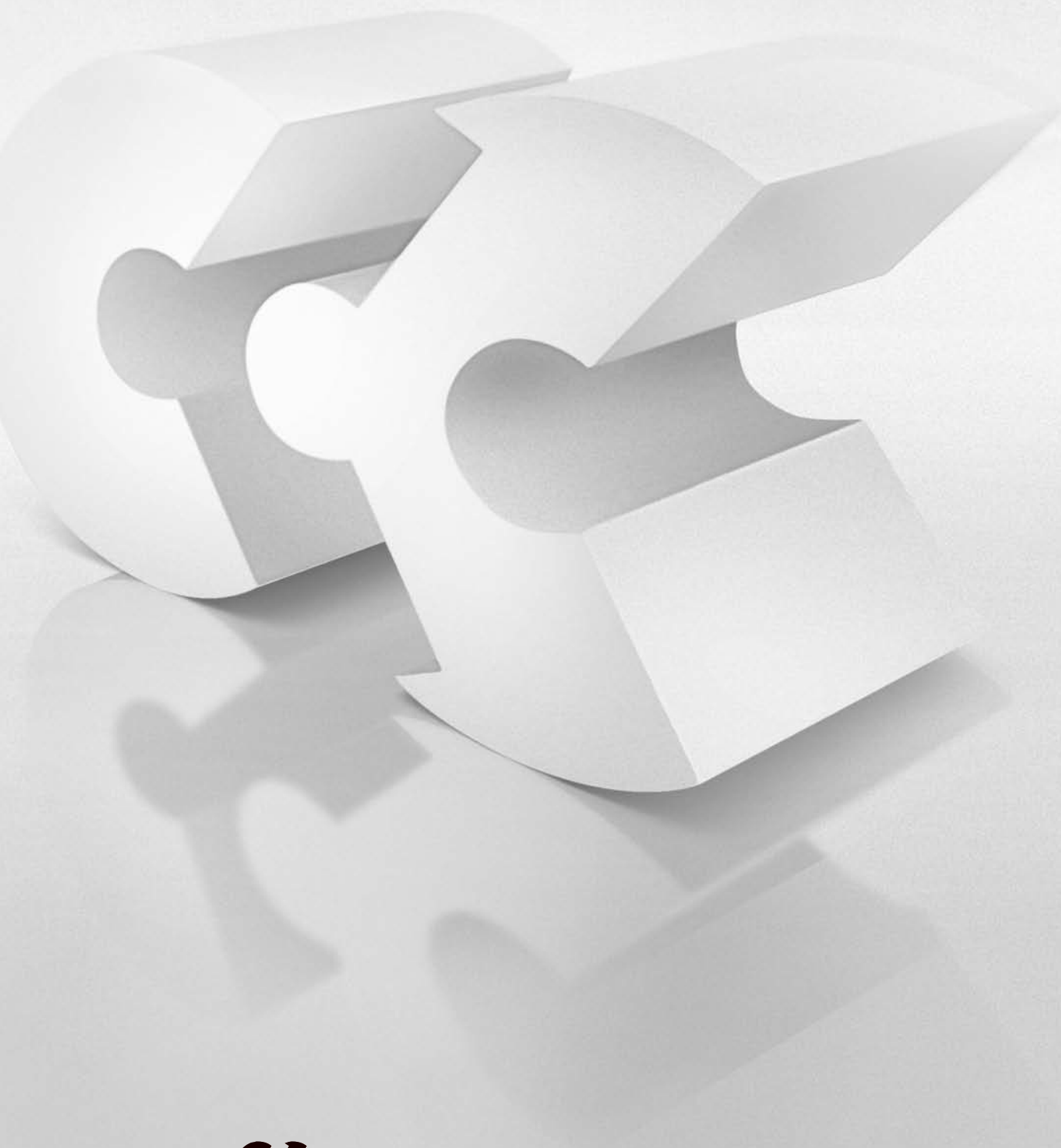




UK Short Form Catalogue

release 8.6



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Internet: www.camozzi.com



Ordering and General Information

Delivery

We can supply any standard product ordered between 8.00am and 5.30pm (5.00pm Fridays) on a next day basis.

Standard - next day delivery for stock products ordered before 5.30pm (5.00pm Fridays).

Premier - optional next day delivery before 10.00am on request.

Emergency breakdown - courier service by arrangement.

Same Day Cylinder Service

We offer a same day cylinder service, including standard and non standard strokes.

Please call the Camozzi sales office for more information.

Additional Services

Camozzi is one of the world's leading suppliers of pneumatic components and is able to offer a range of additional services for the pneumatic user.

- Control Cabinets
- Kit Assembly
- Kanban/Line Feeding Deliveries
- Worldwide Support

Warranty

A comprehensive one-year warranty applies to all Camozzi products, subject to our standard conditions of sale (available on request).

ISO Certification

Camozzi is certified in accordance with ISO 9001 and ISO 14001

Camozzi UK

Camozzi's select distribution network with over 50 outlets throughout the UK and Ireland offers our customers unrivalled service and support.

Camozzi Worldwide

Camozzi is represented in over 70 countries throughout the world. We can supply our catalogue in a range of different languages on request.

We can also provide product advice and technical support on a worldwide basis.

Training

We can offer a range of training courses designed to meet your specific requirements, from basic pneumatics courses to advanced systems courses. All our courses can be offered either at our Nuneaton headquarters or at a location of your choice.

We also have available an extensive range of training equipment and manuals for hire or purchase.

Catalogue

Camozzi offer a comprehensive range of catalogues from short-form catalogues for the end user to comprehensive technical catalogues for the design engineer. Our full catalogue is also available on CD ROM (with dxf files).

Terms and Conditions

We have made every effort to ensure that product descriptions contained within this catalogue are accurate and that prices remain stable. However, the company reserves the right to vary models and dimensions and to amend prices without notification.

Returns are not accepted without prior written approval from the company.

Full terms and conditions are available on request.



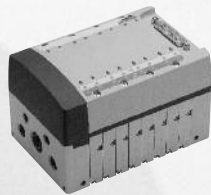
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Welcome to the world of Camozzi

THIS LATEST UK SHORT FORM CATALOGUE
FEATURES CAMOZZI'S COMPLETE RANGE OF
PNEUMATIC SOLUTIONS.

In addition, a range of the fastest moving
complementary fluid power products are also
included. However, if you cannot see what
you are looking for please contact the
Camozzi sales office on 024 7637 4114 or
sales@camozzi.co.uk.

Further detailed information is available in our
full catalogue or by visiting
www.camozzi.co.uk.

www.camozzi.co.uk



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

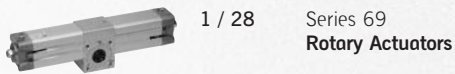


1 / 24 Series 27 Roundline
Cylinders and Accessories



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)



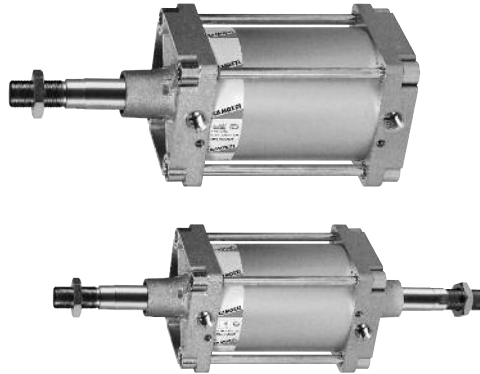
For FRL's
See 3 (Treatment)



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] *Version C: available on request. **The possibility to order the cylinder without piston rod seal, further reduces the friction force. | | |

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 |



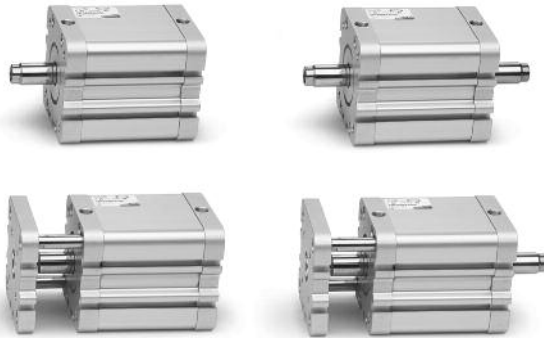
| Coupling Piece | |
|----------------|--------|
| | ∅ |
| GKF-25-32 | 32 |
| GKF-40 | 40 |
| GKF-50-63 | 50-63 |
| GKF-80-100 | 80-100 |
| GKF-125 | 125 |

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) | Ø |
|--------------------|-----|
| B-32-20 | 20 |
| B-31-25 | 25 |
| B-41-32 | 32 |
| B-41-40 | 40 |
| B-41-50 | 50 |
| B-41-63 | 63 |
| B-41-80 | 80 |
| B-41-100 | 100 |



| Rear Trunnion, Female | Ø |
|-----------------------|-----|
| C-41-32 | 32 |
| C-41-40 | 40 |
| C-41-50 | 50 |
| C-H-41-63 | 63 |
| C-H-41-80 | 80 |
| C-H-41-100 | 100 |



| Front Trunnion, Female | Ø |
|------------------------|-----|
| 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 |



| Rear and Front Flange | Ø |
|-----------------------|-----|
| D-E-32-20 | 20 |
| D-E-32-25 | 25 |
| 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 |



| 90° Swivel Combination for Female Trunnion | Ø |
|--|-----|
| L-32-20 | 20 |
| L-32-25 | 25 |
| L-41-32 | 32 |
| L-41-40 | 40 |
| L-41-50 | 50 |
| L-41-63 | 63 |
| L-41-80 | 80 |
| L-41-100 | 100 |



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



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



| 90° Swivel Combination for Trunnion | Ø |
|-------------------------------------|----|
| I-20-25 | 20 |
| I-20-25 | 25 |



| Clevis Pin | Ø |
|------------|-----|
| S-32 | 32 |
| S-40 | 40 |
| S-50 | 50 |
| S-63 | 63 |
| S-80 | 80 |
| S-100 | 100 |



| Rod Fork End | Ø |
|--------------|-------|
| G-12-16 | 12 |
| G-20 | 16 |
| G-25-32 | 20-40 |
| G-40 | 50-63 |
| G-50-63 | 80 |
| G-80-100 | 100 |



| Swivel Ball Joint | Ø |
|-------------------|-------|
| GA-12-16 | 12 |
| GA-20 | 16 |
| GA-32 | 20-40 |
| GA-40 | 50-63 |
| GA-50-63 | 80 |
| GA-80-100 | 100 |



| Piston Rod Socket Joint | Ø |
|-------------------------|-------|
| GY-12-16 | 12 |
| GY-20 | 16 |
| GY-32 | 20-40 |
| GY-40 | 50-63 |
| GY-50-63 | 80 |
| GY-80-100 | 100 |

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

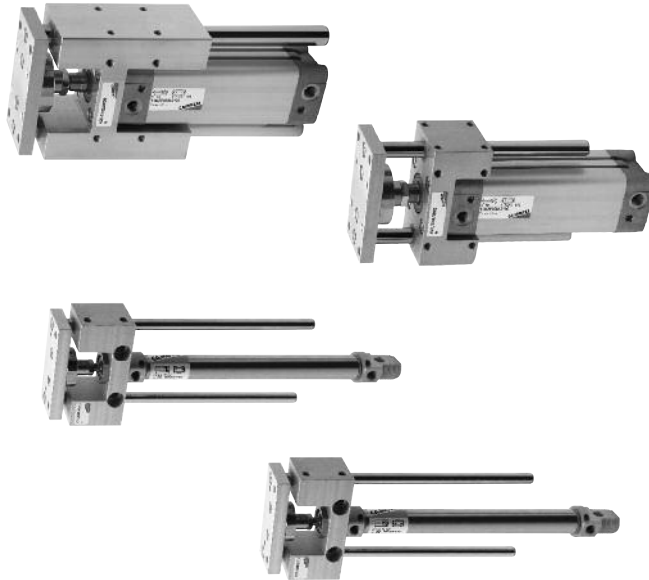
See full catalogue or CD rom for all dimensions.
 For technical advice contact our sales office or your local Camozzi distributor.

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

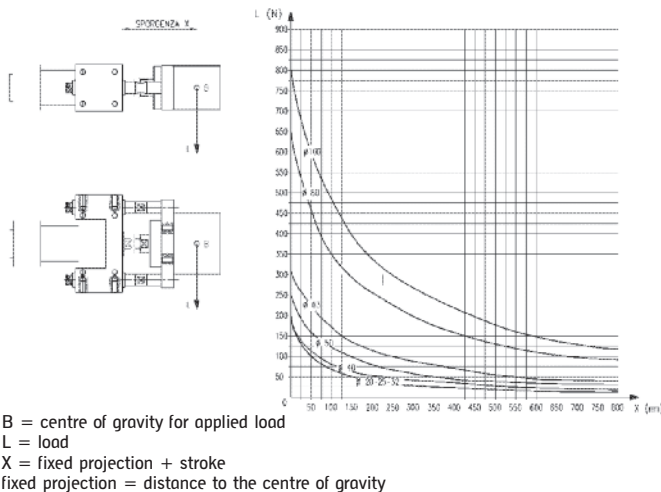
Stroke Lengths
 Made to measure

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

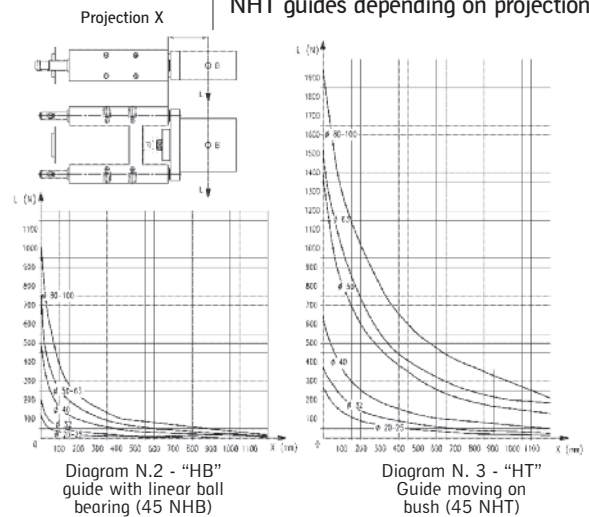
Special Requests
 For assistance, contact our technical office or your local Camozzi distributor.

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. |

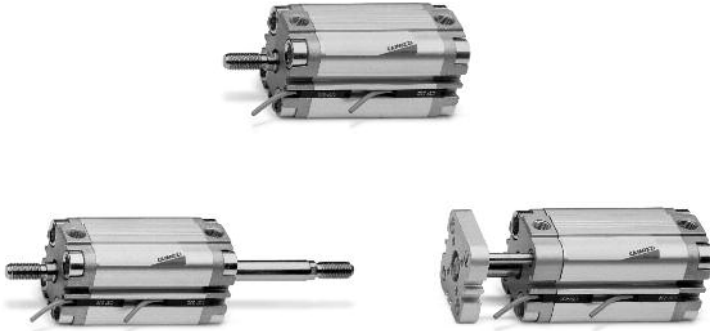
NOTE: Foot (model B) and Male Trunnion (model L) brackets available on request. Ø32, 40, 50, 63, 80, 100mm

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 | - |
| 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 | | |
| A | | | | | | | |

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) | |
|--------------------|-------|
| | Ø |
| B-31-12-16 | 12-16 |
| B-31-20 | 20 |
| B-31-25 | 25 |
| B-31-32 | 32 |
| B-31-40 | 40 |
| B-31-50 | 50 |
| B-31-63 | 63 |
| B-31-80 | 80 |
| B-31-100 | 100 |



| Rear and Front Flange | |
|-----------------------|-------|
| | Ø |
| D-E-31-12-16 | 12-16 |
| D-E-31-20 | 20 |
| D-E-31-25 | 25 |
| D-E-31-32 | 32 |
| D-E-31-40 | 40 |
| D-E-31-50 | 50 |
| D-E-31-63 | 63 |
| D-E-31-80 | 80 |
| D-E-31-100 | 100 |



| Rear Trunnion, Female | |
|-----------------------|-----|
| | Ø |
| C-31-32 | 32 |
| C-31-40 | 40 |
| C-31-50 | 50 |
| C-31-63 | 63 |
| C-31-80 | 80 |
| C-31-100 | 100 |



| Rear Trunnion, Male | |
|---------------------|----|
| | Ø |
| L-31-12-16 | 12 |
| L-31-12-16 | 16 |
| L-31-20 | 20 |
| L-31-25 | 25 |



| 90° Swivel Combination for Female Trunnion | |
|--|-----|
| | Ø |
| ZC-32 | 32 |
| ZC-40 | 40 |
| ZC-50 | 50 |
| ZC-63 | 63 |
| ZC-80 | 80 |
| ZC-100 | 100 |



| 90° Swivel Combination for Trunnion | |
|-------------------------------------|----|
| | Ø |
| I-12-16 | 12 |
| I-12-16 | 16 |
| I-20-25 | 20 |
| I-20-25 | 25 |



| Rod Fork End | |
|--------------|-------|
| | Ø |
| G-12-16 | 12 |
| G-20 | 16 |
| G-25-32 | 20-40 |
| G-40 | 50-63 |
| G-50-63 | 80 |
| G-80-100 | 100 |



| Swivel Ball Joint | |
|-------------------|-------|
| | Ø |
| GA-12-16 | 12 |
| GA-20 | 16 |
| GA-32 | 20-40 |
| GA-40 | 50-63 |
| GA-50-63 | 80 |
| GA-80-100 | 100 |



| Piston Rod Socket Joint | |
|-------------------------|-------|
| | Ø |
| GY-12-16 | 12 |
| GY-20 | 16 |
| GY-32 | 20-40 |
| GY-40 | 50-63 |
| GY-50-63 | 80 |
| GY-80-100 | 100 |



| Piston Rod Lock Nut | |
|---------------------|-------|
| | Ø |
| U-12-16 | 12 |
| U-20 | 16 |
| U-25-32 | 20-40 |
| U-40 | 50-63 |
| U-50-63 | 80 |
| U-80-100 | 100 |



| Self Aligning Rod | |
|-------------------|-------------|
| | Ø |
| GK-20 | 16 |
| GK-25-32 | 20-25-32-40 |
| GK-40 | 50-63 |
| GK-50-63 | 80 |
| GK-80-100 | 100 |



| Coupling Piece | |
|----------------|-------------|
| | Ø |
| GKF-20 | 16 |
| GKF-25-32 | 20-25-32-40 |
| GKF-40 | 50-63 |
| GKF-50-63 | 80 |
| GKF-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

| 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 - 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

| 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.



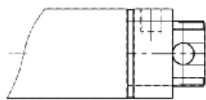
Double-acting only (non-standard strokes available on request)

STANDARD STROKES FOR CYLINDERS SERIES 27

■ Double-acting

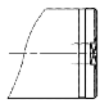
| | Ø20 | Ø25 | Ø32 | Ø40 | Ø50 | Ø63 |
|-----------------|-----|-----|-----|-----|-----|-----|
| Standard Stroke | | | | | | |
| 10 | ■ | ■ | ■ | ■ | ■ | ■ |
| 25 | ■ | ■ | ■ | ■ | ■ | ■ |
| 40 | ■ | ■ | ■ | ■ | ■ | ■ |
| 50 | ■ | ■ | ■ | ■ | ■ | ■ |
| 80 | ■ | ■ | ■ | ■ | ■ | ■ |
| 100 | ■ | ■ | ■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

Mod. M



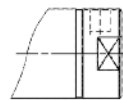
Bore Sizes: 20, 25, 32, 40

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 | ■ | ■ | ■ | ■ |

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.

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.

Series 42 Accessories



| Foot Mount (pair) | |
|-------------------|----|
| ∅ | |
| P-42-32 | 32 |
| P-42-40 | 40 |
| P-42-50 | 50 |
| P-42-63 | 63 |



| Trunnion | |
|----------|----|
| ∅ | |
| I-42-32 | 32 |
| I-42-40 | 40 |
| I-42-50 | 50 |
| I-42-63 | 63 |



| Bracket with Threaded Pins (a pair) | |
|-------------------------------------|----|
| ∅ | |
| T-42-32 | 32 |
| T-42-40 | 40 |
| T-42-50 | 50 |
| T-42-63 | 63 |



| Nose Nut | |
|------------|-------|
| ∅ | |
| V-42-32 | 32 |
| V-42-40 | 40 |
| V-42-50-63 | 50-63 |



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



| Swivel Ball Joint | |
|-------------------|-------|
| ∅ | |
| GA-32 | 32 |
| GA-40 | 40 |
| GA-50-63 | 50-63 |



| Piston Rod Socket Joint | |
|-------------------------|-------|
| ∅ | |
| GY-32 | 32 |
| GY-40 | 40 |
| GY-50-63 | 50-63 |



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



| Self Aligning Rod | |
|-------------------|-------|
| ∅ | |
| GK-25-32 | 32 |
| GK-40 | 40 |
| GK-50-63 | 50-63 |



| Coupling Piece | |
|----------------|-------|
| ∅ | |
| 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

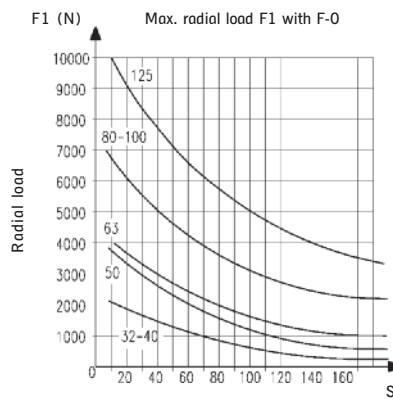
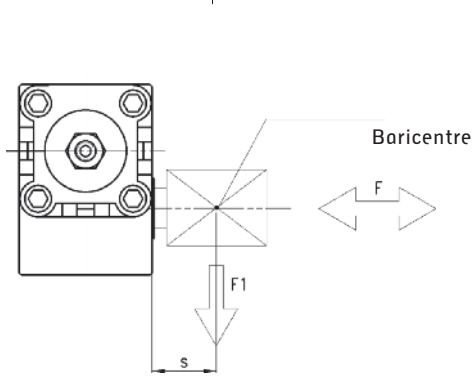
Additional Options

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

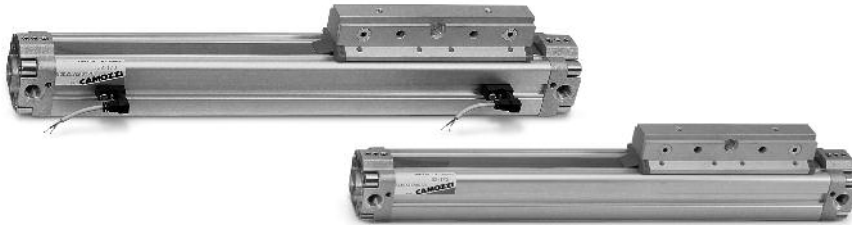
050 VERSION:
 050 = Ø32mm
 064 = Ø45mm
 080 = Ø58mm
 100 = Ø77mm
 125 = Ø98mm

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.

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

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

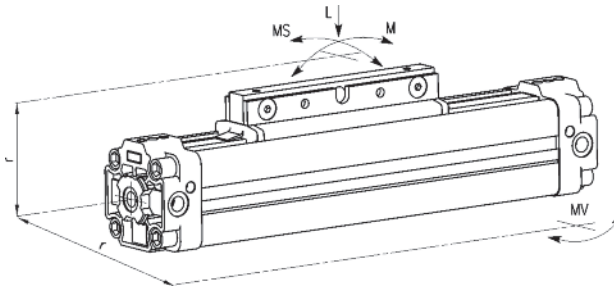
Special Requests

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

Maximum Permitted Loads and Torque Forces

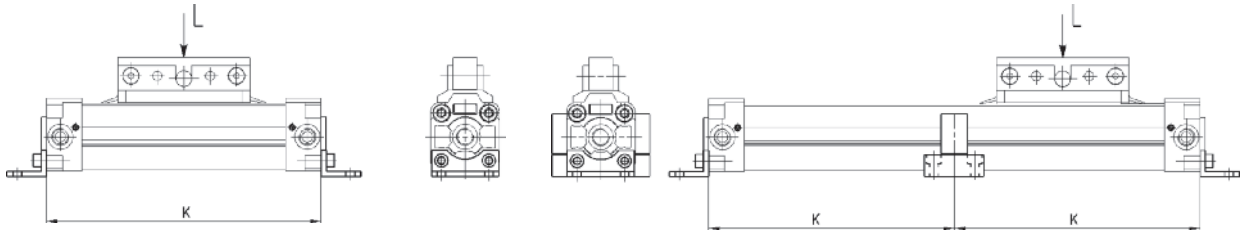


$M = F \times b$
 $MS = F \times b$
 $MV = F \times b$

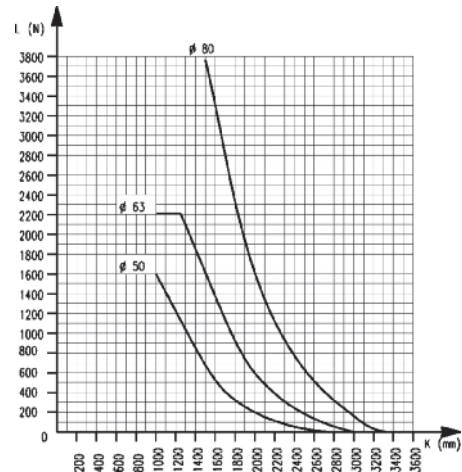
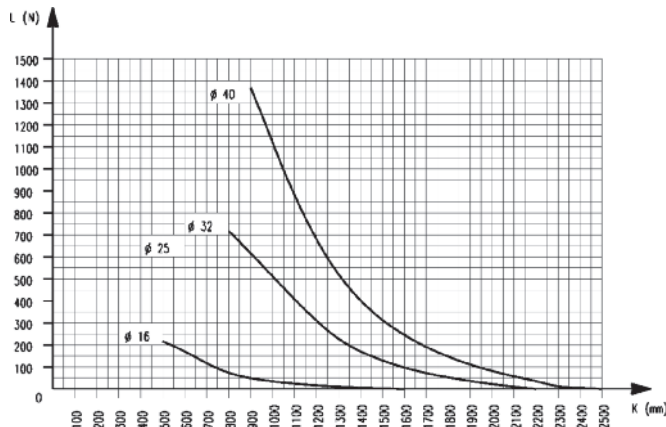
| | Max. load permitted (N) | Max. bending torque force permitted (Nm) | Max. bending torque force permitted (Nm) | Torsional torque force permitted (Nm) |
|----------------------|-------------------------|--|--|---------------------------------------|
| $\varnothing_{cyl.}$ | L | M | Ms | Mv |
| 16 | 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.

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 |

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

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.

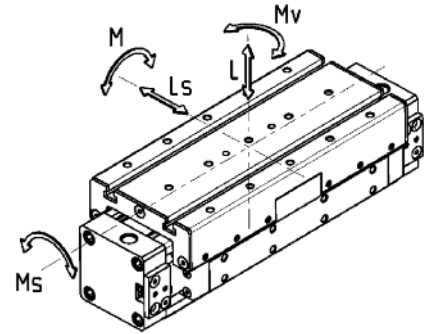
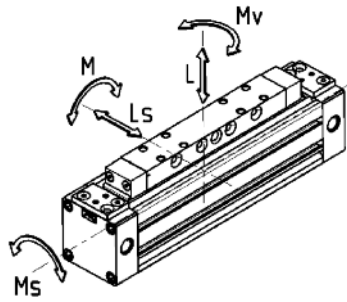


Table showing the maximum permitted loads and torque forces

| 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.

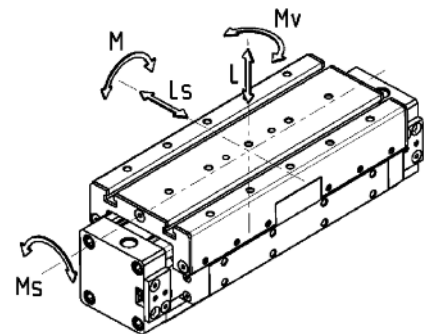
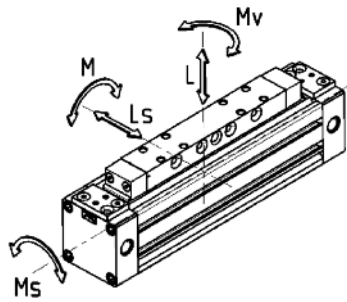
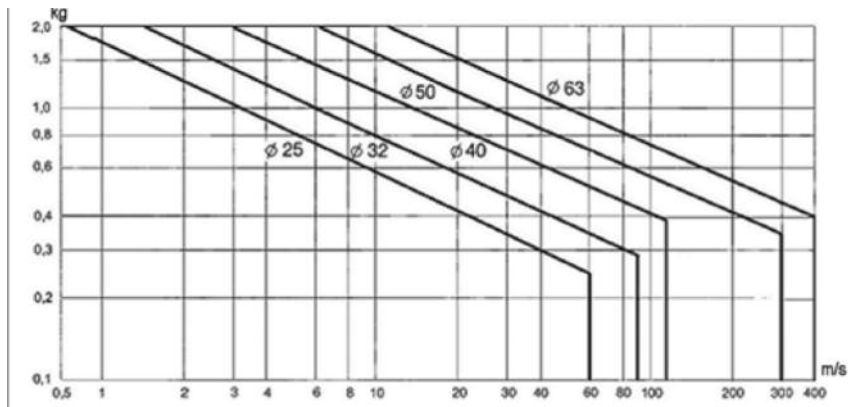


Table showing the maximum permitted loads and torque forces

| 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 |

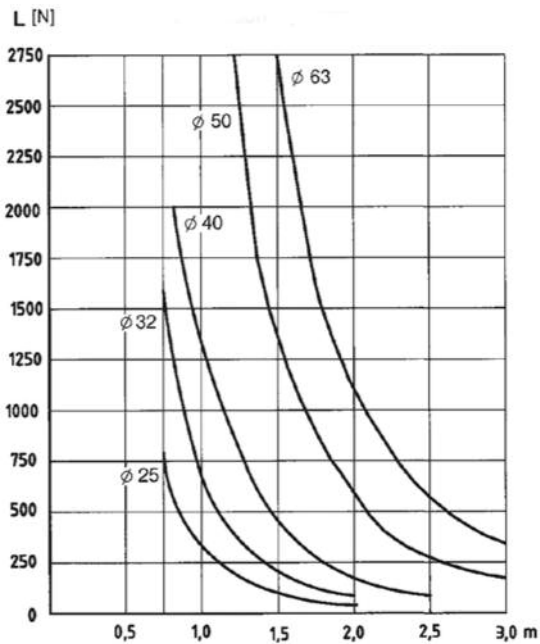
End Cushion Diagram



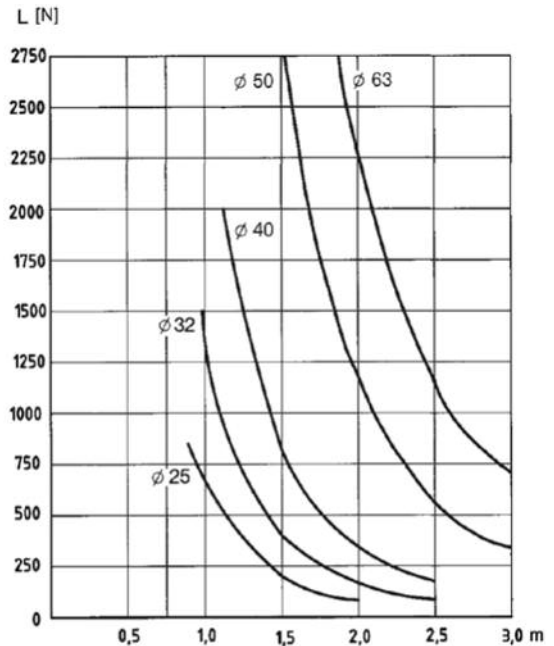
The end cushion regulating screw has to be regulated to obtain a smooth movement at the end of stroke. In those applications which have different values than the ones stated in the diagram, external shock-absorbers have to be used. The shock-absorber should be centrally located with respect to the centre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

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

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.

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 | 94 | 94 | 95 |
|-----------------|-----|-----|-----|-----|
| | Ø16 | Ø20 | Ø25 | 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
 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

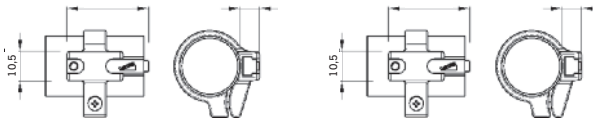
The Camozzi Series SKR - CSV are designed to fit into the grooves provided in the profile barrel of "compact" and "rodless" cylinders or on the surface of roundline and tie rod cylinders by using mounting bands or brackets



| 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.

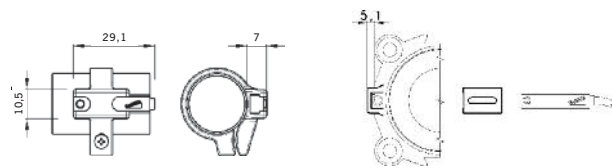


| Series | ∅ | Part Number |
|---|----|-------------|
| 24-25 | 16 | SF16 |
| 24-25 | 20 | SF20 |
| 24-25 | 25 | SF25 |
| Bracket for use with T slot type switch | | |

| 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 | | |

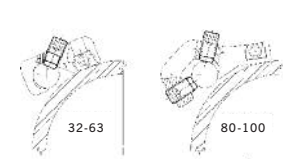


| Series | ∅ | Part Number |
|---|----|-------------|
| 42 | 32 | S-CST 06 |
| 42 | 40 | S-CST 07 |
| 42 | 50 | S-CST 08 |
| 42 | 63 | S-CST 09 |
| Bracket for use with T slot type switch | | |

| 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 | | |

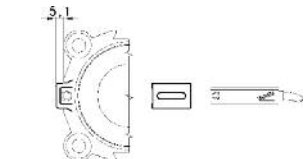
| Series | ∅ | Part Number |
|---|---------|-------------|
| 60 | 32-63 | SCT32 |
| 60 | 80-100 | SCT80 |
| 60 | 125 | S-CST 27 |
| 40 | 160-200 | S-CST 28 |
| Bracket for use with T slot type switch | | |



| 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.

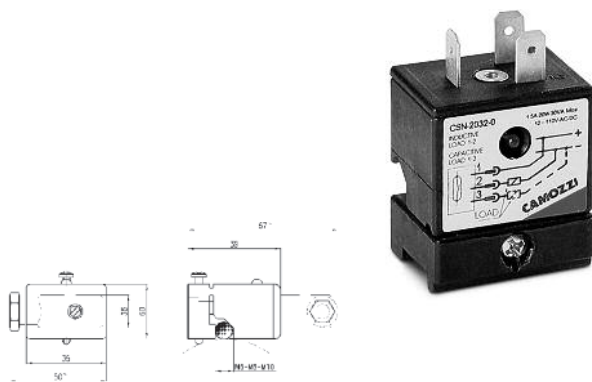


| |
|---|
| Part Number |
| CSB-D-220 |
| CSB-H-220 |
| CSC-D-220 |
| CSC-H-220 |
| *CSB type suit CGA, CGB, CGC and CGP type grippers. |
| **CSC type suit CGLN, CGSN and QX type grippers. |

| |
|--|
| Technical Data |
| Operating Temperature -10°C to +60°C |
| Materials Body: Plastic encapsulating epoxy resin |
| Mountings Directly into the grooves |
| Special Requests For assistance, contact our technical office or your local Camozzi distributor. |

| 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



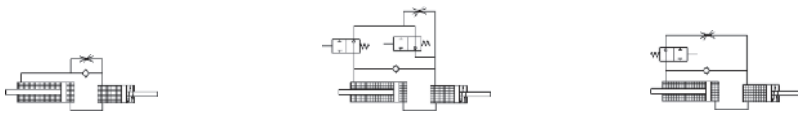
| |
|--|
| Part Number |
| CSN-2032-0 |
| |
| Part Number |
| S21 For cylinders series 40 Ø160, Ø200, Ø250 |
| S53 For cylinders series 41 Ø160, Ø200 |

| |
|--|
| Technical Data |
| Operating Temperature -25°C to +75°C |
| Materials Glass reinforced nylon |
| Mountings Bracket for tie rod Ø6 - Ø10 |
| Voltage For 12 to 220V AC and DC |
| Protection IP54/IP65 with connector DIN 43650 |
| Signalling Integrated red LED |
| 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) |

Series 43 Hydrochecks

Skip - Stop Function
Ø40

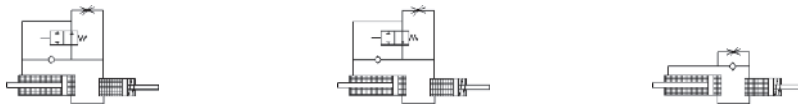
The Camozzi series 43 comes complete with an oil surge tank which ensures automatic equalisation. Speed variation is obtained by means of an incorporated flow regulator designed to allow comprehensive and constant use.



| 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 |

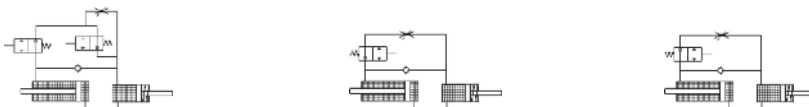
| Part Number |
|----------------|
| 43N-PTV-40-50 |
| 43N-PTV-40-100 |
| 43N-PTV-40-150 |
| 43N-PTV-40-200 |



| 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 |

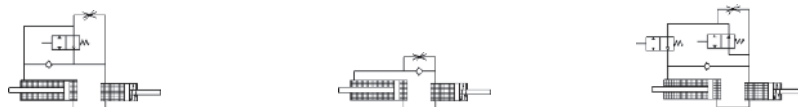
| Part Number |
|----------------|
| 43N-PTO-40-50 |
| 43N-PTO-40-100 |
| 43N-PTO-40-150 |
| 43N-PTO-40-200 |



| 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).

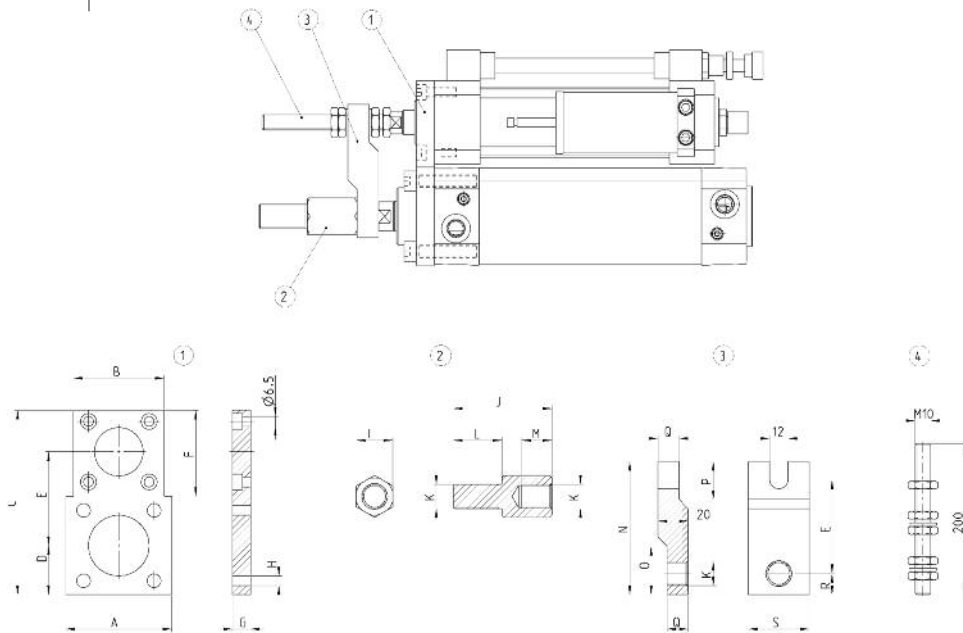
CODING EXAMPLE

| | | | | | | | | | |
|-----------|----------|----------|----------|----------|----------|----------|-----------|----------|------------|
| 43 | N | - | P | S | O | - | 40 | - | 200 |
|-----------|----------|----------|----------|----------|----------|----------|-----------|----------|------------|

| | | | | | | | | | | |
|----------------------|---|--|--|----------|---|--|--|------------|-----------------|--|
| 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

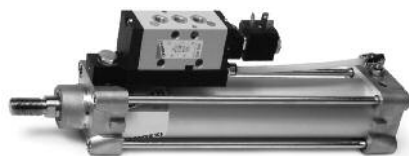
Accessories for Hydrochecks Series 43 - Connecting Kit



| 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

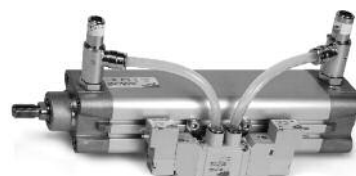
Example of assembly Series 60



| 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.



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.

| 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 |

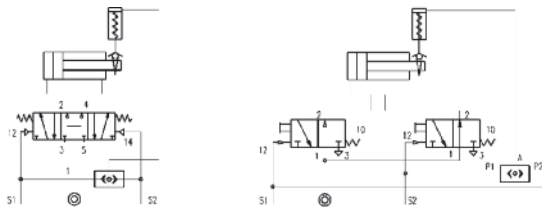
| Cartridge only |
|----------------|
| RLB-24-20 |
| RLB-24-25 |
| RLB-41-32 |
| RLB-41-40 |
| RLB-41-50 |
| RLB-41-63 |
| RLB-41-80 |
| RLB-41-100 |
| RLB-41-125 |

| 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 | |

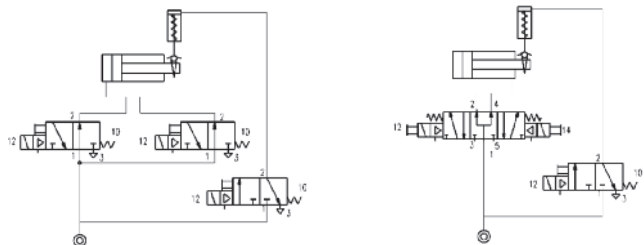
| MINIMUM OPERATIONAL STROKES | | | | | | | | | | |
|-----------------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|--|
| Ø | 20 | 25 | 32 | 40 | 50 | 63 | 80 | 100 | 125 | |
| extension | +46 | +46 | +40 | +43 | +57 | +57 | +80 | +80 | +125 | |

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.

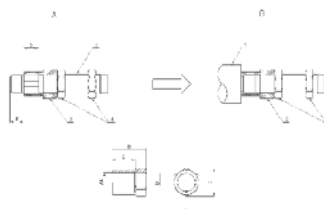
CODING EXAMPLE

| 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 |

Cylinder Problem? The Solution Is Here. . .



The Fastest Cylinder Breakdown Service

Replacements made in as little as one hour!

We believe our cylinder breakdown service is the best available.

With over 25 year's experience of producing cylinders we have perfected our manufacturing processes.

Cylinders can now be made in as little as 1 hour, including non standard strokes.

Next time you have a requirement for a pneumatic cylinder call the Camozzi sales office on 024 7637 4114.

Standard and Non-Standard Strokes

Includes Many Cylinder Types

Totally Flexible Delivery and Collection Options Available

Call the Camozzi Sales Office Today to Place Your Order:



024 7637 4114



Camozzi
Air that moves the world.





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

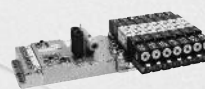


2 / 48 Solenoid DIN Connectors
Solenoids

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 |
|---|--------|--|

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 |
|---|--------|--|

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

2

Series K8 Directly Operated Solenoid Valves

| Part Number | QN (NI/min) (6 bar Δ P 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 Δ P 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 Δ P 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 Δ P 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 Δ P 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 Δ P 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 Δ P 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 Δ P 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 Δ P 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 Δ P1

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

| Series 2L Basic Logic Valves | | | | |
|------------------------------|---|------------------------|--|-----------|
| Part Number | Flow Rate NI/min (6 bar ΔP 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 NI/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 |

A Complete Range of Pneumatic Valves Control



A full range of pneumatic valve solutions are available for a wide variety of applications. The range includes: directly and indirectly operated solenoid valves, pneumatically and electrically operated valves, valve islands, mechanical valves, manual valves, logic valves, automatic valves, flow control valves and an increasingly broad range which is controlled using proportional technology.

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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

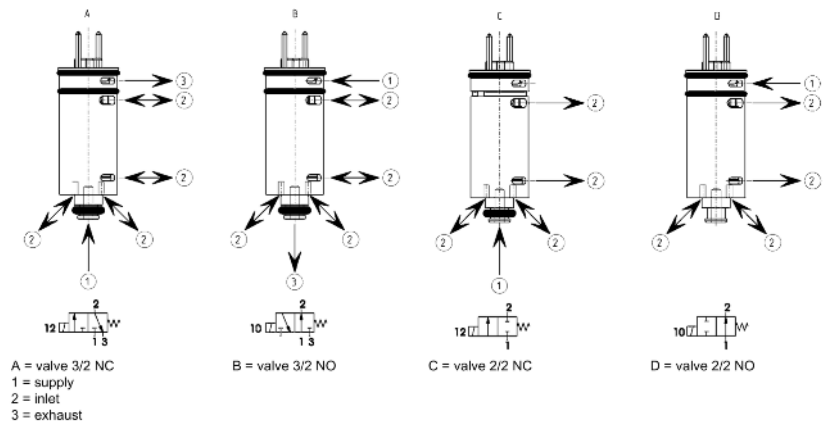
Materials
Body: Brass - stainless steel- PBT technopolymer
Seals: FKM (EPDM on demand)
Internal parts: stainless steel

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 |


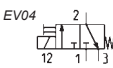

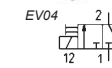

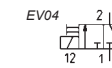
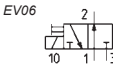


Series K Directly Operated Mini-Solenoid Valves

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

2





CONTROL

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

| 90° Elec Connections | In-line Elec Connections | 300mm Twin Wire | Technical Data |
|--|--|---|--|
|   |   |   | <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 See technical data page 2/2</p> <p>Operating Temperature 0°C to +50°C</p> <p>Materials Body: PBT technopolymer Seals: NBR (FKM on demand) Internal parts: Stainless steel</p> <p>Protection Class IP50</p> <p>Special Requests For assistance, contact our technical office or your local Camozzi distributor.</p> |
| <p>Part Number</p> <p>K000-303-K13</p> <p>K000-303-K23</p> <p>K000-303-K33</p> | <p>Part Number</p> <p>K000-303-KB3</p> <p>K000-303-KC3</p> <p>K000-303-KD3</p> | <p>Part Number</p> <p>K000-303-KF3</p> <p>K000-303-KG3</p> <p>K000-303-KH3</p> | |
|  |  |  | |
| <p>Part Number</p> <p>K000-403-K13</p> <p>K000-403-K23</p> <p>K000-403-K33</p> | <p>Part Number</p> <p>K000-403-KB3</p> <p>K000-403-KC3</p> <p>K000-403-KD3</p> | <p>Part Number</p> <p>K000-403-KF3</p> <p>K000-403-KG3</p> <p>K000-403-KH3</p> | |

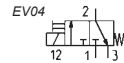
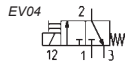
Note: Supplied with gasket, fixing screws and an interface for N.O. valves to mount to single base or manifold

| CODING EXAMPLE | | | | | | | | | | |
|--|--|-----------|---|---|---|---|----------|----------|----------|----------|
| K | 0 | 00 | - | 3 | 0 | 3 | - | K | 2 | 3 |
| K SERIES: K | 0 BODY DESIGN: 0 = single sub-base 1 = manifold | | | 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 | | | | |
| 00 N° OF POSITIONS: 00 = interface 01 = single base (only M5) 02-99 = manifold number of positions | | | 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 | | | | | |
| | | | | 3 NOMINAL DIAMETER: 3 = 0.65 | | 3 SOLENOID VOLTAGE: * 1 = 6V DC * 2 = 12V DC * 3 = 24V DC | | | | |

| Excluder tap | Single Sub-base | Manifold Part N°: K1**-02 | Solenoid Connector |
|---|---|--|--|
|  |  |  |  |
| <p>Part Number Thread</p> <p>K000-TP M5 Ports</p> | <p>Part Number Thread</p> <p>K001-02 M5 Ports</p> | <p>Part Number Thread</p> <p>K1*-02 M5 Ports</p> <p>* = No of connections</p> | <p>Part Number</p> <p>121-803 with 300mm cable</p> <p>121-806 with 600mm cable</p> <p>121-810 with 1000mm cable</p> |

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

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 |

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.

Solenoid Connector



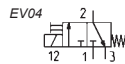
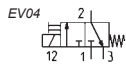
Part Number

| | |
|----------------|-------------------|
| 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



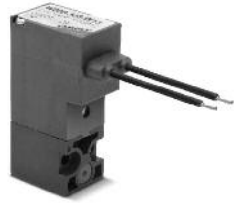


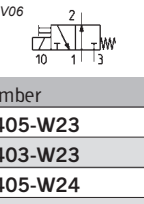

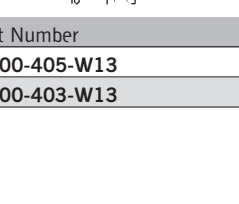

121-810 with 1000mm cable

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> | | |

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 |
|--------------|
| P000-301-P53 |
| P000-303-P53 |
| P000-305-P53 |
| P000-306-P53 |



| Part Number |
|--------------|
| P000-405-P53 |
| P000-403-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

Single manifold rear outlets



Single manifold front outlets



Double-sided manifold rear outlets



Double-sided manifold front outlets



| 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 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

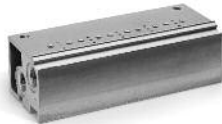
| | | | | | | | | | | |
|----|---|----|---|---|---|---|---|---|---|---|
| PN | 0 | 00 | - | 3 | 0 | 1 | - | P | 5 | 3 |
|----|---|----|---|---|---|---|---|---|---|---|

| | | | |
|-----------|--|--|--|
| 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 |

New

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 | 1 | NOMINAL DIAMETER: Nominal Diameter 1 = Ø0.8 2 = Ø1.2 3 = Ø1.6 4 = Ø2 5 = Ø2.5 |
| 00 | N° OF SEGMENTS: 00 = interface | R | MATERIAL: R = NBR F = FKM (on request) |
| 2 | N° OF CONNECTIONS AND FUNCTIONS: 2 = 2-ways N.C. | 5 | TYPE OF ELECTRICAL CONNECTION: 5 = 3 faston pitch 9.4mm |
| 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) | 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.

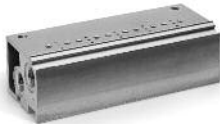
CODING EXAMPLE

| | | | | | | | | | | |
|----|---|----|---|---|---|---|---|----|---|---|
| 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

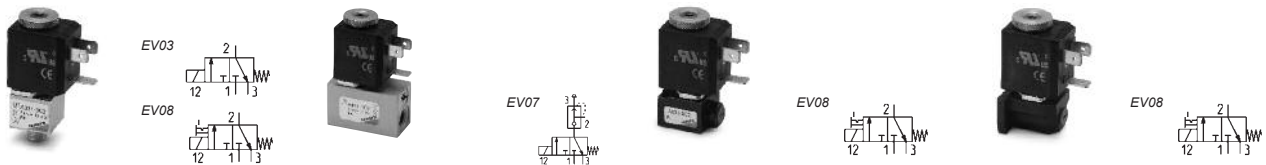
Additional Options
 Seal Kits available on request

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

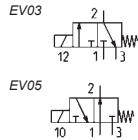
| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| A | 3 | 3 | 1 | - | 0 | C | 2 | - | U | 7 | 7 |
|---|---|---|---|---|---|---|---|---|---|---|---|

| 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

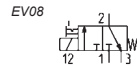
Series 6 Directly Operated Solenoid Valves

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

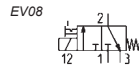
The Camozzi range of Series 6 Directly Operated Solenoid Valves can be used with dry or lubricated air.



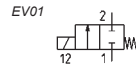
| Part Number | Thread | Function |
|-------------|--------|----------|
| 638-150-A6* | 1/8 | N.C. |
| 648-150-A6* | 1/8 | N.O. |



| 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 | A COIL MATERIALS: A = PPS | |
| 8 CONNECTIONS: 0 = Interface 3 = 3/8 | 6 SOLENOID DIMENSIONS: 6 = 32 x 32 | 8 = 1/8 C = cartridge Ø4 |
| 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) |

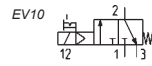
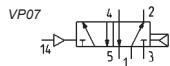
CODING EXAMPLE

| 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

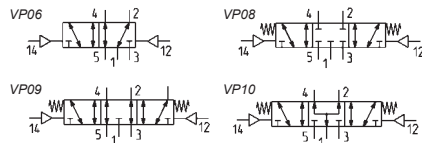
With outlets on the body
For individual or manifold assembly
10.5mm

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

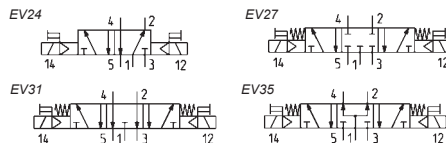


| Part Number | Connection |
|-------------|------------|
| E521-36 | M5 |
| E521-C36 | 4mm |

| 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 |
|---|---|---|---|---|----|---|----|---|---|---|---|

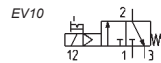
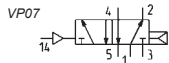
| | | |
|--|--|---|
| E SERIES: E | 1 BODY TYPE: 1 = body with threaded plate | K SOLENOID TYPE: K |
| 5 FUNCTION: 2 = 5/2 supply from the exhausts 5 = 5/2 6 = 5/3 centre closed 7 = 5/3 centre open 8 = 5/3 pressure centre | 11 ACTUATION: 11 = electro-pneumatic, bistable 16 = electro-pneumatic, monostable 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

2

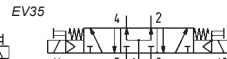
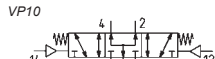
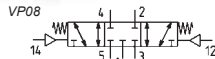
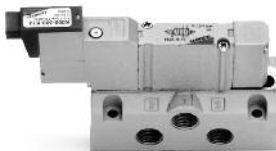
The Camozzi range of Series E Valves have been designed to allow high flows with small overall dimensions.



| 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

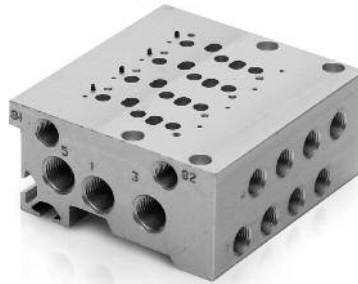


| Part Number | Size | Connection: 1, 3, 5 | Connection: 82, 84 | Number of Positions | | | | | |
|-------------|------|---------------------|--------------------|---------------------|----|----|----|----|----|
| E521-10** | 10.5 | 1/8 | M5 | 02 | 04 | 06 | 08 | 10 | 12 |

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. | |

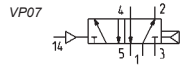


| Threaded valves | |
|--|-------------|
| Part Number | Size |
| PCS-E521 | 10.5 |
| PCS-E520 | 10.5 |
| Intermediate plate for manifolds for valves with separate supply in 3 and 5. | |

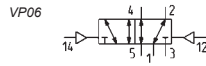
Series EN Valves and Solenoid Valves

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

2



| 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

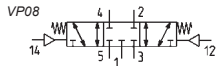
Operating Temperature
 0°C to +50°C

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

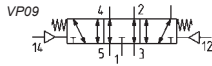
Connections
 1/8, 1/4

Mountings
 By feet or screws to sub-bases

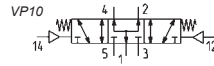
Additional Options
 Seal Kits available on request



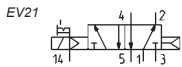
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| EN651-33 |



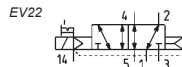
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| EN751-33 |



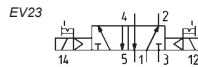
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| EN831-33 |
| EN851-33 |



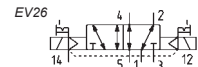
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| EN551-16-P* |
| EN531-16-W* |
| EN551-16-W* |



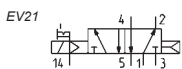
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|--------------|
| EN531-E16-P* |
| EN551-E16-P* |
| EN531-E16-W* |
| EN551-E16-W* |



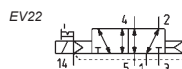
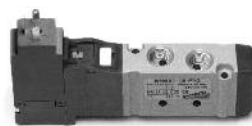
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| EN531-11-P* |
| EN551-11-P* |
| EN531-11-W* |
| EN551-11-W* |



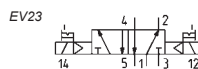
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|--------------|
| EN531-E11-P* |
| EN551-E11-P* |
| EN531-E11-W* |
| EN551-E11-W* |



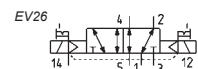
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| EN531-16-PN* |
| EN551-16-PN* |



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



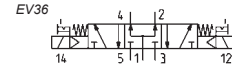
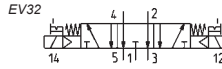
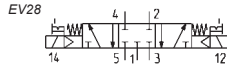
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| EN531-11-PN* |
| EN551-11-PN* |



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

CONTROL

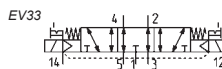
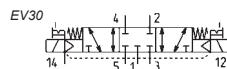
Series EN Valves and Solenoid Valves



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

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

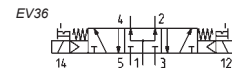
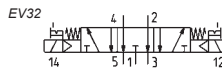
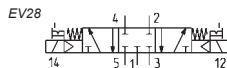
| |
|-------------|
| Part Number |
| EN831-11-P* |
| EN851-11-P* |
| EN831-11-W* |
| EN851-11-W* |



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

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

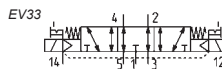
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| EN851-E11-P* |
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| EN851-E11-W* |



| |
|--------------|
| 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 |
|-----------|----------|----------|----------|----------|-----------|----------|------------|

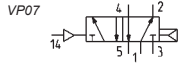
| | | | |
|--|---|---|--|
| <p>EN SERIES: EN</p> | <p>3 SIZES: 3 = 16mm 5 = 19mm</p> | <p>11 ACTUATION: 11 = electro-pneumatic, bistable 16 = electro-pneumatic, monostable 33 = pneumatic bistable 36 = pneumatic monostable</p> | <p>E11 = electro-pneumatic, bistable with external servo-pilot supply E16 = 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

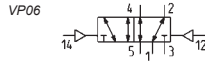
Series EN Valves and Solenoid Valves

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

2



| 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

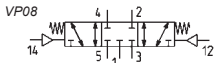
Operating Temperature
 0°C to +50°C

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



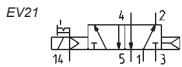
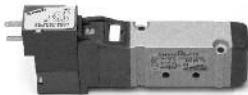
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| EN630-33 |
| EN650-33 |



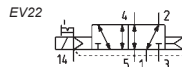
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| EN730-33 |
| EN750-33 |



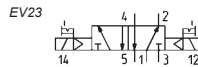
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| EN830-33 |
| EN850-33 |



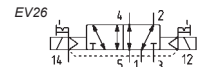
| Part Number |
|-------------|
| EN530-16-P* |
| EN550-16-P* |
| EN530-16-W* |
| EN550-16-W* |



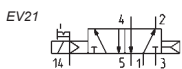
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|--------------|
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| EN550-E16-P* |
| EN530-E16-W* |
| EN550-E16-W* |



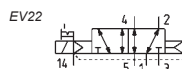
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|-------------|
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| EN550-11-P* |
| EN530-11-W* |
| EN550-11-W* |



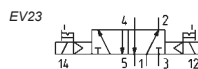
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| EN530-E11-W* |
| EN550-E11-W* |



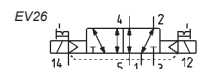
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| EN550-16-PN* |



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



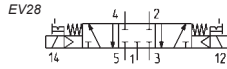
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|--------------|
| EN530-11-PN* |
| EN550-11-PN* |



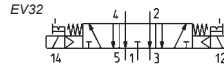
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|---------------|
| EN530-E11-PN* |
| EN550-E11-PN* |

CONTROL

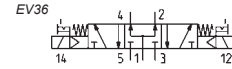
Series EN Valves and Solenoid Valves



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



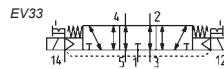
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|-------------|
| EN730-11-P* |
| EN750-11-P* |
| EN730-11-W* |
| EN750-11-W* |



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



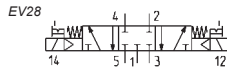
| Part Number |
|--------------|
| EN630-E11-P* |
| EN650-E11-P* |
| EN630-E11-W* |
| EN650-E11-W* |



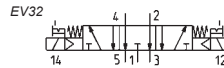
| Part Number |
|--------------|
| EN730-E11-P* |
| EN750-E11-P* |
| EN730-E11-W* |
| EN750-E11-W* |



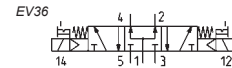
| Part Number |
|--------------|
| EN830-E11-P* |
| EN850-E11-P* |
| EN830-E11-W* |
| EN850-E11-W* |



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



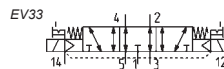
| Part Number |
|--------------|
| EN730-11-PN* |
| EN750-11-PN* |



| 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 |
|----|---|---|---|---|----|---|-----|

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

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)

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

| 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 |

| 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)

Blanking plate for manifolds - base mounted valves

| Part Number | Size |
|-------------|------|
| TP-EN531 | 16 |
| TP-EN551 | 19 |

| Part Number | Size |
|-------------|------|
| TP-EN530 | 16 |
| TP-EN550 | 19 |

Connectors 24DC PN with led for solenoid P and PN



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



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

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

In-line connectors with cable



Connectors DIN 43650



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

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

Mounting brackets

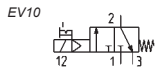


| Part Number |
|-------------|
| PCF-EN531 |

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

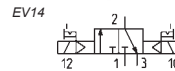
3/2 - way single solenoid valve - 1/8
 - N.C. and N.O.



| Part Number |
|---------------------------|
| 338-015-02-* |
| 338L-015-02-* |
| (For use with CNVL bases) |

*Coil sold separately, page 2/47

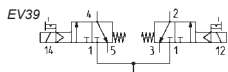
3/2 - way double solenoid valve - 1/8



| Part Number |
|---------------------------|
| 338-011-02-* |
| 338L-011-02-* |
| (For use with CNVL bases) |

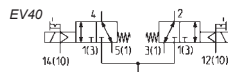
*Coil sold separately, page 2/47

2 x 3/2 - way double solenoid valve - 1/8
 - N.C. and N.O.



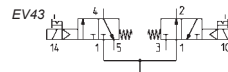
| Part Number |
|----------------------|
| 338D-015-02-* |

*Coil sold separately, page 2/47



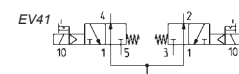
| Part Number |
|----------------------|
| 338D-E15-02-* |

*Coil sold separately, page 2/47



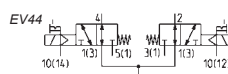
| Part Number |
|----------------------|
| 398D-015-02-* |

*Coil sold separately, page 2/47



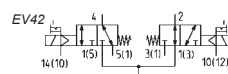
| Part Number |
|----------------------|
| 348D-015-02-* |

*Coil sold separately, page 2/47



| Part Number |
|----------------------|
| 348D-E15-02-* |

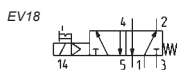
*Coil sold separately, page 2/47



| Part Number |
|----------------------|
| 398D-E15-02-* |

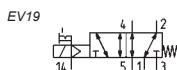
*Coil sold separately, page 2/47

5/2 - way single solenoid valve - 1/8



| Part Number |
|---------------------|
| 358-015-02-* |

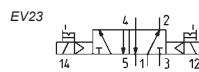
*Coil sold separately, page 2/47



| Part Number |
|---------------------|
| 358-E15-02-* |

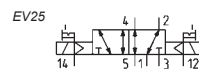
See full catalogue or CD rom for all dimensions.
 For technical advice contact our sales office or your local Camozzi distributor.

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

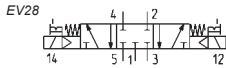
Mountings
 Through holes in valve body

Additional Options
 Seal Kits available on request

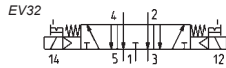
Special Requests
 For assistance, contact our technical office or your local Camozzi distributor.

Series 3 Electropneumatically Operated Valves

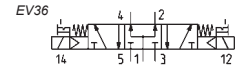
5/3 - way double solenoid valve - 1/8 - centres closed, centres open and pressure centres



Part Number
368-011-02-*



Part Number
378-011-02-*

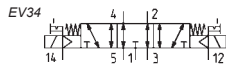


Part Number
388-011-02-*



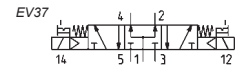
Part Number
368-E11-02-*

*Coil sold separately, page 2/47



Part Number
378-E11-02-*

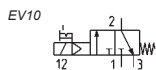
*Coil sold separately, page 2/47



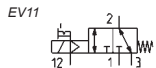
Part Number
388-E11-02-*

*Coil sold separately, page 2/47

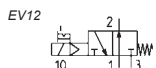
3/2 - way single solenoid valve - 1/4 - N.C. and N.O.



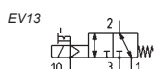
Part Number
334-015-02-*



Part Number
334-E15-02-*



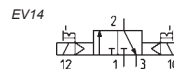
Part Number
344-015-02-*



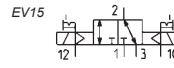
Part Number
344-E15-02-*

*Coil sold separately, page 2/47

3/2 - way double solenoid valve - 1/4



Part Number
334-011-02-*



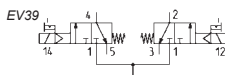
Part Number
334-E11-02-*

*Coil sold separately, page 2/47

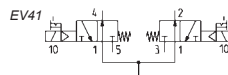


Series 3 Electropneumatically Operated Valves

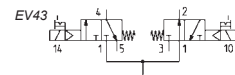
2 x 3/2 - way double solenoid valve - 1/4 - N.C. and N.O.



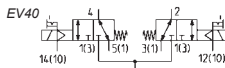
Part Number
334D-015-02-*



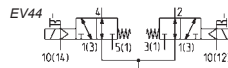
Part Number
344D-015-02-*



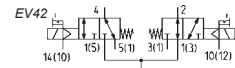
Part Number
394D-015-02-*



Part Number
334D-E15-02-*



Part Number
344D-E15-02-*



Part Number
394D-E15-02-*

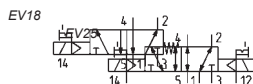
*Coil sold separately, page 2/47

*Coil sold separately, page 2/47

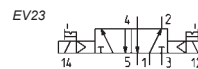
*Coil sold separately, page 2/47

5/2 - way single solenoid valve - 1/4

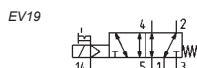
5/2 - way double solenoid valve - 1/4



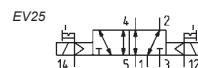
Part Number
354-015-02-*



Part Number
354-011-02-*



Part Number
354-E15-02-*



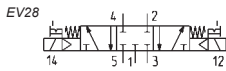
Part Number
354-E11-02-*

*Coil sold separately, page 2/47

*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

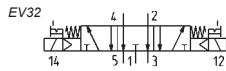
364-011-02-*



Part Number

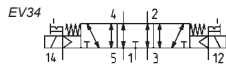
364-E11-02-*

*Coil sold separately, page 2/47



Part Number

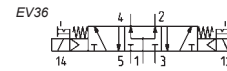
374-011-02-*



Part Number

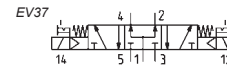
374-E11-02-*

*Coil sold separately, page 2/47



Part Number

384-011-02-*



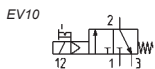
Part Number

384-E11-02-*

*Coil sold separately, page 2/47

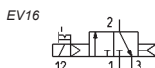
Series 4 Electropneumatically Operated Valves

3/2 - way single solenoid valve - 1/8 - N.C.



Part Number

438-015-22-*

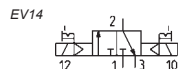


Part Number

438-016-22-*

*Coil sold separately, page 2/47

3/2 - way double solenoid valve - 1/8 - N.C.

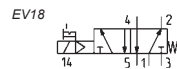


Part Number

438-011-22-*

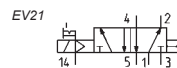
*Coil sold separately, page 2/47

5/2 - way single solenoid valve - 1/8



Part Number

458-015-22-*

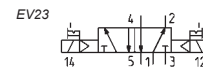


Part Number

458-016-22-*

*Coil sold separately, page 2/47

5/2 - way double solenoid valve - 1/8



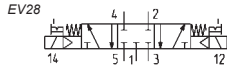
Part Number

458-011-22-*

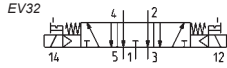
*Coil sold separately, page 2/47

Series 4 Electropneumatically Operated Valves

5/3 - way double solenoid valve - 1/8 - centres closed

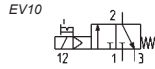


Part Number
468-011-22-*

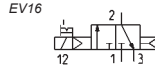


Part Number
478-011-22-*
*Coil sold separately, page 2/47

3/2 - way single solenoid valve - 1/4 - N.C.

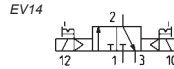


Part Number
434-015-22-*



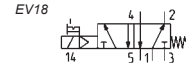
Part Number
434-016-22-*
*Coil sold separately, page 2/47

3/2 - way double solenoid valve - 1/4 - N.C.



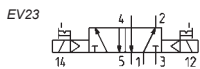
Part Number
434-011-22-*
*Coil sold separately, see page 2/47

5/2 - way single solenoid valve - 1/4



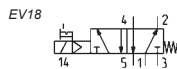
Part Number
454-015-22-*
Part Number
454-016-22-*
*Coil sold separately, page 2/47

5/2 - way double solenoid valve - 1/4



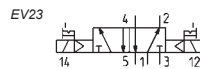
Part Number
454-011-22-*
*Coil sold separately, page 2/47

5/2 - way single vertical solenoid valve - 1/4



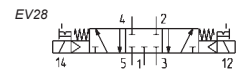
Part Number
454-V15-22-*
Part Number
454-V16-22-*
*Coil sold separately, page 2/47

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

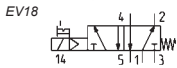


Part Number
464-011-22-*
Part Number
474-011-22-*
*Coil sold separately, page 2/47

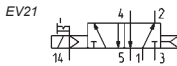
Series 4 Electropneumatically Operated Valves

2

5/2 - way single solenoid valve - 1/2

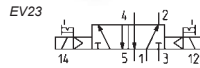


Part Number
452C-015-50-A6*



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 |
|----------|----------|----------|----------|----------|------------|----------|-----------|----------|----------|----------|----------|

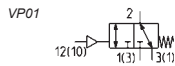
| | | |
|--|---|---|
| 3 SERIES: 3 and 4 | D D = double valve (2x3/2) (series 3) L = for manifold assembly (only for 3/2 1/8) (series 3) | U SOLENOID MATERIAL U = PET G = PA A6 = PPS (series 4 1/2 only) A7 = PPS (series 3 only) A8 = PPS (series 3 only) H8 = PA 6 V0 |
| 3 N° OF WAYS/POSITIONS * 3 = 3/2 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 011 = double solenoid (horizontal solenoids) V11 = double solenoid (vertical solenoids) (series 4 1/4 only) 015 = single solenoid, spring return (horizontal solenoids) V15 = single solenoid, spring return (vertical solenoid) (series 4 1/4 only) 016 = 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) 015 = single solenoid external servo-command 033 = pneumatic pneumatic 034 = pneumatic differential (series 4 only) 035 = 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 02 = 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

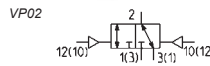
Series 3: 1/8, 3/2-way and 5/2-way

Series 4: 1/8, 1/4 and 1/2

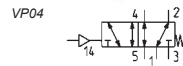
3/2, 5/2 and 5/3-way



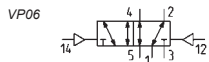
| Part Number |
|---|
| 338-035 |
| 338L-035 (For use with CNVL bases) |
| 334-035 |



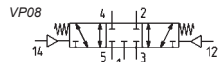
| Part Number |
|---|
| 338-033 |
| 338L-033 (For use with CNVL bases) |
| 334-033 |



| Part Number |
|----------------|
| 358-035 |
| 354-035 |



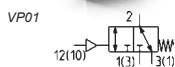
| Part Number |
|----------------|
| 358-033 |
| 354-033 |



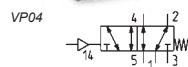
| Part Number |
|----------------|
| 368-033 |
| 364-033 |
| VP09 |
| 378-033 |
| 374-033 |
| VP10 |
| Part Number |
| 388-033 |
| 384-033 |



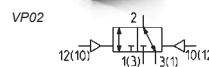
| Part Number |
|-----------------|
| 338D-035 |
| 334D-035 |
| Part Number |
| 348D-035 |
| 344D-035 |
| Part Number |
| 398D-035 |
| 394D-035 |



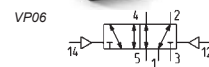
| Part Number |
|---------------|
| 438-35 |



| Part Number |
|---------------|
| 458-35 |



| Part Number |
|---------------|
| 438-33 |
| VP03 |
| 438-34 |



| Part Number |
|---------------|
| 458-33 |
| VP05 |
| 458-34 |

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

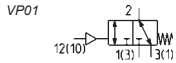
Seal Kits available on request

Special Requests

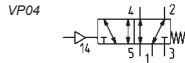
For assistance, contact our technical office or your local Camozzi distributor.

Series 3 and 4 Pneumatically Operated Valves

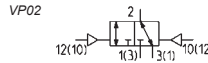
2



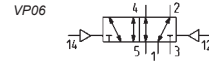
| |
|---------------|
| Part Number |
| 434-35 |
| |



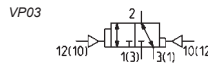
| |
|---------------|
| Part Number |
| 454-35 |
| |



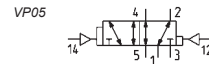
| |
|---------------|
| Part Number |
| 434-33 |
| |



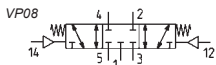
| |
|---------------|
| Part Number |
| 454-33 |
| |



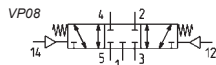
| |
|---------------|
| Part Number |
| 434-34 |



| |
|---------------|
| Part Number |
| 454-34 |



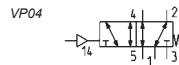
| |
|---------------|
| Part Number |
| 468-33 |
| |



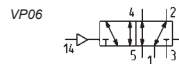
| |
|---------------|
| Part Number |
| 464-33 |
| |



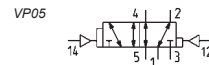
| |
|---------------|
| Part Number |
| 474-33 |



| |
|----------------|
| Part Number |
| 452C-35 |
| |



| |
|----------------|
| Part Number |
| 452C-33 |

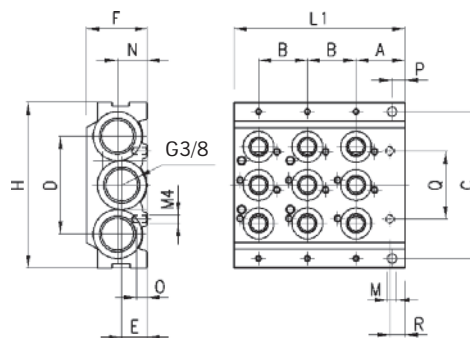


| |
|----------------|
| Part Number |
| 452C-34 |
| |

CODING EXAMPLE

| | | | | |
|-----------------------|---|--|----------|---|
| 3 | 5 | 8 | - | 035 |
| 3 SERIES: 3, 4 | 5 N° OF WAYS/POSITIONS 3 = 3/2 5 = 5/2 6 = 5/3 C.C. 7 = 5/3 C.O. | 8 CONNECTIONS 8 = 1/8 4 = 1/4 2C = 1/2 | | 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) |

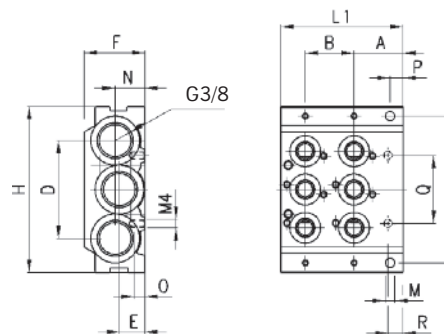
Series 3 Modular Manifolds - 1/8 and 1/4



Basic Module with Three Positions

| | |
|-----------------|-----------------------|
| CNVL-3H3 | to suit series 3, 1/8 |
| CNVL-4H3 | to suit series 3, 1/4 |

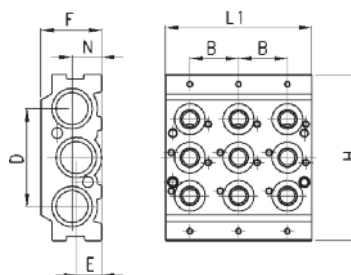
The packaging contains the following items: 3 O-rings, 2 Fixing Screws and 2 Junction plugs per station.



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.

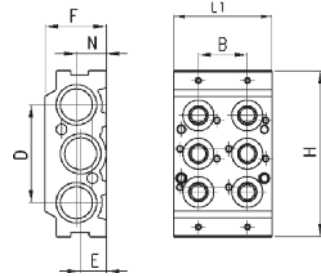


Expansion Module with Three Positions

| | |
|-----------------|-----------------------|
| 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

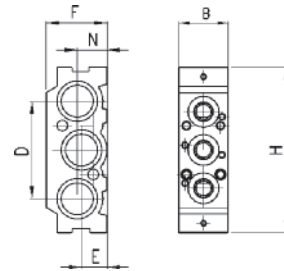


Expansion Module with Two Positions

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.

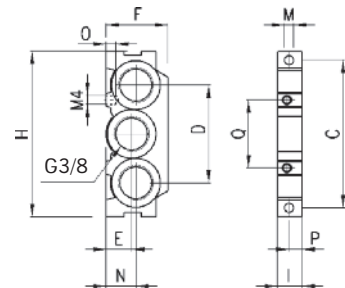


Expansion Module with One Position

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.



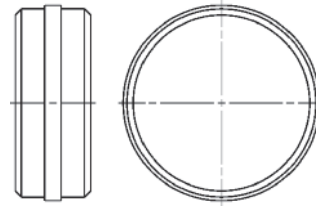
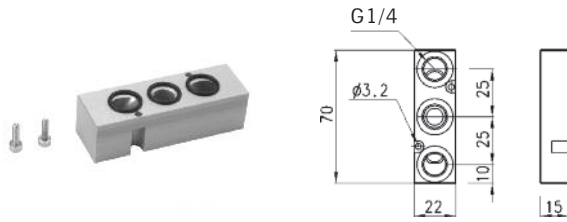
Terminal Module

CNVL-3H to suit series 3, 1/8

CNVL-4H to suit series 3, 1/4

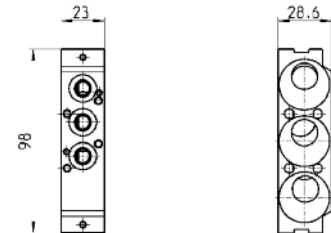
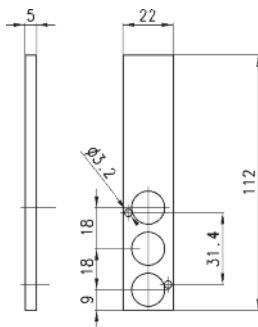
The packaging contains the following items: 2 Junction plugs per station.

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) |

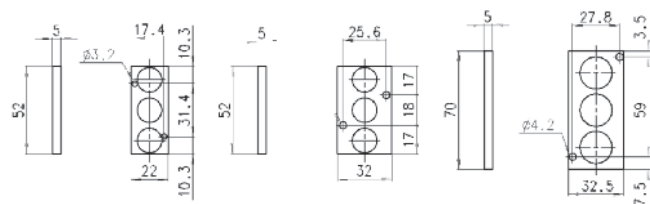
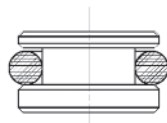


| |
|---|
| Excluder |
| CNVL/1L Code L |
| The packaging contains the following items: 3 O-rings and 2 Fixing Screws |

| |
|---|
| 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 |

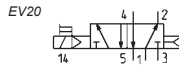
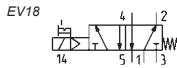
Series 9 Electropneumatically and Pneumatically Operated Valves

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

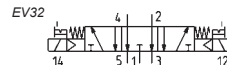
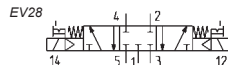
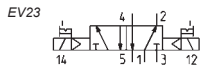
Threaded holes in sub-base

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* |

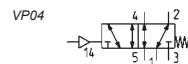
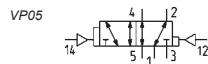
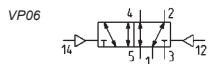
*Coil sold separately, page 2/47

| 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* |

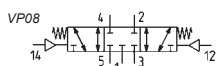
*Coil sold separately, page 2/47



| 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 | |



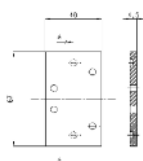
| End Block with Front Outlet | |
|-----------------------------|---|
| Size | |
| 901-N1 | 1 |
| 902-N2 | 2 |
| 903-N3 | 3 |



| 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 | |

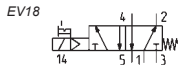
Series NA NAMUR Valves

Connection: 1/4

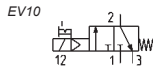
Electropneumatically operated 3/2, 5/2, 5/3 way with interface according to NAMUR standard

2

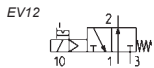
CONTROL



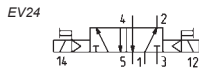
Part Number
NA54N-15-02-*



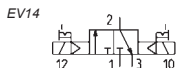
Part Number
NA34N-15-02-*



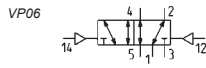
Part Number
NA44N-15-02-*



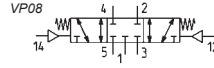
Part Number
NA54N-11-02-*



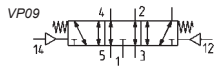
Part Number
NA34N-11-02-*



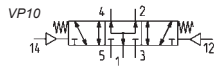
Part Number
NA54N-33



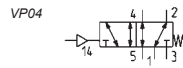
Part Number
NA64N-33



Part Number
NA74N-33



Part Number
NA84N-33



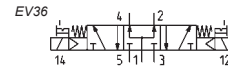
Part Number
NA54N-35



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.

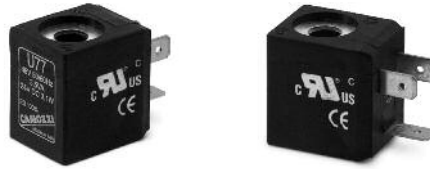
*Coil sold separately, page 2/47

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 |

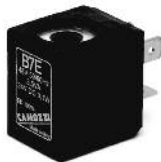
| Solenoid Voltages G7 | | | |
|----------------------|------|------------|-------|
| G7H | 24V | 50/60 Hz | 3.5VA |
| | 12V | DC | 3.1W |
| G7K | 110V | AC 50/60Hz | 4.3VA |
| | 125V | AC 50/60Hz | 5.5VA |
| G7J | 230V | 50/60Hz | 3.5VA |
| | 240V | 50/60Hz | 4VA |
| G79 | 48V | DC | 3.1W |
| G710 | 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 |

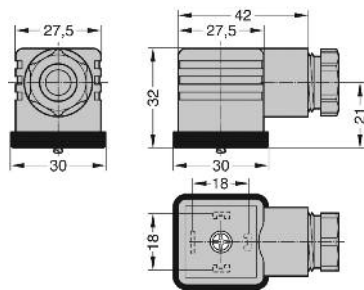
| Solenoid Voltages B9 | | |
|----------------------|------------------|-------|
| B9B | 24 V - 50 Hz | 29 VA |
| B9D | 110 V - 50/60 Hz | 29 VA |
| B9E | 230 V - 50 Hz | 29 VA |
| B92 | 12 V - DC | 30 W |
| B93 | 24 V - DC | 30 W |

Explosion proof coils available on request

Solenoid DIN Connectors

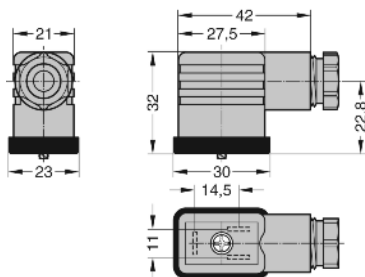
With cable gland entry and conforming to EN175301-803 (Formerly DIN43650)

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 |
|--|-----------------------------|----------------|
| KA13200B9 | Black Connector | PG9 |
| KA13200A9 | 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 |
|---|-----------------------------|----------------|
| KB13200B9 | 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

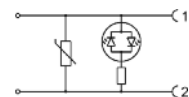
PG7 cable diameter 4 - 6mm

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.

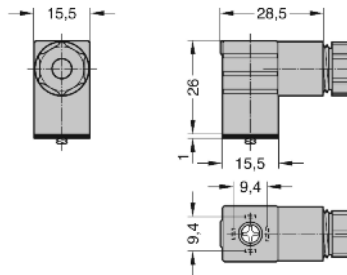
For solenoid connectors with moulded cable, see pages 2/50 and 51

For proximity switches, see page 1/44

Special Requests

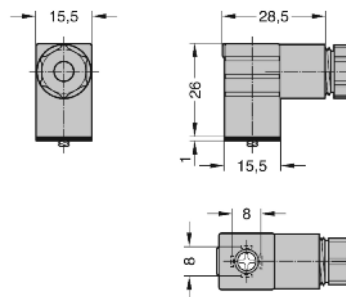
For assistance, contact our technical office or your local Camozzi distributor.

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

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)

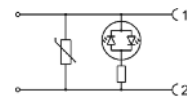
Cable Gland Size

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



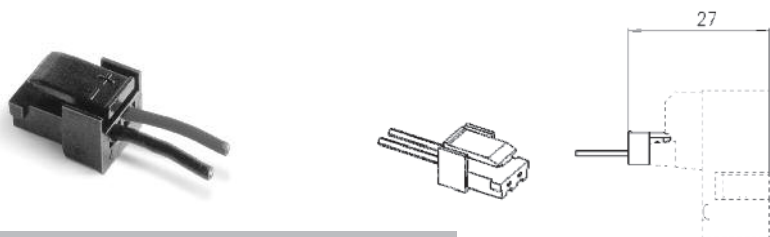
Options

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 Connectors



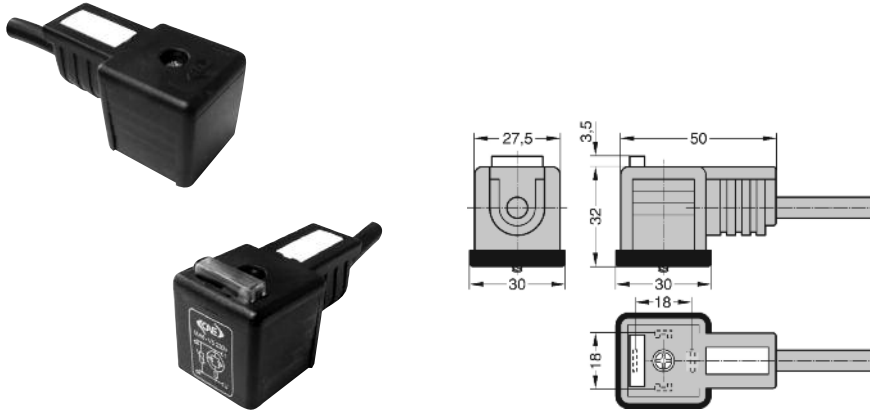
| Part Number | |
|-------------|--------------------|
| 121-803 | with 300 mm cable |
| 121-806 | with 600 mm cable |
| 121-810 | with 1000 mm cable |

Use with Camozzi Series K and Series E (sizes 10.5mm) valves

Solenoid DIN Connectors - with Moulded Cable

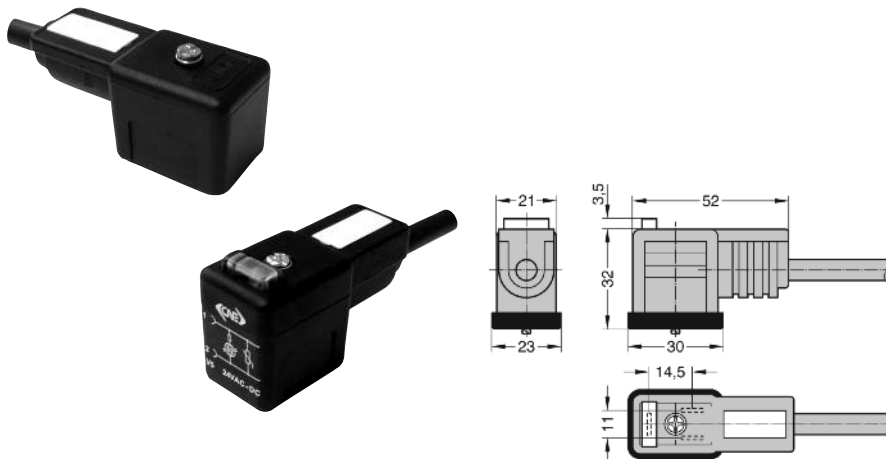
Moulded cable assemblies EN175301-803 (Formerly DIN43650)

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)

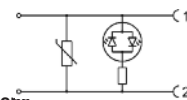
3 x 0.50mm² conductors PVC HO3

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.

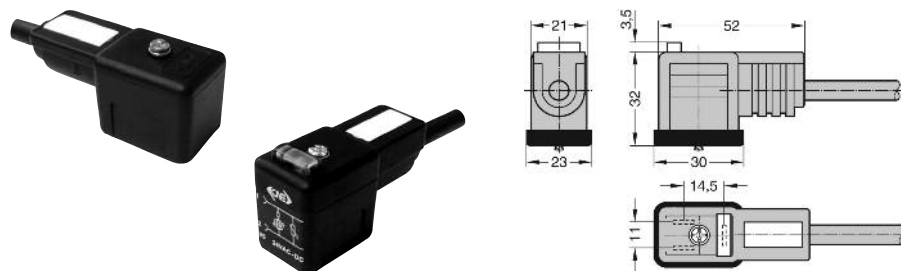
For solenoid connectors with cable gland entry, pages 2/48 and 49.

For proximity switches, see page 1/44

Special Requests

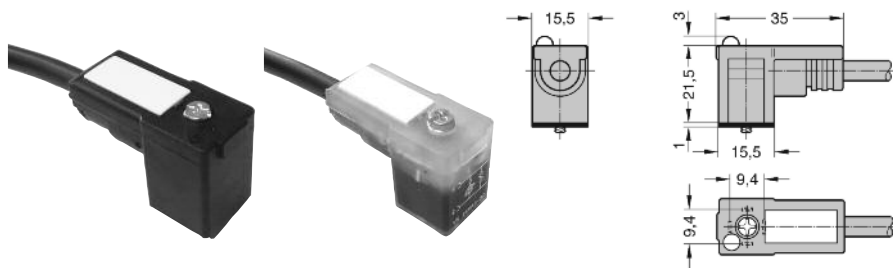
For assistance, contact our technical office or your local Camozzi distributor.

Solenoid DIN Connectors - with moulded cables



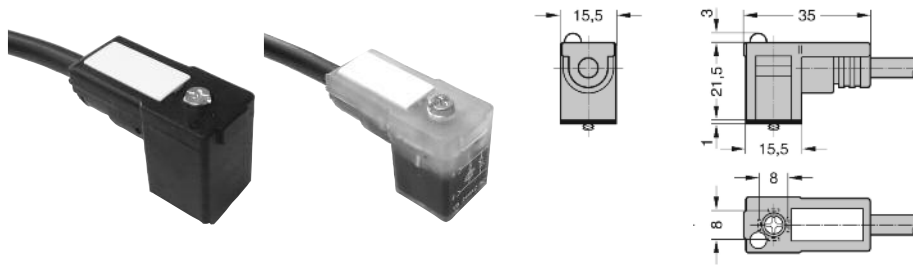
| Part Number | Type (LED Voltage AC/DC) | Cable Length |
|-----------------|-----------------------------|--------------|
| MB136000PA05100 | Cable Connector only | 1M |
| MB136000PA05300 | Cable Connector only | 3M |
| MB636V54PA05100 | Cable Connector (24V LED) | 1M |
| MB636V54PA05300 | Cable Connector (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



| Part Number | Type (LED Voltage AC/DC) | Cable Length |
|-----------------|-----------------------------|--------------|
| 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



| Part Number | Type (LED Voltage AC/DC) | Cable Length |
|-----------------|-----------------------------|--------------|
| 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

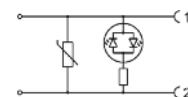
Contact Resistance
≤4m Ω

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 NI/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

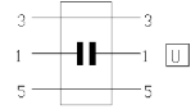
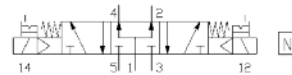
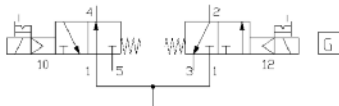
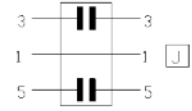
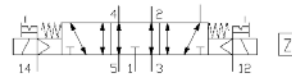
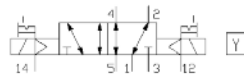
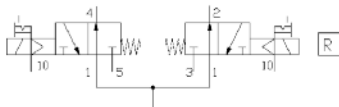
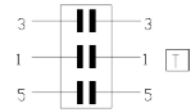
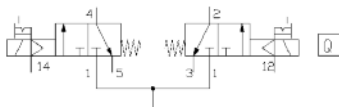
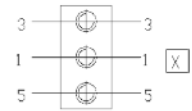
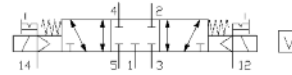
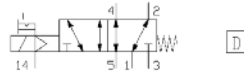
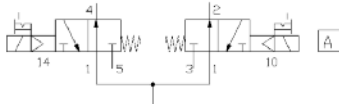
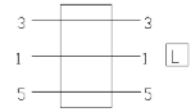
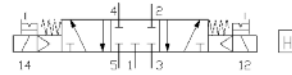
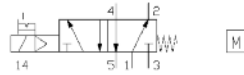
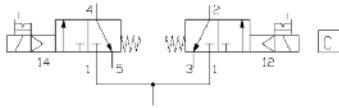
| The letter represents the number of valve positions | Number of valve positions, showing the combination of the modules from which the valve island is built | Position of the D-SUB and the number of valves to which it is connected | | Configuration code | |
|---|--|---|-------|--------------------|---------------|
| | | 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 |
| | [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

2

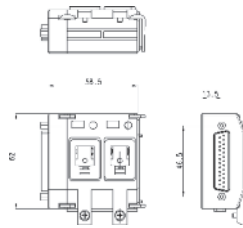
CONTROL



| 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 |

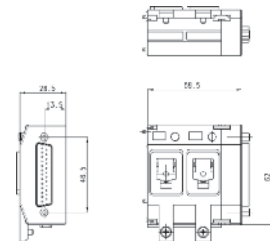
Electrical Modules

To be mounted with manifold CNVL-3H2



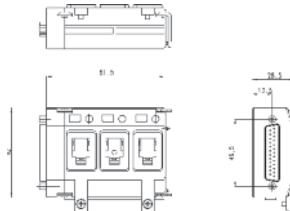
Part Number
3PAC-R-LS2

To be mounted with manifold CNVL-3H2



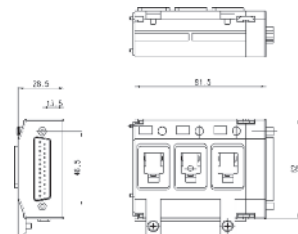
Part Number
3PAC-R-RS2

To be mounted with manifold CNVL-3H3



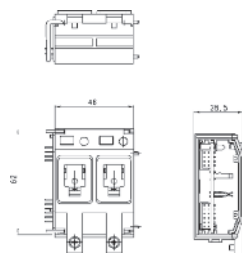
Part Number
3PAC-R-LS3

To be mounted with manifold CNVL-3H3



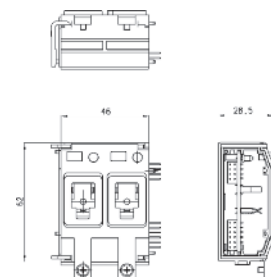
Part Number
3PAC-R-RS3

To be mounted with manifold CNVL-3H2



Part Number
3PAC-R-LI2

To be mounted with manifold CNVL-3H2

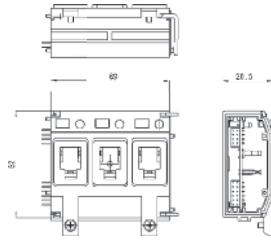


Part Number
3PAC-R-RI2

Electrical Modules

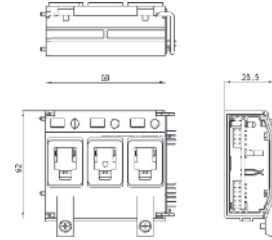
2

To be mounted with manifold CNVL-3I3



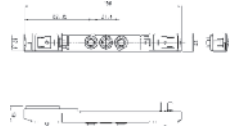
Part Number
3PAC-R-LI3

To be mounted with manifold CNVL-3I3



Part Number
3PAC-R-RI3

For valves with two solenoids



Part Number
3PAC-R-IF1

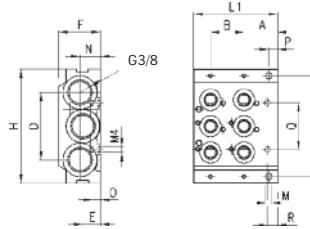
End cap for electric module



Part Number
3PAC-R-TP1

CONTROL

Modular Manifolds for Series 3, 1/8 and 1/4

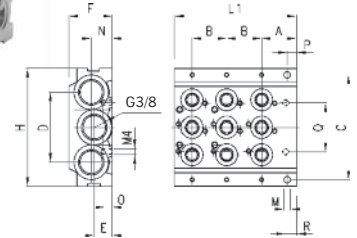


Basic Module with Two Positions

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.

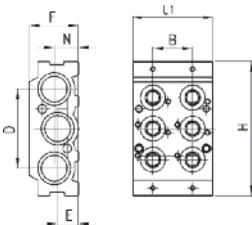


Basic Module with Three Positions

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.

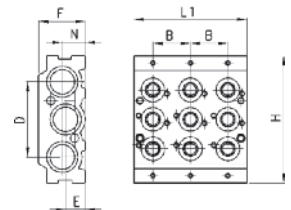


Expansion Module with Two Positions

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.

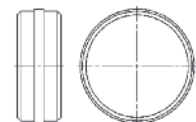


Expansion Module with Three Positions

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)

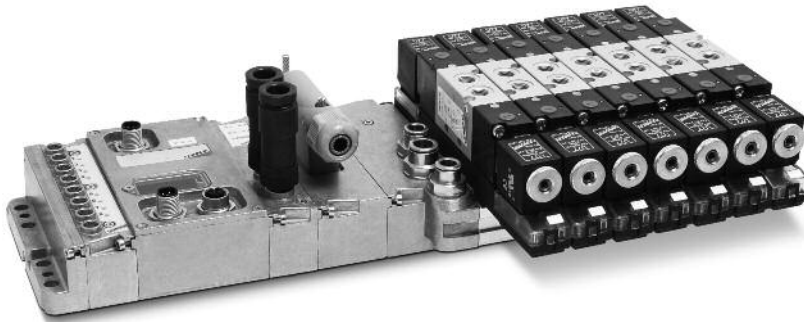
Series 3 Valve Island Fieldbus

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

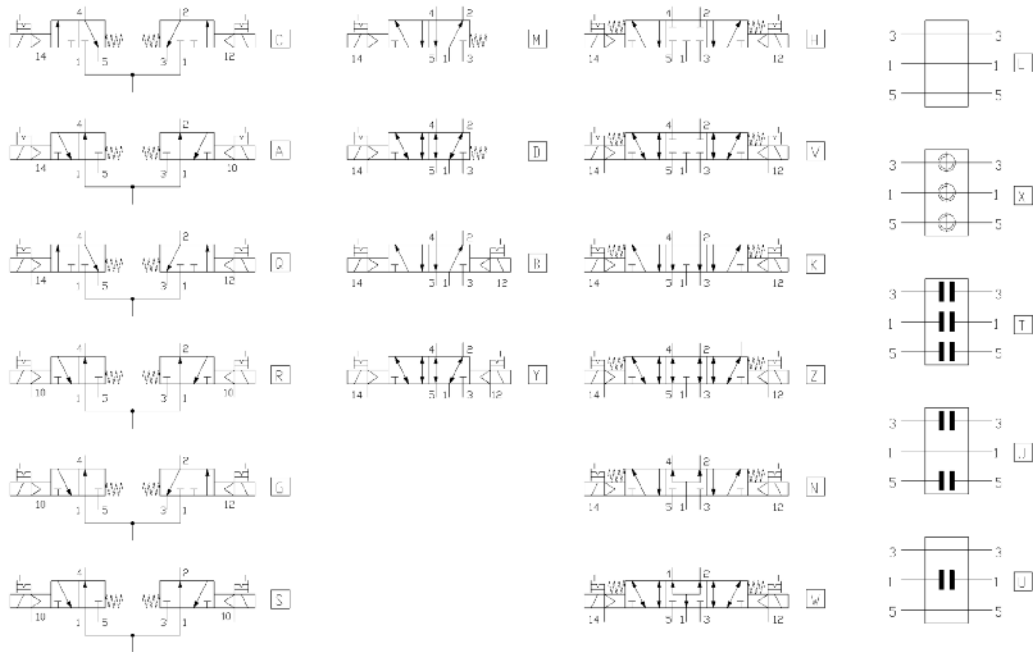
= standard
S = special (to be specified)

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)

CANopen

DeviceNet



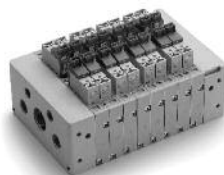
For further detail please see our full catalogue

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

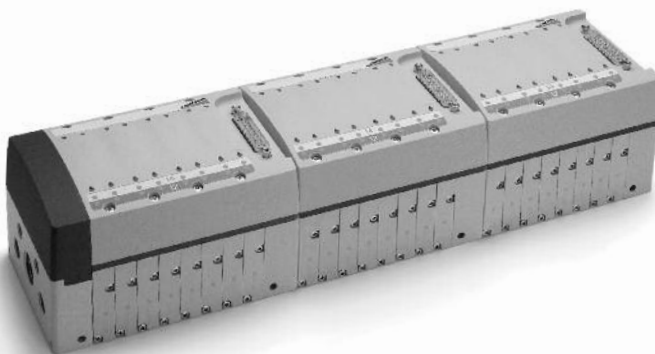
The Multipole version is available in two sizes, with 4, 6 or 8 valve positions. These can be freely equipped with either monostable or bistable valves.

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.

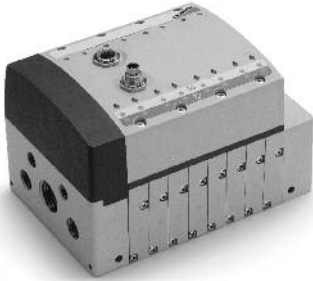
Through a serial interface (RS232), located on the main module it is possible to connect a PC or Palm Pilot to the valve island.

Using a PC or an external Palm Pilot it is possible to:

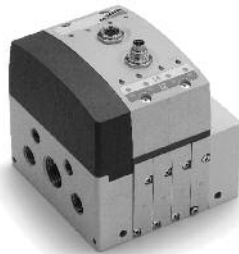
- set the address of the fieldbus node without using switches
- manually set the internal addresses of the signals to the coils, changing the initial address settings created.
- manually activate or deactivate each outlet individually, by passing the main program while it is active and running.



Initial module



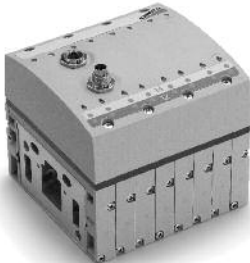
Valve Island with Fieldbus connection (expansion module 8 positions for single assembly)



Valve Island with Fieldbus connection (expansion module 4 positions for single assembly)



Valve Island with Fieldbus connection (expansion module 2 positions for single assembly)



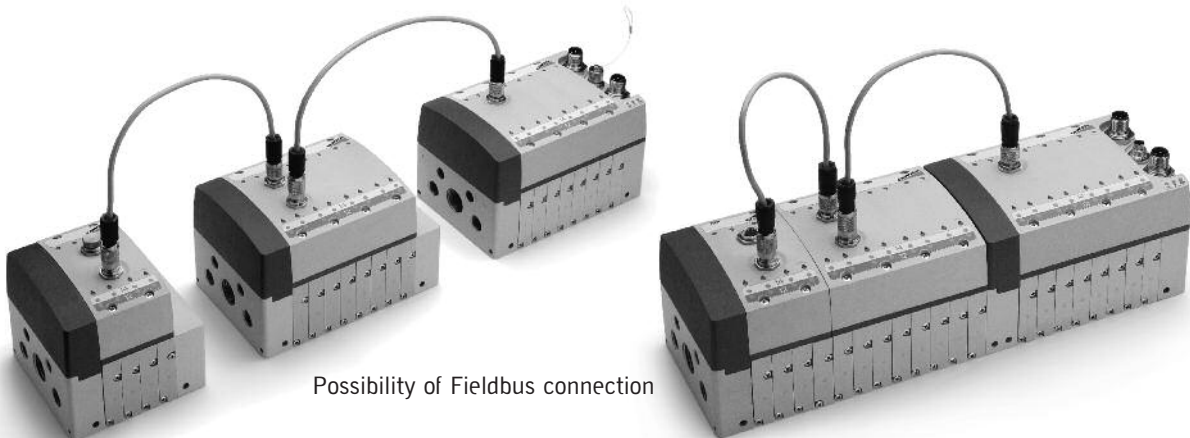
Valve Island with Fieldbus connection (expansion module 8 positions for combined assembly)



Valve Island with Fieldbus connection (expansion module 4 positions for combined assembly)



Valve Island with Fieldbus connection (expansion module 2 positions for combined assembly)



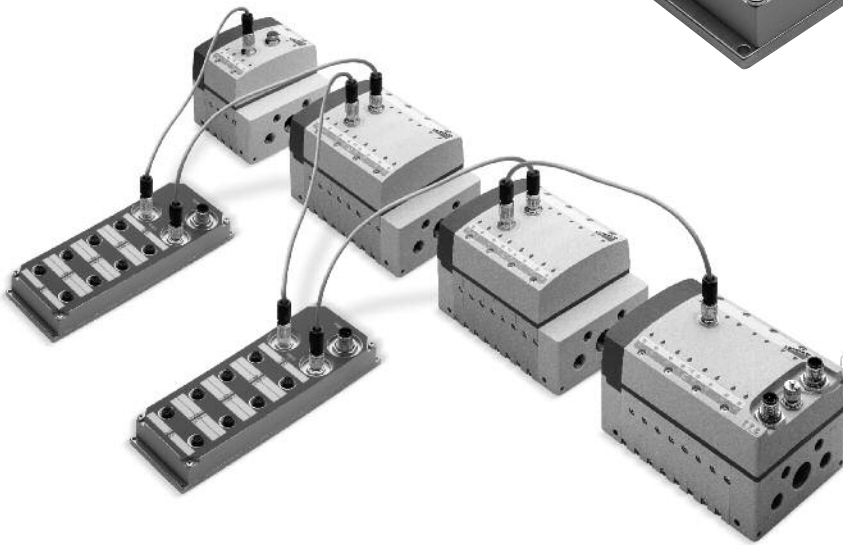
Possibility of Fieldbus connection

CONTROL

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.

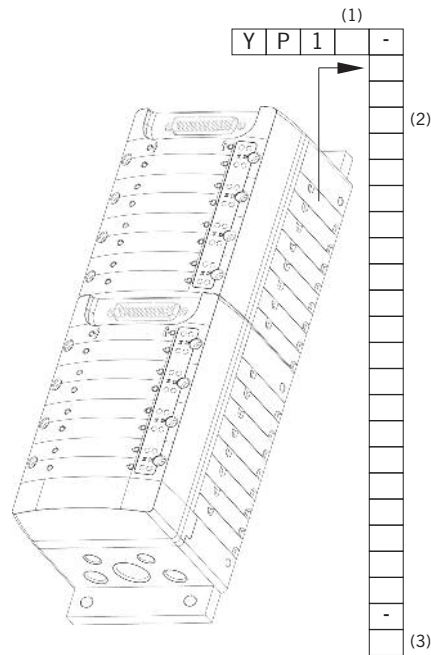
- Filter model:
- MC104-F10
- MX2-3/8-F10
- MX2-1/2-F10
- N108-F10
- N104-F10



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

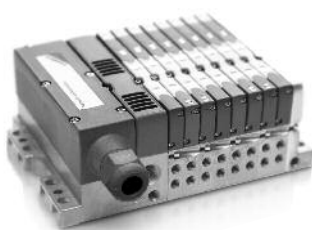
Valve Island with Pneumatics and Electronics integrated

Available versions: Multipole (PNP and NPN) and Fieldbus (Profibus-DP, DeviceNet, CANopen)

Valve functions: 2x2/2; 2x3/2; 5/2; 5/3 CC

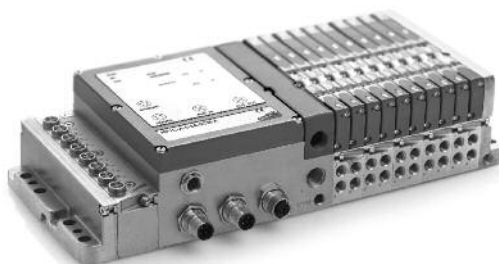
DeviceNet. PROFIBUS
CANopen BUS

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

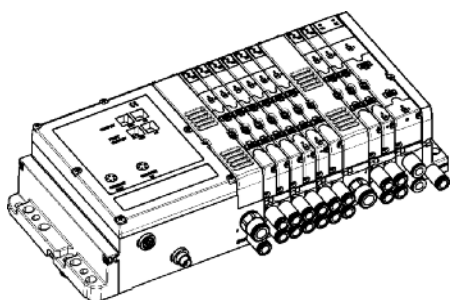
Max. N° of coils multipole

32

Max. N° of coils - fieldbus

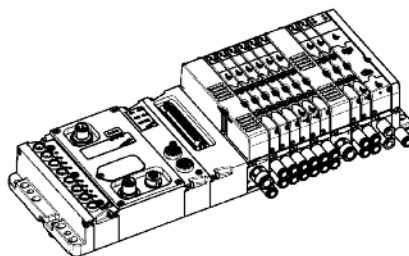
64

Series H Valve Island - Expansion and Individual Fieldbus



Fieldbus Expansion (local fieldbus) version

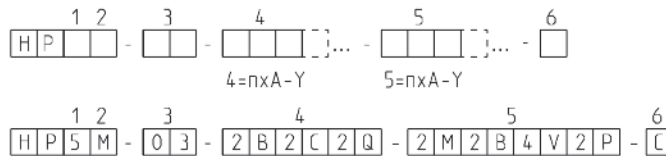
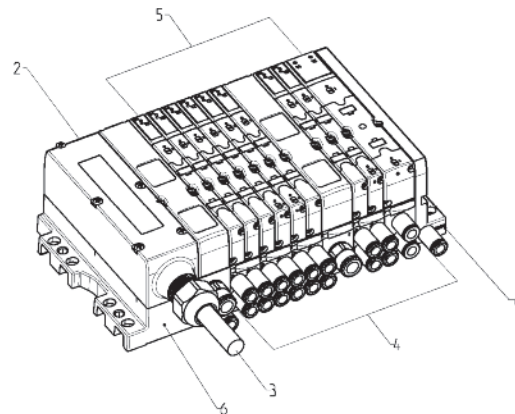
The Expansion islands can handle electrical and pneumatic outlets up to a 50 m distance from the Island that interfaces directly to the Fieldbus net. These expansions communicate with the expandable fieldbus unit (above) through a local fieldbus (Cam.I.Net) and are connected through pre-wired cables (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 |

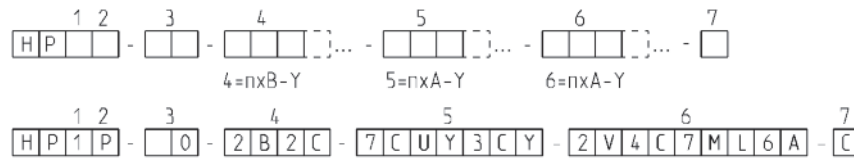
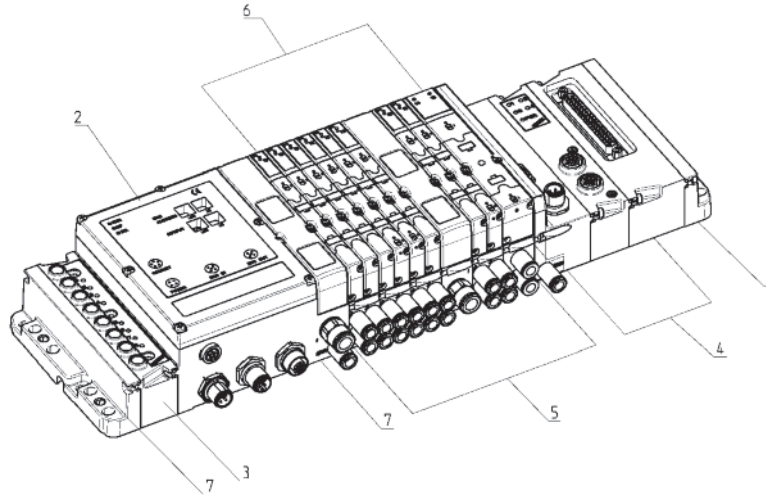
(5) SOLENOID VALVE

| | |
|--|---|
| 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 |

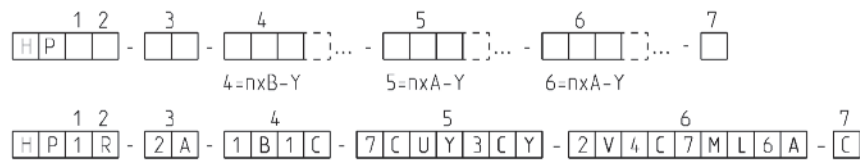
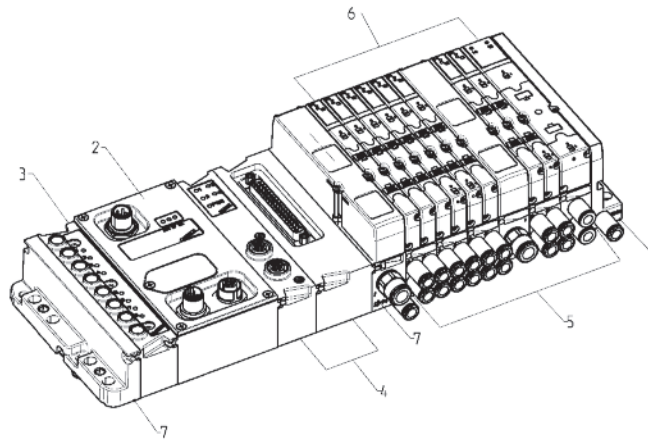
Coding example - Fieldbus version



| (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't use 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

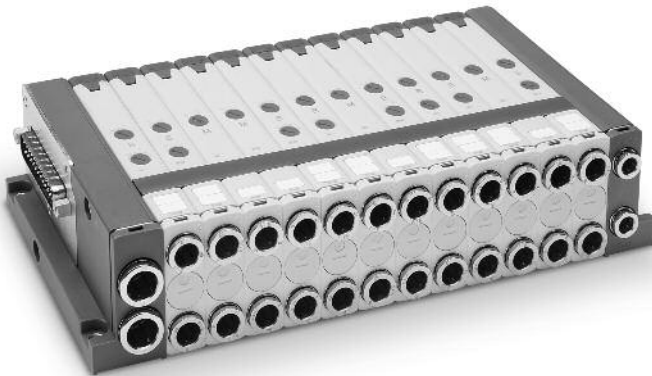
| | |
|--|---|
| 1; 12/14 in common 3/5; 82/84 threaded ports | A |
| 1; 12/14 separate 3/5; 82/84 threaded ports | B |
| 1; 12/14 in common 3/5; 82/84 with integrated silencer | C |
| 1; 12/14 separate 3/5; 82/84 with integrated silencer | D |
| Terminal plates with cartridges Ø8 for size 1 | |
| 1; 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%

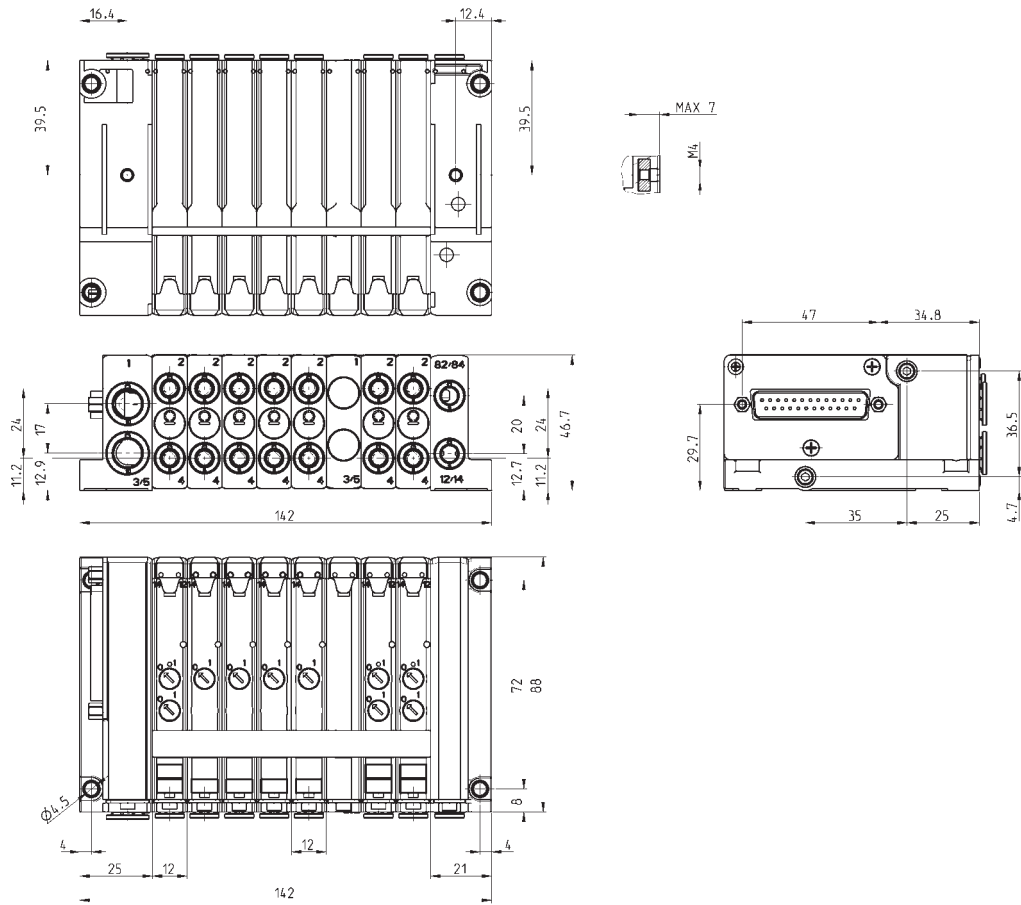
Protection Class

IP40

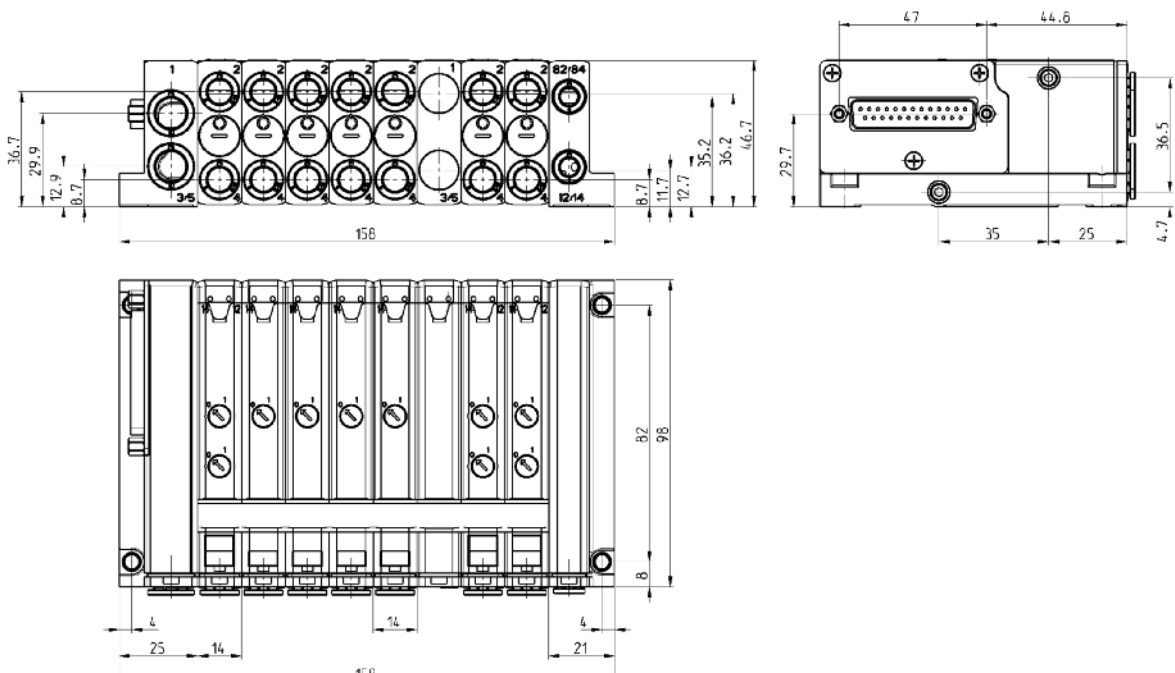
Max. N° of coils multipole

24 (monostable)

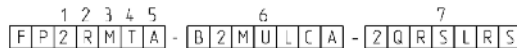
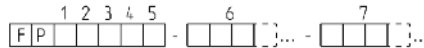
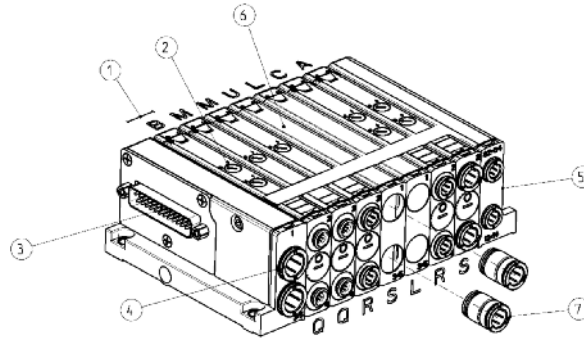
Multipole version - dimensions of size 1



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 | - | B | 2 | M | U | L | C | A | - | 2 | Q | R | S | L | R | S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | |
|----------|--|----------------|--|
| F | SERIES: F | B2MULCA | TYPE OF SOLENOID VALVES AND ADDITIONAL PLATES * 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 |
| P | TYPE: P = pneumatic A = accessories | - | |
| 2 | SIZE: 1 = 12mm 2 = 14mm | 2QRSLRS | CARTRIDGES FOR SOLENOID VALVES AND ADDITIONAL PLATES * Q = tube Ø 4 S = tube Ø 8 R = tube Ø 6 L = free position |
| 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 | - | |
| A | TYPE OF SERVO-PILOT: A = internal B = external Note: the cartridges for the right terminal are for tube Ø 6. | - | |
| - | | - | |

* 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: FP2RMTA-MBCCMULMMBB-QQRSSLRQR
FP2RMTA-MB2CMUL3M2B-2QR2SL3RQ2R

Series CP2, CC2 and CD2 Individual Fieldbus node

Interface with: Profibus-DP; CANopen and DeviceNet

DeviceNet. PROFIBUS
CANopen



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 |
| 3A | 0 = no module nA = numbers of modules 8 input (n = 1 to 8)* *not for DeviceNet version | | | 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) |

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).

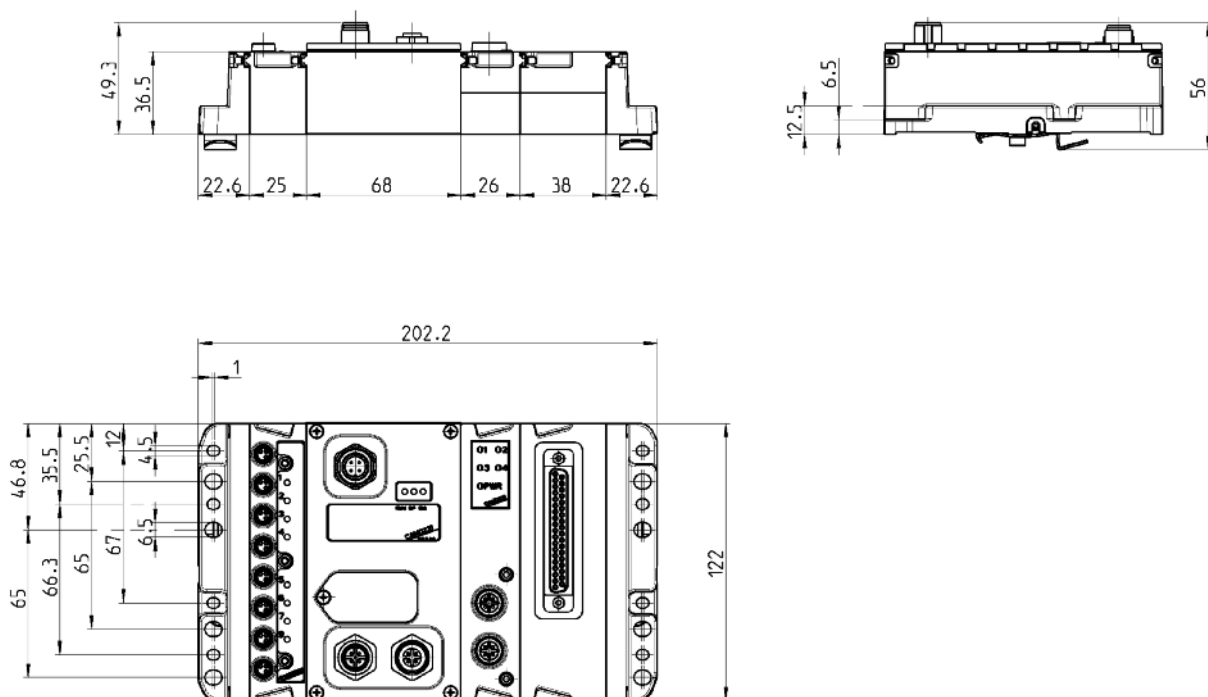
Addressing via rotary switches. Leds indicating the working state. Handling of a max n° of 64 inputs and 64 outputs. Electrical connections on the same side as the pneumatic connections.

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

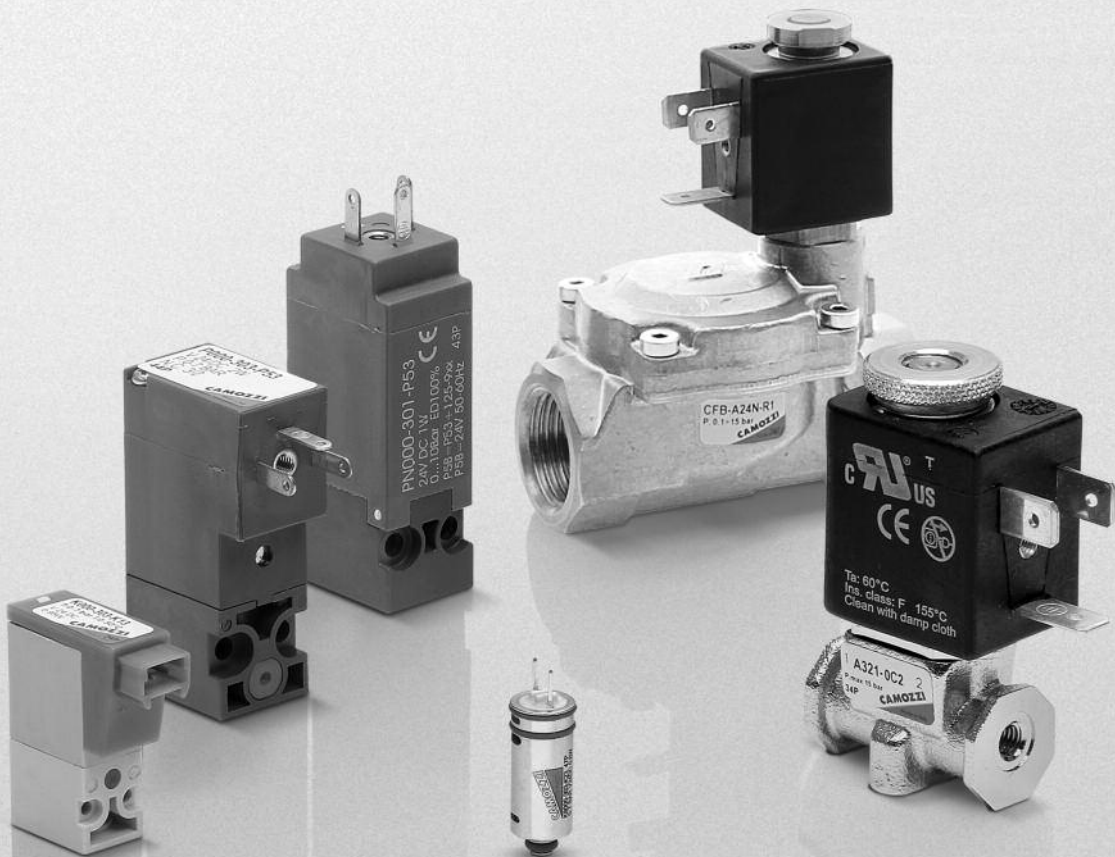


| Part Number |
|-------------|
| CS-DFTP |
| CS-LFTP |

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 |



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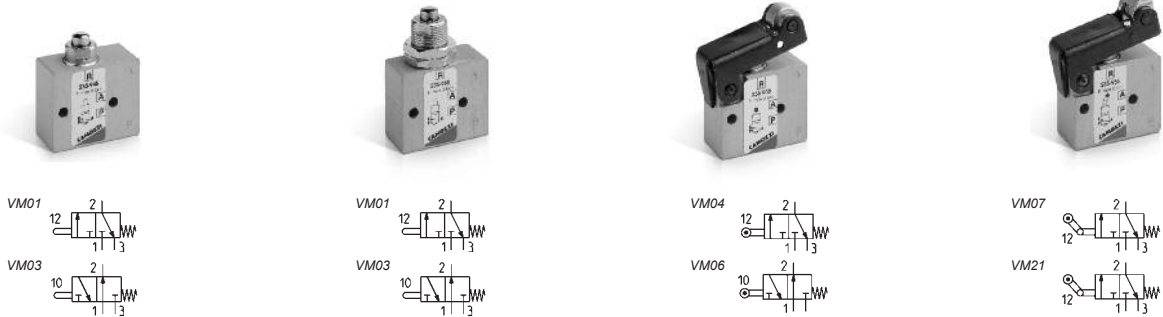
www.camozzi.co.uk

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

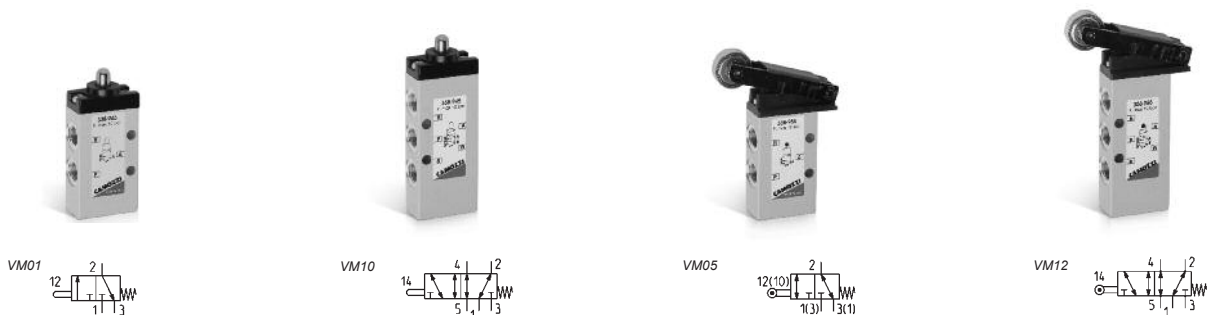
| | | | | | |
|---|---|----------|--|-----------|--|
| 2 | 3 | 4 | - | 94 | 5 |
| 2 SERIES: 2 | 3 FUNCTION: 3 = 3/2-way NC 4 = 3/2-way NO on request | | 94 ACTUATION: 94 = plunger 95 = roller/lever 96 = unidirectional lever 98 = plunger, panel mounting | | 5 RESETTING: 5 = Spring return |
| 4 CONNECTIONS: 4 = Ø4mm cartridge 5 = M5 | | | | | |

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



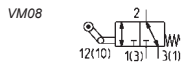
| Plunger 1/8" 3/2 | |
|------------------|--|
| 338-945 | |

| Plunger 1/8" 5/2 | |
|------------------|--|
| 358-945 | |

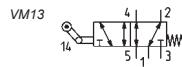
| Roller/Lever 1/8" 3/2 | |
|-----------------------|--|
| 338-955 | |

| Roller/Lever 1/8" 5/2 | |
|-----------------------|--|
| 358-955 | |

Series 1 and 3 Mechanically Operated Valves



VM08
Roller/Lever One-Way Trip 1/8" 3/2
338-965



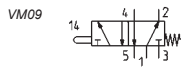
VM13
Roller/Lever One-Way Trip 1/8 5/2
358-965



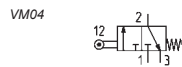
VM01
Plunger 1/8" 3/2 N.C.
138-945



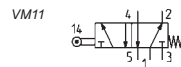
VM03
Plunger 1/8" 3/2 N.O.
148-945



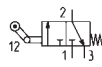
VM09
Plunger 1/8" 5/2
158-945



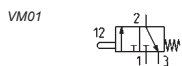
VM04
Roller/Lever 1/8" 3/2
138-955



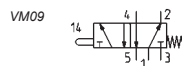
VM11
Roller/Lever 1/8" 5/2
158-955



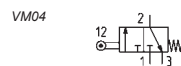
VM07
Roller/Lever One-Way Trip 1/8" 3/2
138-965



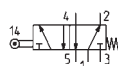
VM01
Plunger 1/4" 3/2
134-945



VM09
Plunger 1/4" 5/2
154-945



VM04
Roller/Lever 1/4" 3/2
134-955



VM11
Roller/Lever 1/4" 5/2
154-955

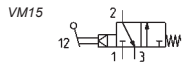
CODING EXAMPLE

| | | | | | |
|--|----------|---|----------|---|----------|
| 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> | | | |

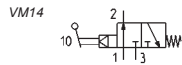
Series 3 and 4 Mechanically Operated Sensor Valves

3/2 and 5/2
Connections: 1/8", 1/4"

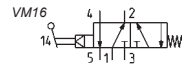
For technical specifications and flow rates see page 2/8



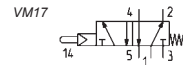
Lever 1/8" 3/2 N.C.
338-D15-9A5



Lever 1/8" 3/2 N.O.
348-D15-9A5



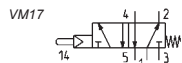
Lever 1/8" 5/2
358-D15-9A5



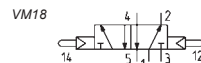
Plunger 1/8" 5/2
458-015-194



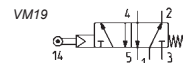
Double Plunger 1/8" 5/2
458-011-294



Plunger 1/4" 5/2
454-015-194

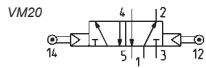


Double Plunger 1/4" 5/2
454-011-294

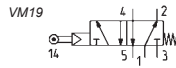


Roller/Lever 1/8" 5/2
458-015-195

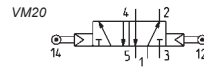
Series 3 and 4 Mechanically Operated Sensor Valves



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

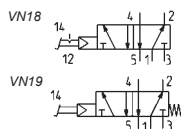
| | | | | | | |
|----------|--|----------|------------|---|----------|------------|
| 3 | 3 | 8 | - | D15 | - | 9A5 |
| 3 | SERIES: 3, 4 | | | | | |
| 3 | FUNCTION: 3 = 3/2 way N.C. 4 = 3/2 way N.O. 5 = 5/2 way C.A | | D15 | D15 = pressure drop/spring 015 = pressure/spring 011 = pressure/pressure | | |
| 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).

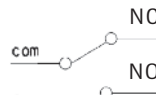
For technical specifications and flow rates see page 2/8

Pneumatic Pedal



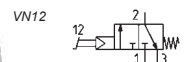
Foot Pedal 1/4" 5/2
354N-925

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



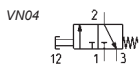
3-Position Selector
200-870 Ø22



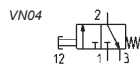
Key Switch
200-904 Ø22



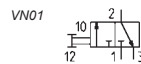
Push Button 3/2
235-895 M5
234-895 4mm



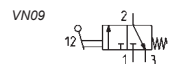
Palm Switch Spring Return 3/2
235-975 M5
234-975 4mm



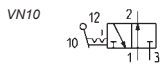
Palm Switch Twist Unlock 3/2
235-972 M5
234-972 4mm



Joystick Spring Return 3/2
235-905 M5
234-905 4mm



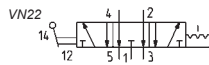
Series 2 Manually Operated Console Minivalves



2-Position Selector 3/2

235-990 M5

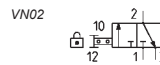
234-990 4mm



3-Position Selector 5/3

285-870 M5

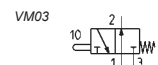
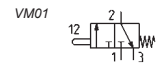
284-870 4mm



Key Switch 3/2

235-904 M5

234-904 4mm



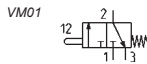
Valve for use with Operators

235-000 M5-NC VM01

234-000 4mm-NC VM01

245-000 M5-N0 VM03

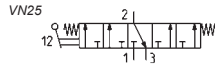
244-000 4mm-N0 VM03



Minivalves

285-000 M5

284-000 4mm



Joystick 1/8" 3/2

234-9054



Bracket

210-000 Single

220-000 Double



Adaptor

200-2230

CODING EXAMPLE

| | | | | | |
|----------|----------|----------|----------|-----------|----------|
| 2 | 3 | 4 | - | 97 | 5 |
|----------|----------|----------|----------|-----------|----------|

| | | | | | |
|----------|--|----------|--|-----------|---|
| 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

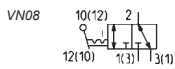
Series 1, 3 and 4, 3/2, 5/2 and 5/3

Connections: 1/8" - 1/4"

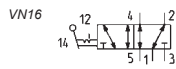
VMS Series, 3/2

Connections: 1/8" - 1/4" - 3/8" - 1/2", 3/4"

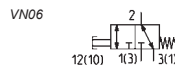
For technical specifications and flow rates see page 2/8



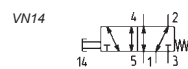
Switch 1/8" 3/2
338-990



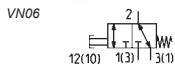
Switch 1/8" 5/2
358-990



Push Button 1/8" 3/2
338-895 (Black)
338-896 (Green)
338-897 (Red)



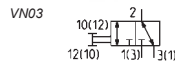
Push Button 1/8" 5/2
358-895 (Black)
358-896 (Green)
358-897 (Red)



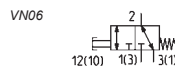
Palm Switch 1/8" 3/2
338-975 (Black)
338-976 (Green)
338-977 (Red)



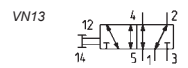
Palm Switch 1/8" 5/2
358-975 (Black)
358-976 (Green)
358-977 (Red)



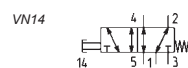
Knob 1/8" 3/2
338-910



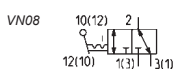
Knob 1/8" 3/2
338-915



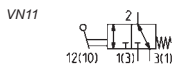
Knob 1/8" 5/2
358-910



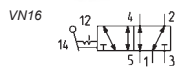
Knob 1/8" 5/2
358-915



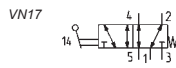
Lever 1/8" 3/2
338-900



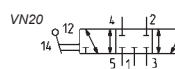
Lever 1/8" 3/2
338-905



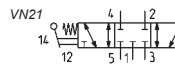
Lever 1/8" 5/2
358-900



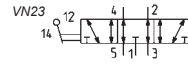
Lever 1/8" 5/2
358-905



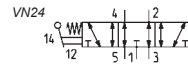
Lever 1/8" 5/3
368-900



Lever 1/8" 5/3
368-905

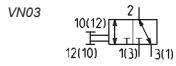


Lever 1/8" 5/3
378-900

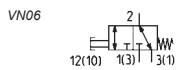


Lever 1/8" 5/3
378-905

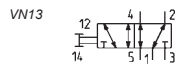
Series 1, 3, 4 and VMS Manually Operated Valves



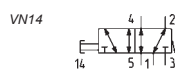
Knob 1/4" 3/2
434-910



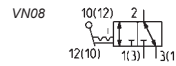
Knob 1/4" 3/2
434-915



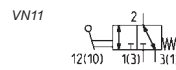
Knob 1/4" 5/2
454-910



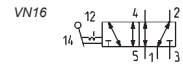
Knob 1/4" 5/2
454-915



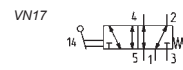
Lever 1/4" 3/2
434-900



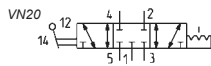
Lever 1/4" 3/2
434-905



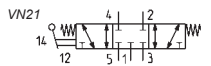
Lever 1/4" 5/2
454-900



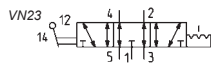
Lever 1/4" 5/2
454-905



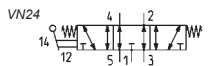
Lever 1/4" 5/3
464-900



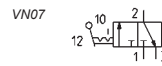
Lever 1/4" 5/3
464-905



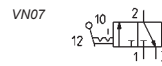
Lever 1/4" 5/3
474-900



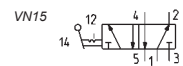
Lever 1/4" 5/3
474-905



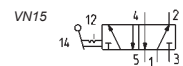
Lever 1/8" 3/2
138-900



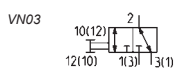
Lever 1/4" 3/2
134-900



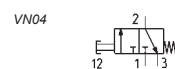
Lever 1/8" 5/2
158-900



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)



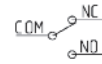
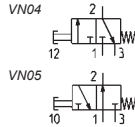
For Fittings
See 4 (Connection)

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



Handle with incorporated micro valve

| | |
|----------------|------|
| 234-885 | VN04 |
| 244-885 | VN05 |

Handle with incorporated micro switch

| |
|----------------|
| 234-88E |
|----------------|

GENERAL DATA

| | |
|-----------------------|---|
| Construction | poppet-type (closed centres) |
| Valve group | way/pos. 3/2 ways N.C. |
| Nominal diameter | 2.5 mm |
| Fixing | N°2 holes M5 |
| Connections | push in cartridge Ø4 |
| Installation | in any position |
| Operating temperature | 0 - 70°C (-20°C with dry air) |
| Operating pressure | 2 to 8 bar |
| Nominal flow rate | 60 NI/min. (6 bar p1) |
| 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. |

| | |
|------------------------|---|
| Actuating force | at 6 bar 13N |
| Construction | switch device |
| 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 |
| Mounting | in any position |
| Operating temperature | 0°C - 70°C |
| Protection class | IP40 |
| Activation stroke | 2mm |
| Actuating force | 5 N |

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



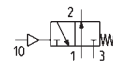
ORO1



OR
 2LR-SB4-B



NOT1



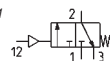
NOT
 2LT-SB4-B

AND1



AND
 2LD-SB4-B

YES1



YES
 2LS-SB4-B

Series 2L Basic Logic Valves



MEM1



Memory
 2LM-SB4-B



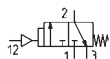
Right-Angled Bracket
 2LQ-8A

Series 2L Pneumatically Operated Amplifier Valve

3/2 monostable
 Connections: 1/8 - Pilot M5



AMP1



Part Number
 2LA-AM

Series 2L Sender and Receiver Elements



2LB2



Receiver
 2LB-SR



2LB1



Sender
 2LB-SE

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

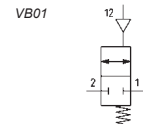
Unidirectional and bidirectional 1/8, 1/4, 3/8, 1/2
Nominal diameters 5,5 - 8 - 11.



| |
|----------------|
| Unidirectional |
| VBU 1/8 |
| VBU 1/4 |
| VBU 3/8 |
| VBU 1/2 |



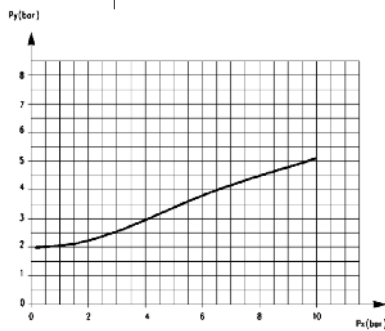
| |
|---------------|
| Bidirectional |
| VBO 1/8 |
| VBO 1/4 |
| VBO 3/8 |
| VBO 1/2 |



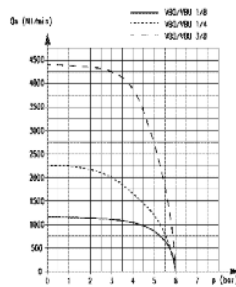
CODING EXAMPLE

| | | | |
|----------------------|---|------------|------------------------------------|
| 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

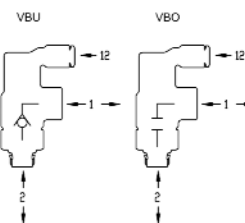
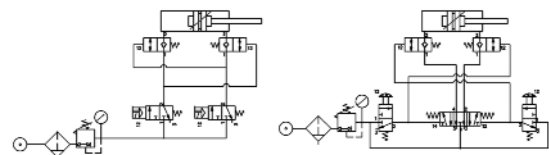
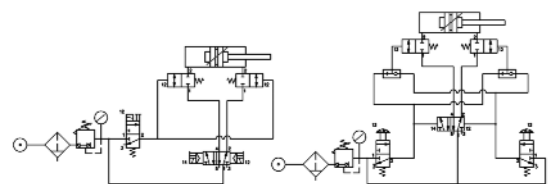


PILOT PRESSURE: This diagram shows the relation between working pressure (Px) and pilot pressure required in order to operate the valve (Py).
The opening pressure of the unidirectional valve is 0,3 bar.



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

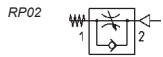
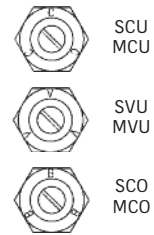
2

CONTROL

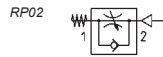
AVAILABLE BANJO FLOW CONTROLLERS



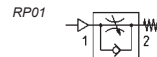
TYPES



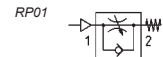
| |
|--|
| Unidirectional Cylinder Mount |
| SCU 602 - M5 |
| SCU 604 - 1/8 |
| SCU 606 - 1/4 |
| SCU 608 - 3/8 |
| Ring Connector required see page 2/89 |



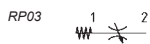
| |
|--|
| Unidirectional Cylinder Mount |
| MCU 702 - M5 |
| MCU 704 - 1/8 |
| MCU 706 - 1/4 |
| MCU 708 - 3/8 |
| Ring Connector required see page 2/89 |



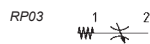
| |
|--|
| Unidirectional Valve Mount |
| SVU 602 - M5 |
| SVU 604 - 1/8 |
| SVU 606 - 1/4 |
| Ring Connector required see page 2/89 |



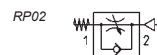
| |
|--|
| Unidirectional Valve Mount |
| MVU 702 - M5 |
| MVU 704 - 1/8 |
| MVU 706 - 1/4 |
| Ring Connector required see page 2/89 |



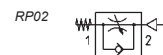
| |
|--|
| Bidirectional |
| SCO 602 - M5 |
| SCO 604 - 1/8 |
| SCO 606 - 1/4 |
| Ring Connector required see page 2/89 |



| |
|--|
| Bidirectional |
| MCO 702 - M5 |
| MCO 704 - 1/8 |
| MCO 706 - 1/4 |
| Ring Connector required see page 2/89 |

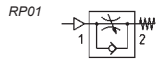


| |
|--------------------------------------|
| Unidirectional Cylinder Mount |
| SCU 610 - 1/2 |
| Pre-assembled with ring connector |

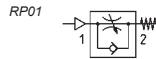


| |
|--------------------------------------|
| Unidirectional Cylinder Mount |
| MCU 710 - 1/2 |
| Pre-assembled with ring connector |

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* |

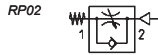
* Banjo ring connectors are only suitable for assemble with type 1635 banjo bolts

* Banjo ring connector required for M5 versions of SCU, MCO, SVU, MVU, SCO and MCO

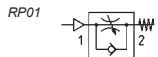
Flow control valves

Series PSCU, PMCU, PSVU, PMVU, PSCO and PMCO

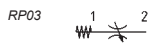
Unidirectional and bidirectional flow control valves
Flow Regulators with banjo in technopolymer
Ports 1/8, 1/4, 3/8



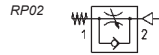
| Part Number |
|-----------------|
| PSCU 604-1/8-4 |
| PSCU 604-1/8-6 |
| PSCU 604-1/8-8 |
| PSCU 606-1/4-6 |
| PSCU 606-1/4-8 |
| PSCU 606-1/4-10 |
| PSCU 608-3/8-10 |
| PSCU 608-3/8-12 |



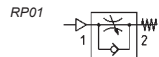
| Part Number |
|-----------------|
| PSVU 604-1/8-4 |
| PSVU 604-1/8-6 |
| PSVU 604-1/8-8 |
| PSVU 606-1/4-6 |
| PSVU 606-1/4-8 |
| PSVU 606-1/4-10 |
| PSVU 608-3/8-10 |
| PSVU 608-3/8-12 |



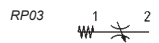
| Part Number |
|-----------------|
| PSCO 604-1/8-4 |
| PSCO 604-1/8-6 |
| PSCO 604-1/8-8 |
| PSCO 606-1/4-6 |
| PSCO 606-1/4-8 |
| PSCO 606-1/4-10 |
| PSCO 608-3/8-10 |
| PSCO 608-3/8-12 |



| Part Number |
|-----------------|
| 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 |

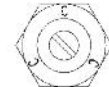


| Part Number |
|-----------------|
| PMVU 704-1/8-4 |
| PMVU 704-1/8-6 |
| PMVU 704-1/8-8 |
| PMVU 706-1/4-6 |
| PMVU 706-1/4-8 |
| PMVU 706-1/4-10 |
| PMVU 708-3/8-10 |
| PMVU 708-3/8-12 |

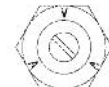


| Part Number |
|-----------------|
| PMCO 704-1/8-4 |
| PMCO 704-1/8-6 |
| PMCO 704-1/8-8 |
| PMCO 706-1/4-6 |
| PMCO 706-1/4-8 |
| PMCO 706-1/4-10 |
| PMCO 708-3/8-10 |
| PMCO 708-3/8-12 |

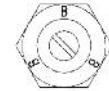
TYPES



PSCU
PMCU



PSVU
PMVU



PSCO
PMCO

PSCU - PMCU = assembly directly on the cylinders
PSVU - PMVU = assembly directly on the valves
PSCO - PMCO = assembly directly on the cylinders or valves

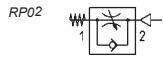
CODING EXAMPLE

| | | | | | | | | |
|---|---|----|---|----|---|-----|---|---|
| P | M | CU | 7 | 04 | - | 1/8 | - | 4 |
|---|---|----|---|----|---|-----|---|---|

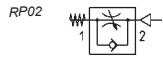
| | | | | | | | | |
|-----------|--|--|--|------------|---|----------------------------|--|--|
| P | SERIES: P | | | | | | | |
| M | ACTUATION: M = Manual S = Screwdriver | | | 04 | NOMINAL DIAMETER: 04 = Ø 2mm max 06 = Ø 4mm max 08 = Ø 4mm max | | | |
| CU | ASSEMBLY: CU = on cylinders unidirectional 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 6 = Ø 6mm 8 = Ø 8mm | 10 = Ø 10mm 12 = Ø 12mm | | |

Series GSCU, GMCU, GSVU, GMVU, GSCO, GMCO Flow Control Valves

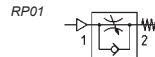
Unidirectional and bidirectional M5, 1/8 and 1/4
banjo flow controllers
Nominal diameters 1.5 - 3.5 and 5



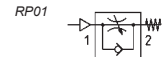
| |
|-----------------------------------|
| Unidirectional Cylinder Mounted |
| GSCU 813-M5-3 |
| GSCU 814-M5-4 |
| GSCU 803-1/8-6 |
| GSCU 804-1/8-8 |
| GSCU 805-1/4-8 |
| GSCU 806-1/4-10 |
| Pre-assembled with ring connector |



| |
|-----------------------------------|
| 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 |

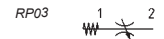


| |
|-----------------------------------|
| Unidirectional Valve Mounted |
| GMVU 913-M5-3 |
| GMVU 914-M5-4 |
| GMVU 903-1/8-6 |
| GMVU 904-1/8-8 |
| GMVU 905-1/4-8 |
| GMVU 906-1/4-10 |
| Pre-assembled with ring connector |

| |
|-----------------------------------|
| 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 |

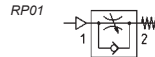
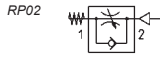


CODING EXAMPLE

| | | | | | | | |
|-----------|--|-----------|--|----------|------------|------------------------------|----------|
| 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 – TMCO 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 | |
|-----------------------|-----|
| RFU 452 | M5 |
| RFU 482 | 1/8 |
| RFU 483 | 1/8 |
| RFU 444 | 1/4 |
| RFU 446 | 1/4 |
| RFU 466 | 3/8 |
| RFU 477 | 1/2 |



| Bidirectional Thread | |
|----------------------|-----|
| RFO 352 | M5 |
| RFO 382 | 1/8 |
| RFO 383 | 1/8 |
| RFO 344 | 1/4 |
| RFO 346 | 1/4 |
| RFO 367 | 3/8 |
| 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 |



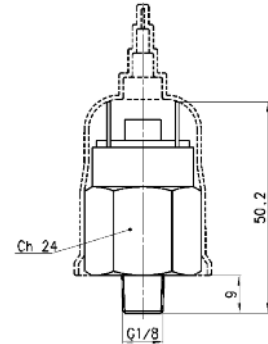
| For Fittings | |
|--------------------|--|
| See 4 (Connection) | |



| For Tubing | |
|-----------------|--|
| See 10 (Tubing) | |

Series PM Adjustable-Diaphragm Pressure Switches

Normally closed (NC) or open (NO).
Connections: 1/8.



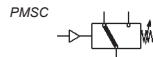
| Pressure Switch | Max.Voltage | Max Power | Service Type | Insulation Voltage | Symbol |
|-----------------|-------------|-----------|--------------|--------------------|--------|
| PM11-NC | 48 V AC DC | 24 VA | Heavy | 500V | PMNC |
| PM11-NA | 48 V AC DC | 24 VA | Heavy | 500V | PMNA |

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.



Series PM Pressure Switch with Exchange Contacts

Normally closed or open
Connections: 1/4.

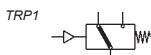


| Pressure Switch | Max.Voltage | Operating Temperature | Actuation Time | Regulation Area | Hysteresis |
|-----------------|-------------|-----------------------|----------------|-----------------|------------|
| PM11-SC | 250 V AC | -25°C | >0.1 ms | 2-10 Bar | 15% |
| | 30 V DC | +85°C | | | |

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

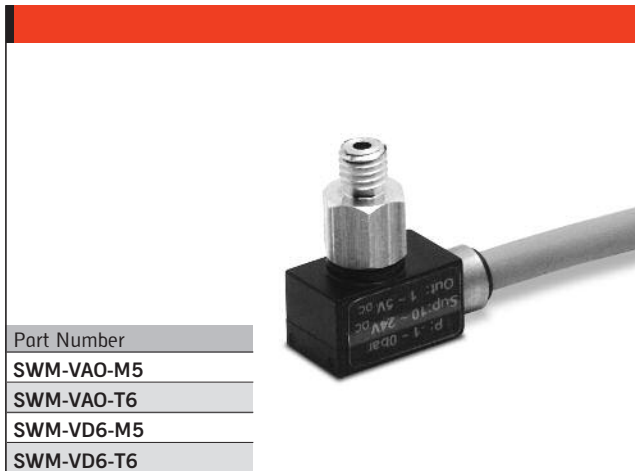


Part Number

2950 M5

Series SWM Electronic Miniature Vacuum Switches

These vacuum switches are used in measuring ranges between 1 and 0 bar



| |
|-------------|
| Part Number |
| SWM-VAO-M5 |
| SWM-VAO-T6 |
| SWM-VD6-M5 |
| SWM-VD6-T6 |

| 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



| |
|-------------|
| Part Number |
| SWE-V00 PA |
| SWE-U10-PA |

| 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



| |
|-------------|
| Part Number |
| SWD-V00-PA |
| SWD-P10-PA |

| 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

CONTROL

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

2



| 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 |



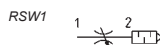
| Part Number | Flow Rate NI/min | Noise db (A) |
|-------------|---------------------|-----------------|
| 2938 M5 | 546 | 67 |
| 2938 1/8 | 1441 | 65 |
| 2938 1/4 | 2752 | 79 |
| 2938 3/8 | 4735 | 73 |
| 2938 1/2 | 8534 | 86 |



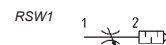
| Part Number | Flow Rate NI/min | Noise db (A) |
|-------------|---------------------|-----------------|
| 2939 4 | 335 | 80 |
| 2939 6 | 632 | 79 |
| 2939 8 | 1229 | 89 |
| 2939 10 | 2650 | 87 |



| 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 | |

CONTROL

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 |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|

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 |

New

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)

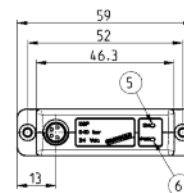
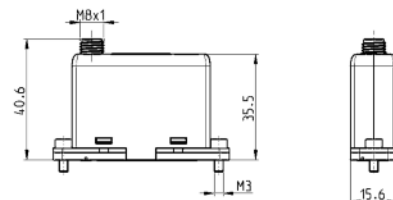
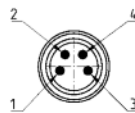
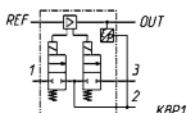
Pin 2: Command analogical signal 0-10 V DC
or 4-20 mA

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 | Light Sub-base | Light Sub-base for the pressure remote reading |
|---|--|---|
| <p>Note: the use of a silencer on the exhaust is recommended*</p> <p>*Mod. 2939 4</p>  | <p>Note: the use of a silencer on the exhaust is recommended*</p> <p>*Mod. 2931 M5 Mod. 2938 M5 Mod. 2901 M5</p>  | <p>Note: the use of a silencer on the exhaust is recommended*</p> <p>*Mod. 2931 M5 Mod. 2938 M5 Mod. 2901 M5</p> <p>In the version Light sub-base for the pressure remote reading it is also possible to use the fixing bracket B2-E531</p>  |
| <p>Part Number</p> <p>K8P-AS</p> | <p>Part Number</p> <p>K8P-AL</p> | <p>Part Number</p> <p>K8P-AT</p> |

Series K8P Accessories

| <p>Mounting Bracket for DIN rail (7.5mm x 35mm - width 1)</p> <p>Supplied with: 1x plate 1x screw M4x6 UNI 5931 Note: this accessory cannot be used with the light sub-base version.</p>  | <p>Bracket for Horizontal Mounting Supplied with: 1x mounting bracket 2x screws M3x8 UNI 5931</p>  | <p>Circular M8 4-pole connectors, Female With PU sheathing, non shielded cable. Protection class: IP65</p>  | | | | | | | | | | | | | | | |
|---|--|--|-------------|-------------------|------------------|-----------------------|----------|---|-----------------------|----------|---|-----------------------|-------------------|---|-----------------------|-------------------|---|
| <p>Part Number</p> <p>PCF-K8P</p> | <p>Part Number</p> <p>K8P-B1</p> | <table border="1"> <thead> <tr> <th>Part Number</th> <th>Type of Connector</th> <th>Cable Length (m)</th> </tr> </thead> <tbody> <tr> <td>CS-DF04EG-E200</td> <td>straight</td> <td>2</td> </tr> <tr> <td>CS-DF04EG-E500</td> <td>straight</td> <td>5</td> </tr> <tr> <td>CS-DR04EG-E200</td> <td>right angle (90°)</td> <td>2</td> </tr> <tr> <td>CS-DR04EG-E500</td> <td>right angle (90°)</td> <td>5</td> </tr> </tbody> </table> | 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 |
| 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

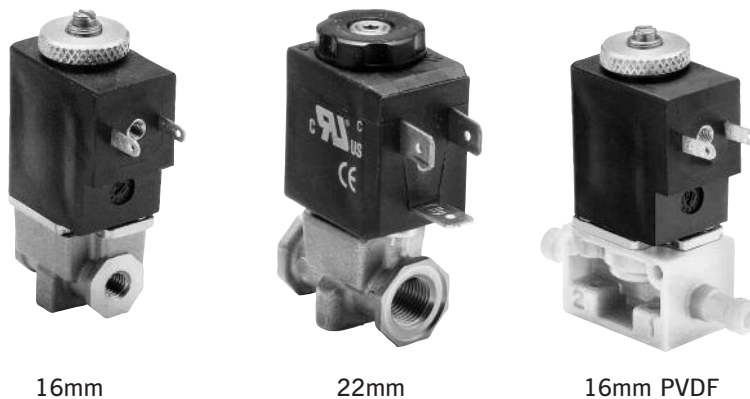
2/2-way proportional valves, NC
Size 16 - 22 mm

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

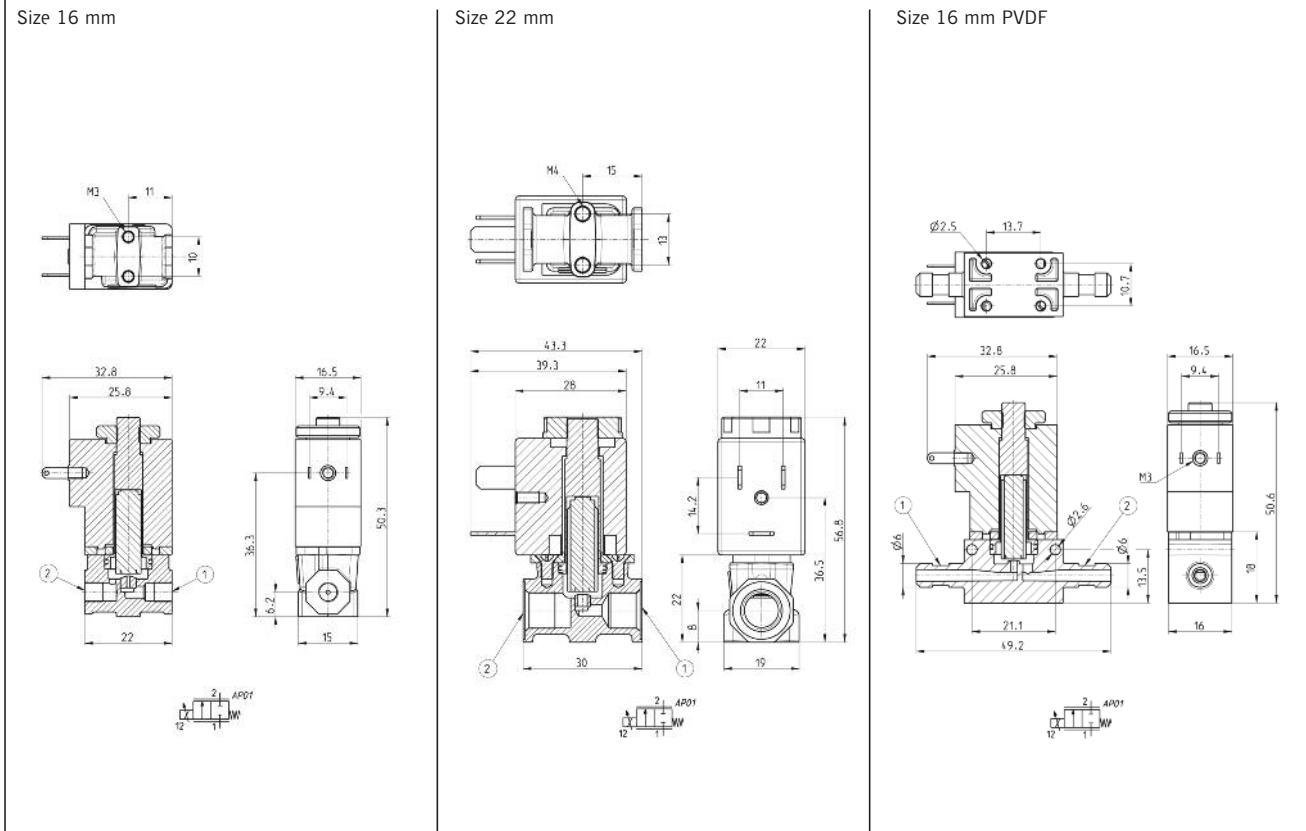
| Pressure Part Number | Connection 1 | Connection 2 | Function | Orifice Ø (mm) | Kv (l/min) | Pressure Max (bar) |
|----------------------|--------------|--------------|----------|----------------|------------|--------------------|
| AP-7211-FR2-U7* | 1/8 | 1/8 | 2/2 N.C. | 1 | 0.5 | 10 |
| AP-7211-HR2-U7* | 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 | R | SEALS MATERIAL: R = NBR |
| 7 | BODY: 6 = Size 16 mm 7 = Size 22 mm | 2 | BODY MATERIAL: 2 = brass 3 = technopolymer (for size 16mm only) |
| 2 | NUMBER OF WAYS 2 = 2-way | G | ENCAPSULATING MATERIAL G = PA (for size 16mm only) U = PET (for size 22mm only) |
| 1 | VALVE FUNCTIONS 1 = NC | 7 | SOLENOID DIMENSIONS P = 16x26 DIN EN 175301-803-C (for size 16mm only) 7 = 22x22 DIN 43650 B (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) | 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) |
| 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) | | |

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

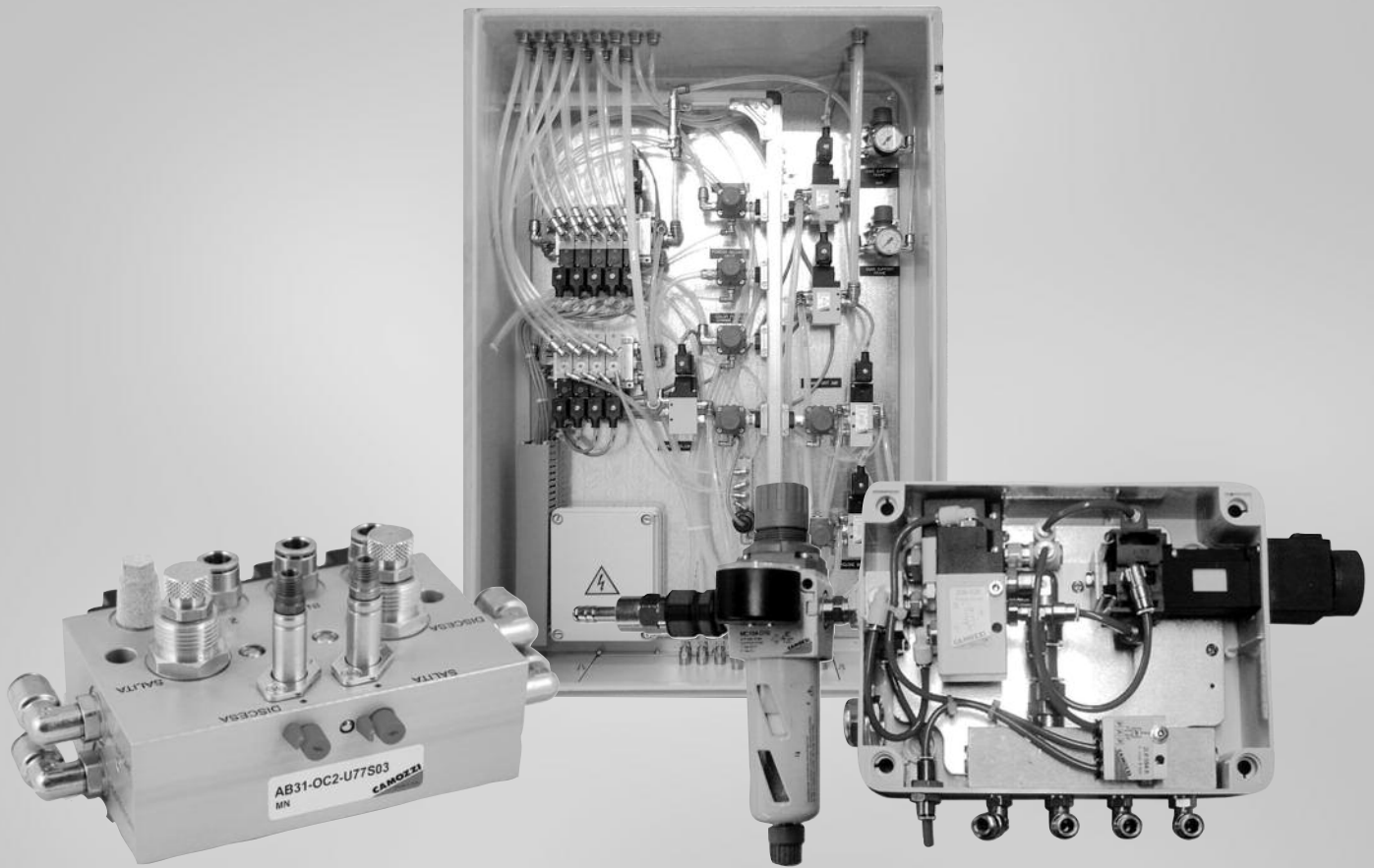
Special Requests

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 |



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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

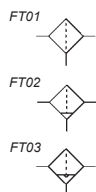
Series MX Filters

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 |
|-----------|----------|----------|------------|----------|----------|----------|----------|

| | |
|--|---|
| 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 |
|-----------|----------|----------|------------|----------|------------|

| | |
|--|------------------------------------|
| 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 | |

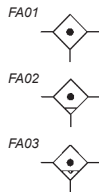
| | MX2 | | | MX3 | |
|--------------------------|--------------------|--------------------|--------------------|--------------------|------------------|
| Activated Carbon Filters | 3/8 | 1/2 | 3/4 | 3/4 | 1 |
| | MX2-3/8-FCA | MX2-1/2-FCA | MX2-3/4-FCA | MX3-3/4-FCA | MX3-1-FCA |

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



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 |

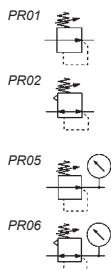
Series MX Pressure Regulators

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)

3



CODING EXAMPLE

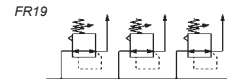
| | | | | | | | | |
|-----------|----------|----------|------------|----------|----------|----------|----------|----------|
| MX | 2 | - | 3/8 | - | R | 0 | 0 | 4 |
|-----------|----------|----------|------------|----------|----------|----------|----------|----------|

| | | |
|------------|---|--|
| 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 | - | - |

TREATMENT

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 |

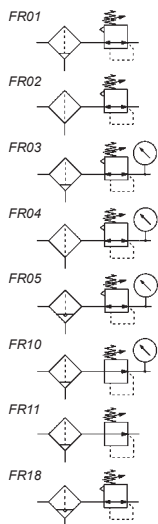
Series MX Filter/Regulator

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 FILTERING ELEMENT WITH DESIGN TYPE: 0 = 25µm with relieving (standard) 1 = 5µm with relieving 2 = 25µm without relieving 3 = 5µm without relieving |
| 2 SIZE: 2 = 3/8 - 1/2 - 3/4 3 = 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 |
| 3/8 CONNECTIONS: 3/8, 1/2, 3/4, 1 | 0 OPERATING PRESSURE: 0 = 0.5 - 10 bar (standard) 4 = 0 - 4 bar 7 = 0.5 - 7 bar (MX2 only) |
| FR FR= filter regulator | 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) |

| Pressure Regulators - With port for 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-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 | - | - |

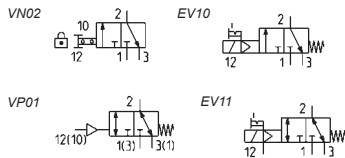
5 Micron also available on request

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



CODING EXAMPLE

| | | | | | | |
|-----------|----------|---|------------|---|----------|-----------|
| MX | 2 | - | 3/8 | - | V | 01 |
|-----------|----------|---|------------|---|----------|-----------|

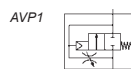
| | |
|--|--|
| MX SERIES: MX | |
| 2 SIZE: 2 = 3/8 - 1/2 - 3/4 3 = 3/4 - 1 | V V = 3/2 way valve |
| 3/8 CONNECTIONS: 3/8, 1/2, 3/4, 1 | 01 DESIGN TYPE: 01 = lockable manual control 16 = electro-pneumatic control 17 = servo-pilot control 36 = pneumatic control |

| | 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

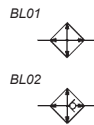
| | | | | | |
|-----------|----------|---|------------|---|-----------|
| MX | 2 | - | 3/8 | - | AV |
|-----------|----------|---|------------|---|-----------|

| | |
|--|---------------------------------|
| 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 |
|-----------|----------|----------|------------|----------|----------|-----------|

| | | |
|------------|---------------------------|--|
| 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).

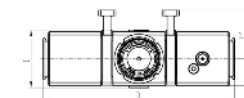
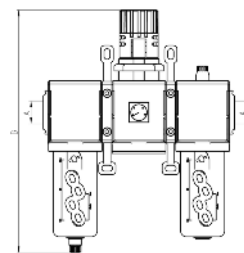
CODING EXAMPLE

| | | | | | |
|-----------|----------|----------|------------|----------|---------------|
| 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

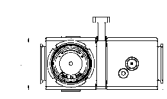
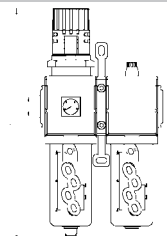
| Part Number | A | B | C | D | F1 | F2 |
|-----------------------|-----|-----|------|-------|----|-------|
| MX2-3/8-000014 | 3/8 | 289 | 74.5 | 210 | 70 | 104.5 |
| MX2-1/2-000014 | 1/2 | 289 | 74.5 | 210 | 70 | 104.5 |
| MX2-3/4-000014 | 3/4 | 289 | 74.5 | 210 | 70 | 104.5 |
| MX3-3/4-000014 | 3/4 | 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

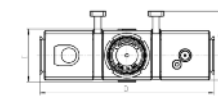
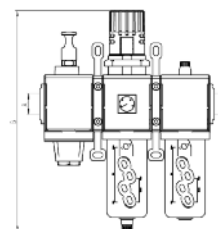
| Part Number | A | B | C | D | F1 | F2 |
|-----------------------|-----|-----|------|-----|----|-------|
| MX2-1/2-000015 | 3/8 | 289 | 74.5 | 140 | 70 | 104.5 |
| MX2-3/8-000015 | 1/2 | 289 | 74.5 | 140 | 70 | 104.5 |
| MX2-3/4-000015 | 3/4 | 289 | 74.5 | 140 | 70 | 104.5 |
| MX3-3/4-000015 | 3/4 | 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

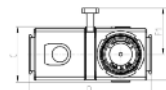
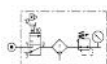
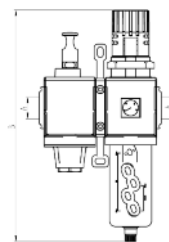
| Part Number | A | B | C | D | F1 | F2 |
|-----------------------|-----|-----|------|-------|----|-------|
| MX2-3/8-000016 | 3/8 | 289 | 74.5 | 210 | 70 | 104.5 |
| MX2-1/2-000016 | 1/2 | 289 | 74.5 | 210 | 70 | 104.5 |
| MX2-3/4-000016 | 3/4 | 289 | 74.5 | 210 | 70 | 104.5 |
| MX3-3/4-000016 | 3/4 | 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

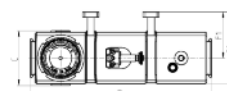
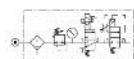
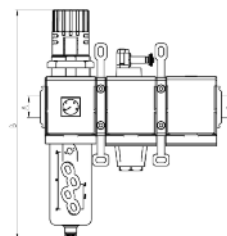
| Part Number | A | B | C | D | F1 | F2 |
|-----------------------|-----|-----|------|-----|----|-------|
| MX2-3/8-000017 | 3/8 | 289 | 74.5 | 140 | 70 | 104.5 |
| MX2-1/2-000017 | 1/2 | 289 | 74.5 | 140 | 70 | 104.5 |
| MX2-3/4-000017 | 3/4 | 289 | 74.5 | 140 | 70 | 104.5 |
| MX3-3/4-000017 | 3/4 | 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

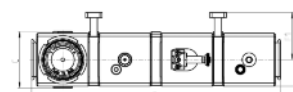
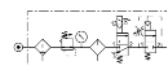
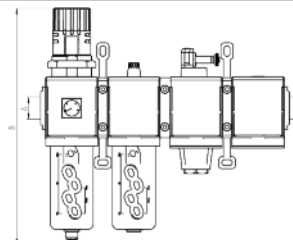
| Part Number | A | B | C | D | F1 | F2 |
|-----------------------|-----|-----|------|-------|----|-------|
| MX2-3/8-000018 | 3/8 | 289 | 74.5 | 210 | 70 | 104.5 |
| MX2-1/2-000018 | 1/2 | 289 | 74.5 | 210 | 70 | 104.5 |
| MX2-3/4-000018 | 3/4 | 289 | 74.5 | 210 | 70 | 104.5 |
| MX3-3/4-000018 | 3/4 | 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

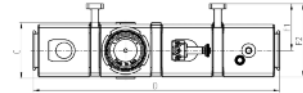
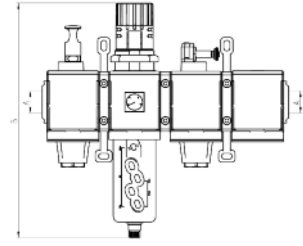
| Part Number | A | B | C | D | F1 | F2 |
|-----------------------|-----|-----|------|-----|----|-------|
| MX2-3/8-000019 | 3/8 | 289 | 74.5 | 280 | 70 | 104.5 |
| MX2-1/2-000019 | 1/2 | 289 | 74.5 | 280 | 70 | 104.5 |
| MX2-3/4-000019 | 3/4 | 289 | 74.5 | 280 | 70 | 104.5 |
| MX3-3/4-000019 | 3/4 | 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

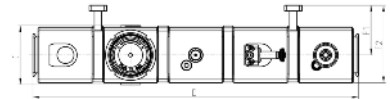
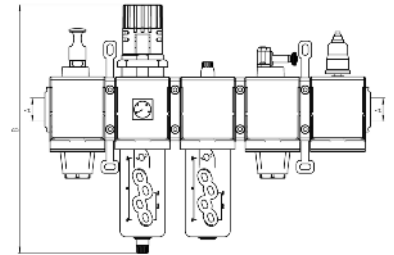
| Part Number | A | B | C | D | F1 | F2 |
|-----------------------|-----|-----|------|-----|----|-------|
| MX2-3/8-000020 | 3/8 | 289 | 74.5 | 280 | 70 | 104.5 |
| MX2-1/2-000020 | 1/2 | 289 | 74.5 | 280 | 70 | 104.5 |
| MX2-3/4-000020 | 3/4 | 289 | 74.5 | 280 | 70 | 104.5 |
| MX3-3/4-000020 | 3/4 | 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

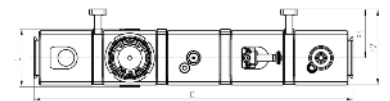
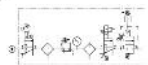
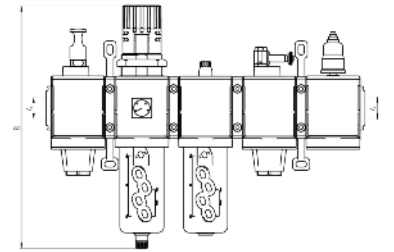
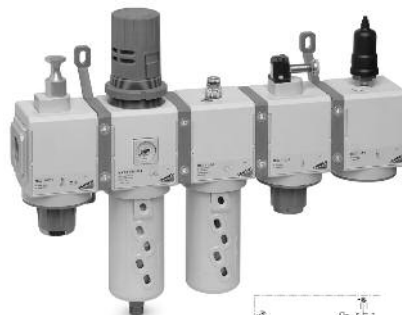
| Part Number | A | B | C | D | F1 | F2 |
|-----------------------|-----|-----|------|-------|----|-------|
| MX2-3/8-000021 | 3/8 | 289 | 74.5 | 350 | 70 | 104.5 |
| MX2-1/2-000021 | 1/2 | 289 | 74.5 | 350 | 70 | 104.5 |
| MX2-3/4-000021 | 3/4 | 289 | 74.5 | 350 | 70 | 104.5 |
| MX3-3/4-000021 | 3/4 | 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

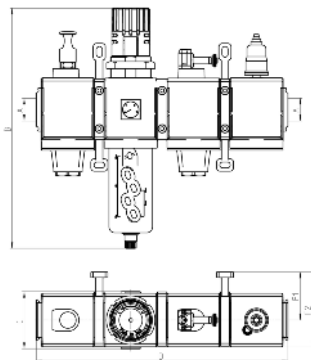
| Part Number | A | B | C | D | F1 | F2 |
|-----------------------|-----|-----|------|-------|----|-------|
| MX2-3/8-000022 | 3/8 | 289 | 74.5 | 350 | 70 | 104.5 |
| MX2-1/2-000022 | 1/2 | 289 | 74.5 | 350 | 70 | 104.5 |
| MX2-3/4-000022 | 3/4 | 289 | 74.5 | 350 | 70 | 104.5 |
| MX3-3/4-000022 | 3/4 | 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

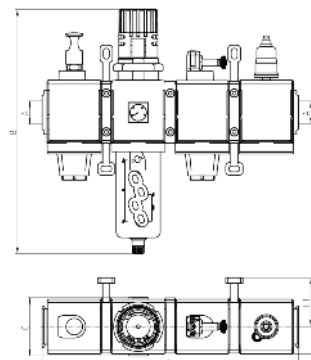
| Part Number | A | B | C | D | F1 | F2 |
|-----------------------|-----|-----|------|-----|----|-------|
| MX2-3/8-000023 | 3/8 | 289 | 74,5 | 280 | 70 | 104,5 |
| MX2-1/2-000023 | 1/2 | 289 | 74,5 | 280 | 70 | 104,5 |
| MX2-3/4-000023 | 3/4 | 289 | 74,5 | 280 | 70 | 104,5 |
| MX3-3/4-000023 | 3/4 | 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

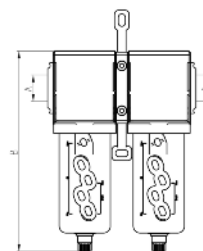
| Part Number | A | B | C | D | F1 | F2 |
|-----------------------|-----|-----|------|-----|----|-------|
| MX2-3/8-000024 | 3/8 | 289 | 74.5 | 280 | 70 | 104.5 |
| MX2-1/2-000024 | 1/2 | 289 | 74.5 | 280 | 70 | 104.5 |
| MX2-3/4-000024 | 3/4 | 289 | 74.5 | 280 | 70 | 104.5 |
| MX3-3/4-000024 | 3/4 | 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

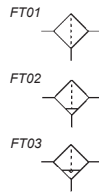


FILTER SET

| 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



CODING EXAMPLE

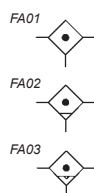
| | | | | | | |
|----|---|----|---|---|---|---|
| MC | 1 | 04 | - | F | 0 | 0 |
|----|---|----|---|---|---|---|

| | |
|------------------------------------|---|
| 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

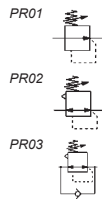
| | | | | | | |
|----|---|----|---|---|---|---|
| MC | 1 | 04 | - | F | B | 0 |
|----|---|----|---|---|---|---|

| | |
|------------------------------------|---|
| 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 |
|-----------|----------|-----------|----------|----------|-----------|

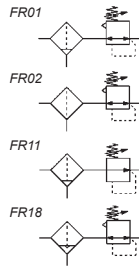
| | | | |
|-----------|--------------------------|-----------|-----------------------------------|
| MC | SERIES: MC | L | L = lubricator |
| 1 | SIZE: 1 = 1/4 | 00 | DESIGN TYPE: 00 = atomized oil |
| 04 | CONNECTIONS: 04 = 1/4 | | |

| | |
|-------------|------------------|
| Part Number | 1/4 MC104 L00 |
|-------------|------------------|

Series MC Filter/Regulator

Connections: 1/4
Compact (modular) with metal bowl and bayonet-type mounting

3



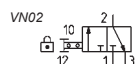
CODING EXAMPLE

| | | | | | | | | |
|-----------|--|-----------|----------|----------|----------|---|----------|----------|
| 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



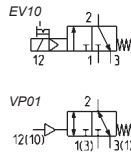
CODING EXAMPLE

| | | | | | | |
|-----------|--------------------------|-----------|----------|----------|-----------|---|
| 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) |

| | |
|-------------|------------------|
| 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

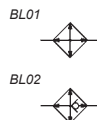
| | | | | |
|-----------|----------|-----------|----------|-----------|
| MC | 1 | 04 | - | AV |
|-----------|----------|-----------|----------|-----------|

| | |
|------------------------------------|---------------------------------|
| 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

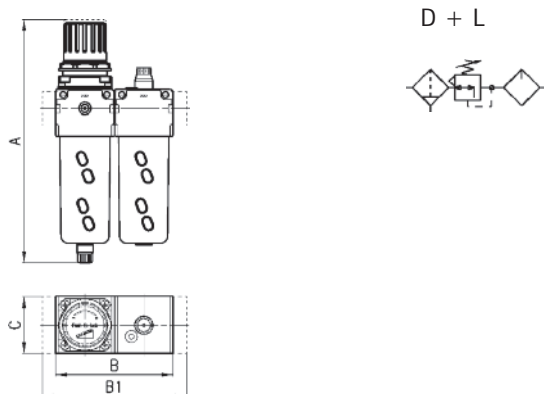
| | | | | | | | | |
|----|---|----|---|---|---|----|---|----|
| MC | 1 | 04 | - | C | - | 25 | - | FL |
|----|---|----|---|---|---|----|---|----|

| | | | |
|------------------------------------|--|--|--|
| 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 |

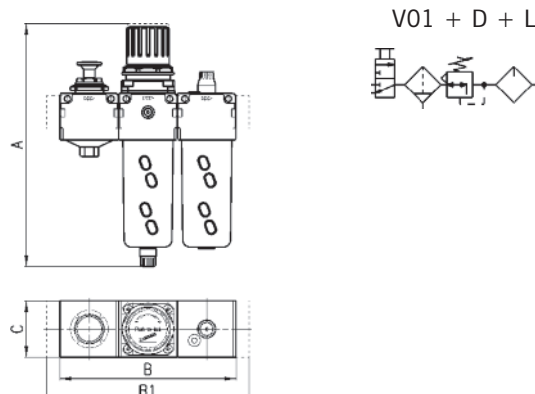
Assembly group C (see above for descriptions)



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)

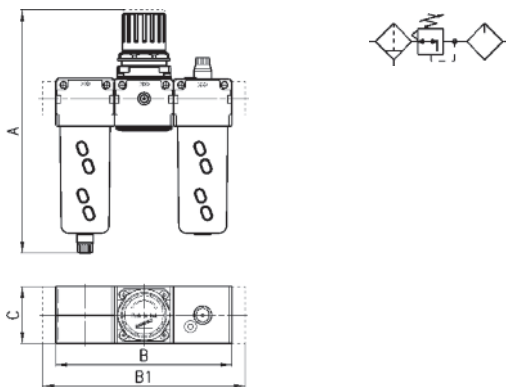


Including gauge and bracket

| 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



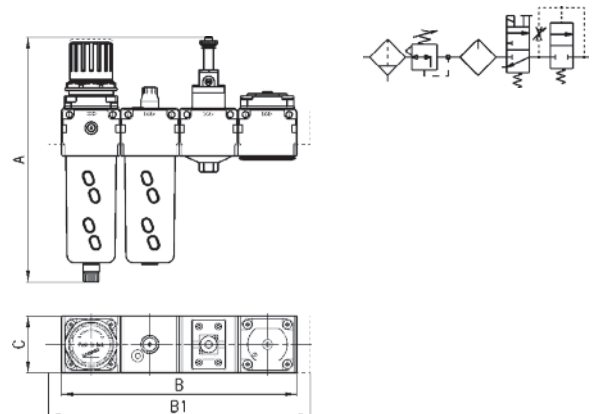
Including gauge and bracket

DIMENSIONS

| Part Number | A | B | B1 | C | Connection |
|----------------------|-------|-----|----|----|------------|
| MC104-FRL-25 | 193.5 | 135 | - | 45 | 1/4 |
| MC104-FRL-25-FL193.5 | - | 159 | 45 | 45 | 1/4 |

Assembly group GN (see page 3/18 for descriptions)

D + L + V16 + AV



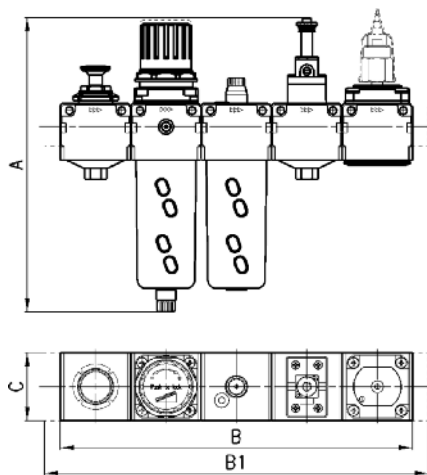
Including gauge and bracket

DIMENSIONS

| Part Number | A | B | B1 | C | Connection |
|--------------------|-----|-----|----|----|------------|
| MC104-GN-25 | 208 | 180 | - | 45 | 1/4 |
| MC104-GN-25-FL 208 | - | 204 | 45 | 45 | 1/4 |

Assembly group HN...

(see page 3/18 for descriptions)

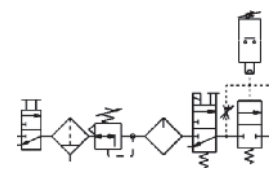


Including gauge and bracket

DIMENSIONS

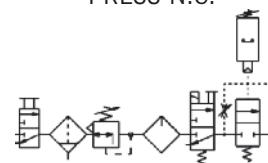
| Part Number | A | B | B1 | C | Connection |
|-----------------------|-----|-----|----|----|------------|
| MC104-HN...-25 | 208 | 225 | - | 45 | 1/4 |
| MC104-HN...-25-FL 208 | - | 249 | 45 | 45 | 1/4 |

V01 + D + L + V16 + AV + PRESS N.A.



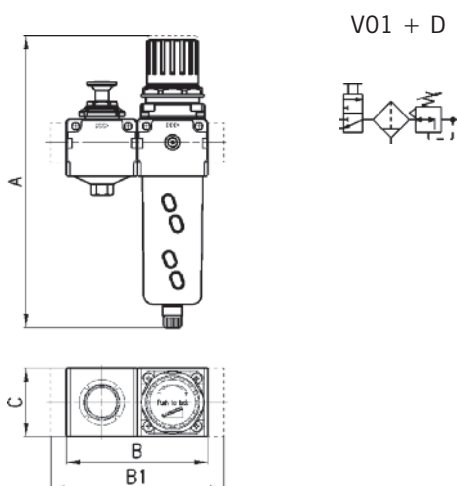
HNA
Pressure switch normally open

V01 + D + L + V16 + AV + PRESS N.C.



HNC
Pressure switch normally closed

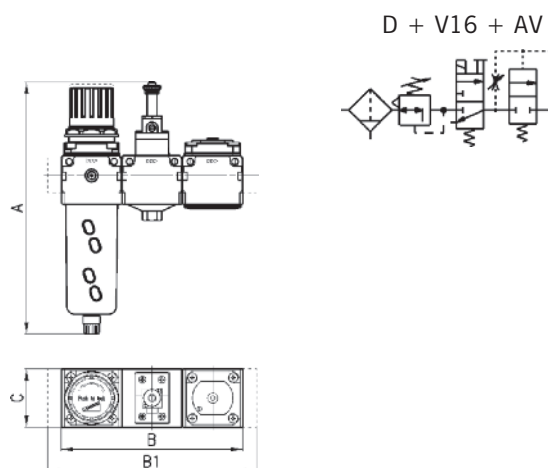
Assembly group N (see page 3/18 for descriptions)



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)

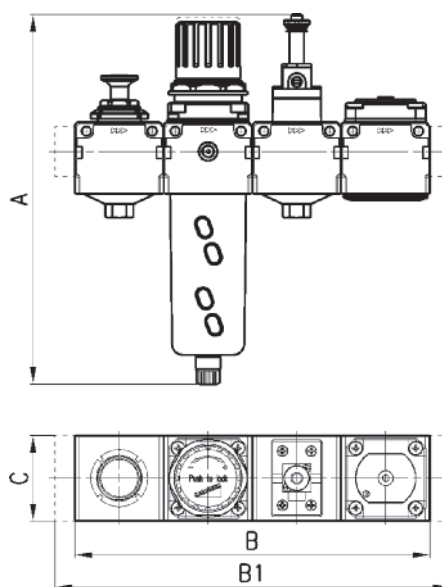
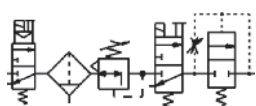


Including gauge and bracket

| 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



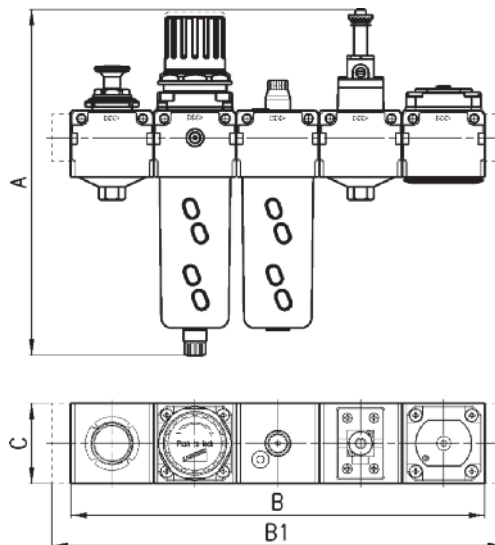
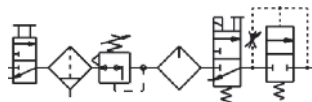
Including gauge and bracket

| 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



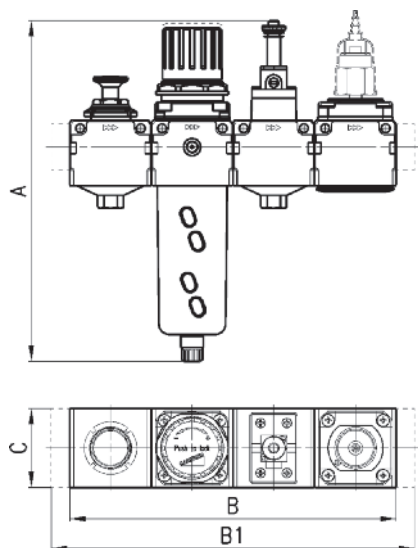
Including gauge and bracket

DIMENSIONS

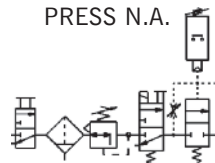
| Part number | A | B | B1 | C | Connection |
|----------------|-----|-----|-----|----|------------|
| MC104-TN-25 | 208 | 225 | - | 45 | 1/4 |
| MC104-TN-25-FL | 208 | - | 249 | 45 | 1/4 |

Assembly group ZN...

(see page 3/18 for descriptions)

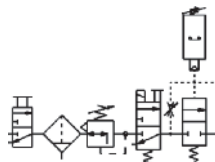


V01 + D + V16 + AV + PRESS N.A.



ZNA
Pressure switch normally open

V01 + D + V16 + AV + PRESS N.C.



ZNC
Pressure switch normally closed

Including gauge and bracket

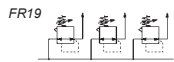
DIMENSIONS

| 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

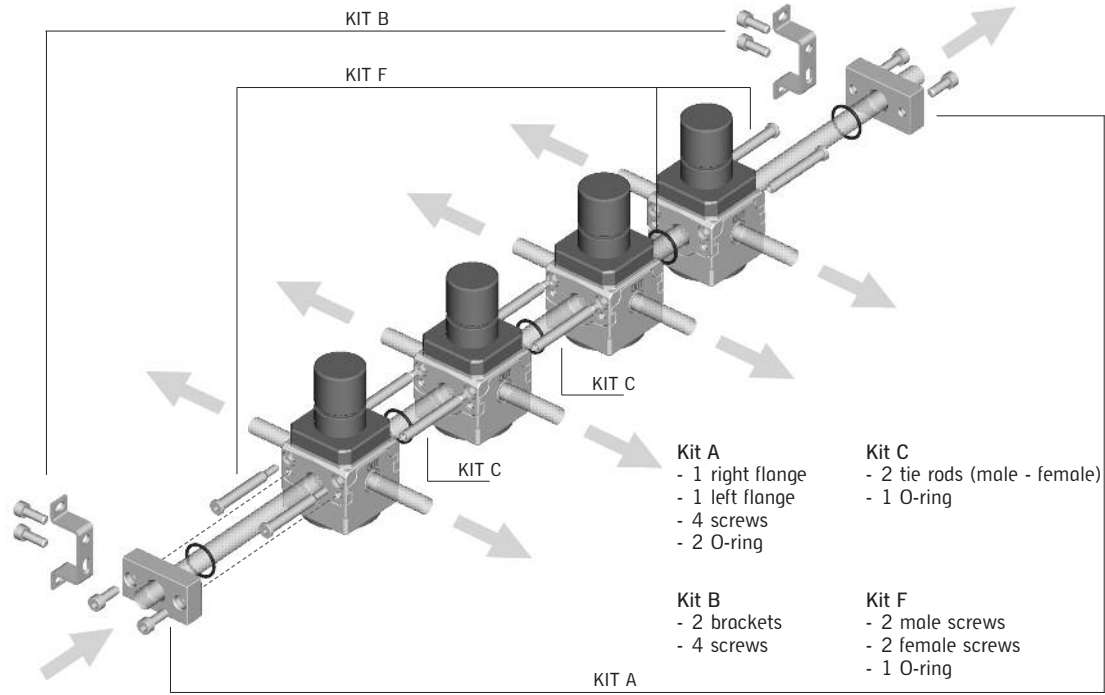
3



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

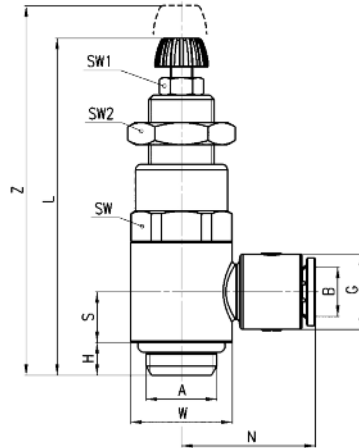


| Body | Kit |
|-------------------|-----------------------------------|
| H + H | 1 Kit "A" + 1 Kit "F" |
| H + H + H | 1 Kit "A" + 1 Kit "F" + 1 Kit "C" |
| H + H + H + H | 1 Kit "A" + 1 Kit "F" + 2 Kit "C" |
| H + H + H + H + H | 1 Kit "A" + 1 Kit "F" + 3 Kit "C" |

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.

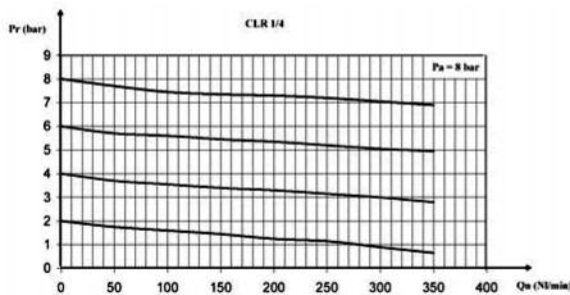
CODING EXAMPLE

| | | | | |
|-----------|----------|------------|----------|----------|
| CL | R | 1/8 | - | 4 |
|-----------|----------|------------|----------|----------|

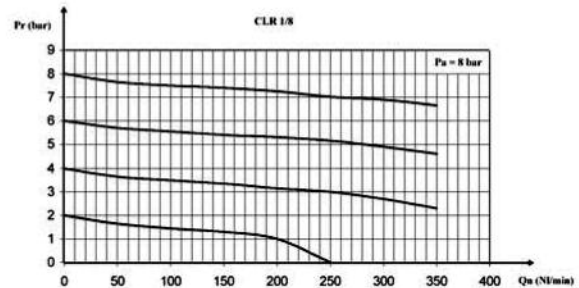
| | |
|------------------------|---|
| CL SERIES: CL | 1/8 CONNECTIONS: 1/8, 1/4 |
| R R = regulator | 4 DIAMETER: Ø4 (1/8 only) Ø6 Ø8 |

| 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

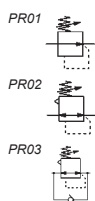


Flow diagram for models: CLR 1/8
 Pa = Inlet pressure (10 Bar)
 Pr = Regulated pressure
 Qn = Flow

Series M Pressure Micro Regulator

Connections: 1/8, 1/4

3



*High relief flow available on request

CODING EXAMPLE

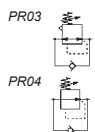
| | | | | | | | |
|---|---|----|---|---|---|---|---|
| M | 0 | 04 | - | R | 0 | 0 | - |
|---|---|----|---|---|---|---|---|

| | | | |
|-----------|--------------------------------------|----------|---|
| 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 | N004 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

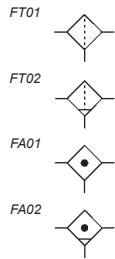
| | | | | | | |
|---|---|----|---|---|---|---|
| T | 1 | 08 | - | R | 0 | 0 |
|---|---|----|---|---|---|---|

| | | | |
|-----------|--------------------------------------|----------|---|
| 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 |

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

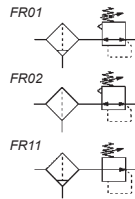
| | | | | | |
|---|---|----|---|---|----|
| N | 2 | 04 | - | L | 00 |
|---|---|----|---|---|----|

| | | | |
|-----------|--|-----------|-----------------------------------|
| 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



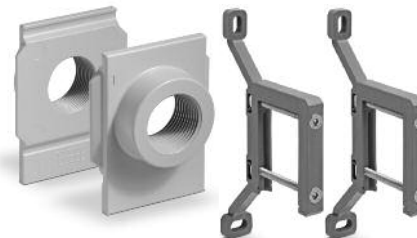
| |
|--------------|
| Part Number |
| MX2-S |
| MX3-S |

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* | *kit with wall fixing screw |
| MX2-3/4-JJ* | |

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)



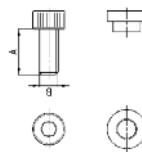
Part Number Connection
C114-ST/1

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



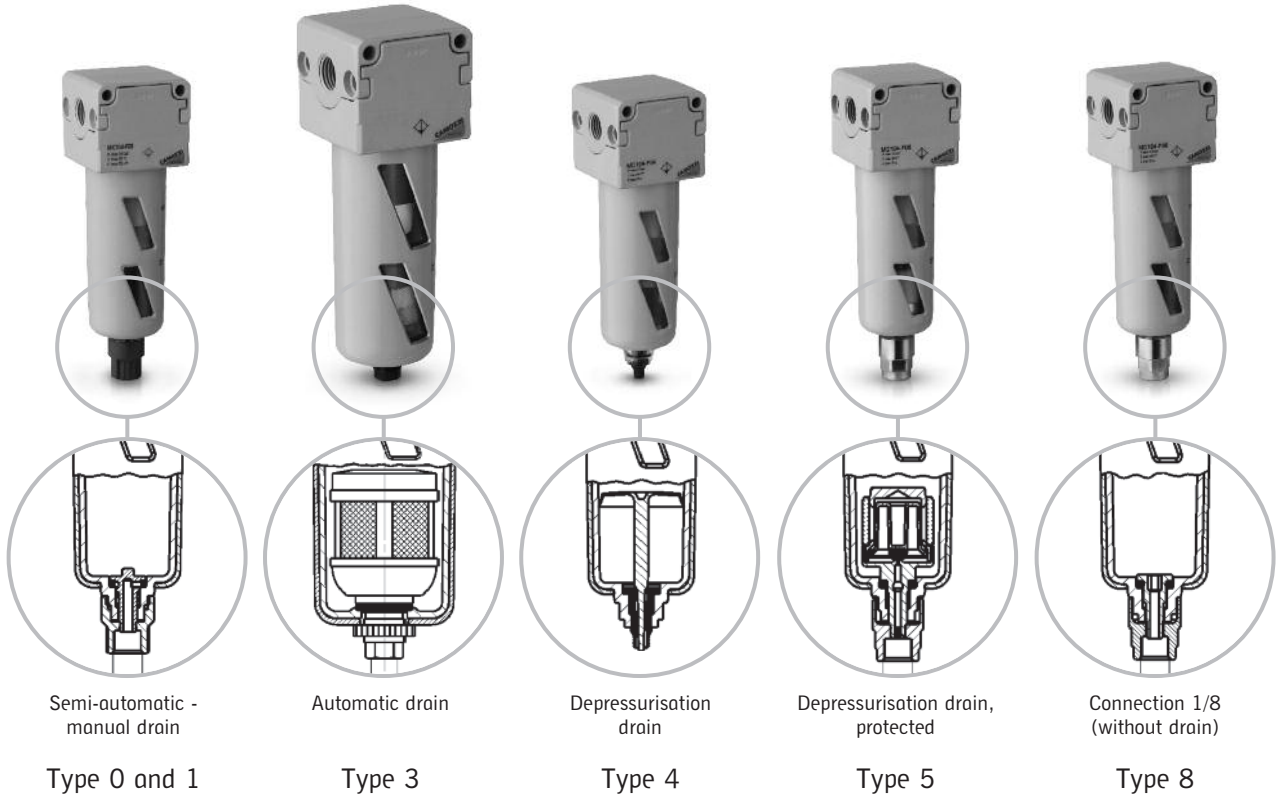
Part Number
MC1-VMD

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

Air Treatment Box Sets - 1/4, 3/8, 1/2, 3/4 and 1"



**Filter, Regulator
Box Set**



**Filter, Regulator and Lubricator
Box Set**

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Super-Rapid Fittings



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Series 6000
**Super-Rapid Fittings
For Plastic Tubes**



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Series 7000
**Super-Rapid Compact™ Fittings
in Technopolymer**



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Series 8000
Dual Seal Push-In Fittings



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Series X6000
**Super-Rapid Fittings
in Stainless Steel**

Rapid Fittings



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Series 1000
**Rapid Fittings
 for Plastic Tubes**

Quick-Release Couplings



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Series 5000
Quick-Release Couplings

Compression Fittings



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Series 1000
Compression Fittings

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Fittings Accessories



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Series S2000
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Series 2000
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316 Stainless Steel
Pipe Fittings



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**Brass Hose Tails
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**Aluminium Distribution
 Manifold Blocks**

NPT Fittings



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**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[®]



| 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



Note:
with O-Ring

| 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[®]



| 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



Note:
with O-Ring

| 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 |

Sprint[®]



| 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

Sprint[®]



| |
|-----------------------|
| 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

Sprint[®]



| |
|-------------------|
| 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* |

*model without mounting holes



| 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 |



| 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



| 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 |

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) |
| |

Pneumatic Fittings Kits



Brass



Mixed (Brass & Plastic)



Each box is available in 4, 6, 8 & 10mm versions

Contains the Most popular Super-Rapid Push-In Fittings

All Parts Listed for Easy Replacement

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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 |



| 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 |



| Blanking Nut - Parallel |
|-------------------------|
| 2613 1/8 |
| 2613 1/4 |
| 2613 3/8 |
| 2613 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



| 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 |

CONNECTION

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 |

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.

4

CONNECTION



| 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 |
| 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 |

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) |

C-Truck Air Brake Fittings Boxes



Straight Tube to Tube Fittings Box



Mixed Tube to Tube Fittings Box



Each box contains tube to tube connectors, the most widely used type of air brake fitting. These boxes are designed to fully equip fitters as only the most popular tube to tube combinations and sizes are included.

Safe and Strong

Fast and Repeatable Connection

Wide Range



Call the Camozzi Sales Office Today to Place Your Order:



024 7637 4114







Camozzi
Air that moves the world.

www.camozzi.co.uk





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 |

CONNECTION

4



| 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) Bellows Suction Pads
(round)



5 / 3

Series VTCN
(2.5 fold) Bellows 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 | DL VERSION: DL = Inline light | 05 NOZZLE DIAMETER (mm): 05 = 0.5 mm 07 = 0.7 mm | 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

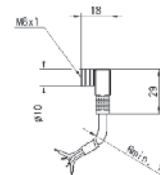
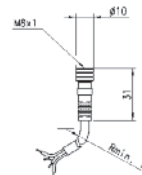
| | |
|--------------------|-----------------------------|
| VEC-10/15-A | A = version Normally Open |
| VEC-10/15-C | C = version Normally Closed |
| VEC-20/25-A | A = version Normally Open |
| VEC-20/25-C | C = version Normally Closed |

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.



5

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

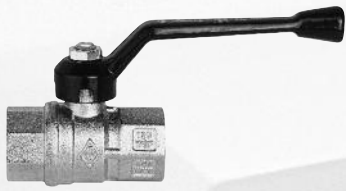
Mounting Foot Bracket

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



6 / 12

**Brass Ball Valves
Three-Way**

Direct Mount Ball Valves (for actuation)



6 / 8

**Brass Ball Valves
- with ISO Pad**



6 / 9

**Stainless Steel Ball Valves
- with ISO Pad**

Non-Return Valves



6 / 13

Non-Return Valves

Exhausting Brass Ball Valves



6 / 10

**Brass Ball Valves
- Exhausting**



6 / 11

Lockable Safety Ball Valve

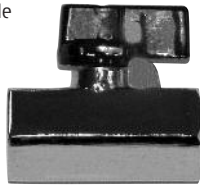
Mini Ball Valves - Economy

Connections: 1/4, 3/8, 1/2

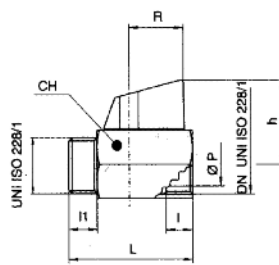
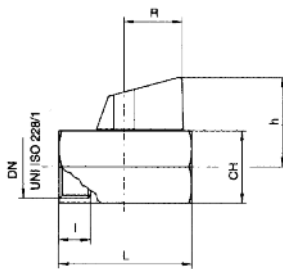
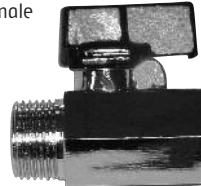
6

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 | DN | 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 | DN | 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

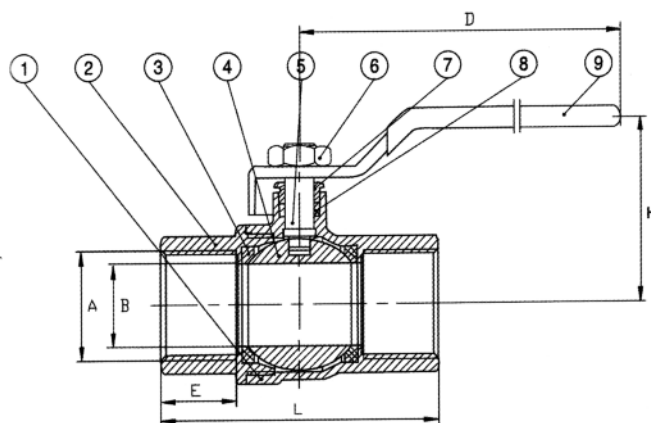
Brass Ball Valves - Economy

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.

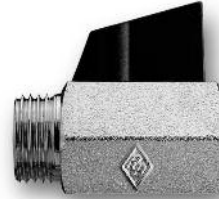
6

BALL VALVES & NON RETURN VALVES

Part Number: 3830*
Lever - Female/Female



Part Number: 3831*
Lever - Male/Female



Part Number: 3730*
Lever - Female/Female



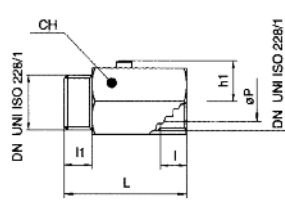
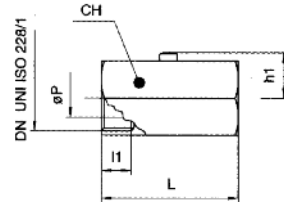
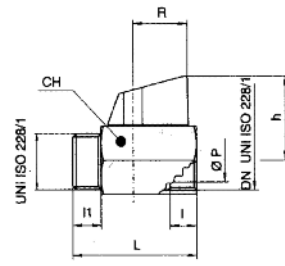
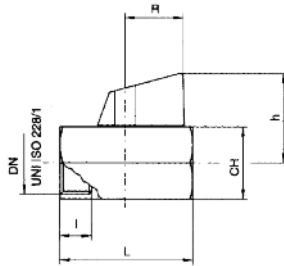
Part Number: 3731*
Lever - Male/Female



Part Number: 3860*
Screwdriver - Female/Female



Part Number: 3861*
Screwdriver - Male/Female



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 |

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.

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



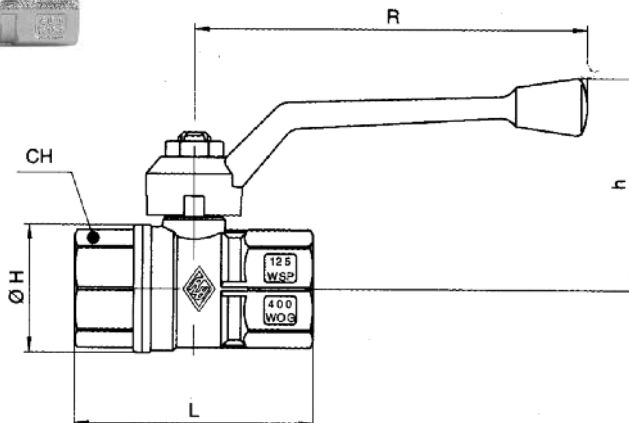
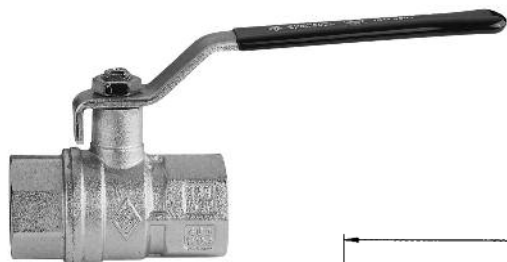
Part Number: 1620* (1/4 - 1 only)
Aluminium Butterfly Handle - Female/Female



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

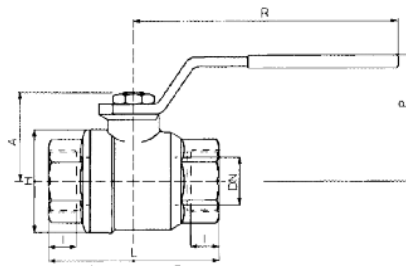
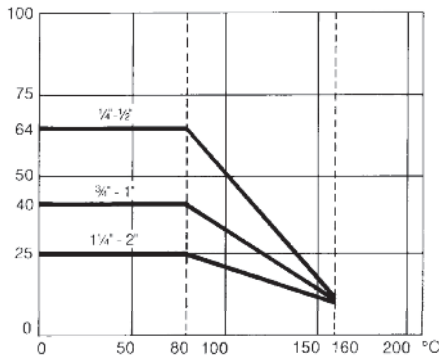
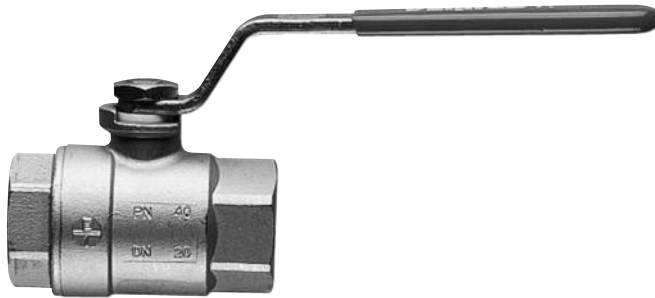
Connections: 1/4, 3/8, 1/2, 3/4, 1, 1 1/4, 1 1/2, 2

BALL VALVES & NON RETURN VALVES

6

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.

Part Number: 704000*



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.

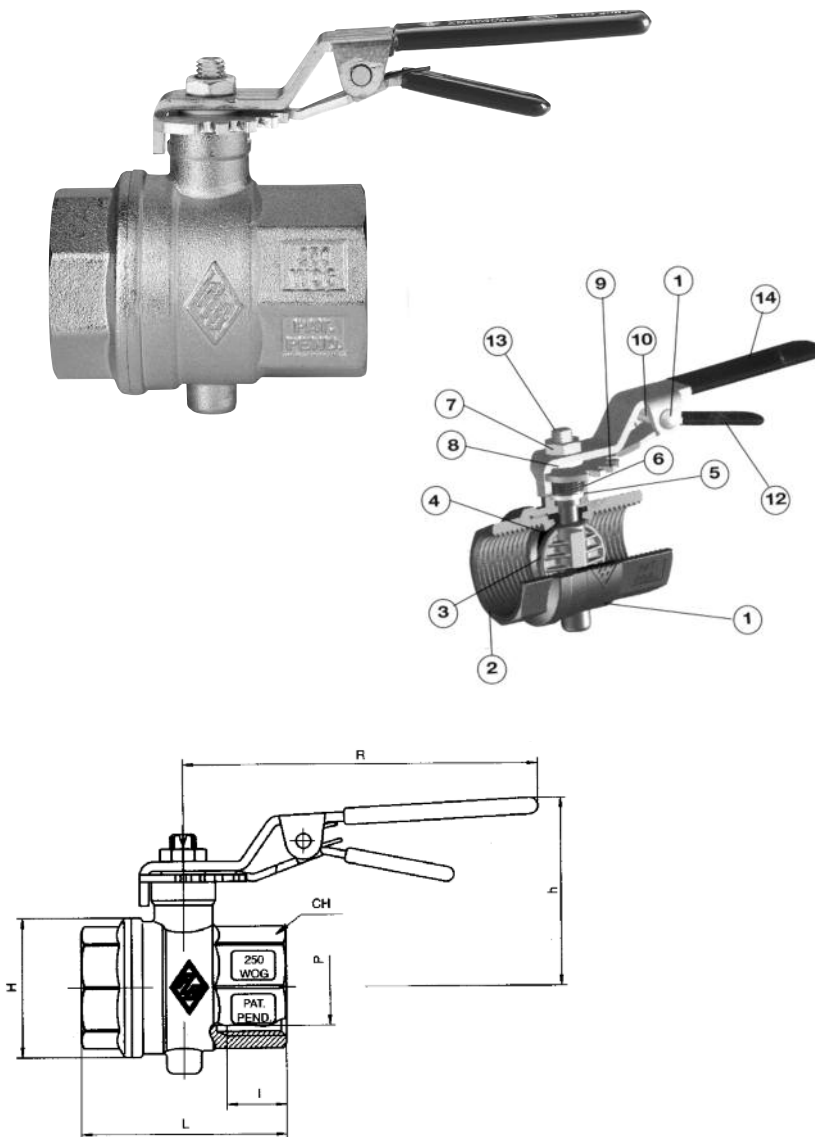
Eurofly Valves

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-polyethereimide.
- 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.

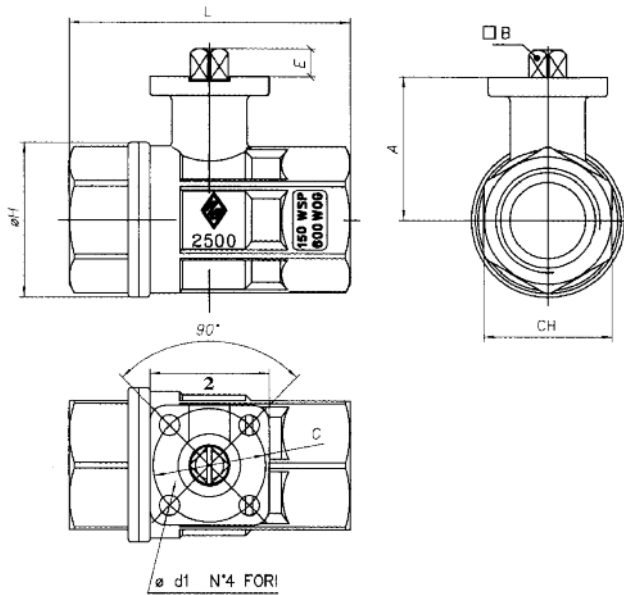
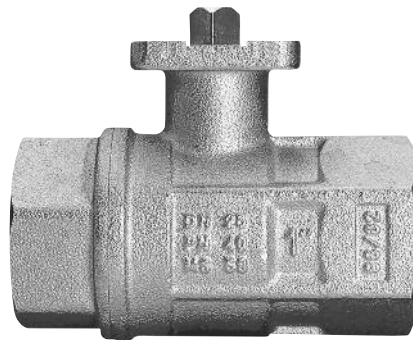
Brass Ball Valves - with ISO Pad

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.

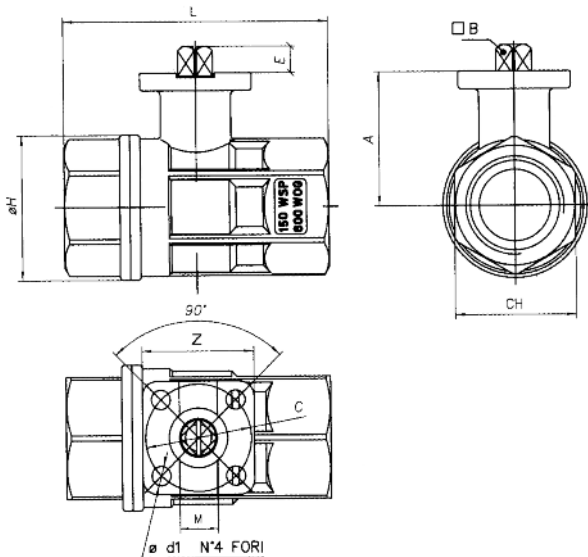
Stainless Steel Ball Valves - with ISO Pad

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*



| 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 |

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

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.

Brass Ball Valves - Exhausting

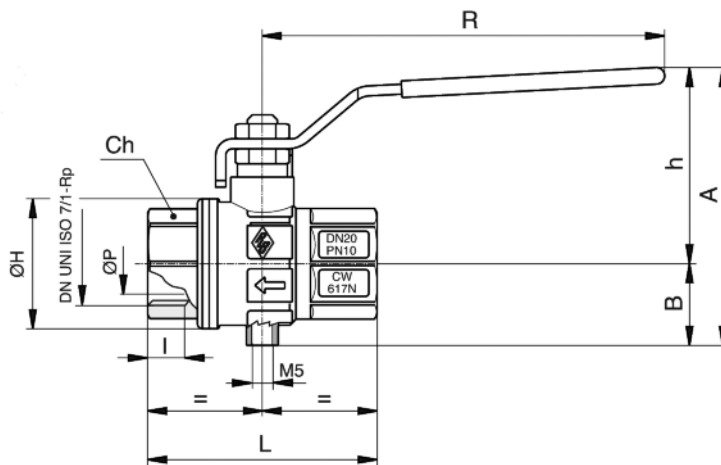
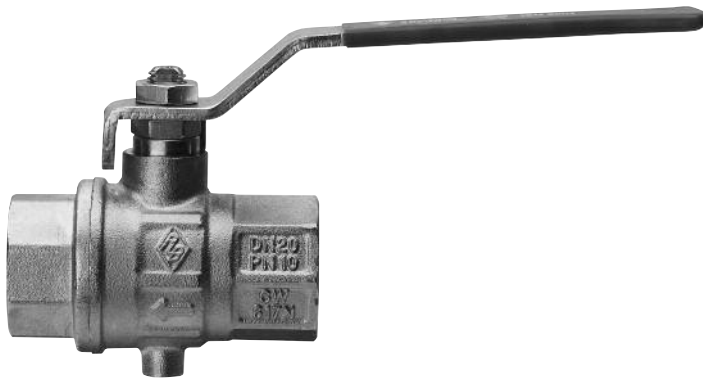
Connections: 1/4, 3/8, 1/2, 3/4, 1

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

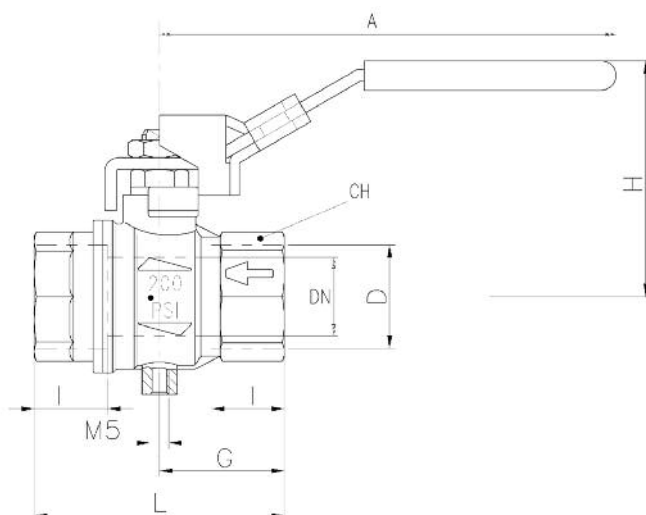
For assistance, contact our technical office or your local Camozzi distributor.

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

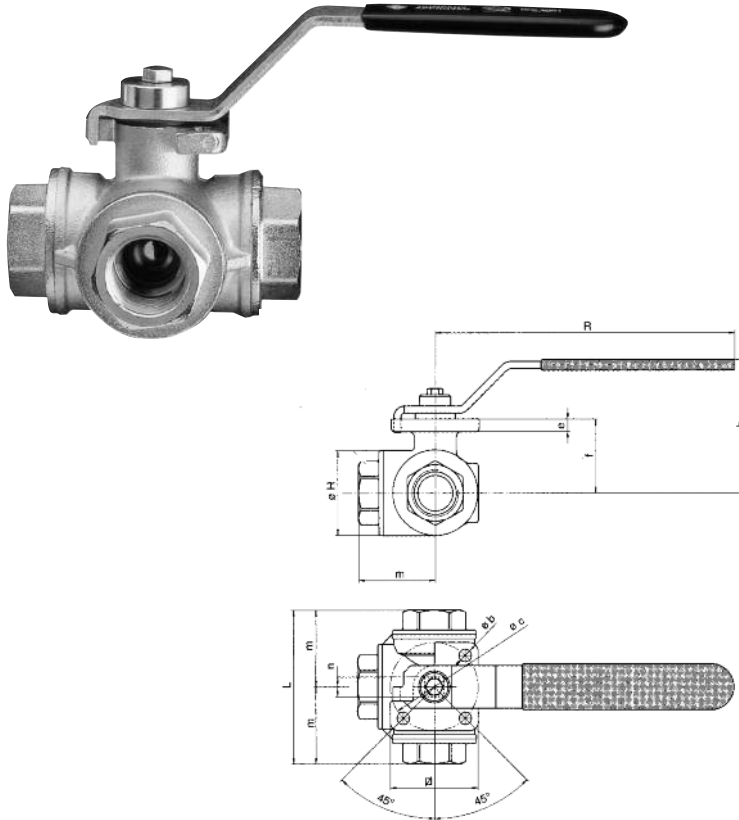
Connections: 1/4, 3/8, 1/2, 3/4, 1, 1 1/4, 1 1/2, 2

6

BALL VALVES & NON RETURN VALVES

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

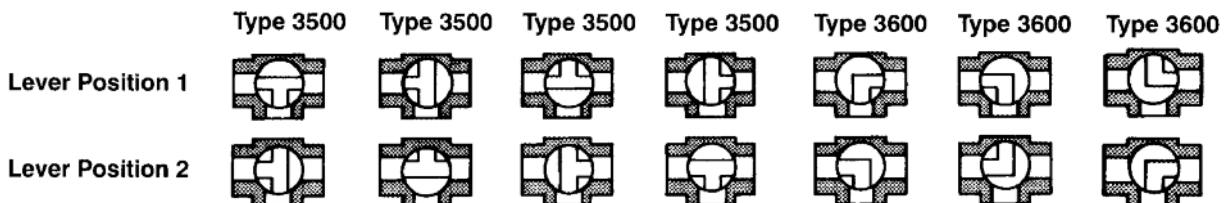
Additional Options
NPTF - NPT

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)

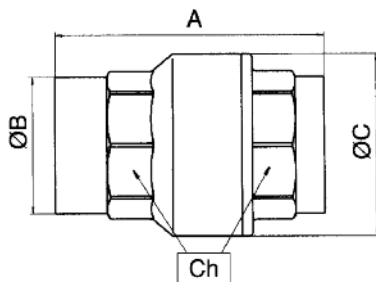


Non-Return Valves

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 | 40 | 0.09 |
| *04 | 1/2 | 15 | 59 | 25 | 34.5 | 25 | 5.2 | 40 | 0.14 |
| *05 | 3/4 | 20 | 65 | 30.5 | 42 | 31 | 9.4 | 40 | 0.21 |
| *06 | 1 | 25 | 75 | 37.5 | 49 | 38 | 14.5 | 25 | 0.32 |
| *07 | 1 1/4 | 32 | 83 | 47.5 | 61 | 48 | 23.5 | 25 | 0.53 |
| *08 | 1 1/2 | 40 | 89 | 53.5 | 73 | 54 | 33.5 | 16 | 0.75 |
| *10 | 2 | 50 | 101.5 | 68 | 88 | 67 | 52 | 16 | 1.13 |
| *12 | 2 1/2 | 65 | 121 | 82 | 111.5 | 83 | 84.3 | 12 | 2.00 |
| *14 | 3 | 80 | 136 | 97.5 | 133 | 98 | 135.4 | 12 | 3.12 |
| *18 | 4 | 100 | 158 | 127 | 163 | 128 | 193.2 | 10 | 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

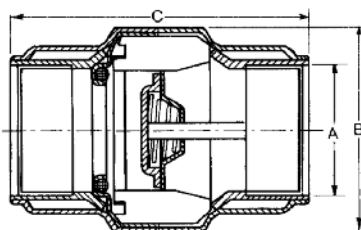
Materials
Body: Brass
Seals: NBR

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 | 95 |
| *3/4 | 45 | 72 | 16 | 142 |
| *1 | 53 | 88 | 16 | 197 |
| *1 1/4 | 62 | 99 | 16 | 320 |
| *1 1/2 | 78 | 117 | 16 | 400 |
| *2 | 85 | 115 | 16 | 676 |
| *2 1/2 | 106 | 127 | 16 | 1075 |
| *3 | 128 | 140 | 16 | 1630 |
| *4 | 163 | 167 | 16 | 2770 |

Technical Data

Media
Suitable for a wide range of fluids including hard hot water, hydrocarbons, corrosive and abrasive liquids

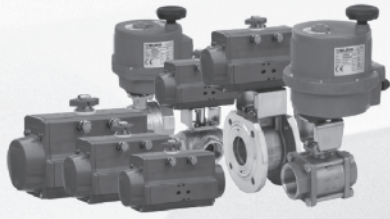
Opening Pressure
0.03 BAR

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



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Electrically Actuated Three-Way Brass Ball Valves

Knife Gate Valves

| | | | |
|---|--------|----------------------|---|
|  | 7 / 10 | Manual Hand Wheel |  |
|  | 7 / 11 | Air Actuated |  |


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 |  |

Accessories

| | | | |
|---|--------|---------------------------|--|
|  | 7 / 24 | Series NA NAMUR Valves | |
|---|--------|---------------------------|--|

Butterfly Valves - Manual

Wafer Types 600104 & 600105

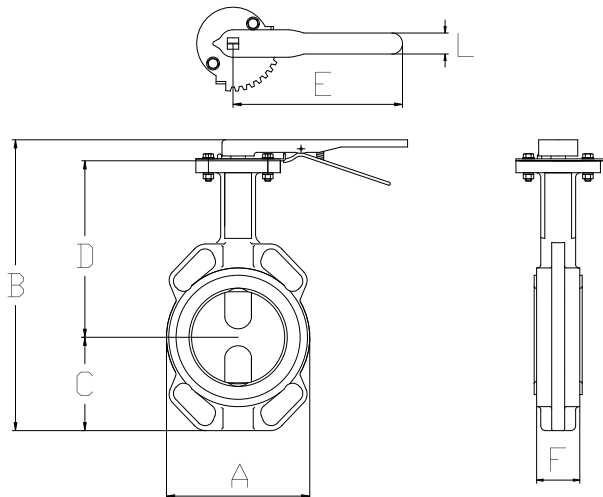
7

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



Also available with limit switch box



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

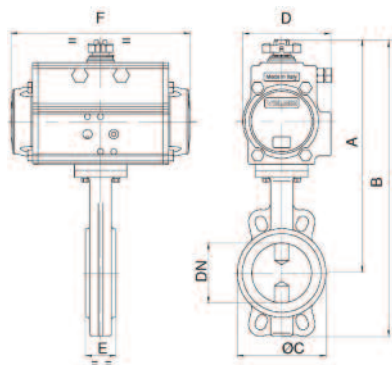
PROCESS VALVES & ACTUATION

Butterfly Valves - Actuated

Actuated 'Wafer' Type Cast Iron

Cast Iron 'Wafer' Pattern Butterfly Valve with Cast Iron and Stainless Steel Disc options, fitted with Pneumatic Actuator. For Valve details refer to types 600104 and 600105 on page 7/2.

Part Number: 8P0097*
8P0101*
8P0098*
8P0102*



Valve Mounted on Double Acting Actuator.

Types 8P009700* } GGG 40 Disc
 } EPDM Liner
 } 8P010100* } CF8M Disc
 } EPDM Liner

| Dimensions (mm) | | | | | | | | | |
|-----------------|-----|----|-----|-----|-----|-----|----|-----|-------|
| Size | DN | PN | A | B | ØC | D | E | F | ACT |
| *07 | 32 | 16 | 224 | 282 | 85 | 71 | 33 | 141 | DA52 |
| *08 | 40 | 16 | 224 | 294 | 95 | 71 | 33 | 141 | DA52 |
| *10 | 50 | 16 | 255 | 326 | 100 | 71 | 43 | 141 | DA52 |
| *12 | 65 | 16 | 267 | 345 | 120 | 71 | 46 | 141 | DA52 |
| *14 | 80 | 16 | 281 | 370 | 127 | 81 | 46 | 164 | DA63 |
| *18 | 100 | 16 | 315 | 417 | 161 | 95 | 52 | 210 | DA75 |
| *19 | 125 | 16 | 327 | 450 | 190 | 95 | 56 | 210 | DA75 |
| *20 | 150 | 16 | 355 | 493 | 215 | 106 | 56 | 241 | DA85 |
| *21 | 200 | 16 | 410 | 578 | 268 | 123 | 60 | 275 | DA100 |
| *77 | 250 | 16 | 471 | 678 | 325 | 137 | 68 | 333 | DA115 |
| *78 | 300 | 16 | 593 | 837 | 400 | 148 | 78 | 372 | DA125 |

Valve Mounted on Single Acting Actuator.

Types 8P009800* } GGG 40 Disc
 } EPDM Liner
 } 8P010200* } CF8M Disc
 } EPDM Liner

| Dimensions (mm) | | | | | | | | | |
|-----------------|------|----|-----|-----|-----|-----|----|-----|-------|
| Size | DN | PN | A | B | ØC | D | E | F | ACT |
| *07 | 32 | 16 | 231 | 290 | 85 | 81 | 33 | 164 | SR63 |
| *08 | 40 | 16 | 235 | 305 | 95 | 81 | 33 | 164 | SR63 |
| *10 | 50 | 16 | 266 | 338 | 100 | 81 | 43 | 164 | SR63 |
| *12 | 65 | 16 | 279 | 357 | 120 | 81 | 46 | 164 | SR63 |
| *14 | 80 | 16 | 312 | 401 | 127 | 106 | 46 | 241 | SR85 |
| *18 | 100 | 16 | 328 | 430 | 161 | 106 | 52 | 241 | SR85 |
| *19 | 125 | 16 | 354 | 477 | 190 | 123 | 56 | 275 | SR100 |
| *20 | 150 | 16 | 366 | 504 | 215 | 123 | 56 | 275 | SR100 |
| *21 | 200* | 16 | 469 | 637 | 268 | 164 | 60 | 435 | SR140 |
| *77 | 250* | 16 | 524 | 731 | 325 | 186 | 68 | 500 | SR160 |
| *78 | 300* | 16 | 565 | 808 | 400 | 186 | 78 | 500 | SR160 |

Valve design may vary from type shown

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 Rate

PN16 / AISI 150

Materials

For valve details refer to page 7/2

Additional Options

Limit switch boxes for open/closed position indication.

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.

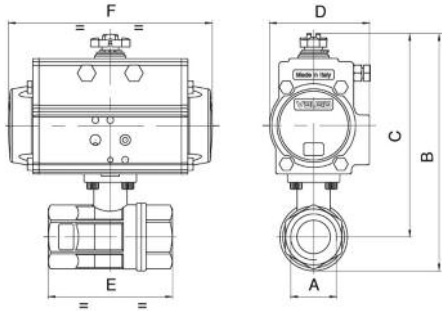


Also available in Lugged Pattern

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

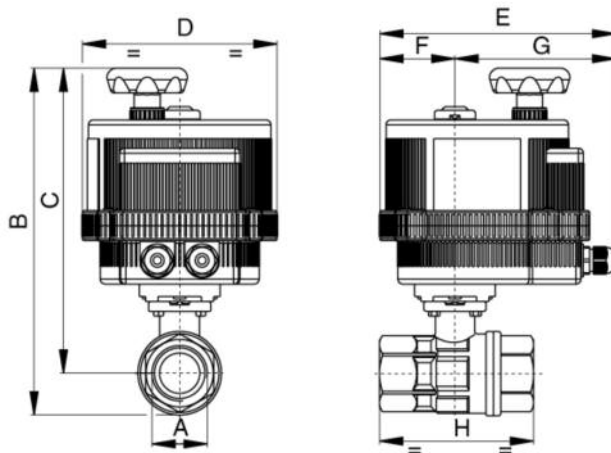


Limit switch box

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** *



Voltage Supply Order Code

| | | | |
|--------------------|--------------------|-----------|-------------|
| For Mod. VB015 | 12V AC/DC **001 | 24V AC/DC | 100-240V AC |
| For Mod. VB030-350 | 12V DC **001 | **002 | **004 |

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 |

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

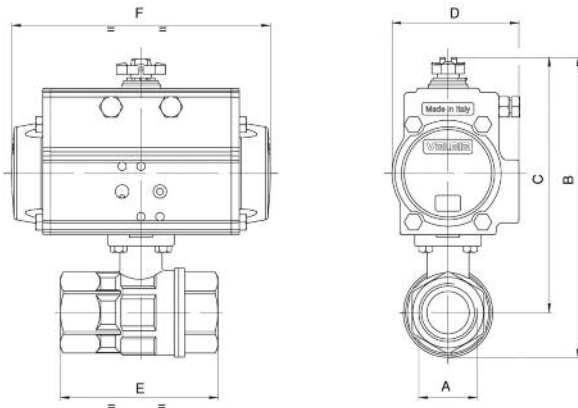
Special Requests

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

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



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 |

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

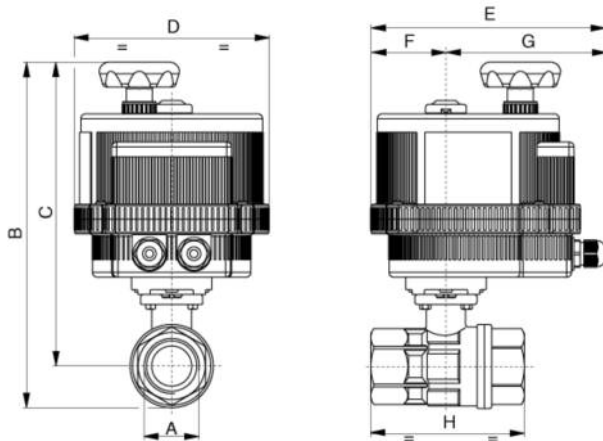


Limit switch box

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)

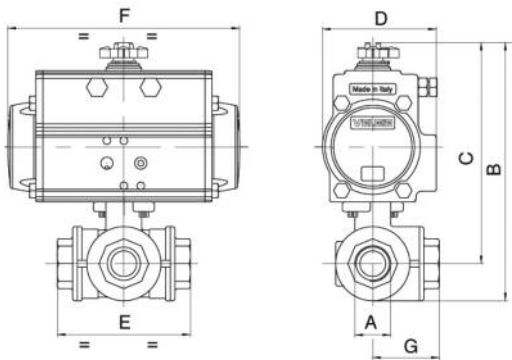
| Size | Thread | DN | PN | B | C | D | E | F | G | H | Elect. ACT |
|------|--------|----|----|-----|-----|-----|-----|----|-----|-----|------------|
| *04 | 1/2 | 15 | 64 | 192 | 175 | 123 | 164 | 43 | 121 | 67 | VB 015 |
| *05 | 3/4 | 20 | 64 | 198 | 177 | 123 | 164 | 43 | 121 | 78 | VB 015 |
| *06 | 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



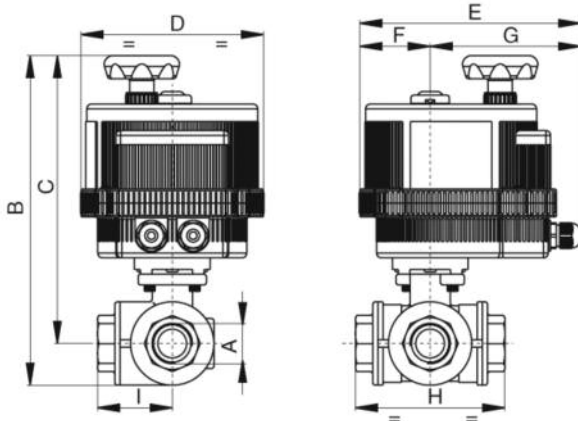
Limit switch box

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 | **002 | **004 |
| | **001 | | |

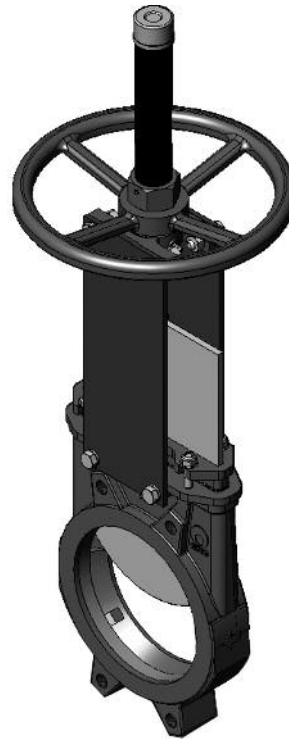
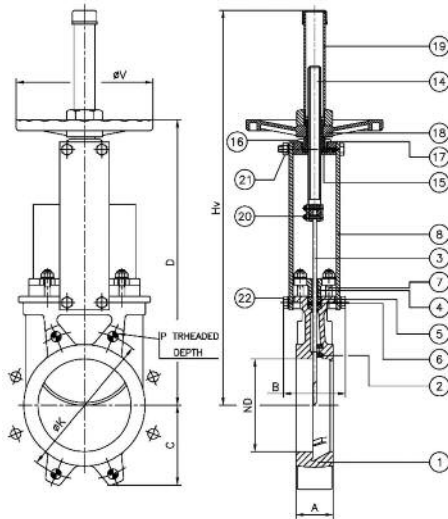
| Dimensions (mm) | | | | | | | | | | | | |
|-----------------|--------|----|----|-----|-----|-----|-----|----|-----|-----|----|------------|
| Size | Thread | DN | PN | B | C | D | E | F | G | H | I | Elect. ACT |
| *02 | 1/4 | 8 | 30 | 190 | 173 | 123 | 164 | 43 | 121 | 67 | 34 | VB 015 |
| *03 | 3/8 | 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)

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

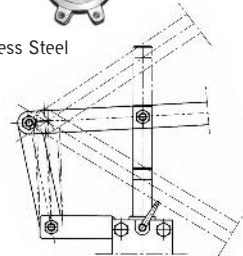
Materials

- 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.

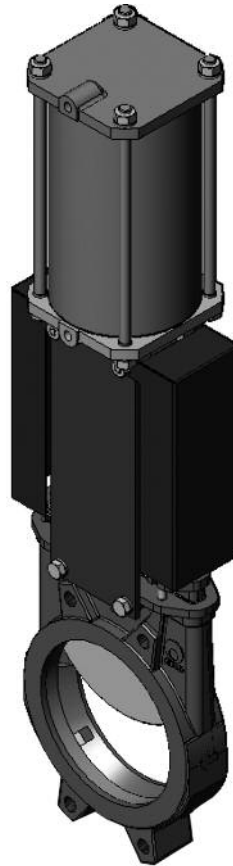
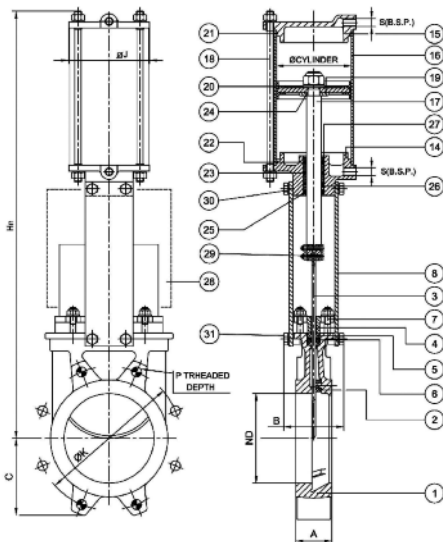
Dimensions (mm)

| | 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



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 O-Ring: Nitrile
- ㉔ Scraper: Steel + Nitrile
- ㉕ Guide Sleeve: Nylon
- ㉖ Elastic Ring: Steel
- ㉗ Protect. (Optional): Steel
- ㉘ Bolts/Nuts/Washers: 304
- ㉙ Bolts/Nuts/Washers: Steel
- ㉚ Bolts/Washers: Steel

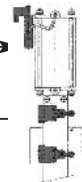
Additional Options



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.

| 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 | - |

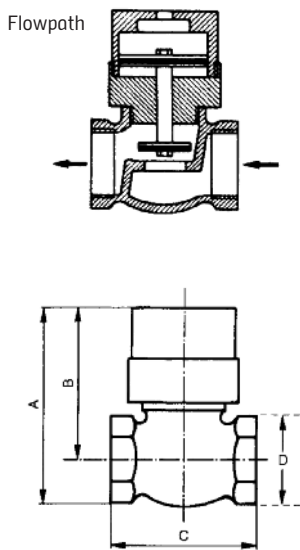
Pneumatically Operated Globe Valves

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)



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.

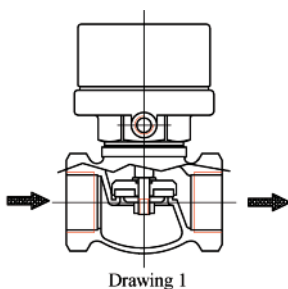
**DIFFERENTIAL PRESSURE CHART
 DOUBLE ACTING
 VERSION**

**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 |

'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.



**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 |

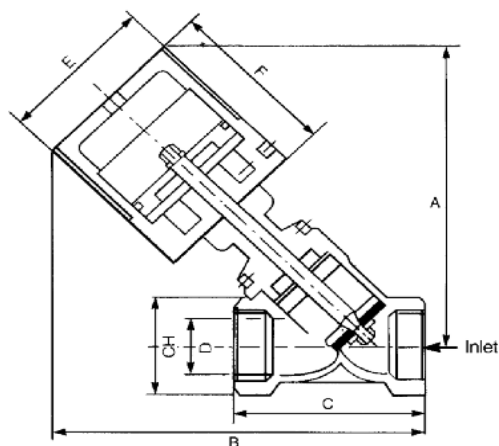
New

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.

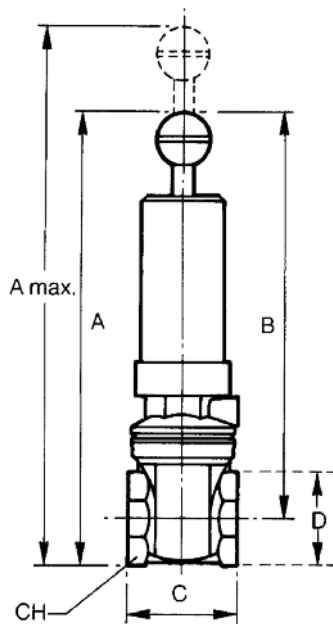
7

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

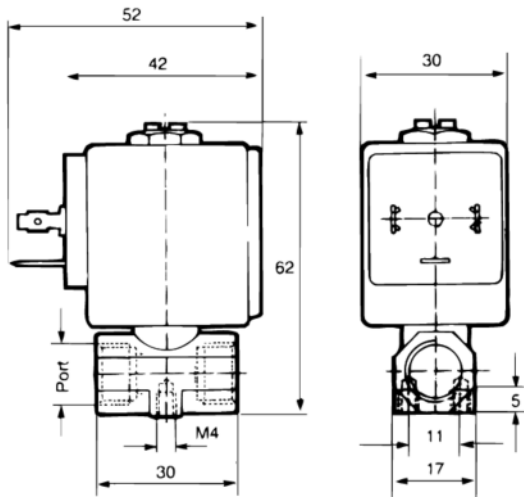
- Media**
Simple low cost on-off valve for non-aggressive liquids
- Operating Pressure**
Please contact our technical office
- Operating Temperature**
-20°C to +80°C
- Threads**
ISO 228 f/f
- Materials**
Valve Body: Brass OT58
Seals: Metal-to-metal
Stem: Stainless Steel
Body Gasket: Fibre
- Actuation 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

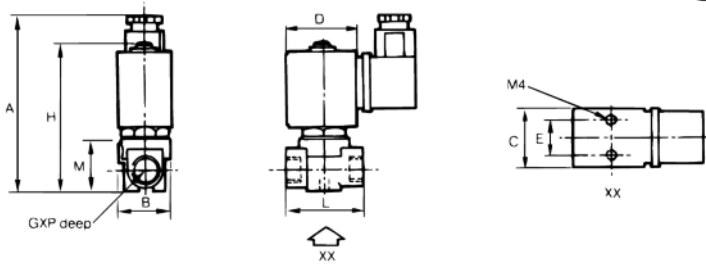
See pages 2/48 and 2/49

Solenoid Valves - Direct Acting

Connections: 1/4
 Operation: Direct Acting 2/2 NC or NO

7

PROCESS VALVES & ACTUATION



| 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 |

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
 BSSP 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.



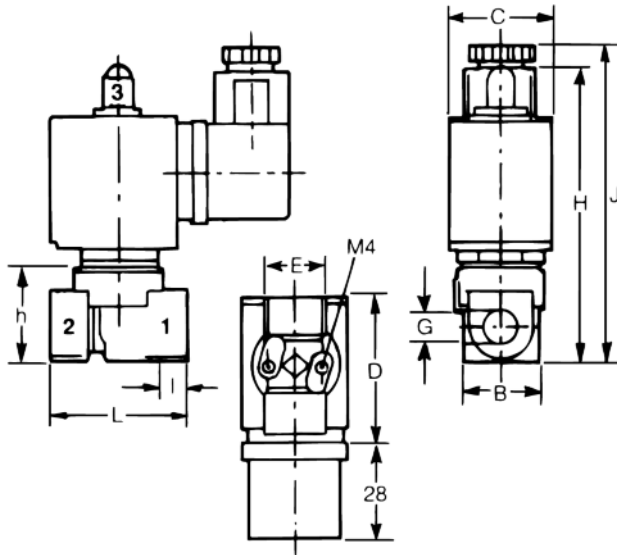
For Moulded Connectors

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 |

| 3/2 Direct - Acting Solenoid Valves | | | | |
|-------------------------------------|------|-----------|----------------------|----|
| | Size | Orifice | Pressure Range (bar) | |
| | | Ø mm | 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 |

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.



For Moulded Connectors
See pages 2/50 and 2/51

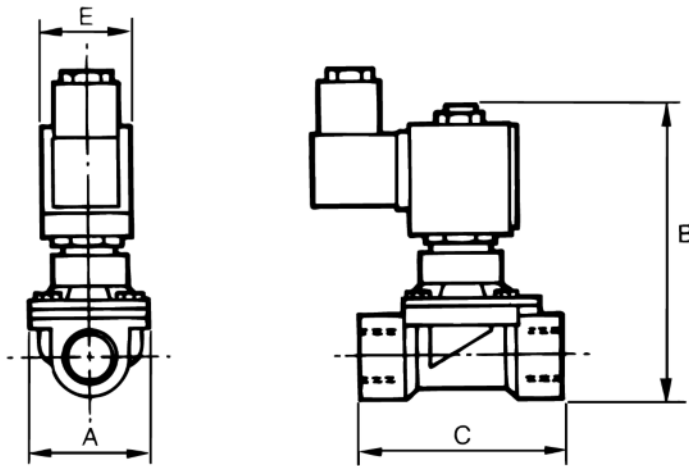
Solenoid Valves - Servo Assisted

Connections: 3/8, 1/2, 3/4

Operations: Servo assisted 2/2 NC

7

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 |



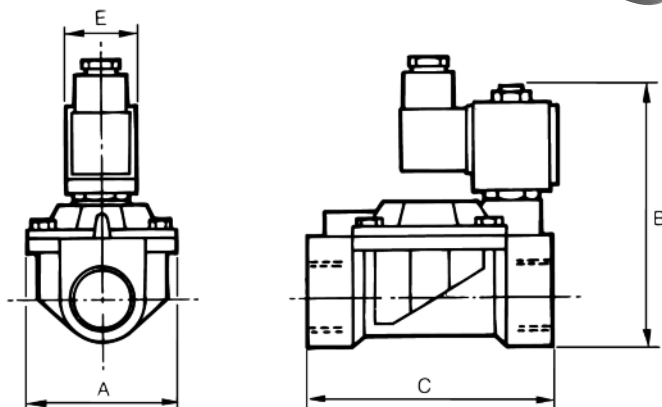
For Standard Connectors

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

| | Dimensions | | | | | | Pressure Range (bar) | |
|-------------|--------------|------|-----|-----|-----|----|----------------------|----------|
| | Orifice 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 |
| 21W7KV500 | 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

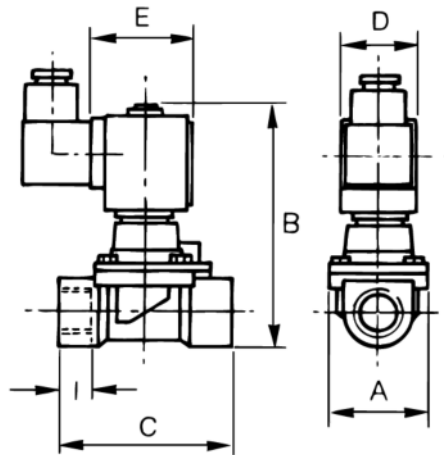
See pages 2/50 and 2/51

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

BSPG 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 | Orifice 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 | 30 | 42 | 12 | 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 | 30 | 42 | 12 | 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 |
|---------|--------------|---------------|---------------|
| Voltage | | | |
| 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 |

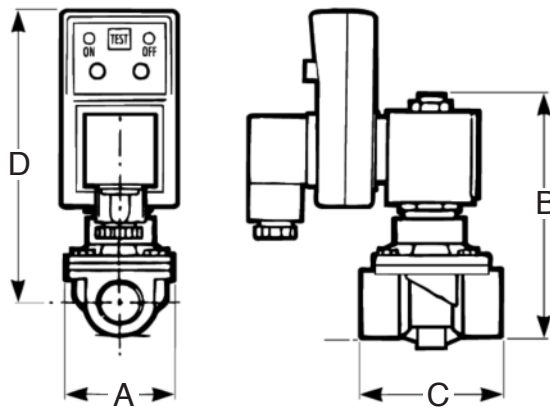


For Standard Connectors

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

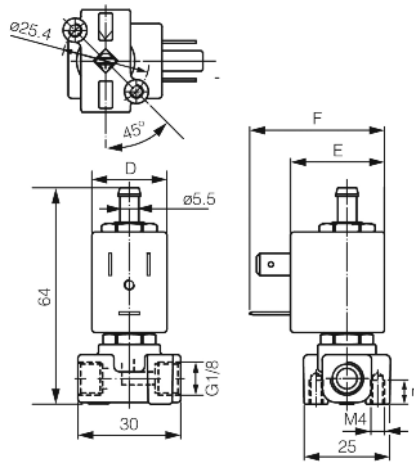
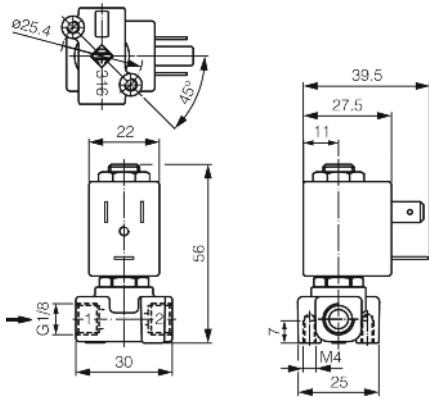
For assistance, contact our technical office or your local Camozzi distributor.

New

Solenoid Valves - Direct Acting Normally Closed Stainless Steel

Connections: 1/8
Operation: 2 way normally closed

7



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
BSPG 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 | | Pressure Range (bar) | | | Kv |
|-------------|------|---------|------|----------------------|----|----|-------|
| | | mm | Watt | Min | 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 |



| Coil Type | Power Absorption | | | Dimensions mm | | |
|-----------|------------------|----------|------------|---------------|------|------|
| | W | Hold VA~ | Inrush VA~ | D | E | F |
| L | 5 | 10 | 15 | 22 | 27.5 | 39.5 |

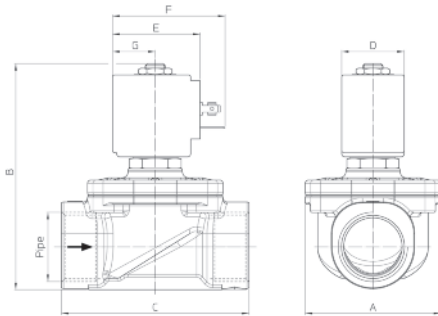
For Standard Connectors

See pages 2/48 and 2/49

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

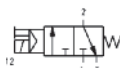
Connection: 1/4

Electropneumatically operated 3/2, 5/2, 5/3 way with interface according to NAMUR standard

7



Part Number
NA54N-15-02-*



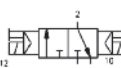
Part Number
NA34N-15-02-*



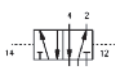
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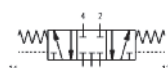
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NA54N-11-02-*



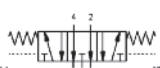
Part Number
NA34N-11-02-*



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*.

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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 Range8 / 8 Dust Caps
for ISO A8 / 9 CAM IA (F/M) Range
- Hydraulic Quick Release
Couplings8 / 10 PAO1 PAOC
Valveless Range (Free Flow)8 / 11 PAVX
Standard Range8 / 12 PPV
Standard Range8 / 13 PKK1, PKK4
Hydraulic Probes

Quick-Release Couplings - ISO B Norm

8 / 14 Technical Data - ISO B Norm

8 / 14 PBV1
Steel8 / 14 Dust Caps for
ISO B8 / 15 PBVM
Brass8 / 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 (bar) | 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 (bar) | 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 (bar) | 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 |

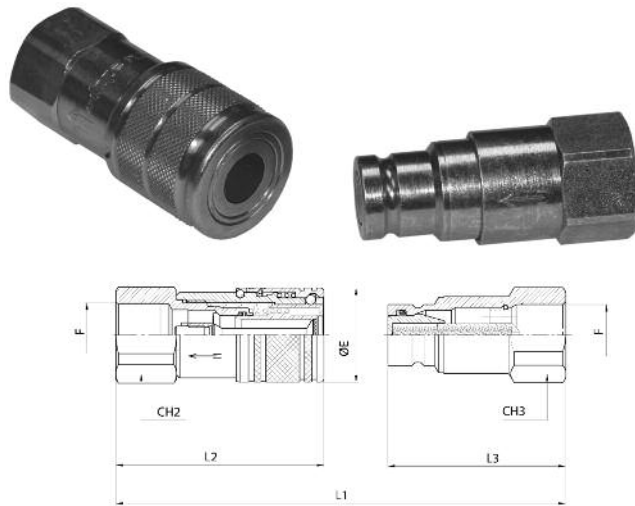
Flat Face Couplings - PLTX Stainless Steel Range

| Standard - Stainless Steel | | | | | | Min. Burst Pressure | | | |
|----------------------------|-----|--------|--------------------------------|---------------------|---------------|---------------------|------------------|------------------------|-------|
| Nominal Size | | | Max. Working Pressure (bar) | Rated Flow (l/m) | Male (bar) | Female (bar) | Coupled (bar) | Fluid Spillage (cc) | |
| DN USA | ISO | DN(mm) | | | | | | | |
| 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

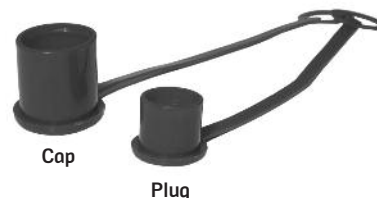
For assistance, contact our technical office or your local Camozzi distributor.

Other seals available on request.

| DN | Dash | ISO | CH2 | CH3 | ØE | L1 | L2 | L3 | Thread | Carrier Half | Probe Half |
|----|------|------|-----|-----|-----|-------|-------|-------|--------|---------------|---------------|
| 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

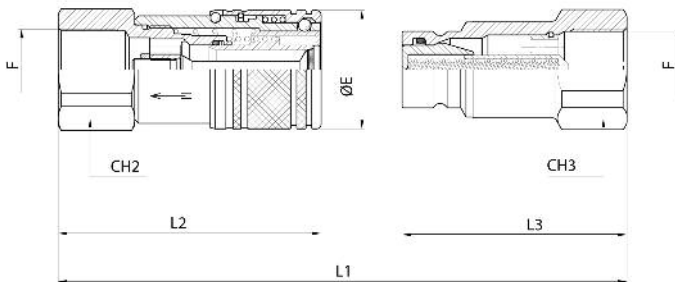
| Dust Caps - for Flat Face Couplings | | | |
|-------------------------------------|--------|-----------------|----------------|
| DIN | Thread | for Carrier | for Probe |
| 06 | 1/4 | PLUG SPLT.06002 | CAP SPLT.06003 |
| 13 | 3/8 | PLUG SPLT.13002 | CAP SPLT.13003 |
| 13 | 1/2 | PLUG SPLT.13002 | CAP 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.

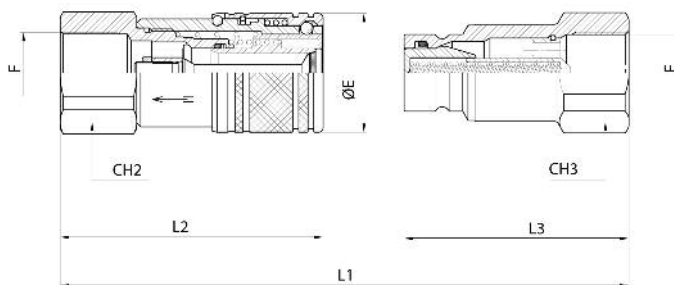


See 8/3 for Dust Caps

| DN | Dash | ISO | CH2 | CH3 | ØE | L1 | L2 | L3 | Thread | Carrier Half | Probe Half |
|------|------|------|-----|-----|----|-------|-------|------|--------|--------------|--------------|
| Size | | | | | | | | | | | |
| 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



| 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 |

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

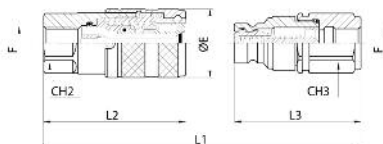
For assistance, contact our technical office or your local Camozzi distributor.



See 8/3 for Dust Caps

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 (bar) | Female (bar) | Coupled (bar) | Fluid Spillage (cc) | |
| DNP | USA | ISO | DN(mm) | | | | | | (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 (bar) | Female (bar) | Coupled (bar) | Fluid Spillage (cc) | |
| DNP | USA | ISO | DN(mm) | | | | | | (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 (bar) | Female (bar) | Coupled (bar) | Fluid Spillage (cc) | |
| DNP | USA | ISO | DN(mm) | | | | | | (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 |

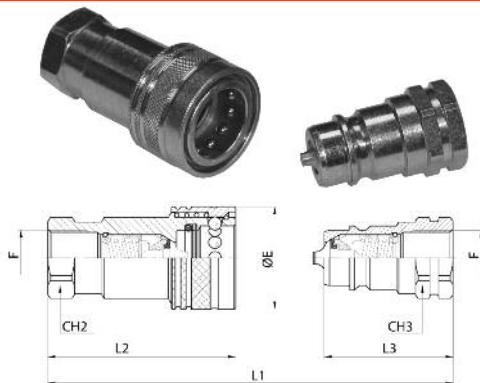
Probes for Connection Under Pressure - PKK1, PKK4

| 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

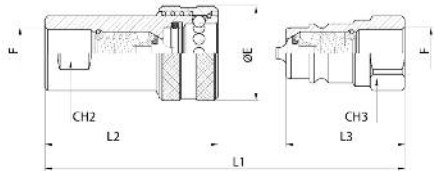
| Dust Caps - for ISO 'A' Series | | |
|--------------------------------|--------------|------------|
| DN | Carrier Half | Probe Half |
| 06 | SPAV.06002 | SPAV.06003 |
| 10 | SPAV.10002 | SPAV.10003 |
| 13 | SPAV.13002 | SPAV.13003 |
| 20 | SPAV.20002 | SPAV.20003 |
| 25 | SPAV.25002 | SPAV.25003 |
| 30 | SPAV.30202 | SPAV.30203 |
| 39 | SPAV.39202 | SPAV.39203 |
| 50 | SPAV.50202 | SPAV.50203 |



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.



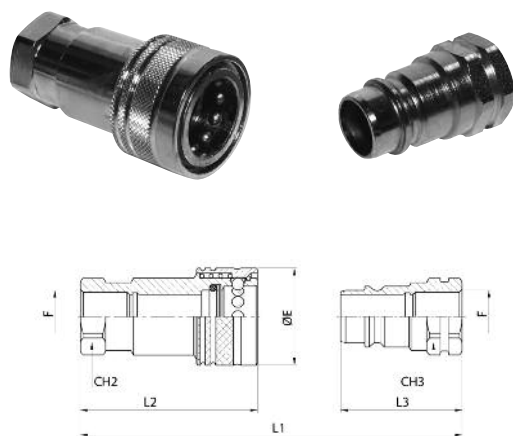
See page 8/8 for Dust Caps

Stainless Steel

| Body Size | ISO Base | 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.



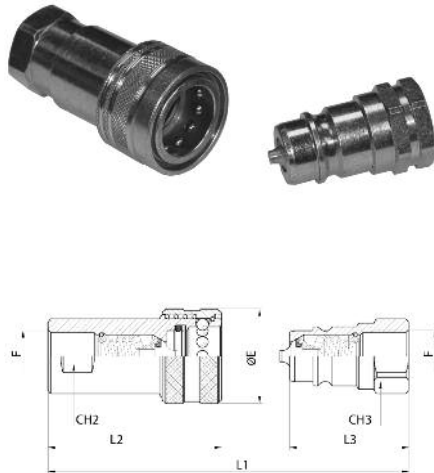
See page 8/8 for Dust Caps

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

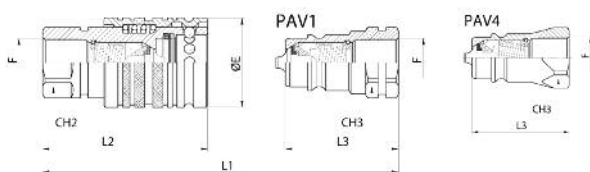
| Body | ISO | Dimensions | | | | | | | Thread | Carrier Half | Probe Half |
|-------|------|------------|-----|------|------|------|------|-----|--------|---------------|----------------|
| Size | Base | CH2 | CH3 | ØE | L1 | L2 | L3 | BAR | Size | Part Number | Part Number |
| 1/4 | 6.3 | 19 | 19 | 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.



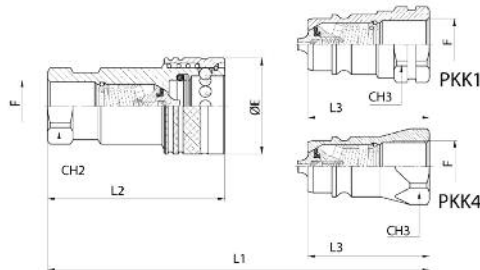
See page 8/8 for Dust Caps

| 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

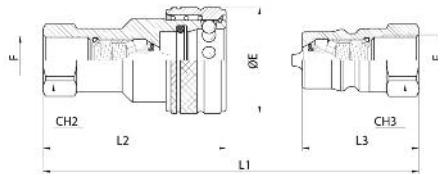
ISO B Norm

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



| 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 |

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

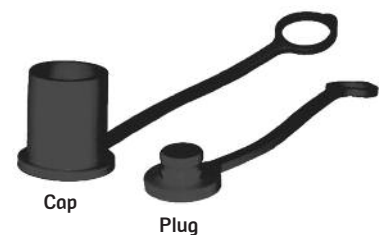
For assistance, contact our technical office or your local Camozzi distributor.

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.

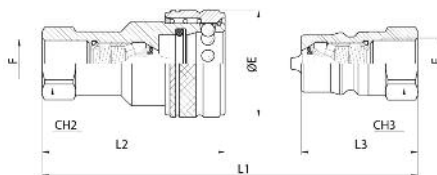
| Body Size | Colour | Material | Female Dust Plug | Male Dust Cap |
|-----------|--------|-----------|------------------|---------------|
| 1/8 | Red | PVC* | SPBV.04002 | SPBV.04003 |
| 1/4 | Red | PVC* | SPBV.06002 | SPBV.06003 |
| 3/8 | Red | PVC* | SPBV.10002 | SPBV.10003 |
| 1/2 | Red | PVC* | 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

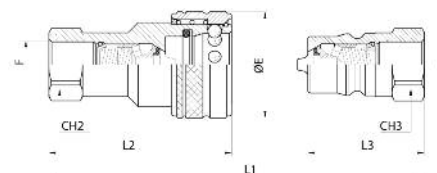
Special Requests
 For assistance, contact our technical office or your local Camozzi distributor.



See page 8/14 for Dust Caps

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

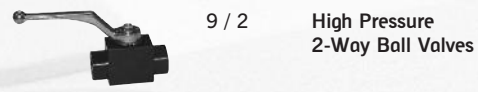
Special Requests
 For assistance, contact our technical office or your local Camozzi distributor.



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**



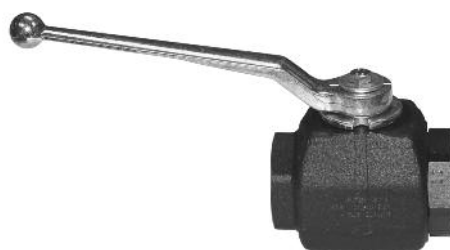
9 / 9 **Pressure Test Kits**

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.

9

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

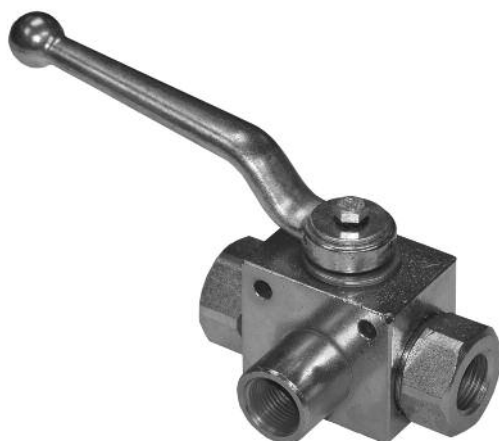
-20°C - to +100°C

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 |



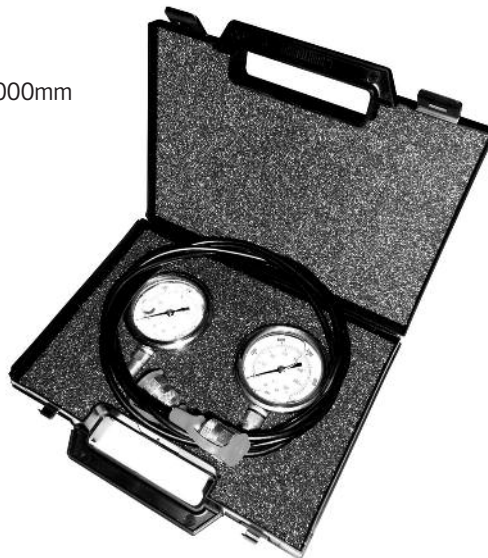
Pressure Test Kits

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

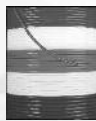
Dimensions

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



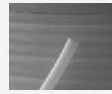
10 / 7 PV Tubing

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.

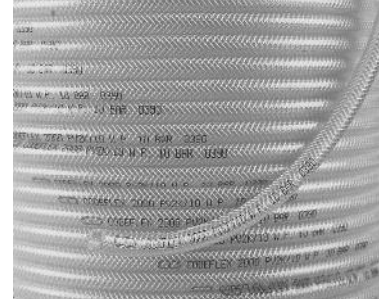
Please note: not suitable for constant rotation.

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

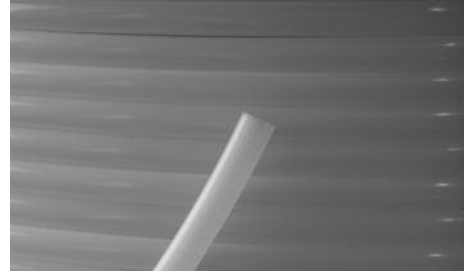
Technical Advice

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

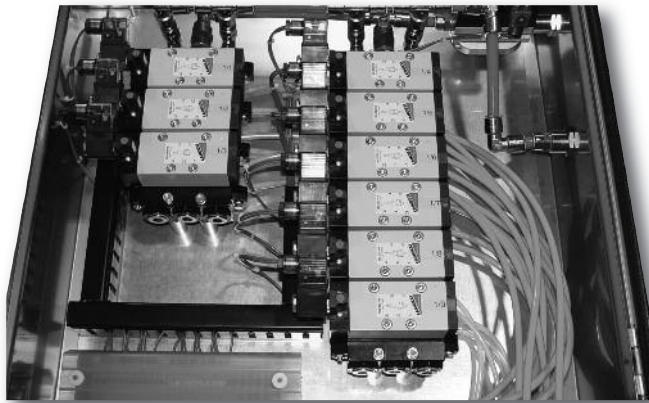
- To protect the environment and health, our products are designed and manufactured to operate without lubrication. At the end of the product's life, we recommend the separation of the components to allow recycling.
- Packaging: we respect the environment, using materials which can be recycled. The packaging 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.

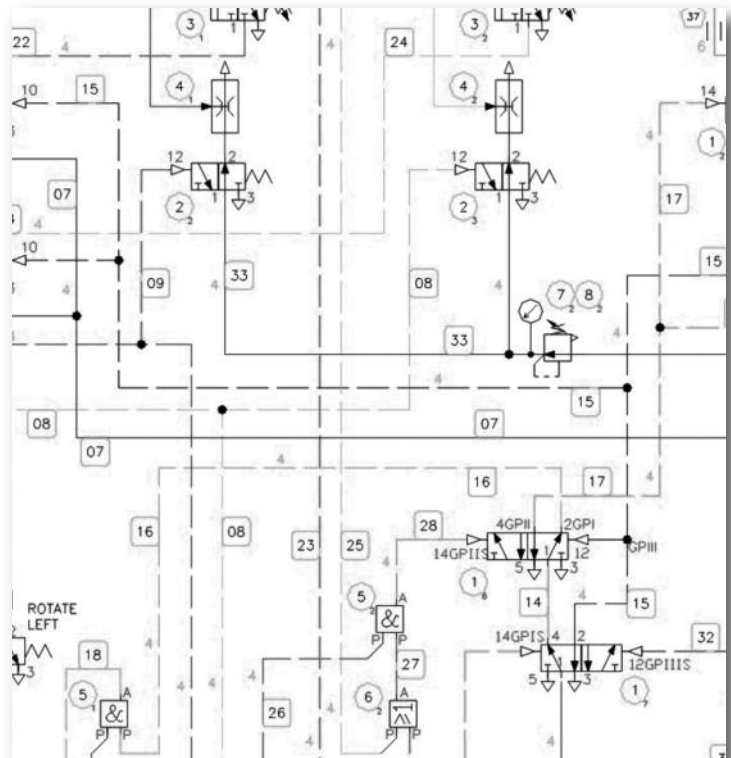
By ordering one part number, a kit of parts can either be supplied assembled or in a loose component form.



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.



ATEX
94/9/CE

» 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 |

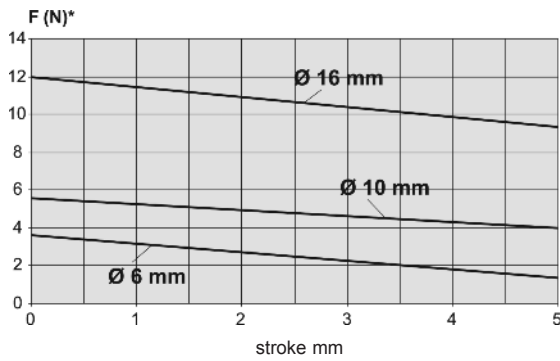
| Symbol | Type |
|--|--|
| PNEUMATIC LOGIC VALVES | |
| ORO2 | "OR" logical symbol |
| YES1 | "YES" pneumatic symbol |
| YES2 | "YES" logical symbol |
| NOT1 | "NOT" pneumatic symbol |
| NOT2 | "NOT" logical symbol |
| MEM1 | "MEMORY" pneumatic symbol |
| MEM2 | "MEMORY" logical symbol |
| AMP1 | Signal 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 |

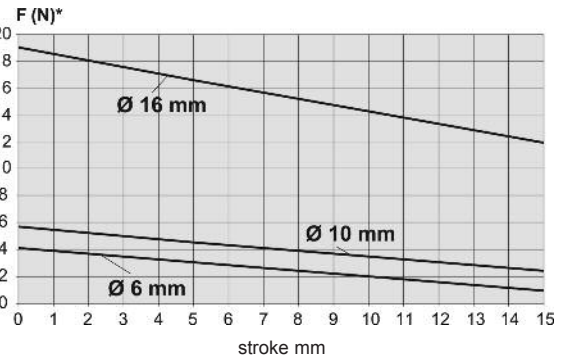


Spring Loads Cylinders

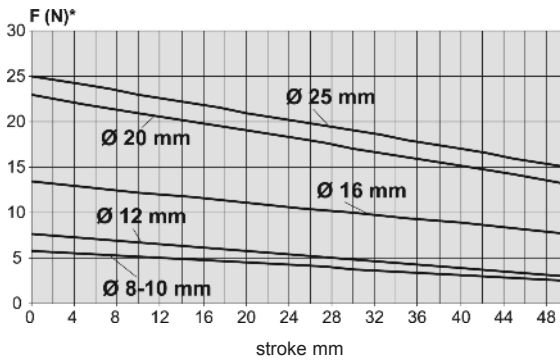
Series 14 - stroke 5 mm



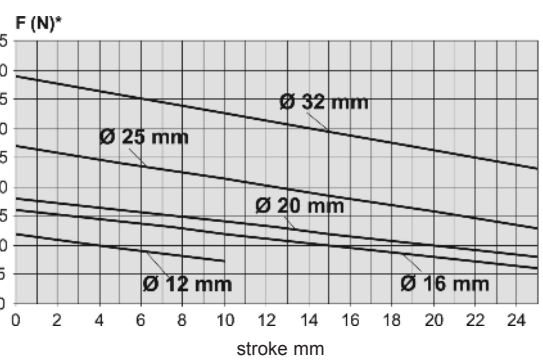
Series 14 - stroke 10 and 15 mm



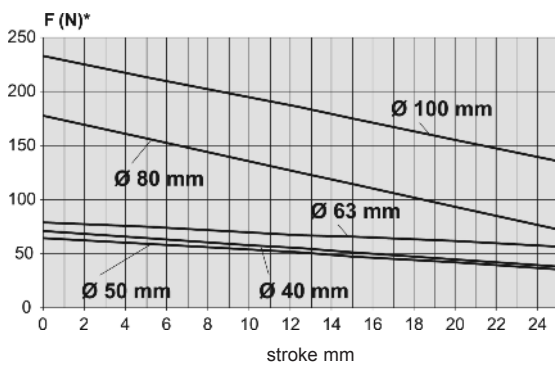
Series 16-24



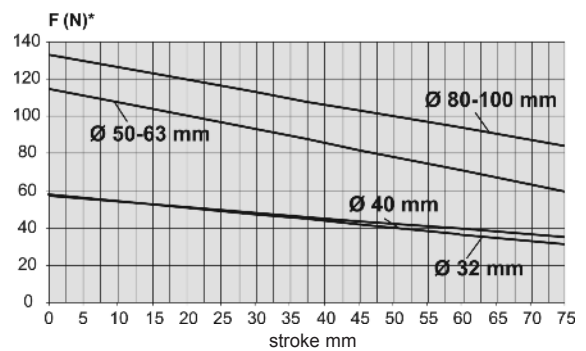
Series 31-32



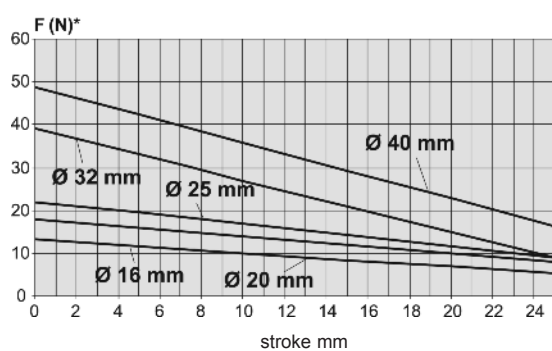
Series 31-32



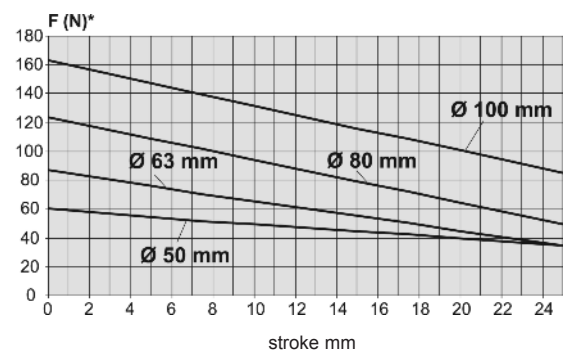
Series 60-61-42-90



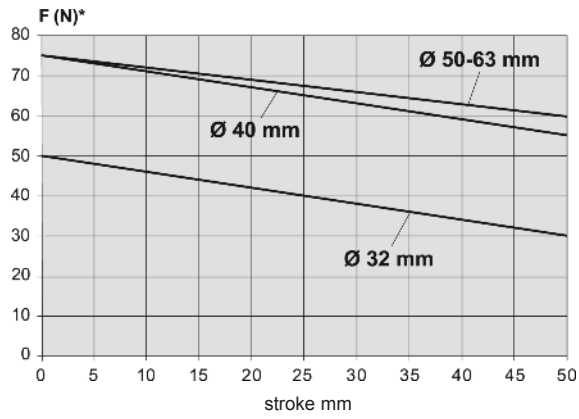
Series QP



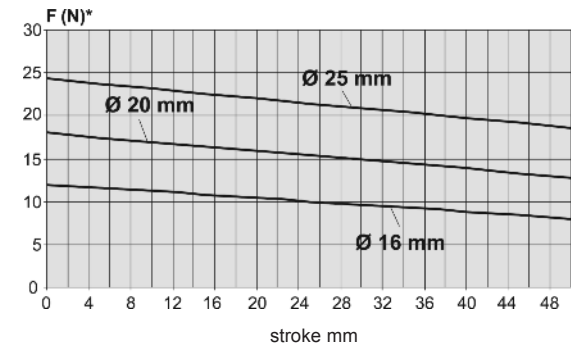
Series QP



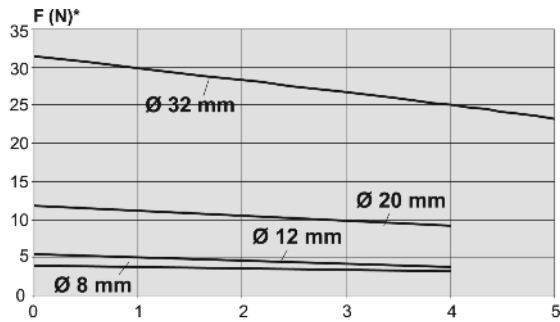
Series 90-97



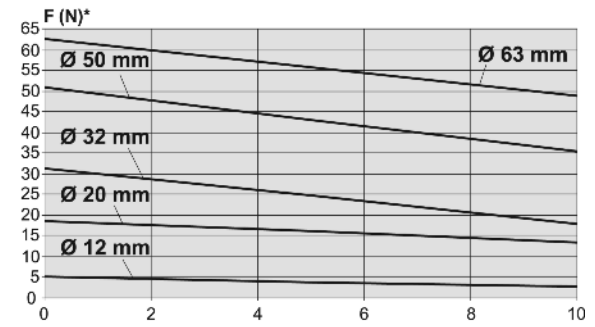
Series 94



Series QN - stroke 4 and 5 mm

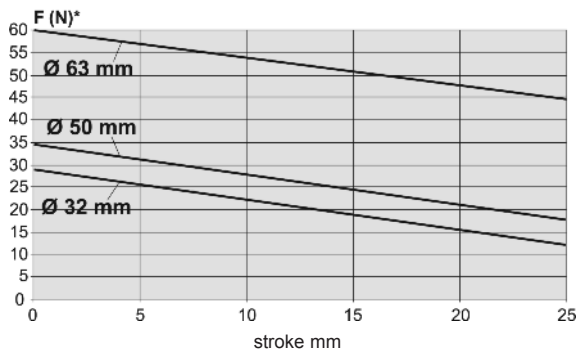


Series QN - stroke 10 mm



* F = spring force

Series QN - stroke 25 mm

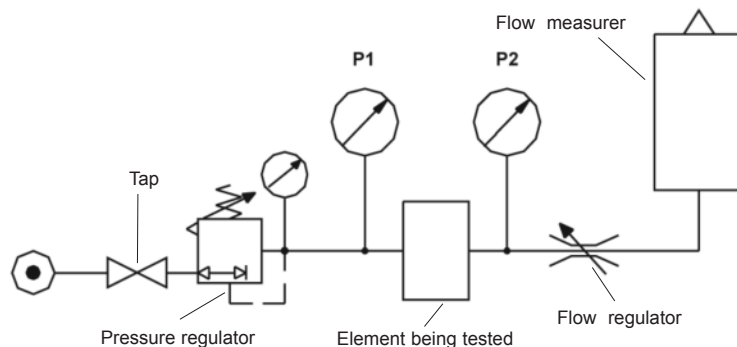


Flow and Speed Cylinders

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) | 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) | 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) | | | | | | | | | | | |
| 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 |
| 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 |
| 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 |
| 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 | 0,020 | 0,020 | 0,022 | 0,022 | 0,024 | 0,024 | 0,026 | 0,026 | 0,028 | 0,028 | 0,030 |
| 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 |
| 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 | 0,060 | 0,060 | 0,066 | 0,066 | 0,072 | 0,072 | 0,078 |
| 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 | 0,098 | 0,098 | 0,108 | 0,108 | 0,118 | 0,118 | 0,128 |
| 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 | 0,152 | 0,152 | 0,166 | 0,166 | 0,180 | 0,180 | 0,194 |
| 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 | 0,236 | 0,236 | 0,256 | 0,256 | 0,276 | 0,276 | 0,296 |
| 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 | 0,375 | 0,375 | 0,406 | 0,406 | 0,437 | 0,437 | 0,468 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |

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 | | | 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 |



Camozzi Returns Policy

Step by Step Guide

Step 1

If you have a product to be returned please call the Camozzi Sales office on 024 7637 4114.

Step 2

If the return is agreed you will be quoted a returns reference number, which must be noted on all paperwork relating to the returned goods.

Step 3

Address the parcel to
Camozzi Pneumatics Ltd,
The Fluid Power Centre,
Watling Street,
Nuneaton,
Warwickshire,
CV11 6BQ.

Please do

- Include the returns note issued to you
- Ensure the goods are adequately packed to prevent damage in transit.
- Arrange for the parcel to be returned to Camozzi via the most appropriate method.
- Include a contact name on the enclosed paperwork in case of any queries.
- State the reason for return, a part number and description of the part or parts on the enclosed paperwork.

Please do not

- Return anything without a returns number (We reserve the right to return goods received without a returns number back to you at your cost)
- Give returns to the Camozzi Area Sales Managers, they are not permitted to accept returns.

Handling Charges

Handling charges will be applied to cover :-

- Administration
- Processing Cost
- Breakdown of product in to component parts (where applicable)

These handling charges will be advised when the returns number is issued.

Faulty Goods

If an item received is deemed faulty, we will invoice a replacement. This will be credited once the item has been returned, inspected and found to be faulty. If misuse has caused the item to fail then the replacement invoice will stand.



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