vacuum switch * VD = without air saving system, digital vacuum switch (with display) VE = without air saving system, with electronic vacuum switch	

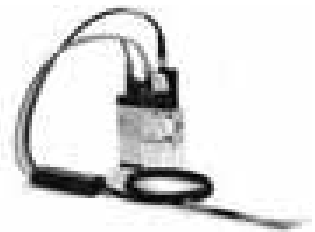
* Delivered complete with connectors and cables

Connector for Ejector mod. VEC
Models: VEC-20;
VEC-25;



Part Number
126-800

Air-Saving System



Part Number

VEC-10/15-A	A = version Normally Open
VEC-10/15-C	C = version Normally Closed
VEC-20/25-A	A = version Normally Open
VEC-20/25-C	C = version Normally Closed

Cable for Switch and Ejectors



CS-DF04EG-E500

CS-DR04EG-E500



DIMENSIONS

Part Number Cable type

CS-DF04EG-E500 - Circular connector M8 4 poles with protection class IP65, with polyurethane non shielded cable, length 5 mt.

CS-DR04EG-E500 - Circular connector M8 4 poles 90° degrees with protection class IP65, with polyurethane non shielded cable, length 5 mt.

Series VEM Compact Ejectors

Miniaturized vacuum generators with integrated valves and monitoring system.
Possibility to command suction and blow-off individually without using external valves.



CODING EXAMPLE								
VE	M	-	05	C	2	-	VE	
VE	SERIES: VE = Vacuum ejector		05	NOZZLE DIAMETER: 05 = 0.5 mm 07 = 0.7 mm 10 = 1.0 mm		2	VERSION: 2 = with Blow-off valve	
M	VERSION: M = compact, mini		C	VALVE FUNCTION: C = NC (suction OFF when not activated) A = NA (suction ON when not activated)		VE	VERSION: VE = without air saving system, with electronic vacuum switch	

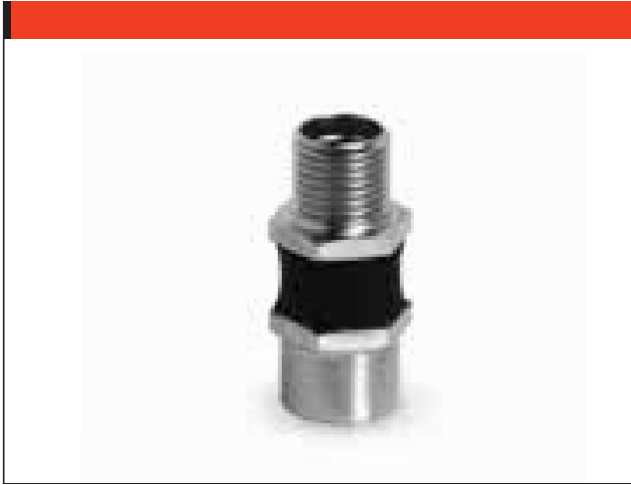
Connector for Ejector Mod VEC and VEM
Connector for ejector Models:
VEC-10; VEC-15; VEM-05; VEM-07; VEM-10.



DIMENSIONS	
Part Number	Cable length
121-803	300 mm
121-806	600 mm
121-810	1000 mm

Series NPF Flexible Suction Pad Mountings

The vulcanisation provides flexibility in all directions.
Thread G1/4.



CODING EXAMPLE

NPF	-	FM	-	1/4	-	M10X1.25
NPF	SERIES: NPF = Flexible suction pad mounting			1/4	THREADS G1: 1/4 = G1/4	
FM	VERSION: FM = G1 female / G2 male			THREADS G2: M10X1.25 = M10X1.25 1/4 = G1/4		

Series NPM - NPR Spring Plungers (non rotating)

The spring plungers are used in situations where significant height differences of the workpiece have to be compensated for.
Thread size M3, M5, G1/8, G1/4, plunger stroke length from 5 to 75 mm.



CODING EXAMPLE

NPM	-	FM	-	1/4	-	75
NPM	SERIES: NPM = Spring plunger NPR = Spring plunger - non-rotating					
FM	VERSION: FM = G1 female / G2 male FF = G1 female / G2 female			75	COMPENSATION STROKE: 05 = 5mm 10 = 10mm 15 = 15mm 20 = 20mm 25 = 25mm 50 = 50mm 75 = 75mm	
1/4	THREADS: M3 M5 1/8 1/4					

Series VNV Check Valves

These check valves are mainly used on vacuum gripper systems containing multiple suction pads in order to shut off individual suction pads which are not covered. Thread size M5, G1/8, G1/4, G3/8, G1/2.



CODING EXAMPLE

VNV	-	MF	-	M5	
VNV	SERIES: VNV = Check valve				
MF	VERSION: MF = G1 male / G2 female FM = G1 female / G2 male			M5	THREAD SIZE: M5 1/8 1/4 1/2

Series FVD Inline Vacuum Filters

For use in vacuum systems with minor to medium levels of dirt.
Direct mounting on the suction pad.



CODING EXAMPLE

FVD	6/4	-	50
FVD SERIES: FVD	6/4 CONNECTIONS: 6/4 = tube 6 8/6 = tube 8	50 FILTER ELEMENT: 50 = 50 µm	

Series FVT Vacuum Cup Filters

Used as pre-filters and fine filters for air with varying amounts of contamination,
for the protection of the vacuum generator. Mounted as protection for the ejector.



CODING EXAMPLE

FVT	-	FF	-	1/4	-	80
FVT SERIES: FVT = Cup filter		1/4 CONNECTIONS: 1/8, 1/4, 3/8, 1/2, 3/4				
FF THREAD SIZE: FF = female -female		80 FILTER ELEMENT: 80 = 80 µm				

Accessories

Mounting Foot Bracket

The mod. FVT-FF-1/8-80-B is used on cup filters with ports 1/8, 1/4, 3/8 and 1/2.

The mod. FVT-FF-3/4-80-B is used on cup filters with ports 3/4.



6 > Ball Valves & Non Return Valves



Brass Two-Way Ball Valves (Economy)



6 / 2 **Mini Ball Valves**
- Economy



6 / 3 **Brass Ball Valves**
- Economy

Brass Two-Way Ball Valves (Premium)



6 / 4 **Mini Ball Valves**



6 / 5 **Brass Ball Valves**
- Gas/WRAS Approved

Stainless Steel Two-Way Ball Valves



6 / 6 **Economy Stainless Steel Ball**
Valves - Two-Piece Design

Eurofly Valves



6 / 7

Eurofly Valves

Brass Three-Way Ball Valves



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**Brass Ball Valves
Three-Way**

Direct Mount Ball Valves (for actuation)



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**Brass Ball Valves
- with ISO Pad**



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**Stainless Steel Ball Valves
- with ISO Pad**

Non-Return Valves



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Non-Return Valves

Exhausting Brass Ball Valves



6 / 10

**Brass Ball Valves
- Exhausting**



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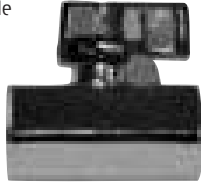
Lockable Safety Ball Valve

Mini Ball Valves - Economy

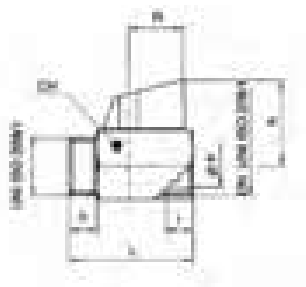
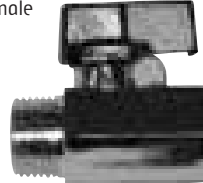
Connections: 1/4, 3/8, 1/2

Our range of Mini Ball Valves offers a wide variety of choices for the design engineer.

Part Number: AV5003
Lever - Female/Female



Part Number: AV5004
Lever - Male/Female



Dimensions (mm)

Part Number		l	l1	L	h	R	Ch
AV5003	1/4	10	-	40	22	18	20
AV5003	3/8	10	-	40	22	18	20
AV5003	1/2	10	-	43	30	22	20

Dimensions (mm)

Part Number		L	L1	h	h1	R	Kv
AV5004	1/4	40	-	29	13.8	20.5	4.3
AV5004	3/8	40	-	29	13.8	20.5	2.7
AV5004	1/2	43	-	31	15.8	20.5	5.4

Technical Data

Media

Most non-corrosive liquids including air, water and fuels

Operating Pressure

10 bar (147 p.s.i.)

Operating Temperature

-10°C to +90°C

Materials

Brass - Bright Nickel Finish

Actuation Details

90° rotation of lever

We recommend that the valve is used in either the fully open or fully closed position. In addition, the valve should be actuated at least twice a year

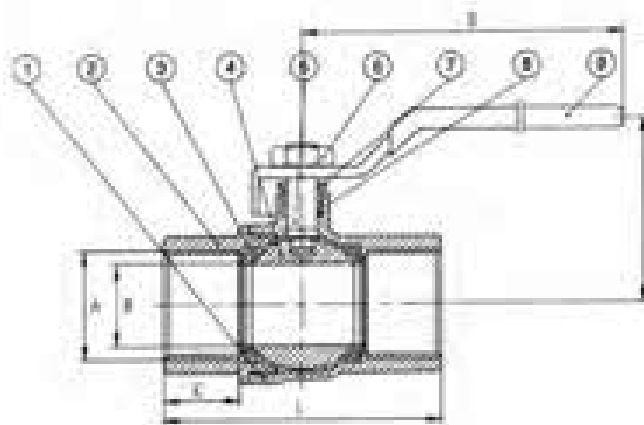
Brass Ball Valves - Economy

Connections: 1/4, 3/8, 1/2, 3/4, 1, 1 1/4, 1 1/2, 2

Our economy range of Brass Ball Valves offering a cost saving solution suitable for many applications.

Part Number: AV6000

Steel Handle with plastic sleeve - Female/Female



Dimensions (mm)						
Part Number		L	D	H	B	E
AV6000	3/8	45.5	86	36	10	13.5
AV6000	1/2	57.7	88	40	15	14.5
AV6000	3/4	67	88	44	20	15.5
AV6000	1	88.8	111	58	25	20
AV6000	1 1/4	94.5	130	66.5	32	21.5
AV6000	1 1/2	102.9	130	70.5	40	22
AV6000	2	126.3	158	83	50	20

Technical Data

Media

Most non-corrosive liquids and gases including air, water, solvents and fuels.

Operating Pressure

16 Bar (230 p.s.i.)

Operating Temperature

-10°C to +90°C

Materials

- ① Body: Nickel plated brass
- ② Bonnet: Brass
- ③ Seat: PTFE
- ④ Ball: Chrome plated brass
- ⑤ Stem: Brass
- ⑥ Nut: Brass
- ⑦ Press nut: Brass
- ⑧ Gasket: PTFE
- ⑨ Lever Handle: Steel with plastic sleeve
- Seals: PTFE

Actuation

90° rotation of the lever.

We recommend that the valve is used in either the fully open or fully closed position. In addition, the valve should be actuated at least twice a year

Mini Ball Valves

Connections: 1/8, 1/4, 3/8, 1/2

Our range of Mini Ball Valves offers a wide variety of choices for the design engineer.

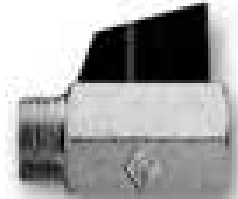
6

BALL VALVES & NON RETURN VALVES

Part Number: 3830*
Lever - Female/Female



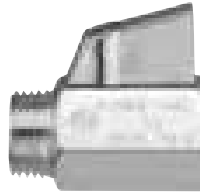
Part Number: 3831*
Lever - Male/Female



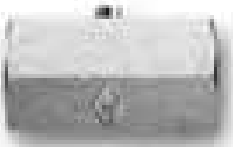
Part Number: 3730*
Lever - Female/Female



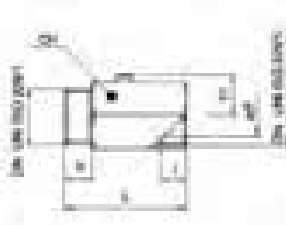
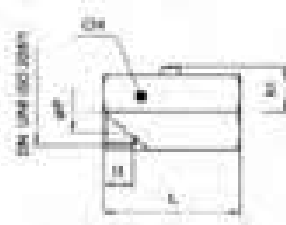
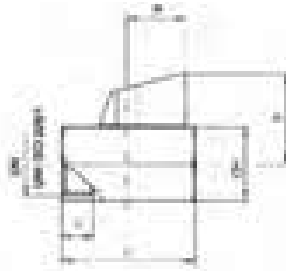
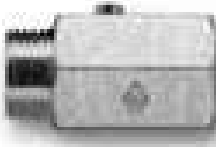
Part Number: 3731*
Lever - Male/Female



Part Number: 3860*
Screwdriver - Female/Female



Part Number: 3861*
Screwdriver - Male/Female



Technical Data

Media

Most non-corrosive liquids and gases including air, water and fuels

Operating Pressure

10 bar (147 p.s.i.)

Operating Temperature

-20°C to +90°C (detail of valves for higher temperatures available on request)

Flow Rate

Flow rates stated in Kv: Flow coefficient in m³/h at differential pressure of 100kPa

Threads

UNI ISO 228/1

Materials

Body: Brass, chrome plated, types 3730 and 3731 polished chrome plated

Handle: Plastic, types 3830 and 3831 black, types 3730 and 3731 plastic chromed

Ball: Brass, chrome plated

Main Seal: PTFE

Stem Seal: NBR. Viton on request

Actuation Details

90° rotation of lever

We recommend that the valve is used in either the fully open or fully closed position. In addition, the valve should be actuated at least twice a year

Additional Options

NPT available on request

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.

Dimensions (mm)

	ØP	C/H	I	L	h	h1	R	Kv
*1/8	8	21	8	41	29	13.8	20.5	4.3
*1/4	8	21	10	41	29	13.8	20.5	4.3
*3/8	8	21	10	41	29	13.8	20.5	2.7
*1/2	10	25	11	46	31	15.8	20.5	5.4

Brass Ball Valves - Gas/WRAS Approved

Connections: 1/4, 3/8, 1/2, 3/4, 1, 1 1/4, 1 1/2, 2, 2 1/2, 3, 4

Our range of Brass Ball Valves offering a cost saving solution suitable for many applications.

Part Number: 1600*
Aluminium Handle - Female/Female



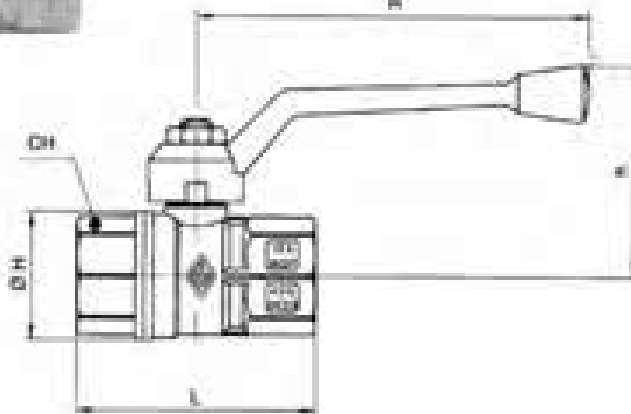
Part Number: 1620* (1/4 - 1 only)
Aluminium Butterfly Handle - Female/Female



Part Number: 1610*
Steel with Black Plastic Coated Handle - Female/Female

Part Number: 6273*
Steel with Yellow Plastic Coated Handle - Female/Female

Gas approved to BSEN331 1998



Dimensions (mm) and Pressures									
	DN	L	H	CH	R	h	Kv	PN	Kg
*1/4	8	51.5	23	20	95	48	5.4	64	0.14
*3/8	10	51.5	23	20	95	48	6	64	0.13
*1/2	15	59	30	25	95	52	16.3	30	0.17
*3/4	20	67	36	31	110	60	29.5	30	0.29
*1	25	81.5	43.5	38	110	70	43	30	0.44
*1 1/4	32	94	53	48	160	77.5	89	25	0.76
*1 1/2	40	102.4	65	54	160	82.5	230	25	1.02
*2	50	123	80	67	170	102	265	25	1.75
*2 1/2	65	152	111	90	205	123	540	25	3.71
*3	80	177	136	105	205	133	873	25	5.90
*4	100	114	166	130	260	165	1390	25	10.00

Technical Data

Media
Most non-corrosive liquids and gases including air, water, solvents and fuels.

6273 range gas approved to BSEN331 1998

Operating Pressure
Nominal working pressure (PN) in bar.
(see chart)

Operating Temperature
-20°C to +130°C

Flow Rates
Flow rates stated in Kv: Flow coefficient in m³/h at differential pressure of 100kPa

Threads
Female-Female UNI ISO 7/1

Materials
Body: Nickel plated brass
Ball: Chromed brass
Seals: PTFE
Stem Seals: NBR
Lever Handle: Steel black enamelled
'T' Handle: Aluminium black enamelled

Actuation
90° rotation of the lever.
We recommend that the valve is used in either the fully open or fully closed position. In addition, the valve should be actuated at least twice a year

Additional Options
Suitable for vacuum applications: maximum 10³ torr. The Series 1600 valve range is only illustrated in this catalogue up to 2". It is also available in sizes 2 1/2", 3" and 4".
Lockable handle available on request

Special Requests
For assistance, contact our technical office or your local Camozzi distributor.

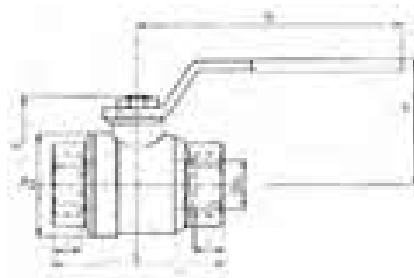
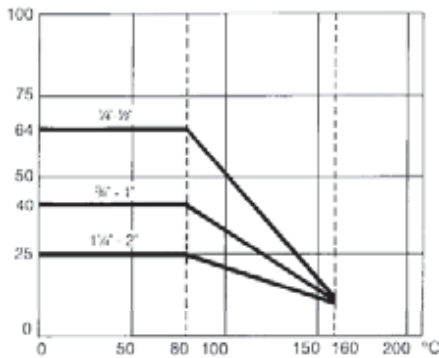
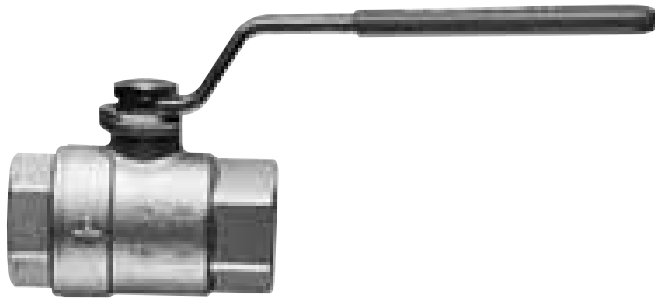
Economy Stainless Steel Ball Valves - Two-Piece Design

Connections: 1/4, 3/8, 1/2, 3/4, 1, 1 1/4, 1 1/2, 2

6

Part Number: 704000*

2-piece Stainless Steel Quarter Turn Ball Valve with all wetted parts Stainless Steel AISI316. Other metal parts in Stainless Steel AISI304. Available with NPT Threads.



Dimensions (mm) and Pressures											
	Size	DN	U Bore	A	H	I	L	R	P	Kv	PN
*02	1/4	8	10	28	30	10	53.5	110.5	44.5	5.4	64
*03	3/8	10	10	28	30	10	53.5	110.5	44.5	6	64
*04	1/2	15	14.2	30.5	32.5	13	60	110.5	47	16.3	64
*05	3/4	20	19	37	40	14	70	131.5	54.5	29.5	40
*06	1	25	24.2	41	49	17	79	131.5	58.5	43	40
*07	1 1/4	32	30	50	62	19	91	174.5	70	89	25
*08	1 1/2	40	38	57	75	19.5	103	174.5	76.5	230	25
*10	2	50	50	66	95	22.5	124	174.5	86	265	25

Technical Data

Media

Any application with media suitable to material of construction

Operating Pressure

Nominal working pressure (PN) in BAR -
See chart
Vacuum: Maximum 10⁻³ torr.

Operating Temperature

-20°C to +160°C

Flow Rates

Flow rates stated in Kv: Flow coefficient in m³/h at differential pressure of 100kPa

Threads

ISO 228/1

Materials

Body: CF8M Stainless Steel
Ball: CF8M Stainless Steel
Seals: PTFE
Handle: Stainless Steel AISI430 with plastic grip

Actuation

90° rotation of lever
We recommend that the valve is used in either the fully open or fully closed position. In addition, the valve should be actuated at least twice a year

Additional Options

700023 - Female/Female NPT

Special Requests

For assistance, contact our technical office.

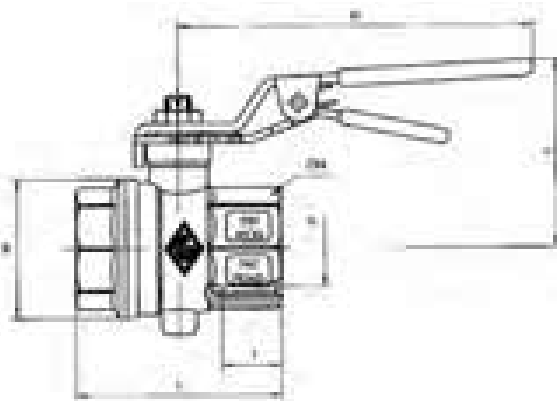
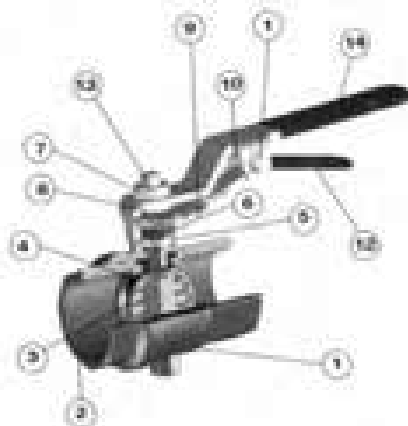
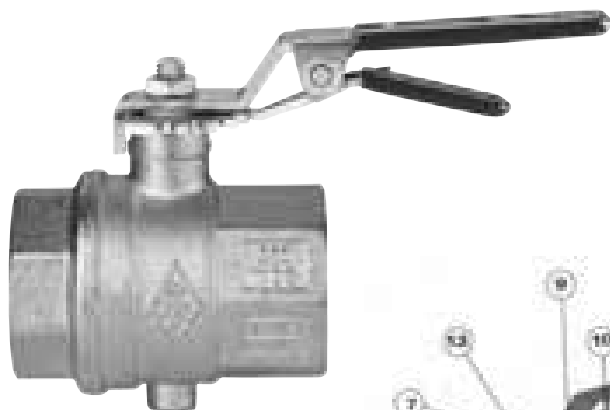
Eurofly Valves

Connections: 1/2, 3/4, 1, 1 1/4, 1 1/2, 2, 2 1/2, 3, 4

New patented design Brass Butterfly Valve with Throttling Lever offers the user the ability of total control of line media with the benefit of no back cavity, anti-water hammer, reduced lime scale build up and competitive prices.

Part Number: 600000*

Steel Flow Control Lever - Female/Female



Dimensions (mm)

	Thread	DN	P	I	L	H	CH	R	h	Kv	Kg
*04	1/2	15	16	15	48.5	31	25	95	46.5	8.5	0.19
*05	3/4	20	21	16.3	56	38	31	95	50.5	17	0.25
*06	1	25	27	19.1	64	46	38	95	54	27	0.36
*07	1 1/4	32	34	21.4	76	55.5	48	120	71.5	50	0.67
*08	1 1/2	40	41	21.4	82	65.5	54	120	76.5	82.5	0.88
*10	2	50	52	25.7	93	77.5	67	150	86.5	136.5	1.33
*12	2 1/2	65	65	30.2	112	102	90	205	115	240	3.35
*14	3	80	80	33.3	129.5	122	105	205	125	340	4.90
*18	4	100	103	39.3	146	145	130	205	140	550	6.50

Technical Data

Media

Most non-corrosive liquids and gases including air, water, solvents, fuels and propane.

Operating Pressure

16 bar max

Operating Temperature

-10°C to +130°C

Flow Rates

Flow rates stated in Kv: Flow coefficient in m³/h at differential pressure of 100kPa

Threads

UNI ISO 7/1

Material

- ① Body: Brass CW 617N UNI EN 12165 Nickel-plated
- ② Sleeve: Brass CW 617N UNI EN 12165 Nickel-plated
- ③ Disc: Pei-polyetherimide.
- ④ Seal: NBR 80sh
- ⑤ Stem Seal: P.T.F.E - Teflon
- ⑥ Gland: Brass CW 617N UNI EN 12164
- ⑦ Nut: Steel 6 s
- ⑧ Seal: P.T.F.E - Teflon
- ⑨ Throttling Plate: Steel Fe P11 - UNI 5887
- ⑩ Spring: Stainless steel - AISI 302
- ⑪ Pin: Steel
- ⑫ Handle: Coated steel - P11 UNI 5867
- ⑬ Stem: Brass CW 617N UNI EN 12164
- ⑭ Lever-Handle: art. 600000 Coated steel Fe P11 UNI 5867 art. 600001 Aluminium

Actuation

90° rotation of lever
We recommend that the valve is used in either the fully open or fully closed position. In addition, the valve should be actuated at least twice a year

Additional Options

EPDM and Viton Seals for higher temperature applications

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.

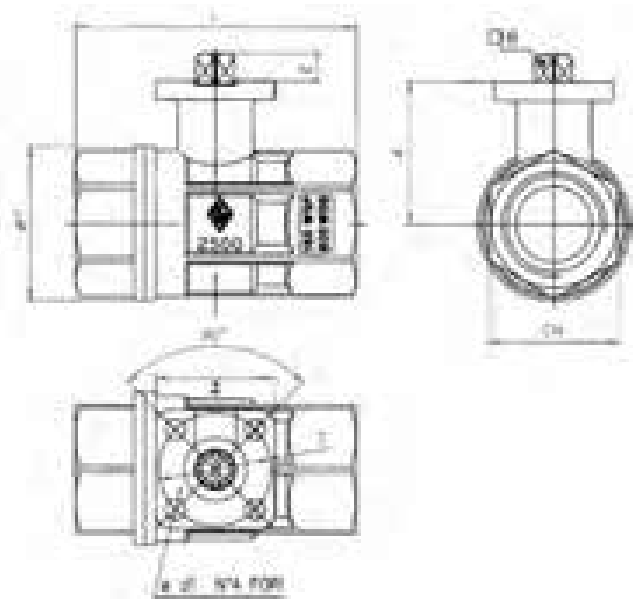
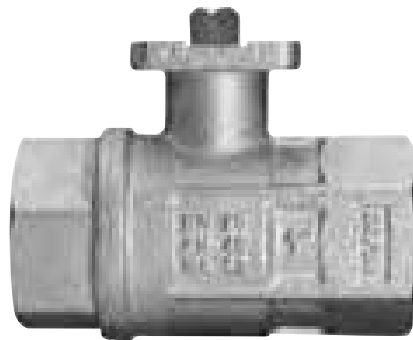
Brass Ball Valves - with ISO Pad

Connections: 1/4, 3/8, 1/2, 3/4, 1, 1 1/4, 1 1/2, 2, 2 1/2, 3, 4

Full bore brass ball valves with ISO 5211 mounting pad for direct mounting of pneumatic/electric actuators for on-off applications of most non-corrosive media. Body seals energised with Viton 'O' rings.

Only for actuation - no lever available

Part Number: 2500*



Dimensions (mm) and Pressures

	DN	2	A	B	C	d1	E	H	L	Kv	PN	Torque
*1/4	8	38	32.5	9	36	6	9	33.5	67	5.4	40	6 NM
*3/8	10	38	32.5	9	36	6	9	33.5	67	6	40	6 NM
*1/2	15	38	32.5	9	36	6	9	33.5	67	16.3	40	6 NM
*3/4	20	38	34.5	9	36	6	9	40	76	29.5	40	6 NM
*1	25	38	45.5	9	36	6	9	49	90	43	40	6 NM
*1 1/4	32	38	59	9	36	6	9	58.5	102	89	40	6 NM
*1 1/2	40	50	64	11	50	7	11	73	114	230	40	17 NM
*2	50	50	73.25	11	50	7	11	91.5	138	265	40	17 NM
*2 1/2	65	70	88.5	14	70	9	15	114.5	165	540	25	31 NM
*3	80	70	98	14	70	9	15	136	188	873	16	31 NM
*4	100	70	116.5	17	70	9	17.5	166	225	1390	16	73 NM

Technical Data

Media

Most non-corrosive liquids and gases including air, water, solvents, fuels and propane

Operating Pressure

See chart

Operating Temperature

-20°C to +160°C

Flow Rates

Flow rates stated in Kv: Flow coefficient in m³/h at differential pressure of 100kPa

Threads

UNI ISO 7/1

Materials

Body: Brass, nickel plated
Ball: Brass, chrome plated
Seals: PTFE with Viton 'O' Ring
Size: 1/4" to 4" UNI ISO 7/1

Actuation Details

Refer to chart for torque and pad details

Additional Options

NPTF - Series 250N



Available with spring return (dead mans) lever.



Available with Pneumatic Actuators



Available with Electric Actuators

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.

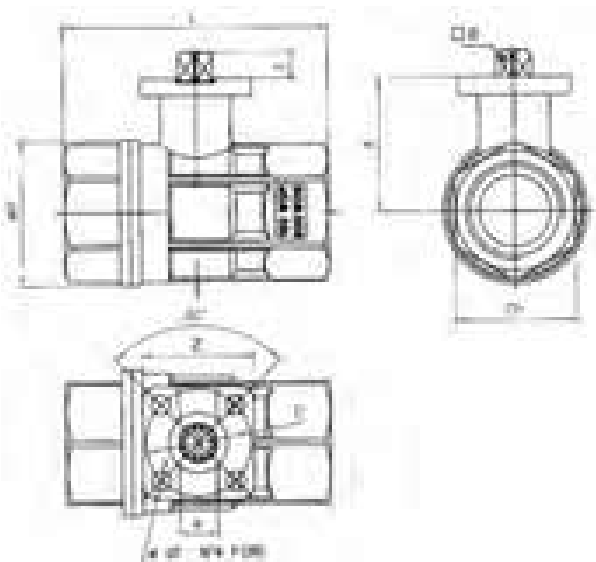
Stainless Steel Ball Valves - with ISO Pad

Connections: 1/2, 3/4, 1, 1 1/4 1 1/2, 2

Full bore brass ball valves with ISO 5211 mounting pad for direct mounting of pneumatic/electric actuators for on-off applications of most non-corrosive media. Body seals energised with Viton 'O' rings.

Only for actuation - no lever available

Part Number: 703000*



Technical Data

Media

Any application with media suitable to stainless steel (materials of construction)

Operating Pressure

10⁻³ torr max vacuum to 64 bar

Operating Temperature

-20°C to +160°C

Flow Rates

Flow rates stated in Kv: Flow coefficient in m³/h at differential pressure of 100kPa

Threads

ISO 7/1 RP

Materials

Body: CF8M

Ball: AISI 316

Seals: PTFE with Viton 'O' Ring

Stem: AISI 316

Size: 1/4 to 2 UNI ISO 7/1

Actuation Details

Refer to chart for torque and pad details

Additional Options

NPTF - Series 700076



Available with spring return (dead mans) lever.



Available with Pneumatic Actuators



Available with Electric Actuators

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.

Dimensions (mm) and Pressures

	Threads	DN	U Bore	L	H	A	B	E	C	1	Z	Kv	PN	Torque
*04	1/2	15	14.2	67	34.5	41.5	9	9	36	6	38	16.3	64	6 NM
*05	3/4	20	19	78	42	43.5	9	9	36	6	38	29.5	64	6 NM
*06	1	25	24.5	90	51.5	53.5	9	9	36	6	38	43	64	6 NM
*07	1 1/4	32	30	100	64.5	57	9	9	36	6	38	89	64	6 NM
*08	1 1/2	40	38	112	77	74	11	11	50	7	50	230	64	17 NM
*10	2	50	50	135	97	83.25	11	11	50	7	50	265	64	17 NM

Brass Ball Valves - Exhausting

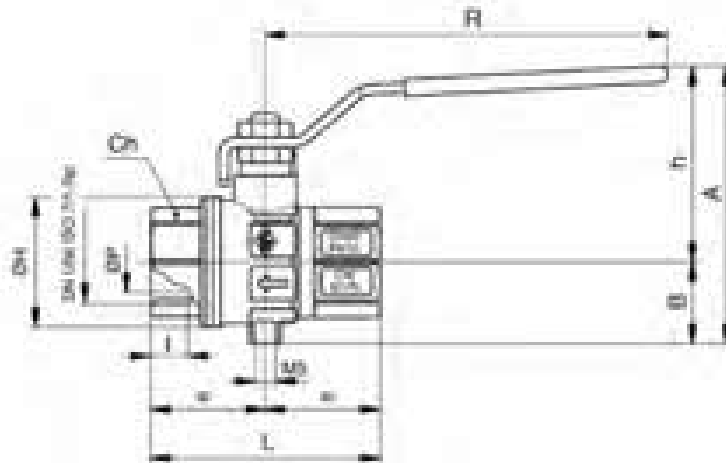
Connections: 1/4, 3/8, 1/2, 3/4, 1

For use as an on-off valve for pneumatic systems.

In the off position, downstream air is exhausted to atmosphere through a small vent hole in the valve body.

In this way the danger of pressurised air remaining in the system after shut-off can be eliminated.

Part Number: 5110*



Dimensions (mm) and Pressures

Thread	DN	ØP	A	B	h	ØH	I	L	R	Ch	Kv	PN	Kg
*1/4	8	10	59.5	17.5	42	28	11	52	96	22	5.4	10	0.20
*3/8	10	10	59.5	17.5	42	28	11.4	52	96	22	6	10	0.19
*1/2	15	15	66	20	46	33	15	62	96	25	16.3	10	0.22
*3/4	20	20	82.5	24.5	58	39	16.3	69	121	31	29.5	10	0.36
*1	25	25	98	36	62	49	19.1	83	121	41	43	10	0.55

Technical Data

Media

Compressed Air

Operating Pressure

10 bar

Operating Temperature

-10°C to +100°C

Flow Rates

Flow rates stated in Kv: Flow coefficient in m³/h at differential pressure of 100kPa

Threads

UNI ISO 7/1

Materials

Body: Brass, nickel plated

Ball: Brass, hard chrome

Seals: PTFE

Handle: Steel zinc plated, red plastic coated

Direction flow: As indicated by arrow

Connections: 1/4 to 1 UNI ISO 7/1

Flow coefficient m³/h - see Kv column of dimensions

Actuation Details

As per 1700 valve

Additional Options

Lockable handle

Special Requests

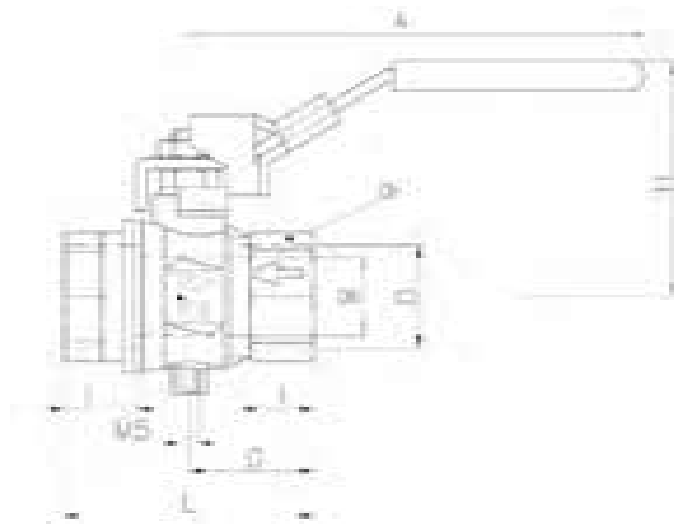
For assistance, contact our technical office or your local Camozzi distributor.

Lockable Safety Ball Valve

Connections: 1/4, 3/8, 1/2, 1

Our lockable safety ball valve is for use as an on-off valve for pneumatic systems. In off position, vent hole in valve body allows air to be exhausted. In the off position, downstream air is exhausted to atmosphere through a small vent hole in the valve body. Locking feature allows maintenance and setting activities to be carried out safely on the system and prevents air supply being reactivated inadvertently.

Part Number: S93*



	D(inch)	DN(mm)	J(mm)	L(mm)	G(mm)	A(mm)	H(mm)	AF(mm)
*B00	1/4	8	12	45	22.5	96	47.5	20
*C00	3/8	9.5	12	45	22.5	96	47.5	20
*D00	1/2	15	15.5	59	29.5	96	52	25
*F00	1	24	21	81	40.5	117	63.5	40

Technical Data

Media

For use as an on-off valve for pneumatic systems

Operating Pressure

0 to 16 bar

Operating Temperature

-20°C to +90°C

Threads

UNI ISO 7/1

Materials

Body: Brass, nickel plated

Ball: Brass, hard chrome

Seals: PTFE

Handle: Steel zinc plated, blue plastic coated

Direction flow: As indicated by arrow

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.

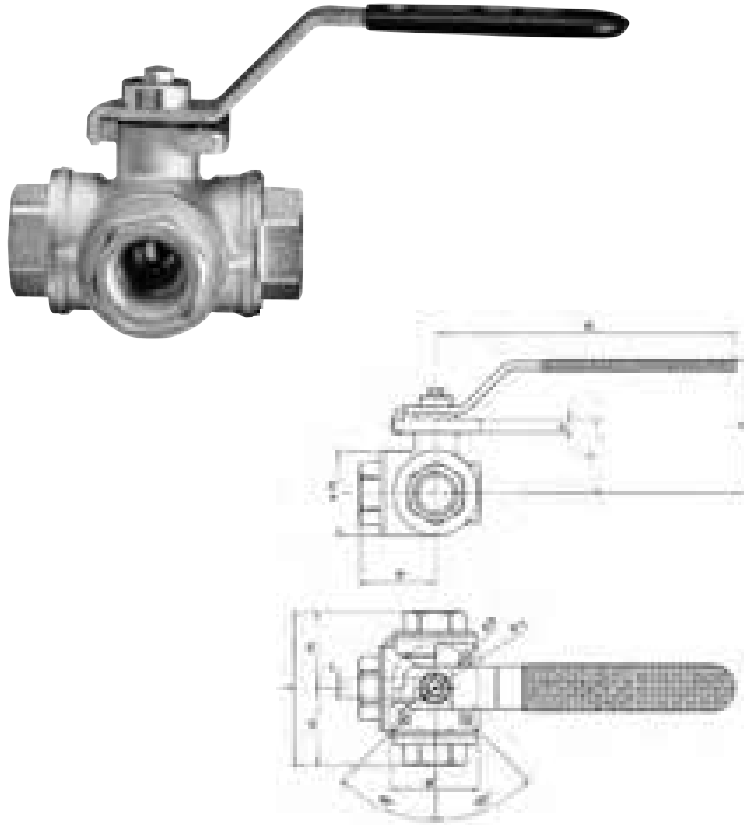
Brass Ball Valves Three-Way

Connections: 1/4, 3/8, 1/2, 3/4, 1, 1 1/4, 1 1/2, 2

6

Full bore, 3-way L-port or T-port ball valves for control of air, water, oil and some solvents and fuels. On site selection of desired flowpath by simple lever positioning system (see chart below). ISO Pad for direct mounting of actuator.

Part Number: 3500* (T-port), 3600 (L-Port)



Technical Data

Media

Most non-corrosive liquids and gases including air, water, solvents, fuels and propane.

Operating Pressure

10⁻³ torr vacuum to see chart

Operating Temperature

-20°C to + 160°C

Flow Rates

Flow rates stated in Kv: Flow coefficient in m³/h at differential pressure of 100kPa

Threads

UNI ISO 7/1

Materials

Body: Brass, Nickel-plated
Balls: Brass, hard chromed
Seal: PTFE and VITON
Lever: Steel, plastic coated black

Actuation Details

90° rotation of lever. We recommend that the valve is used in either the fully open or fully closed position. In addition, the valve should be actuated at least twice a year

Additional Options

NPTF - NPT

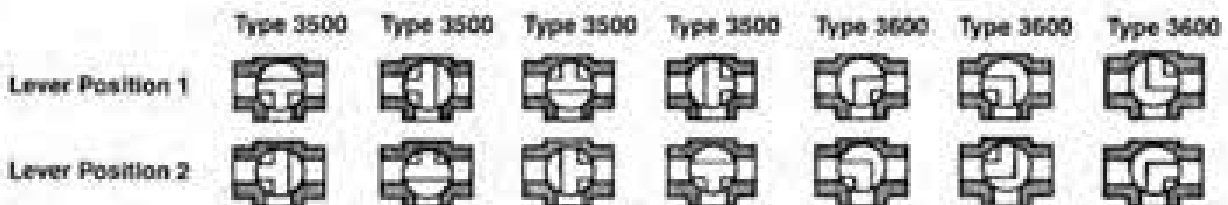
Special Requests

For assistance, contact our technical office or your local Camozzi distributor.

Dimensions (mm) and Pressures

Size	DN	H	L	m	R	h	Øb	Øc	e	f	g	∇	n	Kv	PN	Torque
*1/4	8	34	67	33.5	120	62.5	6	36 (ISO F03)	5	30.5	9	38	9	2.8	30	6 NM
*3/8	10	34	67	33.5	120	62.5	6	36 (ISO F03)	5	30.5	9	38	9	3	30	6 NM
*1/2	15	39	77	38.5	120	63.5	6	36 (ISO F03)	5	32.7	9	38	9	3.9	30	6 NM
*3/4	20	48	87	43.5	170	75	7	50 (ISO F05)	7	41.5	11	50	11	7.9	30	17 NM
*1	25	60	105	52.5	170	79.5	7	50 (ISO F05)	7	47	11	50	11	13	16	17 NM
*1 1/4	32	72	122.5	61.25	170	93	7	50 (ISO F05)	7	59.5	11	50	11	20.7	10	17 NM
*1 1/2	40	86	138.5	69.25	230	113.5	9	70 (ISO F07)	8	73.85	15	70	14	38.7	10	30.5 NM
*2	50	111	166	83	230	123.5	9	70 (ISO F07)	8	85	15	70	14	54	10	30.5 NM

Flowpaths (indicated by markings on the stem)

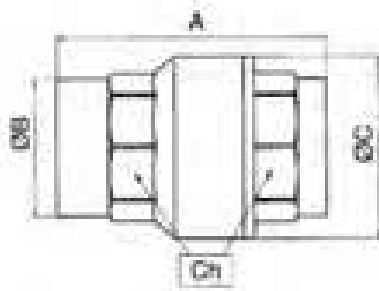
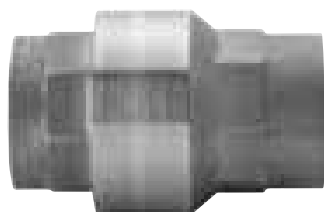


Non-Return Valves

Connections: 3/8, 1/2, 3/4, 1, 1 1/4, 1 1/2, 2, 2 1/2, 3, 4
Brass & Stainless Steel

Suitable for a wide range of fluids.

Part Number: 100000* - Brass Valves



Dimensions (mm) and Pressures

	DN	A	B	C	CH	Kv	PN	kg
*03	3/8	10	47	21.5	26.5	22	3.9	0.09
*04	1/2	15	59	25	34.5	25	5.2	0.14
*05	3/4	20	65	30.5	42	31	9.4	0.21
*06	1	25	75	37.5	49	38	14.5	0.32
*07	1 1/4	32	83	47.5	61	48	23.5	0.53
*08	1 1/2	40	89	53.5	73	54	33.5	0.75
*10	2	50	101.5	68	88	67	52	1.13
*12	2 1/2	65	121	82	111.5	83	84.3	2.00
*14	3	80	136	97.5	133	98	135.4	3.12
*18	4	100	158	127	163	128	193.2	5.64

Technical Data

Media

Suitable for air lines and generally for fluids compatible with materials used e.g. air, gas, oil, water etc.
(NOT RECOMMENDED FOR USE DIRECTLY ON OR ADJACENT TO COMPRESSORS)

Opening Pressure

20 - 25 millibar

Operating Pressure

3/8 to 3/4 - 40 bar
1 to 1 1/4 - 25 bar
1 1/2 to 2 - 16 bar
2 1/2 to 3 - 12 bar
4 - 10 bar

Operating Temperature

-20°C to +100°C

Materials

Body: Brass
Seals: NBR

Installation

In rigid pipework

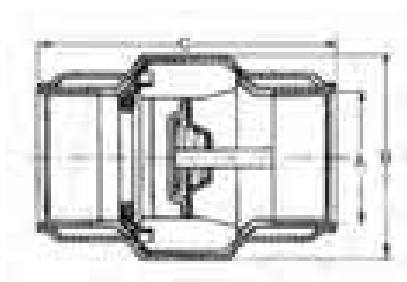
Position

As indicators

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.

Part Number: CRO* - Stainless Steel



Dimensions (mm) and Pressures

	A	B	C	PN	Weight (gm)
*1/2	38	64	16	16	95
*3/4	45	72	16	16	142
*1	53	88	16	16	197
*1 1/4	62	99	16	16	320
*1 1/2	78	117	16	16	400
*2	85	115	16	16	676
*2 1/2	106	127	16	16	1075
*3	128	140	16	16	1630
*4	163	167	16	16	2770

Technical Data

Media

Suitable for a wide range of fluids including hard hot water, hydrocarbons, corrosive and abrasive liquids

Opening Pressure

0.03 BAR

Operating Pressure

Nominal working pressure (PN) in bar - see chart
Not suitable for Vacuum

Operating Temperature

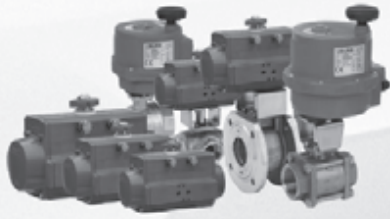
-20°C to +150°C
(on request PTFE Seal -20°C to +200°C)

Materials

Metal parts: Stainless steel AISI 304, (316 stainless steel on request)
Seal: Viton

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.



Butterfly Valves



7 / 2

Butterfly Valves -
Manual



7 / 3

Butterfly Valves -
Actuated

Actuated Two-Way Ball Valves



7 / 4

Pneumatically Actuated
Two-Way Brass Ball Valves



7 / 5

Electrically Actuated
Two-Way Brass Ball Valves



7 / 6

Pneumatically Actuated
Two-Way Stainless Steel
Ball Valves



7 / 7

Electrically Actuated
Two-Way Stainless Steel
Ball Valves

Actuated Three-Way Ball Valves



7 / 8





Pneumatically Actuated
Three-Way
Brass Ball Valves




7 / 9

Electrically Actuated
Three-Way
Brass Ball Valves

Knife Gate Valves

	7 / 10	Manual Hand Wheel	
	7 / 11	Air Actuated	



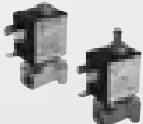
Accessories

	7 / 24	Series NA NAMUR Valves
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Other Actuated Valves

	7 / 12	Pneumatically Operated Globe Valves	
	7 / 13	Pneumatically Operated Bronze Angle Seat Valve for High Temperature	
	7 / 14	Pneumatically Operated Gate Valves	

Industrial Solenoid Valves

	7 / 15-17	Solenoid Valves - Direct Acting	
	7 / 18-19	Solenoid Valves - Servo Assisted	
	7 / 20	Solenoid Valves - Coupled Diaphragm	
	7 / 21	Automatic Drain Valve	
	7 / 22	Solenoid Valves - Direct Acting Normally Closed Stainless Steel	
	7 / 23	Solenoid Valves - Coupled Diaphragm Normally Closed Stainless Steel	

Butterfly Valves - Manual

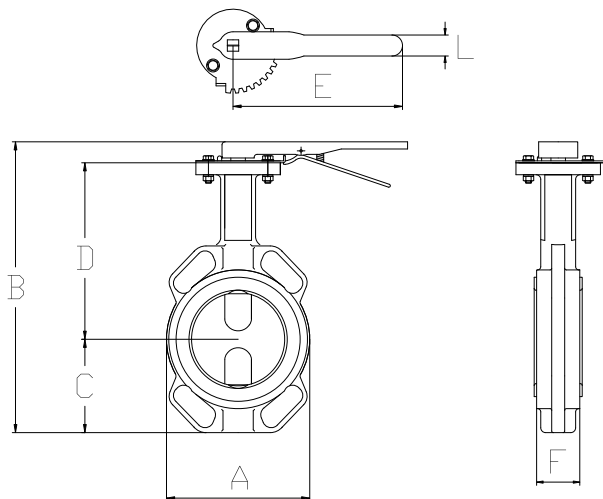
Wafer Types 600104 & 600105

PROCESS VALVES & ACTUATION

7

Wafer Butterfly Valve with Handle and Body made of Cast Iron - PN16 and ANSI 150. The Butterfly Valve series Eurofly Wafer and Lug have been manufactured to meet the industrial applications of water treatment, fire-fighting and plumbing plants. They can be used for all the applications where fluid regulation is required. The Seat construction is made with a rigid plastic ring covered with thick EPDM or Buna or Viton coating, depending on the media. This system offers a soft and reliable closure, a long cycling life and low torque. Due to the seat geometry it is particularly easy to replace.

Part Number: 600104* Cast Iron Disc / EPDM seat
600105* Stainless Steel Disc / EPDM seat



ISO Mounting Dimensions

Dimensions (mm)										
Size	DN	NPS	A	B	C	D	E	L	F	Kg
*07	32	1 1/4	80.00	189.00	57.00	110.00	165.00	30.00	33.00	2.10
*08	40	1 1/2	100.00	200.00	68.00	110.00	165.00	30.00	33.00	2.30
*10	50	2	100.00	236.10	71.40	142.70	267.00	30.00	43.00	3.50
*12	65	2 1/2	120.00	255.20	77.80	155.40	267.00	30.00	46.00	4.25
*14	80	3	127.00	272.80	89.00	161.80	267.00	30.00	46.00	4.20
*18	100	4	161.00	302.00	102.00	178.00	267.00	30.00	52.00	5.60
*19	125	5	190.00	335.50	123.00	190.50	267.00	30.00	56.00	7.10
*20	150	6	215.00	365.20	138.00	205.20	267.00	30.00	56.00	7.20
*21	200	8	268.00	439.50	168.00	237.00	358.00	35.00	60.00	13.90
*77	250	10	325.00	509.80	207.00	268.30	358.00	35.00	68.00	22.00
*78	300	12	400.00	586.50	243.50	308.50	358.00	35.00	78.00	36.50

DN32-40 valves only available with Stainless Steel Disc.

Technical Data

Media
Any application with media suitable to materials of construction

Operating Pressure
16 BAR

Operating Temperature
-20°C to +120°C EPDM

Flange Rating
PN16 / ANSI 150

Materials
Body: Cast Iron
Disc: 600105: Stainless Steel
600104: Cast Iron
Stem: AISI 420
Liner: EPDM
Lever: EN GJL 250

Additional Options
Actuated: Pneumatic electric gearbox
NBR Seat
Viton Seat

Special Requests
For assistance, contact our technical office or your local Camozzi distributor.



Also available in Lugged Pattern

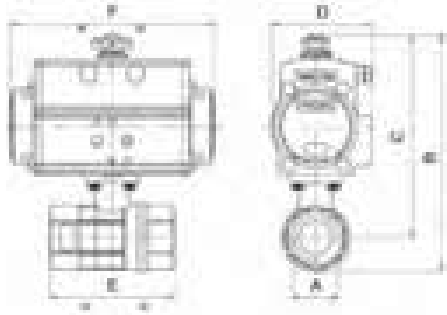


Also available: Gearbox Operated

Pneumatically Actuated Two-Way Brass Ball Valves

Full bore 2-way brass ball valve, (type 2500 page 6/8), with direct mount pneumatic actuator.
Not suitable for use with solvents.

Part Number: 8P0079* - Double Acting
8P0081* - Single Acting



Technical Data

Media

Most non-corrosive liquids and gases including air, water, solvents, fuels and propane

Operating Pressure

See Chart

Operating Temperature

-20°C to + 160°C

Flow Rates

Flow rates stated in Kv: Flow coefficient in m³/h at differential pressure of 100kPa

Threads

DN - UNI EN 10226-1 Rp

Materials

Body: Brass, nickel plated
Ball: Brass, chrome plated
Seals: PTFE with Viton 'O' Ring

Additional Options

Valve with NPTF thread.
Limit switch boxes for open/closed position indication.
Actuation fitting conditions.
Fluid H₂O +20°C Actuation 6 bar.

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.

Valve Mounted on Double Acting Actuator. Types 8P0079

Dimensions (mm)										
Size	Thread	DN	PN	A	B	C	D	E	F	ACT
*02	1/4	8	40	1/4	115	98	45	67	110	DA32
*03	3/8	10	40	3/8	115	98	45	67	110	DA32
*04	1/2	15	40	1/2	115	98	45	67	110	DA32
*05	3/4	20	40	3/4	120	100	45	76	110	DA32
*06	1	25	40	1	135	111	45	90	110	DA32
*07	1 1/4	32	40	1 1/4	144	114	45	102	110	DA32
*08	1 1/2	40	40	1 1/2	203	166	71	114	141	DA52
*10	2	50	40	2	221	175	71	138	141	DA52
*12	2 1/2	65	25	2 1/2	259	202	81	165	164	DA63
*14	3	80	16	3	279	211	81	188	164	DA63
*18	4	100	16	4	345	262	106	225	241	DA85

Valve Mounted on Single Acting Actuator. Types 8P0081

Dimensions (mm)										
Size	Thread	DN	PN	A	B	C	D	E	F	ACT
*02	1/4	8	40	1/4	151	134	71	67	141	SR52
*03	3/8	10	40	3/8	151	134	71	67	141	SR52
*04	1/2	15	40	1/2	151	134	71	67	141	SR52
*05	3/4	20	40	3/4	156	136	71	76	141	SR52
*06	1	25	40	1	172	147	71	90	141	SR52
*07	1 1/4	32	40	1 1/4	180	151	71	102	141	SR52
*08	1 1/2	40	40	1 1/2	214	177	81	114	164	SR63
*10	2	50	40	2	232	186	81	138	164	SR63
*12	2 1/2	65	25	2 1/2	291	234	106	165	241	SR85
*14	3	80	16	3	311	243	106	188	241	SR85
*18	4	100	16	4	358	275	123	225	275	SR100



NAMUR solenoid valves

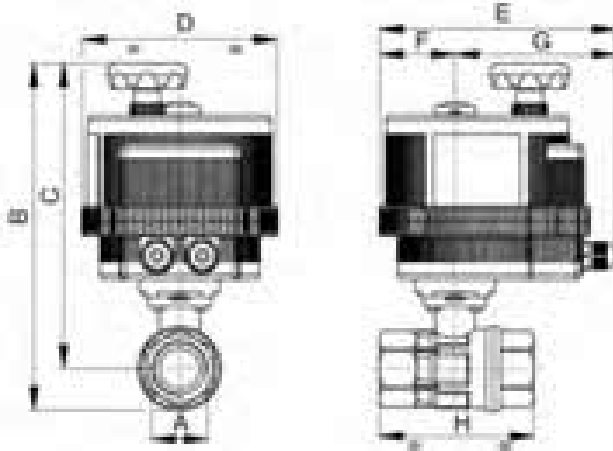


Limit switch box

Electrically Actuated Two-Way Brass Ball Valves

2-way chromed brass ball valve, (type 2500 page 6/8), threaded F/F with electric actuator, not suitable for use with solvents.

Part Number: 8E014** *



Technical Data

Operating Conditions
Fluid water at +20°C

Media
Most non-corrosive liquids and gases including air, water, solvents, fuels and propane

Operating Pressure
Nominal working pressure (PN) in bar - see chart

Operating Temperature
-20°C to + 160°C

Flow Rates
Flow rates stated in 2500 data sheet

Threads
DN - UNI EN 10226-1 Rp

Materials
Body: Brass, nickel plated
Ball: Brass, chrome plated
Seals: PTFE with Viton 'O' Ring

Additional Options
Modulating options:
4 - 20mA or 0 - 10v
Battery Block for safety operation

Special Requests
For assistance, contact our technical office or your local Camozzi distributor.

Voltage Supply Order Code

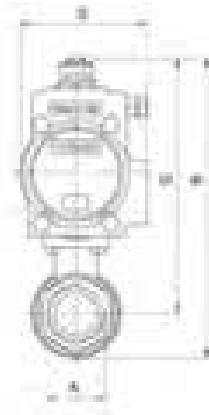
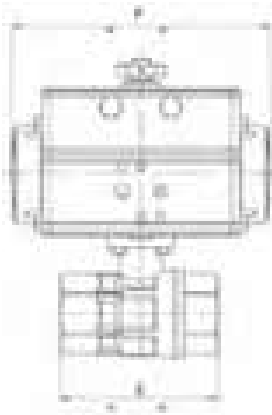
For Mod. VB015	12V AC/DC **001	24V AC/DC **002	100-240V AC **004
For Mod. VB030-350	12V DC **001		

Dimensions (mm)											
Size	Thread	DN	PN	B	C	D	E	F	G	H	Elect. ACT
*02	1/4	8	40	192	175	123	164	43	121	67	VB 015
*03	3/8	10	40	192	175	123	164	43	121	67	VB 015
*04	1/2	15	40	192	175	123	164	43	121	67	VB 015
*05	3/4	20	40	197	177	123	164	43	121	76	VB 015
*06	1	25	40	213	188	123	164	43	121	90	VB 015
*07	1 1/4	32	40	221	191	123	164	43	121	102	VB 015
*08	1 1/2	40	40	289	252	157	191	61	130	114	VB 030
*10	2	50	40	308	262	157	191	61	130	138	VB 030
*12	2 1/2	65	25	360	303	185	215	68	147	165	VB 060
*14	3	80	16	382	314	185	215	68	147	188	VB 060
*18	4	100	16	435	352	211	237	84	153	225	VB 110

Pneumatically Actuated Two-Way Stainless Steel Ball Valves

Full bore 2-way Stainless Steel Ball Valve (Type 703000 Page 6/9) with Direct Mount Pneumatic Actuator.

Part Number: 8P0003* - Double Acting
8P0004* - Single Acting



Technical Data

Media

Any application with media suitable to stainless steel (materials of construction)

Operating Pressure

10³ torr max vacuum to 64 bar

Operating Temperature

-20°C to +160°C

Flow Rates

Flow rates stated in Kv: Flow coefficient in m³/h at differential pressure of 100kPa

Threads

ISO 7/1 UNI EN 10226/1 - Rp

Materials

Body: CF8M

Ball: AISI 316

Seals: PTFE with Viton 'O' Ring

Stem: AISI 316

Additional Options

Valve with NPTF threads. Limit switchbox for open and close position indicator.

Actuation fitting conditions.

Fluid H₂O +20°C Actuation 6 bar.

NAMUR solenoid valve

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.



NAMUR solenoid valves



Limit switch box

Valve Mounted on Double Acting Actuator. Types 8P0003

Dimensions (mm)										
Size	Thread	DN	PN	A	B	C	D	E	F	ACT
*04	1/2	15	64	1/2	115	98	45	67	110	DA 32
*05	3/4	20	64	3/4	121	100	45	78	110	DA 32
*06	1	25	64	1	136	110	45	90	110	DA 32
*07	1 1/4	32	64	1 1/4	146	113	45	100	110	DA 32
*08	1 1/2	40	64	1 1/2	203	165	71	112	141	DA 52
*10	2	50	64	2	223	174	71	135	141	DA 52

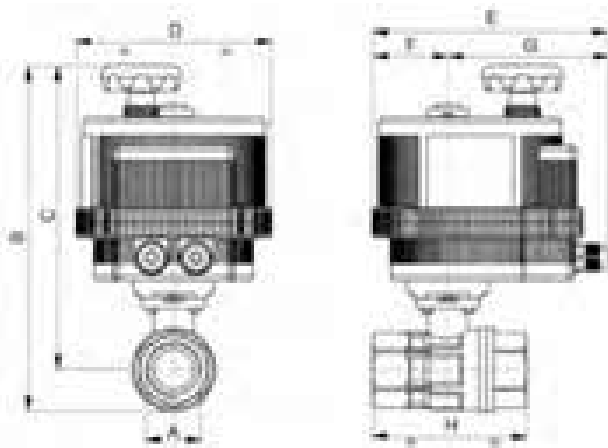
Valve Mounted on Single Acting Actuator. Types 8P0004

Dimensions (mm)										
Size	Thread	DN	PN	A	B	C	D	E	F	ACT
*04	1/2	15	64	1/2	152	134	71	67	141	SR 52
*05	3/4	20	64	3/4	157	136	71	78	141	SR 52
*06	1	25	64	1	172	146	71	90	141	SR 52
*07	1 1/4	32	64	1 1/4	182	150	71	100	141	SR 52
*08	1 1/2	40	64	1 1/2	215	177	81	112	164	SR 63
*10	2	50	64	2	235	186	81	135	164	SR 63

Electrically Actuated Two-Way Stainless Steel Ball Valves

2 way ball valve (703000), stainless steel AISI 316, Threaded F/F with electric actuator.
Not suitable for use with solvents.

Part Number: 8E003** *



Technical Data

Operating Conditions
Fluid water at +20°C

Media
PN64

Vacuum: Maximum 10-3 torr

Operating Pressure
Nominal working pressure (PN) in bar
- see chart

Operating Temperature
-20°C to + 160°C

Flow Rates
Flow rates stated in data sheet
703000

Threads
ISO 7/1 - UNI EN 10226/1 - Rp

Materials
Body: CF8M
Ball: AISI 316
Seals: PTFE with Viton 'O' Ring
Stem: AISI 316

Additional Options
Modulating options:
4 - 20mA or 0 - 10v
Battery Block for safety operation

Special Requests
For assistance, contact our technical office or your local Camozzi distributor.

Voltage Supply Order Code

For Mod. VB015	12V AC/DC	24V AC/DC	100-240V AC
	**001		
For Mod. VB030-350	12V DC	**002	**004
	**001		

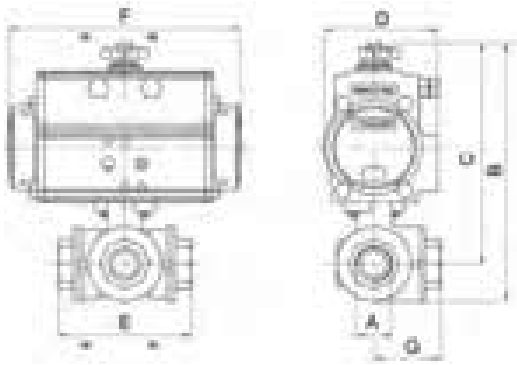
Dimensions (mm)											
Size	Thread	DN	PN	B	C	D	E	F	G	H	Elect. ACT
*04	1/2	15	64	192	175	123	164	43	121	67	VB 015
*05	3/4	20	64	198	177	123	164	43	121	78	VB 015
*06	1	25	64	213	187	123	164	43	121	90	VB 015
*07	1 1/4	32	64	223	190	123	164	43	121	100	VB 015
*08	1 1/2	40	64	290	251	157	191	61	130	112	VB 030
*10	2	50	64	309	261	157	191	61	130	135	VB 030

Pneumatically Actuated Three-Way Brass Ball Valves

Full Bore 3-way Brass Ball Valve (Type 3500/3600 page 6/12) with direct mount pneumatic actuator

Full bore 3-way Brass Ball Valve, Ball bored to T or L with Direct Mount Pneumatic Actuator. NPT thread version also available. Pressure rating up to 30 BAR according to size.

Part Number: 8P0083* (double acting T Ported)
 8P0084* (double acting L Ported)
 8P0085* (single acting T Ported)
 8P0086* (single acting L Ported)



Valve Mounted on Double Acting Actuator. Types 8P0083-T 8P0084-L

Dimensions (mm)											
Size	Thread	DN	PN	A	B	C	D	E	F	G	ACT
*02	1/4	8	30	1/4	113	96	45	67	110	34	DA32
*03	3/8	10	30	3/8	113	96	45	67	110	34	DA32
*04	1/2	15	30	1/2	118	98	45	77	110	39	DA32
*05	3/4	20	30	3/4	167	143	71	87	141	44	DA52
*06	1	25	16	1	179	149	71	105	141	53	DA52
*07	1 1/4	32	10	1 1/4	197	161	71	123	141	62	DA52
*08	1 1/2	40	10	1 1/2	230	187	81	139	164	70	DA63
*10	2	50	10	2	272	216	95	166	210	83	DA75

Valve Mounted on Single Acting Actuator. Types 8P0085-T 8P0086-L

Dimensions (mm)											
Size	Thread	DN	PN	A	B	C	D	E	F	G	ACT
*02	1/4	8	30	1/4	149	132	71	67	141	34	SR52
*03	3/8	10	30	3/8	149	132	71	67	141	34	SR52
*04	1/2	15	30	1/2	154	134	71	77	141	39	SR52
*05	3/4	20	30	3/4	179	155	81	87	164	44	SR63
*06	1	25	16	1	190	160	81	105	164	53	SR63
*07	1 1/4	32	10	1 1/4	209	173	81	123	164	62	SR63
*08	1 1/2	40	10	1 1/2	262	219	106	139	241	70	SR85
*10	2	50	10	2	299	243	123	166	275	83	SR100

Technical Data

Media

Most non-corrosive liquids and gases including air, water, solvents, fuels and propane

Operating Pressure

Upto 30 BAR depending on size

Operating Temperature

-20°C to +160°C

Threads

DN - UNI EN 10226-1 Rp

Materials

Body: Brass, nickel plated
 Ball: Brass, chrome plated
 Seals: PTFE with Viton 'O' Ring

Additional Options

Valve with NPTF thread.
 Limit switch boxes for open/closed position indication.
 Actuation fitting conditions.
 Fluid H₂O +20°C Actuation 6 bar.
 NAMUR solenoid valves.

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.



NAMUR solenoid valves



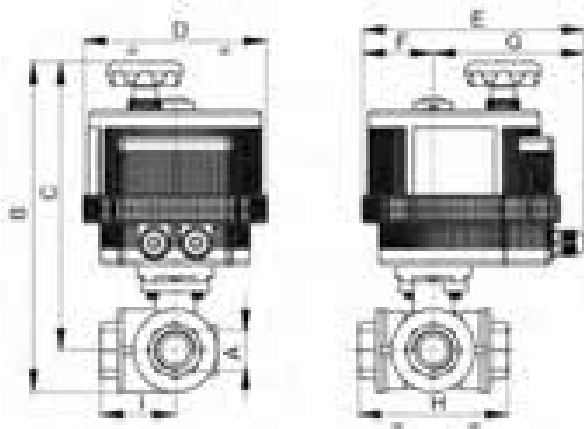
Limit switch box

Electrically Actuated Three-Way Brass Ball Valves

3 way brass ball valve (3500 (T) - Part 3600 (L)), seals in PTFE +Viton, threaded F/F/F, full bore, 'T' or 'L' port with electric actuator.

Not suitable for use with solvents.

Part Number: 8E028** *(T)
8E029** *(L)



Technical Data

Operating Conditions
Fluid water at +20°C

Media
Most non-corrosive liquids and gases including air, water, solvents, fuels and propane.

Operating Pressure
Nominal working pressure (PN) in bar - see chart

Operating Temperature
-20°C to + 160°C

Flow Rates
Flow rates stated in data sheet
3500/3600

Threads
ISO 7/1 - UNI EN 10226/1 - Rp

Materials
Body: Brass, Nickel-plated
Balls: Brass, hard chromed
Seal: PTFE and Viton 'O' Rings

Additional Options
Modulating options:
4 - 20mA or 0 - 10v
Battery Block for safety operation

Special Requests
For assistance, contact our technical office or your local Camozzi distributor.

Voltage Supply Order Code

For Mod. VB015	12V AC/DC	24V AC/DC	100-240V AC
	**001		
For Mod. VB030-350	12V DC		
	**001		

Dimensions (mm)

Size	Thread	DN	PN	B	C	D	E	F	G	H	I	Elect. ACT
*02	1/4	8	30	190	173	123	164	43	121	67	34	VB 015
*03	3/8	10	30	190	173	123	164	43	121	67	34	VB 015
*04	1/2	15	30	195	175	123	164	43	121	77	39	VB 015
*05	3/4	20	30	208	184	123	164	43	121	87	44	VB 015
*06	1	25	16	265	235	157	191	61	130	105	53	VB 030
*07	1 1/4	32	10	284	248	157	191	61	130	123	62	VB 030
*08	1 1/2	40	10	332	289	185	215	68	147	139	70	VB 060
*10	2	50	10	356	300	185	215	68	147	166	83	VB 060

New

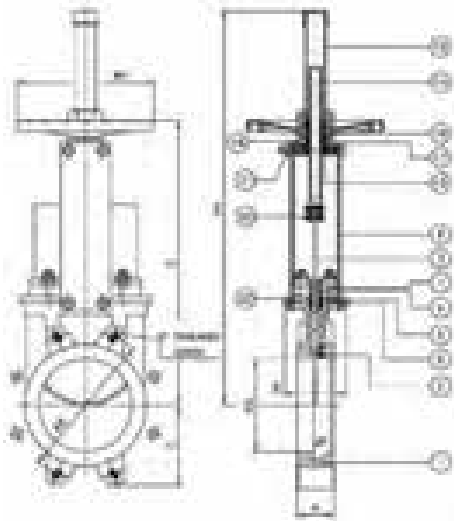
Knife Gate Valve (Manual Hand Wheel)

PROCESS VALVES & ACTUATION

7

Wafer pattern uni-directional knife gate valve - Pneumatically operated. Designed for a wide range of applications including road vehicle tankers, paper and pulp, effluent handling plants, chemical plants and bulk conveying.

Part Number: A1V2H2* - Cast Iron



Technical Data

Operating Pressure

See Chart

Operating Temperature

EPDM Max 90°C

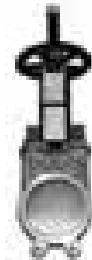
Flange Rating

PN10

Materials

- ① Body: GG25
- ② Guide: RCH-1000
- ③ Knife: 304
- ④ Packing Gland: Aluminium
- ⑤ Packing: SYNTET. +P.T.F.E.
- ⑥ O-Ring: EPDM
- ⑦ Stud: Steel + Zinc
- ⑧ Support: Steel
- ⑨ Sockety: 316
- ⑩ Joint: EPDM
- ⑪ Reinforced Socket: CF8M
- ⑫ Deflection Cone: CA15
- ⑬ Joint: BELPA DW
- ⑭ Spindle: 303
- ⑮ Stem Nut: Bronze
- ⑯ Nut: ST 44.2+Zinc
- ⑰ Yoke: Steel
- ⑱ Handwheel: Nodular Iron
- ⑲ Hood: Steel
- ⑳ Bolts/Nuts/Washers: 304
- ㉑ Bolts/Nuts/Washers: Steel
- ㉒ Bolts/Washers: Steel

Additional Options



Stainless Steel



Lever Operated

Various Seal Options

Metal, PTFE, Viton

Special Requests

For assistance, contact our technical office.

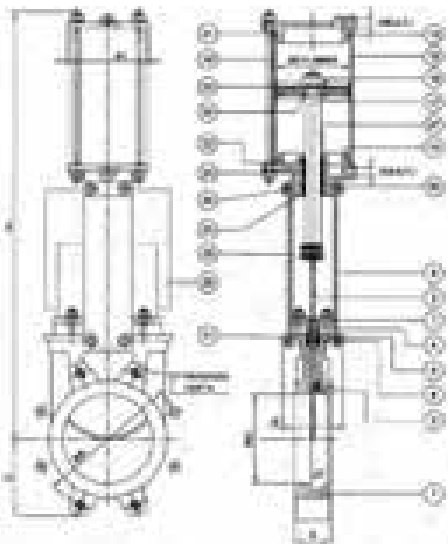
Dimensions (mm)

	Size	A	B	C	D	ØV	Hv	Working Pressure (Bar)
*50	2"	40	92	63	289	185	409	10
*65	2 1/2"	40	92	70	316	185	436	10
*80	3"	50	92	92	342	185	462	10
*100	4"	50	92	105	382	185	502	10
*125	5"	50	102	120	415	225	585	10
*150	6"	60	102	130	458	225	637	8
*200	8"	60	119	160	575	325	815	7
*250	10"	70	119	198	676	325	1016	5
*300	12"	70	119	234	776	380	1116	5
*350	14"	96	290	256	906	460	1336	4
*400	16"	100	290	292	1012	460	1442	4
*450	18"	106	290	308	1098	460	1628	3
*500	20"	110	290	340	1210	460	1740	3
*600	24"	110	290	400	1416	460	2046	3
*700	28"	110	320	452	1611	620	2461	2
*800	32"	110	320	505	1870	620	2820	2
*900	36"	110	320	555	2103	620	3153	-
*1000	40"	110	320	610	2293	620	3443	-
*1200	48"	150	400	725	-	-	-	-

Knife Gate Valve (Air Actuated)

Wafer pattern uni-directional knife gate valve – pneumatically operated (double acting). Designed for a wide range of applications including road vehicle tankers, paper and pulp, effluent handing plants, chemical plants and bulk conveying.

Part Number: A1N2H2* - Cast Iron



Dimensions (mm)									
Size	A	B	C	Ø Cylinder	S B.S.P.	Ø J	Hn	Working Pressure (Bar)	
*50	2"	40	92	63	80	1/4"	96	400	10
*65	2 1/2"	40	92	70	80	1/4"	96	442	10
*80	3"	50	92	92	80	1/4"	96	483	10
*100	4"	50	92	105	100	1/4"	115	546	10
*125	5"	50	102	120	125	1/4"	138	630	10
*150	6"	60	102	130	125	1/4"	138	692	8
*200	8"	60	119	160	160	1/4"	175	869	7
*250	10"	70	119	198	200	3/8"	218	1032	5
*300	12"	70	119	234	200	3/8"	218	1182	5
*350	14"	96	290	256	250	3/8"	270	1379	4
*400	16"	100	290	292	250	3/8"	270	1535	4
*450	18"	106	290	308	300	1/2"	382	1677	3
*500	20"	110	290	340	300	1/2"	382	1839	3
*600	24"	110	290	400	300	1/2"	382	2145	3
*700	28"	110	320	452	350	1/2"	426	2488	2
*800	32"	110	320	505	350	1/2"	426	2798	2
*900	36"	110	320	555	400	1/2"	538	3162	-
*1000	40"	110	320	610	400	1/2"	538	3452	-
*1200	48"	150	400	725	400	1/2"	538	4048	-

Technical Data

Operating Pressure

See Chart

Operating Temperature

EPDM Max 90°C

Flange Rating

PN10

Materials

- ① Body: GG25
- ② Guide: RCH-1000
- ③ Knife: 304
- ④ Packing Gland: Aluminium
- ⑤ Packing: SYNTET.+P.T.F.E.
- ⑥ O-Ring: EPDM
- ⑦ Stud: Steel + Zinc
- ⑧ Support: Steel
- ⑨ Sockety: 316
- ⑩ Joint: EPDM
- ⑪ Reinforced Socket: CF8M
- ⑫ Deflection Cone: CA15
- ⑬ Joint: BELPA DW
- ⑭ Cylinder Head: GG45
- ⑮ Cylinder Cap: GG45
- ⑯ Jacket: Aluminium
- ⑰ Piston Rod: 304
- ⑱ Tie Rod: Steel + Zinc
- ⑲ Washer: Steel
- ⑳ Piston: Steel + Nitrile
- ㉑ ㉒ ㉓ ㉔ O-Ring: Nitrile
- ㉕ Scraper: Steel + Nitrile
- ㉖ Guide Sleeve: Nylon
- ㉗ Elastic Ring: Steel
- ㉘ Protect. (Optional): Steel
- ㉙ Bolts/Nuts/Washers: 304
- ㉚ Bolts/Nuts/Washers: Steel
- ㉛ Bolts/Washers: Steel

Additional Options



Stainless Steel

Control Solenoid Valve

Top end limit-switches or inductive switches



Various Seal Options

Metal, PTFE, Viton

Special Requests

For assistance, contact our technical office.

Pneumatically Operated Globe Valves

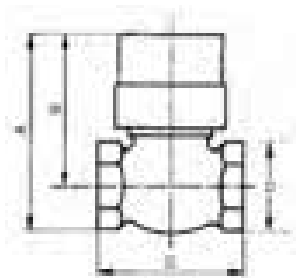
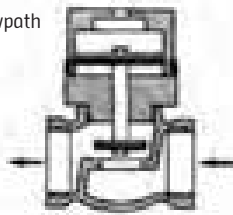
Connections: 1/2, 3/4, 1, 1 1/4, 1 1/2, 2

Globe valves type B are simple on-off seat valves with pneumatic actuation. They are available in sizes G1/2 to 2 and in single acting normally closed and double acting versions.

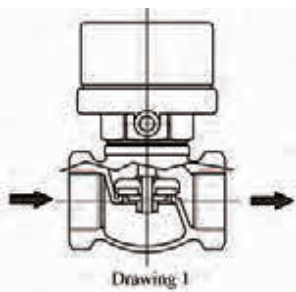
The seat configuration is such that the valve opens in the direction of flow and closes against it. At line pressures in excess of 3.5 bar, or in the case of actuator failure, the valve will tend to open. (For higher line pressure, please contact our sales offices).

Part Number: B (+size) DE (double acting)
 B (+size) NC (single acting)

Flowpath



'B' Globe Valves are not subject to "Water Hammer" because the fluid passed through the valve in the direction of the arrow printed on the body, as shown in drawing 1 (under the actuator). With these conditions the tightness is guaranteed up to the pressures shown in the Differential Pressure Chart.



**DIFFERENTIAL PRESSURE CHART
 DOUBLE ACTING
 VERSION**

**SINGLE ACTING
 N.C. VERSION**

G	DeltaP bar
1/2"	5,5
3/4"	7
1"	7
1 1/4"	5,5
1 1/2"	8
2"	5

G	PRESS. PILOTA	DeltaP bar
1/2"	3	12
"	4	16
3/4"	3	8
"	4	10
1"	3	13
"	4	17
1 1/4"	3	10
"	4	13
1 1/2"	3	9
"	4	11,5
2"	3	6
"	4	9

**MINIMUM PRESSURE REQUIRED TO OPEN
 THE VALVE IN THE S.A.N.C. VERSION**

G	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
BAR	3	5	3	3	4	4

Dimensions (mm)

Size	DN	D	Kv	A	B	C	Weight gr.
1/2	15	17	3.4	105	85	60	600
3/4	20	22	7.9	113	85	75	700
1	25	28	11	125	95	85	1300
1 1/4	32	37	18	136	103	95	1700
1 1/2	40	43	28	170	130	110	2450
2	50	55	44	180	135	120	2900

Technical Data

Media

Simple on-off seat valve with pneumatic actuation

Operating Pressure

Please contact our technical office

Operating Temperature

-20°C to +100°C

Flow Rates

Flow rates stated in Kv: Flow coefficient in m³/h at differential pressure of 100kPa

Threads

ISO 228 f/f

Materials

Body: Bronze

Stem: Stainless steel AISI 303

Seal: NBR. PTFE or Viton on request

Actuation Details

All types, 3 to 8 bar, air only

Additional Options

NPTF Valve threads. Position limit switches available

Special Requests

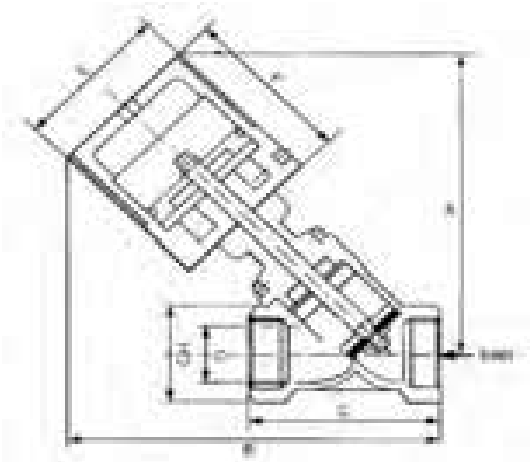
For assistance, contact our technical office or your local Camozzi distributor.

Pneumatically Operated Bronze Angle Seat Valve for High Temperature

Connections: 1/2, 3/4, 1, 1 1/4, 1 1/2, 2

Pneumatically operated Angle Disc Valves series DV are recommended for steam, and frequent operation applications. The Valve is constructed from Bronze, Stainless Steel and Aluminium. Versions are available in normally open, normally closed and Double Acting. The Actuator consists of a piston, which when pressurised by the pilot air supply of 4 to 8 BAR, lifts to open the Valve Seat.

Part Number: DV (+size) DE (double acting)
 DV (+size) NC (single acting N/C)
 DV (+size) NO (single acting N/O)



DN = Nominal diameter corresponding approx. to inside diameter of pipe
 D = Orifice diameter of flow passage

Dimensions (mm)										
Size	DN	A	B	C	D	E	F	Kv	CH	Weight gr.
1/2	15	122	143	59	16	64	65	4.5	27	840
3/4	20	130	150	70	22	64	65	11	33	950
1	25	138	162	74	27	64	65	13	38	970
1 1/4	32	200	204	95	32	100	130	30	49	2470
1 1/2	40	207	233	108	40	100	130	42	56	2870
2	50	220	250	129	50	100	130	66	69	3700

Technical Data

Media

Simple on-off seat valve with pneumatic actuation

Operating Pressure

Please contact our technical office

Operating Temperature

-20°C to +180°C

Flow Rates

Flow rates stated in Kv: Flow coefficient in m³/h at differential pressure of 100kPa

Threads

ISO 228 f/f

Materials

Body: Bronze

Stem: Stainless steel AISI 303

Seal: PTFE

Actuation Details

All types, 3 to 8 bar, air only

Additional Options

NPTF Valve threads. Position limit switches available

Special Requests

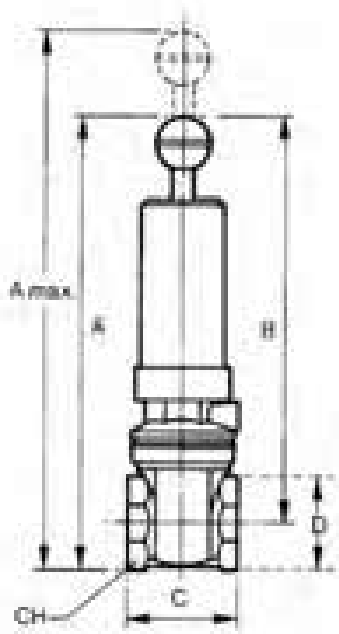
For assistance, contact our technical office or your local Camozzi distributor.

Pneumatically Operated Gate Valves

Connections: 3/4, 1, 1 1/4, 1 1/2, 2, 2 1/2, 3, 4

Pneumatically-operated gate valves series A are relatively simple, low cost on-off valves for non-aggressive liquids at pressures no higher than 3 bar. Having metal-to-metal seals, absolute bubble-tight shut off cannot be guaranteed. However, within these constraints the valves are ideal for remote control of non-critical applications, for instance with water. The knob at the top of the actuator is of the push-pull variety, for manual override.

Part Number: A (+size) DE (double acting)
 A (+size) NC (single acting N/C)
 A (+size) NO (single acting N/O)



Technical Data

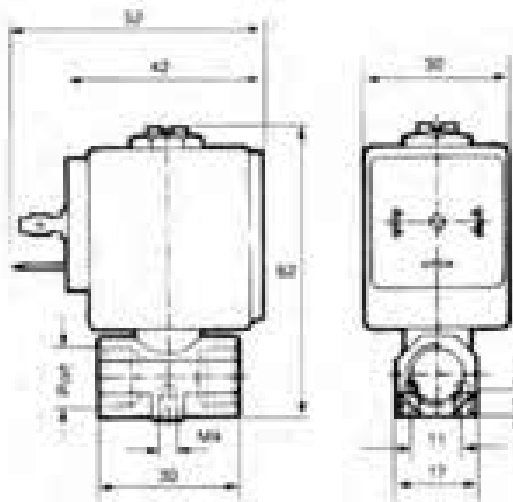
- Media**
Simple low cost on-off valve for non-aggressive liquids
- Operating Pressure**
Please contact our technical office
- Operating Temperature**
-20°C to +80°C
- Threads**
ISO 228 f/f
- Materials**
Valve Body: Brass OT58
Seals: Metal-to-metal
Stem: Stainless Steel
Body Gasket: Fibre
- Actuation Details**
Max. 8 bar, air only
Double Acting and Single Acting
- Additional Options**
NPTF valve threads
D/A Actuator - 3/4"-4"
S/A N.C. Actuator - 3/4"-3"
S/A N.O. Actuator - 3/4"-2"
- Special Requests**
For assistance, contact our technical office or your local Camozzi distributor.

Dimensions (mm)											
Size	DN	D	CH	Amax	A	B	Amax	A	B	C	Weight gr
				(SE)	(SE)	(SE)	(DE)	(DE)	(DE)		
3/4	20	19	33	195	175	156	175	160	140	44	450
1	25	24	40	205	183	106	188	172	150	54	520
1 1/4	32	32	50	266	238	208	235	212	183	60	900
1 1/2	40	37	56	270	245	213	253	230	197	64	1130
2	50	46	69	337	295	255	318	275	236	72	1800
2 1/2	65	59	85	390	332	283	367	308	259	80	2550
3	80	70	102	462	397	340	428	363	305	85	3800
4	100	92	127	525	443	373	505	410	343	97	6200

Solenoid Valves - Direct Acting

Connections: 1/8, 1/4

Operation: Direct Acting 2/2 NC



Connection Sizes	A	B	C	D	E	F	G
1/8 - 1/4	17	62	30	30	42	52	5

Technical Data

Type of Construction
Direct - Acting
Normally closed only

Line Media
Non-aggressive liquids and gases, ie air, oil, water

Operating Pressure
See table

Operating Temperature
Ambient: -10°C to +55°C
Fluid: -10°C to +140°C

Threads
BSPP GAS Parallel ISO 228/1

Materials
Body: Brass
Other Parts: Stainless steel
Seals: Viton

Mounting
M4 mounting holes in body

Standard Voltages
12VDC 24VDC
24VAC 110VAC 230VAC (50Hz)

Protection Rating
IP65 with connector
- see pages 2/48-51

Power Consumption
DC: 8W
AC: Working 14 VA In rush 25 VA

Options
Different voltages
Bi-stable coils

Special Requests
For assistance, contact our technical office or your local Camozzi distributor.

2/2 Direct - Acting Solenoid Valves

	Size	Orifice Ø mm	Pressure Range (bar)	
			AC	DC
21T1BV28-F	1/8	2.8	0 - 12	0 - 6
21T2BV22-F	1/4	2.2	0 - 20	0 - 10
21T2BV28-F	1/4	2.8	0 - 12	0 - 6
21T2BV40-F	1/4	4.0	0 - 6	0 - 2

*Please specify coil voltage required when ordering.
Price excludes coil - please order separately (see below).

8 Watt Coils

	Voltage
BDA08012CS	12V DC
BDA08024CS	24V DC
BDA08024AS	24V AC
BDA08110AS	110V AC
BDA08223DS	230V AC



For Standard Connectors

See pages 2/48 and 2/49

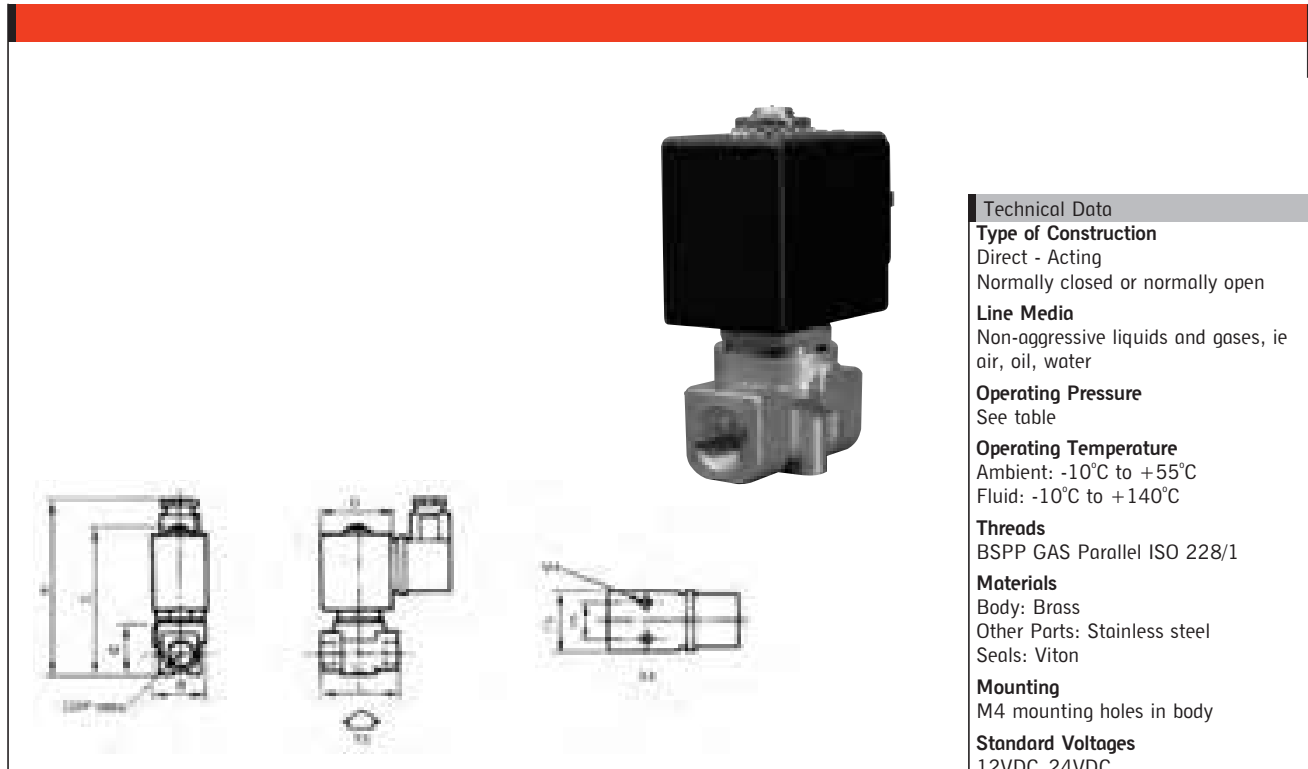
Solenoid Valves - Direct Acting

Connections: 1/4

Operation: Direct Acting 2/2 NC or NO

7

PROCESS VALVES & ACTUATION



Technical Data

Type of Construction

Direct - Acting
Normally closed or normally open

Line Media

Non-aggressive liquids and gases, ie air, oil, water

Operating Pressure

See table

Operating Temperature

Ambient: -10°C to +55°C
Fluid: -10°C to +140°C

Threads

BSPP GAS Parallel ISO 228/1

Materials

Body: Brass
Other Parts: Stainless steel
Seals: Viton

Mounting

M4 mounting holes in body

Standard Voltages

12VDC 24VDC
24VAC 110VAC 230VAC (50Hz)

Protection Rating

IP65 with connector
- see pages 2/48-51

Power Consumption

DC: 8W
AC: Working 14 VA In rush 25 VA
DC: 12W
AC: Working 35 VA In rush 25 VA

Options

Different voltages
Bi-stable coils
Different seals

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.

Connection Size	A	B	C	D	E	F	G	M	P
1/4	91	28	52	55	16	78	41	28	7

2/2 Direct - Acting Solenoid Valves (For use with 8W Coil)

Size	Orifice Ø mm	Pressure Range (bar) Normally Closed		Pressure Range (bar) Normally Open		
		AC	DC	AC	DC	
		21A2KV25	1/4	2.5	0 - 14	0 - 9
21A2ZV25	1/4	2.5	-	-	0 - 14	0 - 14
21A2KV30	1/4	3.0	0 - 10	0 - 6	-	-
21A2ZV30	1/4	3.0	-	-	0 - 10	0 - 10

2/2 Direct - Acting Solenoid Valves (For use with 12W Coil)

Size	Orifice Ø mm	Pressure Range (bar) Normally Closed		Pressure Range (bar) Normally Open		
		AC	DC	AC	DC	
		21A2KV25	1/4	2.5	0 - 30	0 - 25
21A2ZV25	1/4	2.5	-	-	0 - 17	0 - 17
21A2KV30	1/4	3.0	0 - 25	0 - 20	-	-
21A2ZV30	1/4	3.0	-	-	0 - 15	0 - 15

Please specify coil voltage required when ordering. Price excludes coil - please order separately (see below).

8 and 12 Watt Coils

	Voltage	Watt
BDA08012CS	12V DC	8W
BDA08024CS	24V DC	8W
BDA08024AS	24V AC	8W
BDA08110AS	110V AC	8W
BDA08223DS	230V AC	8W
UDA12012CS	12V DC	12W
UDA12024CS	24V DC	12W
UDA12024AS	24V AC	12W
UDA12110AS	110V AC	12W
UDA12230AS	230V AC	12W



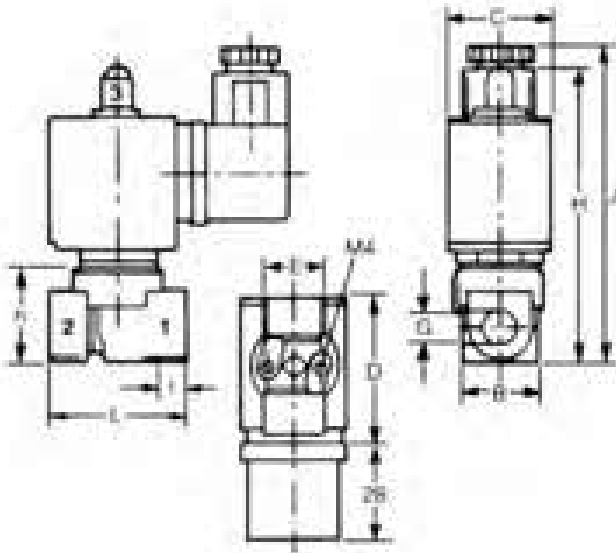
For Moulded Connectors

See pages 2/50 and 2/51

Solenoid Valves - Direct Acting

Connections: 1/8, 1/4

Operation: Direct Acting 3/2 NC



Connection Size	B	C	D	E	h	H	I	J	L
1/8 - 1/4	28	31	42	16	28	88	7	92	41

Technical Data

Type of Construction

Direct - Acting
Normally closed

Line Media

Non-aggressive liquids and gases, ie air, oil, water

Operating Pressure

See table

Operating Temperature

Ambient: -10°C to +55°C
Fluid: -10°C to +140°C

Threads

BSPG GAS Parallel ISO 228/1

Materials

Body: Brass
Other Parts: Stainless steel
Seals: Viton

Mounting

M4 mounting holes in body

Standard Voltages

12VDC 24VDC
24VAC 110VAC 230VAC (50Hz)

Protection Rating

IP65 with connector
- see pages 2/48-51

Power Consumption

DC: 8W
AC: Working 14 VA In rush 25 VA

Flowpath (Normally Closed)

See drawing
Supply: 2 Output: 1 Exhaust: 3

Options

Different voltages
Bi-stable coils
Normally open version

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.

3/2 Direct - Acting Solenoid Valves

	Size	Orifice Ø mm	Pressure Range (bar)	
			AC	DC
31A3AV20	1/8	2.0 (2.5)	10	10
31A3AV25	1/8	2.5 (2.5)	6	6
31A2AV20	1/4	2.0 (2.5)	10	10
31A2AV25	1/4	2.5 (2.5)	6	6
31A2AV30	1/4	3.0 (2.5)	5	5

Please specify coil voltage required when ordering.
Price excludes coil - please order separately (see below).

8 Watt Coils

	Voltage
BDA08012CS	12V DC
BDA08024CS	24V DC
BDA08024AS	24V AC
BDA08110AS	110V AC
BDA08223DS	230V AC



For Moulded Connectors

See pages 2/50 and 2/51

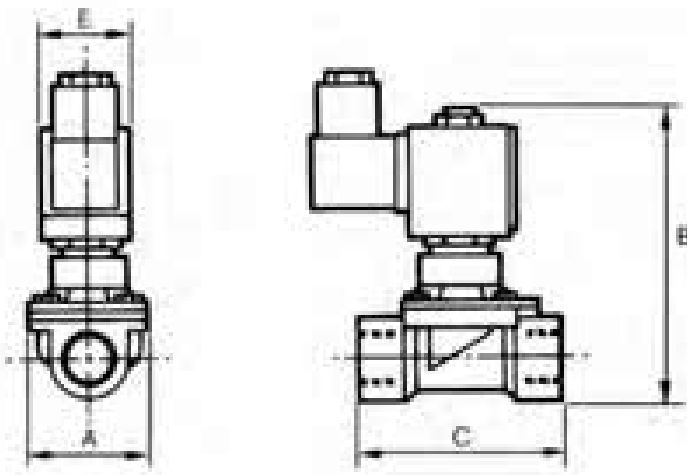
Solenoid Valves - Servo Assisted

Connections: 3/8, 1/2, 3/4

Operations: Servo assisted 2/2 NC

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PROCESS VALVES & ACTUATION



Technical Data

Type of Construction

Servo - Assisted
Normally closed only

Line Media

Non-aggressive liquids and gases, ie air, oil, water

Operating Pressure

See table

Operating Temperature

Ambient: -10°C to +55°C
Fluid: -10°C to +140°C

Threads

BSPG GAS Parallel ISO 228/1

Materials

Body: Brass
Other Parts: Stainless steel
Seals: Viton

Mounting

Body can be drilled for mounting

Standard Voltages

12VDC 24VDC
24VAC 110VAC 230VAC (50Hz)

Protection Rating

IP65 with connector
- see pages 2/48-51

Power Consumption

DC: 8W
AC: Working 14 VA In rush 25 VA
DC: 14W
AC: Working 27 VA In rush 43 VA

Options

Different voltages
Bi-stable coils
Different seals

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.

2/2 Servo - Assisted Solenoid Valves

Size	Dimensions				Pressure Range (bar)	
	A	B	C	E	AC	DC
21H7KV120	3/8	40	92	50	30	0.1 - 20 0.1 - 10
21H8KV120	1/2	40	92	50	30	0.1 - 20 0.1 - 10
21H9KV180	3/4	50	96	35	30	0.1 - 16 0.1 - 16 (14 watt coil only)

Please specify coil voltage required when ordering.

Price excludes coil - please order separately (see below).

8 and 14 Watt Coils

	Voltage	Watt
BDA08012CS	12V DC	8W
BDA08024CS	24V DC	8W
BDA08024AS	24V AC	8W
BDA08110AS	110V AC	8W
BDA08223DS	230V AC	8W
GDH14012CS	12V DC	14W
GDH14024CS	24V DC	14W
GDH14024AS	24V AC	14W
GDH14110AS	110V AC	14W
GDH14223DS	230V AC	14W



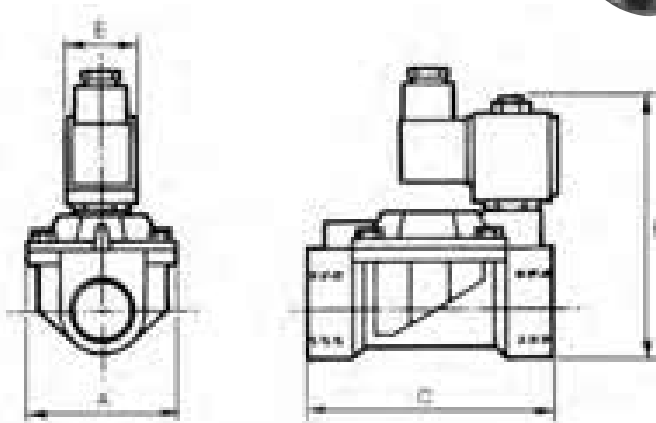
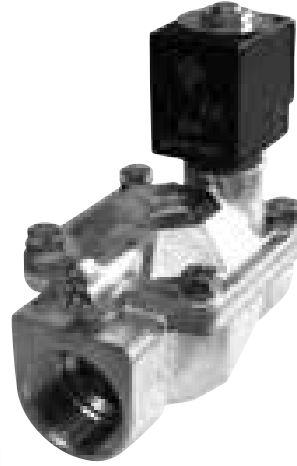
For Standard Connectors

See pages 2/48 and 2/49

Solenoid Valves - Servo Assisted

Connections: 3/8, 1/2, 3/4, 1, 1 1/4, 1 1/2, 2

Operations: Servo Assisted 2/2 NC or NO



Technical Data

Type of Construction

Servo - Assisted
Normally closed or normally open

Line Media

Non-aggressive liquids and gases, ie air, oil, water

Operating Pressure

See table

Operating Temperature

Ambient: -10°C to +55°C
Fluid: -10°C to +140°C

Threads

BSPG GAS Parallel ISO 228/1

Materials

Body: Brass
Other Parts: Stainless steel
Seals: Viton

Mounting

Normally in fixed pipework

Standard Voltages

12VDC 24VDC
24VAC 110VAC 230VAC
(50Hz)

Protection Rating

IP65 with connector
- see pages 2/48-51

Power Consumption

DC: 8W
AC: Working 14 VA In rush 25 VA

Options

Different voltages
Bi-stable coils
Different seals

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.

2/2 Servo - Assisted Solenoid Valves

	Orifice		Dimensions				Pressure Range (bar)	
	Size	Ø mm	A	B	C	E	AC	DC
21WA3KOV130	3/8	13	40	97	60	30	0.2 - 16	0.2 - 16
21WA3ZOV130	3/8	13	40	97	60	30	0.2 - 16	0.2 - 16
21WA4KOV130	1/2	13	40	97	66	30	0.2 - 16	0.2 - 16
21WA4ZOV130	1/2	13	40	97	66	30	0.2 - 16	0.2 - 16
21W3KV190	3/4	19	65	105	104	30	0.2 - 16	0.2 - 16
21W3ZV190	3/4	19	65	105	104	30	0.2 - 16	0.2 - 16
21W4KV250	1	25	65	112	104	30	0.2 - 16	0.2 - 16
21W4ZV250	1	25	65	112	104	30	0.2 - 10	0.2 - 16
21W5KV350	1 1/4	35	98	125	144	30	0.2 - 10	0.2 - 16
21W5ZV350	1 1/4	35	98	125	144	30	0.2 - 10	0.2 - 10
21W6KV400	1 1/2	40	98	125	144	30	0.2 - 10	0.2 - 10
21W6ZV400	1 1/2	40	98	125	144	30	0.2 - 10	0.2 - 10
21W7KV500	2	50	118	141	172	30	0.2 - 10	0.2 - 10
21W7ZV500	2	50	118	141	172	30	0.2 - 10	0.2 - 10

Please specify coil voltage required when ordering. Price excludes coil - please order separately (see below).

8 Watt Coils

	Voltage
BDA08012CS	12V DC
BDA08024CS	24V DC
BDA08024AS	24V AC
BDA08110AS	110V AC
BDA08223DS	230V AC

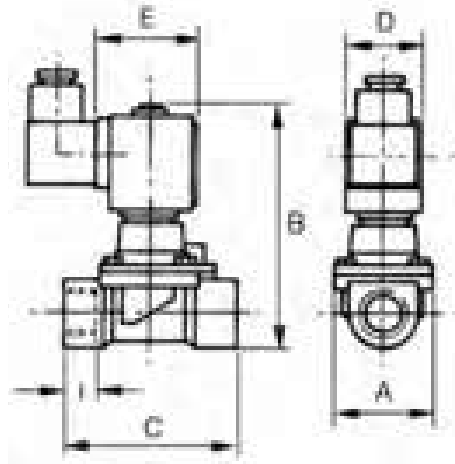
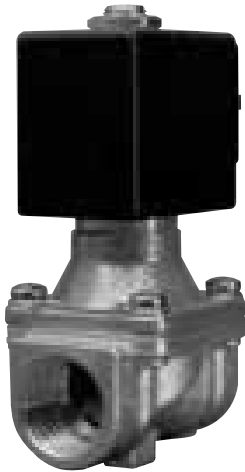
For Moulded Connectors

See pages 2/50 and 2/51



Solenoid Valves - Coupled Diaphragm

Connections: 3/8, 1/2, 3/4, 1, 3/4, 1, 1 1/2
 Operations: Coupled Diaphragm 2/2 NC
 Operates from zero pressure



Technical Data

Type of Construction
 Coupled diaphragm
 Normally closed only

Line Media
 Non-aggressive liquids and gases, ie air, oil, water

Operating Pressure
 See table

Operating Temperature
 Ambient: -10°C to +55°C
 Fluid: -10°C to +140°C

Threads
 BSPP GAS Parallel ISO 228/1

Materials
 Body: Brass
 Other Parts: Stainless steel
 Seals: Viton

Mounting
 Normally in fixed pipework 3/8 and 1/2 only. Can be drilled for mounting. Brackets available for larger sizes on request

Standard Voltages
 12VDC 24VDC
 24VAC 110VAC 230VAC (50Hz)

Protection Rating
 IP65 with connector
 - see pages 2/48-51

Power Consumption
 DC: 12W
 AC: Working 35 VA In rush 25 VA
 DC: 14W
 AC: Working 43 VA In rush 27 VA

Options
 Different voltages

Special Requests
 For assistance, contact our technical office or your local Camozzi distributor.

2/2 Servo - Assisted Solenoid Valves										
	Orifice Size	mm	Dimensions					Coil watts	Pressure Range (bar)	
			A	B	C	D	E		AC	DC
21H11KOV120	3/8	12	40	99	50	30	42	8	0 - 16	0 - 1.5
	3/8	12	40	99	50	30	42	12	0 - 20	0 - 6
			40	99	50	52	55	14	0 - 20	0 - 15
21H12KOV120	1/2	12	40	99	50	30	42	8	0 - 16	0 - 1.5
	1/2	12	40	99	50	30	42	12	0 - 20	0 - 6
			40	99	50	52	55	14	0 - 20	0 - 15
21HF5KOV200	3/4	20	65	103	104	52	55	8	0 - 12	0 - 6
	3/4	20	65	103	104	52	55	12	0 - 16	0 - 16
21HF6KOV250	1	25	65	110	104	52	55	8	0 - 16	0 - 5
	1	25	65	110	104	52	55	12	0 - 16	0 - 16
21HF8KOV400	1 1/2	40	94	130	128	52	55	14	0 - 16	0 - 6
	1 1/2	40	94	130	128	52	55	12	0 - 16	-

Please specify coil voltage required when ordering. Price excludes coil - please order separately (see below).

	8 Watt Coils	12 Watt Coils	14 Watt Coils
12V DC	BDA08012CS	UDA12DC	GDH14012CS
24V DC	BDA08024CS	UDA24DC	GDH14024CS
24V AC	BDA08024AS	UDA24AC	GDH14024AS
110V AC	BDA08110AS	UDA110AC	GDH14110AS
230V AC	BDA08223DS	UDA230AC	GDH14223DS

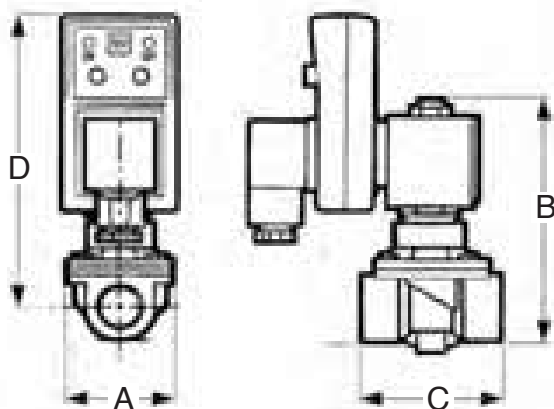


For Standard Connectors

See pages 2/48 and 2/49

Automatic Drain Valve

- Simple to install
- Long life
- Minimum maintenance
- Manual test facility
- Solid state timer
- Variable discharge times
- LED indicators showing operational status
- Timer can be wired with an AC or DC supply
- CE tested



Dimensions			
A	B	C	D
40	75	40	120

Automatic Drain Valve	
CD50	3/8 (plus voltage)

Technical Data

Type of Construction
 Servo - Assisted
 Normally closed only

Line Media
 Non-aggressive liquids and gases, ie air, oil, water

Operating Pressure
 0.1 - 16 bar

Operating Temperature
 -10°C to +90°C

Threads
 BSPP GAS Parallel ISO 228/1

Materials
 Body: Brass
 Other Parts: Stainless steel
 Seals: Viton

Mounting
 Contact sales office for details.

Standard Voltages
 24VDC 24VAC
 110VAC 230VAC (50Hz)

Connection Size
 3/8

Times (variable)
 Discharge: 0.5 - 10 secs.
 Interval: 0.5 - 45 mins

Protection Rating
 IP65 with connector
 - see pages 2/48-51

Options
 Different voltages
 Different connection sizes

Special Requests
 For assistance, contact our technical office or your local Camozzi distributor.

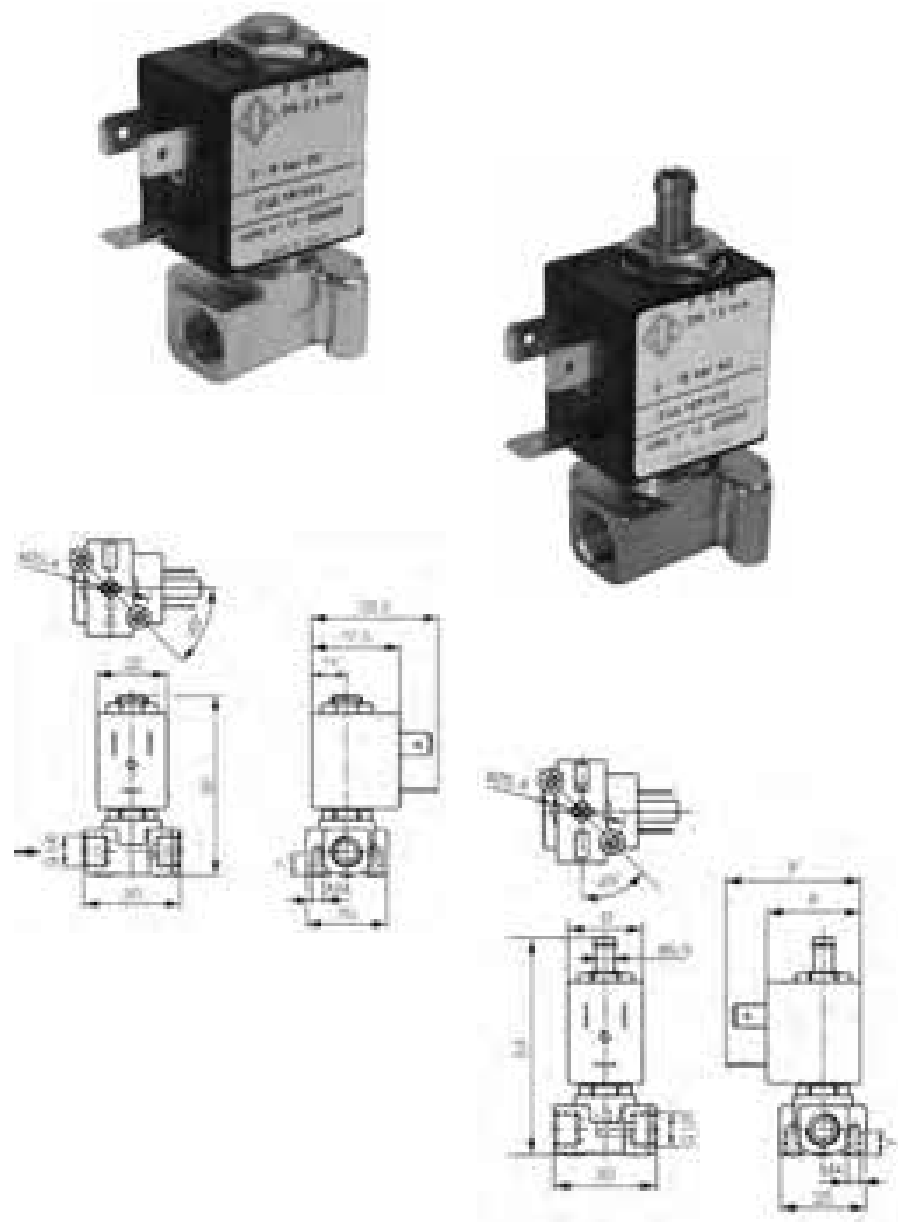
New

Solenoid Valves - Direct Acting Normally Closed Stainless Steel

Connections: 1/8
 Operation: 2 way normally closed

7

PROCESS VALVES & ACTUATION



Technical Data

Type of Construction
 Direct Acting, normally closed

Line Media
 Air, oil, water, gas

Operating Pressure
 See table

Operating Temperature
 Ambient: -10°C to +60°C
 Fluid: -10°C to +140°C

Threads
 BSPP GAS Parallel ISO 228/1

Materials
 Body: 316 Stainless Steel
 Plunger: 306 Stainless steel
 Seals: Viton

Mounting
 M4

Standard Voltages
 12v DC 24v DC
 24v AC 110v AC 230v AC

Protection Rating
 IP65 with connector
 - see pages 2/48-51

Power Consumption
 See table

Special Requests
 For assistance, contact our technical office or your local Camozzi distributor.

	Size	Orifice		Min	Pressure Range (bar)		Kv
		mm	Watt		AC	DC	
21JL1R1V12	1/8	1.2	5	0	25	12	0.06
21JL1R1V23	1/8	2.3	5	0	18	8	0.126
31JL1XP1V12	1/8	2.3	5	0	15	-	0.045



For Standard Connectors

See pages 2/48 and 2/49

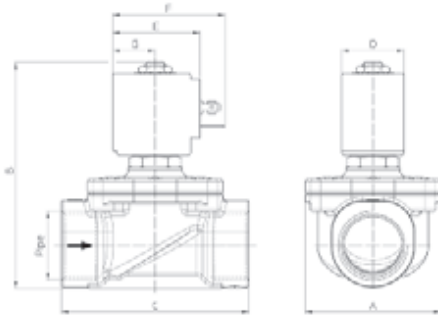
Coil Type	Power Absorption			Dimensions mm		
	W	Hold VA~	Inrush VA~	D	E	F
L	5	10	15	22	27.5	39.5

New

Solenoid Valves - Coupled Diaphragm Normally Closed Stainless Steel

Connections: 3/8 - 1 1/2 with 8 watt and 12 watt and 14 watt coils

Operation: 2 way normally closed



Technical Data

Type of Construction

Direct coupled, normally closed

Line Media

Air, oil, water, gas

Operating Pressure

See table

Operating Temperature

Ambient: -10°C to +80°C

Fluid: -10°C to +140°C

Threads

BSPP GAS Parallel ISO 228/1

Materials

Body: 316 Stainless Steel

Plunger: 306 Stainless steel

Seals: Viton

Mounting

Normally in fixed pipework

Standard Voltages

12v DC 24v DC

24v AC 110v AC 230v AC

Protection Rating

IP65 with connector

- see pages 2/48-51

Power Consumption

See table

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.

	Size	Orifice		Watt	Pressure Range (bar)			Kv	Coil Type
		mm			Min	AC	DC		
21IH3K1V150	3/8	15	8	8	0	14	6	2.4	B
21IH3K1V150	3/8	15	12	12	0	-	14	2.4	U
21IH4K1V160	1/2	16	8	8	0	14	6	3	B
21IH4K1V160	1/2	16	12	12	0	-	14	3	U
21IH5K1V200	3/4	20	8	8	0	14	6	3.6	B
21IH5K1V200	3/4	20	12	12	0	-	14	3.6	U
21IH6K1V250	1	25	8	8	0	14	3	8.4	B
21IH6K1V250	1	25	12	12	0	-	8	8.4	U
21IH6K1V250	1	25	14	14	0	-	14	8.4	G
21IH7K1V350	1 1/4	35	14	14	0	14	7	18	G
21IH8K1V400	1 1/2	40	14	14	0	14	7	21	G

Coil Type	Dimensions mm				
	W	D	E	F	G
B	8	30	42	54	20.5
U	12	36	48	60	23.5
G	14	52	55	67	25

Coil Type	Dimensions mm		
	A	B	C
21IH3K1V510	52	92	68
21IH4K1V160	52	92	68
21IH5K1V200	58	100	75
21IH6K1V250	65	109	90
21IH7K1V350	94	126	128
21IH8K1V400	94	126	128



For Moulded Connectors

See pages 2/50 and 2/51

Series NA NAMUR Valves

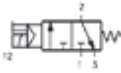
Connection: 1/4

Electropneumatically operated 3/2, 5/2, 5/3 way with interface according to NAMUR standard

7



Part Number
NA54N-15-02-*



Part Number
NA34N-15-02-*



Part Number
NA44N-15-02-*



Part Number
NA54N-11-02-*



Part Number
NA34N-11-02-*



Part Number
NA54N-33



Part Number
NA64N-33



Part Number
NA74N-33



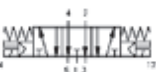
Part Number
NA84N-33



Part Number
NA54N-35



Part Number
NA64N-11-02-*



Part Number
NA74N-11-02-*



Part Number
NA84N-11-02-*



Technical Data

Type of Construction
Spool type (pilot operated)

Media
Filtered air, without lubrication. If lubricated air is used, it is recommended to use oil ISO VG32. Once applied, the lubrication should never be interrupted.

Operating Pressure
See technical data page 2/7

Flow Rates
See technical data page 2/7

Operating Temperature
0°C to +60°C.
(with dry air -20°C to +60°C)

Materials
Body: Aluminium
Spool: Stainless Steel
Seals: NBR

Connections
2, 4 = NAMUR 1, 3, 5 = 1/4

Mountings
Through 2 Ø5 holes in valve body

Additional Options
Seal Kits available on request

Special Requests
For assistance, contact our technical office or your local Camozzi distributor.

*Coil sold separately, page 2.00/047

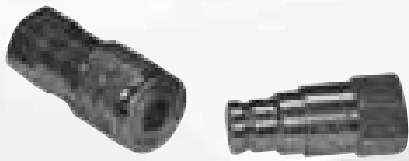
CODING EXAMPLE

NA	5	4	15	02	U	7	0
NA SERIES: NA					U SOLENOID MATERIAL U = PPS H = Self-extinguishing nylon Explosion-proof (30 x 30)* * on request		
5	N° N° WAY/POSITIONS 3 = 3/2 4 = 3/2 N.A. 5 = 5/2 6 = 5/3 C.C. 7 = 5/3 C.A. 8 = 5/3 pressure centres		15	ACTUATION 11 = double solenoid 15 = single solenoid spring return 33 = pneumatic / pneumatic 35 = pneumatic / spring		7	SOLENOID DIMENSIONS 7 = 22 x 22 8 = 30 x 30 9 = 22 x 22 with memory
4	CONNECTIONS 4 = 1/4		02	SOLENOID INTERFACE 02 = mech. sol. 22 x 22		0	SOLENOID VOLTAGE: See page 2/47

Complete with two end-blocks Part Number 90-H** or 90*-HN*.

PROCESS VALVES & ACTUATION

8 > Hydraulic Couplings



Flat Face Couplings - ISO 16028

8 / 2 **Technical Data - ISO 16028**

8 / 3 **PLT1
Standard Range**



8 / 3 **Dust Caps
for Flat Face Couplings**



8 / 4 **CAM FF (F/M) Range -
Flat Face Couplings**






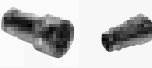



8 / 5 **PLTX
Stainless Steel Range**







8 / 6 **PLT4
Premier Range**



Quick Release Couplings - ISO A Norm

	8 / 7	Technical Data - ISO A Norm
	8 / 8	PAV1 Standard Range
	8 / 8	Dust Caps for ISO A
	8 / 9	CAM IA (F/M) Range - Hydraulic Quick Release Couplings
	8 / 10	PAO1 PAOC Valveless Range (Free Flow)
	8 / 11	PAVX Standard Range
	8 / 12	PPV Standard Range
	8 / 13	PKK1, PKK4 Hydraulic Probes

Quick-Release Couplings - ISO B Norm

	8 / 14	Technical Data - ISO B Norm
	8 / 14	PBV1 Steel
	8 / 14	Dust Caps for ISO B
	8 / 15	PBVM Brass
	8 / 15	PBVX Stainless Steel

Hydraulic Flat Face Couplings - Technical Data - ISO 16028

PLT Range - ISO 16028

PLT1 Standard Range (250/350 Bar) Body size ISO 6.3 - 50

CAM FF (250-320 Bar) Body size ISO 6.3 - 19

PLT4 Premier Range (350/500 Bar) Body size ISO 5 - 25

PLT6 Ultra High Pressure Range (700 Bar)

Body size ISO 6.3 - 10

PLTX Standard Range in Stainless Steel (100/400 Bar)

Body size 6.3 - 50

The PLK4 range of probes has been designed to offer connection to PLT couplings under residual pressure. A full range of connections are available in BSP, Metric, NPT and UNF thread forms with tube connections from 6 to 30mm tube diameters to DIN 2353. Options include light and heavy thread forms in both short and long (Bulkhead) connections.

Applications

Flat faced couplings are particularly suitable for agriculture, construction and mobile equipment, mining and general industrial use.

Features

Heavy duty construction
High working pressures and flow rates low pressure drops
Designed for minimal spillage during connection and disconnection
Locking sleeve provided with safety system preventing accidental disconnection
Easy to keep clean.

General Technical Information

Body and Probe - All steel construction, stressed components nitrided or induction hardened
Finish - Zinc Plated in accordance with EEC directive 2000/53/CE (Chrome 6 free)
Seals - NBR standard EPDM, Viton and Neoprene on request. (PLTX Viton as standard)
Backing Ring - Teflon
Springs - C98 steel or stainless steel
Contact the sales office for special enquires and further technical information

Flat Face Couplings - PLT1 Standard Range

Standard				Min. Burst Pressure					
Nominal Size		Max. Working Pressure (bar)	Rated Flow (l/m)	Male	Female	Coupled	Fluid Spillage (cc)		
DN USA	ISO			DN(mm)	(bar)			(bar)	
06	04	6.3	6.1	315	12	1800	1260	1430	0.008
13	06	10	8.7	250	23	1640	1000	1610	0.010
20	08	12.5	11.2	250	45	1560	1100	1900	0.012
25	12	19	15.5	250	100	1400	1100	1400	0.020
30	16	25	18	250	189	1300	1000	1400	0.030
39	24	40	30	250	379	1290	1200	1170	0.050
50	32	50	40	250	757	see PLK4	1000	1000	0.100

Flat Face Couplings - CAM FF (F/M) Range

Premier				Min. Burst Pressure					
Nominal Size		Max. Working Pressure (bar)	Rated Flow (l/m)	Male	Female	Coupled	Fluid Spillage (cc)		
DN USA	ISO			DN(mm)	(bar)			(bar)	
06	04	6.3	4	320	15	1600	1400	1500	0.005
13	06	10	6.2	250	53	1350	1250	1500	0.007
13	06	10	8.7	250	53	1350	1250	1500	0.007
20	08	12.5	11	250	98	1050	1100	1400	0.008
25	12	19	12.8	250	174	1050	1000	1200	0.009

Flat Face Couplings - PLT4 Premier Range

Standard - Stainless Steel				Min. Burst Pressure					
Nominal Size		Max. Working Pressure (bar)	Rated Flow (l/m)	Male	Female	Coupled	Fluid Spillage (cc)		
DN USA	ISO			DN(mm)	(bar)			(bar)	
06	04	6.3	6.2	400	12	2610	1660	2320	0.008
13	06	10	8.7	250	23	1450	1050	1980	0.010
20	08	12.5	11	250	45	1300	1000	1670	0.012
22	10	16	12.8	250	74	1200	1000	1500	0.015
25	12	19	15	250	100	1150	1040	1480	0.020
30	16	25	18	250	189	1000	1000	1000	0.030
39	24	40	30	150	379	600	600	600	0.050
50	32	50	40	100	757	400	400	400	0.100

Flat Face Couplings - PLTX Stainless Steel Range

Standard - Stainless Steel						Min. Burst Pressure			
Nominal Size		Max. Working Pressure		Rated Flow	Male	Female	Coupled	Fluid Spillage	
DN USA	ISO	DN(mm)	(bar)	(l/m)	(bar)	(bar)	(bar)	(cc)	
06 04	6.3	6.2	400	12	2610	1660	2320	0.008	
13 06	10	8.7	250	23	1450	1050	1980	0.010	
20 08	12.5	11	250	45	1300	1000	1670	0.012	
22 10	16	12.8	250	74	1200	1000	1500	0.015	
25 12	19	15	250	100	1150	1040	1480	0.020	
30 16	25	18	250	189	1000	1000	1000	0.030	
39 24	40	30	150	379	600	600	600	0.050	
50 32	50	40	100	757	400	400	400	0.100	

PLT1 Standard Range - Hydraulic Flat Face Couplings

ISO 16028

8



Technical Data

Characteristics

Easy connection and disconnection by pushing the two halves together with one hand only. The locking sleeve is provided with safety-system which makes sure a perfect connection and prevents accidental disconnection. Dimension 13 (DN13) conforms to HTMA specifications. All dimensions conform to ISO 16028 standard.

Threads

BSP
NPT on request

Materials

See page 8/2

Operating and Burst Pressures

See table page 8/2

Operating Temperature

NBR standard seals -25°C to +125°C

Special Requests

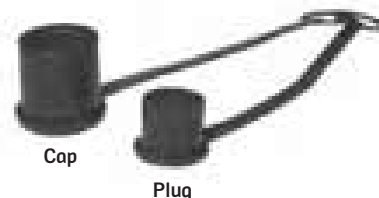
For assistance, contact our technical office or your local Camozzi distributor.

Other seals available on request.

DN	Dash	ISO	CH2	CH3	ØE	L1	L2	L3	Thread	Carrier Half	Probe Half
Size											
06	04	6.3	22	22	28	101.5	58.5	53.5	1/4	PLT1.0606.002	PLT1.0606.003
13	06	10	27	27	32	116	67.5	63.5	3/8	PLT1.1310.002	PLT1.1310.003
13	06	10	27	27	32	125	72.5	67.5	1/2	PLT1.1313.002	PLT1.1313.003
20	08	12.5	36	36	38	138.5	78.5	72	3/4	PLT1.2019.002	PLT1.2019.003
25	12	19	46	41	48	157.5	94	86	3/4	PLT1.2519.002	PLT1.2519.003
25	12	19	46	41	48	157.5	94	86	1	PLT1.2525.002	PLT1.2525.003
30	16	25	50	50	55	177	109.5	90	1 1/4	PLT1.3031.002	PLT1.3031.003
39	24	40	70	70	79	210	118.5	119.5	1 1/2	PLT1.3939.002	PLT1.3939.003
50	32	50	80	70	103	290	147.5	119.5	2	PLT1.5051.112	PLK4.5051.113

Dust Caps for Flat Face Couplings

Dust Caps - for Flat Face Couplings			
DIN	Thread	for Carrier	for Probe
06	1/4	PLUG SPLT.06002	CAP SPLT.06003
13	3/8	PLUG SPLT.13002	CAP SPLT.13003
13	1/2	PLUG SPLT.13002	CAP SPLT.13003
20	3/4	PLUG SPLT.20002	CAP SPLT.20003
25	1	PLUG SPLT.25002	CAP SPLT.25003
30	1 1/4	PLUG SPLT.30002	CAP SPLT.30003



New

CAM FF (F/M) Range - Flat Face Couplings

ISO 16028



Technical Data

Characteristics

Flat mating surfaces easily wiped clean to prevent contamination and spillage during connection/disconnection. Connection is made by pushing the male coupling and disconnection by pulling back the sleeve of the female. Positive, quick connection of the male into the female by the latching ball system. Shut-off by flat valve.

Threads

BSP
NPT on request

Materials

See page 8/2

Operating and Burst Pressures

See table page 8/2

Operating Temperature

-30°C up to +110°C
(for other temperatures the coupling is assembled with the specified seals)

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.

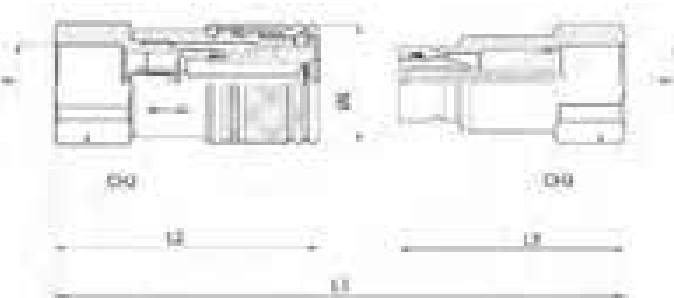


See 8/3 for Dust Caps

DN	Dash	ISO	CH2	CH3	ØE	L1	L2	L3	Thread	Carrier Half	Probe Half
06	04	6.3	24	22	28	104.6	63.6	52.1	1/4	CAM FFF 0404	CAM FFF 0404
13	06	10	27	27	32	121.5	74.9	62.5	3/8	CAM FFF 0606	CAM FFF 0606
13	06	10	27	27	32	127.5	77.9	65.5	1/2	CAM FFF 0608	CAM FFF 0608
20	08	12.5	34	34	38	144.1	86.7	74.5	3/4	CAM FFF 0812	CAM FFF 0812
25	12	19	41	41	48	178.7	108.9	91.5	1	CAM FFF 1216	CAM FFF 1216

PLTX Stainless Steel Range - Hydraulic Flat Face Couplings

ISO 16028



Technical Data

Characteristics

Easy connection and disconnection by pushing the two halves together with one hand only. The locking sleeve is provided with safety-system which makes sure a perfect connection and prevents accidental disconnection. Dimension 13 (DN13) conforms to HTMA specifications. All dimensions conform to ISO 16028 standard.

Threads

BSP
NPT on request

Materials

See page 8/3

Operating and Burst Pressures

See table page 8/3

Operating Temperature

with Viton seals -25°C to +200°C

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.



See 8/3 for Dust Caps

DN	Dash Size	ISO	CH2	CH3	ØE	L1	L2	L3	Thread	Carrier Half	Probe Half
06	04	6.3	22	22	28	108	59	60	1/4	PLTX.0606.112	PLTX.0606.113
13	06	10	27	27	32	126.5	73	69.5	3/8	PLTX.1310.112	PLTX.1310.113
13	06	10	27	27	32	126	73	69	1/2	PLTX.1313.112	PLTX.1313.113
20	08	12.5	36	36	38	151	87	81.5	1/2	PLTX.2019.112	PLTX.2019.113
20	08	12.5	36	36	38	152.5	87	83	3/4	PLTX.2019.112	PLTX.2019.113
22	10	16	36	36	42	151.5	86	83	3/4	PLTX.2019.112	PLTX.2019.113
25	12	19	41	41	48	166	97.5	90.5	1	PLTX.2525.112	PLTX.2525.113
30	16	25	50	50	55	181.5	109.5	95	1 1/4	PLTX.3031.112	PLTX.3031.113
39	24	40	70	70	79	202	118	112.5	1 1/2	PLTX.3939.112	PLTX.3939.113
50	32	50	80	80	99	259	149	148	2	PLTX.5051.112	PLTX.5051.113

PLT4 Premier Range - Hydraulic Flat Face Couplings

ISO 16028



DN	ISO	CH2	CH3	ØE	L1	L2	L3	Thread	Carrier Half	Probe Half
04	5	17	17	25	84	48.5	43.5	1/8	PLT4.0404.112	PLT4.0404.113
04	5	17	17	25	84	48.5	43.5	1/8 NPT	PLT4.0404.012	PLT4.0404.013
04	5	17	17	25	88	50.5	45.5	7/16 UNF	PLT4.0404.032	PLT4.0412.033
06	6.3	22	22	28	100	58.5	52	1/4	PLT4.0606.112	PLT4.0606.113
06	6.3	22	22	28	100	58.5	52	1/4 NPT	PLT4.0606.012	PLT4.0606.013
06	6.3	22	22	28	100	58.5	52	3/8	PLT4.0610.112	PLT4.0610.113
06	6.3	22	22	28	100	58.5	52	3/8 NPT	PLT4.0610.012	PLT4.0610.013
06	6.3	22	22	28	100	58.5	52	9/16 UNF	PLT4.0615.032	PLT4.0615.033
06	6.3	22	22	28	100	58.5	52	M16x1.5	PLT4.0616.102	PLT4.0616.103
06	6.3	22	22	28	100	58.5	52	M18x1.5	PLT4.0618.102	PLT4.0618.103
13	10	30	30	32	118	73.5	60.5	3/8	PLT4.1310.112	PLT4.1310.113
13	10	30	30	32	121	73.5	63.5	3/8 NPT	PLT4.1310.012	PLT4.1310.013
13	10	30	30	32	118	73.5	60.5	1/2	PLT4.1313.112	PLT4.1313.113
13	10	30	30	32	121	73.5	63.5	1/2 NPT	PLT4.1313.012	PLT4.1313.013
13	10	30	30	32	116.5	72	60.5	9/16 UNF	PLT4.1315.032	PLT4.1315.033
13	10	30	30	32	118	73.5	60.5	M16x1.5	PLT4.1316.102	PLT4.1316.103
13	10	30	30	32	118	73.5	60.5	M18x1.5	PLT4.1318.102	PLT4.1318.103
13	10	30	30	32	118	73.5	60.5	3/4 UNF	PLT4.1319.032	PLT4.1319.033
13	10	30	30	32	119	74.5	60.5	M22x1.5	PLT4.1322.102	PLT4.1322.103
20	12.5	36	36	38	142.5	85	73	1/2	PLT4.2013.112	PLT4.2013.113
20	12.5	36	36	38	143.5	86	74	1/2 NPT	PLT4.2013.012	PLT4.2013.013
20	12.5	36	36	38	135.5	86	70	3/4 UNF	PLT4.2019.032	PLT4.2019.033
20	12.5	36	36	38	144	88	74.5	3/4	PLT4.2019.112	PLT4.2019.113
20	12.5	36	36	38	144	87	74.5	3/4 NPT	PLT4.2019.012	PLT4.2019.013
20	12.5	36	36	38	143	86	70.5	M22x1.5	PLT4.2022.102	PLT4.2022.103
20	12.5	36	36	38	142	85	74.5	7/8 UNF	PLT4.2023.032	PLT4.2023.033
20	12.5	36	36	38	144	87	74.5	M26x1.5	PLT4.2026.102	PLT4.2026.103
20	12.5	36	36	38	144	87	74.5	1 1/16 UNF	PLT4.2027.032	PLT4.2027.033
22	16	36	36	42	141.5	86	73	1/2	PLT4.2213.112	PLT4.2213.113
22	16	36	36	42	142.5	86	74	1/2 NPT	PLT4.2213.012	PLT4.2213.013
22	16	36	36	42	134.5	82	70	3/4 UNF	PLT4.2219.032	PLT4.2219.033
22	16	36	36	42	143	86	74.5	3/4	PLT4.2219.112	PLT4.2219.113
22	16	36	36	42	143	86	74.5	3/4 NPT	PLT4.2219.012	PLT4.2219.013
22	16	36	36	42	142	85	70.5	M22x1.5	PLT4.2222.102	PLT4.2222.103
22	16	36	36	42	141	84	74.5	7/8 UNF	PLT4.2223.032	PLT4.2223.033
22	16	36	36	42	143	86	74.5	M26x1.5	PLT4.2226.102	PLT4.2226.103
22	16	36	36	42	143	86	74.5	1 1/16 UNF	PLT4.2227.032	PLT4.2227.033
25	19	41	41	48	154	95	81	3/4	PLT4.2519.112	PLT4.2519.113
25	19	41	41	48	154	95	81	3/4 NPT	PLT4.2519.012	PLT4.2519.013
25	19	41	41	48	161	97	86	1	PLT4.2525.112	PLT4.2525.113
25	19	41	41	48	161	97	86	1 NPT	PLT4.2525.012	PLT4.2525.013
25	19	41	41	48	159	95	86	1 5/16 UNF	PLT4.2533.032	PLT4.2533.033
30	25	55	55	55	177	109.5	90	1 1/4	PLT4.3031.112	PLT4.3031.113
30	25	55	55	55	177	109.5	90	1 1/4 NPT	PLT4.3031.012	PLT4.3031.013
30	25	55	55	55	177	109.5	90	1 5/8 UNF	PLT4.3041.032	PLT4.3041.033

Technical Data

Characteristics

PLT4 couplings are manufactured to the ISO 16028 standard. This guarantees:

- interchangeability with other couplings manufactured to this standard.
 - maximum operating pressure 350 bar for all sizes
 - Safety factor 1:4 coupled and uncoupled
- reliable operation of the coupling with low pressure drops guaranteed, irrespective of the flow direction, male to female or female to male

Materials

See page 8/2

Threads

Metric - G(BSP)

NPT according to DIN 3852 form Y.
UNF thread according to SAE J1926 norm

Outside metric according to DIN 2353 L(light) or S(heavy).
Outside metric according to DIN 2353 L(light) or S(heavy) bulkhead

Operating and Burst Pressures

See table page 8/2

Operating Temperature

NBR standard seals -25°C to +125°C

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.

Other seals available on request.



See page 8/3 for Dust Caps

Hydraulic Quick Release Couplings - Technical Data - ISO A Norm

ISO 7241-1A

PAV1 Standard Range (160/350 Bar) Body sizes ISO 6.3 - 50
 PAO1 Valveless Range (200/350 Bar) Body sizes ISO 5 - 25
 CAM IA (F/M) Range (250/350 Bar) Body sizes ISO 6.3 - 25

PPV Push - Pull Range (225/300 Bar) Body sizes ISO 6.3 - 25
 SCBC Economy Range (130/350 Bar) Body sizes 6.3 - 50
 SCBX Stainless Steel Range (130/350 Bar) Body sizes 6.3 - 50

The PKK range of probes has been designed to offer connection to PPV couplings under residual pressure.
 A full range of connections are available in BSP, Metric and NPT thread forms with tube connections from 6 to 35mm tube diameters to DIN 2353. Options include light and heavy thread forms in both short and long (Bulkhead) connections.

Applications

ISO couplings are the most common couplings in the market and used in all industrial applications. The PPV push - pull range are used extensively in agriculture.

Features

- Simple and quick connection
- Full interchange ability
- Available with poppet valve or ball closing system
- Compact and lightweight design
- Valveless couplings available in zinc or chrome plated

General Technical Information

- Body and Probe - All steel construction, stressed components nitrided or induction hardened
- Finish - Zinc Plated in accordance with EEC directive 2000/53/CE (Chrome 6 free)
- Seals - NBR standard EPDM, Viton and Neoprene on request. (SCBX Viton as standard)
- Backing Ring - Teflon
- Springs - C98 steel or stainless steel
- Contact the sales office for special enquires and further technical information

Quick Release Couplings - PAV1 Standard Range

						Min. Burst Pressure			
Nominal Size		Max. Working Pressure		Rated Flow (l/m)	Male	Female	Coupled	Fluid Spillage (cc)	
DNP	USA	ISO	DN(mm)		(bar)	(bar)	(bar)		
06	04	6.3	5	350	12	1510	1760	1450	0.5
10	06	10	9	350	23	1470	1520	1590	1.9
13	08	12.5	10.6	250	45	1000	1460	1240	2.7
20	12	20	15.7	250	106	900	1530	1040	9.3
25	16	25	17.3	200	189	1300	960	1300	16
30	20	31.5	22.8	200	288	1140	850	1090	30
39	24	40	30	190	379	810	790	820	54
50	32	50	37.6	160	757	650	960	1100	120

CAM IA (F/M) Range

						Min. Burst Pressure			
Nominal Size		Max. Working Pressure		Rated Flow (l/m)	Male	Female	Coupled	Fluid Spillage (cc)	
DNP	USA	ISO	DN(mm)		(bar)	(bar)	(bar)		
06	04	6.3	5	350	5	2000	1500	1450	0.7
10	06	10	9	315	35	1450	1450	1300	1.4
13	08	12.5	10.6	300	75	1200	1500	1500	1.8
20	12	19	15.7	250	147	1000	1200	1000	7
25	16	25	17.3	250	250	1000	1100	1100	10.5

Quick Release Couplings - PAO1 PAOC Valveless Range (Free Flow)

						Min. Burst Pressure	
Nominal Size		Max. Working Pressure		Rated Flow (l/m)	Coupled		
DNP	USA	ISO	DN(mm)		(bar)	(bar)	
06	04	6.3	5.5	350	12	1450	
10	06	10	9.5	350	23	1590	
13	08	12.5	11.5	250	45	1240	
20	12	20	16.5	250	106	1040	
25	16	25	19	200	189	880	

Push-Pull Quick Release Couplings - PPV Standard Range

						Min. Burst Pressure			
Nominal Size		Max. Working Pressure		Rated Flow (l/m)	Male	Female	Coupled	Fluid Spillage (cc)	
DNP	USA	ISO	DN(mm)		(bar)	(bar)	(bar)		
06	04	6.3	5.5	250	12	1000	1000	1000	0.8
10	06	10	9	300	23	1340	1500	1380	1.9
13	08	12.5	10.6	225	45	930	1670	1110	2.7
20	12	20	15.7	225	106	1240	1460	1190	9.3
25	16	25	17.3	225	189	900	1170	970	16

Probes for Connection Under Pressure - PKK1, PKK4

Nominal Size			Max. Working Pressure (bar)	Rated Flow (l/m)	Min. Burst Pressure			Fluid Spillage (cc)	
DNP	USA	ISO DN(mm)			Male (bar)	Female (bar)	Coupled (bar)		
13	08	12.5	10.6	250	45	1000	1460	1240	2.7

Contact the sales office for flow and pressure drop characteristics

PAV1 Standard Range - Hydraulic Quick Release Couplings

ISO A Norm



Technical Data

Material

See page 8/7

Operating and Burst Pressures

See table page 8/7

Operating Temperature

with NBR standard seals -25°C to +125°C

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.

Other seal available on request.

DN	ISO	CH2	CH3	ØE	L1	L2	L3	Thread	Carrier Half	Probe Half
06	6.3	19	19	26	70	49	35	1/4	PAV1.0606.002	PAV1.0606.003
06	6.3	19	19	26	70	49	35	1/4 NPT	PAV1.0606.012	PAV1.0606.013
10	10	22	22	30	85	60.5	42.5	3/8	PAV1.1010.002	PAV1.1010.003
10	10	22	22	30	85	60.5	42.5	3/8 NPT	PAV1.1010.012	PAV1.1010.013
13	12.5	27	27	38	96	70	48	1/2	PAV1.1313.002	PAV1.1313.003
13	12.5	27	27	38	96	70	48	1/2 NPT	PAV1.1313.012	PAV1.1313.013
20	20	34	34	45	114	84.5	57	3/4	PAV1.2019.002	PAV1.2019.003
20	20	34	34	45	114	84.5	57	3/4 NPT	PAV1.2019.012	PAV1.2019.013
25	25	41	41	52	131	99	65.5	1	PAV1.2525.002	PAV1.2525.003
25	25	41	41	52	131	99	65.5	1 NPT	PAV1.2525.012	PAV1.2525.013
30	31.5	50	50	70	150	117	75	1 1/4	PAV1.3031.002	PAV1.3031.003
30	31.5	50	50	70	150	117	75	1 1/4 NPT	PAV1.3031.012	PAV1.3031.013
39	40	60	60	82	167	133	84	1 1/2	PAV1.3939.002	PAV1.3939.003
39	40	60	60	82	167	133	84	1 1/2 NPT	PAV1.3939.012	PAV1.3939.013
50	50	75	75	99	216	169	108	2	PAV1.5051.002	PAV1.5051.003
50	50	75	75	99	216	169	108	2 NPT	PAV1.5051.012	PAV1.5051.013

Dust Caps for ISO A

Dust Caps - for ISO 'A' Series

DN	Carrier Half	Probe Half
06	SPAV.06002	SPAV.06003
10	SPAV.10002	SPAV.10003
13	SPAV.13002	SPAV.13003
20	SPAV.20002	SPAV.20003
25	SPAV.25002	SPAV.25003
30	SPAV.30202	SPAV.30203
39	SPAV.39202	SPAV.39203
50	SPAV.50202	SPAV.50203



Cap

Plug

New

CAM IA (F/M) Range - Hydraulic Quick Release Couplings

ISO A Norm



Technical Data

Characteristics

Flat mating surfaces easily wiped clean to prevent contamination and spillage during connection/disconnection. Connection is made by pushing the male coupling and disconnection by pulling back the sleeve of the female. Positive, quick connection of the male into the female by the latching ball system. Shut-off by flat valve.

Threads

BSP
NPT on request

Materials

See page 8/7

Operating and Burst Pressures

See table page 8/7

Operating Temperature

-30°C up to +110°C
(for other temperatures the coupling is assembled with the specified seals)

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.



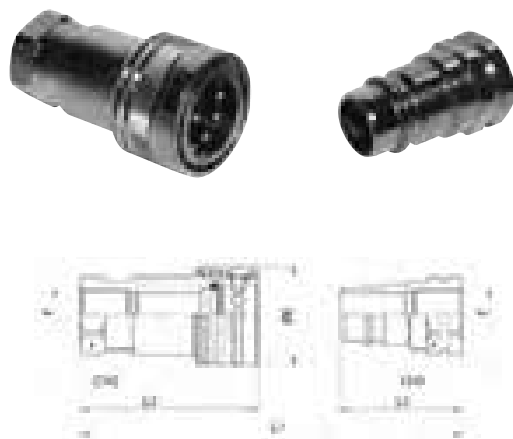
See page 8/8 for Dust Caps

Stainless Steel

Body Size	ISO	ISO			Dimensions			Thread Size	Carrier Half Part Number	Probe Half Part Number
		CH2	CH3	ØE	L1	L2	L3			
1/4	6.3	17	17	24	69.1	48.8	34.5	1/4	CAM IAF 0404	CAM IAF 0404
3/8	10	22	22	30	80.3	57.8	40.0	3/8	CAM IAF 0606	CAM IAF 0606
1/2	12.5	27	27	38	90.2	67.0	45.0	1/2	CAM IAF 0808	CAM IAF 0808
3/4	19	34	34	45	113.3	83.5	56.5	3/4	CAM IAF 1212	CAM IAF 1212
1	25	41	41	52	129.7	97.9	64.5	1	CAM IAF 1616	CAM IAF 1616

PA01 PAOC Valveless Range (Free Flow) - Hydraulic Quick Release Couplings

ISO A Norm



Technical Data

Material

PA01 series zinc plated and yellow bichromated. PAOC series chromium-plated. All high stressed components carbonitrided or hardened by induction

Seals: PA01 model standard in nitrile NBR. PAOC model standard in FPM (Viton™). On request EPDM and CR (Neoprene) seals

Back-up Ring: In pure Teflon

Operating and Burst Pressures

See table page 8/7

Operating Temperature

PA01 with NBR standard seals -25°C to +125°C

PAOC with Viton standard seals - 25°C to +200°C

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.



See page 8/8 for Dust Caps

Zinc Passivated

DN	ISO	CH2	CH3	ØE	L1	L2	L3	Thread	Carrier Half	Probe Half
06	6.3	19	19	26	70	49	35	1/4	PA01.0606.002	PA01.0606.003
06	6.3	19	19	26	70	49	35	1/4 NPT	PA01.0606.012	PA01.0606.013
10	10	22	22	30	85	60.5	42.5	3/8	PA01.1010.002	PA01.1010.003
10	10	22	22	30	85	60.5	42.5	3/8 NPT	PA01.1010.012	PA01.1010.013
13	12.5	27	27	38	96	70	48	1/2	PA01.1313.002	PA01.1313.003
13	12.5	27	27	38	96	70	48	1/2 NPT	PA01.1313.012	PA01.1313.013
13	12.5	27	27	38	96	70	48	M 22x1.5	PA01.1322.102	PA01.1322.103
20	20	34	34	45	114	84.5	57	3/4	PA01.2019.002	PA01.2019.003
20	20	34	34	45	114	84.5	57	3/4 NPT	PA01.2019.012	PA01.2019.013
25	25	41	41	52	131	99	65.5	1	PA01.2525.002	PA01.2525.003
25	25	41	41	52	131	99	65.5	1 NPT	PA01.2525.012	PA01.2525.013
Chromium Plated										
10	10	22	22	30	85	60.5	42.5	3/8	PAOC.1010.002	PAOC.1010.003
13	12.5	27	27	38	96	70	48	1/2	PAOC.1313.002	PAOC.1313.003
20	20	34	34	45	114	84.5	57	3/4	PAOC.2019.002	PAOC.2019.003

PAVX Standard Range - Hydraulic Quick Release Couplings

ISO A Norm



Technical Data

Material
 Stainless Steel - AISI 316.
 Springs - AISI 302
 Seals - NBR standard
 Back-up Ring: In pure Teflon

Operating Temperature
 with NBR standard seals -25°C to +125°C
 with Viton seals -25°C to +200°C

Special Requests
 For assistance, contact our technical office or your local Camozzi distributor.



See page 8/8 for Dust Caps

8

Stainless Steel

Body	ISO	Dimensions							Thread	Carrier Half	Probe Half
Size	Base	CH2	CH3	ØE	L1	L2	L3	BAR	Size	Part Number	Part Number
1/4	6.3	19	19	26	72	51	36	350	1/4	PAVX.0606.002	PAVX. 0606.003
3/8	10	24	22	32	81	58.5	40.5	250	3/8	PAVX.1010.002	PAVX. 1010.003
1/2	12.5	30	27	38	87.5	63.5	46	250	1/2	PAVX.1313.002	PAVX. 1313.003
3/4	20	38	36	46	112	83.5	56	200	3/4	PAVX.2019.002	PAVX. 2019.003
1	25	46	41	55	126	97	63	150	1	PAVX.2525.002	PAVX. 2525.003
1 1/4	31.5	60	50	70	150	117	75	63	*1 1/4	PAVX.3031.002	PAVX. 3031.003
1 1/2	40	70	60	84.5	167	133	83.5	50	*1 1/2	PAVX.3939.002	PAVX. 3939.003
2	50	75	75	100	210	165	105	50	*2	PAVX.5051.002	PAVX. 5051.003

* Not ISO A Standard

PPV Standard Range - Hydraulic Push-Pull Quick Release Couplings

Application: Quick release couplings of the "Push-Pull" series are designed for use in all agricultural applications. The main characteristic of this coupling is to allow an automatic release in case of accidental pulls. This system avoids possible damage to the hydraulic circuit.

ISO A Norm



Technical Data

Material

See page 8/7

Operating and Burst Pressures

See table page 8/7

Operating Temperature

NBR standard seals -25°C to +125°C

Additional Options

Available with ball seal if required

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.



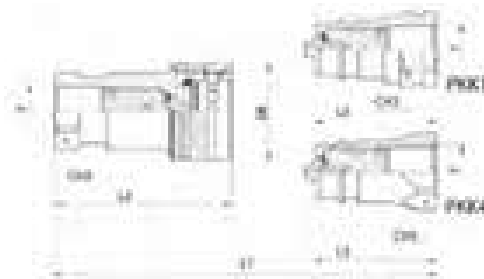
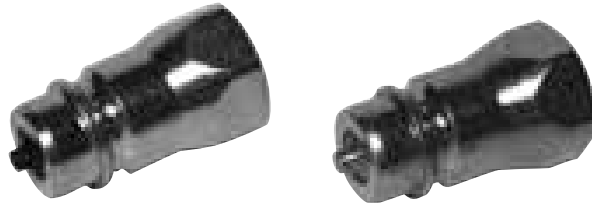
See page 8/8 for Dust Caps

DN	ISO	CH2	CH3	ØE	L1	L2	L3	Thread	Carrier Half	Probe Half
13	12.5	27	27	38	96	70	48	1/2	PPV1.1313.002	PAV1.1313.003
13	12.5	27	27	38	96	70	48	1/2 NPT	PPV1.1313.012	PAV1.1313.013
13	12.5	27	27	38	92.5	66.5	48	M 22x1.5	PPV1.1322.102	PAV1.1322.103
13	12.5	27	27	38	96	70	48	3/4 UNF	PPV1.1319.032	PAV4.1319.033
13	12.5	27	27	38	96	70	48	1/2	-	PAV4.1313.003

PKK1, PKK4 Hydraulic Probes - for Connection Under Pressure

Application: The main feature of these male couplings is that they can be connected to the female even if there is residual pressure in the circuit. This makes them suitable for agricultural applications, and in any hydraulic circuits affected by this type of problem. PAV1 PPV3 SCB compatible.

ISO A Norm



Technical Data

Characteristics

These male couplings are available in all versions and with all threads, standard (PAV) and push-pull (PPV). PKK 4 Ford Shape

Material

See page 8/8

Operating and Burst Pressures

See table page 8/8

Operating Temperature

with standard seals -25°C to +125°C

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.



See page 8/8 for Dust Caps

DN	ISO	CH2	CH3	ØE	L1	L2	L3	Thread	Probe 1/2
13	12.5	27	27	38	96	70	48	1/2	PKK1.1313.003
13	12.5	27	27	38	96	70	48	1/2 NPT	PKK1.1313.013
13	12.5	27	27	38	96	70	48	RC 1/2	PKK1.1313.043
13	12.5	27	27	38	96	70	48	M 22x1.5	PKK1.1322.103
13	12.5	27	27	38	96	70	48	3/4 UNF	PKK4.1319.033
13	12.5	27	27	38	96	70	48	1/2	PKK4.1313.003

Hydraulic Quick Release Couplings - Technical Data

ISO 7241-1B

PBV1 Carbon Steel Range (500/50 Bar) Body sizes ISO 04 - 50

PBVM Brass Range (300/50 Bar) Body sizes ISO 04 - 50

PBVX Stainless Steel Range (400/50 Bar) Body sizes ISO 04 - 50

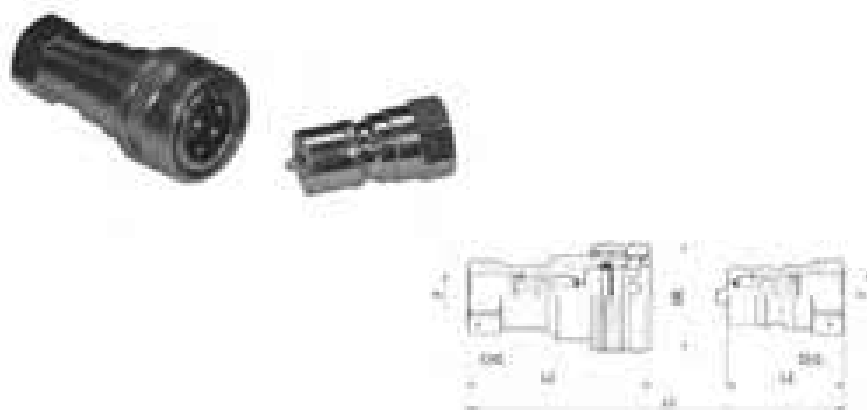
ISO B Norm

These couplings are stocked in 1/8 - 2 BSP (NPT and UNF threads available on request).

Applications: The robust nature of these couplings make the suitable for the iron, steel, oil and automobile industry. They offer excellent flow characteristics.

PBV1 Steel - Quick Release Couplings

ISO B Norm



Technical Data

Threads

BSP
NPT available on request

Material

Main parts in brass. Springs in AISI 302 and balls in AISI 316
Seals: Standards are in FPM (Viton™). Other seals provided on request
Back-up Ring: In pure Teflon

Operating Temperature

NBR standard seals -25°C to +200°C

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.

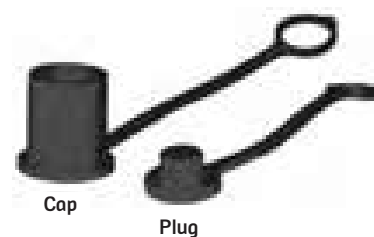
DN	ISO	CH2	CH3	ØE	L1	L2	L3	BAR	Thread	Carrier Half	Probe Half
04	5	17	14	23	62	50	31	500	1/8	PBV1.0404.002	PBV1.0404.003
06	6.3	19	19	28	76	60	38	250	1/4	PBV1.0606.002	PBV1.0606.003
10	10	22	22	35	86	67.5	43	250	3/8	PBV1.1010.002	PBV1.1010.003
13	12.5	27	27	44	97	76	48.5	250	1/2	PBV1.1313.002	PBV1.1313.003
20	20	34	34	52	114	91.5	57	250	3/4	PBV1.2019.002	PBV1.2019.003
25	25	41	41	60	131	106	65.5	200	1	PBV1.2525.002	PBV1.2525.003
39	40	65	65	75	198	126	126	63	1 1/4	PBV1.3931.002	PBV1.3931.003
39	40	65	65	75	198	126	126	63	1 1/2	PBV1.3939.002	PBV1.3939.003
50	50	90	90	105	222	142	142	50	2	PBV1.5051.002	PBV1.5051.003

Dust Caps for ISO B

Application: Quick release couplings of the “Push-Pull” series are designed for use in all agricultural applications. The main characteristic of this coupling is to allow an automatic release in case of accidental pulls. This system avoids possible damage to the hydraulic circuit.

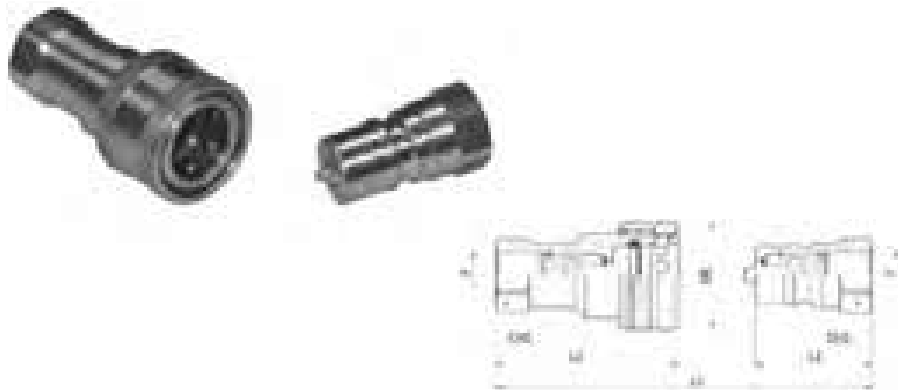
Body Size	Colour	Material	Female Dust Plug	Male Dust Cap
1/8	Red	PVC*	SPBV.04002	SPBV.04003
1/4	Red	PVC*	SPBV.06002	SPBV.06003
3/8	Red	PVC*	SPBV.10002	SPBV.10003
1/2	Red	PVC*	SPBV.13002	SPBV.13003
3/4	Red	PVC*	SPBV.20002	SPBV.20003
1	Red	PVC*	SPBV.25002	SPBV.25003
1 1/2	-	Aluminium	SPBV.39002	SPBV.39003
2	-	Aluminium	SPBV.50002	SPBV.50003

* Also available in Aluminium



PBVM Brass - Hydraulic Quick Release Couplings

ISO B Norm



DN	ISO	CH2	CH3	ØE	L1	L2	L3	BAR	Thread	Carrier Half	Probe Half
04	5	17	14	23	62	50	31	300	1/8	PBVM.0404.002	PBVM.0404.003
06	6.3	19	19	28	76	60	38	200	1/4	PBVM.0606.002	PBVM.0606.003
10	10	22	22	35	86	67.5	43	200	3/8	PBVM.1010.002	PBVM.1010.003
13	12.5	27	27	44	97	76	48.5	175	1/2	PBVM.1313.002	PBVM.1313.003
20	20	34	34	52	114	91.5	57	130	3/4	PBVM.2019.002	PBVM.2019.003
25	25	41	41	60	131	106	65.5	130	1	PBVM.2525.002	PBVM.2525.003
39	40	65	65	75	198	126	126	63	1 1/4	PBVM.3931.002	PBVM.3931.003
39	40	65	65	75	198	126	126	63	1 1/2	PBVM.3939.002	PBVM.3939.003
50	50	90	90	105	222	142	142	50	2	PBVM.5051.002	PBVM.5051.003

Technical Data

Threads

BSP
NPT available on request

Material

Main parts in brass. Springs in AISI 302 and balls in AISI 316
Seals: Standards are in FPM (Viton™). Other seals provided on request
Back-up Ring: In pure Teflon

Operating Temperature

NBR standard seals -25°C to +200°C

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.

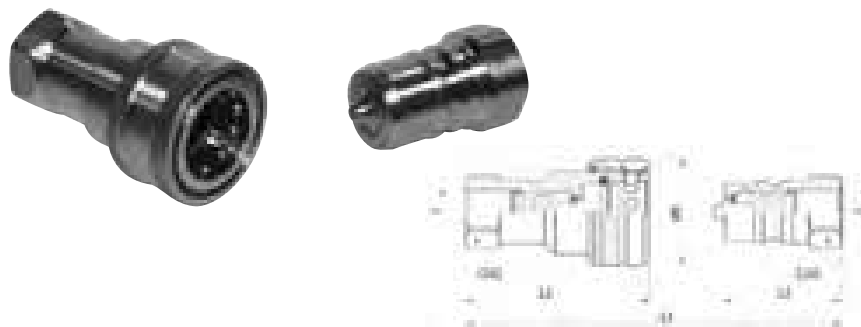


See page 8/14 for Dust Caps

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PBVX Stainless Steel - Hydraulic Quick Release Couplings

ISO B Norm



DN	ISO	CH2	CH3	ØE	L1	L2	L3	BAR	Thread	Carrier Half	Probe Half
04	5	14	14	24	62	50	31	400	1/8	PBVX.0404.002	PBVX.0404.003
06	6.3	19	19	28	76	60	38	350	1/4	PBVX.0606.002	PBVX.0606.003
10	10	24	22	35	78	64	39	250	3/8	PBVX.1010.002	PBVX.1010.003
13	12.5	27	27	42	91	73	45.5	250	1/2	PBVX.1313.002	PBVX.1313.003
20	20	36	34	52	107	87	53.5	200	3/4	PBVX.2019.002	PBVX.2019.003
25	25	41	41	60	125	102	63	150	1	PBVX.2525.002	PBVX.2525.003
39	40	65	65	75	198	126	126	63	1 1/4	PBVX.3931.002	PBVX.3931.003
39	40	65	65	75	198	126	126	63	1 1/2	PBVX.3939.002	PBVX.3939.003
50	50	90	90	105	222	142	142	50	2	PBVX.5051.002	PBVX.5051.003

Technical Data

Threads

BSP
NPT available on request

Material

All components in stainless steel AISI 316. Springs in AISI 302.
Seals: Standard in FPM (Viton™). Other seals provided on request
Back-up Ring: Teflon

Operating Temperature

Viton standard seals -25°C to +200°C

Special Requests


For assistance, contact our technical office or your local Camozzi distributor.





See page 8/14 for Dust Caps





Hydraulic Ball Valves

 9 / 2 High Pressure 2-Way Ball Valves

 9 / 3 Ultra High Pressure Ball Valves

 9 / 3 High Pressure 3-Way Diverter Ball Valves

 9 / 4 High Pressure Ball Valves (with fixing holes)

 9 / 5 316 Stainless Steel High Pressure Ball Valves

Accessories



9 / 6 In-Line Check Valves



9 / 7-8 Flow Control
& Needle Valves



9 / 9 Pressure Test Kits

High Pressure 2-Way Ball Valves



Part Number: BKH.* - BKH Series, Barstock Steel

BSP (G), NPT (N), METRIC THREADS (L&S)					
DN	Bore	Thread	BAR	BSP Code	NPT Code
4	5	1/8	500	*1113 G18	*1113 N18
6	6	1/4	500	*1113 G14	*1113 N14
10	10	3/8	500	*1113 G38	*1113 N38
13	13	1/2	500	*1113 G1213	*1113 N12
16	15	1/2	500	*1113 G1215	-
20	20	3/4	400	*1113 G34	*1113 N34
25	24	1	350	*1113 G1	*1113 N1
32	24	1 1/4	350	*1113 G54	*1113 N54
40	24	1 1/2	350	*1113 G32	*1113 N32
Outside metric according to DIN 2353 L (light) or S (heavy)					
		Code Tube Size Light		Code Tube Size Heavy	
4	5	-	M12 x 1.5	500	*1113 6L -
6	6	-	M14 x 1.5	500	*1113 8L -
8	8	5	M16 x 1.5	500	*1113 10L *1113 8S
10	10	6	M18 x 1.5	500	*1113 12L *1113 10S
10	-	8	M20 x 1.5	500	- *1113 12S
13	13	10	M22 x 1.5	500	*1113 15L *1113 14S
13	-	13	M24 x 1.5	500	- *1113 16S
16	15	-	M26 x 1.5	500	*1113 18L *1113 20S
20	20	15	M30 x 2	400	*1113 22L *1113 20S
25	24	20	M36 x 2	350	*1113 28L *1113 25S
25	-	24	M42 x 2	350	- *1113 30S
32	24	-	M45 x 2	350	*1113 35L -
40	24	24	M52 x 2	350	*1113 42L *1113 38S



Part Number: SKH.* - SKH Series, Forged Steel

BSP (G), NPT (N), METRIC THREADS (L&S)					
DN	Bore	Thread	BAR	BSP Code	NPT Code
32	32	1 1/4	420	*3123 G54	*2123 N54
40	38	1 1/2	420	*3123 G32	*3123 N32
50	48	2	420	*3123 G2-2PC	*3123 N2
50	48	2	420	*1113 G2-3PC	-
		Code Tube Size Light		Code Tube Size Heavy	
32	32	M45 x 2	420	*2123 35L	*2123 38S
40	38	M52 x 2	420	*2123 42L	-

Technical Data

Materials

Carbon steel, black phosphated,
Polyamide/BUNA seals

Operating Pressure

See table

Safety Factor

1.5

Operating Temperature

-30°C - to +90°C

Additional Options

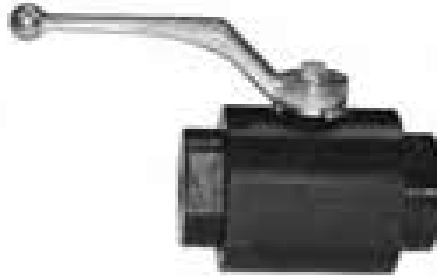
Forged steel bodies, DELRIN/BUNA,
VITON, EPDM and PTFE seals

Special Requests

For assistance, contact our technical
office or your local Camozzi
distributor.

Ultra High Pressure Ball Valves

Connections: NPT Female
1/4 - 1 1/2 Female



Part Number: HRKH* - HRKH Series

DN	Bore	Thread	BAR	Carbon Steel	Stainless Steel
6	6	1/4	800	*3723 N14	*4423 N14
10	6	3/8	800	*3723 N38	*4423 N38
13	9	1/2	800	*3723 N12	*4423 N12
20	13	3/4	800	*3723 N34	*4423 N34
25	17	1	800	*3723 N1	*4423 N1
40	40	1 1/2	700	*3723 N112	*4423 N112

Technical Data

Materials

Carbon steel, stainless steel,
Polyamide/BUNA seals

Operating Pressure
See table

Operating Temperature
-30°C - to +90°C

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.

High Pressure 3-way Diverter Ball Valves



Part Number: BK3* - BK3 Series, Barstock Steel

DN	Bore	Thread	BAR	Code BSP	Code NPT
4	4	1/8	400	*1123 G18	-
6	6	1/4	400	*1123 G14	*1123 N14
10	9	3/8	400	*1123 G38	*1123 N38
13	12	1/2	350	*1123 G12	*1123 N12



Part Number: SK3* - SK3 Series, Forged Steel

DN	Bore	Thread	BAR	Code BSP	Code NPT
20	18	3/4	350	*2123 G34	*2123 N34
25	22	1	350	*2123 G1	*2123 N1
32	22	1 1/4	350	*2123 G5425	*2123 N5425
32	30	1 1/4	350	*2123 G5425	*2123 N5432
40	25	1 1/2	350	*2123 G3225	*2123 N3225
40	35	1 1/2	350	*2123 G3240	*2123 N3240
50	44	2	350	*2123 G2	*2123 N2

Technical Data

Materials

Carbon steel, black phosphated,
DELTRIN/BUNA seals

Operating Pressure
See table

Operating Temperature
-30°C - to +90°C

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.

High Pressure Ball Valves (with fixing holes)

Connections: 1/4 - 1 1/2 BSP Female



Technical Data

Materials

Carbon steel, zinc passivated, BUNA

Operating Pressure

See table

Operating Temperature

-20°C - to +100°C

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.

Part Number: VF2* - VF2 Series 2-Way

DN	Thread	BAR	Carbon Steel
6	1/4	500	*1113 G14
10	3/8	500	*1113 G38
13	1/2	500	*1113 G12
20	3/4	320	*1113 G34
25	1	320	*1113 G1
25	1 1/4	320	*1113 G54
25	1 1/2	320	*1113 G32



Part Number: VF3* - VF3 Series 3-Way L or T

DN	Thread	BAR	Carbon Steel
6	1/4	500	*1113 G14
10	3/8	500	*1113 G38
13	1/2	500	*1113 G12
20	3/4	250	*1113 G34
25	1	250	*1113 G1
25	1 1/4	250	*1113 G54
25	1 1/2	250	*1113 G32

316 Stainless Steel High Pressure Ball Valves



Technical Data

Materials

316 stainless steel, DELRIN, BUNA seals

Operating Pressure

See table

Operating Temperature

-30°C - to +90°C

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.

Part Number: RKH* - RKH Series, Full Bore

DN	Bore	Thread	BAR	Code BSP	Code NPT
6	6	1/4	400	*4423 G14	*4423 N14
10	10	3/8	400	*4423 G38	*4423 N38
13	13	1/2	400	*4423 G12	*4423 N12
20	20	3/4	400	*4423 G34	*4423 N34
25	24	1	400	*4423 G1	*4423 N1
25	24	1 1/4	400	*4423 G5425	*4423 N5425
25	24	1 1/2	400	*4423 G3525	*4423 N3225
32	32	1 1/4	350	*4423 G5432	*4423 N5432
40	38	1 1/2	350	*4423 G3240	*4423 N3240
50	48	2	350	*4423 G2	*4423 N2

In-Line Check Valves



FT 260/6 - Ball type closure - Carbon Steel

Thread	PN BAR	Carbon Steel/Buna
1/8	350	FT260/6-G18
1/4	350	FT260/6-G14
3/8	350	FT260/6-G38
1/2	350	FT260/6-G12
3/4	350	FT260/6-G34
1	350	FT260/6-G100

ATR Series - Metal to Metal Seal - Carbon Steel*

Thread	PN BAR	Carbon Steel/Buna
1/8	300	ATR-G18
1/4	300	ATR-G14
3/8	300	ATR-G38
1/2	300	ATR-G12
3/4	300	ATR-G34
1	300	ATR-G100
1 1/4	300	ATR-G114
1 1/2	300	ATR-G112
2	200	ATR-G200

*Standard spring 5psi, for other options contact the sales office

Technical Data

Materials

FT 260/6: Black Carbon Steel
 ATR Series: Yellow Carbon Steel
 FT 2260: Stainless Steel/VITON
 ATR-X: Stainless Steel (316)

Cracking Pressure

FT: 0.35 BAR or 4.5 BAR
 ATR: 0.35/1.5/2.5/4/6 BAR

Operating Temperature

-20°C - to +100°C

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.

Flow Control & Needle Valves

Connections: 1/8 - 1 1/2 BSP

Inline needle valves with micrometer scale



Technical Data

Materials

DV/DRV: Carbon steel, Nitrile seals
FT: Nickel plated brass (stainless steel where stated), Nitrile seals

Operating Pressure

DV/DRV: 350 BAR
FT: 210 BAR

Operating Temperature

-20°C - to +100°C

Special Requests

For assistance, contact our technical office or your local Camozzi distributor.

DV Series, Double Acting Flow Control & Shut-off (Bi-directional)

Part Number	BSP	BAR	LPM MAX
DV-G18	1/8	350	10
DV-G14	1/4	350	50
DV-G38	3/8	350	75
DV-G12	1/2	350	140
DV-G34	3/4	350	175
DV-G100	1	350	350
DV-G114	1 1/4	350	350
DV-G112	1 1/2	350	350

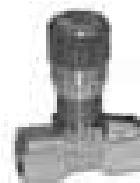


DRV Series, Single Acting Flow Control, Free reverse Flow (Uni-directional)

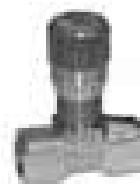
Part Number	BSP	BAR	LPM MAX
DRV-G18	1/8	350	10
DRV-G14	1/4	350	50
DRV-G38	3/8	350	75
DRV-G12	1/2	350	140
DRV-G34	3/4	350	175
DRV-G100	1	350	350
DRV-G114	1 1/4	350	350
DRV-G112	1 1/2	350	350
DRV-G200	2	350	350

Flow Control & Needle Valves

Bi-directional Fine flow control			Part Number
BSP	BAR	LPM	Brass
1/8	210	0-3 fine control	FT 1237/2-18



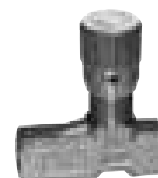
Bi-directional Flow control & shut off			Part Number	Part Number
BSP	BAR	LPM	Brass	Stainless Steel
1/8	210	10	FT 1251/2-18	-
1/4	210	20	FT 1251/2-14	FT 2251/2-14
3/8	210	30	FT 1251/2-38	FT 2251/2-38
1/2	210	60	FT 1251/2-12	FT 2251/2-12
3/4	210	80	FT 1251/2-34	FT 2251/2-34



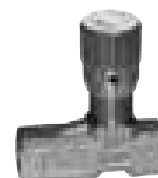
Bi-directional 900 Mount Flow control & shut off			Part Number
BSP	BAR	LPM	Brass
1/8	210	10	FT 1252/2-18
1/4	210	20	FT 1252/2-14
3/8	210	30	FT 1252/2-38
1/2	210	60	FT 1252/2-12



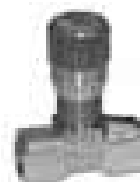
Uni-directional Fine flow control			Part Number
BSP	BAR	LPM	Brass
1/8	210	0-3 fine control	FT 1237/5-18



Uni-directional Flow control			Part Number
BSP	BAR	LPM	Brass
1/4	210	20	FT 1251/5-14
3/8	210	30	FT 1251/5-38
1/2	210	60	FT 1251/5-12
3/4	210	80	FT 1251/5-34



Uni-directional Flow control			Part Number
BSP	BAR	LPM	Brass
1/8	210	10	FT 1253/5-18
1/4	210	20	FT 1253/5-14
3/8	210	30	FT 1253/5-38
1/2	210	60	FT 1253/5-12
3/4	210	80	FT 1253/5-34



Uni-directional 900 Mount Flow control			Part Number
BSP	BAR	LPM	Brass
1/8	210	10	FT 1254/5-18
1/4	210	20	FT 1254/5-14
3/8	210	30	FT 1254/5-38
1/2	210	60	FT 1254/5-12



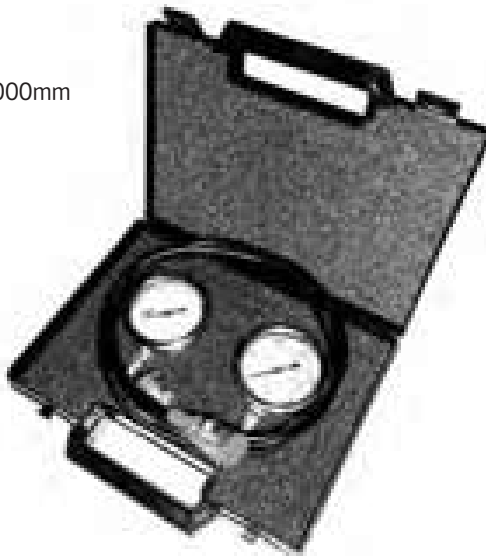
Pressure Test Kits

Contains:

- N.1 Plastic box > KP1
- N.2 Glycerine-filled pressure gauges > D.63
- N.1 Micro-hose > 6400-10.162-50.204-2000mm

Contains:

- N.1 Plastic box > KP1
- N.2 Glycerine-filled pressure gauges > D.63
- N.1 Micro-hose > 6400-10.162-10.162-2000mm



Order Code

750.KP1 + indicate the scale of the gauge.

Available Scales

0-6, 0-10, 0-25, 0-40, 0-60, 0-100, 0-160, 0-250, 0-400, 0-600

Dimensions

240 x 200 x 240mm

750.KP1 (+ scale)

Contains:

- N.1 Plastic box > KP2
- N.2 Glycerine-filled pressure gauges > D.63
- N.2 Test points > 620.01.204.21 1/4
- N.1 Micro-hose > 6400-10.162-10.162-2000mm
- N.2 Pressure gauges connections > 620.08.204.00 1/4 BSP
- N.1 Pressure gauge adaptor > 620.09.204.00 1/4 BSP
- N.1 Reducer > 630.01.206.10 3/8 M8x1
- N.1 Reducer > 630.01.208.20 1/2 M10x1
- N.1 Test point > 620.01.008.01 M8x1
- N.1 Test point > 620.01.010.01 M10x1



Order Code

750.KP2 + indicate the scale of the gauge.

Available Scales

0-6, 0-10, 0-25, 0-40, 0-60, 0-100, 0-160, 0-250, 0-400, 0-600

Dimensions

390 x 260 x 80mm

750.KP2 (+ scale)

Nylon



10 / 2 Flexible and Extra Flexible Nylon Tubing



10 / 3 C-Truck Air Brake Nylon Tubing



10 / 4 Flexible Nylon Recoils

PVC Hose



10 / 5 Reinforced PVC Braided Hose



10 / 6 PVC Hose



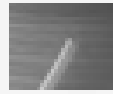
10 / 7 PV Tubing

Pneumatic Polyurethane Tubing



10 / 7 Pneumatic Polyurethane Tubing

PTFE Tubing



10 / 8 PTFE Tubing

Accessories



10 / 8 Tube Cutters and Clamps

Flexible and Extra Flexible Nylon Tubing

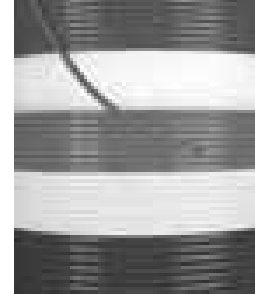
30m coil (BS5409)

Applications: Both flexible and extra flexible nylon tubing is manufactured from high quality nylon granules.

These are ideally suited for use with push-in fittings and for a wide range of industrial applications.

Compressed air, lubrication, refrigeration, air conditioning, coolant lines, fuels and oils (TRN and TRM).

Pneumatic controls and instrumentation systems (TRXN).



Flexible Nylon Tubing - Metric	OD mm	ID mm	Working Pressure psi	Working Pressure bar
TRN 4/2.5*	4	2.5	400	27
TRN 4/3#	4	3	260	18
TRN 5/3*	5	3	400	24
TRN 6/4*	6	4	350	24
TRN 8/5.5*	8	5.5	335	23
TRN 8/6*	8	6	255	17
TRN 10/7*	10	7	320	22
TRN 10/8*	10	8	200	14
TRN 12/9*	12	9	260	18
TRN 12/10*	12	10	160	11
TRN 14/11†	14	11	210	14
TRN 15/12.5†	14	12.5	195	13
TRN 16/13#	16	13	200	14
TRN 22/17#	22	17	235	16
TRN 28/22#	28	22	220	15

Flexible Nylon Tubing - Imperial	OD inch	ID inch	Working Pressure psi	Working Pressure bar
TRM 1/8#	1/8	.058	350	23
TRM 3/16*	3/16	.117	350	23
TRM 1/4*	1/4	.170	350	23
TRM 5/16*	5/16	.212	350	23
TRM 3/8*	3/8	.250	350	23
TRM 1/2*	1/2	.375	250	17
TRM 5/8#	5/8	.5	200	13
TRM 3/4#	3/4	.594	200	13
TRM 1#	1	.813	200	13

Extra Flexible Nylon Tubing - Metric	OD mm	ID mm	Working Pressure psi	Working Pressure bar
TRXN 4/2.5*	4	2.5	220	15
TRXN 5/3#	5	3	250	17
TRXN 6/4*	6	4	200	13
TRXN 8/5.5#	8	5.5	160	11
TRXN 10/7#	10	7	160	11
TRXN 12/8.5*	12	8.5	130	9

*TRN, TRM and TRXN tubing is supplied in natural as standard. The tube sizes marked * are available in natural, black, red, blue, green and yellow. Please specify colour when ordering.

#Only available in natural.

†Only available in natural or blue.

Technical Data

Standard Coil Lengths

30 metres

Other lengths and drums available on request

Materials

Manufactured from nylon 11 or 12

Operating Temperature

-35°C to +70°C

Brittle temperature: -70°C

Working Pressure

Values stated are based on the short term burst pressure of nylon at 20°C using a 4:1 safety factor.

For data over 20°C, contact our sales office

Bend Radius

For information regarding this data, contact our sales office

Chemical Resistance

Resistant to most solvents, alkalis, oils, greases, petroleum products, and dilute acids (mineral and organic).

For further information, contact our sales office

Approvals

Manufactured to BS5409 (1 and 2)

This product range is not suitable for food and drinks applications - see page 10/6

Technical Advice

For assistance, contact our technical office or your local Camozzi distributor.

C-Truck Air Brake Nylon Tubing

Manufactured and printed to DIN 73378 except black tube which complies to air brake standards DIN 74324. It is also printed with depth marks and is suitable for use with air, water, petrol, diesel and many other chemicals.



C-Truck Air Brake Nylon Tubing - Metric	OD mm	ID mm	Working Pressure psi	Working Pressure bar
TRN 4/2 NX*	4	2	900	27
TRN 6/4 NX*	6	4	350	24
TRN 8/6 NX*†	8	6	255	17
TRN 10/8 NX*†	10	8	200	14
TRN 12/9 NX*†	12	9	260	18
TRN 15/12 NX	15	12	200	13
TRN 16/13 NX	16	13	200	14
TRN 18/14 NX	18	14	250	17

Supplied in black as standard.

The tube sizes marked * are also available in natural, red, blue.

The tube sizes marked † are also available in yellow.

Please specify colour when ordering.

Technical Data

Standard Coil Lengths

15 metres

Other lengths available on request

Materials

Manufactured from nylon 11 or 12

Operating Temperature

-35°C to +70°C

Brittle temperature: -70°C

Working Pressure

Values stated are based on the short term burst pressure of nylon at 20°C using a 4:1 safety factor.

For data over 20°C, contact our sales office

Bend Radius

For information regarding this data, contact our sales office

Chemical Resistance

Resistant to most solvents, alkalis, oils, greases, petroleum products, and dilute acids (mineral and organic).

For further information, contact our sales office

Approvals

Manufactured and printed to DIN 73378 except black tube which complies to air brake standards DIN 74324

Technical Advice

For assistance, contact our technical office or your local Camozzi distributor.

Flexible Nylon Recoils

Tubing to (BS5409)

Applications: TRNR flexible nylon recoils are manufactured from high quality nylon granules and are suitable for use in a wide range of pneumatic applications.

Flexible nylon recoils are fitted with BSPT swivel fittings and anti-kink tube nuts as standard.



Technical Data

Standard Coil Lengths

See table

Other lengths available on request

Materials

TRNR coils are manufactured from nylon 11 or 12

Operating Temperature

-35°C to +70°C

Brittle temperature: -70°C

Working Pressure

Values stated are based on the short term burst pressure of nylon at 20°C using a 4:1 safety factor.

For data over 20°C, contact our sales office

Chemical Resistance

Resistant to most solvents, alkalis, oils, greases, petroleum products, and dilute acids (mineral and organic).

For further information, contact our sales office

Approvals

Tubing manufactured to BS5409 (1 and 2)

This product range is not suitable for food and drinks applications

Technical Advice

For assistance, contact our technical office or your local Camozzi distributor.

Flexible Nylon Tubing - Metric	OD mm	ID mm	Working Length metre	BSPT Swivel Fitting	Working Pressure bar
TRNR-0602	6	4	2.5	1/4	24
TRNR-0605	6	4	5	1/4	24
TRNR-0610	6	4	10	1/4	24
TRNR-0615	6	4	15	1/4	24
TRNR-0802	8	6	2.5	1/4	17
TRNR-0805	8	6	5	1/4	17
TRNR-0810	8	6	10	1/4	17
TRNR-0815	8	6	15	1/4	17
TRNR-1002	10	8	2.5	3/8	14
TRNR-1005	10	8	5	3/8	14
TRNR-1010	10	8	10	3/8	14
TRNR-1015	10	8	15	3/8	14
TRNR-1202	12	9	2.5	3/8	11
TRNR-1205	12	9	5	3/8	11
TRNR-1210	12	9	10	3/8	11
TRNR-1215	12	9	15	3/8	11

Flexible nylon recoils are available without BSPT swivel fittings on request.

Please note: not suitable for constant rotation.

Reinforced PVC Braided Hose

30m Coils

PVCB reinforced braided hose is a quality product range offering both high working pressures and extreme flexibility.

This hose is suitable for a wide range of industrial applications including factory airlines, pneumatic and hydraulic applications, food and drinks industry, chemicals and water.



	Hose ID mm	Hose OD mm	Colour	Working Pressure bar
PVCB 3C	3	8	Clear	32
PVCB 4C	4	9	Clear	27
PVCB 5C	5	10	Clear	20
PVCB 5N	5	10	Black	20
PVCB 6C	6	11	Clear	10
PVCB 6N	6	11	Black	10
PVCB 6R	6	11	Red	10
PVCB 6B	6	11	Blue	10
PVCB 6G	6	11	Green	10
PVCB 6Y	6	11	Yellow	10
PVCB 8C	8	12	Clear	10
PVCB 8N	8	12	Black	10
PVCB 8R	8	12	Red	10
PVCB 8B	8	12	Blue	10
PVCB 8G	8	12	Green	10
PVCB 8Y	8	12	Yellow	10
PVCB 10C	10	14	Clear	10
PVCB 10N	10	14	Black	10
PVCB 10R	10	14	Red	10
PVCB 10B	10	14	Blue	10
PVCB 10G	10	14	Green	10
PVCB 10Y	10	14	Yellow	10
PVCB 12C	12	18	Clear	10
PVCB 12N	12	18	Black	10
PVCB 12R	12	18	Red	10
PVCB 12B	12	18	Blue	10
PVCB 12G	12	18	Green	10
PVCB 12Y	12	18	Yellow	10
PVCB 16C	16	22	Clear	10
PVCB 16N	16	22	Black	10
PVCB 19C	19	25	Clear	10
PVCB 19N	19	25	Black	10
PVCB 19R	19	25	Red	10
PVCB 19B	19	25	Blue	10
PVCB 25C	25	32	Clear	10
PVCB 25N	25	32	Black	10
PVCB 32C	32	42	Clear	6
PVCB 38C	38	49	Clear	6
PVCB 50C	50	62	Clear	3

Technical Data

Standard Coil Lengths

30 metres

Other lengths available on request

Materials

PVCB is manufactured from crystal clear PVC compound, and is reinforced with 1000 denier polyester fibre yarn

Operating Temperature

-15°C to +60°C

Working Pressure

Values stated are based on the short term burst pressure of PVC at 20°C using a 3:1 safety factor.

For data over 20°C, contact our sales office

Bend Radius

For information regarding this data, contact our sales office

Chemical Resistance

Resistant to most oxidising and reducing agents including dilute acids and alkalis.

For further information, contact our sales office

Approvals

Raw materials used have FDA, BGA and BIPRA approval for use with food stuffs

Technical Advice

For assistance, contact our technical office or your local Camozzi distributor.

10

PVC Hose

30m Coils

PVC unreinforced hose is a quality product range offering extreme flexibility.

This hose is suitable for a wide range of applications including chemical delivery, laboratory use, sight glasses, instrumentation, drainage hoses and the delivery of food and beverages (beer).



Technical Data

Standard Coil Lengths

30 metres

Other lengths available on request

Materials

PVC is manufactured from crystal clear PVC compound

Operating Temperature

-15°C to +60°C

Working Pressure

For pressure applications we recommend the use of reinforced PVCB tubing.

Unreinforced PVC is NOT recommended for use in pressure applications

Bend Radius

For information regarding this data, contact our sales office

Chemical Resistance

Resistant to most oxidising and reducing agents including dilute acids and alkalis.

For further information, contact our sales office

Approvals

Raw materials used have FDA, BGA and BIPRA approval for use with foodstuffs

Technical Advice

For assistance, contact our technical office or your local Camozzi distributor.

	Hose ID mm	Hose OD mm	Colour
PVCL 3C	3	6	Clear
PVCL 5C	5	8	Clear
PVCL 6C	6	9	Clear
PVCL 8C	8	11	Clear
PVCL 10C	10	13	Clear
PVCL 12C	12	15	Clear
PVCL 16C	16	19	Clear
PVCM 4C	4	10	Clear
PVCM 5C	5	11	Clear
PVCM 6C	6	12	Clear
PVCM 8C	8	14	Clear
PVCM 10C	10	16	Clear
PVCM 22C	22	28	Clear
PVCM 25C	25	31	Clear
PVCH 38C	38	47	Clear

10

TUBING

PV Tubing

25m Coils

PV tubing is manufactured from high quality PVC.
PV tubing is flexible and lightweight, making it ideally suited to a wide range of industrial applications, particularly air tools.
For use with Rapid fitting and pipe adaptors.



Flexible PVC Tubing - Metric	OD mm	ID mm	Colour	Working Pressure psi	Working Pressure bar
PV 6/4	6	4	Blue	375	25
PV 8/6	8	6	Blue	375	25
PV 10/8	10	8	Blue	375	25
PV 12/10	12	10	Blue	375	25
PV 15/12.5	15	12.5	Blue	375	25

Technical Data

Standard Coil Lengths

25 metres

Materials

PV is manufactured from high quality PVC

Operating Temperature

-10°C to +60°C

Brittle temperature: -20°C

Working Pressure

Values stated are based on the short term burst pressure of PVC at 30°C. For data over 30°C, contact our sales office

Bend Radius

For information regarding this data, contact our sales office

Chemical Resistance

Resistant to most oxidising and reducing agents including dilute acids and alkalis.

For further information, contact our sales office

Technical Advice

For assistance, contact our technical office or your local Camozzi distributor.

10

Pneumatic Polyurethane Tubing

30m Coils

PU tubing is manufactured from ester based polyurethane.
PU tubing is ideally suited for use with Rapid and push-in fittings, but is also suitable for a wide range of industrial applications, particularly industrial robotics, control instrumentation and hydraulic lines.



Polyurethane Tubing - Metric	OD mm	ID mm	Working Pressure psi	Working Pressure bar
PU 4/2.5	4	2.5	190	12
PU 6/4	6	4	160	10
PU 8/5	8	5	160	10
PU 10/7.5	10	7.5	120	8
PU 12/9	12	9	120	8

Available in the following colours: blue (standard), clear, black, red, green, yellow and white Please state colour when ordering.

Technical Data

Standard Coil Lengths

30 metres

Other lengths available on request

Materials

PU is manufactured from 100% ester based polyurethane

Operating Temperature

-50°C to +80°C

Note: in hot and humid conditions, hydrolysis will occur

Working Pressure

Values stated are based on the short term burst pressure of PU at 20°C. For data over 20°C, contact our sales office

Bend Radius

For information regarding this data, contact our sales office

Chemical Resistance

Resistant to most fuels, oils, greases and many other solvents, chemicals and gases.

For further information, contact our sales office

Technical Advice

For assistance, contact our technical office or your local Camozzi distributor.

PTFE Tubing

100m Coils

PTFE tubing is manufactured from polytetrafluoroethylene granules. PTFE tubing is ideally suited to the transport of harsh chemicals, printing equipment, analytical instruments, environmental monitoring equipment and abrasion protection.



10

TUBING

PTFE Tubing - Metric	OD mm	ID mm	Working Pressure psi	Working Pressure bar
PT 4/2.5	4	2.5	180	12
PT 6/4	6	4	180	12
PT 8/6	8	6	135	9
PT 10/8	10	8	105	7
PT 12/10	12	10	75	5

Technical Data

Standard Coil Lengths

100 metres
25m and 50m available on request

Materials

PTFE is manufactured from polytetrafluoroethylene granules

Operating Temperature

-200°C to +260°C
Melting point: +327°C

Working Pressure

Values stated are based on the short term burst pressure of PTFE at 20°C using a safety factor of 4:1. For data over 20°C, contact our sales office

Bend Radius

For information regarding this data, contact our sales office

Chemical Resistance

PTFE tubing is suitable for use with virtually any corrosive material. For further information, contact our sales office

Technical Advice

For assistance, contact our technical office or your local Camozzi distributor.

Accessories

Tube Cutters

PNZ 12

PNZ 25

Plastic Tube Cutters

PNZP-12

Tube Clamp

MPL 4

MPL 6

MPL 8

MPL 10

For Cylinders

See 1 (Movement)

For Valves

See 2 (Control)

For Fittings

See 4 (Connection)

Information for the use of Camozzi products



Just browsing through the pages of our website www.camozzi.com, you will have the possibility to download GSD files for the configuration of Valve Islands, all relative use and installation manuals and the configuration software of the product codes. Moreover, here you can find all 2D and 3D files in the most commonly used formats.

Respecting the limit values for:

- Pressure
- Mass
- Actuating force
- Speed
- Voltage
- Temperature

The pneumatic components have to be used with properly prepared compressed air. The type of preparation depends on the environmental characteristics and the sector of industry in which they will be used. Except for different information shown on the technical data sheet for the single products, in general the air characteristics should be:

Fluid temperature: $-10 \div +60^{\circ}$

Environmental temperature: $-20 \div +80^{\circ}$

Air filtering according to DIN ISO 8573-1: not superior to the classes 5/5/4 (see table)

Lubrication: not necessary, in case use ISOVG32 oil and do not interrupt the lubrication once applied.

Oil contents: From 1 to 5 drops every 1000 litres of air

Air treatment

Filtering

The temperature affects the capacity of air to maintain water particles (relative humidity).

Warm air contains a larger quantity of water than the same volume filled with cold air.

An excess of humidity causes the formation of condensate.

Cooling of the air modifies the structure of the water it contains, by turning it from a gaseous to a liquid state. Specific apparatus can be used to cool (refrigerator) and heat (drier) the air and are, as a rule, assembled on the outlet of the compressor.

The filtering elements mounted inside the filters for compressed air, are only partly able to separate the condensate from the air, in fact, their main function is to eliminate any solid particles.

During the production of compressed air, compressors can introduce oil into the distribution network. The characteristics of this oil are not compatible with the seals of pneumatic components.

The market trend towards miniaturized products imposes the requirement to use coalescing filters.

It is advisable to provide for automatic drains on the filters.

Lubrication

This is not necessary as the components are already greased with special products. Only use oils with a viscosity of 32 cSt at 40°C. The oil quantity has to be a maximum of 1 drop per minute, this regulation has to be made with the machine in normal operation.

The lubrication, once applied, must never be interrupted. If not, the seals of the components could degenerate, compromising their function.

For a correct use of our products, refer to the values shown in the table of the Air Quality classes according to the Standard DIN ISO 8573-1.

Class	Solid bodies Max. dimension of the particles	Air contents dew-point	Oil quantity Max concentration
1	0,1 μ	-70 °C	0,01 mg/m ³
2	1 μ	-40 °C	0,1 mg/m ³
3	5 μ	-20 °C	1 mg/m ³
4	15 μ	+3 °C	5 mg/m ³
5	40 μ	+7 °C	25 mg/m ³

Pneumatic cylinders

The choice of the correct cylinder mounting to the structure and also that of the rod attachment to any moving parts, are as important as the control of parameters relating to speed, mass and radial loads. The control of these parameters has to be guaranteed by the user. The location of position sensors (reed switches), and their switching response times to magnetic fields, is dependant upon the type and bore size of cylinder and the appropriate precautions need to be taken when fixing these items. (see notes on the pages relative to the sensors).

We do not advise the use of a cylinder application as a shock absorber or as pneumatic cushioning. If used at the maximum speed, we recommend gradual deceleration to avoid a violent impact between piston and the cylinder end cover.

As a general value, we calculate a maximum average speed of 1 m/sec. In this case no lubrication is required as the lubrication introduced during assembly is sufficient to guarantee good operation. If faster speeds are required, we suggest lubrication in the quantities described above.

Quality... an absolute and total commitment



EVERYBODY TALKS ABOUT QUALITY.
WE PREFER TO TALK ABOUT THE MANY COMPONENTS THAT WORK TOGETHER TO CREATE A QUALITY SYSTEM that ensures excellence, not only in the final product but throughout the entire business process.
Research, technological innovation, training, respect for personnel, employee and environmental safety, and total customer care are all factors that Camozzi considers strategic in the achievement of quality reflecting an unyielding commitment to the pursuit of excellence.

ISO 9001

Day by day we try to improve ourselves, to extend our competence and our professionalism in a constant way.

Mandatory directives

- Directive 85/374/CE concerning liability for defective products modified by D.Lgs. 02/02/01 n° 25.
- Directive 2006/95/CE "Equipment designed for use within certain voltages".
- Directive 2004/108/CE "Electromagnetic Compatibility EMC" and repealing Directive 89/336/EEC.
- Directive 94/9/CE "Atex".
- Directive 2006/42/CE "Machinery".
- Directive 97/23/CE "Pressure equipment - PED".
- Directive 2001/95/CE "General products' safety".
- Regulation 1907/2006 concerning the registration, evaluation, authorisation and restriction of chemicals (REACH).

COMPANY WITH INTEGRATED MANAGEMENT SYSTEM
CERTIFIED BY DNV

ISO 9001 - ISO 14001

In 2003 Camozzi obtained from Det NorskeVeritas the certifications for the Quality Management Systems regarding ISO 9001/2000 and for the Environmental Management Systems as ISO 14001:1996.

In 2006, "Det Norske Veritas" issues the new certification ISO 14001:2004, whereas in 2009, it issues the new certification ISO 9001:2008 confirming also certification ISO 14001:2004. One of Camozzi's main goals, equal to quality and safety, is the protection of the environment and compatibility of our activities with the territorial context in which they are performed.

From the 1° July 2003, all products commercialised in the European Union and destined to be used in potentially explosive areas, should be approved according directive 94/9/CE better know as ATEX.

This new directive involves also the non electrical parts, as for instance pneumatic commands which should be approved.



ISO 14001

Minimise the consumption of energy, water, raw material and the production of waste, and focus on recycling wherever possible.

Technical standards

- ISO 4414 - Pneumatic fluid power - General rules relating to systems.

Environmental notes

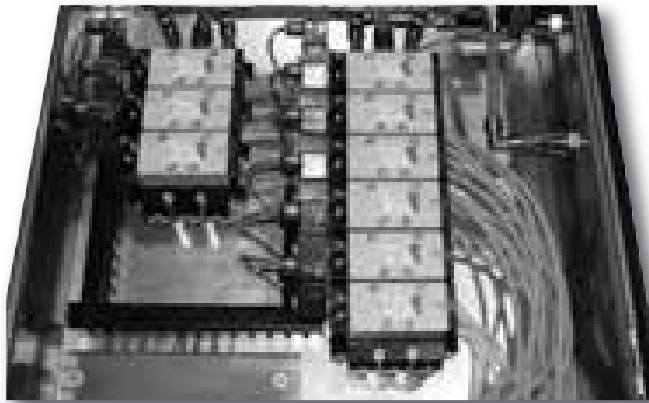
- To protect the environment and health, our products are designed and manufactured to operate without lubrication. At the end of the product's life, we recommend the separation of the components to allow recycling.
- Packaging: we respect the environment, using materials which can be recycled. The packaging consists of plastic bags which are recyclable PVC and paper.
- Green Design Project: in the study of new products, the environmental impact is always taken into consideration (real project, elaboration, etc.).

Camozzi Systems

Why spend costly time developing your pneumatic system in-house when Camozzi can take on the job for you?

When calling on Camozzi's systems department, you have access to engineers with years of experience in the design of pneumatic and electropneumatic control system solutions in all areas of industry.

Each system is designed to accommodate your specific needs and is fully tested to ensure the solution works as required.



Capabilities

Drawing from an extensive and continually expanding range of top class products, Camozzi's Systems Engineers can provide the very best design solutions from basic pneumatic applications through to PLC based electropneumatic systems.

The solutions on offer also incorporate pick and place automation as and when required. In short, you have the problem - Camozzi has the solution!

Each system is fully function tested before delivery within the required timescale.

Integration

Camozzi systems can integrate:

- Valves
- Cylinders
- FRLs
- Timers
- PLCs
- Counters
- Logic Elements
- Motor Controls
- Grippers
- Control Interfaces
- Safety Relays
- Proximity Sensors

Projects

At Camozzi the design and build of the project will be done by the systems department.

The systems project process:

- Initial enquiry
- Site visit by ASM & Technical manager if required
- Complete project analysis including "how to achieve it"
- Initial design concept and presentation
- Final design and quotation
- Order
- Build Test and Supply

Camozzi Assembly and Design

Assembly

Camozzi have the capability to offer customers an assembly service, saving time and reducing costs.

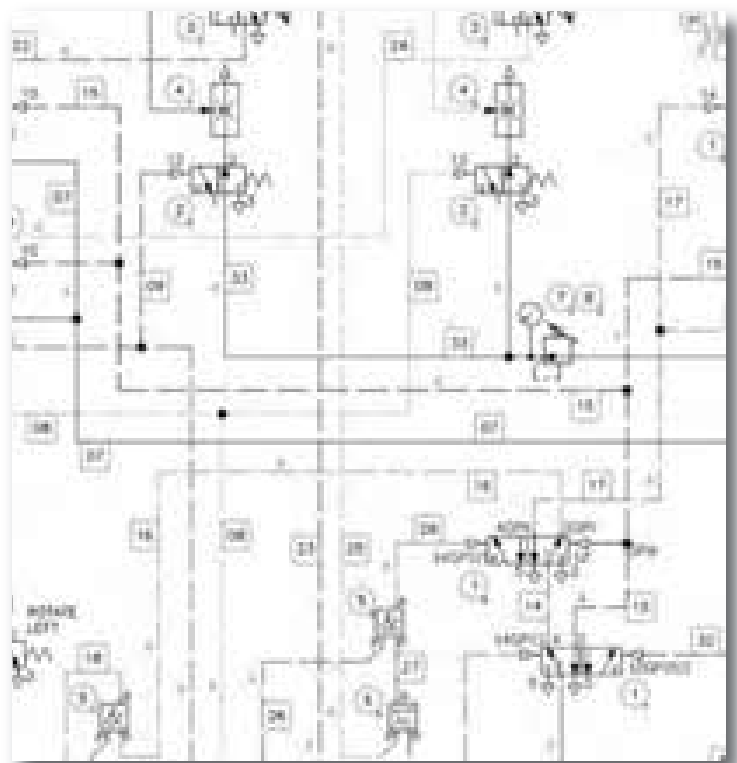
By ordering one part number, a kit of parts can either be supplied assembled or in a loose component form.

*a*

Design

Camozzi offer a complete design package for our customers

- Bespoke pneumatic products
- Cabinets
- Systems



Products Classified for the use in Potentially Explosive Atmospheres (Directive Atex 94/9/CE)

As from the first of July 2003, all products which are commercialised in the European Union and destined to be used in **potentially explosive atmospheres**, have to be approved according to the directive 94/9/CE, also known as ATEX. This new directive also refers to non-electric items, like pneumatic drives, which need to be approved.



» The European certification for products destined to be used in potentially explosive zones.

These are the main changes introduced by the new directive 94/9/CE:

- Also non-electric apparatus and devices, as pneumatic cylinders, are part of the Directive
- The apparatus are assigned to different categories which are assigned to certain potentially explosive zones.
- The products are identified with the CE mark Ex.
- The instructions for use and the declarations of conformity should in order to be supplied with each sold product used in potentially explosive zones.
- Products destined to be used in potentially explosive zones, because of the presence of dust, are included in the directive like the products destined to be used in zones with the presence of dangerous gases. A potentially explosive atmosphere could be composed of gas, mist, steam or dust which can be created in manufacturing processes or in all those areas in which there is a constant or random presence of inflammable substances. An explosion can occur when there is an existing presence of inflammable

substances and an ignition source in a potentially explosive atmosphere.

An ignition source could be:

- Electrical (electric arcs, induced current, heat generated by the Joule effect)
- Mechanical (heat between surfaces caused by friction, sparks generated by the collision of metallic bodies, electrostatic discharges, adiabatic compression)
- Chemical (exothermic reactions between materials)
- Naked flames.

The products which are subject to the approval are those which, during their normal use or because of a malfunction, present one or more ignition sources for the potentially explosive atmospheres.

The producer has to guarantee that the product conforms with the declarations and to the marking of the product. Moreover the product should always be accompanied by the relative instructions. The builder of the equipment and/or user should identify the risk zone in which the products, to which directive 99/92/CE refers,

are used and purchase the product according to the use in the pre-determined zone paying attention to the specifications in the relative instructions.

In case a product is composed by two components with different markings, the component which is classified in the lowest category defines the class to which the complete product belongs.

Example:
solenoid suitable for Category 3
marked ...
Ex - II 3 EEx...

and valve suitable for Category 2 ...
Ex - II 2 EEx...
The valve unit with solenoid can be used only in category 3 or zone 2/22.

Zones, groups and categories

In the places and for the types of equipment subject to Directive 99/92/CE, the employer should execute the classification of the zones regarding the danger of the creation of explosive atmospheres because of the presence of gas or dust.

The apparatus for the use in potentially explosive zones are divided in GROUPS:

GROUP I: apparatus used in mines

GROUP II: apparatus used in installations above the ground.

Group I: Apparatus for mines

CATEGORY M1
Functioning in explosive atmosphere

CATEGORY M2
Non-supplied equipment in explosive atmospheres

Group II: Apparatus for industries above the ground

Product category	GAS	DUST
1	Zone 0	Zone 20
2	Zone 1	Zone 21
3	Zone 2	Zone 22

Classification in zones according to Directive 99/92/CE:

- Category 1** Zone 0 - Area in which (permanently, for long periods or often) an explosive atmosphere is present, consisting of a mixture of air and inflammables in the form of gas, vapour or mist.
Zone 20 - Area in which (permanently, for long periods or often) an explosive atmosphere is present in the form of a dust/powder cloud which is combustible in the air.
- Category 2** Zone 1 - Area in which, during normal activities, the formation of an explosive atmosphere is probable, consisting of a mixture of air and inflammables in the form of gas, vapours or mist.
Zone 21 - Area in which occasionally during normal activities the formation of an explosive atmosphere is probable, in the form of a dust/powder cloud which is combustible in the air.
- Category 3** Zone 2 - Area in which, during normal activities, the formation of an explosive atmosphere, consisting of a mixture of air and inflammables in the form of gas, vapour or mist is not probable and, whenever this should occur, it is only of a short duration
Zone 22 - Area in which, during normal activities, the formation of an explosive atmosphere in the form of a combustible dust/powder cloud is not probable and, whenever this should occur, it is only of a short duration.

Example of Marking:  **II 2 GD c T100°C (T5) -20°C≤Ta≤60°C**

- II** Group: Devices which are to be used in spaces exposed to risks of an explosive atmosphere, different from underground spaces, mines, tunnels, etc., individuated according to the criteria in enclosure I of the Directive 94/9/CE (ATEX).
- 2** Category: Devices designed to function in compliance with the operational parameters determined by the manufacturer and guarantee a high protection level.
- GD** Protected against gas (G) and explosive powders (D).
- c** Non-electrical constructions for potentially explosive atmospheres. Protection through constructive security.
- T 100°C** Max. superf. temp. of 100 °C reg. potential hazards resulting from striking within the vicinity of hazardous powders.
- T5** Max. superf. temp. of 100 °C regarding potential hazards which may result from striking within gassy environments.
- Ta** Environmental temperature: **-20°C≤Ta≤60°C**. Environmental temperature range (with dry air).

Group I: Temperature classes

Temperature =150 °C
or = 450 °C according to the level
of dust on the apparatus.

Group II: Temperature classes

Temp. classes for gas (G)	Admissible surface temperatures
T1	450°C
T2	300°C
T3	200°C
T4	135°C
T5	100°C
T6	85°C

ATEX certified Camozzi products

APPARATUS regarding ATEX - Group II

Cylinders series	Category	Zone	Gas/Dust
16*	2 DE-3 SE	1/21 DE -2/22 SE	G/D
24*	2 DE-3 SE	1/21 DE-2/22SE	G/D
25*	2 DE-3 SE	1/21 DE-2/22SE	G/D
31	2 DE-3 SE	1/21DE-2/22SE	G/D
31-32 Cylinders/Tandem/ multi-position	2 DE	1/21 DE	G/D
40*	2 DE	1/21 DE	G/D
41*	2 DE	1/21 DE	G/D
60*	2 DE-3 SE	1/21DE-2/22 SE	G/D
61*	2 DE-3 SE	1/21DE-2/22 SE	G/D
62	3 DE	2/22 DE	G/D
27	2 DE	1/21 DE	G/D
QP-QPR	2 DE-3 SE	1/21DE-2/22 SE	G/D
QN	3 SE	2/22 SE	G/D
42	2 DE-3 SE	1/21DE-2/22 SE	G/D
CST/CSV/CSH	3	2/22	G/D

Solenoids series	Category	Zone	Gas/Dust
U70	3	2/22	G/D
H80	2	1/21	G/D

Pressure switches series	Category	Zone	Gas/Dust
PM	1	0/20	G/D

Valves series	Category	Zone	Gas/Dust
9#*	2	1/21	G/D
K	3	2/22	G/D
P	3	2/22	G/D
W	3	2/22	G/D
A#	2	1/21	G/D
3#	2	1/21	G/D
4#	2	1/21	G/D
NAMUR#	2	1/21	G/D
E (pneumatic)	2	1/21	G/D
E (electropneumatic)	3	2/22	G/D
Y	3	2/22	G/D
2	2	1/21	G/D

FRL Groups	Category	Zone	Gas/Dust
MC#	2	1/21	G/D
N	2	1/21	G/D

* According ISO
Without solenoid
DA = Double-Acting cylinders
SA = Single-Acting cylinders

COMPONENTS regarding ATEX - Group II

Products	Category	Zone	Gas/Dust
Silencers	2	1/21	G/D
Quick release couplings	2	1/21	G/D
Manifolds	2	1/21	G/D
Sub-bases	2	1/21	G/D
Feet	2	1/21	G/D
Caps	2	1/21	G/D
Plates	2	1/21	G/D

» The order code number of the certified products is obtained by adding "EX"
Es. 358-015 standard solenoid valve
Es. 358-015EX ATEX certified solenoid valve



Pneumatic Symbols

Symbol	Type
CYLINDERS	
CD01	Double acting cylinder, fixed cushions
CD02	Double acting cylinder, cushioned
CD03	Double acting cylinder, adjustable rear cushion
CD04	Double acting cylinder, adjustable front cushion
CD05	Double acting cylinder, through-rod, fixed cushions
CD06	Double acting cylinder, through-rod, adjustable front and rear cushion
CD07	Double acting cylinder, magnetic
CD08	Double acting cylinder, magnetic, fixed cushions
CD09	Double acting cylinder, magnetic, adjustable cushions in both directions
CD10	Double acting cylinder, magnetic, adjustable rear cushion
CD11	Double acting cylinder, magnetic, adjustable front cushion
CD12	Double acting cylinder, magnetic, through-rod, fixed cushions
CD13	Double acting cylinder, magnetic, through-rod, adjustable cushions in both directions
CD14	Double acting cylinder, magnetic, through-rod
CD15	Magnetic twin rod cylinders
CD16	Magnetic twin through-rod cylinders
CD17	Double acting rotary cylinder
CD18	Double acting rotary cylinder, magnetic
CD19	Single acting rotary cylinder
CD2T	Magnetic tandem cylinder, two stages, fixed cushions
CD3T	Magnetic tandem cylinder, three stages, fixed cushions
CD4T	Magnetic tandem cylinder, four stages, fixed cushions
CDPP	Magnetic multi-position cylinder, fixed cushions
CDSS	Double acting rodless cylinder, magnetic
CS01	Single acting cylinder, front spring

Symbol	Type
CYLINDERS	
CS02	Single acting cylinder, front spring
CS03	Single acting cylinder, non cushioned
CS04	Single acting cylinder, through-rod
CS05	Single acting cylinder, through-rod, adjustable cushion
CS06	Single acting cylinder, magnetic
CS07	Single acting cylinder, front spring, adjustable rear cushion
CS08	Single acting cylinder, rear spring, magnetic
CS09	Single acting cylinder, magnetic, front spring
CS10	Single acting cylinder, through-rod
CS11	Single acting cylinder, through-rod, adjustable rear cushion
HI01	Hydrocheck, regulated rod thrust
HI02	Hydrocheck, regulated rod return
HI03	Hydrocheck, regulated rod thrust with stop valve
HI04	Hydrocheck, regulated rod return with stop valve
HI05	Hydrocheck, regulated rod thrust with skip valve
HI06	Hydrocheck, regulated rod return with skip valve
HI07	Hydrocheck, regulated rod thrust with skip and stop valve
HI08	Hydrocheck, regulated rod return with skip and stop valve
PNZ1	Double acting magnetic grippers
RDLK	Rod lock device
SOLENOID VALVES	
EV01	Directly operated solenoid valve, 2/2 NC
EV02	Directly operated solenoid valve, 2/2 NO
EV03	Directly operated solenoid valve, 3/2 NCs
EV04	Directly operated solenoid valve, 3/2 NC, monostable, with manual override

Symbol	Type
SOLENOID VALVES	
EV05 	Directly operated solenoid valve, 3/2 NO
EV06 	Directly operated solenoid valve, 3/2 NO, monostable, with manual override
EV07 	Solenoid valve, 3/2 NC with quick exhaust
EV08 	Directly operated solenoid valve, 3/2 NC, bistable, with manual override
EV09 	Directly operated solenoid valve, 3/2 NO, bistable, with manual override
EV10 	Solenoid valve, 3/2 NC, monostable, with bistable manual override
EV11 	Solenoid valve, 3/2, monostable, solenoid pilot with separate air supply and bistable manual override
EV12 	Solenoid valve, 3/2 NO, monostable, with bistable manual override
EV13 	Solenoid valve, 3/2, monostable, solenoid pilot with separate air supply and bistable manual override
EV14 	Solenoid valve, 3/2, bistable, with manual override bistable
EV15 	Solenoid valve, 3/2, bistable, solenoid pilot with separate air supply and bistable manual override
EV16 	Solenoid valve, 3/2 NC, monostable, (pneumatic spring) and bistable manual override
EV17 	Solenoid valve, 3/2 NO, monostable, (pneumatic spring) and bistable manual override
EV18 	Solenoid valve, 5/2, monostable, with bistable manual override
EV19 	Solenoid valve, 5/2, monostable, solenoid pilot with separate air supply and bistable manual override
EV20 	Solenoid valve, 5/2, monostable, (pneumatic spring) and manual override
EV21 	Solenoid valve, 5/2, monostable, (pneumatic spring) and bistable manual override
EV22 	Solenoid valve, 5/2, monostable, solenoid pilot with separate air supply, pneumatic spring and bistable manual override
EV23 	Solenoid valve, 5/2, bistable, with bistable manual override
EV24 	Solenoid valve, 5/2, bistable, with manual override
EV25 	Solenoid valve, 5/2, bistable, solenoid pilot with separate air supply and bistable manual override
EV26 	Solenoid valve, 5/2, bistable, solenoid pilot with separate air supply and bistable manual override
EV27 	Solenoid valve, 5/3 CC, with manual override
EV28 	Solenoid valve, 5/3 CC, with bistable manual override
EV29 	Solenoid valve, 5/3, solenoid pilot with separate air supply and bistable manual override

Symbol	Type
SOLENOID VALVES	
EV30 	Solenoid valve, 5/3, solenoid pilot with separate air supply and bistable manual override
EV31 	Solenoid valve, 5/3 CO, with manual override
EV32 	Solenoid valve, 5/3 CO, with bistable manual override
EV33 	Solenoid valve, 5/3 CO, solenoid pilot with separate air supply and bistable manual override
EV34 	Solenoid valve, 5/3 CO, solenoid pilot with separate air supply and bistable manual override
EV35 	Solenoid valve, 5/3 CP, with manual override
EV36 	Solenoid valve, 5/3 CP, with bistable manual override
EV37 	Solenoid valve, 5/3 CP, solenoid pilot with separate air supply and bistable manual override
EV38 	Solenoid valve, 5/3 CP, solenoid pilot with separate air supply and bistable manual override
EV39 	Double solenoid valve, 3/2 NC, monostable, with bistable manual override
EV40 	Double solenoid valve, 3/2, monostable, solenoid pilot with separate air supply and bistable manual override
EV41 	Double solenoid valve, 3/2 NO, monostable, with bistable manual override
EV42 	Double solenoid valve, 3/2, monostable, solenoid pilot with separate air supply and bistable manual override
EV43 	Double solenoid valve, 3/2 NC, NO, monostable, with bistable manual override
EV44 	Double solenoid valve, 3/2, monostable, solenoid pilot with separate air supply and bistable manual override
EV45 	Directly operated solenoid valve, 3/2, possible universal use, reversed printed ports 1 and 2 on the body
EV46 	Indirectly operated solenoid valve, 2/2 NO
EV47 	Directly operated solenoid valve, 2/2 NC, with linked diaphragm
EV48 	Indirectly operated solenoid valve, 2/2 NC
PNEUMATICALLY OPERATED VALVES	
VP01 	Pneumatically operated valve, 3/2, monostable, mechanical spring
VP02 	Pneumatically operated valve, 3/2, bistable
VP03 	Pneumatically operated valve, 3/2, preferential
VP04 	Pneumatically operated valve, 5/2, monostable, mechanical spring
VP05 	Pneumatically operated valve, 5/2, preferential
VP06 	Pneumatically operated valve, 5/2, bistable



Symbol	Type
PNEUMATICALLY OPERATED VALVES	
VP07	Pneumatically operated valve, 5/2, monostable, pneumatic spring
VP08	Pneumatically operated valve, 5/3 CC
VP09	Pneumatically operated valve, 5/3 CO
VP10	Pneumatically operated valve, 5/3 CP
VP11	Pneumatically operated double valve, 3/2, monostable
VP12	Pneumatically operated double valve, 3/2, monostable
VP13	Pneumatically operated double valve, 3/2, monostable

Symbol	Type
MECHANICALLY OPERATED VALVES	
VM01	Mechanically operated valve, plunger actuation, 3/2 NC, monostable, mechanical spring
VM02	Mechanically operated valve, plunger actuation, 3/2, monostable, mechanical spring
VM03	Mechanically operated valve, plunger actuation, 3/2 NO, monostable, mechanical spring
VM04	Mechanically operated valve, lever/roller actuation, 3/2 NC, monostable, mechanical spring
VM05	Mechanically operated valve, lever/roller actuation, 3/2, monostable, mechanical spring
VM06	Mechanically operated valve, lever/roller actuation, 3/2 NO, monostable, mechanical spring
VM07	Mechanically operated valve, unidirectional lever actuation, 3/2 NC, monostable, mechanical spring
VM08	Mechanically operated valve, unidirectional lever actuation, 3/2 monostable, mechanical spring
VM09	Mechanically operated valve, plunger actuation, 5/2, monostable, mechanical spring
VM10	Mechanically operated valve, plunger actuation, 5/2, monostable, mechanical spring
VM11	Mechanically operated valve, lever/roller actuation, 5/2, monostable, mechanical spring
VM12	Mechanically operated valve, lever/roller actuation, 5/2, monostable, mechanical spring
VM13	Mechanically operated valve, unidirectional lever actuation, 5/2, monostable, mechanical spring
VM14	Mechanically operated sensor valve, 3/2 NO, monostable, mechanical spring
VM15	Mechanically operated sensor valve, 3/2 NC, monostable, mechanical spring
VM16	Mechanically operated sensor valve, plunger actuation, 5/2, monostable, mechanical spring
VM17	Mechanically operated sensor valve, plunger actuation, 5/2, bistable
VM18	Valvola a comando meccanico frontale sensibile 5/2, bistabile
VM19	Mechanically operated sensor valve, lever/roller actuation, 5/2, monostable, mechanical spring
VM20	Mechanically operated sensor valve, lever/roller actuation, 5/2, bistable
VM21	Mechanically operated valve, unidirectional lever actuation, 3/2 NO, monostable, mechanical spring

Symbol	Type
MANUALLY OPERATED VALVES	
VN01	Manually operated valve, 3/2, bistable
VN02	Manually operated valve, 3/2, bistable, lockable in two positions
VN03	Manually operated valve, 3/2, bistable
VN04	Manually operated valve, 3/2 NC, monostable, mechanical spring
VN05	Manually operated valve, 3/2 NO, monostable, mechanical spring
VN06	Manually operated valve, 3/2, monostable, mechanical spring
VN07	Manually operated lever valve, 3/2, bistable
VN08	Manually operated lever valve, 3/2, bistable
VN09	Manually operated lever valve, 3/2 NC, monostable, mechanical spring
VN10	Manually operated lever valve, 3/2, bistable
VN11	Manually operated lever valve, 3/2, monostable, mechanical spring
VN12	Pedal operated valve, 3/2 NC, monostable, mechanical spring
VN13	Manually operated valve, 5/2, bistable
VN14	Manually operated valve, 5/2, monostable, mechanical spring
VN15	Manually operated lever valve, 5/2, bistable
VN16	Manually operated lever valve, 5/2, bistable
VN17	Manually operated lever valve, 5/2, monostable, mechanical spring
VN18	Pedal operated valve, 5/2, bistable
VN19	Pedal operated valve, 5/2, monostable bistable
VN20	Manually operated lever valve, 5/3 CC, stable
VN21	Manually operated lever valve, 5/3 CC, monostable
VN22	Manually operated lever valve, 5/3 CO, stable
VN23	Manually operated lever valve, 5/3 CO, stable
VN24	Manually operated lever valve, 5/3 CO, monostable
VN25	Manually operated lever valve, Joystick

Symbol	Type
PNEUMATIC LOGIC VALVES	
AND1	"AND" pneumatic symbol
AND2	"AND" logical symbol
ORO1	"OR" pneumatic symbol and circuit selector

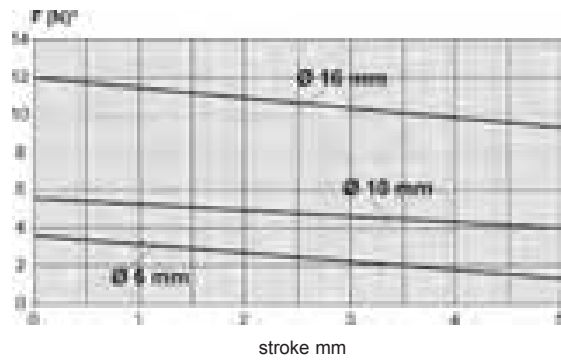
Symbol	Type
PNEUMATIC LOGIC VALVES	
ORO2	"OR" logical symbol
YES1	"YES" pneumatic symbol
YES2	"YES" logical symbol
NOT1	"NOT" pneumatic symbol
NOT2	"NOT" logical symbol
MEM1	"MEMORY" pneumatic symbol
MEM2	"MEMORY" logical symbol
AMP1	Signal amplifier, 3/2 NC, mechanical spring return
2LB1	Jet interruption sender sensor
2LB2	Jet interruption receiver sensor
AUTOMATIC VALVES	
ORO1	"OR" pneumatic symbol and circuit selector
VSC1	Quick exhaust valves
VBU1	Unidirectional blocking valves
VB01	Bidirectional blocking valves
VNR1	Non return valves
FLOW CONTROL VALVES	
RFU1	Unidirectional flow control valve
RFO1	Bidirectional flow control valve
RP01	Unidirectional flow control valve
RP02	Unidirectional flow control valve
RP03	Bidirectional flow control valve
PRESSURE SWITCHES AND VACUUM SWITCHES	
PMNA	Pressure switch, normally open
PMNC	Pressure switch, normally closed
PMSC	Pressure switch with exchange contacts
TRP1	Electro-pneumatic transducer
SEG1	Pressure indicator
CAP1	Capacity
SILENCIER	
SIL1	Silencier
RSW1	Silenced exhaust controller

Symbol	Type
FRL	
FT01	Filter without drain
FT02	Filter with manual drain
FT03	Filter with automatic drain
FA01	Coalescing filter without drain
FA02	Coalescing filter with manual drain
FA03	Coalescing filter with automatic drain
FC01	Absorption function without cup hole
PR01	Regulator without relieving
PR02	Regulator with relieving
PR03	Regulator with relieving and by-pass valve
PR04	Regulator without relieving and with by-pass valve
PR05	Regulator without relieving and with pressure gauge
PR06	Regulator with relieving and with pressure gauge
LU0	Lubricator
FR01	Filter-regulator with relieving and manual drain
FR02	Filter-regulator with relieving and without drain
FR03	Filter-regulator with relieving, manual drain and pressure gauge
FR04	Filter-regulator with relieving, without drain and with pressure gauge
FR05	Filter-regulator with relieving, automatic drain and pressure gauge
FR10	Filter-regulator with manual drain, without relieving and with pressure gauge
FR11	Filter-regulator with manual drain and without relieving
FR18	Filter-regulator with relieving and automatic drain
FR19	Manifold pressure regulator
VN02	Lockable isolation valve
AVP1	Soft start valve
BL01	Take-off block
BL02	Take-off block with VNR

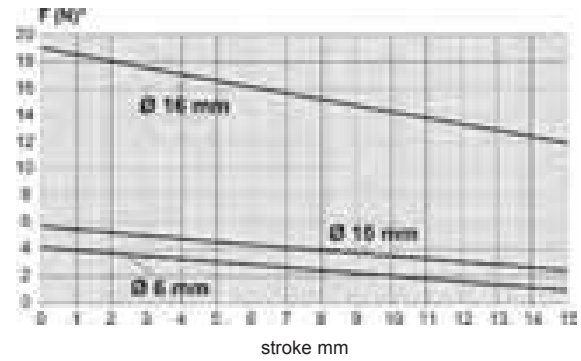


Spring Loads Cylinders

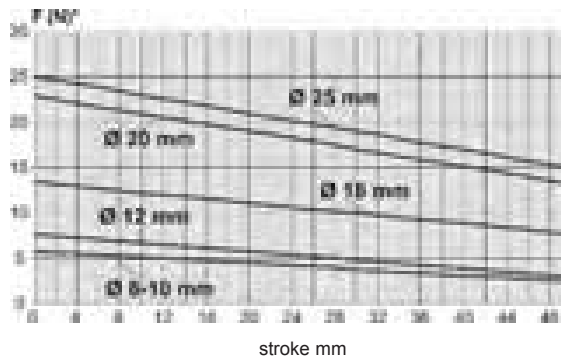
Series 14 - stroke 5 mm



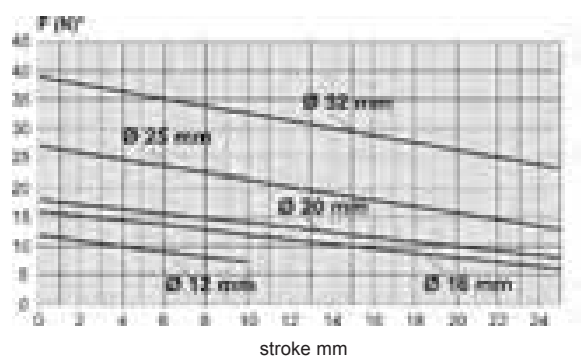
Series 14 - stroke 10 and 15 mm



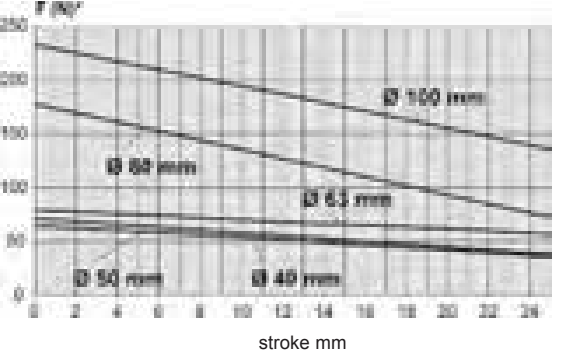
Series 16-24



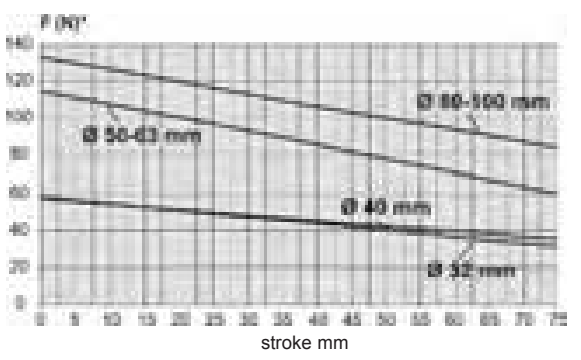
Series 31-32



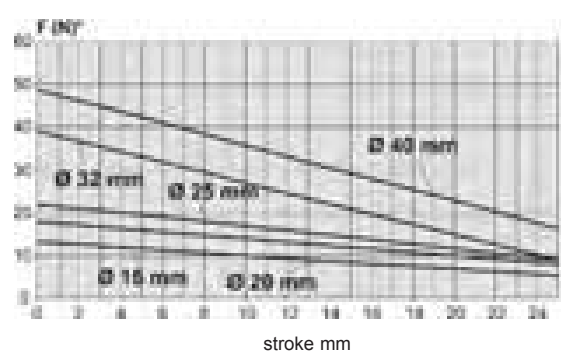
Series 31-32



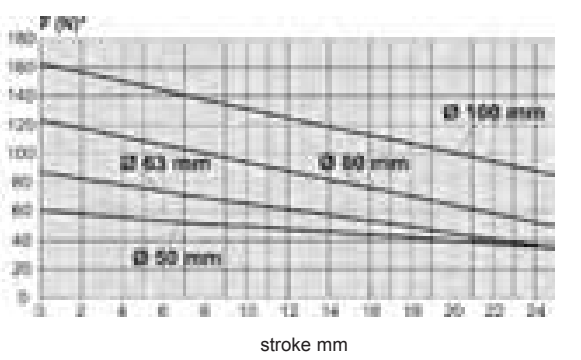
Series 60-61-42-90



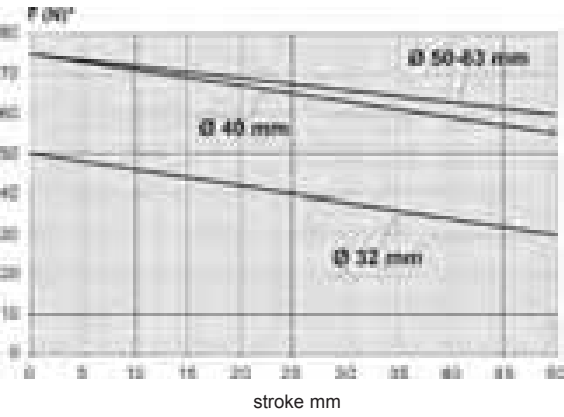
Series QP



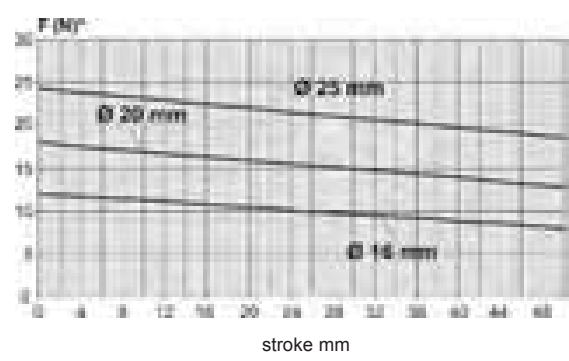
Series QP



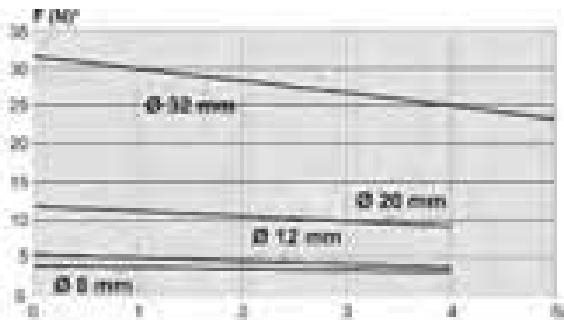
Series 90-97



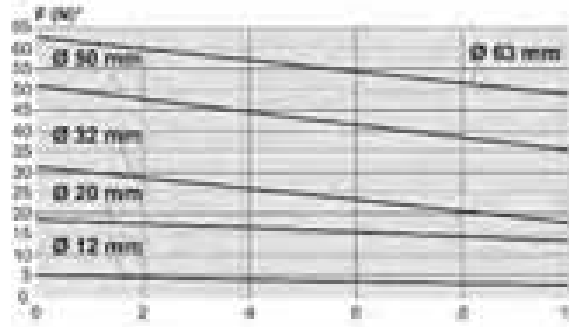
Series 94



Series QN - stroke 4 and 5 mm

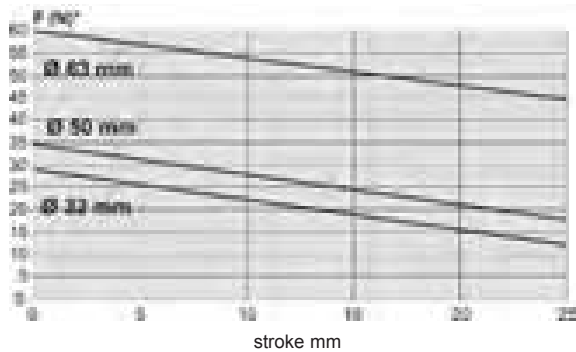


Series QN - stroke 10 mm



* F = spring force

Series QN - stroke 25 mm

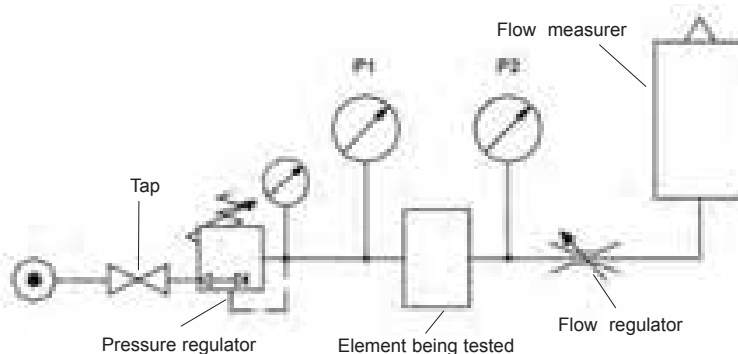


Flow and Speed Cylinders

Valves and solenoid valves

Flow survey instruments.

The flow rate indicated in the catalogue is obtained with
P1 = 6 bar e P2 = 5 bar.



Maximum speeds obtainable combining a certain flow regulator (mm/sec) with a cylinder

MOD.	Cylinders diameter (mm)						
	32	40	50	63	80	100	125
GSCU-1/8"; GSVU-1/8"; GMCU-1/8"; GSCU-1/8"	1000	986	629	395	246	158	100
GSCU-1/4"; GSVU-1/4"; GMCU-1/4"; GSCU-1/4"	-	1000	911	573	357	229	145
RFU 452 M5	204	-	-	-	-	-	-
RFU 482-1/8"	227	145	93	58	36	-	-
RFU 483-1/8"	520	333	212	133	83	53	-
RFU 444-1/4"	-	739	471	296	185	118	75
RFU 446-1/4"	-	-	847	532	332	213	135
SCU M5 - SVU M5	154	-	-	-	-	-	-
SCU-1/4"; SVU-1/4"; MCU-1/4"; MVU-1/4"	-	1000	660	415	259	166	105
SCU-1/8"; SVU-1/8"; MCU-1/8"; MVU-1/8"	604	387	247	155	97	62	-
SCU-3/8"; MCU-3/8"	-	-	-	622	388	249	158
SCU-1/2"; MCU-1/2"	-	-	-	-	1000	869	-

To obtain the above indicated speeds, the connected tubing should have a certain diameter and not exceed, if indicated, the max. length (mm)

	Tube diameter and max length (m)				
	4/2	6/4	8/6	10/8	12/10
GSCU-1/8"; GSVU-1/8"; GMCU-1/8"; GSCU-1/8"	-	0.4	8	25	-
GSCU-1/4"; GSVU-1/4"; GMCU-1/4"; GSCU-1/4"	-	-	4.5	18	24
RFU 452 M5	3.5	25	-	-	-
RFU 482-1/8"	3	25	-	-	-
RFU 483-1/8"	0.25	10	-	-	-
RFU 444-1/4"	-	2	17	-	-
RFU 446-1/4"	-	-	5	20	-
SCU M5 - SVU M5	5	-	-	-	-
SCU-1/4"; SVU-1/4"; MCU-1/4"; MVU-1/4"	-	0.4	8	25	-
SCU-1/8"; SVU-1/8"; MCU-1/8"; MVU-1/8"	-	7	-	-	-
SCU-3/8"; MCU-3/8"	-	-	3.5	-	-
SCU-1/2"; MCU-1/2"	-	-	-	0.25	3.5

Air flow required by the valve (6 bar) to obtain the above indicated speeds (NI/min)

	Cylinders diameter (mm)						
	32	40	50	63	80	100	125
GSCU-1/8"; GSVU-1/8"; GMCU-1/8"; GSCU-1/8"	336	217	517	517	517	517	517
GSCU-1/4"; GSVU-1/4"; GMCU-1/4"; GSCU-1/4"	-	525	750	750	750	750	750
RFU 452 M5	69	-	-	-	-	-	-
RFU 482-1/8"	76	76	76	76	76	-	-
RFU 483-1/8"	175	175	175	175	175	175	-
RFU 444-1/4"	-	388	388	388	388	388	388
RFU 446-1/4"	-	-	697	697	697	697	697
SCU M5 - SVU M5	52	-	-	-	-	-	-
SCU-1/4"; SVU-1/4"; MCU-1/4"; MVU-1/4"	-	525	543	543	543	543	543
SCU-1/8"; SVU-1/8"; MCU-1/8"; MVU-1/8"	203	203	203	203	203	203	-
SCU-3/8"; MCU-3/8"	-	-	-	815	815	815	815
SCU-1/2"; MCU-1/2"	-	-	-	-	2100	2846	-

a

Output Forces Double-Acting Cylinders

Thrust side Values in Newton

SERIES >		16	24	25	27	31	32	QP	QN	QCT	QCB	QCTB	QCTF	40	41	42	50	52	60	61	62	90	94	95	97
Ø	Thrust side	Pressure																							
		MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)												
mm	cm ²	0,10 (1)	0,20 (2)	0,30 (3)	0,40 (4)	0,50 (5)	0,60 (6)	0,70 (7)	0,80 (8)	0,90 (9)	1 (10)														
8	0,50	4,44	8,9	13,3	17,7	22,2	26,6	31,0	35,5	39,9	44,4														
10	0,79	6,93	13,9	20,8	27,7	34,7	41,6	48,5	55,4	62,4	69,3														
12	1,13	9,98	20,0	29,9	39,9	49,9	59,9	69,9	79,8	89,8	99,8														
16	2,01	17,74	35,5	53,2	71,0	88,7	106,5	124,2	141,9	159,7	177,4														
20	3,14	27,72	55,4	83,2	110,9	138,6	166,3	194,1	221,8	249,5	277,2														
25	4,91	43,32	86,6	130,0	173,3	216,6	259,9	303,2	346,5	389,9	433,2														
32	8,04	70,97	141,9	212,9	283,9	354,9	425,8	496,8	567,8	638,7	709,7														
40	12,56	110,89	221,8	332,7	443,6	554,5	665,4	776,2	887,1	998,0	1108,9														
50	19,63	173,27	346,5	519,8	693,1	866,3	1039,6	1212,9	1386,2	1559,4	1732,7														
63	31,16	275,08	550,2	825,2	1100,3	1375,4	1650,5	1925,6	2200,7	2475,7	2750,8														
80	50,24	443,57	887,1	1330,7	1774,3	2217,8	2661,4	3105,0	3548,6	3992,1	4435,7														
100	78,50	693,08	1386,2	2079,2	2772,3	3465,4	4158,5	4851,5	5544,6	6237,7	6930,8														
125	122,66	1082,93	2165,9	3248,8	4331,7	5414,7	6497,6	7580,5	8663,5	9746,4	10829,3														
160	200,96	1774,28	3548,6	5322,8	7097,1	8871,4	10645,7	12419,9	14194,2	15968,5	17742,8														
200	314,00	2772,31	5544,6	8316,9	11089,2	13861,5	16633,8	19406,1	22178,4	24950,8	27723,1														
250	490,62	4331,73	8663,5	12995,2	17326,9	21658,6	25990,4	30322,1	34653,8	38985,6	43317,3														
320	803,84	7097,10	14194,2	21291,3	28388,4	35485,5	42582,6	49679,7	56776,8	63873,9	70971,0														

SERIES > QX

Ø	Thrust side	Pressure											
		MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)		
mm	cm ²	0,10 (1)	0,20 (2)	0,30 (3)	0,40 (4)	0,50 (5)	0,60 (6)	0,70 (7)	0,80 (8)	0,90 (9)	1 (10)		
10	1,58	14,22	28,44	42,66	56,88	71,1	85,32	99,54	113,76	127,98	142,2		
16	4,02	35,48	71	106,4	142	177,4	213	248,4	283,8	319,4	354,8		
20	6,28	55,44	110,8	166,4	221,8	277,2	332,6	388,2	443,6	499	554,4		
25	9,82	86,64	173,2	260	346,6	433,2	519,8	606,4	693	779,8	866,4		
32	16,08	141,94	283,8	425,8	567,8	709,8	851,6	993,6	1135,6	1277,4	1419,4		

Traction side Values in Newton

SERIES >		16	24	25	40	41	42	60	61	62	90	94	95	97	
Ø	Thrust side	Ø rod	Traction side	Pressure											
				MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)		
mm	cm ²	mm	cm ²	0,10 (1)	0,20 (2)	0,30 (3)	0,40 (4)	0,50 (5)	0,60 (6)	0,70 (7)	0,80 (8)	0,90 (9)	1 (10)		
8	0,50	4	0,38	3,33	6,7	10,0	13,3	16,6	20,0	23,3	26,6	29,9	33,3		
10	0,79	4	0,66	5,82	11,6	17,5	23,3	29,1	34,9	40,8	46,6	52,4	58,2		
12	1,13	6	0,85	7,49	15,0	22,5	29,9	37,4	44,9	52,4	59,9	67,4	74,9		
16	2,01	6	1,73	15,25	30,5	45,7	61,0	76,2	91,5	106,7	122,0	137,2	152,5		
20	3,14	8	2,64	23,29	46,6	69,9	93,1	116,4	139,7	163,0	186,3	209,6	232,9		
25	4,91	10	4,12	36,39	72,8	109,2	145,5	181,9	218,3	254,7	291,1	327,5	363,9		
32	8,04	12	6,91	60,99	122,0	183,0	244,0	305,0	365,9	426,9	487,9	548,9	609,9		
40	12,56	16	10,55	93,15	186,3	279,4	372,6	465,7	558,9	652,0	745,2	838,3	931,5		
50	19,63	20	16,49	145,55	291,1	436,6	582,2	727,7	873,3	1018,8	1164,4	1309,9	1455,5		
63	31,16	20	28,02	247,36	494,7	742,1	989,4	1236,8	1484,2	1731,5	1978,9	2226,2	2473,6		
80	50,24	25	45,33	400,25	800,5	1200,8	1601,0	2001,3	2401,5	2801,8	3202,0	3602,3	4002,5		
100	78,50	25	73,59	649,76	1299,5	1949,3	2599,0	3248,8	3898,6	4548,3	5198,1	5847,8	6497,6		
125	122,66	32	114,62	1011,96	2023,9	3035,9	4047,8	5059,8	6071,8	7083,7	8095,7	9107,6	10119,6		
160	200,96	40	188,40	1663,38	3326,8	4990,2	6653,5	8316,9	9980,3	11643,7	13307,1	14970,5	16633,8		
200	314,00	40	301,44	2661,41	5322,8	7984,2	10645,7	13307,1	15968,5	18629,9	21291,3	23952,7	26614,1		
250	490,62	50	471,00	4158,46	8316,9	12475,4	16633,8	20792,3	24950,8	29109,2	33267,7	37426,1	41584,6		
320	803,84	63	772,68	6822,02	13644,0	20466,1	27288,1	34110,1	40932,1	47754,1	54576,2	61398,2	68220,2		

SERIES > QX

Ø	Thrust side	Ø rod	Traction side	Pressure											
				MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)		
mm	cm ²			0,10 (1)	0,20 (2)	0,30 (3)	0,40 (4)	0,50 (5)	0,60 (6)	0,70 (7)	0,80 (8)	0,90 (9)	1 (10)		
10	1,58	6	1,0148	9,1332	18,2664	27,3996	36,5328	45,666	54,7992	63,9324	73,0656	82,1988	91,332		
16	4,02	16	3,02	26,62	53,2	79,8	106,4	133	159,6	186,2	213	239,6	266,2		
20	6,28	20	4,72	41,58	83,2	124,8	166,4	208	249,6	291	332,6	374,2	415,8		
25	9,82	24	7,56	66,68	133,4	200	266,6	333,4	400	466,8	533,4	600	666,8		
32	16,08	32	12,06	106,46	213	319,4	425,8	532,2	638,8	745,2	851,6	958,2	1064,6		

Traction side

Values in Newton

SERIES > 31 32													
Ø	Thrust side	Ø rod	Traction side	Pressure									
				MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)
mm	cm ²	mm	cm ²	0,10 (1)	0,20 (2)	0,30 (3)	0,40 (4)	0,50 (5)	0,60 (6)	0,70 (7)	0,80 (8)	0,90 (9)	1 (10)
12	1,13	6	0,85	7,49	15,0	22,5	29,9	37,4	44,9	52,4	59,9	67,4	74,9
16	2,01	8	1,51	13,31	26,6	39,9	53,2	66,5	79,8	93,1	106,5	119,8	133,1
20	3,14	10	2,36	20,79	41,6	62,4	83,2	104,0	124,8	145,5	166,3	187,1	207,9
25	4,91	10	4,12	36,39	72,8	109,2	145,5	181,9	218,3	254,7	291,1	327,5	363,9
32	8,04	12	6,91	60,99	122,0	183,0	244,0	305,0	365,9	426,9	487,9	548,9	609,9
40	12,56	12	11,43	100,91	201,8	302,7	403,6	504,6	605,5	706,4	807,3	908,2	1009,1
50	19,63	16	17,62	155,53	311,1	466,6	622,1	777,6	933,2	1088,7	1244,2	1399,7	1555,3
63	31,16	16	29,15	257,34	514,7	772,0	1029,4	1286,7	1544,0	1801,4	2058,7	2316,1	2573,4
80	50,24	20	47,10	415,85	831,7	1247,5	1663,4	2079,2	2495,1	2910,9	3326,8	3742,6	4158,5
100	78,50	25	73,59	649,76	1299,5	1949,3	2599,0	3248,8	3898,6	4548,3	5198,1	5847,8	6497,6

SERIES > QP													
Ø	Thrust side	Ø rod	Traction side	Pressure									
				MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)
mm	cm ²	mm	cm ²	0,10 (1)	0,20 (2)	0,30 (3)	0,40 (4)	0,50 (5)	0,60 (6)	0,70 (7)	0,80 (8)	0,90 (9)	1 (10)
12	1,13	6	0,85	7,49	15,0	22,5	29,9	37,4	44,9	52,4	59,9	67,4	74,9
16	2,01	8	1,51	13,31	26,6	39,9	53,2	66,5	79,8	93,1	106,5	119,8	133,1
20	3,14	10	2,36	20,79	41,6	62,4	83,2	104,0	124,8	145,5	166,3	187,1	207,9
25	4,91	10	4,12	36,39	72,8	109,2	145,5	181,9	218,3	254,7	291,1	327,5	363,9
32	8,04	12	6,91	60,99	122,0	183,0	244,0	305,0	365,9	426,9	487,9	548,9	609,9
40	12,56	16	10,55	93,15	186,3	279,4	372,6	465,7	558,9	652,0	745,2	838,3	931,5
50	19,63	16	17,62	155,53	311,1	466,6	622,1	777,6	933,2	1088,7	1244,2	1399,7	1555,3
63	31,16	20	28,02	247,36	494,7	742,1	989,4	1236,8	1484,2	1731,5	1978,9	2226,2	2473,6
80	50,24	25	45,33	400,25	800,5	1200,8	1601,0	2001,3	2401,5	2801,8	3202,0	3602,3	4002,5
100	78,50	25	73,59	649,76	1299,5	1949,3	2599,0	3248,8	3898,6	4548,3	5198,1	5847,8	6497,6

SERIES > 27													
Ø	Thrust side	Ø rod	Traction side	Pressure									
				MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)
mm	cm ²	mm	cm ²	0,10 (1)	0,20 (2)	0,30 (3)	0,40 (4)	0,50 (5)	0,60 (6)	0,70 (7)	0,80 (8)	0,90 (9)	1 (10)
20	3,14	8	2,64	23,29	46,6	69,9	93,1	116,4	139,7	163,0	186,3	209,6	232,9
25	4,91	10	4,12	36,39	72,8	109,2	145,5	181,9	218,3	254,7	291,1	327,5	363,9
32	8,04	12	6,91	60,99	122,0	183,0	244,0	305,0	365,9	426,9	487,9	548,9	609,9
40	12,56	16	10,55	93,15	186,3	279,4	372,6	465,7	558,9	652,0	745,2	838,3	931,5
50	19,63	16	17,62	155,53	311,1	466,6	622,1	777,6	933,2	1088,7	1244,2	1399,7	1555,3
63	31,16	20	28,02	247,36	494,7	742,1	989,4	1236,8	1484,2	1731,5	1978,9	2226,2	2473,6

SERIES > QCT QCB QCTF QCBF													
Ø	Thrust side	Ø rod	Traction side	Pressure									
				MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)
mm	cm ²	mm	cm ²	0,10 (1)	0,20 (2)	0,30 (3)	0,40 (4)	0,50 (5)	0,60 (6)	0,70 (7)	0,80 (8)	0,90 (9)	1 (10)
20	3,14	10	2,36	20,79	41,6	62,4	83,2	104,0	124,8	145,5	166,3	187,1	207,9
25	4,91	12	3,78	33,34	66,7	100,0	133,3	166,7	200,0	233,4	266,7	300,0	333,4
32	8,04	16	6,03	53,23	106,5	159,7	212,9	266,1	319,4	372,6	425,8	479,1	532,3
40	12,56	16	10,55	93,15	186,3	279,4	372,6	465,7	558,9	652,0	745,2	838,3	931,5
50	19,63	20	16,49	145,55	291,1	436,6	582,2	727,7	873,3	1018,8	1164,4	1309,9	1455,5
63	31,16	20	28,02	247,36	494,7	742,1	989,4	1236,8	1484,2	1731,5	1978,9	2226,2	2473,6



Table Showing Air Consumption of Double-Acting Cylinders

Thrust side

Values in NL for each 10 mm of stroke

SERIES >		16	24	25	27	31	32	QP	QCT	QCB	QCTB	QCTF	40	41	42	50	52	60	61	62	90	94	95	97	
Ø	Thrust side	Pressure																							
		MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)
mm	cm ²	0,10 (1)	0,20 (2)	0,30 (3)	0,40 (4)	0,50 (5)	0,60 (6)	0,70 (7)	0,80 (8)	0,90 (9)	1 (10)														
8	0,50	0,001	0,002	0,002	0,003	0,003	0,004	0,004	0,005	0,005	0,006	0,006	0,007	0,007	0,008	0,008	0,009	0,009	0,010	0,010	0,011	0,011	0,012	0,012	0,012
10	0,79	0,002	0,002	0,003	0,004	0,005	0,005	0,006	0,006	0,007	0,007	0,008	0,008	0,009	0,009	0,010	0,010	0,011	0,011	0,012	0,012	0,013	0,013	0,014	0,014
12	1,13	0,002	0,003	0,005	0,006	0,007	0,007	0,008	0,008	0,009	0,009	0,010	0,010	0,011	0,011	0,012	0,012	0,013	0,013	0,014	0,014	0,015	0,015	0,016	0,016
16	2,01	0,004	0,006	0,008	0,010	0,012	0,012	0,014	0,014	0,016	0,016	0,018	0,018	0,019	0,019	0,020	0,020	0,021	0,021	0,022	0,022	0,023	0,023	0,024	0,024
20	3,14	0,006	0,009	0,013	0,016	0,019	0,019	0,022	0,022	0,025	0,025	0,028	0,028	0,031	0,031	0,034	0,034	0,037	0,037	0,040	0,040	0,043	0,043	0,046	0,046
25	4,91	0,010	0,015	0,020	0,025	0,029	0,029	0,034	0,034	0,039	0,039	0,044	0,044	0,049	0,049	0,054	0,054	0,059	0,059	0,064	0,064	0,069	0,069	0,074	0,074
32	8,04	0,016	0,024	0,032	0,040	0,048	0,048	0,056	0,056	0,064	0,064	0,072	0,072	0,080	0,080	0,088	0,088	0,096	0,096	0,104	0,104	0,112	0,112	0,120	0,120
40	12,56	0,025	0,038	0,050	0,063	0,075	0,075	0,088	0,088	0,100	0,100	0,113	0,113	0,126	0,126	0,138	0,138	0,150	0,150	0,163	0,163	0,176	0,176	0,188	0,188
50	19,63	0,039	0,059	0,079	0,098	0,118	0,118	0,137	0,137	0,157	0,157	0,177	0,177	0,196	0,196	0,216	0,216	0,235	0,235	0,254	0,254	0,273	0,273	0,292	0,292
63	31,16	0,062	0,093	0,125	0,156	0,187	0,187	0,218	0,218	0,249	0,249	0,280	0,280	0,312	0,312	0,343	0,343	0,374	0,374	0,405	0,405	0,436	0,436	0,467	0,467
80	50,24	0,100	0,151	0,201	0,251	0,301	0,301	0,352	0,352	0,402	0,402	0,452	0,452	0,502	0,502	0,553	0,553	0,603	0,603	0,653	0,653	0,703	0,703	0,753	0,753
100	78,50	0,157	0,236	0,314	0,393	0,471	0,471	0,550	0,550	0,628	0,628	0,707	0,707	0,785	0,785	0,864	0,864	0,942	0,942	1,020	1,020	1,098	1,098	1,176	1,176
125	122,66	0,245	0,368	0,491	0,613	0,736	0,736	0,859	0,859	0,981	0,981	1,104	1,104	1,227	1,227	1,349	1,349	1,471	1,471	1,594	1,594	1,716	1,716	1,838	1,838
160	200,96	0,402	0,603	0,804	1,005	1,206	1,206	1,407	1,407	1,608	1,608	1,809	1,809	2,010	2,010	2,211	2,211	2,412	2,412	2,613	2,613	2,814	2,814	3,015	3,015
200	314,00	0,628	0,942	1,256	1,570	1,884	1,884	2,198	2,198	2,512	2,512	2,826	2,826	3,140	3,140	3,454	3,454	3,768	3,768	4,082	4,082	4,396	4,396	4,710	4,710
250	490,63	0,981	1,472	1,963	2,453	2,944	2,944	3,434	3,434	3,925	3,925	4,416	4,416	4,906	4,906	5,397	5,397	5,887	5,887	6,378	6,378	6,868	6,868	7,358	7,358
320	803,84	1,608	2,412	3,215	4,019	4,823	4,823	5,627	5,627	6,431	6,431	7,235	7,235	8,038	8,038	8,842	8,842	9,645	9,645	10,448	10,448	11,251	11,251	12,054	12,054

SERIES > QX

Ø	Thrust side	Pressure									
		MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)
mm	cm ²	0,10 (1)	0,20 (2)	0,30 (3)	0,40 (4)	0,50 (5)	0,60 (6)	0,70 (7)	0,80 (8)	0,90 (9)	1 (10)
10	1,58	0,003	0,005	0,006	0,008	0,009	0,011	0,013	0,014	0,016	0,017
16	4,02	0,008	0,012	0,016	0,02	0,024	0,028	0,032	0,036	0,04	0,044
20	6,28	0,012	0,018	0,026	0,032	0,038	0,044	0,05	0,056	0,062	0,07
25	9,82	0,02	0,03	0,04	0,05	0,058	0,068	0,078	0,088	0,098	0,108
32	16,08	0,032	0,048	0,064	0,08	0,096	0,112	0,128	0,144	0,16	0,176

Traction side

Values in NL for each 10 mm of stroke

SERIES >		16	24	25	40	41	42	60	61	62	90	94	95	97
Ø	Thrust side	Ø rod	Traction side	Pressure										
				MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)
mm	cm ²	mm	cm ²	0,10 (1)	0,20 (2)	0,30 (3)	0,40 (4)	0,50 (5)	0,60 (6)	0,70 (7)	0,80 (8)	0,90 (9)	1 (10)	
8	0,50	4	0,38	0,001	0,001	0,002	0,002	0,002	0,003	0,003	0,003	0,004	0,004	0,004
10	0,79	4	0,66	0,001	0,002	0,003	0,003	0,004	0,005	0,005	0,006	0,007	0,007	0,007
12	1,13	6	0,85	0,002	0,003	0,003	0,004	0,005	0,006	0,007	0,008	0,008	0,009	0,009
16	2,01	6	1,73	0,003	0,005	0,007	0,009	0,010	0,012	0,014	0,016	0,017	0,019	0,019
20	3,14	8	2,64	0,005	0,008	0,011	0,013	0,016	0,018	0,021	0,024	0,026	0,029	0,029
25	4,91	10	4,12	0,008	0,012	0,016	0,021	0,025	0,029	0,033	0,037	0,041	0,045	0,045
32	8,04	12	6,91	0,014	0,021	0,028	0,035	0,041	0,048	0,055	0,062	0,069	0,076	0,076
40	12,56	16	10,55	0,021	0,032	0,042	0,053	0,063	0,074	0,084	0,095	0,106	0,116	0,116
50	19,63	20	16,49	0,033	0,049	0,066	0,082	0,099	0,115	0,132	0,148	0,165	0,181	0,181
63	31,16	20	28,02	0,056	0,084	0,112	0,140	0,168	0,196	0,224	0,252	0,280	0,308	0,308
80	50,24	25	45,33	0,091	0,136	0,181	0,227	0,272	0,317	0,363	0,408	0,453	0,499	0,499
100	78,50	25	73,59	0,147	0,221	0,294	0,368	0,442	0,515	0,589	0,662	0,736	0,810	0,810
125	122,66	32	114,62	0,229	0,344	0,458	0,573	0,688	0,802	0,917	1,032	1,146	1,261	1,261
160	200,96	40	188,40	0,377	0,565	0,754	0,942	1,130	1,319	1,507	1,696	1,884	2,072	2,072
200	314,00	40	301,44	0,603	0,904	1,206	1,507	1,809	2,110	2,412	2,713	3,014	3,316	3,316
250	490,63	50	471,00	0,942	1,413	1,884	2,355	2,826	3,297	3,768	4,239	4,710	5,181	5,181
320	803,84	63	772,68	1,545	2,318	3,091	3,863	4,636	5,409	6,181	6,954	7,727	8,500	8,500

SERIES > QX

Ø	Thrust side	Ø rod	Traction side	Pressure									
				MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)
mm	cm ²	mm	cm ²	0,10 (1)	0,20 (2)	0,30 (3)	0,40 (4)	0,50 (5)	0,60 (6)	0,70 (7)	0,80 (8)	0,90 (9)	1 (10)
10	1,58	6	1,0148	0,002	0,003	0,004	0,005	0,006	0,007	0,008	0,009	0,010	0,011
16	4,02	16	3,02	0,006	0,01	0,012	0,016	0,018	0,022	0,024	0,028	0,03	0,034
20	6,28	20	4,72	0,01	0,014	0,018	0,024	0,028	0,032	0,038	0,042	0,048	0,052
25	9,82	24	7,56	0,016	0,022	0,03	0,038	0,046	0,052	0,06	0,068	0,076	0,084
32	16,08	32	12,06	0,024	0,036	0,048	0,06	0,072	0,084	0,096	0,108	0,12	0,132

Traction side

Values in NL for each 10 mm of stroke

SERIES > 31 32													
Ø	Thrust side	Ø rod	Traction side	Pressure									
				MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)
mm	cm ²	mm	cm ²	0,10 (1)	0,20 (2)	0,30 (3)	0,40 (4)	0,50 (5)	0,60 (6)	0,70 (7)	0,80 (8)	0,90 (9)	1 (10)
12	1,13	6	0,85	0,002	0,003	0,003	0,004	0,005	0,006	0,007	0,008	0,008	0,009
16	2,01	8	1,51	0,003	0,005	0,006	0,008	0,009	0,011	0,012	0,014	0,015	0,017
20	3,14	10	2,36	0,005	0,007	0,009	0,012	0,014	0,016	0,019	0,021	0,024	0,026
25	4,91	10	4,12	0,008	0,012	0,016	0,021	0,025	0,029	0,033	0,037	0,041	0,045
32	8,04	12	6,91	0,014	0,021	0,028	0,035	0,041	0,048	0,055	0,062	0,069	0,076
40	12,56	12	11,43	0,023	0,034	0,046	0,057	0,069	0,080	0,091	0,103	0,114	0,126
50	19,63	16	17,62	0,035	0,053	0,070	0,088	0,106	0,123	0,141	0,159	0,176	0,194
63	31,16	16	29,15	0,058	0,087	0,117	0,146	0,175	0,204	0,233	0,262	0,291	0,321
80	50,24	20	47,10	0,094	0,141	0,188	0,236	0,283	0,330	0,377	0,424	0,471	0,518
100	78,50	25	73,59	0,147	0,221	0,294	0,368	0,442	0,515	0,589	0,662	0,736	0,810

SERIES > QP													
Ø	Thrust side	Ø rod	Traction side	Pressure									
				MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)
mm	cm ²	mm	cm ²	0,10 (1)	0,20 (2)	0,30 (3)	0,40 (4)	0,50 (5)	0,60 (6)	0,70 (7)	0,80 (8)	0,90 (9)	1 (10)
12	1,13	6	0,85	0,002	0,003	0,003	0,004	0,005	0,006	0,007	0,008	0,008	0,009
16	2,01	8	1,51	0,003	0,005	0,006	0,008	0,009	0,011	0,012	0,014	0,015	0,017
20	3,14	10	2,36	0,005	0,007	0,009	0,012	0,014	0,016	0,019	0,021	0,024	0,026
25	4,91	10	4,12	0,008	0,012	0,016	0,021	0,025	0,029	0,033	0,037	0,041	0,045
32	8,04	12	6,91	0,014	0,021	0,028	0,035	0,041	0,048	0,055	0,062	0,069	0,076
40	12,56	16	10,55	0,021	0,032	0,042	0,053	0,063	0,074	0,084	0,095	0,106	0,116
50	19,63	16	17,62	0,035	0,053	0,070	0,088	0,106	0,123	0,141	0,159	0,176	0,194
63	31,16	20	28,02	0,056	0,084	0,112	0,140	0,168	0,196	0,224	0,252	0,280	0,308
80	50,24	25	45,33	0,091	0,136	0,181	0,227	0,272	0,317	0,363	0,408	0,453	0,499
100	78,50	25	73,59	0,147	0,221	0,294	0,368	0,442	0,515	0,589	0,662	0,736	0,810

SERIES > 27													
Ø	Thrust side	Ø rod	Traction side	Pressure									
				MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)
mm	cm ²	mm	cm ²	0,10 (1)	0,20 (2)	0,30 (3)	0,40 (4)	0,50 (5)	0,60 (6)	0,70 (7)	0,80 (8)	0,90 (9)	1 (10)
20	3,14	8	2,64	0,005	0,008	0,011	0,013	0,016	0,018	0,021	0,024	0,026	0,029
25	4,91	10	4,12	0,008	0,012	0,016	0,021	0,025	0,029	0,033	0,037	0,041	0,045
32	8,04	12	6,91	0,014	0,021	0,028	0,035	0,041	0,048	0,055	0,062	0,069	0,076
40	12,56	16	10,55	0,021	0,032	0,042	0,053	0,063	0,074	0,084	0,095	0,106	0,116
50	19,63	16	17,62	0,035	0,053	0,070	0,088	0,106	0,123	0,141	0,159	0,176	0,194
63	31,16	20	28,02	0,056	0,084	0,112	0,140	0,168	0,196	0,224	0,252	0,280	0,308

SERIES > QCT QCB QCTF QCBF													
Ø	Thrust side	Ø rod	Traction side	Pressure									
				MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)	MPa (bar)
mm	cm ²	mm	cm ²	0,10 (1)	0,20 (2)	0,30 (3)	0,40 (4)	0,50 (5)	0,60 (6)	0,70 (7)	0,80 (8)	0,90 (9)	1 (10)
20	3,14	10	2,36	0,005	0,007	0,009	0,012	0,014	0,016	0,019	0,021	0,024	0,026
25	4,91	12	3,78	0,008	0,011	0,015	0,019	0,023	0,026	0,030	0,034	0,038	0,042
32	8,04	16	6,03	0,012	0,018	0,024	0,030	0,036	0,042	0,048	0,054	0,060	0,066
40	12,56	16	10,55	0,021	0,032	0,042	0,053	0,063	0,074	0,084	0,095	0,106	0,116
50	19,63	20	16,49	0,033	0,049	0,066	0,082	0,099	0,115	0,132	0,148	0,165	0,181
63	31,16	20	28,02	0,056	0,084	0,112	0,140	0,168	0,196	0,224	0,252	0,280	0,308



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