



# Short form catalogue

release 8.8





**Camozzi Automation spa**  
Società Unipersonale

Via Eritrea, 20/I  
25126 Brescia - Italy  
Tel. +39 030 37921  
Fax +39 030 2400430  
info@camozzi.com  
www.camozzi.com

**Technical assistance**

Product inquiries and  
requests for support:  
Tel.+39 030 3792790  
service@camozzi.com

Special products inquiries:  
Tel.+39 030 3792390  
service@camozzi.com



*Welcome to the world of  
Camozzi Automation*

This short form catalogue features the complete range of Camozzi Automation products. Further details are available in our full catalogue. We suggest you also to take a look at our website, where you can discover more about the world of Camozzi Automation.



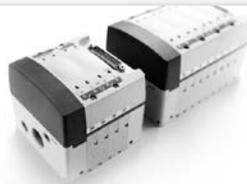
**1 > Movement**

Includes News



**2 > Control**

Includes News



**3 > Treatment**

Includes News



**4 > Connection**

Includes News



**5 > Vacuum**



## 1 > Movement



### Cylinders according standards

		Page
Series 16, 24, 25	<b>Minicylinders</b> <b>CETOP RP52-P / DIN/ISO 6432</b>  Single-acting and double-acting Series 16: ø 8, 10, 12 mm Series 24: ø 16, 20, 25 mm - magnetic Series 25: ø 16, 20, 25 mm - magnetic cushioned	3
Series 40	<b>Cylinders</b> <b>ISO 15552</b> <b>DIN/ISO 6431 / VDMA 24562</b>  Double-acting, cushioned, magnetic ø 160, 200, 250, 320 mm	4
Series 41	<b>Cylinders - Aluminium profile</b> <b>DIN/ISO 6431 / VDMA 24562</b>  Double-acting cushioned, magnetic ø 160, 200 mm	5
Series 60	<b>Cylinders</b> <b>ISO 15552</b> <b>DIN/ISO 6431 / VDMA 24562</b>  Single and double-acting, magnetic, cushioned Standard, low friction, low temperatures and tandem versions ø 32, 40, 50, 63, 80, 100, 125 mm	6
Series 61	<b>Cylinders - Aluminium profile</b> <b>ISO 15552</b> <b>DIN/ISO 6431 / VDMA 24562</b>  Single and double-acting, magnetic, cushioned Standard, low friction, low temperatures and tandem versions ø 32, 40, 50, 63, 80, 100, 125 mm	7
Series 62	<b>Cylinders - Aluminium profile</b> <b>ISO 15552</b> <b>DIN/ISO 6431 / VDMA 24562</b>  Double-acting, magnetic, cushioned ø 32, 40, 50, 63, 80, 100 mm	8
Series 6PF	<b>Positioning Feedback cylinders</b> <b>ISO 15552</b> <b>DIN/ISO 6431 / VDMA 24562</b>  Double-acting low friction, magnetic ø 50, 63, 80, 100, 125 mm	9
Series 63	<b>Cylinders - Aluminium tube and profile</b> <b>ISO 15552</b> <b>DIN/ISO 6431 / VDMA 24562</b>  Single and double-acting, magnetic, cushioned Versions: standard, low friction, high and low temperatures ø 32, 40, 50, 63, 80, 100, 125 mm	10
Series 32	<b>Compact cylinders</b> <b>ISO 21287</b>  Single and double-acting, non-rotating, magnetic ø 20, 25, 32, 40, 50, 63, 80, 100 mm	12
Series 32	<b>Compact cylinders,</b> <b>tandem and multi-position versions</b> <b>ISO 21287</b>  Double-acting, magnetic, ø 25, 40, 63, 100 mm	13
Series 45	<b>Anti-rotation guides</b>  For cylinders DIN/ISO 6432 ø 12, 16, 20, 25 mm For cylinders DIN/ISO 6431 ø 32, 40, 50, 63, 80, 100 mm	14

### Compact cylinders

		Page
Series QN	<b>Short-stroke cylinders</b>  Single-acting, non magnetic ø 8, 12, 20, 32, 50, 63 mm	15
Series QP, QPR	<b>Short-stroke cylinders</b>  Series QP: single and double-acting, magnetic Series QPR: double-acting magnetic, non-rotating ø 12, 16, 20, 25, 32, 40, 50, 63, 80, 100 mm	16
Series 31	<b>Compact cylinders</b>  Series 31M-31F: single-acting and double-acting, magnetic Series 31R: double-acting, non-rotating, magnetic ø 12, 16, 20, 25 mm ø 32, 40, 50, 63, 80, 100 mm UNITOP	17
Series 31	<b>Compact cylinders,</b> <b>tandem and multi-position versions</b>  Double-acting, magnetic ø 12, 16, 20, 25, 32, 40, 50, 63, 80, 100 mm	18

### Stainless steel cylinders

		Page
Series 90	<b>Stainless steel cylinders</b> <b>ISO 15552</b> <b>DIN/ISO 6431 / VDMA 24562</b>  Single and double-acting, cushioned, magnetic ø 32, 40, 50, 63, 80, 100 and 125 mm	19
Series 94, 95	<b>Stainless steel minicylinders</b> <b>CETOP RP52-P / DIN/ISO 6432</b>  Single and double-acting, magnetic Series 94: ø 16, 20, 25 mm Series 95: ø 25 mm, cushioned	20
Series 97	<b>Stainless steel cylinders</b>  Single and double-acting, cushioned, magnetic ø 32, 40, 50, 63 mm	21

### Guided cylinders

		Page
Series QCT, QCB	<b>Cylinders</b> <b>with integrated guide</b>  Double-acting, magnetic piston, guided ø 20, 25, 32, 40, 50, 63 mm	22
Series QCTF, QCBF	<b>Cylinders</b> <b>with integrated guide</b>  Double-acting, magnetic, with double bearings and flanges ø 20, 25, 32, 40 mm	23
Series QX	<b>Twin cylinders</b>  Double-acting, magnetic, guided ø 10x2, 16x2, 20x2, 25x2, 32x2 mm	24

### Cylinders not according standards

		Page
Series 14	<b>Compact minicylinders</b>  Single-acting Bores ø 6, 10, 16 mm and strokes 5, 10, 15 mm With super-rapid fitting ø 4 and M5 port	25
Series 27	<b>Cylinders</b>  Double-acting, magnetic ø 20, 25, 32, 40, 50, 63 mm	26
Series 42	<b>Cylinders</b>  Single and double-acting, magnetic, cushioned ø 32, 40, 50, 63 mm	27

**Rotary cylinders**

		<b>Page</b>
Series 69	<b>Rotary cylinders</b> Magnetic, cushioned ø 32, 40, 50, 63, 80, 100, 125 Rotational angles: 90°, 180°, 270° and 360°	28
Series 30	<b>Rotary cylinders</b> Non magnetic, cushioned and not cushioned ø 50, 63, 80, 100 mm Rotational angles: 90° and 180°	28
Series ARP	<b>Rotary actuators</b> Model: "Rack & Pinion" Sizes: 1, 3, 5, 10, 12, 20, 35, 55, 70, 100, 150, 250, 400 Rotational angles: 90°	29

**Grippers**

		<b>Page</b>
Series CGA	<b>Angular grippers</b> Magnetic Sizes: ø 10, 16, 20, 25, 32 mm	30
Series CGSN	<b>180° angular grippers</b> Magnetic Sizes: ø 16, 20, 25, 32 mm	30
Series CGP	<b>Parallel grippers</b> Magnetic Sizes: ø 10, 16, 20, 25, 32 mm	30
Series CGPT	<b>Self-centering parallel grippers</b> Single and double acting, magnetic, self-centering Bores: ø 16, 20, 25, 32, 40 mm	31
Series CGPS	<b>Self-centering parallel grippers with double ball bearing guide</b> Single and double acting, magnetic, self-centering Bores: ø 10, 16, 20, 25, 32 mm	31
Series CGLN	<b>Wide opening parallel grippers</b> Sizes: ø 10, 16, 20, 25, 32 mm	32
Series CGC	<b>3-Finger centric grippers</b> Magnetic Sizes: 50, 64, 80, 100, 125	32
Series RPGA	<b>Sprue grippers - Size 20 mm</b> Angular, not self-centering, single-acting, Normally Open (NO) Models: Flat Finger, Curved Finger, Short Finger, Flat Finger with sensor slot, Curved Finger with sensor slot	33
Series RPGB	<b>Sprue grippers - Size 8, 12 mm</b> Angular, not self-centering, single-acting, Normally Open (NO) Models: Flat Finger, Short Finger, Flat Finger with sensor	33

**Rodless cylinders**

		<b>Page</b>
Series 50	<b>Rodless cylinders</b> Double-acting, magnetic, cushioned ø 16, 25, 32, 40, 50, 63, 80 mm	34
Series 52	<b>Rodless cylinders</b> Double-acting, magnetic, cushioned ø 25, 32, 40, 50, 63 mm	35

**Proximity switches**

		<b>Page</b>
Series CSH, CST, CSV, CSB, CSC, CSD	<b>Magnetic proximity switches</b> Reed - Magneto-resistive - Hall effect	36
Series CSN	<b>Proximity switches</b> Reed switches	37
<b>Tables for the use of sensors</b>		39

**Clamping elements and shock absorbers**

		<b>Page</b>
Series 43	<b>Hydrochecks</b> Bore ø 40mm Regulated thrust or return stroke Skip-Stop function	41
Series RL	<b>Rod lock ISO 6431/VDMA and ISO 6432</b> For cylinders ø 20, 25, 32, 40, 50, 63, 80, 100, 125 mm	42
Series SA	<b>Shock absorbers</b> 7 different sizes Threads: M8x1 - M10x1 - M12x1 M14x1,5 - M20x1,5 - M25x1,5 - M27x1,5	43

**Electrical actuation**

		<b>Page</b>
Series 6E	<b>Electromechanical cylinders ISO 15552</b> Sizes 32, 40, 50 and 63	44
Series 5E	<b>Electromechanical axis</b> Sizes 50, 65, 80	45
Series DRWB	<b>Drivers for the control of electric actuation</b> Driver for Brushless motors, sizes in power classes 100, 400 and 750 W	46
Series DRWS	<b>Drivers for the control of electric actuation</b> Driver for Stepper motors, one size/version	46
Series MTB	<b>Motors for electric actuation</b> Brushless motors in power classes 100, 400 and 750 W	47
Series MTS	<b>Motors for electric actuation</b> Stepper motors with Nema 23 or 24 fixing flange	47
Series GB	<b>Planetary gearboxes</b> Available sizes: 40, 60 and 80	48
Series CO	<b>Motion transmission devices</b> Mod. COE: elastomer coupling with clamps Mod. COS: elastomer coupling with expansion shaft Mod. COT: self-centering locking-set	48

**Pneumatic symbols for cylinders**

# Series 16, 24 and 25 minicylinders

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

Series 16:  $\varnothing$  8, 10, 12 mm. Series 24:  $\varnothing$  16, 20, 25 mm - magnetic

Series 25: 16, 20, 25 mm - magnetic, cushioned



## CODING EXAMPLE

<b>24</b>	<b>N</b>	<b>2</b>	<b>A</b>	<b>16</b>	<b>A</b>	<b>100</b>	
<b>24</b>	<p><b>SERIES:</b> 16 = non magnetic 24 = magnetic 25 = magnetic, adjustable cushioning</p>						
<b>N</b>	<p><b>VERSION:</b> N = standard</p>						
<b>2</b>	<p><b>OPERATION:</b> 1 = single-acting, front spring, no cushion 2 = double-acting 3 = double-acting, through-rod 7 = single-acting, through-rod</p>				<p><b>PNEUMATIC SYMBOLS *</b> CS02 (s. 16) - CS06 (s. 24) CD01 (s. 16) - CD08 (s. 24) - CD09 (s. 25) CD05 (s. 16) - CD12 (s. 24) - CD13 (s. 25) CS04 (s. 16) - CS10 (s. 24)</p>		
<b>A</b>	<p><b>MATERIALS:</b> A = rolled stainless steel AISI 303 rod, stainless steel AISI 304 tube, anodized AL end-blocks</p>						
<b>16</b>	<p><b>BORE:</b> 08 = 8 mm - 10 = 10 mm - 12 = 12 mm - 16 = 16 mm - 20 = 20 mm - 25 = 25 mm</p>						
<b>A</b>	<p><b>CONSTRUCTION:</b> A = Nose nut Mod. V + Piston rod lock nut Mod. U RL = cylinder with rod lock <math>\varnothing</math> 20 - <math>\varnothing</math> 25</p>						
<b>100</b>	<p><b>STROKE:</b> Series 16 <math>\varnothing</math> 8 + <math>\varnothing</math> 10: 10 - 250 mm; <math>\varnothing</math> 12: 10 - 300 mm / Series 24 and 25 <math>\varnothing</math> 16: 10 - 600 mm; <math>\varnothing</math> 20 - <math>\varnothing</math> 25: 10 - 1000 mm</p> <p>= standard V = rod seal in FKM W = all seals in FKM, +130°C (for series 25 only)</p>						
<p>* = The complete list of cylinders pneumatic symbols is available at the end of this chapter</p>							

## STANDARD STROKES

■ = Double-acting  
✕ = Single-acting

Series	$\varnothing$	10	25	40	50	80	100	125	160	200	250	300	320	400	500
16	8	✕	✕	✕	✕	■	■	■	■	■					
16	10	✕	✕	✕	✕	■	■	■	■	■					
16	12	✕	✕	✕	✕	■	■	■	■	■					
24	16	✕	✕	✕	✕	■	■	■	■	■	■	■	■	■	■
24	20	✕	✕	✕	✕	■	■	■	■	■	■	■	■	■	■
24	25	✕	✕	✕	✕	■	■	■	■	■	■	■	■	■	■
25	16	■	■	■	■	■	■	■	■	■	■	■	■	■	■
25	20	■	■	■	■	■	■	■	■	■	■	■	■	■	■
25	25	■	■	■	■	■	■	■	■	■	■	■	■	■	■

# Series 40 cylinders

Double-acting, cushioned, magnetic  
 ISO 15552 - DIN/ISO 6431 / VDMA 24562  
 ø 160, 200, 250, 320 mm



1  
MOVEMENT



## CODING EXAMPLE

40	M	2	L	160	A	0200	
----	---	---	---	-----	---	------	--

<b>40</b>	SERIES	
<b>M</b>	VERSION: M = standard, magnetic	
<b>2</b>	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, front and rear cushions 8 = double-acting, through-rod, no cushion	PNEUMATIC SYMBOLS * CD09 CD08 CD10 CD11 CD13 CD12
<b>L</b>	MATERIALS: L = AL end blocks and piston, rolled stainless steel AISI 420B (ø 160-200 mm) or chrome plated steel (ø 250-320 mm) piston rod, zinc-plated steel piston rod nut, anodized AL tube, zinc-plated steel tie-rods and tie-rod nuts, NBR-PU rod - piston - cushion seals brass rod scraper T = stainless steel AISI 420B tie-rods - stainless steel AISI 303 tie-rod nuts C = rolled stainless steel AISI 303 piston rod, stainless steel AISI 304 piston rod nut U = rolled stainless steel AISI 303 piston rod, stainless steel AISI 304 piston-rod nut, stainless steel AISI 420B tie-rods, stainless steel AISI 303 tie-rod nuts W = rolled stainless steel AISI 304 piston rod, stainless steel AISI 304 piston-rod nut, stainless steel AISI 420B tie-rods, stainless steel AISI 303 tie-rod nuts Note: The rod of cylinders with bore of 250 and 320 mm is in C40 chrome plated steel	
<b>160</b>	BORE: 160 = 160 mm - 200 = 200 mm - 250 = 250 mm - 320 = 320 mm	
<b>A</b>	TYPE OF BRACKET: A = standard F = cylinder with centre trunnion	
<b>0200</b>	STROKE: 10 ÷ 2500 mm  = standard V = FKM rod seals - W = all FKM seals +130°C - C = PU coated cylinder. Colour: Grey G = with brass rod scraper (chrome plated stainless steel AISI 420B rod, NBR rod seal) [ ø 250 and 320 excluded ] ( _ _ _ ) = extended piston rod _ _ _ mm	
Notes: The C version is available on request. For further details, contact our technical dept The W and C versions are available for diameters 160 and 200 only		
* = The complete list of cylinders pneumatic symbols is available at the end of this chapter		

## STANDARD STROKES

■ = Double-acting

Ø	25	50	75	80	100	125	150	160	200	250	300	320	400	500
160		■		■	■		■		■		■		■	■
200		■			■				■		■			
250		■			■				■		■			
320		■			■				■		■			

# Series 41 cylinders - Aluminium profile

Double-acting, cushioned, magnetic  
DIN/ISO 6431 / VDMA 24562  
ø 160, 200 mm



Mod. S



Mod. ZS



Mod. BF



Mod. G



Mod. D-E



Mod. F



Mod. B



Mod. GA



Mod. C-H



Mod. U



Mod. L



Mod. C+L+S



Mod. GK

## CODING EXAMPLE

<b>41</b>	<b>M</b>	<b>2</b>	<b>P</b>	<b>160</b>	<b>A</b>	<b>0200</b>	
-----------	----------	----------	----------	------------	----------	-------------	--

**41** SERIES

**M** VERSION:  
M = standard magnetic

**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, front and rear cushions  
8 = double-acting, through-rod, no cushion

PNEUMATIC SYMBOLS \*  
CD09  
CD08  
CD10  
CD11  
CD13  
CD12

**P** MATERIALS:  
P = AL end blocks and piston, rolled stainless steel AISI 420B piston rod, zinc-plated steel piston rod nut, anodized AL-profile tube, zinc-plated steel tie-rods and tie-rod nuts, NBR rod - piston - cushion seals  
R = stainless steel AISI 420B tie-rods, stainless steel AISI 303 tie-rod nuts  
C = rolled stainless steel AISI 303 piston rod, stainless steel AISI 304 piston rod nut  
U = rolled stainless steel AISI 303 piston rod, stainless steel AISI 304 piston rod nut, stainless steel AISI 420B tie-rods, stainless steel AISI 303 tie-rod nuts  
W = rolled stainless steel AISI 304 piston rod, stainless steel AISI304 piston rod nut, stainless steel AISI 420B tie-rods, stainless steel AISI 303 tie-rod nuts

**160** BORE:  
160 = 160 mm - 200 = 200 mm

**A** TYPE OF DESIGN:  
A = tie-rods  
F = cylinder with centre trunnion

**0200** STROKE  
10 ÷ 2500 mm

= standard  
V = FKM rod seals  
W = all FKM seals +130°C  
C = PU coated cylinder. Color: Grey  
G = with brass rod scraper (chrome plated stainless steel AISI 420B rod, NBR rod seal)  
( \_ \_ \_ ) = extended piston rod \_ \_ \_ mm

Notes: The C version is available on request. For further details, contact our technical dept

\* = The complete list of cylinders pneumatic symbols is available at the end of this chapter

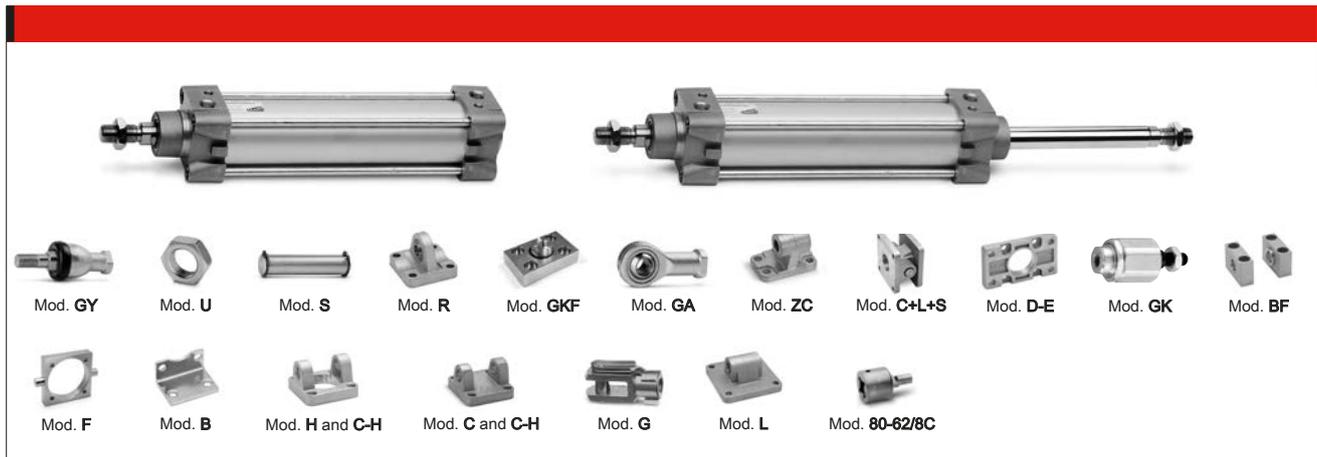
## STANDARD STROKES

\* = Double-acting

ø	25	50	75	80	100	125	150	160	200	250	300	320	400	500
<b>160</b>		*			*		*		*				*	*
<b>200</b>		*			*				*					

# Series 60 cylinders

Single and double-acting, magnetic, cushioned. ISO 15552 - DIN/ISO 6431 / VDMA 24562  
Standard, low friction, low temperatures and tandem versions - ø 32, 40, 50, 63, 80, 100, 125 mm  
Example of assembly with a valve on page 11



## CODING EXAMPLE

60	M	2	L	050	A	0200
----	---	---	---	-----	---	------

<b>60</b>	SERIES
<b>M</b>	VERSIONS: M = magnetic - N = non magnetic - L = low friction, magnetic
<b>2</b>	OPERATION: 1 = single-acting, front spring 2 = double-acting, front and rear cushioned 3 = double-acting, no cushion 4 = double-acting, rear cushioned 5 = double-acting, front cushioned 6 = double-acting, through-rod, front and rear cushioned 7 = single-acting, through-rod 8 = double-acting, through-rod, no cushion
<b>L</b>	MATERIALS: L = standard: AL end-blocks and piston, rolled stainless steel AISI 420B rod, anodized AL tube, zinc-plated steel tie-rods and tie-rod nuts, PU seals; low friction: standard materials with NBR piston seals and NBR rod seal (FKM rod seal on request) low temperature: standard materials with chrome plated stainless steel AISI 420B rod, brass rod scraper ring, stainless steel AISI 303 nuts, stainless steel AISI 420B tie-rods, PU piston seals and NBR rod seal T = stainless steel AISI 420B tie-rods, stainless steel AISI 303 tie-rod nuts, others C = rolled stainless steel AISI 303 piston rod, stainless steel AISI 304 piston rod nut U = rolled stainless steel AISI 303 piston rod, AISI 304 piston-rod nut, AISI 420B tie-rods, AISI 303 tie-rod nuts W = rolled stainless steel AISI 304 piston rod, AISI304 piston-rod nut, AISI 420B tie-rods, AISI 303 tie-rod nuts Z = chrome plated stainless steel AISI 420B rod, stainless steel AISI 304 rod nut, stainless steel AISI 420B tie-rods, stainless steel AISI 303 tie-rods nuts, seals for low temperature (-40°C), brass rod scraper [ ø 125 excepted ] Y = chrome plated stainless steel AISI 420B rod, stainless steel AISI 304 rod nut, stainless steel AISI 420B tie-rods, stainless steel AISI 303 tie-rods nuts, seals for low temperature (-50°C), brass rod scraper [ ø 125 excepted ]
<b>050</b>	BORE: 032 = 32 mm - 040 = 40 mm - 050 = 50 mm - 063 = 63 mm - 080 = 80 mm - 100 = 100 mm - 125 = 125 mm
<b>A</b>	CONSTRUCTION: A = standard with lock nut for rod - RL = cylinder with rod lock - F = cylinder with centre trunnion
<b>0200</b>	STROKE: 10 ÷ 2500 mm = standard - V = FKM rod seal - N = tandem [ pneumatic symbols CD8T (M) - CD9T (N) ] - R = NBR rod seal W = all FKM seals +130C° - 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)
	Notes: Version C is available on request. For further information, please contact our technical department. With Version L the possibility to order the cylinder without piston rod seal further reduces the friction force.

\* = The complete list of cylinders pneumatic symbols is available at the end of this chapter  
Note: all double-acting cylinders are also available in the low friction version

## STANDARD STROKES

- = Single-acting (standard and low temperature)
  - ✖ = Double-acting (standard, low friction and low temperature)
- Other strokes up to 2500 mm are available on request

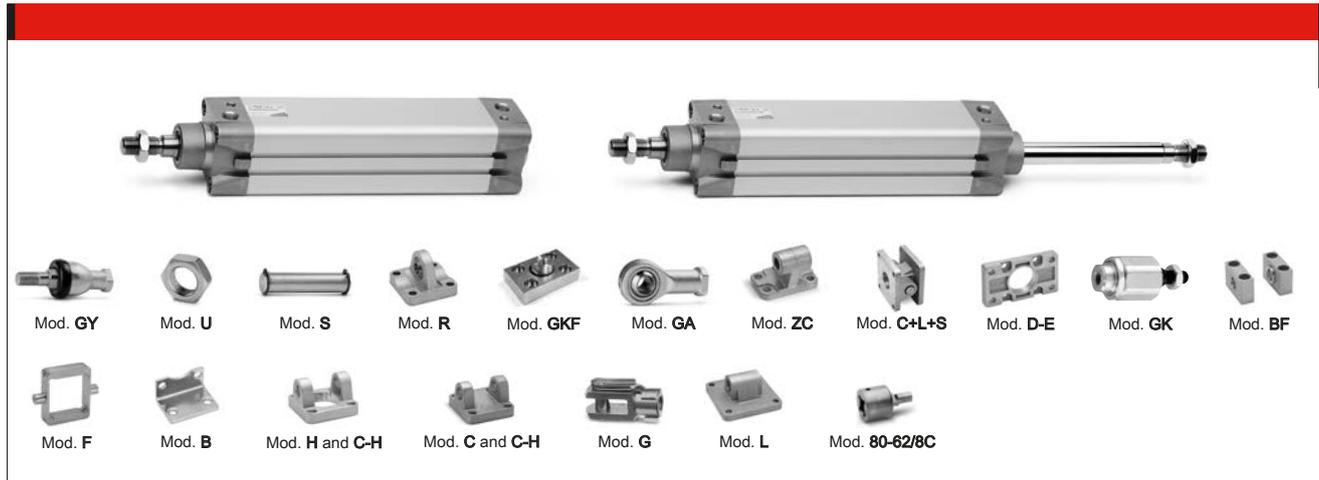
Ø	25	50	75	100	125	150	160	200	250	300	320	400	500
32	■ ✖	■ ✖	■ ✖	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖
40	■ ✖	■ ✖	■ ✖	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖
50	■ ✖	■ ✖	■ ✖	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖
63	■ ✖	■ ✖	■ ✖	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖
80	■ ✖	■ ✖	■ ✖	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖
100		■ ✖	■ ✖	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖
125		■ ✖	■ ✖	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖

# Series 61 cylinders - Aluminium profile

Single and double-acting, magnetic, cushioned. ISO 15552 - DIN/ISO 6431 / VDMA 24562  
Standard, low friction, low temperatures and tandem versions - ø 32, 40, 50, 63, 80, 100, 125 mm  
Example of assembly with a valve on page 11



MOVEMENT



## CODING EXAMPLE

<b>61</b>	<b>M</b>	<b>2</b>	<b>P</b>	<b>050</b>	<b>A</b>	<b>0200</b>	
<b>61</b>	SERIES						
<b>M</b>	VERSION: M = standard, magnetic - L = low friction, magnetic						
<b>2</b>	OPERATION: 1 = single-acting, front spring (ø 32 ± ø 100) 2 = double-acting, front and rear cushioned 3 = double-acting, no cushion 4 = double-acting, rear cushioned 5 = double-acting, front cushioned 6 = double-acting, through-rod, front and rear cushioned 7 = single-acting, through-rod 8 = double-acting, through-rod, no cushion						PNEUMATIC SYMBOLS * CS07 CD09 CD08 CD10 CD11 CD13 CS11 CD12
<b>P</b>	MATERIALS: P = standard: AL end-blocks and piston, rolled stainless steel AISI 420B rod, anodized AL profile tube, zinc-plated steel tie-rods and tie-rod nuts, PU seals; low friction: standard materials with NBR piston seal and NBR rod seal (FKM rod seal on request) low temperature: standard materials with chrome plated stainless steel AISI 420B rod, brass rod scraper ring, stainless steel AISI 303 nuts, stainless steel AISI 420B tie-rods, PU piston seals and NBR rod seal R = stainless steel AISI 420B tie-rods, stainless steel AISI 303 tie-rod nuts, others C = rolled stainless steel AISI 303 piston rod, stainless steel AISI 304 piston rod nut U = rolled stainless steel AISI 303 piston rod, AISI 304 piston-rod nut, AISI 420B tie-rods, AISI 303 tie-rod nuts W = rolled stainless steel AISI 304 piston rod, AISI304 piston-rod nut, AISI 420B tie-rods, AISI 303 tie-rod nuts Z = chrome plated stainless steel AISI 420B rod, stainless steel AISI 304 rod nut, stainless steel AISI 420B tie-rods, stainless steel AISI 303 tie-rods nuts, seals for low temperature (-40°C), brass rod scraper [ ø 125 excepted ] Y = chrome plated stainless steel AISI 420B rod, stainless steel AISI 304 rod nut, stainless steel AISI 420B tie-rods, stainless steel AISI 303 tie-rods nuts, seals for low temperature (-50°C), brass rod scraper [ ø 125 excepted ]						
<b>050</b>	BORE: 032 = 32 mm - 040 = 40 mm - 050 = 50 mm - 063 = 63 mm - 080 = 80 mm - 100 = 100 mm - 125 = 125 mm						
<b>A</b>	CONSTRUCTION: A = standard with rod nut - RL = cylinder with rod lock						
<b>0200</b>	STROKE: 10 + 2500 mm = standard - V = FKM rod seal - N = tandem [ pneumatic symbols CD9T ] - R = NBR rod seal W = all FKM seals +130C° - 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)						
Notes: Version C is available on request. For further information, please contact our technical department. With Version L the possibility to order the cylinder without piston rod seal further reduces the friction force.							
* = The complete list of cylinders pneumatic symbols is available at the end of this chapter Note: all double-acting cylinders are also available in the low friction version							

## STANDARD STROKES

- = Single-acting (standard and low temperature)
  - ✖ = Double-acting (standard, low friction and low temperature)
- Other strokes up to 2500 mm are available on request

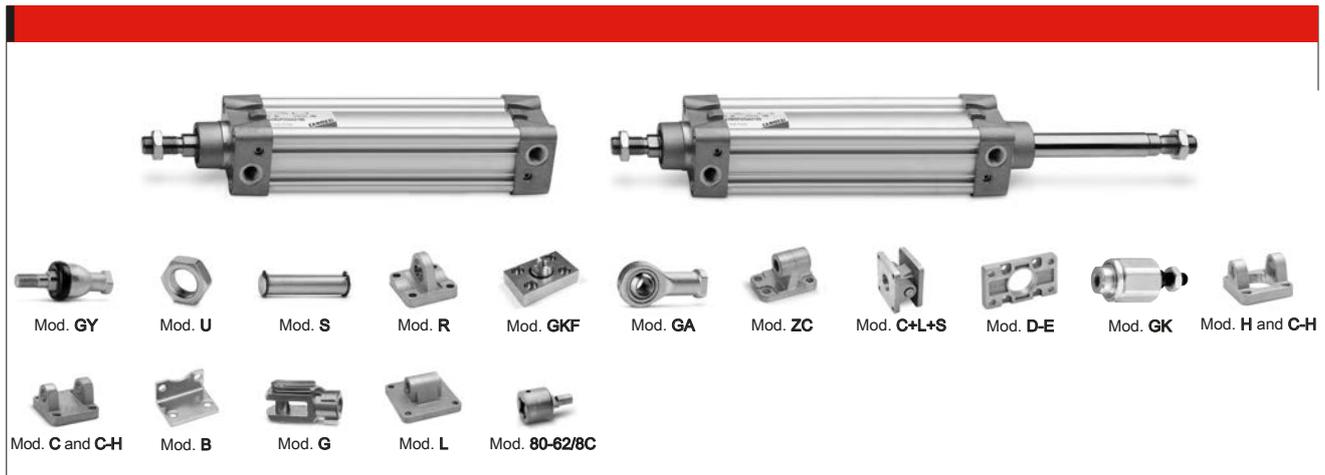
Ø	25	50	75	80	100	125	150	160	200	250	300	320	400	500
32	■ ✖	■ ✖	■ ✖	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖
40	■ ✖	■ ✖	■ ✖	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖
50	■ ✖	■ ✖	■ ✖	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖
63	■ ✖	■ ✖	■ ✖	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖
80	■ ✖	■ ✖	■ ✖	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖
100		■ ✖	■ ✖	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖	✖
125		■ ✖	■ ✖	✖	✖	✖	✖	✖	✖	✖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

# Series 62 cylinders - Aluminium profile

Double-acting, magnetic, cushioned. ISO 15552 - DIN/ISO 6431 / VDMA 24562

ø 32, 40, 50, 63, 80, 100 mm

Example of assembly with a valve on page 11



## CODING EXAMPLE

62	M	2	P	050	A	0200	
----	---	---	---	-----	---	------	--

<b>62</b>	SERIES	
<b>M</b>	VERSION: M = standard, magnetic	
<b>2</b>	OPERATION: 2 = double-acting, front + rear cushion 3 = double-acting, no cushion 4 = double-acting, rear cushion 5 = double-acting, front cushion 6 = double-acting, through-rod, front + rear cushion 8 = double-acting, through-rod, no cushion	PNEUMATIC SYMBOLS * CD09 CD08 CD10 CD11 CD13 CD12
<b>P</b>	MATERIALS: P = AL end-blocks, technopolymer piston, rolled stainless steel AISI 420B piston rod, zinc-plated steel piston rod nut, anodized AL-profile tube, zinc-plated steel tie-rods and nuts, NBR piston rod and piston seals, PU cushion seals (ø 80-100: PU piston seal) R = stainless steel AISI 420B tie-rods, stainless steel AISI 303 tie-rod nuts C = rolled stainless steel AISI 303 piston rod, stainless steel AISI 304 piston rod nut U = rolled stainless steel AISI 303 piston rod, stainless steel AISI 304 piston rod nut, stainless steel AISI 420B tie-rod, stainless steel AISI 303 tie-rod nuts W = rolled stainless steel AISI 304 piston rod, stainless steel AISI304 piston rod nut, stainless steel AISI 420B tie-rods, stainless steel AISI 303 tie-rod nuts	
<b>050</b>	BORE: 032 = 32 mm - 040 = 40 mm - 050 = 50 mm - 063 = 63 mm - 080 = 80 mm - 100 = 100 mm	
<b>A</b>	CONSTRUCTION: A = standard lock nut for rod RL = cylinder with rod lock	
<b>0200</b>	STROKE: 10 ÷ 2500 mm  = standard V = FKM piston rod seal P = PU piston rod seal ( ___ ) = extended piston rod ___ mm	

\* = The complete list of cylinders pneumatic symbols is available at the end of this chapter

## STANDARD STROKES

\* = Double-acting  
Special strokes until 2500 mm available on request

ø	25	50	75	80	100	125	150	160	200	250	300	320	400	500
32	*	*	*	*	*	*	*	*	*	*	*	*	*	*
40	*	*	*	*	*	*	*	*	*	*	*	*	*	*
50	*	*	*	*	*	*	*	*	*	*	*	*	*	*
63	*	*	*	*	*	*	*	*	*	*	*	*	*	*
80	*	*	*	*	*	*	*	*	*	*	*	*	*	*
100		*	*	*	*	*	*	*	*	*	*	*	*	*

# Series 6PF Positioning Feedback cylinders

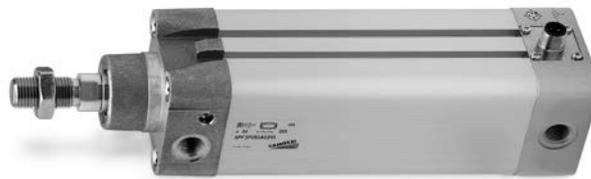
Double-acting low friction, magnetic. ISO 15552 - DIN/ISO 6431 / VDMA 24562

ø 50, 63, 80, 100, 125 mm

Example of assembly with a valve on page 11



1  
MOVEMENT



## CODING EXAMPLE

<b>6PF</b>	<b>3</b>	<b>P</b>	<b>050</b>	<b>A</b>	<b>0200</b>
------------	----------	----------	------------	----------	-------------

**6PF** SERIES

**3** OPERATION:  
3 = double-acting low friction, no cushion PNEUMATIC SYMBOL \*  
CD08

**P** MATERIALS:  
P = AL piston, rear endcap, steel nut and grain, anodized AL extrusion profile, sintered bronze rod guide bush, chrome plated steel rod, acetal resin piston guide element, nickel plated brass M12 connector, Neodymium magnetic actuator, NBR seals (rod, piston and OR)

**050** BORE:  
050 = 50 mm  
063 = 63 mm  
080 = 80 mm  
100 = 100 mm  
125 = 125 mm

**A** CONSTRUCTION:  
A = standard with rod nut  
RL = cylinder with rod lock

**0200** STROKE:  
50 ÷ 500 mm (step 50 mm)

VERSIONS:  
= 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

Note: with Version L the possibility to order the cylinder without piston rod seal further reduces the friction force

\* = The complete list of cylinders pneumatic symbols is available at the end of this chapter

## STANDARD STROKES

\* = Double-acting, low friction

∅	50	100	150	200	250	300	350	400	450	500
<b>50</b>	*	*	*	*	*	*	*	*	*	*
<b>63</b>	*	*	*	*	*	*	*	*	*	*
<b>80</b>	*	*	*	*	*	*	*	*	*	*
<b>100</b>	*	*	*	*	*	*	*	*	*	*
<b>125</b>	*	*	*	*	*	*	*	*	*	*

# Series 63 cylinders - Aluminium tube and profile

New

Single and double-acting, magnetic, cushioned.

Versions: standard, low friction, high and low temperatures.  $\varnothing$  32, 40, 50, 63, 80, 100, 125 mm

Example of assembly with a valve on page 11



1

MOVEMENT



## CODING EXAMPLE

63	M	P	2	C	050	A	0200			
----	---	---	---	---	-----	---	------	--	--	--

<b>63</b>	SERIES	
<b>M</b>	VERSION: M = standard, magnetic - L = low friction, magnetic	
<b>P</b>	CONSTRUCTION: T = round tube - P = profile	
<b>2</b>	OPERATION: 1 = single-acting, front spring 2 = double-acting 6 = double-acting, through-rod 7 = single-acting, through-rod 9 = single-acting, rear spring	PNEUMATIC SYMBOL * CS07 CD08 - CD09 - CD10 - CD11 CD13 CS11 CS14
<b>C</b>	CUSHIONING: N = no cushioning C = cushioning on both sides F = front cushioning R = rear cushioning	CD08 CD09/CD13 CD11 CD10
<b>050</b>	BORE: 032 = 32 mm - 040 = 40 mm - 050 = 50 mm - 063 = 63 mm - 080 = 80 mm - 100 = 100 mm - 125 = 125 mm	
<b>A</b>	CONSTRUCTIVE TYPE: A = standard with rod nut - RL = cylinder with rod lock - F = cylinder with centre trunnion	
<b>0200</b>	STROKES: 10 $\times$ 2500 mm	
	TEMPERATURE RANGE: = standard - W = high temperatures (150°C) - Z = low temperatures (-40°C) - Y = low temperatures (-50°C)	
	RESISTANCE TO CORROSION: = standard (for further details see the Camozzi's catalogue) C1 = rod nut AISI 304 stainless steel, rod AISI 304 stainless steel (for further details see the Camozzi's catalogue)	
	ROD VARIATIONS: = standard - ( _ _ _ ) = rod longer than _ _ _ mm - L = without rod seal (rear supply only) * - R = NBR rod seal - V = FKM rod seal G = dry and dusty environments (with brass rod scraper and chrome-plated stainless steel AISI 420B rod)	
	* The possibility to order the cylinder without piston rod seal, further reduces the friction force.	
	Add EX to order the ATEX certified version.	

\* = The complete list of cylinders pneumatic symbols is available at the end of this chapter

## STANDARD STROKES

- = Single-acting (standard, high and low temperatures);
- = Single-acting, rear spring (standard, high/low temperatures);
- \* = Double-acting (standard, low friction, high and low temperatures). Other strokes up to 2500 mm are available on request.

$\varnothing$	25	50	75	80	100	125	150	160	200	250	300	320	400	500
32	■ ● *	■ ● *	■ *	■ *	■ *	■ *	■ *	■ *	■ *	■ *	■ *	■ *	■ *	■ *
40	■ ● *	■ ● *	■ *	■ *	■ *	■ *	■ *	■ *	■ *	■ *	■ *	■ *	■ *	■ *
50	■ ● *	■ ● *	■ *	■ *	■ *	■ *	■ *	■ *	■ *	■ *	■ *	■ *	■ *	■ *
63	■ ● *	■ ● *	■ *	■ *	■ *	■ *	■ *	■ *	■ *	■ *	■ *	■ *	■ *	■ *
80	■ ● *	■ ● *	■ *	■ *	■ *	■ *	■ *	■ *	■ *	■ *	■ *	■ *	■ *	■ *
100		■ ● *	■ *	■ *	■ *	■ *	■ *	■ *	■ *	■ *	■ *	■ *	■ *	■ *
125		■ ● *	■ *	■ *	■ *	■ *	■ *	■ *	■ *	■ *	■ *	■ *	■ *	■ *

**Examples of assembly Series 60, 61, 62, 6PF and 63**

Example of assembly Series 60

Mod. **PCV-32**  
**PCV-40-50**  
**PCV-63-80**



Example of assembly Series 61 and 6PF

Mod. **PCV-61-K3** to connect Series 3 valves/solenoid valves, port G1/8  
**PCV-61-K4** to connect Series 4 valves/solenoid valves, port G1/4  
**PCV-61-K8** to connect Series 4 valves/solenoid valves, port G1/8 and Series 3 port G1/4  
**PCV-62-KEN** to connect Series EN valves/solenoid valves



Example of assembly Series 62 and 63

Mod. **PCV-62-K3** to connect Series 3 valves/solenoid valves, port G1/8  
**PCV-62-K4** to connect Series 4 valves/solenoid valves, port G1/4  
**PCV-62-K8** to connect Series 4 valves/solenoid valves, port G1/8 and Series 3 port G1/4  
**PCV-62-KEN** to connect Series EN valves/solenoid valves



# Series 32 compact cylinders

Single and double-acting, non-rotating, magnetic  
ISO 21287  
ø 20, 25, 32, 40, 50, 63, 80, 100 mm



1

MOVEMENT



## CODING EXAMPLE

32	M	2	A	032	A	050	
----	---	---	---	-----	---	-----	--

**32** SERIES

**M** VERSION:  
M = male rod thread, mounted with rod nut Mod. U  
F = female rod thread  
R = antirotation with flange (not for single-acting version)

**2** OPERATION:  
1 = single-acting, front spring  
2 = double-acting  
3 = double-acting, through-rod  
4 = single-acting, rear spring

PNEUMATIC SYMBOLS \*  
CS06  
CD08  
CD12  
CS08

**A** MATERIALS:  
A = anodized aluminium body, end blocks and piston,  
PU seals (rod, end-blocks OR and piston)

**032** BORES:  
020 = 20 mm - 025 = 25 mm - 032 = 32 mm - 040 = 40 mm  
050 = 50 mm - 063 = 63 mm - 080 = 80 mm - 100 = 100 mm

**A** CONSTRUCTION:  
A = standard

**050** STROKE  
ø 20-25 = 5-300 mm / ø 32-40-50-63 = 5-400 mm / ø 80-100 = 5-500 mm

= standard  
S = special  
V = FKM rod seal  
W = high temperatures (double-acting, non-magnetic  
with FKM seals for high temperatures up to 140°C)

\* = The complete list of cylinders pneumatic symbols is available at the end of this chapter

## STANDARD STROKES

- ✕ = Non-rotating
- = Double-acting, male/female rod thread
- = Single-acting, front/rear spring, male/female rod thread

ø	5	10	15	20	25	30	40	50	60	80
20	✕ • ■	✕ • ■	✕ • ■	✕ • ■	✕ • ■	✕ •	✕ •	✕ •		
25	✕ • ■	✕ • ■	✕ • ■	✕ • ■	✕ • ■	✕ •	✕ •	✕ •		
32	✕ • ■	✕ • ■	✕ • ■	✕ • ■	✕ • ■	✕ •	✕ •	✕ •	✕ •	✕ •
40	✕ • ■	✕ • ■	✕ • ■	✕ • ■	✕ • ■	✕ •	✕ •	✕ •	✕ •	✕ •
50		✕ • ■	✕ • ■	✕ • ■	✕ • ■	✕ •	✕ •	✕ •	✕ •	✕ •
63		✕ • ■	✕ • ■	✕ • ■	✕ • ■	✕ •	✕ •	✕ •	✕ •	✕ •
80		✕ • ■	✕ • ■	✕ • ■	✕ • ■	✕ •	✕ •	✕ •	✕ •	✕ •
100		✕ • ■	✕ • ■	✕ • ■	✕ • ■	✕ •	✕ •	✕ •	✕ •	✕ •

# Series 32 compact cylinders tandem and multi-position versions

Double-acting, magnetic  
ISO 21287  
ø 25, 40, 63, 100 mm



MOVEMENT

Tandem version



Mod. 32F2A...XN2

Multi-position version



Mod. 32F2A...X1/X2N

## CODING EXAMPLES

**32 M 2 A 040 A 050 N 2**

<b>32</b>	SERIES
<b>M</b>	VERSION: M = male rod thread, mounted with rod nut Mod. U F = female rod thread
<b>2</b>	OPERATION: 2 = double-acting PNEUMATIC SYMBOLS * CDPP
<b>A</b>	MATERIALS: A = anodized aluminium body, end blocks and piston PU seals (rod - OR end block and piston)
<b>040</b>	BORE: 025 = 25 mm 040 = 40 mm 063 = 63 mm 100 = 100 mm PNEUMATIC SYMBOLS * CD5T - CD6T - CD7T CD2T - CD3T - CD4T CD5T - CD6T - CD7T
<b>A</b>	CONSTRUCTION: A = standard
<b>050</b>	STROKES (min and max): ø 25 = 5+80 mm ø 40-63-100 = 5+100 mm
<b>N</b>	TANDEM
<b>2</b>	STAGES: 2 = 2 stages

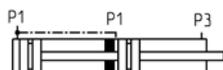
**32 M 2 A 040 A 25/75 N**

<b>32</b>	SERIES
<b>M</b>	VERSION: M = male rod thread, mounted with rod nut Mod. U F = female rod thread
<b>2</b>	OPERATION: 2 = double-acting PNEUMATIC SYMBOLS * CDPP
<b>A</b>	MATERIALS: A = anodized aluminium body, end blocks and piston PU seals (rod - OR end block and piston)
<b>040</b>	BORE: 025 = 25 mm 040 = 40 mm 063 = 63 mm 100 = 100 mm PNEUMATIC SYMBOLS * CD5T - CD6T - CD7T CD2T - CD3T - CD4T CD5T - CD6T - CD7T
<b>A</b>	CONSTRUCTION: A = standard
<b>25/75</b>	STROKES (min and max): ø 25 = 5+300 (size for X2) ø 40-63 = 5+400 (size for X2) ø 100 = 5+500 (size for X2)
<b>N</b>	MULTI-POSITION

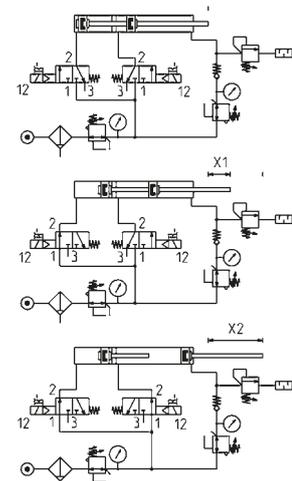
\* = The complete list of cylinders pneumatic symbols is available at the end of this chapter

## Operating schemes

Example for ordering:  
Stroke 50 mm  
Mod. 32M2A040A050N2



Example for ordering:  
X1=25 mm and X2=75 mm  
Mod. 32M2A040A25/75N



## Series 45 anti-rotation guides

For cylinders DIN/ISO 6432 -  $\varnothing$  12, 16, 20, 25 mm

For cylinders DIN/ISO 6431 -  $\varnothing$  32, 40, 50, 63, 80, 100 mm



### CODING EXAMPLE

<b>45</b>	<b>N</b>	<b>UT</b>	<b>050</b>	<b>A</b>	<b>0100</b>
-----------	----------	-----------	------------	----------	-------------

**45** SERIES

**N** VERSION:  
N = standard

**UT** OPERATION:  
UT = "U" self lubricating guide  
HT = "H" self lubricating guide  
HB = "H" ball guide

**050** BORE:  
016 =  $\varnothing$  12-16 mm (available only in the UT version with "U" self lubricating guide)  
020 = 20 mm  
025 = 25 mm  
032 = 32 mm  
040 = 40 mm  
050 = 50 mm  
063 = 63 mm  
080 = 80 mm  
100 = 100 mm

**A** MATERIALS:  
A = anodized aluminium body - stainless steel AISI 420B columns for 45UT and 45HT - hardened steel C50 columns for 45HB

**0100** STROKE in mm

# Series QN short-stroke cylinders

Single-acting, non magnetic  
 ø 8, 12, 20, 32, 50, 63 mm

1

MOVEMENT



## CODING EXAMPLE

<b>QN</b>	<b>1</b>	<b>A</b>	<b>50</b>	<b>A</b>	<b>25</b>
<b>QN</b>	SERIES				
<b>1</b>	OPERATING: 1 = single-acting		PNEUMATIC SYMBOL* CS01		
<b>A</b>	MATERIALS: A = rolled stainless steel rod - aluminium body				
<b>50</b>	BORE: 08 = 8 mm 12 = 12 mm 20 = 20 mm 32 = 32 mm 50 = 50 mm 63 = 63 mm				
<b>A</b>	TYPE OF DESIGN: A = standard				
<b>25</b>	STROKE: (see the table)				

\* = The complete list of cylinders pneumatic symbols is available at the end of this chapter

## STANDARD STROKES

\* = Single-acting

Ø	4	5	10	25
8	*			
12	*		*	
20	*		*	
32		*	*	*
50			*	*
63			*	*

# Series QP and QPR short-stroke cylinders

Series QP: single and double-acting, magnetic  
 Series QPR: double-acting magnetic, non-rotating  
 ø 12, 16, 20, 25, 32, 40, 50, 63, 80, 100 mm

1

MOVEMENT



CODING EXAMPLE						
QP	2	A	050	A	050	
<b>QP</b>	SERIES: QP = standard QPR = standard non-rotating					
<b>2</b>	OPERATION: 1 = single-acting, front spring (only QP) 2 = double-acting 3 = double-acting, through-rod			PNEUMATIC SYMBOLS * CS09 CD07 CD14		
<b>A</b>	MATERIALS: A = rolled stainless steel rod - AL tube profile					
<b>050</b>	BORE: 012 = 12 mm - 016 = 16 mm - 020 = 20 mm - 025 = 25 mm - 032 = 32 mm 040 = 40 mm - 050 = 50 mm - 063 = 63 mm - 080 = 80 mm - 100 = 100 mm					
<b>A</b>	TYPE OF MOUNTING: A = standard					
<b>050</b>	STROKE: Series QP: ø 12+25 = 1+150 mm / ø 32+100 = 1+200 mm Series QPR: ø 12 = 1+50 mm / ø 16 = 1+75 mm / ø 20+100 = a 1+100 mm  = standard V = FKM rod seal W = all FKM seals (ø 12 excepted)					
* = The complete list of cylinders pneumatic symbols is available at the end of this chapter						

STANDARD STROKES														
ø	5	10	15	20	25	30	35	40	45	50	60	75	80	100
12	■ x •	■ x •	■ x •	■ x	■ x •	■ •	■	■	■					
16	■ x •	■ x •	■ x •	■ x •	■ x •	■ •	■ •	■ •	■ •	■ •	■ •	■ •	■	■
20	■ x •	■ x •	■ x •	■ x •	■ x •	■ •	■ •	■ •	■ •	■ •	■ •	■ •	■ •	■ •
25	■ x •	■ x •	■ x •	■ x •	■ x •	■ •	■ •	■ •	■ •	■ •	■ •	■ •	■ •	■ •
32	■ x •	■ x •	■ x •	■ x •	■ x •	■ •	■ •	■ •	■ •	■ •	■ •	■ •	■ •	■ •
40	■ x •	■ x •	■ x •	■ x •	■ x •	■ •	■ •	■ •	■ •	■ •	■ •	■ •	■ •	■ •
50	■ x •	■ x •	■ x •	■ x •	■ x •	■ •	■ •	■ •	■ •	■ •	■ •	■ •	■ •	■ •
63	■ x •	■ x •	■ x •	■ x •	■ x •	■ •	■ •	■ •	■ •	■ •	■ •	■ •	■ •	■ •
80	■ x •	■ x •	■ x •	■ x •	■ x •	■ •	■ •	■ •	■ •	■ •	■ •	■ •	■ •	■ •
100	■ x •	■ x •	■ x •	■ x •	■ x •	■ •	■ •	■ •	■ •	■ •	■ •	■ •	■ •	■ •

# Series 31 compact cylinders

New version

Series 31M-31F: single-acting and double-acting, magnetic  
Series 31R: double-acting, non-rotating, magnetic  
ø 12, 16, 20, 25 mm. ø 32, 40, 50, 63, 80, 100 mm UNITOP



Mod. GY

Mod. U

Mod. GKF

Mod. GA

Mod. ZC

Mod. D-E

Mod. GK

Mod. I

Mod. B

Mod. G

Mod. L



Mod. C

Mod. DC

## CODING EXAMPLE

<b>31</b>	<b>M</b>	<b>2</b>	<b>A</b>	<b>032</b>	<b>A</b>	<b>050</b>	
-----------	----------	----------	----------	------------	----------	------------	--

**31**

SERIES

**M**

VERSION:  
M = male rod thread, mounted with rod nut Mod. U  
F = female rod thread  
R = non-rotating with flange only double-acting

**2**

OPERATION:  
1 = single-acting, front spring  
2 = double-acting  
3 = double-acting, through-rod  
4 = single-acting, rear spring  
7 = semplice effetto, stelo passante

PNEUMATIC SYMBOLS \*  
CS06  
CD08  
CD12  
CS08  
CS10

**A**

MATERIALS:  
A = rolled stainless steel AISI 303 rod - AL tube profile

**032**

BORE:  
012 = 12 mm - 016 = 16 mm - 020 = 20 mm - 025 = 25 mm - 032 = 32 mm  
040 = 40 mm - 050 = 50 mm - 063 = 63 mm - 080 = 80 mm - 100 = 100 mm

**A**

DESIGN TYPE:  
A = standard

**050**

STROKE:  
Series 31R, 31M and 31F: ø 12 + 25 = 1 + 200 mm / ø 32 + 63 = 1 + 300 mm / ø 80 + 100 = 1 + 400 mm  
The min. stroke for the use of sensors is 10 mm  
Single-acting = 5+25 mm (see the standard strokes table)

= standard  
S = special  
V = rod seal FKM  
W = seals in FKM for high temperatures (140°C), only available in the double-acting, non magnetic version

\* = The complete list of cylinders pneumatic symbols is available at the end of this chapter

## STANDARD STROKES

- = Double-acting female, male
- ✕ = Non-rotating
- = Single-acting female, male

ø	5	10	15	20	25	30	40	50	60	80
12	■ ✕ ●	■ ✕ ●	■ ✕	■ ✕	■ ✕	■ ✕	■ ✕			
16	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕	■ ✕			
20	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕	■ ✕	■ ✕		
25	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕	■ ✕	■ ✕	■ ✕	
32	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕	■ ✕	■ ✕	■ ✕	■ ✕
40	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕	■ ✕	■ ✕	■ ✕	■ ✕
50		■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕	■ ✕	■ ✕	■ ✕	■ ✕
63		■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕	■ ✕	■ ✕	■ ✕	■ ✕
80		■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕	■ ✕	■ ✕	■ ✕	■ ✕
100		■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕	■ ✕	■ ✕	■ ✕	■ ✕

# Series 31 compact cylinders tandem and multi-position versions

New version

Double-acting, magnetic  
 ø 12, 16, 20, 25, 32, 40, 50, 63, 80, 100 mm

Tandem version



Mod. 31F2A...XN

Multi-position version



Mod. 31F2A...X1/X2N

## CODING EXAMPLES

**31 M 2 A 032 A 050 N 2**

<b>31</b>	SERIES
<b>M</b>	VERSION: M = male rod thread, mounted with rod nut Mod. U F = female rod thread
<b>2</b>	OPERATION: 2 = double-acting PNEUMATIC SYMBOLS * CDPP
<b>A</b>	MATERIALS: A = rolled stainless steel rod AISI 303 - AL tube profile
<b>032</b>	BORE: 012 = 12 mm - 016 = 16 mm 020 = 20 mm - 025 = 25 mm 032 = 32 mm - 040 = 40 mm - 050 = 50 mm 063 = 63 mm - 080 = 80 mm - 100 = 100 mm PNEUMATIC SYMBOLS * CD5T - CD6T - CD7T CD5T - CD6T - CD7T CD2T - CD3T - CD4T CD2T - CD3T - CD4T
<b>A</b>	CONSTRUCTION TYPE: A = standard
<b>050</b>	STROKES (min and max): ø 12+25 = 1+80 mm ø 32+100 = 1+100 mm
<b>N</b>	TANDEM
<b>2</b>	STAGES: 2 = 2 stages - 3 = 3 stages - 4 = 4 stages

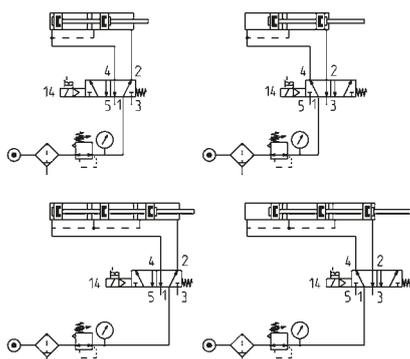
**31 M 2 A 032 A 25/100 N**

<b>31</b>	SERIES
<b>M</b>	VERSION: M = male rod thread, mounted with rod nut Mod. U F = female rod thread
<b>2</b>	OPERATION: 2 = double-acting PNEUMATIC SYMBOLS * CDPP
<b>A</b>	MATERIALS: A = rolled stainless steel rod AISI 303 - AL tube profile
<b>032</b>	BORE: 012 = 12 mm - 016 = 16 mm 020 = 20 mm - 025 = 25 mm 032 = 32 mm - 040 = 40 mm - 050 = 50 mm 063 = 63 mm - 080 = 80 mm - 100 = 100 mm PNEUMATIC SYMBOLS * CD5T - CD6T - CD7T CD5T - CD6T - CD7T CD2T - CD3T - CD4T CD2T - CD3T - CD4T
<b>A</b>	CONSTRUCTION TYPE: A = standard
<b>25/100</b>	STROKES (min and max): ø 12+25 = size for x2 max 200 mm ø 32+63 = size for x2 max 300 mm ø 80+100 = size for x2 max 400 mm
<b>N</b>	MULTI-POSITION

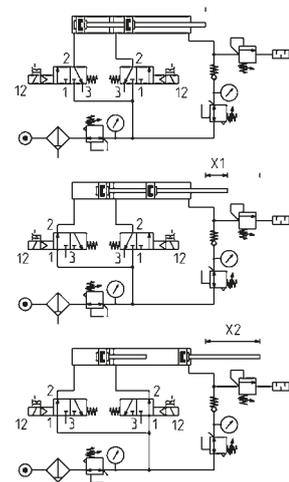
\* = The complete list of cylinders pneumatic symbols is available at the end of this chapter

## Operating schemes

Example for ordering:  
 Stroke 25 mm  
 Mod. **31M2A032A025N2** (2 stages)



Example for ordering:  
 X1=25 mm and X2=100 mm  
 Mod. **31M2A032A25/100N**



# Series 90 stainless steel cylinders

Single and double-acting, cushioned, magnetic  
ISO 15552 - DIN/ISO 6431- VDMA 24562  
ø 32, 40, 50, 63, 80, 100, 125 mm



Mod. B



Mod. D-E



Mod. C-H



Mod. CR



Mod. L



Mod. ZC



Mod. R



Mod. ZCR



Mod. G-90



Mod. GA-90



Mod. U-90



Mod. S-90



Mod. SR-90

## CODING EXAMPLE

90	M	2	A	050	A	0200	
----	---	---	---	-----	---	------	--

**90** SERIES

**M** VERSION:  
M = standard, magnetic

**2** OPERATION:  
1 = single-acting, front spring  
2 = double-acting, front and rear cushions  
6 = double-acting, through-rod, front and rear cushions

PNEUMATIC SYMBOLS \*  
CS06  
CD09  
CD13

**A** MATERIALS:  
A = stainless steel AISI 316, seals in NBR  
V = stainless steel AISI 316, all seals in FKM (150°C)

**050** BORE:  
032 = 32 mm  
040 = 40 mm  
050 = 50 mm  
063 = 63 mm  
080 = 80 mm  
100 = 100 mm  
125 = 125 mm

**A** TYPE OF DESIGN:  
A = standard with piston rod lock nut Mod. U

**0200** STROKE:  
25 ÷ 800 mm

= standard  
V = rod seal in FKM

\* = The complete list of cylinders pneumatic symbols is available at the end of this chapter

## STANDARD STROKES

✕ = Double-acting  
• = Single-acting

Ø	25	50	80	100	125	150	160	200	250	300	320	400	500
32	✕•	✕•	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕
40	✕•	✕•	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕
50	✕•	✕•	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕
63	✕•	✕•	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕
80	✕•	✕•	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕
100	✕•	✕•	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕
125		✕•	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕

# Series 94 and 95 stainless steel minicylinders

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

Series 94:  $\varnothing$  16, 20, 25 mm

Series 95:  $\varnothing$  25 mm, cushioned



## CODING EXAMPLE

<b>94</b>	<b>N</b>	<b>2</b>	<b>A</b>	<b>16</b>	<b>A</b>	<b>100</b>	
<b>94</b>	SERIES: 94 = magnetic 95 = magnetic, cushioned						
<b>N</b>	VERSION: N = standard						
<b>2</b>	OPERATION: 1 = single-acting, front spring 2 = double-acting 3 = double-acting, through-rod				PNEUMATIC SYMBOLS * CS06 (S. 94) CD08 (S. 94) - CD09 (S. 95) CD12 (S. 94) - CD13 (S. 95)		
<b>A</b>	MATERIALS: A = stainless steel, seals in NBR V = stainless steel, all seals in FKM (150°C)						
<b>16</b>	BORE: 16 = 16 mm 20 = 20 mm 25 = 25 mm						
<b>A</b>	TYPE OF DESIGN: A = standard with locking ring for end cap Mod. V and piston rod lock nut Mod. U						
<b>100</b>	STROKE: 10 + 500 mm = standard V = rod seal in FKM						

\* = The complete list of cylinders pneumatic symbols is available at the end of this chapter

## STANDARD STROKES

- = Single-acting
- ✕ = Double-acting

Series	$\varnothing$	10	25	40	50	80	100	125	160	200	250	300	320	400	500
94	16	• ✕	• ✕	• ✕	• ✕	✕	✕	✕	✕	✕					
94	20	• ✕	• ✕	• ✕	• ✕	✕	✕	✕	✕	✕	✕	✕			
94	25	• ✕	• ✕	• ✕	• ✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕
95	25	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕

# Series 97 stainless steel cylinders

Single and double-acting, cushioned, magnetic  
 ø 32, 40, 50, 63 mm



Mod. B



Mod. I



Mod. C-H



Mod. CR



Mod. R



Mod. ZCR



Mod. G-90



Mod. GA-90



Mod. U-90



Mod. V-97



Mod. S-90



Mod. SR-90

## CODING EXAMPLE

97	M	2	A	050	A	0200	
----	---	---	---	-----	---	------	--

**97** SERIES

**M** VERSIONS:  
 M = rear male hinge  
 S = articulated rear male hinge  
 F = rear female hinge  
 T = front and rear threaded end blocks  
 A = front end block with pin

**2** OPERATION:  
 1 = single-acting, front spring  
 2 = double-acting, front and rear cushions  
 6 = double-acting, through-rod, front and rear cushions (T and A versions only)

PNEUMATIC SYMBOLS \*  
 CS06  
 CD09  
 CD13

**A** MATERIALS:  
 A = stainless steel AISI 304 - PU seals  
 V = stainless steel AISI 304 - FKM seals (150°C)

**050** BORE:  
 032 = 32 mm  
 040 = 40 mm  
 050 = 50 mm  
 063 = 63 mm

**A** TYPE OF DESIGN:  
 A = standard (locking ring for end cap V + lock nut for rod U)

**0200** STROKE:  
 25 + 800 mm  
 = standard  
 V = rod seal in FKM

\* = The complete list of cylinders pneumatic symbols is available at the end of this chapter

## STANDARD STROKES

• = Single-acting  
 \* = Double-acting

Ø	25	50	75	80	100	125	150	160	200	250	300	320	400	500
32	*•	*•	*	*	*	*	*	*	*	*	*	*	*	*
40	*•	*•	*	*	*	*	*	*	*	*	*	*	*	*
50	*•	*•	*	*	*	*	*	*	*	*	*	*	*	*
63	*•	*•	*	*	*	*	*	*	*	*	*	*	*	*

# Series QCT and QCB cylinders with integrated guide

Double-acting, magnetic piston, guided  
 ø 20, 25, 32, 40, 50, 63 mm



CODING EXAMPLE						
QC	T	2	A	020	A	050
<b>QC</b>	SERIES					
<b>T</b>	VERSION: T = sintered bronze bushes B = linear ball bearings					
<b>2</b>	OPERATIONS: 2 = double-acting				PNEUMATIC SYMBOLS * CD07	
<b>A</b>	MATERIALS: A = anodized aluminium body - rolled stainless steel AISI 303 piston rod rolled stainless steel AISI 420B columns for QCT - hardened steel C50 columns for QCB					
<b>020</b>	BORE: 020 = 20 mm - 025 = 25 mm - 032 = 32 mm - 040 = 40 mm - 050 = 50 mm - 063 = 63 mm					
<b>A</b>	TYPE OF DESIGN: A = standard					
<b>050</b>	STROKE: (see the table)					
* = The complete list of cylinders pneumatic symbols is available at the end of this chapter						

STANDARD STROKES											
	20	25	30	40	50	75	100	125	150	175	200
20	■		■	■	■	■	■	■	■	■	■
25	■		■	■	■	■	■	■	■	■	■
32		■			■	■	■	■	■	■	■
40		■			■	■	■	■	■	■	■
50			■		■	■	■	■	■	■	■
63				■	■	■	■	■	■	■	■

■ = Double-acting  
 Out of standard intermediate strokes available on request (strokes multiple of 5 mm)

# Series QCTF and QCBF cylinders with integrated guide

Double-acting, magnetic, with double bearings and flanges  
 ø 20, 25, 32, 40 mm

1  
MOVEMENT



Mod. QCTF2A...A...  
Mod. QCBF2A...A...



Mod. QCTF2A...B...  
Mod. QCBF2A...B...



Mod. QCTF2A...C...  
Mod. QCBF2A...C...

## CODING EXAMPLE

QC	T	F	2	A	020	A	050
----	---	---	---	---	-----	---	-----

**QC**

SERIES

**T**

TYPE OF BEARING:  
T = sintered bronze bushes  
B = linear ball bearings

**F**

VERSION:  
F = double flange

**2**

OPERATION:  
2 = double-acting

PNEUMATIC SYMBOLS \*  
CD07

**A**

MATERIALS:  
A = anodized aluminium body - rolled stainless steel piston rod AISI 303  
rolled stainless steel AISI 420B columns for QCTF - hardened steel C50 columns for QCBF

**020**

BORE:  
020 = 20 mm - 025 = 25 mm - 032 = 32 mm - 040 = 40 mm

**A**

CUSHION:  
A = fixed mechanical cushion (standard)  
B = two shock absorbers located on the body  
C = one shock absorber located on the rear flange

**050**

STROKE:  
(see the table)

\* = The complete list of cylinders pneumatic symbols is available at the end of this chapter

## STANDARD STROKES

- = Type A and C
- ✕ = Type B

Out of standard intermediate strokes available on request (strokes multiple of 5 mm)

Ø	20	25	30	40	50	75	100	125	150	175	200
20	■		■	■	■	■✕	■✕	■✕	■✕	■✕	■✕
25	■		■	■	■	■✕	■✕	■✕	■✕	■✕	■✕
32		■			■	■	■✕	■✕	■✕	■✕	■✕
40		■			■	■	■✕	■✕	■✕	■✕	■✕

# Series QX twin cylinders

Double-acting, magnetic, guided  
 ø 10x2, 16x2, 20x2, 25x2, 32x2 mm

1

MOVEMENT



## CODING EXAMPLE

<b>QX</b>	<b>T</b>	<b>2</b>	<b>A</b>	<b>020</b>	<b>A</b>	<b>050</b>
-----------	----------	----------	----------	------------	----------	------------

<b>QX</b>	SERIES					
<b>T</b>	VERSION: T = sintered bronze bushes B = linear ball bearings					
<b>2</b>	OPERATION: 2 = double-acting (1 flange) radial / axial pressure supply 3 = double-acting through-rod (double-flange), radial pressure supply				PNEUMATIC SYMBOLS * CD15 CD16	
<b>A</b>	MATERIALS: A = anodized aluminium body, rolled stainless steel AISI 303 piston rod					
<b>020</b>	BORE: 010 = 10 mm - 016 = 16 mm - 020 = 20 mm - 025 = 25 mm - 032 = 32 mm					
<b>A</b>	TYPE OF DESIGN: A = standard					
<b>050</b>	STROKE: from 10 to 100					

\* = The complete list of cylinders pneumatic symbols is available at the end of this chapter

## STANDARD STROKES

■ = Double-acting

ø	10	20	30	40	50	75	100
<b>10</b>	■	■	■	■	■	■	■
<b>16</b>	■	■	■	■	■	■	■
<b>20</b>	■	■	■	■	■	■	■
<b>25</b>	■	■	■	■	■	■	■
<b>32</b>	■	■	■	■	■	■	■

# Series 14 compact minicylinders

Single-acting

Bores  $\varnothing$  6, 10, 16 mm and strokes 5, 10, 15 mm

With super-rapid fitting  $\varnothing$  4 and M5 port

MOVEMENT

1

With non threaded piston rod



With threaded piston rod



SIZES Super-rapid fitting incorporated			SIZES Threaded port		
Mod.	$\varnothing$	STROKE	Mod.	$\varnothing$	STROKE
14N1A06A05	6	5	14N1M06A05	6	5
14N1A06A10	6	10	14N1M06A10	6	10
14N1A06A15	6	15	14N1M06A15	6	15
14N1A10A05	10	5	14N1M10A05	10	5
14N1A10A10	10	10	14N1M10A10	10	10
14N1A10A15	10	15	14N1M10A15	10	15
14N1A16A05	16	5	14N1M16A05	16	5
14N1A16A10	16	10	14N1M16A10	16	10
14N1A16A15	16	15	14N1M16A15	16	15

SIZES Super-rapid fitting incorporated			SIZES Threaded port		
Mod.	$\varnothing$	STROKE	Mod.	$\varnothing$	STROKE
14N1A06B05	6	5	14N1M06B05	6	5
14N1A06B10	6	10	14N1M06B10	6	10
14N1A06B15	6	15	14N1M06B15	6	15
14N1A10B05	10	5	14N1M10B05	10	5
14N1A10B10	10	10	14N1M10B10	10	10
14N1A10B15	10	15	14N1M10B15	10	15
14N1A16B05	16	5	14N1M16B05	16	5
14N1A16B10	16	10	14N1M16B10	16	10
14N1A16B15	16	15	14N1M16B15	16	15

## CODING EXAMPLE

<b>14</b>	<b>N</b>	<b>1</b>	<b>A</b>	<b>06</b>	<b>A</b>	<b>05</b>
-----------	----------	----------	----------	-----------	----------	-----------

<b>14</b>	VERSION: N = non-magnetic					
<b>N</b>	OPERATION: 1 = single-acting				PNEUMATIC SYMBOL * CS01	
<b>1</b>	TYPE OF CONNECTION: A = tube $\varnothing$ 4 M = thread M5					
<b>A</b>	BORE: 06 = 6 mm 10 = 10 mm 16 = 16 mm					
<b>06</b>	TYPE OF DESIGN: A = non-threaded smooth piston rod B = threaded piston rod					
<b>A</b>	STROKE: 05 = 5 mm 10 = 10 mm 15 = 15 mm					
<b>05</b>						

\* = The complete list of cylinders pneumatic symbols is available at the end of this chapter

# Series 27 cylinders

Double-acting, magnetic  
 ø 20, 25, 32, 40, 50, 63 mm



Mod. GKF



Mod. GK



Mod. T



Mod. GY



Mod. GA



Mod. B



Mod. U



Mod. V



Mod. I



Mod. G

## CODING EXAMPLE

<b>27</b>	<b>M</b>	<b>2</b>	<b>A</b>	<b>20</b>	<b>A</b>	<b>0050</b>
-----------	----------	----------	----------	-----------	----------	-------------

**27** SERIES

**M** VERSION:  
 M = rear endblock with trunnion and upper round port for ø 20-25-32-40  
 T = rear endblock with rear round port for ø 20-25-32-40  
 U = rear endblock with upper round port for ø 20-25-32-40-50-63

**2** OPERATION:  
 2 = double-acting PNEUMATIC SYMBOL\*  
CD08

**A** MATERIALS:  
 A = rolled stainless steel rod - stainless steel tube

**20** BORE:  
 20 = 20 mm  
 25 = 25 mm  
 32 = 32 mm  
 40 = 40 mm  
 50 = 50 mm  
 63 = 63 mm

**A** TYPE OF DESIGN:  
 A = standard

**0050** STROKE:  
 10 + 1000 mm

\* = The complete list of cylinders pneumatic symbols is available at the end of this chapter

## STANDARD STROKES

Mod. 27M and 27T (ø 20 ÷ 40) and Mod. 27U (ø 20 ÷ 63)

Ø	10	25	40	50	80	100	125	160	200	250	300	320	400	500
<b>20</b>	■	■	■	■	■	■	■	■	■	■	■	■	■	■
<b>25</b>	■	■	■	■	■	■	■	■	■	■	■	■	■	■
<b>32</b>	■	■	■	■	■	■	■	■	■	■	■	■	■	■
<b>40</b>	■	■	■	■	■	■	■	■	■	■	■	■	■	■
<b>50</b>	■	■	■	■	■	■	■	■	■	■	■	■	■	■
<b>63</b>	■	■	■	■	■	■	■	■	■	■	■	■	■	■

# Series 42 cylinders

Single and double-acting, magnetic, cushioned  
 ø 32, 40, 50, 63 mm

1

MOVEMENT



## CODING EXAMPLE

<b>42</b>	<b>M</b>	<b>2</b>	<b>N</b>	<b>050</b>	<b>A</b>	<b>0200</b>
-----------	----------	----------	----------	------------	----------	-------------

<b>42</b>	SERIES					
<b>M</b>	VERSION: M= standard magnetic					
<b>2</b>	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, front and rear cushions 7 = single-acting, through-rod, no cushions				PNEUMATIC SYMBOLS * CS12 CD09 CD08 CD10 CD11 CD13 CS13	
<b>N</b>	MATERIALS: N = stainless steel AISI 420B rod - stainless steel AISI 304 tube - NBR seals					
<b>050</b>	BORE: 032 = 32 mm 040 = 40 mm 050 = 50 mm 063 = 63 mm					
<b>A</b>	TYPE OF DESIGN: A = standard with nose nut Mod. V and piston rod lock nut Mod. U					
<b>0200</b>	STROKE: 10 ÷ 1000 mm					

\* = The complete list of cylinders pneumatic symbols is available at the end of this chapter

## STANDARD STROKES

✕ = Double acting  
 ■ = Single acting

Ø	25	50	75	80	100	125	150	160	200	250	300	320	400	500
<b>32</b>	✕ ■	✕ ■	✕ ■	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕
<b>40</b>	✕ ■	✕ ■	✕ ■	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕
<b>50</b>	✕ ■	✕ ■	✕ ■	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕
<b>63</b>	✕ ■	✕ ■	✕ ■	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕	✕

## Series 69 rotary cylinders

Magnetic, cushioned

ø 32, 40, 50, 63, 80, 100, 125 mm

Rotational angles: 90°, 180°, 270° and 360°



### CODING EXAMPLE

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

**69** SERIES PNEUMATIC SYMBOL\*  
CD18

**050** BORE:  
032 = 32 mm - 040 = 40 mm - 050 = 50 mm - 063 = 63 mm  
080 = 80 mm - 100 = 100 mm - 125 = 125 mm

**090** ROTATIONAL ANGLES:  
090 = 90° - 180 = 180°  
270 = 270° - 360 = 360°

**F** PINION:  
F = Female - M = Male

SEALS MATERIAL:  
= NBR - W = FKM +130°C

\* = The complete list of cylinders pneumatic symbols is available at the end of this chapter

### TABLE OF TORQUE FORCE IN Nm (THEORETICAL)

Bore	32	40	50	63	80	100	125
Work in Nm							
1 bar	1,2	2,25	3,9	7,3	15,7	26,35	51
2 bar	2,4	4,5	7,8	14,6	31,4	52,7	102
3 bar	3,6	6,75	11,7	21,9	47,1	79,05	153
4 bar	4,8	9	15,6	29,2	62,8	105,4	204
5 bar	6	11,25	19,5	36,5	78,5	131,75	255
6 bar	7,2	13,5	23,4	43,8	94,2	158,1	306
7 bar	8,4	15,75	27,3	51,1	109,9	184,45	357
8 bar	9,6	18	31,2	58,4	125,6	210,8	408
9 bar	10,8	20,25	35,1	65,7	141,3	237,15	459
10 bar	12	22,5	39	73	157	263,5	510

## Series 30 rotary cylinders

Non magnetic, cushioned and not cushioned

ø 50, 63, 80, 100 mm

Rotational angles 90° and 180°



### CODING EXAMPLE

**30** - **050** / **090** - **3**

**30** SERIES PNEUMATIC SYMBOL\*  
CD17

**050** BORE:  
050 = 50 mm - 063 = 63 mm  
080 = 80 mm - 100 = 100 mm

**090** ROTATIONAL ANGLES:  
090 = 90°  
180 = 180°

**3** VERSION:  
= cushioned  
3 = not cushioned

\* = The complete list of cylinders pneumatic symbols is available at the end of this chapter

### TABLE OF TORQUE FORCE 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

# Series ARP rotary actuators

Model: "Rack & Pinion"

Sizes: 1, 3, 5, 10, 12, 20, 35, 55, 70, 100, 150, 250, 400

Rotational angles: 90°



## CODING EXAMPLE

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

<b>ARP</b>	SERIES														
<b>001</b>	<p>SIZES:</p> <table border="0"> <tr> <td>001 = torque force 9 Nm</td> <td>055 = torque force 597 Nm</td> </tr> <tr> <td>003 = torque force 24 Nm</td> <td>070 = torque force 825 Nm</td> </tr> <tr> <td>005 = torque force 50 Nm</td> <td>100 = torque force 1122 Nm</td> </tr> <tr> <td>010 = torque force 100 Nm</td> <td>150 = torque force 1655 Nm</td> </tr> <tr> <td>012 = torque force 120 Nm</td> <td>250 = torque force 2648 Nm</td> </tr> <tr> <td>020 = torque force 200 Nm</td> <td>400 = torque force 4800 Nm</td> </tr> <tr> <td>035 = torque force 370 Nm</td> <td></td> </tr> </table>	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	
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															
<b>1A</b>	<p>OPERATION:</p> <p>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</p> <p>PNEUMATIC SYMBOLS *</p> <p>CD19 / CD21          CD19 / CD21          CD19 / CD21          CD19 / CD21          CD17</p>														
<b>A</b>	<p>ROTATION ANGLE:</p> <p>A = 90°</p>														
<b>F0300</b>	<p>INTERFACE FOR FLANGE (ISO 5211):</p> <p>F0300 = F03 flange and 9mm square holes          F0305 = F03 flange holes + F05 flange and 9mm square holes          F0400 = F04 flange and 11mm square holes          F0507 = F05 flange holes + F07 flange and 14mm square holes          F0705 = F07 flange holes + F05 flange and 17mm square holes          F0710 = F07 flange holes + F10 flange and 17mm square holes          F1007 = F10 flange holes + F07 flange and 22mm square holes          F1210 = F12 flange holes + F10 flange and 27mm square holes          F1400 = F14 flange and 36mm square holes          F1600 = F16 flange and 46mm square holes          F2516 = F25 flange + F16 flange and 55mm square holes</p>														
<b>A</b>	<p>MATERIALS:</p> <p>A = standard anodized          C = CNI Kanigen type nickel-plating          W = all FKM seals (130°C)</p>														
<b>EX</b>	ATEX certified product														

\* = The complete list of cylinders pneumatic symbols is available at the end of this chapter

## Accessories

### Switch box in technopolymer Mod. SBT (standard) e 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 in aluminium Mod. SBA (standard) e SIM (ATEX version)

Mod. SIM: 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**  
**SIM7022N-2H**

## Series CGA angular grippers

Magnetic

Sizes: ø 10, 16, 20, 25, 32 mm



### CODING EXAMPLE

<b>CGA</b>	<b>-</b>	<b>20</b>
------------	----------	-----------

<b>CGA</b>	SERIES	PNEUMATIC SYMBOL * PNZ1
<b>20</b>	SIZES: 10 = ø 10 mm 16 = ø 16 mm 20 = ø 20 mm 25 = ø 25 mm 32 = ø 32 mm	

\* = The complete list of cylinders pneumatic symbols is available at the end of this chapter

## Series CGSN 180° angular grippers

New version

Magnetic

Sizes: ø 16, 20, 25, 32 mm



### CODING EXAMPLE

<b>CGSN</b>	<b>-</b>	<b>20</b>
-------------	----------	-----------

<b>CGSN</b>	SERIES	PNEUMATIC SYMBOL * PNZ1
<b>20</b>	SIZES: 16 = ø 16 mm 20 = ø 20 mm 25 = ø 25 mm 32 = ø 32 mm	

\* = The complete list of cylinders pneumatic symbols is available at the end of this chapter

## Series CGP parallel grippers

Magnetic

Sizes: ø 10, 16, 20, 25, 32 mm



### CODING EXAMPLE

<b>CGP</b>	<b>-</b>	<b>20</b>
------------	----------	-----------

<b>CGP</b>	SERIES	PNEUMATIC SYMBOL * PNZ1
<b>20</b>	SIZES: 10 = ø 10 mm 16 = ø 16 mm 20 = ø 20 mm 25 = ø 25 mm 32 = ø 32 mm	

\* = The complete list of cylinders pneumatic symbols is available at the end of this chapter

### Accessories

#### Mounting brackets

Mod.

**L-CGP-16**  
**L-CGP-20**  
**L-CGP-25**  
**L-CGP-32**



#### Mounting brackets

Mod.

**C-CGP-16**  
**C-CGP-20**  
**C-CGP-25**  
**C-CGP-32**



New

## Series CGPT self-centering parallel grippers with T-guide

Single and double acting, magnetic, self-centering  
Bores:  $\varnothing$  16, 20, 25, 32, 40 mm



Mod.		
CGPT-16	CGPT-20-NO	CGPT-32-NC
CGPT-16-NC	CGPT-25	CGPT-32-NO
CGPT-16-NO	CGPT-25-NC	CGPT-40
CGPT-20	CGPT-25-NO	CGPT-40-NC
CGPT-20-NC	CGPT-32	CGPT-40-NO

### CODING EXAMPLE

**CGPT - 16 - NC - W EX**

#### CGPT SERIES

**16** BORES:  
10 =  $\varnothing$  10 mm  
16 =  $\varnothing$  16 mm  
20 =  $\varnothing$  20 mm  
25 =  $\varnothing$  25 mm  
32 =  $\varnothing$  32 mm  
40 =  $\varnothing$  40 mm

**NC** FUNCTIONING:  
= double acting  
NO = single acting, normally open  
NC = single acting, normally closed

PNEUMATIC SYMBOL \*  
PNZ1  
PNZ3  
PNZ2

**W** VERSION:  
= standard  
W = high temperatures (150 °C) - not magnetic

**EX** Add EX to order the certified ATEX version

\* = The complete list of cylinders pneumatic symbols is available at the end of this chapter

## Series CGPS self-centering parallel grippers with double ball bearing guide

New

Single and double acting, magnetic, self-centering  
Bores:  $\varnothing$  10, 16, 20, 25, 32 mm



Mod.			
CGPS-L-10	CGPS-L-16-NC	CGPS-L-20-NO	CGPS-L-32
CGPS-F-10	CGPS-F-16-NC	CGPS-F-20-NO	CGPS-F-32
CGPS-L-10-NC	CGPS-L-16-NO	CGPS-L-25	CGPS-L-32-NC
CGPS-F-10-NC	CGPS-F-16-NO	CGPS-F-25	CGPS-F-32-NC
CGPS-L-10-NO	CGPS-L-20	CGPS-L-25-NC	CGPS-L-32-NO
CGPS-F-10-NO	CGPS-F-20	CGPS-F-25-NC	CGPS-F-32-NO
CGPS-L-16	CGPS-L-20-NC	CGPS-L-25-NO	
CGPS-F-16	CGPS-F-20-NC	CGPS-F-25-NO	

### CODING EXAMPLE

**CGPS - L - 16 - NO - W EX**

#### CGPS SERIES

**L** DESIGN TYPE:  
L = Long finger  
F = Flat finger

**16** BORES:  
10 =  $\varnothing$  10 mm  
16 =  $\varnothing$  16 mm  
20 =  $\varnothing$  20 mm  
25 =  $\varnothing$  25 mm  
32 =  $\varnothing$  32 mm

**NO** FUNCTIONING:  
= double acting  
NO = single acting, normally open  
NC = single acting, normally closed

PNEUMATIC SYMBOL \*  
PNZ1  
PNZ3  
PNZ2

**W** VERSION:  
= standard  
W = high temperatures (150°C)

**EX** Add EX to order the certified ATEX version

\* = The complete list of cylinders pneumatic symbols is available at the end of this chapter

# Series CGLN wide opening parallel grippers

New version

Sizes: ø 10, 16, 20, 25, 32 mm



Mod.		
CGLN-10-020	CGLN-16-080	CGLN-25-100
CGLN-10-040	CGLN-20-040	CGLN-25-120
CGLN-10-060	CGLN-20-080	CGLN-32-070
CGLN-16-030	CGLN-20-100	CGLN-32-120
CGLN-16-060	CGLN-25-050	CGLN-32-160

### CODING EXAMPLE

CGLN	-	20	-	040
------	---	----	---	-----

CGLN	SERIES	PNEUMATIC SYMBOL * PNZ1
20	SIZES: 10 = ø 10 mm 16 = ø 16 mm 20 = ø 20 mm 25 = ø 25 mm 32 = ø 32 mm	

040	STROKE
-----	--------

\* = The complete list of cylinders pneumatic symbols is available at the end of this chapter

# Series CGC 3-Finger centric grippers

Magnetic

Sizes: 50, 64, 80, 100, 125 mm



Mod.	
CGC-050	CGC-100
CGC-064	CGC-125
CGC-080	

### CODING EXAMPLE

CGC	-	050
-----	---	-----

CGC	SERIES	PNEUMATIC SYMBOL * PNZ1
050	SIZE: 050 = 32 mm 064 = 45 mm 080 = 58 mm 100 = 77 mm 125 = 98 mm	

\* = The complete list of cylinders pneumatic symbols is available at the end of this chapter

## Series RPGA sprue grippers - Size 20 mm

New version

Angular, not self-centering, single-acting, Normally Open (NO)  
Models: Flat Finger, Curved Finger, Short Finger,  
Flat Finger with sensor slot, Curved Finger with sensor slot



### CODING EXAMPLE

RPGA	-	20	-	A
------	---	----	---	---

<b>RPGA</b>	SERIES	PNEUMATIC SYMBOL * PNZ2
<b>20</b>	SIZE: 20 = ø 20 mm	
<b>A</b>	TYPE OF CONSTRUCTION: A = Flat finger B = Curved finger C = Short finger with holes for extra jaws D = Flat finger for sensor E = Curved finger for sensor	

\* = The complete list of cylinders pneumatic symbols is available at the end of this chapter

## Series RPGB sprue grippers - Size 8, 12 mm

New version

Angular, not self-centering, single-acting, Normally Open (NO)  
Models: Flat Finger, Short Finger, Flat Finger with sensor



### CODING EXAMPLE

RPGB	-	12	-	A
------	---	----	---	---

<b>RPGB</b>	SERIES	PNEUMATIC SYMBOL * PNZ2
<b>12</b>	SIZE: 08 = ø 8 mm 12 = ø 12 mm	
<b>A</b>	TYPE OF CONSTRUCTION: A = Flat finger C = Short finger with holes for extra jaws D = Flat finger with sensor mounted (Mod. CSD-362)	

\* = The complete list of cylinders pneumatic symbols is available at the end of this chapter

### Accessories for Series RPGB

Series CSD magnetic proximity switches with 3-wire cable  
Length cable 2 m  
Mod. CSD-332



Series CSD magnetic proximity switches with male connector M8  
Length cable 0,3 m  
Mod. CSD-362



Extension with connector M8, 3 Pin Male / Female  
Non shielded  
Mod. CS-DW03HB-C250  
CS-DW03HB-C500

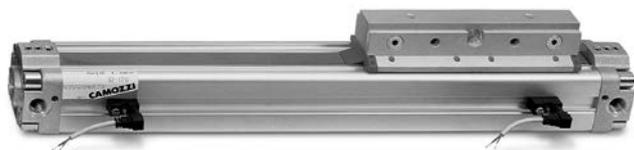


Circular connectors M8, 3 Pin Female  
With PU sheathing, non shielded cable  
Protection class IP65  
Mod. CS-2  
CS-5  
CS-10



# Series 50 rodless cylinders

Double-acting, magnetic, cushioned  
 ø 16, 25, 32, 40, 50, 63, 80 mm



Mod. B-50



Mod. BH-50



Mod. CF-50

## CODING EXAMPLE

<b>50</b>	<b>M</b>	<b>2</b>	<b>P</b>	<b>50</b>	<b>A</b>	<b>0500</b>
-----------	----------	----------	----------	-----------	----------	-------------

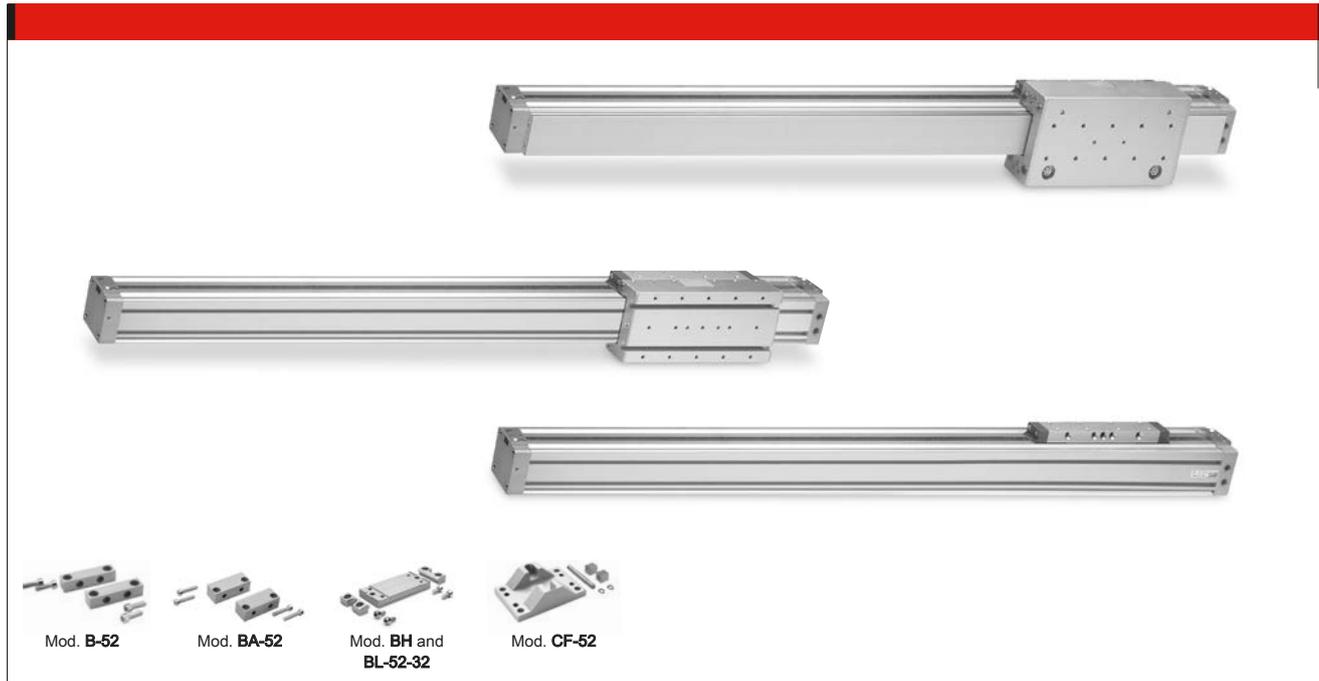
<b>50</b>	SERIES		
<b>M</b>	VERSION: M = standard magnetic		
<b>2</b>	OPERATION: 2 = double-acting cushioned		PNEUMATIC SYMBOL * CDSS
<b>P</b>	MATERIALS: P = anodized AL profile tube - PU and NBR seals - standard carriage U = anodized AL profile tube - PU and NBR seals - flanged carriage		
<b>50</b>	BORE: 16 = 16 mm 25 = 25 mm 32 = 32 mm 40 = 40 mm 50 = 50 mm 63 = 63 mm 80 = 80 mm		
<b>A</b>	TYPE OF MOUNTING: A = standard		
<b>0500</b>	STROKE: for all diameters 100+4000 mm		

\* = The complete list of cylinders pneumatic symbols is available at the end of this chapter

# Series 52 rodless cylinders

Double-acting, magnetic, cushioned  
 ø 25, 32, 40, 50, 63 mm

1  
MOVEMENT



## CODING EXAMPLE

<b>52</b>	<b>M</b>	<b>2</b>	<b>P</b>	<b>40</b>	<b>A</b>	<b>0500</b>
-----------	----------	----------	----------	-----------	----------	-------------

<b>52</b>	SERIES					
<b>M</b>	VERSION: M = standard G = with slide bearing R = with roller bearing (only ø 25 - 32 - 40)					
<b>2</b>	OPERATION: 2 = double-acting, cushioned, with air supply from both sides 8 = double-acting, cushioned, with air supply from one side only				PNEUMATIC SYMBOLS * CDSS CDSS	
<b>P</b>	MATERIALS: P = anodized AL profile tube, NBR and PU seals, standard carriage C = anodized AL profile, NBR and PU seals, short carriage					
<b>40</b>	BORE: 25 = 25 mm 32 = 32 mm 40 = 40 mm 50 = 50 mm 63 = 63 mm					
<b>A</b>	TYPE OF MOUNTING: A = standard					
<b>0500</b>	STROKE: Up to 6000 mm					

\* = The complete list of cylinders pneumatic symbols is available at the end of this chapter

# Magnetic proximity switches

Reed - Magneto-resistive - Hall effect

1

MOVEMENT



Mod.  
**CST-220**    **CSV-232**  
**CSV-220**    **CST-332**  
**CST-220-5**    **CSV-332**  
**CST-232**    **CST-532**

Mod.  
**CST-250N**    **CST-362**  
**CSV-250**    **CSV-362**  
**CST-262**    **CST-562**  
**CSV-262**

Mod.  
**CSH-223-2**    **CSH-233-2**  
**CSH-223-5**    **CSH-233-5**  
**CSH-221-2**    **CSH-334-2**  
**CSH-221-5**    **CSH-334-5**

Mod.  
**CSH-253**    **CSH-364**  
**CSH-263**    **CSH-463**

Mod.  
**CSD-362**

Mod.  
**CSB-D-220**

Mod.  
**CSB-H-220**  
**CSC-H-220**

Mod.  
**CSC-D-220**

## SERIES CST, CSV, CSH CODING EXAMPLE

CS	T	-	2	2	0	N	-	5
----	---	---	---	---	---	---	---	---

### CS

SERIES

### T

SLOT TYPE:  
 T = T-slot - V = V-slot - H = H-slot

### 2

OPERATION:  
 2 = Reed NO  
 3 = Magneto-resistive  
 4 = Reed NC  
 5 = Hall effect

### 2

CONNECTIONS:  
 2 = 2 wires (Reed only)  
 3 = 3 wires  
 5 = 2 wires with M8 connector (Reed only)  
 6 = 3 wires with M8 connector

### 0

POWER SUPPLY VOLTAGE:  
 0 = 10 ÷ 110V DC; 10 ÷ 230V AC (PNP)  
 1 = 30 ÷ 110V DC; 30 ÷ 230V AC (PNP)  
 2 = 3 wires cst (PNP)  
 3 = 10 ÷ 30V AC/DC (PNP)  
 4 = 10 ÷ 27V DC (PNP)

### N

NOTE (CST/CSV-250N only):  
 N = according to norm

### 5

LENGTH OF THE CABLE:  
 = 2m (CST and CSV only) - 2 = 2m (CSH only) - 5 = 5m

## SERIES CSB, CSC, CSD CODING EXAMPLE

CS	B	-	D	-	2	2	0	-
----	---	---	---	---	---	---	---	---

### CS

SERIES

### B

TYPE OF SLOT:  
 B = B-slot - C = C-slot - D = D-slot

### D

CABLE OUTPUT:  
 D = straight - H = 90°

### 2

OPERATION:  
 2 = Reed NC (CSB, CSC only) - 3 = Magneto-resistive (CSD only)

### 2

CONNECTIONS:  
 2 = 2 wires (CSB, CSC only) - 3 = 3 wires (CSD only) - 6 = 3 wires with M8 connector (CSD only)

### 0

POWER SUPPLY VOLTAGE:  
 0 = 10 ÷ 110V DC/AC (CSB, CSC only) - 4 = 10 ÷ 27V DC PNP (CSD only)

LENGTH OF THE CABLE:  
 = 2m (standard) - 5 = 5m

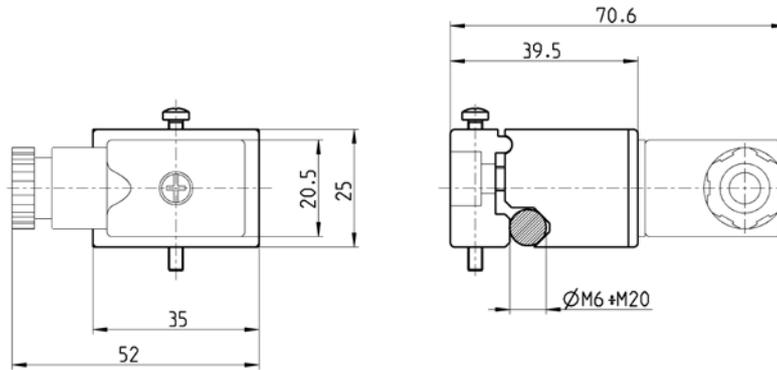
# Series CSN proximity switches

Reed switch

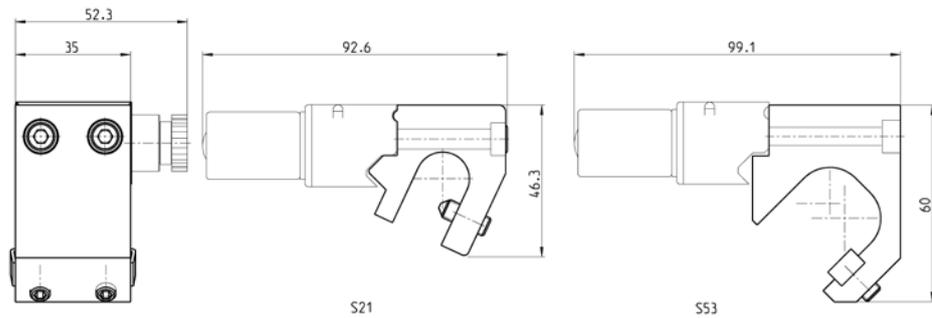


## Switches Series CSN

For cylinders Series 40 from  $\varnothing 160 + 200$   
(mounting band to be ordered separately)  
For cylinders Series 40  $\varnothing 250 + 320$   
(direct mounting)  
For cylinders Series 41 from  $\varnothing 160 - 200$   
(mounting band to be ordered separately)  
Mod. **CSN 2032-0**



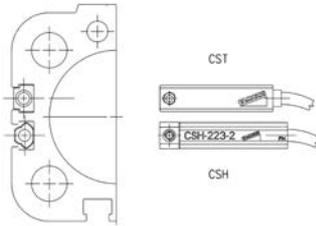
Mounting bracket for sensor Mod. CSN 2032-0  
Mod. **S21** for cylinders Series 40  $\varnothing 160$  and 200  
Mod. **S53** for cylinders Series 41  $\varnothing 160$  and 200



### Fixing of proximity switches \*

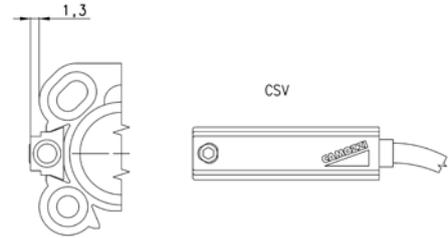
CST/CSH proximity switches can be directly mounted on the following cylinders:

Series 31 - 31R  
Series 32 - 32R  
Series 52  
Series 61  
Series 62 (CSH only)  
Series 63 (CSH only)  
Series 69  
Series 6PF  
Serie QC - QCBF - QCTF



CSV proximity switches must be assembled directly into the groove of cylinders:

Series 50 ø 16+25  
Series QP - QPR ø 12+16



### ACCESSORIES

#### Extension with connectors M8, 3 Pin Female

With PU sheathing, non shielded cable

Protection class: IP65

Mod. **CS-2** (cable 2 m)  
**CS-5** (cable 5 m)  
**CS-10** (cable 10 m)



#### Three-wire extension with connector M8, 3 Pin Male / Female

Non shielded

Mod. **CS-DW03HB-C250** (cable 2,5 m)  
**CS-DW03HB-C500** (cable 5 m)



#### Mounting brackets for Series CST and CSH proximity switches \*

Mod. **S-CST-01**



#### Mounting brackets in technopolymer for Series CST and CSH proximity switches \*

Mod. **S-CST-02**  
**S-CST-03**  
**S-CST-04**  
**S-CST-18**  
**S-CST-19**  
**S-CST-20**  
**S-CST-21**



#### Mounting brackets for Series CST and CSH proximity switches \*

Mod. **S-CST-25**  
**S-CST-26**  
**S-CST-27**  
**S-CST-28**



#### Mounting brackets in stainless steel for Series CST and CSH proximity switches \*

Mod. **S-CST-05**  
**S-CST-06**  
**S-CST-07**  
**S-CST-08**  
**S-CST-09**  
**S-CST-10**  
**S-CST-11**  
**S-CST-12**



#### Mounting brackets for Series CST and CSH proximity switches \*

for cylinders Series 60 mounted with guides  
Series 45NHT or 45NHB

Mod. **S-CST-45N1**  
**S-CST-45N2**



#### Slot cover profile

Supplied with 500 mm tube

Slot cover profile for cylinders:

Series 31 - 31 tandem and multi-position  
Series 32 - 32 tandem and multi-position  
Series QCT - QCB - QCBT - QCBF  
Series 61, 62, 63  
Series 69  
Series 6E, 5E  
Mod. **S-CST-500**



\* Further information in the TABLE SHOWING THE USE OF CAMOZZI MAGNETIC PROXIMITY SWITCHES on page 39



## TABLES FOR THE USE OF SENSORS

Table 3: mounting of sensors on cylinders

Series	Ø	CST - CSH	CSV	CSC-D/CSC-H
<b>QC</b>	20	Direct mounting		
	25	Direct mounting		
	32	Direct mounting		
	40	Direct mounting		
	50	Direct mounting		
<b>QCBF</b>	20	Direct mounting		
	25	Direct mounting		
	32	Direct mounting		
	40	Direct mounting		
<b>QCTF</b>	20	Direct mounting		
	25	Direct mounting		
	32	Direct mounting		
	40	Direct mounting		
<b>QP-QPR</b>	12		Direct mounting	
	16		Direct mounting	
	20	S-CST-01		
	25	S-CST-01		
	32	S-CST-01		
	40	S-CST-01		
	50	S-CST-01		
	63	S-CST-01		
<b>QX</b>	10			Direct mounting
	16			Direct mounting
	20			Direct mounting
	25			Direct mounting
	32			Direct mounting
<b>ST</b>	20	Direct mounting		
	32	Direct mounting		
	40	Direct mounting		
	50	Direct mounting		

Table 4: mounting of sensors on grippers, electromechanical axis and cylinders

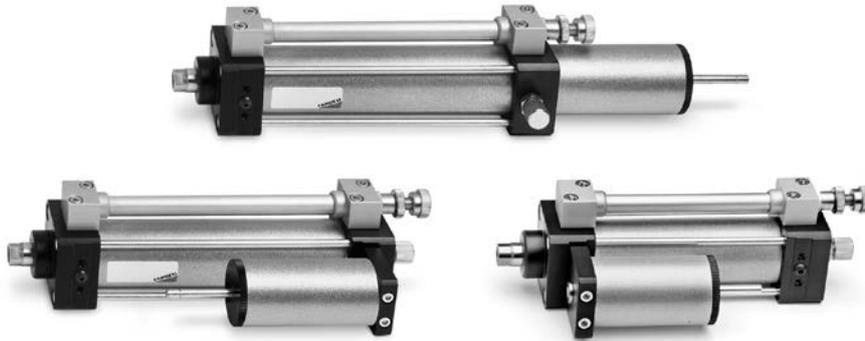
Series	Ø	CST - CSH	CSB-D/CSB-H	CSC-D/CSC-H	CSD-D / CSD-H
<b>CGA</b>	10		Direct mounting		
	16		Direct mounting		
	20		Direct mounting		
	25		Direct mounting		
	32		Direct mounting		
<b>CGC</b>	50		Direct mounting (CSB-D-220 only)		
	64		Direct mounting (CSB-D-220 only)		
	80		Direct mounting (CSB-D-220 only)		
	100		Direct mounting (CSB-D-220 only)		
	125		Direct mounting (CSB-D-220 only)		
<b>CGLN</b>	10			Direct mounting	
	16			Direct mounting	
	20			Direct mounting	
	25			Direct mounting	
	32			Direct mounting	
<b>CGP</b>	10		Direct mounting		
	16		Direct mounting		
	20		Direct mounting		
	25		Direct mounting		
	32		Direct mounting		
<b>CGPS</b>	10				Direct mounting
	16				Direct mounting
	20				Direct mounting
	25				Direct mounting
	32				Direct mounting
<b>CGPT</b>	16				Direct mounting
	20				Direct mounting
	25				Direct mounting
	32				Direct mounting
	40				Direct mounting
<b>CGSN</b>	16			Direct mounting	Direct mounting
	20			Direct mounting	Direct mounting
	25			Direct mounting	Direct mounting
	32			Direct mounting	Direct mounting
<b>RGB</b>	8				Direct mounting
	12				Direct mounting
<b>Electromechanical axis*</b>					
<b>5E</b>	50		Direct mounting (CSH only)		
	65		Direct mounting (CSH only)		
	80		Direct mounting (CSH only)		
<b>Electromechanical cylinders*</b>					
<b>6E</b>	32		Direct mounting		
	40		Direct mounting		
	50		Direct mounting		
	63		Direct mounting		

\* Further details about Series 5E electromechanical axis and Series 6E electromechanical cylinders can be found in the C\_Electrics catalogue which is also available on the Camozzi website [www.camozzi.com](http://www.camozzi.com) within the section Products & Solutions > C\_Electrics

# Series 43 hydrochecks

Bore  $\varnothing$  40 mm  
Regulated thrust or return stroke  
Skip-Stop function

1  
MOVEMENT



## CODING EXAMPLE

<b>43</b>	<b>N</b>	<b>-</b>	<b>P</b>	<b>S</b>	<b>0</b>	<b>-</b>	<b>40</b>	<b>-</b>	<b>200</b>
-----------	----------	----------	----------	----------	----------	----------	-----------	----------	------------

**43**

SERIES

**N**

VERSION:  
N = standard - S = special

**P**

TANK POSITION:  
L = in-line tank - P = parallel tank - D = double valve, parallel tank

**S**

REGULATION:  
S = thrust (hydrocheck's rod return regulated) - T = traction (hydrocheck's rod thrust regulated)

**0**

OPERATION:  
A = SKIP valve - B = SKIP + STOP valve (minimum stroke 80 mm)  
V = STOP valve - 0 = standard

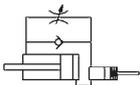
**40**

BORE:  
40 mm

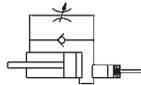
**200**

STROKE:  
50, 100, 150, 200 (special stroke available on request)

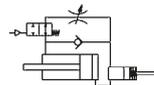
## Pneumatic symbols and PART codes



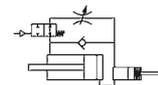
Mod. **43N-LT0-40-050**  
**43N-LT0-40-100**  
**43N-LT0-40-150**  
**43N-LT0-40-200**  
**43N-PT0-40-050**  
**43N-PT0-40-100**  
**43N-PT0-40-150**  
**43N-PT0-40-200**



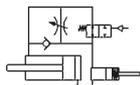
Mod. **43N-PS0-40-050**  
**43N-PS0-40-100**  
**43N-PS0-40-150**  
**43N-PS0-40-200**



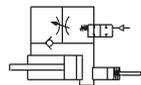
Mod. **43N-LTV-40-050**  
**43N-LTV-40-100**  
**43N-LTV-40-150**  
**43N-LTV-40-200**  
**43N-PTV-40-050**  
**43N-PTV-40-100**  
**43N-PTV-40-150**  
**43N-PTV-40-200**



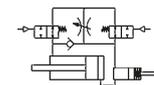
Mod. **43N-PSV-40-050**  
**43N-PSV-40-100**  
**43N-PSV-40-150**  
**43N-PSV-40-200**



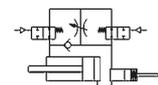
Mod. **43N-LTA-40-050**  
**43N-LTA-40-100**  
**43N-LTA-40-150**  
**43N-LTA-40-200**  
**43N-PTA-40-050**  
**43N-PTA-40-100**  
**43N-PTA-40-150**  
**43N-PTA-40-200**



Mod. **43N-PSA-40-050**  
**43N-PSA-40-100**  
**43N-PSA-40-150**  
**43N-PSA-40-200**



Mod. **43N-LTB-40-050**  
**43N-LTB-40-100**  
**43N-LTB-40-150**  
**43N-LTB-40-200**  
**43N-PTB-40-050**  
**43N-PTB-40-100**  
**43N-PTB-40-150**  
**43N-PTB-40-200**



Mod. **43N-PSB-40-100**  
**43N-PSB-40-150**  
**43N-PSB-40-200**

## Accessories

Pump for refilling hydraulic speed regulator  
Mod. **43N-PMP**



## Series RL rod lock

For cylinders ISO 6431/VDMA and ISO 6432  
 ø 20, 25, 32, 40, 50, 63, 80, 100, 125 mm

1

MOVEMENT



### CODING EXAMPLE

<b>RLC</b>	-	<b>41</b>	-	<b>32</b>
------------	---	-----------	---	-----------

**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, 61 and 62

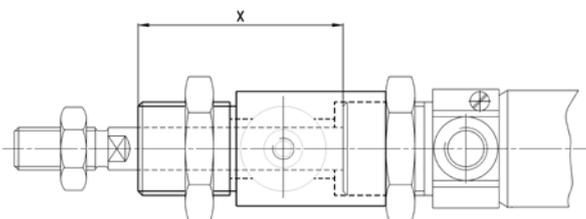
PNEUMATIC SYMBOL \*  
 RDLK

**32** CYLINDER DIAMETER (mm):  
 20 = 20 mm  
 25 = 25 mm  
 32 = 32 mm  
 40 = 40 mm  
 50 = 50 mm  
 63 = 63 mm  
 80 = 80 mm  
 100 = 100 mm  
 125 = 125 mm

\* = The complete list of cylinders pneumatic symbols is available at the end of this chapter

### ROD EXTENSION AND HOLDING FORCE

Table showing the rod extensions which are necessary for the rod lock mounting



ø	Rod extension [X] (mm)	Holding force [static load] (N)
20	+50	300
25	+48	400
32	+40	650
40	+43	1100
50	+57	1600
63	+57	2500
80	+80	4000
100	+80	6300
125	+125	8800

# Series SA shock absorbers

7 different sizes

Threads: M8x1, M10x1, M12x1, M14x1,5, M20x1,5, M25x1,5, M27x1,5

MOVEMENT



Mod.  
SA-0806 W  
SA-1007 W  
SA-1007  
SA-1210 W  
SA-1210  
SA-1412 W  
SA-1412  
SA-2015 W  
SA-2015  
SA-2525 W  
SA-2525  
SA-2725 W  
SA-2725

## CODING EXAMPLE

SA	-	2015	
----	---	------	--

**SA** SERIES

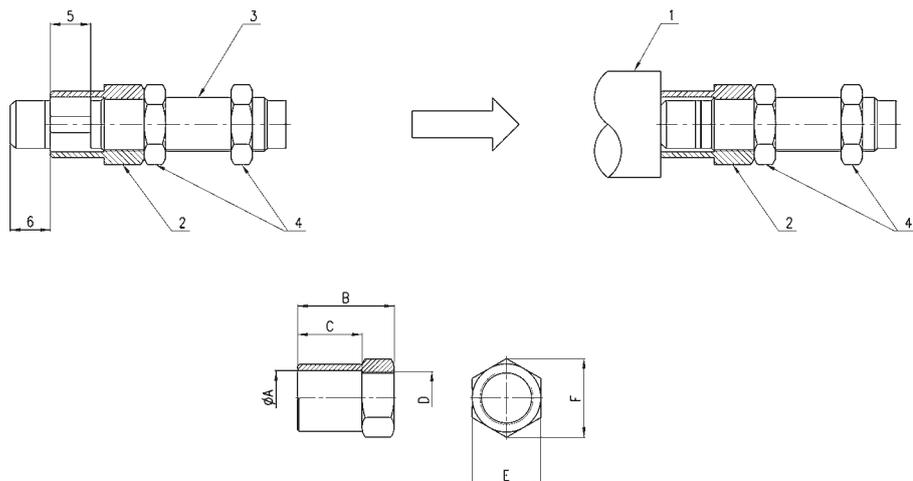
**2015**

SIZE/STROKE:  
0806 = Size M8 x 1 / Stroke 6 mm  
1007 = Size M10 x 1 / Stroke 7 mm  
1210 = Size M12 x 1 / Stroke 10 mm  
1412 = Size M14 x 1,5 / Stroke 12 mm  
2015 = Size M20 x 1,5 / Stroke 15 mm  
2525 = Size M25x 1,5 / Stroke 25 mm  
2725 = Size M27 x 1,5 / Stroke 25 mm

VERSION:  
= standard, with cap  
W = Without cap (on request)

## 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



## DIMENSIONS

Mod.		Ø A	B	C	D	E	F
<b>SA-08SC</b>	(for SA-0806)	10,5	14	9	M8X1	11	12,7
<b>SA-10SC</b>	(for SA-1007)	12	16	10	M10X1	13	14,7
<b>SA-12SC</b>	(for SA-1210)	14,5	20	13	M12X1	16	18,5
<b>SA-14SC</b>	(for SA-1412)	25,8	20	15	M14X1	19	21,9
<b>SA-20SC</b>	(for SA-2015)	27,8	35	20	M20X1,5	26	30
<b>SA-25SC</b>	(for SA-2525)	5,8	45	30	M25X1,5	32	37
<b>SA-27SC</b>	(for SA-2725)	20,7	65	50	M27X1,5	32	37

# Series 6E electromechanical cylinders

New

ISO 15552

Sizes 32, 40, 50 and 63

1

MOVEMENT



## CODING EXAMPLE

<b>6E</b>	<b>032</b>	<b>BS</b>	<b>0200</b>	<b>P05</b>	<b>A</b>	
<b>6E</b>	SERIES					
<b>032</b>	SIZE: 032 = 32 mm 040 = 40 mm 050 = 50 mm 063 = 63 mm					
<b>BS</b>	DESIGN: BS = recirculating ball screw					
<b>0200</b>	STROKE: 100 ÷ 1200 mm					
<b>P05</b>	SCREW PITCH: P05 = 5 mm P10 = 10 mm P16 = 16 mm (for size 40 only) P20 = 20 mm (for size 50 only) P25 = 25 mm (for size 63 only)					
<b>A</b>	CONSTRUCTION: A = standard with rod nut  VERSION: = standard ( _ _ _ ) = extended piston rod _ _ _ mm					

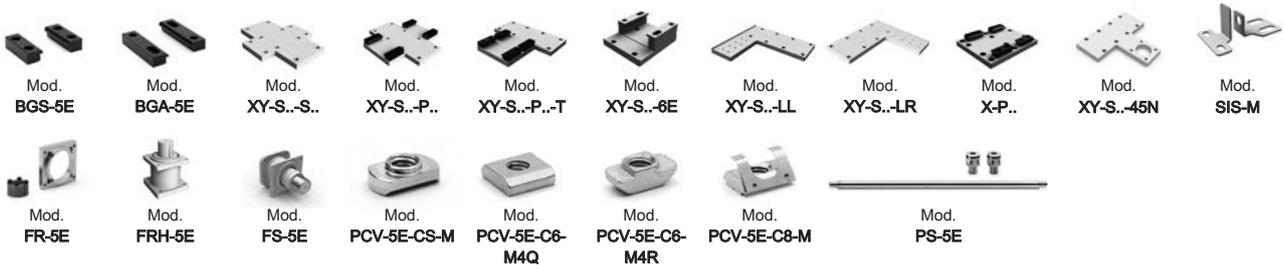
## STANDARD STROKES

Size	100	200	300	400	500	600	700	800	900	1000	1100	1200
<b>32</b>	x	x	x	x	x							
<b>40</b>	x	x	x	x	x	x	x					
<b>50</b>	x	x	x	x	x	x		x		x		
<b>63</b>	x	x	x	x	x			x		x		x

# Series 5E electromechanical axis

New

Sizes 50, 65, 80



## CODING EXAMPLE

<b>5E</b>	<b>S</b>	<b>050</b>	<b>TBL</b>	<b>0200</b>	<b>A</b>	<b>S</b>	<b>1</b>
<b>5E</b>	SERIES						
<b>S</b>	PROFILE: S = square section						
<b>050</b>	FRAME SIZE: 050 = 50x50 mm 065 = 65x65 mm 080 = 80x80 mm						
<b>TBL</b>	TRANSMISSION: TBL = toothed belt						
<b>0200</b>	TOTAL STROKE [TS]: 0050 + 4000 mm for size 050 0050 + 6000 mm for sizes 065 and 080						
<b>A</b>	VERSION: A = standard						
<b>S</b>	TYPE OF SLIDER: S = standard						
<b>1</b>	NUMBER OF SLIDERS: 1 = 1 slider						

## Series DRWB drivers for the control of electric actuation

New

Driver for Brushless motors,  
sizes in power classes 100, 400 and 750 W



### CODING EXAMPLE

**DRWB - W01 - 2 - D - E - A**

<b>DRWB</b>	SERIES
<b>W01</b>	SIZE W: W01 = 100 W - W04 = 400 W - W07 = 750 W
<b>2</b>	SUPPLY: 2 = 220 V AC
<b>D</b>	COMMUNICATION: D = Digital I/O and Analog
<b>E</b>	FEEDBACK: E = incremental encoder 13 bit
<b>A</b>	VERSIONS: A = Standard

## Series DRWS drivers for the control of electric actuation

New

Driver for Stepper motors,  
one size/version



### CODING EXAMPLE

**DRWS - A05 - 8 - D - 0 - A**

<b>DRWS</b>	SERIES
<b>A05</b>	MAX SIZE A: A05 = 5 A
<b>8</b>	SUPPLY: 8 = 24V - 48V DC
<b>D</b>	COMMUNICATION: D = Digital I/O and Analog
<b>0</b>	FEEDBACK: 0 = no Feedback
<b>A</b>	VERSIONS: A = Standard

## Series MTB motors for electric actuation

New

Brushless motors in power classes 100, 400 and 750 W



### CODING EXAMPLE

<b>MTB</b>	-	<b>010</b>	-	<b>2</b>	-	<b>0</b>	-	<b>E</b>
------------	---	------------	---	----------	---	----------	---	----------

#### MTB SERIES

**010** POWER:  
010 = 100 W  
040 = 400 W  
075 = 750 W

**2** SUPPLY:  
2 = 220 V DC

**0** BRAKE:  
0 = without brake  
F = with brake

**E** ENCODER:  
E = standard 13 bit

## Series MTS motors for electric actuation

New

Stepper motors with Nema 23 or 24 fixing flange



### CODING EXAMPLE

<b>MTS</b>	-	<b>23</b>	-	<b>18</b>	-	<b>060</b>	-	<b>0</b>	-	<b>0</b>	-	<b>S</b>	-	<b>C</b>
------------	---	-----------	---	-----------	---	------------	---	----------	---	----------	---	----------	---	----------

#### MTS SERIES

**23** MOTOR SIZE FLANGE CONNECTION:  
23 = Nema 23  
24 = Nema 24

**18** RESOLUTION IN DEGREES PER REVOLUTION:  
18 = 1.8° per step

**060** TORQUE:  
060 = 0.6 Nm with Nema 23 only  
250 = 2.5 Nm with Nema 24 only

**0** ELECTRICAL CONNECTION:  
0 = connector

**0** BRAKE:  
0 = without brake

**S** ENCODER VARIANTS:  
S = single shaft without encoder

**C** MECHANICAL SHAFT VARIANTS:  
C = cylindrical shaft

## Series GB planetary gearboxes

New

Available sizes: 40, 60 and 80



### CODING EXAMPLE

GB	-	040	-	03	-	D	-	0100
----	---	-----	---	----	---	---	---	------

**GB**

SERIES

**040**

SIZE:

040 =  $\varnothing$  40 mm060 =  $\varnothing$  60 mm080 =  $\varnothing$  80 mm**03**

REDUCTION RATIO:

03 i = 3

05 i = 5

07 i = 7

10 i = 10

**D**

TYPE:

D = straight

A = angular

**0100**

PREPARATION OF THE MOTOR:

0100 = Brushless 100W (size 040 mm only)

0400 = Brushless 400W (size 060 mm only)

0750 = Brushless 750W (size 080 mm only)

0024 = Nema 24

## Series CO motion transmission devices

New

Mod. COE: elastomer coupling with clamps

Mod. COS: elastomer coupling with expansion shaft

Mod. COT: self-centering locking-set



Mod.

COE-05-0800-0635-A

COE-05-0800-0800-A

COE-05-1000-0635-A

COE-05-1200-0800-A

COE-10-1000-1400-A

COE-10-1200-1400-A

COE-10-1500-0800-A

COE-20-1500-1900-A



Mod.

COS-10-2000-1400-A

COS-10-2000-0800-A

COE-20-2600-2000-A

COE-60-3800-2500-A



Mod.

COT-2000-1000

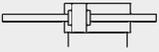
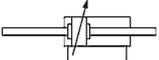
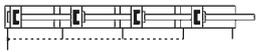
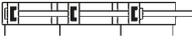
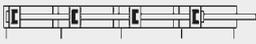
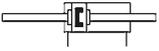
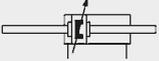
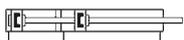
COT-2600-1400

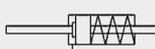
COT-3800-2000

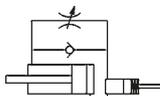
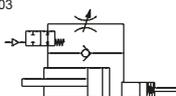
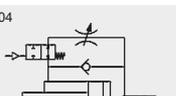
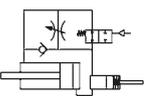
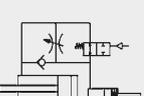
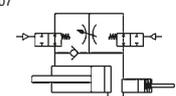
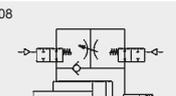
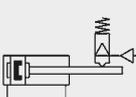
# Pneumatic symbols for cylinders

MOVEMENT

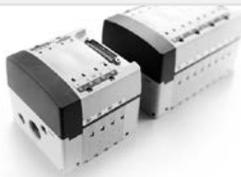
1

Symbol	Type	Symbol	Type
CD01	 Double-acting cylinder, fixed cushions	CD15	 Magnetic twin rod cylinders
CD02	 Double-acting cylinder, cushioned	CD16	 Magnetic twin through-rod cylinders
CD03	 Double-acting cylinder, adjustable rear cushion	CD17	 Double-acting rotary cylinder
CD04	 Double-acting cylinder, adjustable front cushion	CD18	 Double-acting rotary cylinder, magnetic
CD05	 Double-acting cylinder, through-rod, fixed cushions	CD19	 Single-acting rotary cylinder
CD06	 Double-acting cylinder, through-rod, adjustable front and rear cushion	CD2T	 Magnetic tandem cylinder, two stages, fixed cushions single rear supply, sole front supply
CD07	 Double-acting cylinder, magnetic	CD3T	 Magnetic tandem cylinder, three stages, fixed cushions single rear supply, sole front supply
CD08	 Double-acting cylinder, magnetic, fixed cushions	CD4T	 Magnetic tandem cylinder, four stages, fixed cushions single rear supply, sole front supply
CD09	 Double-acting cylinder, magnetic, adjustable cushions in both directions	CD5T	 Magnetic tandem cylinder, two stages, fixed cushions, separated rear supplies, sole front supply
CD10	 Double-acting cylinder, magnetic, adjustable rear cushion	CD6T	 Magnetic tandem cylinder, three stages, fixed cushions, single rear supplies, sole front supply
CD11	 Double-acting cylinder, magnetic, adjustable front cushion	CD7T	 Magnetic tandem cylinder, two stages, fixed cushions, single rear supplies, sole front supply
CD12	 Double-acting cylinder, magnetic, through-rod, fixed cushions	CD8T	 Magnetic tandem cylinder, two stages, fixed cushions, separated rear and front supplies
CD13	 Double-acting cylinder, magnetic, through-rod, adjustable cushions in both directions	CD9T	 Non magnetic tandem cylinder, two stages, fixed cushions, separated rear and front supplies
CD14	 Double-acting cylinder, magnetic, through-rod	CDPP	 Magnetic multi-position cylinder, fixed cushions

Symbol	Type
CDSS 	Double-acting rodless cylinder, magnetic
CS01 	Single-acting cylinder, front spring
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
CS12 	Single-acting cylinder, front spring, adjustable rear cushion
CS13 	Single-acting cylinder, through-rod, adjustable rear cushion

Symbol	Type
CS14 	Single-acting, rear spring
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 gripper
PNZ2 	Single-acting, NC, magnetic gripper
PNZ3 	Single-acting, NO, magnetic gripper
RDLK 	Rod lock device

2 > Control



Directly and indirectly operated  
2/2, 3/2 solenoid valves

		Page
Series K8	 <b>Directly operated solenoid valves - 8 mm</b> 2/2-way, 3/2-way Normally Closed (NC) and Normally Open (NO)	55
Series K8B	 <b>Pilot operated solenoid valves</b> 2/2-way, 3/2-way Normally Closed (NC) and Normally Open (NO)	56
Series K	 <b>Directly operated solenoid valves - 10 mm</b> 3/2-way Normally Closed (NC) and Normally Open (NO) The solenoid valves can be mounted on a single base (with M5 ports) as well as on manifolds (with M5 ports)	57
Series KN, KN HIGH FLOW	 <b>Directly operated solenoid valves - 10 mm</b> 3/2-way, Normally Closed (NC) and Normally Open (NO) 3/2-way - Universal (UNI)	58
Series W	 <b>Directly operated solenoid valves - 15 mm</b> 3/2-way, Normally Closed (NC) and Normally Open (NO) Monostable. 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)	59
Series P	 <b>Directly operated solenoid valves - 15 mm</b> 3/2-way, Normally Closed (NC) and Normally Open (NO) 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)	60
Series PL	 <b>Directly operated solenoid valves - 15 mm</b> 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)	61
Series PN	 <b>Directly operated solenoid valves - 15 mm</b> 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)	62
Series PD	 <b>Directly operated solenoid valves - 15 mm</b> 2/2-way Normally Closed (NC)	63
Series PDV	 <b>Directly operated solenoid valves with separating diaphragm</b> 2/2-way Normally Closed (NC)	64
Series A	 <b>Directly operated solenoid valves - 22 mm</b> 2/2-way, 3/2-way Normally Closed (NC) and Normally Open (NO) Monostable - bistable (with magnetic memory) Ports: M5, G1/8. Cartridge ø 4	65
Series 6	 <b>Directly operated solenoid valves - 30 mm</b> 2/2-way, 3/2-way Normally Closed (NC) and Normally Open (NO) Ports: G1/8, G3/8. Cartridge ø 4 Available also in version for the low temperatures up to -50°C	67
Series CFB	 <b>Solenoid valves</b> 2/2-way, 3/2-way Normally Closed (NC) and Normally Open (NO)	68
Series CFB Stainless steel	 <b>Solenoid valves</b> 2/2-way, 3/2-way Normally Closed (NC)	69
Series K8, K8B, K, KN, KN HIGH FLOW, W, P, PL, PN, PD, PDV, 6	 <b>Accessories for solenoid valves</b> Connectors, manifolds, bases, sub-bases and blanking plates	70

Solenoid valves / pneumatic valves

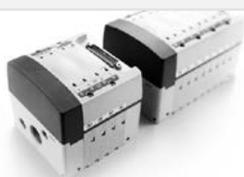
		Page
Series 8	 <b>Pneumatic operated cartridge valves</b> 2/2-way - 3/2-way Normally Closed (NC)	71
Series 8	 <b>Pneumatically and electropneumatically operated valves</b> 2/2-way - Normally Closed (NC), Normally Open (NO) 3/2-way - Normally Closed (NC), Normally Open (NO)	72
Series E	 <b>Valves and solenoid valves</b> 5/2-way monostable/bistable 5/3-way CC CO CP For individual or manifold assembly Size: 10,5 mm	73
Series EN	 <b>Valves and solenoid valves</b> 5/2-way, 5/3-way CC CO CP With outlets on the body For individual or manifold assembly Size: 16, 19 mm	76
Series 3	 <b>Valves and solenoid valves</b> 2x3/2-way, 3/2-way, 5/2-way, 5/3-way CC CO Ports: G1/8, G1/4	79
Series 4	 <b>Valves and solenoid valves</b> 3/2-way, 5/2-way, 5/3-way CC CO CP Ports: G1/8, G1/4, G1/2	82
Series 9	 <b>Valves and solenoid valves ISO 5599/1</b> 5/2-way, 5/3-way CC CO Ports: G1/4 (size 1), G3/8 (size 2), G1/2 (size 3)	86
Series 7	 <b>Valves and solenoid valves VDMA 24563 (ISO 15407-1)</b> 5/2-way, 5/3-way CC CO CP	88
Series NA	 <b>Valves and solenoid valves</b> 3/2-way, 5/2-way, 5/3-way CC CO CP With holes configured according NAMUR standards	90
Series U, G, A, B, H, GP	 <b>Solenoids</b> Version A and B Connection according to DIN 43650 and DIN 40050 standards	91

Valve islands

		Page
Series 3	 <b>Plug-In valve islands, Multipole and Fieldbus</b> Plug-In system for Series 3 solenoid valves, G1/8 port Valve functions: 2x3/2, 5/2 and 5/3-way CO CC CP Multipole with a 25-pin Sub-D connector It can interface with all major serial communication protocols	92
Series F	 <b>Multipole and Fieldbus valve islands</b> Multipole integrated electrical connection (PNP) Valve functions: 2x2/2; 2x3/2; 5/2; 5/3 CC It can interface with all major serial communication protocols	96
Series HN	 <b>Multipole and Fieldbus valve islands</b> Multipole connection with 25 or 37 pins Serial connection with the most common communication protocols Valve functions: 2x2/2; 2x3/2; 5/2; 5/3 CC	101
Series Y	 <b>Individual, Multipole and Fieldbus valve islands</b> Valve Island with Pneumatics and Electronics integrated Available versions: Individual, Multipole, Fieldbus (Profibus-DP, DeviceNet, CANopen) Valve functions: 2x2/2; 2x3/2; 5/2; 5/3 CC	107
Series CX	 <b>Multi-serial module</b> Interface with: PROFIBUS, CANopen, DeviceNet, EtherNet/IP, PROFINET, EtherCAT Compatible with all Camozzi valve islands	110
Series 3, F, HN, Y, CX	 <b>Connectors and accessories for valve islands</b>	113



## 2 > Control



### Mechanical / manual valves

		<b>Page</b>
Series 2	 <b>Mechanically operated minivalves</b> 3/2-way Ports: M5. Cartridge ø 4	114
Series 1, 3	 <b>Mechanically operated valves</b> Series 1: 3/2-way, 5/2-way. Ports: G1/8, G1/4 Series 3: 3/2-way, 5/2-way. Ports: G1/8	115
Series 3, 4	 <b>Mechanically operated sensor valves</b> 3/2-way, 5/2-way Ports: G1/8, G1/4	116
Series 2, 3	 <b>Foot operated pedal electrical and pneumatic</b> Series 3: G1/4, 5/2-way, Normally Closed (NC) and Normally Open (NO) contacts Series 2: M5, 4/2 tube, 3/2-way, Normally Closed (NC)	117
Series 2	 <b>Manually operated console minivalves</b> 3/2-way, 5/3-way CC CO CP Ports: M5. Cartridge ø 4	117
Series 1, 3, 4 VMS	 <b>Manually operated valves</b> Series 1, 3 and 4: 3/2-way, 5/2-way, 5/3-way CC CO CP. Ports: G1/8, G1/4 Series VMS: 3/2-way. Ports M5, G1/8, G1/4, G3/8, G1/2 and G3/4	118
Series 2	 <b>Mini-handle valves</b> Handle with incorporated micro valve 3/2-way, Normally Closed (NC) and Normally Open (NO) Handle with incorporated micro switch	120

### Logic valves

		<b>Page</b>
Series 2L	 <b>Basic logic valves</b> Cartridge ø 4 mm or - and - yes - not - memory	120

### Automatic valves

		<b>Page</b>
Series SCS, VNR, VSO, VSC, VMR	 <b>Automatic valves</b> Circuit selector Mod. SCS Unidirectional valves Series VNR Quick exhaust valves Series VSO - VSC Valves with adjustable exhaust Mod. VMR	121
Series VBO, VBU	 <b>Blocking valves</b> Unidirectional valves (VBU) and bidirectional valves (VBO) Ports: G1/8, G1/4, G3/8, G1/2	122

### Flow control valves

		<b>Page</b>
Series SCU, MCU, SVU, MVU, SCO, MCO	 <b>Flow control valves</b> Unidirectional and bidirectional banjo flow control regulators Ports: M5, G1/8, G1/4, G3/8, G1/2	123
Series PSCU, PMCU, PSVU, PMVU, PSCO, PMCO	 <b>Flow control valves</b> Unidirectional and bidirectional flow regulators with ports M5, G1/8, G1/4, G3/8 and banjo in brass (ports M5) or in technopolymer (ports G1/8, G1/4, G3/8)	125
Series TMCU, TMVU, TMCO	 <b>Flow control valves</b> Unidirectional and bidirectional banjo flow control regulators Nominal diameters ø 2 - 3,8 - 5,8 - 8 mm Ports: G1/8, G1/4, G3/8, G1/2	126
Series GSCU, GMCU, GSVU, GMVU, GSCO, GMCO	 <b>Flow control valves</b> Unidirectional and bidirectional banjo flow control regulators Nominal diameters ø 1,5 - 3,5 - 5 mm Ports: M5, G1/8, G1/4	127
Series RFU, RFO	 <b>Flow control valves</b> Unidirectional and bidirectional flow control valves Ports: M5, G1/8, G1/4, G3/8, G1/2 Nominal diameters M5 = 1,5 mm; G1/8 = 2 and 3 mm; G1/4 = 4 and 6 mm; G3/8, G1/2 = 7 mm	128
Series 28	 <b>Flow control valves</b> Bidirectional flow control valves Ports: G1/8, G1/4, G3/8, G1/2	128

**Pressure switches and vacuum switches**

		<b>Page</b>
Series PM, TRP, 2950	<b>Pressure switches, transducers and pressure indicators</b> Series PM adjustable-diaphragm pressure switches, with setting visual scale, with exchange contacts Series TRP electro-pneumatic transducers Series 2950 pressure indicators, ports M5	129
Series SWDN	<b>Electronic vacuum/pressure switches</b> With digital display High precision, easy to use	130
Series SWCN	<b>Electronic vacuum/pressure switches</b> With digital display High precision, easy to use	131

**Silencers**

		<b>Page</b>
Series 29...	<b>Silencers</b> Ports: M5, G1/8, G1/4, G3/8, G1/2, G3/4, G1	132

**Proportional technology**

		<b>Page</b>
Series AP	<b>Directly operated proportional valves</b> 2/2-way proportional valves, NC Size: 16 - 22 mm Bodies with rear and lower flanges	133
Series CP	<b>Directly operated proportional solenoid valves</b> 2/2 NC proportional valves Sizes: 16 and 20 mm	135
Series 130	<b>Electronic control device for proportional valves</b> PWM control device, with current control system for directly operated proportional valves	136
Series LRWD2, LRPD2, LRXD2	<b>Digital proportional servo valves</b> 3/3-way directly operated servo valves for the flow (LRWD2), pressure (LRPD2) and position (LRXD2) control	137
Series K8P	<b>Electronic proportional micro regulator</b> Proportional regulator for the pressure control	138
Series MX-PRO	<b>Electronic proportional regulator</b> Ports: G1/2. Manifold ports: G1/2 Modular - Available with built-in pressure gauges or ports for gauges	139
Series ER100, ER200	<b>Digital electro-pneumatic regulators</b> Series ER100 ports: G1/4 Series ER200 ports: G1/4, G3/8	140

## Series K8 directly operated solenoid valves - 8 mm

2/2-way, 3/2-way

Normally closed (NC) and normally open (NO)

For detailed information about suitable accessories, see page 70



### CODING EXAMPLE

<b>K8</b>	<b>0</b>	<b>00</b>	<b>-</b>	<b>3</b>	<b>0</b>	<b>3</b>	<b>-</b>	<b>K</b>	<b>2</b>	<b>3</b>
-----------	----------	-----------	----------	----------	----------	----------	----------	----------	----------	----------

**K8** SERIES

**0** BODY DESIGN:  
0 = single valve

**00** NUMBER OF POSITIONS:  
00 = valve without seat

**3** NUMBER OF WAYS - FUNCTIONS:  
0 = single base  
3 = 3-way NC  
4 = 3-way NO  
5 = 2-way NC  
6 = 2-way NO

**0** MATERIALS AND SEALS:  
0 = poppet, FKM seals

**3** NOMINAL DIAMETER:  
3 =  $\varnothing$  0,5 mm (working pressure 1 + 7 bar)  
6 =  $\varnothing$  0,5 mm (working pressure -1 + 4 bar)  
5 =  $\varnothing$  0,7 mm (working pressure -1 + 3 bar)

**K** MATERIALS:  
K = zinc-plated steel body, brass cage

**2** ELECTRICAL CONNECTION:  
2 = pin interface pitch 4 mm

**3** SOLENOID VOLTAGE:  
1 = 6V DC (0,6 W)  
2 = 12V DC (0,6 W)  
3 = 24V DC (0,6 W)

### Available versions

Single body for Series K8 solenoid valve

Material: anodized aluminium

Pneumatic connections: M5 threads

Mod. **K8303/14C**



## Series K8B pilot operated solenoid valves

2/2-way - 3/2-way

Normally Closed (NC) and Normally Open (NO)

For detailed information about suitable accessories, see page 70



### CODING EXAMPLE

K8B	C5	4	00	-	D4	3	2	N	-	N	00	1A	C003
-----	----	---	----	---	----	---	---	---	---	---	----	----	------

**K8B** SERIES

**C5** BODY DESIGN:  
C0 = body with interface for subbase - C3 = threaded body - C5 = cartridge

**4** NUMBER OF WAYS - FUNCTIONS:  
1 = 2/2-way NC - 2 = 2/2-way NO - 4 = 3/2-way NC - 5 = 3/2-way NO

**00** PNEUMATIC CONNECTIONS:  
00 = cartridge - 03 = M7 - 18 = K8B-type interface, 2-way - 19 = K8B-type interface, 3-way

**D4** NOMINAL DIAMETER:  
D4 = ø 3.6 mm

**3** SEALS MATERIALS:  
3 = FKM

**2** BODY MATERIALS:  
1 = aluminium - 2 = brass

**N** MANUAL OVERRIDE:  
N = not foreseen

**N** FIXING ACCESSORIES:  
N = not foreseen - P = screws for plastics - M = screws for metal

**00** OPTION:  
00 = no option

**1A** ELECTRICAL CONNECTION:  
1A = only pins, pitch 4 mm - 1B = JST connector, pitch 4 mm

**C003** VOLTAGE - POWER CONSUMPTION:  
C001 = 6V DC (0.6 W) - C002 = 12V DC (0.6 W) - C003 = 24V DC (0.6 W)

### Available versions

Body with threaded ports, 2/2-way NC and NO  
Supplied with:  
1x connector with flying leads Mod. 120-J803 (300mm)  
Mod. **K8BC3103-D431N-N001B\***  
**K8BC3203-D431N-N001B\***  
\* = enter the required voltage  
(see the CODING EXAMPLE)



Body with threaded ports, 3/2-way NC and NO  
Supplied with:  
1x connector with flying leads Mod. 120-J803 (300mm)  
Mod. **K8BC3403-D431N-N001B\***  
**K8BC3503-D431N-N001B\***  
\* = enter the required voltage  
(see the CODING EXAMPLE)



Body for sub-base, 2/2-way NC and NO  
Supplied with:  
1x connector with flying leads Mod. 120-J803 (300mm)  
2x interface seals  
2x screws M3x6 UNI 5931 (for M version)  
or  
2x screws M3x6 UNI 10227 (for P version)  
Mod. **K8BC0118-D431N-\*001B\*\***  
**K8BC0218-D431N-\*001B\*\***  
\* = enter the type of screws  
\*\* = enter the required voltage  
(see the CODING EXAMPLE)



Body for sub-base, 3/2-way NC and NO  
Supplied with:  
1x connector with flying leads Mod. 120-J803 (300mm)  
3x interface seals  
2x screws M3x6 UNI 5931 (for M version)  
or  
2x screws M3x6 UNI 10227 (for P version)  
Mod. **K8BC0419-D431N-\*001B\*\***  
**K8BC0519-D431N-\*001B\*\***  
\* = enter the type of screws  
\*\* = enter the required voltage  
(see the CODING EXAMPLE)

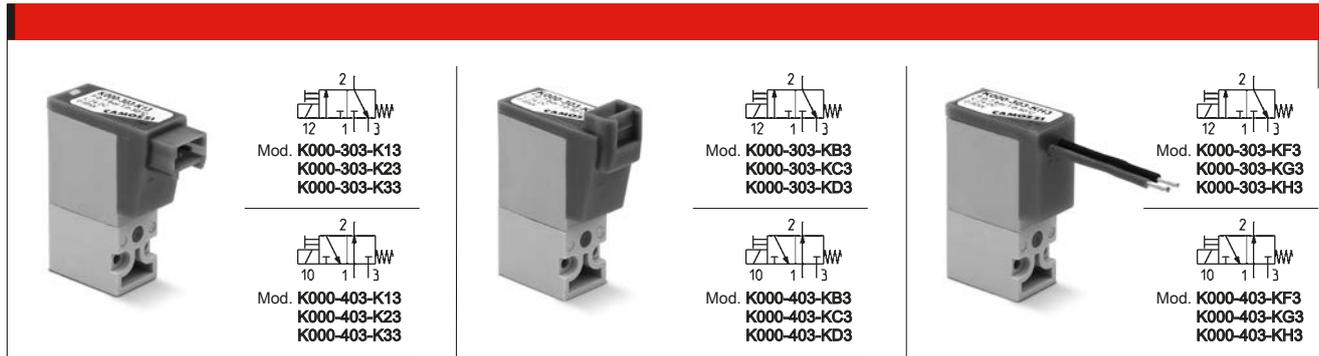


## Series K directly operated solenoid valves - 10 mm

3/2-way, normally closed (NC) and normally open (NO)

The solenoid valves can be mounted on a single base (with M5 ports) as well as on manifolds (with M5 ports)

For detailed information about suitable accessories, see page 70



### CODING EXAMPLE

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

<b>K</b>	SERIES
<b>0</b>	BODY DESIGN: 0 = single sub-base (only M5) or interface 1 = manifold
<b>00</b>	NUMBER OF POSITIONS: 00 = interface 01 = single base (only M5) 02 + 99 = manifold number of positions
<b>3</b>	NUMBER OF WAYS - FUNCTIONS: 0 = manifold or single base 3 = 3-way NC 4 = 3-way NO 5 = 3-way NC electric part revolved by 180° 6 = 3-way NO electric part revolved by 180°
<b>0</b>	PORTS: 0 = interface 2 = M5 side outlets
<b>3</b>	NOMINAL DIAMETER: 3 = $\varnothing$ 0,65
<b>K</b>	MATERIALS: K = PBT body, HNBR poppet F = PBT body, FKM poppet
<b>2</b>	ELECTRICAL CONNECTION: 1 = 90° connection with protection and led 2 = 90° connection with protection 3 = 90° connection B = in-line connection with protection and led C = in-line connection with protection D = in-line connection F = cable (300 mm) with protection and led G = cable (300 mm) with protection H = cable only (300 mm)
<b>3</b>	SOLENOID VOLTAGE: 1 = 6V DC 2 = 12V DC 3 = 24V DC
	FIXING: = standard version for mounting on plastic interface M = with screws for mounting on metal interfaces (on demand)

# Series KN and KN High Flow directly operated solenoid valves - 10 mm

3/2-way - Normally Closed (NC) and Normally Open (NO)

3/2-way - Universal (UNI)

	<p>Mod. <b>KN000-303-K1*</b> <b>KN000-303-F1*</b> <b>KN000-305-F1*</b> <b>KN000-306-F1*</b></p>		<p>Mod. <b>KN000-303-K1*</b> <b>KN000-303-F1*</b> <b>KN000-305-F1*</b> <b>KN000-306-F1*</b></p>
	<p>Mod. <b>KN000-403-F1*</b></p>		<p>Mod. <b>KN000-403-F1*</b></p>
	<p>Mod. <b>KN000-706-F1*</b></p>		<p>Mod. <b>KN000-706-F1*</b></p>
<p>* add VOLTAGE - POWER CONSUMPTION (see CODING EXAMPLE)</p>		<p>* add VOLTAGE - POWER CONSUMPTION (see CODING EXAMPLE)</p>	

2

CONTROL

CODING EXAMPLE											
KN	0	00	-	3	0	3	-	K	1	3	
<b>KN</b>	SERIES										
<b>0</b>	BODY DESIGN: 0 = single valve										
<b>00</b>	NUMBER OF POSITIONS: 00 = interface										
<b>3</b>	NUMBER OF WAYS - FUNCTIONS: 3 = 3/2-way NC 4 = 3/2-way NO 7 = 3/2-way UNI										
<b>0</b>	PORTS: 0 = single valve										
<b>3</b>	NOMINAL DIAMETER / MAX PRESSURE: 3 = $\varnothing$ 0.65 mm 5 = $\varnothing$ 1.1 mm - max pressure 7 bar 6 = $\varnothing$ 1.1 mm - max pressure 3 bar										
<b>K</b>	MATERIALS: F = PBT body, FKM poppet seal, FKM other seals K = PBT body, FKM poppet seal, NBR other seals										
<b>1</b>	ELECTRICAL CONNECTION: 1 = 90° connection with protection and led B = in-line connection with protection and led										
<b>3</b>	VOLTAGE - POWER CONSUMPTION: 2 = 12 V DC - 1.3/0.25 W 3 = 24 V DC - 1.3/0.25 W 5 = 5 V DC - 4/1 W 6 = 6 V DC - 4/1 W 7 = 12 V DC - 4/1 W 8 = 24 V DC - 4/1 W										
	FIXING: = with screws for mounting on plastics M = with screws for mounting on metal										

## Accessories

### Single sub-base

Note: use solenoid valves with mounting screws on metal interfaces  
Mod. **KN01-02**



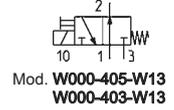
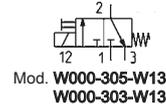
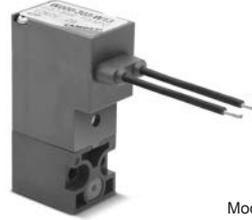
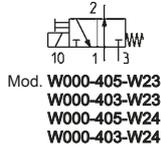
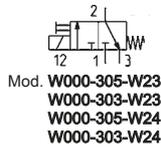
### Connector Mod. 121-8..

Mod. **121-803**  
**121-806**  
**121-810**  
**121-830**



## Series W directly operated solenoid valves - 15 mm

3/2-way, normally closed (NC) and normally open (NO). Monostable. 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)  
For detailed information about suitable accessories, see page 70



### CODING EXAMPLE

<b>W</b>	<b>0</b>	<b>00</b>	<b>-</b>	<b>3</b>	<b>0</b>	<b>3</b>	<b>-</b>	<b>W</b>	<b>2</b>	<b>3</b>	
----------	----------	-----------	----------	----------	----------	----------	----------	----------	----------	----------	--

**W**

SERIES

**0**

BODY DESIGN:

- 0 = single sub-base (only M5) or interface
- 1 = single manifold
- 2 = double manifold

**00**

NUMBER OF POSITIONS:

- 00 = interface
- 01 = single base (M5 only)
- 02 + 99 = manifold number of positions

**3**

NUMBER OF WAYS - FUNCTIONS:

- 0 = manifold or single sub-base
- 3 = 3-way NC - 4 = 3-way NO
- 5 = 3-way NC electric part revolved by 180°
- 6 = 3-way NO electric part revolved by 180°

**0**

VALVE PORTS:

- 0 = interface

MANIFOLD PORTS (for Series W, P and PN):

- 2 = M5 side
- 3 = tube  $\varnothing$  3 side
- 4 = tube  $\varnothing$  4 side
- 6 = M5 rear ports
- 7 =  $\varnothing$  3 tube rear ports
- 8 =  $\varnothing$  4 tube rear ports

**3**

NOMINAL DIAMETER - MAX PRESSURE:

- 1 =  $\varnothing$  0,8 (1W) 10 bar (NC) 24V only
- 3 =  $\varnothing$  1,5 (2W) 7 bar (NC) 5 bar (NO)
- 5 =  $\varnothing$  1,1 NC (2W) 10 bar (NC)
- $\varnothing$  0,9 NO (2W) 10 bar (NO)

**W**

MATERIALS:

- W = technopolymer PBT body, FKM poppet seal, other seals in NBR (FKM on demand)

**2**

ELECTRICAL CONNECTION:

- 1 = cables 300 mm (24V DC only)
- 2 = 2 faston (24V - 48V DC)

**3**

SOLENOID VOLTAGE:

- 2 = 12 V DC
- 3 = 24V DC
- 4 = 48V DC

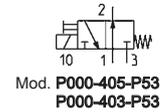
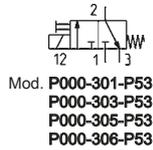
FIXING:

- = with screws for metal (standard)
- P = with screws for plastics

## Series P directly operated solenoid valves - 15 mm

3/2-way, normally closed (NC) and normally open (NO). 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)

For detailed information about suitable accessories, see page 70



2

CONTROL

### CODING EXAMPLE

P	0	00	-	3	0	3	-	P	5	3	
---	---	----	---	---	---	---	---	---	---	---	--

**P**

SERIES

**0**

BODY DESIGN:

0 = single sub-base (M5 only) or interface

1 = single manifold

2 = double sided manifold

**00**

NUMBER OF POSITIONS:

00 = interface

01 = single base (M5 only)

02 + 99 = manifold number of positions

**3**

NUMBER OF WAYS - FUNCTIONS:

0 = manifold or single base

3 = 3-way NC

4 = 3-way NO

5 = 3-way NC electric part revolved by 180°

6 = 3-way NO electric part revolved by 180°

**0**

VALVE PORTS:

0 = interface (for single valve only)

MANIFOLD PORTS (for Series W, P and PN):

2 = M5 side port

3 =  $\varnothing$  3 tube side port4 =  $\varnothing$  4 tube side port

6 = M5 rear ports

7 =  $\varnothing$  3 tube rear ports8 =  $\varnothing$  4 tube rear ports**3**

NOMINAL DIAMETER - MAX PRESSURE

1 =  $\varnothing$  0,8 (1W) 10 bar (NC) 24V only3 =  $\varnothing$  1,5 (2W) 7 bar (NC) 5 bar (NO)5 =  $\varnothing$  1,1 NC (2W) 10 bar (NC) $\varnothing$  0,9 NO (2W) 10 bar (NO)6 =  $\varnothing$  1,5 NC (2W) 3 bar (NC) (Voltage tolerance from +10% to -25%)**P**

MATERIALS:

P = technopolymer PBT body, FKM poppet seal, other seals in NBR (FKM on demand)

**5**

ELECTRICAL CONNECTION:

5 = 3 faston pitch 9,4

**3**

SOLENOID VOLTAGE:

B = 24V 50/60 Hz 2 = 12 V DC 6 = 110V DC

C = 48V 50/60 Hz 3 = 24V DC

D = 110V 50/60 Hz 4 = 48V DC

FIXING:

= with screws for metal (standard)

P = with screws for plastics

## Series PL directly operated solenoid valves - 15 mm

3/2-way, normally closed (NC). These 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)  
For detailed information about suitable accessories, see page 70



2

CONTROL

### CODING EXAMPLE

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

**PL**

SERIES

**0**

**BODY DESIGN:**  
0 = single sub-base (M5 only) or interface  
1 = single manifold  
2 = double sided manifold

**00**

**NUMBER OF POSITIONS:**  
00 = interface  
01 = single base (M5 only)  
02 + 99 = manifold number of positions

**3**

**NUMBER OF WAYS - FUNCTIONS:**  
0 = manifold or single base  
3 = 3-way NC  
5 = 3-way NC electric part revolved by 180°

**0**

**VALVE PORTS:**  
0 = interface (for single valve only)

**MANIFOLD PORTS:**  
2 = M5 side port  
3 =  $\varnothing$  3 tube side port  
4 =  $\varnothing$  4 tube side port  
6 = M5 rear ports  
7 =  $\varnothing$  3 tube rear ports  
8 =  $\varnothing$  4 tube rear ports

**3**

**NOMINAL DIAMETER**  
3 =  $\varnothing$  1,5  
6 =  $\varnothing$  1,5 NC (for use with vacuum)

**PL**

**MATERIALS:**  
PL = technopolymer PBT body, FKM poppet seal, other seals in NBR

**2**

**ELECTRICAL CONNECTION:**  
2 = 2 faston pitch 9,4

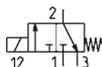
**3**

**SOLENOID VOLTAGE:**  
3 = 24V DC  
2 = 12V DC

## Series PN directly operated solenoid valves - 15 mm

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)

For detailed information about suitable accessories, see page 70



Mod. PN000-301-P53

### CODING EXAMPLE

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

#### PN SERIES

**0** BODY DESIGN:  
 0 = single sub-base  
 1 = single manifold  
 2 = double sided manifold

**00** NUMBER OF POSITIONS:  
 00 = interface  
 01 = single base (M5 only)  
 02 + 99 = manifold number of positions

**3** NUMBER OF WAYS - FUNCTIONS:  
 0 = manifold or single base  
 3 = 3-way NC

**0** VALVE PORTS:  
 0 = interface (for single valve only)

MANIFOLD PORTS (for Series W, P and PN):  
 2 = M5 side port  
 3 =  $\varnothing$  3 tube side port  
 4 =  $\varnothing$  4 tube side port  
 6 = M5 rear ports  
 7 =  $\varnothing$  3 tube rear ports  
 8 =  $\varnothing$  4 tube rear ports

**1** NOMINAL DIAMETER - MAX PRESSURE  
 1 =  $\varnothing$  0,8 (1W) 10 bar (NC) 24V only

**P** MATERIALS:  
 P = PBT body, PU poppet seal

**5** ELECTRICAL CONNECTION:  
 5 = 3 faston pitch 9,4

**3** SOLENOID VOLTAGE:  
 3 = 24V DC  
 4 = 48V DC  
 6 = 110V DC  
 7 = 205V DC

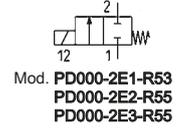
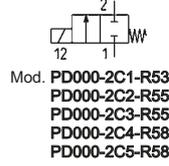
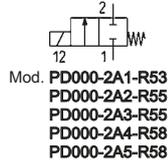
FIXING:  
 = standard for the mounting on plastic interfaces  
 M = with screw for the mounting on metal interface (on demand)

## Series PD directly operated solenoid valves - 15 mm

2/2-way

Normally closed (NC)

For detailed information about suitable accessories, see page 70



### CODING EXAMPLE

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

**PD** SERIES

**0** BODY DESIGN:  
0 = single body

**00** NUMBER OF POSITIONS:  
00 = interface

**2** NUMBER OF WAYS - FUNCTIONS:  
2 = 2-way NC

**A** BODY MATERIALS AND VALVE PORTS:  
A = aluminium body, rear pneumatic interface  
C = aluminium body, low pneumatic interface  
E = brass body, M5 ports (for  $\phi$  up to 1.6 mm)

**1** NOMINAL DIAMETER:  
1 =  $\phi$  0.8  
2 =  $\phi$  1.2  
3 =  $\phi$  1.6  
4 =  $\phi$  2  
5 =  $\phi$  2.5

**R** POPPET SEAL MATERIALS:  
R = NBR  
F = FKM (on request)

**5** ELECTRICAL CONNECTION:  
5 = 3 faston pitch 9,4

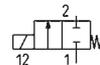
**3** SOLENOID VOLTAGE:  
1 = 12V DC 1W  
2 = 12V DC 2W  
3 = 24V DC 1W  
5 = 24V DC 2W  
8 = 24V DC 4W

FIXING:  
= with screws for metal (standard)  
P = with screws for plastics

# Series PDV directly operated solenoid valves with separating diaphragm

2/2-way Normally Closed (NC)

For detailed information about suitable accessories, see page 70



- Mod. PDVC0122-A73GN-M00\* PDVC0122-B73GN-M00\*  
 PDVC0122-A73GN-MVC\* PDVC0122-B73GN-MVC\*  
 PDVC0122-A74GN-M00\* PDVC0122-B74GN-M00\*  
 PDVC0122-A74GN-MVC\* PDVC0122-B74GN-MVC\*  
 PDVC0122-A75GN-M00\* PDVC0122-B75GN-M00\*  
 PDVC0122-A75GN-MVC\* PDVC0122-B75GN-MVC\*  
 PDVC0122-B33GN-M00\* PDVC0122-C13GN-M00\*  
 PDVC0122-B33GN-MVC\* PDVC0122-C13GN-MVC\*  
 PDVC0122-B34GN-M00\* PDVC0122-C14GN-M00\*  
 PDVC0122-B34GN-MVC\* PDVC0122-C14GN-MVC\*  
 PDVC0122-B35GN-M00\* PDVC0122-C15GN-M00\*  
 PDVC0122-B35GN-MVC\* PDVC0122-C15GN-MVC\*

\* = to complete the code, add ELECTRICAL CONNECTION (see the CODING EXAMPLE)

2

CONTROL

## CODING EXAMPLE

PDV	C0	1	22	-	B7	3	G	N	-	M	00	4A	C023
-----	----	---	----	---	----	---	---	---	---	---	----	----	------

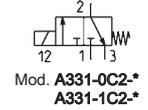
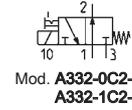
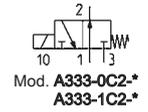
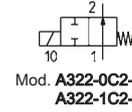
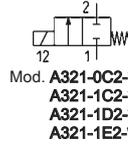
<b>PDV</b>	SERIES
<b>C0</b>	BODY DESIGN: 0 = body with interface for subbase
<b>1</b>	NUMBER OF WAYS - FUNCTIONS: 1 = 2/2-way NC
<b>22</b>	PNEUMATIC CONNECTIONS: 22 = PDV-type interface, 2-way
<b>B7</b>	NOMINAL DIAMETER: A7 = $\varnothing$ 0.8 mm B3 = $\varnothing$ 1.2 mm B7 = $\varnothing$ 1.6 mm C1 = $\varnothing$ 2.0 mm
<b>3</b>	SEAL MATERIAL: 3 = FKM 4 = EPDM 5 = FFKM
<b>G</b>	BODY MATERIAL: G = PEEK
<b>N</b>	MANUAL OVERRIDE: N = not foreseen
<b>M</b>	FIXING ACCESSORIES: M = screws for metal
<b>00</b>	OPTIONS: 00 = none VC = for vacuum applications
<b>4A</b>	ELECTRICAL CONNECTION: 3A = DIN 43650 connector (C Form), pitch 8 mm 3C = DIN 43650 connector (C Form), pitch 8 mm with coil rotated 180° 4A = DIN 43650 connector (C Form), pitch 9.4 mm 4C = DIN 43650 connector (C Form), pitch 9.4 mm with coil rotated 180° 7A = cables (L = 300 mm) 7C = cables (L = 300 mm) with coil rotated 180°
<b>C023</b>	VOLTAGE - ABSORPTION: C017 = 6V DC 2W C020 = 12V DC 2W C023 = 24V DC 2W

## Series A directly operated solenoid valves - 22 mm

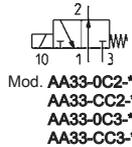
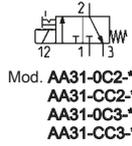
2/2-way, 3/2-way

Normally closed (NC) and normally open (NO). Monostable - bistable (with magnetic memory).

Ports: M5, G1/8. Cartridge  $\varnothing$  4

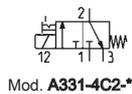
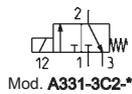
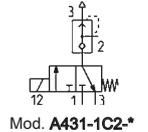


\* = choose the most suitable solenoid (see the coding example)  
Note: For the use of NO valves in line, use the coil model U771 or U7K1 or G771 or G7K1



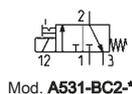
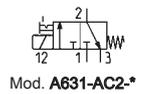
\* = choose the most suitable solenoid (see the coding example)  
Note: For the use of NO valves in line, use the coil model U771 or U7K1 or G771 or G7K1

\* = choose the most suitable solenoid (see the coding example)



\* = choose the most suitable solenoid (see the coding example)

\* = choose the most suitable solenoid (see the coding example)



\* = choose the most suitable solenoid (see the coding example)

**CODING EXAMPLE**

<b>A</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>-</b>	<b>0</b>	<b>C</b>	<b>2</b>	<b>-</b>	<b>U7</b>	<b>7</b>
----------	----------	----------	----------	----------	----------	----------	----------	----------	-----------	----------

**A** SERIES

**3** BODY DESIGN:  
 1 = base ( 24x24 mm ) interface rotatable through 360°  
 2 = base ( 24x24 mm ) fixed interface  
 3 = threaded body  
 4 = rapid exhaust body  
 5 = base with ISO standard interface, fixed body in technopolymer  
 6 = ( 16x16 mm ) interface rotatable through 360°  
 A = single manifold  
 B = 2-part manifold  
 C = 3-part manifold  
 D = 4-part manifold  
 E = 5-part manifold  
 F = 6-part manifold  
 G = 7-part manifold  
 H = 8-part manifold  
 K = 9-part manifold  
 L = 10-part manifold  
 M = 11-part manifold  
 N = 12-part manifold  
 P = 13-part manifold  
 R = 14-part manifold  
 S = 15-part manifold

**3** NUMBER OF PORTS:  
 2 = 2 way  
 3 = 3 way

**1** FUNCTION:  
 1 = NC  
 2 = NO  
 3 = NO in line

**0** PORTS:

	1	2	3
0	M5	M5	M5
1	G1/8	G1/8	M5
3	M5	G1/8 male	M5
4	M5	G1/8 male	M5 with manual override
A	swivel O-ring interface		M5
B	fixed O-ring interface		M5
C	cartridge ø 4		

**C** NOMINAL DIAMETER:  
 C = ø 1,5  
 D = ø 2  
 E = ø 2,5

**2** BODY MATERIAL:  
 2 = nickel-plated brass  
 3 = technopolymer

**U** ENCAPSULATING MATERIAL / SOLENOID DIMENSIONS:  
 A8 = PPS / 30x30  
 G7 = PA / 22x22  
 G8 = PA / 30x30 (24 V DC only)  
 G9 = PA / 22x58  
 H8 = PA 6 V0 / 30x30  
 U7 = PET / 22x22

**7** SOLENOID VOLTAGE:

		<b>U7**</b>	<b>G7**</b>	<b>A8**</b>	<b>H8**</b>	<b>G9**</b>
B	24V AC 50/60Hz	-	-	5VA	5,3VA	-
C	48V AC 50/60Hz	-	-	-	5,3VA	-
D	110V AC 50/60Hz	-	-	5VA	5,3VA	-
E	230V AC 50/60Hz	-	-	5VA	5,3VA	-
F	380V AC 50/60Hz	7VA	7VA	-	-	-
H	24V 50/60Hz 3,5VA	3,5VA	-	-	-	-
	12V DC	3,1W	3,1W	-	-	-
K	72V DC	4,8W	4,8W	-	-	-
	110V AC 50/60Hz	3,8VA	3,8VA	-	-	-
	125V AC 50/60Hz	5,5VA	5,5VA	-	-	-
K1*	72V DC	5,6W	5,6W	-	-	-
	110V AC 50/60Hz	5,8VA	5,8VA	-	-	-
	125V AC 50/60Hz	8,3VA	8,3VA	-	-	-
J	230V AC 50/60Hz	3,5VA	3,5VA	-	-	-
	240V AC 50/60Hz	4VA	4VA	-	-	-
1	6V DC	5,1W	5,1W	-	-	-
2	12V DC	5W	5W	-	-	-
3	24V DC	5W	5W	4W	5,4W	4/2W
4	48V DC	5,3W	5,3W	4W	-	-
6	110V DC	4,2W	4,2W	-	-	-
7	24V DC	3,1W	3,1W	-	-	-
	48V AC 50/60 Hz	3,5VA	3,5VA	-	-	-
71*	24V DC	3,1W	3,1W	-	-	-
	48V AC 50/60Hz	3,5VA	3,5VA	-	-	-
9	48V DC	3,1W	3,1W	-	-	-
10	110V DC	3,2W	3,2W	-	-	-

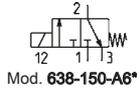
\* = only for valves NO in-line  
 \*\* = substitute 0 with letter or number at the beginning of the line

## Series 6 directly operated solenoid valves - 30 mm

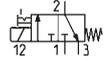
2/2-way - 3/2-way. Normally closed (NC) and normally open (NO). Ports: G1/8, G3/8. Cartridge  $\varnothing$  4

Available also in version for the low temperatures up to  $-50^{\circ}\text{C}$

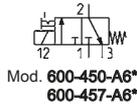
For detailed information about suitable accessories, see page 70



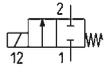
\* = choose the suitable solenoid (see the coding example)



\* = choose the suitable solenoid (see the coding example)



\* = choose the suitable solenoid (see the coding example)



\* = choose the suitable solenoid (see the coding example)

### CODING EXAMPLE

<b>6</b>	<b>3</b>	<b>8</b>	<b>M</b>	<b>-</b>	<b>105</b>	<b>-</b>	<b>A</b>	<b>6</b>	<b>B</b>
----------	----------	----------	----------	----------	------------	----------	----------	----------	----------

<b>6</b>	SERIES
<b>3</b>	NUMBER OF PORTS AND FUNCTIONS: 0 = interface 1 = 2 way NO 2 = 2 way NC 3 = 3 way NC 4 = 3 way NO
<b>8</b>	CONNECTION: 0 = interface 3 = G3/8 8 = G1/8 C = cartridge $\varnothing$ 4
<b>M</b>	M = manifold
<b>105</b>	TYPE OF BODY: 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
<b>A</b>	COIL MATERIAL: A = PPS
<b>6</b>	SOLENOID DIMENSIONS: 6 = 32x32
<b>B</b>	SOLENOID VOLTAGE: B = 24V 50/60Hz D = 110V 50/60 Hz E = 230V 50/60 Hz 2 = 12V DC 3 = 24V DC 4 = 48V DC 6 = 110V DC
	VERSIONS: = standard LT = for low temperatures

# Series CFB solenoid valves

2/2-way, 3/2-way  
Normally closed (NC) and normally open (NO)

	<p>Mod. CFB-D21C-W1-* CFB-D21F-W1-* CFB-D22C-W1-* CFB-D22F-W1-* CFB-D22G-W1-* CFB-D23J-R1-* CFB-D24J-R1-* CFB-D24M-R1-*</p> <p>Mod. CFB-D31A-W1-* CFB-D31D-W1-* CFB-D32A-W1-* CFB-D32D-W1-*</p> <p>Mod. CFB-D11A-W1-* CFB-D12D-W1-* CFB-D13J-W1-*</p>		<p>Mod. CFB-B23L-W1-* CFB-B24N-W1-* CFB-B25P-W1-* CFB-B26R-W1-*</p>
* = choose the suitable solenoid (see the coding example)		* = choose the suitable solenoid (see the coding example)	
	<p>Mod. CFB-A23L-R1-* CFB-A24N-R1-* CFB-A25P-R1-* CFB-A26R-R1-* CFB-A27T-R1-* CFB-A28X-R1-* CFB-A29Z-R1-*</p>		<p>Mod. CFB-A13L-R1-* CFB-A14N-R1-* CFB-A15P-R1-* CFB-A16R-R1-* CFB-A17T-R1-* CFB-A18X-R1-* CFB-A19Z-R1-*</p>
* = choose the suitable solenoid (see the coding example)		* = choose the suitable solenoid (see the coding example)	

2

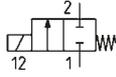
CONTROL

CODING EXAMPLE											
CFB	-	A	1	3	L	-	R	1	-	B7	E
<b>CFB</b>	SERIES										
<b>A</b>	OPERATION: A = indirect B = direct with linked diaphragm D = direct										
<b>1</b>	NUMBER OF WAYS - POSITIONS: 1 = 2/2-way NO 2 = 2/2-way NC 3 = 3/2-way NC										
<b>3</b>	CONNECTIONS: 1 = G1/8 2 = G1/4 3 = G3/8 4 = G1/2 5 = G3/4 6 = G1 7 = G1 1/4 8 = G1 1/2 9 = G2										
<b>L</b>	NOMINAL DIAMETER: A = 1,4 mm - B = 2 mm - C = 2,5 mm - D = 2,8 mm - F = 4 mm - G = 6 mm - J = 8 mm - L = 11,5 mm - M = 13 mm - N = 13,5 mm P = 18 mm - R = 26 mm - T = 32 mm - X = 45 mm - Z = 50 mm										
<b>R</b>	DIAPHRAGM MATERIAL: R = NBR - W = FKM - E = EPDM (ond demand)										
<b>1</b>	BODY MATERIAL: 1 = brass 2 = alimentary anti-limestone nickel-plated brass for high temperatures (on demand) 3 = alimentary nickel-plated brass (on demand)										
<b>B7</b>	SOLENOID DIMENSION: B7 = 22 mm - B8 = 30 mm - B9 = 36 mm										
<b>E</b>	SOLENOID VOLTAGE: B = 24V AC 50 Hz D = 110V AC 50/60 Hz E = 230V AC 50/60 Hz 2 = 12V DC 3 = 24V DC										

NOTE: for some directly operated 2/2 NO solenoid valves, the solenoid to be used is the B8\*K type (for further details see also the TABLE FOR THE COUPLING BETWEEN SOLENOIDS AND VALVES in the Camozzi's catalogue on page 2/1.30.03)

# Series CFB Stainless Steel solenoid valves

2/2-way, 3/2-way  
Normally closed (NC)



- Mod. CFB-D21A...X-\*  
 CFB-D21B...X-\*  
 CFB-D21C...X-\*  
 CFB-D22B...X-\*  
 CFB-D22C...X-\*  
 CFB-D22E...X-\*  
 CFB-D23E...X-\*  
 CFB-D23F...X-\*  
 CFB-D24E...X-\*  
 CFB-D24F...X-\*

\* = choose the suitable solenoid (see the coding example)

## CODING EXAMPLE

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

**CFB** SERIES

**D** OPERATION:  
D = direct

**2** NUMBER OF WAYS - POSITIONS:  
2 = 2/2-way NC  
3 = 3/2-way NC

**1** CONNECTIONS:  
1 = G1/8  
2 = G1/4  
3 = G3/8  
4 = G1/2

**A** NOMINAL DIAMETER:  
A = 1.5 mm  
B = 2 mm  
C = 2.5 mm  
E = 3 mm  
F = 4 mm

**W** SEALS MATERIAL:  
W = FKM  
E = EPDM (on demand)

**X** BODY MATERIAL:  
X = stainless steel

**B8** SOLENOID DIMENSION:  
B8 = 30 mm

**E** SOLENOID VOLTAGE:  
B = 24V AC 50 Hz  
D = 110V AC 50/60 Hz  
E = 230V AC 50/60 Hz  
2 = 12V DC  
3 = 24V DC

## Accessories for solenoid valves

Connectors, manifolds, bases, sub-bases and blanking plates

### Connectors with crimped cable for Series K8

Cable section: 0.25 mm<sup>2</sup>  
Cable external diameter: 1.2 mm  
Material for the cable insulation: PVC  
Mod. **120-803** (cable 300 mm)  
**120-806** (cable 600 mm)



### Connector J with crimped cable for Series K8 and K8B

Cable section: 0.25 mm<sup>2</sup>  
Cable external diameter: 1.2 mm  
Material for the cable insulation: PVC  
Mod. **120-J803** (cable 300 mm)



### Connectors with crimped cable for Series K, KN and KN High Flow

Mod. **121-803** (cable 300 mm)  
**121-806** (cable 600 mm)  
**121-810** (cable 1000 mm)  
**121-830** (cable 3000 mm)



### Connectors DIN 43650, pin spacing 9,4 mm for Series P, PL, PN, PD and PDV

Mod. **125-601**  
**125-701**  
**125-800**



### Connectors DIN 43650, pin spacing 9,4 mm with cable for Series P, PL, PN, PD and PDV

The internal rectifier circuit of the connector Mod. 125-900 allows to use solenoid valves with different AC voltage, even if the voltage indicated on the solenoid valve is DC  
Mod. **125-501-2** (cable 2000 mm)  
**125-550-1** (cable 1000 mm)  
**125-601-2** (cable 2000 mm)  
**125-571-3** (cable 3000 mm)  
**125-900** (cable 2000 mm)



### In-line connectors with moulded cable for Series P, PL, PN, PD and PDV

Mod. **125-503-2** (cable 2000 mm)  
**125-503-5** (cable 5000 mm)  
**125-553-2** (cable 2000 mm)  
**125-553-5** (cable 5000 mm)



### In-line connectors with moulded cable and bridge rectifier for Series P, PL, PN, PD and PDV

Mod. **125-903-2** (cable 2000 mm)  
**125-903-5** (cable 5000 mm)



### Connectors DIN 43650 pin spacing 8 mm for Series PDV and W

To be used in all DC valves with voltages from 6 to 110 V  
Mod. **126-550-1** (cable 1000 mm)  
**126-800**  
**126-701**



### Connectors DIN 43650 for Series 6

Protection class IP65  
Mod. **124-800**  
**124-702**  
**124-701**  
**124-703**



### Single manifolds with rear outlets for Series W, P, PL and PN

Mod. **P102-0\*** (2 positions)  
**P103-0\*** (3 positions)  
**P104-0\*** (4 positions)  
**P105-0\*** (5 positions)  
**P106-0\*** (6 positions)



\* = see the MANIFOLD PORTS in the CODING EXAMPLE TABLE of the reference Series

### Single manifolds with front outlets for Series W, P, PL and PN

This manifold is arranged to be fixed through DIN 46277/3 guide together with the accessory PCF-E520  
Mod. **P102-0\*** (2 positions)  
**P103-0\*** (3 positions)  
**P104-0\*** (4 positions)  
**P105-0\*** (5 positions)  
**P106-0\*** (6 positions)



\* = see the MANIFOLD PORTS in the CODING EXAMPLE TABLE of the reference Series

### Double sided manifolds with rear outlets for Series W, P, PL and PN

Mod. **P204-0\*** (4 positions)  
**P206-0\*** (6 positions)  
**P208-0\*** (8 positions)  
**P210-0\*** (10 positions)  
**P212-0\*** (12 positions)



\* = see the MANIFOLD PORTS in the CODING EXAMPLE TABLE of the reference Series

### Double sided manifolds with front outlet for Series W, P, PL and PN

This manifold is arranged to be fixed through DIN 46277/3 guide together with the accessory PCF-E520

Mod. **P204-0\*** (4 positions)  
**P206-0\*** (6 positions)  
**P208-0\*** (8 positions)  
**P210-0\*** (10 positions)  
**P212-0\*** (12 positions)



\* = see the MANIFOLD PORTS in the CODING EXAMPLE TABLE of the reference Series

### Manifold with side outlets and conveyed inlet and exhaust for Series K

Note: use solenoid valves with mounting screws on metal interfaces (see the CODING EXAMPLE TABLE of Series K)  
Mod. **K1\*\*-02**  
\*\* = N° of positions



### Single sub-base for Series P, PL and PN

Mod. **P001-02**



### Single sub-base for Series K

Note: use solenoid valves with mounting screws on metal interfaces (see the CODING EXAMPLE TABLE of Series K)  
Mod. **K001-02**



### Excluder tap for Series K

Supplied with:  
1x excluder tap  
1x interface seal  
2x screws  
Mod. **K000-TP**



### Excluder tap for Series P, PL and PN

Supplied with:  
1x excluder tap,  
1x interface seal,  
2x screws  
Mod. **P000-TP**



# Series 8 pneumatic operated cartridge valves

New

2/2-way, 3/2-way  
Normally closed (NC)



## CODING EXAMPLE

<b>8</b>	<b>10</b>	<b>C5</b>	<b>1</b>	<b>00</b>	<b>-</b>	<b>F1</b>	<b>3</b>	<b>2</b>
----------	-----------	-----------	----------	-----------	----------	-----------	----------	----------

**8** SERIES

**10** TAGLIA:  
10 = Size 1  
20 = Size 2  
30 = Size 3

**C5** BODY DESIGN:  
C5 = cartridge

**1** NUMBER OF WAYS - FUNCTIONS:  
1 = 2/2-way NC or 3/2-way NC  
NOTE: The function depends on the seat used (for further details see the Camozzi's catalogue)

**00** PNEUMATIC CONNECTIONS:  
00 = cartridge

**F1** DIAMETRO NOMINALE:  
F1 = ø 5.0 mm (size 1 only)  
G7 = ø 6.6 mm (size 2 only)  
K1 = ø 9.0 mm (size 3 only)

**3** SEAL MATERIAL:  
3 = FKM

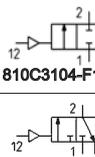
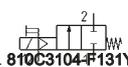
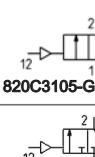
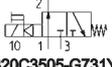
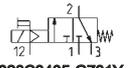
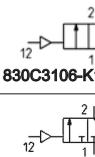
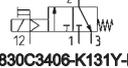
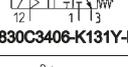
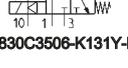
**2** BODY MATERIAL:  
2 = brass

# Series 8 pneumatically and electropneumatically operated valves

New

2/2-way - Normally Closed (NC), Normally Open (NO)

3/2-way - Normally Closed (NC), Normally Open (NO)

 <p>Mod. <b>810C3104-F131N-NPP</b></p>  <p>Mod. <b>810C3404-F131N-NPP</b></p>	 <p>Mod. <b>810C3104-F131Y-N00*</b></p>  <p>Mod. <b>810C3104-F131Y-NPE*</b></p>  <p>Mod. <b>810C3404-F131Y-N00*</b></p>  <p>Mod. <b>810C3404-F131Y-NPE*</b></p> <p>* please complete the code with ELECTRIC CONNECTION (option 2C or 2F) and VOLTAGE (see the CODING EXAMPLE).</p>
 <p>Mod. <b>820C3105-G731N-NPP</b></p>  <p>Mod. <b>820C3405-G731N-NPP</b></p>	 <p>Mod. <b>820C3105-G731Y-N00*</b></p>  <p>Mod. <b>820C3505-G731Y-N00*</b></p>  <p>Mod. <b>820C3105-G731Y-NPE*</b></p>  <p>Mod. <b>820C3405-G731Y-NPE*</b></p>  <p>Mod. <b>820C3405-G731Y-NPE*</b></p> <p>* please complete the code with ELECTRIC CONNECTION (option 3A, 4A o 7A) and VOLTAGE (see the CODING EXAMPLE).</p>
 <p>Mod. <b>830C3106-K131N-NPP</b></p>  <p>Mod. <b>830C3406-K131N-NPP</b></p>	 <p>Mod. <b>830C3106-K131Y-N00*</b></p>  <p>Mod. <b>830C3506-K131Y-N00*</b></p>  <p>Mod. <b>830C3106-K131Y-NPE*</b></p>  <p>Mod. <b>830C3206-K131Y-NPE*</b></p>  <p>Mod. <b>830C3406-K131Y-NPE*</b></p> <p>* please complete the code with ELECTRIC CONNECTION (option 3A, 4A o 7A) and VOLTAGE (see the CODING EXAMPLE).</p>

2

CONTROL

CODING EXAMPLE															
8	10	C3	4	04	-	F1	3	1	Y	-	N	00	2C	C015	
<b>8</b>	SERIES														
<b>10</b>	SIZE: 10 = Size 1 - 20 = Size 2 - 30 = Size 3														
<b>C3</b>	TYPE OF BODY: C3 = threaded body														
<b>4</b>	NUMBER OF WAYS - FUNCTIONS: 1 = 2/2-way NC - 2 = 2/2-way NO - 4 = 3/2-way NC - 5 = 3/2-way NO														
<b>04</b>	PNEUMATIC CONNECTIONS: 04 = G1/8 (Size 1) - 05 = G1/4 (Size 2) - 06 = G3/8 (Size 3)														
<b>F1</b>	NOMINAL DIAMETER: F1 = 5.0 mm (Size 1) - G7 = 6.6 mm (Size 2) - K1 = 9.0 mm (Size 3)														
<b>3</b>	SEAL MATERIAL: 3 = FKM														
<b>1</b>	BODY MATERIAL: 1 = aluminium														
<b>Y</b>	MANUAL OVERRIDE: N = not provided - Y = provided monostable														
<b>N</b>	MOUNTING ACCESSORIES: N = not provided														
<b>00</b>	OPTIONS: 00 = no option - PP = pneumatic piloting - PE = electropilot with external piloting														
<b>2C</b>	ELECTRICAL CONNECTION: 2C = connection type KN 90° + protection + led (Size 1) 2F = connection type KN 90° in line + protection + led (Size 1)										3A = connection DIN EN 175 301-803-C (8 mm) 4A = industry standard connection (9.4 mm) 7A = wires - length 300 mm (Size 2 - 3)				
<b>C015</b>	VOLTAGE - POWER CONSUMPTION: C012 = 12V DC 1.3/0.25W (Size 1) C014 = 24V DC 1.3/0.25W (Size 1)										C020 = 12V DC 2W (Size 2 - 3) C023 = 24V DC 2W (Size 2 - 3) C025 = 48V DC 2W (Size 2 - 3)				
VERSION: = standard - OX1 = for use with oxygen (non volatile residual less than 550 mg/m <sup>3</sup> ) - OX2 = for use with oxygen (non volatile residual less than 33 mg/m <sup>3</sup> )															

# Series E valves and solenoid valves

5/2-way monostable/bistable - 5/3-way CC CO CP

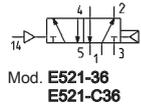
For individual or manifold assembly

Size: 10,5 mm

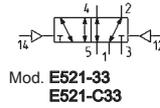
2

CONTROL

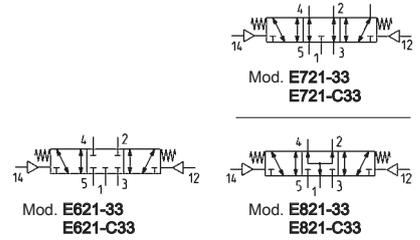
With outlets on the body



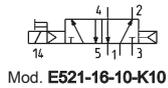
With outlets on the body



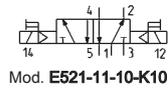
With outlets on the body



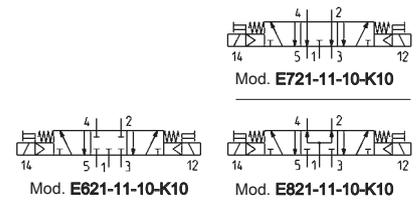
With outlets on the body



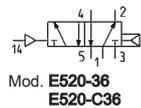
With outlets on the body



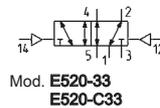
With outlets on the body



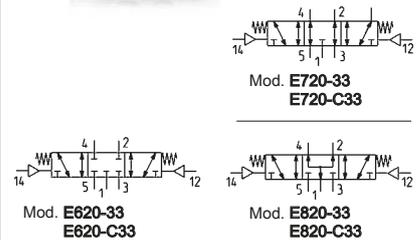
Body for sub-base



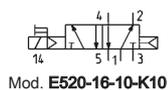
Body for sub-base



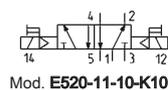
Body for sub-base



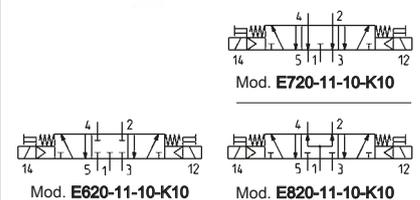
Body for sub-base



Body for sub-base



Body for sub-base



**CODING EXAMPLE**

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

<b>E</b>	SERIES
<b>5</b>	FUNCTION: 5 = 5/2 6 = 5/3 Centres Closed 7 = 5/3 Centres Open 8 = 5/3 Centres in Pressure
<b>2</b>	SIZE: 2 = 10,5 mm
<b>1</b>	BODY TYPE: 1 = body with threaded plate 0 = body for sub-base
<b>11</b>	ACTUATION: 11 = electro-pneumatic, bistable 16 = electro-pneumatic, monostable 33 = pneumatic bistable - tube ø 3 36 = pneumatic monostable - tube ø 3 C33 = pneumatic bistable - tube ø 4 C36 = pneumatic monostable - tube ø 4
<b>10</b>	INTERFACE: 10
<b>K</b>	TYPE OF SOLENOID: K
<b>1</b>	SOLENOID DIMENSION: 1 = 10x10
<b>3</b>	SOLENOID VOLTAGE: 1 = 6V DC 2 = 12V DC 3 = 24V DC

**Sub-bases and manifolds**



Mod. **E521-10\*\***  
\*\* = number of positions



Mod. **E520-0101**



Mod. **E520-21\*\***  
**E520-2C\*\***  
\*\* = number of positions

**CODING EXAMPLE**

E5	2	1	-	1	0	02
----	---	---	---	---	---	----

<b>E5</b>	SERIES
<b>2</b>	SIZE: 2 = size 10,5
<b>1</b>	BODY TYPE: 0 = body for sub-base assembly 1 = body with threads or tube port
<b>1</b>	TYPE OF SUB-BASE: 0 = single sub-base with side outlets 1 = manifold for threaded valve 2 = manifold for body mounted valve
<b>0</b>	PORTS: 0 = for valves with outlets on the body 1 = threaded C = tube 4
<b>02</b>	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 port 1 at each end of the block. The exhaust ports 3 and 5 at each end should also be utilized (size 10,5 and 16 mm). The same provision should be made for 5 station manifolds of the 19 mm valves. Manifolds complete with ports for external pilot supply are available on request.

**Accessories**

**Mounting brackets for DIN rail**  
**DIN EN 50022 (7,5 mm x 35 mm - width 1)**  
Suitable for all manifolds  
Supplied with:  
2x plates  
2x screws M4x6 UNI 5931  
Mod. **PCF-E520**



**Horizontal mounting foot bracket for valves with outlets on the body**  
The following is supplied:  
1x foot bracket, 2x screws  
Mod. **B1-E521**



**Vertical mounting foot bracket for valves with outlets on the body (monostable valves only)**  
The following is supplied:  
1x foot bracket, 2x screws  
Mod. **B2-E521**



**Blanking plate for manifolds**  
The following is supplied:  
1x blanking plate,  
2x screws, 1x seal  
Mod. **TP-E521** (valves with outlets on the body)  
**TP-E520** (valves mounted on sub-base)



**Intermediate plate for valves to provide a separate supply in 1**  
Base mounted valves  
The following is supplied:  
1x plate, 2x screws,  
1x interface seal, 2x O-Ring  
Mod. **PCP-E521**



**Intermediate plate for valves to provide a separate supply in 1**  
Base mounted valves  
The following is supplied:  
1x plate, 2x screws,  
1x interface seal, 2x O-Ring  
Mod. **PCP-E520**



**Intermediate plate for valves to provide separate supply in 3 and 5**  
The following is supplied:  
1x plate, 2x screws,  
1x interface seal, 2x O-Ring  
Mod. **PCS-E521** (valves with outlets on the body)  
**PCS-E520** (valves mounted on sub-base)



# Series EN valves and solenoid valves

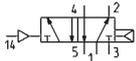
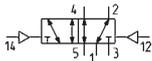
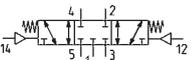
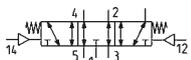
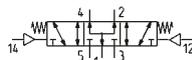
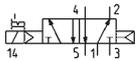
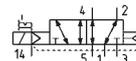
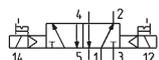
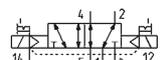
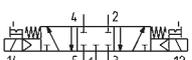
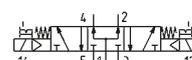
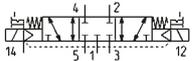
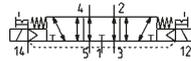
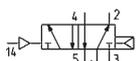
5/2-way, 5/3-way CC CO CP

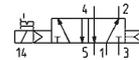
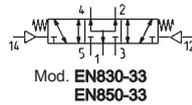
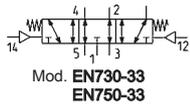
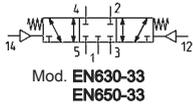
With outlets on the body. For individual or manifold assembly

Size 16, 19 mm

2

CONTROL

  <p>Mod. <b>EN531-36</b> <b>EN551-36</b></p>	  <p>Mod. <b>EN531-33</b> <b>EN551-33</b></p>
      <p>Mod. <b>EN631-33</b> <b>EN651-33</b></p> <p>Mod. <b>EN731-33</b> <b>EN751-33</b></p> <p>Mod. <b>EN831-33</b> <b>EN851-33</b></p>	    <p>Mod. <b>EN531-16-P*</b> <b>EN551-16-P*</b> <b>EN531-16-PN*</b> <b>EN551-16-PN*</b> <b>EN531-16-W*</b> <b>EN551-16-W*</b></p> <p>Mod. <b>EN531-16-P*</b> <b>EN551-16-P*</b> <b>EN531-E16-PN*</b> <b>EN551-E16-PN*</b> <b>EN531-E16-W*</b> <b>EN551-E16-W*</b></p> <p>* = choose the most suitable solenoid (see the coding example)</p>
    <p>Mod. <b>EN531-11-P*</b> <b>EN551-11-P*</b> <b>EN531-11-PN*</b> <b>EN551-11-PN*</b> <b>EN531-11-W*</b> <b>EN551-11-W*</b></p> <p>Mod. <b>EN531-E11-P*</b> <b>EN551-E11-P*</b> <b>EN531-E11-PN*</b> <b>EN551-E11-PN*</b> <b>EN531-E11-W*</b> <b>EN551-E11-W*</b></p> <p>* = choose the most suitable solenoid (see the coding example)</p>	      <p>Mod. <b>EN631-11.*</b> <b>EN651-11.*</b></p> <p>Mod. <b>EN731-11.*</b> <b>EN751-11.*</b></p> <p>Mod. <b>EN831-11.*</b> <b>EN851-11.*</b></p>    <p>Mod. <b>EN631-E11.*</b> <b>EN651-E11.*</b></p> <p>Mod. <b>EN731-E11.*</b> <b>EN751-E11.*</b></p> <p>Mod. <b>EN831-E11.*</b> <b>EN851-E11.*</b></p> <p>* = choose the suitable solenoid (see the coding example)</p>
  <p>Mod. <b>EN530-36</b> <b>EN550-36</b></p>	  <p>Mod. <b>EN530-33</b> <b>EN550-33</b></p>

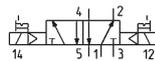


- EN530-16-PN\***
- EN550-16-PN\***
- EN530-16-W\***
- EN550-16-W\***

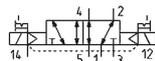


- EN530-E16-PN\***
- EN550-E16-PN\***
- EN530-E16-W\***
- EN550-E16-W\***

\* = choose the most suitable solenoid (see the coding example)

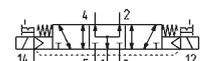
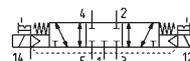
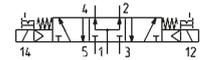
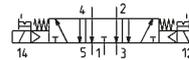
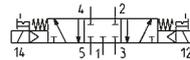


- EN530-11-PN\***
- EN550-11-PN\***
- EN530-11-W\***
- EN550-11-W\***



- EN530-E11-PN\***
- EN550-E11-PN\***
- EN530-E11-W\***
- EN550-E11-W\***

\* = choose the most suitable solenoid (see the coding example)



\* = choose the suitable solenoid (see the coding example)

**CODING EXAMPLE**

EN	5	3	1	-	11	-	PN3
----	---	---	---	---	----	---	-----

**EN** SERIES

**5** FUNCTION:  
5 = 5/2  
6 = 5/3 Centre Closed  
7 = 5/3 Centre Open  
8 = 5/3 Pressure Centre

**3** SIZE:  
3 = size 16  
5 = size 19

**1** BODY TYPE:  
1 = body with threaded plate  
0 = body for sub-base

**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

**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

## Manifolds

Manifolds for valves size 16 and 19  
(outlets on the body valve)

Mod. <b>EN531-1002</b>	<b>EN551-1002</b>
<b>EN531-1003</b>	<b>EN551-1003</b>
<b>EN531-1004</b>	<b>EN551-1004</b>
<b>EN531-1005</b>	<b>EN551-1005</b>
<b>EN531-1006</b>	<b>EN551-1006</b>
<b>EN531-1008</b>	<b>EN551-1008</b>
<b>EN531-1010</b>	<b>EN551-1010</b>
<b>EN531-1012</b>	<b>EN551-1012</b>

Manifolds for valves size 16 and 19  
(outlets on manifolds)

Mod. <b>EN530-2102</b>	<b>EN550-2102</b>
<b>EN530-2103</b>	<b>EN550-2103</b>
<b>EN530-2104</b>	<b>EN550-2104</b>
<b>EN530-2105</b>	<b>EN550-2105</b>
<b>EN530-2106</b>	<b>EN550-2106</b>
<b>EN530-2108</b>	<b>EN550-2108</b>
<b>EN530-2110</b>	<b>EN550-2110</b>
<b>EN530-2112</b>	<b>EN550-2112</b>



## Accessories

### Blanking plate for manifolds - valves with outlets on the body

The following is supplied:

- 1x blanking plate,
- 2x screws,
- 1x seal

Mod. **TP-EN531**  
**TP-EN551**



### Blanking plate for manifolds - base mounted valves

The following is supplied:

- 1x blanking plate,
- 2x screws,
- 1x seal

Mod. **TP-EN530**  
**TP-EN550**



### Mounting brackets for DIN rail DIN EN 50022 (7,5 mm x 35 mm - width 1)

Suitable for all manifolds.

Supplied with:

- 2x plates,
- 2x screws M4x6 UNI 5931
- 2x nuts

Mod. **PCF-EN531**



### Connectors DIN 43650, pin spacing 9,4 mm

Mod. **125-601**

**125-701**  
**125-800**



### Connectors DIN 43650, pin spacing 9,4 mm with cable

The internal rectifier circuit of the connector Mod. 125-900 allows to use solenoid valves with different AC voltage, even if the voltage indicated on the solenoid valve is DC

Mod. **125-501-2** (cable 2000 mm)

**125-550-1** (cable 1000 mm)

**125-601-2** (cable 2000 mm)

**125-571-3** (cable 3000 mm)

**125-900** (cable 2000 mm)



### Connectors DIN 43650 pin spacing 8 mm

To be used in all DC valves with voltages from 6 to 110 V

Mod. **126-550-1** (cable 1000 mm)

**126-800**  
**126-701**



### In-line connectors with moulded cable

Mod. **125-503-2** (cable 2000 mm)

**125-503-5** (cable 5000 mm)

**125-553-2** (cable 2000 mm)

**125-553-5** (cable 5000 mm)



### In-line connectors with moulded cable and bridge rectifier

Mod. **125-903-2** (cable 2000 mm)

**125-903-5** (cable 5000 mm)



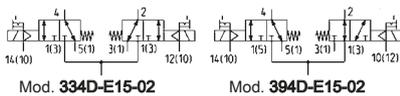
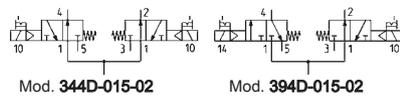
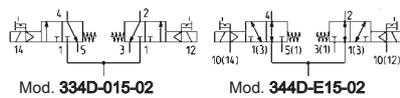
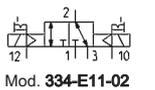
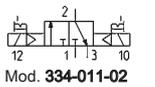
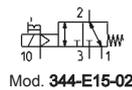
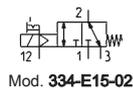
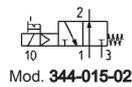
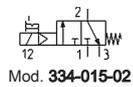
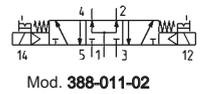
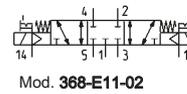
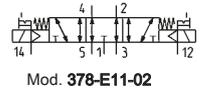
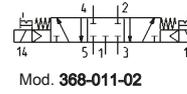
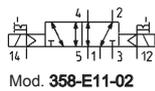
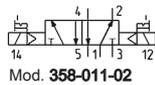
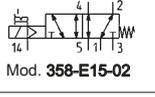
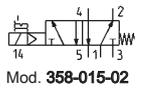
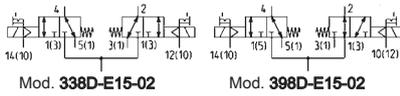
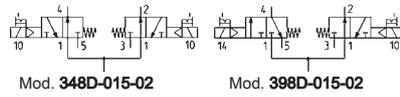
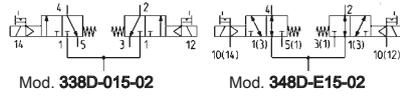
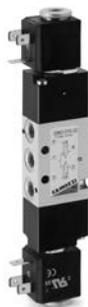
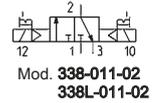
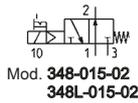
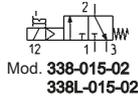
# Series 3 valves and solenoid valves

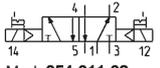
2x3/2-way, 3/2-way, 5/2-way, 5/3-way CC CO CP

Ports: G1/8, G1/4

2

CONTROL

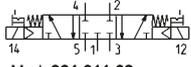


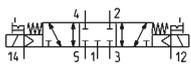
Mod. **354-E11-02**



Mod. **354-E11-02**

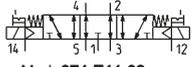
Mod. **364-E11-02**



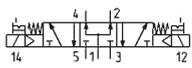
Mod. **364-E11-02**



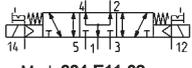
Mod. **374-E11-02**



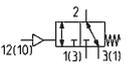
Mod. **384-E11-02**



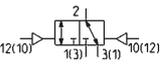
Mod. **384-E11-02**



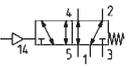
Mod. **384-E11-02**

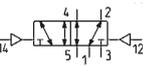
Mod. **338-035**  
**338L-035**  
**334-035**

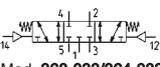
Mod. **338-033**  
**338L-033**  
**334-033**

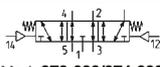
Mod. **358-035**  
**354-035**

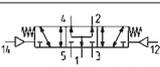
Mod. **358-033**  
**354-033**

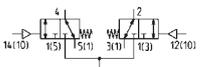
Mod. **368-033/364-033**



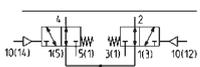
Mod. **378-033/374-033**



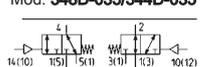
Mod. **388-033/384-033**

Mod. **338D-035/334D-035**



Mod. **348D-035/344D-035**



Mod. **398D-035/394D-035**

**CODING EXAMPLE**

<b>3</b>	<b>3</b>	<b>8</b>	<b>D</b>	<b>-</b>	<b>015</b>	<b>-</b>	<b>02</b>	<b>-</b>	<b>U7</b>	<b>7</b>	
----------	----------	----------	----------	----------	------------	----------	-----------	----------	-----------	----------	--

<b>3</b>	SERIES
<b>3</b>	NUMBER OF WAYS - POSITIONS: 3 = 3/2 NC - 4 = 3/2 NO - 5 = 5/2 - 6 = 5/3 CC - 7 = 5/3 CO - 8 = 5/3 CP - 9 = 1x3/2 NC + 1x3/2 NO
<b>8</b>	PORTS: 8 = G1/8 - 4 = G1/4
<b>D</b>	VERSION: = standard D = double valve 2x3/2 L = for manifold assembly (only for solenoid valves 3/2 with G1/8 ports)
<b>015</b>	ACTUATION: 011 = double solenoid - 015 = single solenoid, spring return - 016 = single solenoid, pneumatic spring return E11 = double solenoid external servo-command - E15 = single solenoid, external servo-command - 033 = pneumatic pneumatic - 035 = pneumatic spring
<b>02</b>	SOLENOID INTERFACE: 02 = mech. sol. 22 x 22
<b>U7</b>	ENCAPSULATING MATERIAL / SOLENOID DIMENSIONS: A8 = PPS / 30 x 30 G7 = PA / 22 x 22 G8 = PA / 30 x 30 (solo 24 V DC) G9 = PA / 22 x 58 H8 = PA 6 V0 / 30 x 30 U7 = PET / 22 x 22

<b>7</b>	SOLENOID VOLTAGE:	U7**	G7**	A8**	H8**	G9**	U7**	G7**	A8**	H8**	G9**
B	24V AC 50/60Hz	-	-	5VA	5,3VA	-	J	230V AC 50/60Hz	3,5VA	3,5VA	-
C	48V AC 50/60Hz	-	-	-	5,3VA	-		240V AC 50/60Hz	4VA	4VA	-
D	110V AC 50/60Hz	-	-	5VA	5,3VA	-	1	6V DC	5,1W	5,1W	-
E	230V AC 50/60Hz	-	-	5VA	5,3VA	-	2	12V DC	5W	5W	-
F	380V AC 50/60Hz	7VA	7VA	-	-	-	3	24V DC	5W	5W	4W
H	24V 50/60Hz	3,5VA	3,5VA	-	-	-	4	48V DC	5,3W	5,3W	4W
K	12V DC	3,1W	3,1W	-	-	-	6	110V DC	4,2W	4,2W	-
K1*	72V DC	4,8W	4,8W	-	-	-	7	24V DC	3,1W	3,1W	-
J	110V AC 50/60Hz	3,8VA	3,8VA	-	-	-		48V AC 50/60Hz	3,5VA	3,5VA	-
	125V AC 50/60Hz	5,5VA	5,5VA	-	-	-	71*	24V DC	3,1W	3,1W	-
	110V AC 50/60Hz	5,8VA	5,8VA	-	-	-		48V AC 50/60Hz	3,5VA	3,5VA	-
	125V AC 50/60Hz	8,3VA	8,3VA	-	-	-	9	48V DC	3,1W	3,1W	-
	230V AC 50/60Hz	3,5VA	3,5VA	-	-	-	10	110V DC	3,2W	3,2W	-
	240V AC 50/60Hz	4VA	4VA	-	-	-					

TYPE OF MANUAL OVERRIDE:  
= bistable, standard  
IL = bistable, lever type (available on demand)  
IM = monostable (available on demand)

**Accessories**

**Manifold bars with separate exhausts (low version)**

The following is supplied:  
2x feet, 1x manifold,  
1x inlet fitting, 1x plug,  
4x washers

Mod. **CNV-318-2**  
**CNV-318-3**  
**CNV-318-4**  
**CNV-318-5**  
**CNV-318-6**



**Manifold bars with separate exhausts (high version)**

The following is supplied:  
2x feet, 1x manifold,  
1x inlet fitting, 1x plug,  
4x washers

Mod. **CNV-328-2**  
**CNV-328-3**  
**CNV-328-4**  
**CNV-328-5**  
**CNV-328-6**



**Initial / final Module with three positions**

The following is supplied:  
3x interface O-Rings manifold/manifold,  
2x fixing nuts,  
2x junction plugs,  
9x interface seals valve/manifold (CNVL-3H3)  
or 3x interface seals valve/manif. (CNVL-4H3),  
6x fixing screws for valves

Mod. **CNVL-3H3**  
**CNVL-4H3**



**Initial / final Module with 2 positions**

Initial module with 2 positions  
The following is supplied:  
3x interface O-Rings manifold/manifold,  
2x fixing nuts,  
2x junction plugs,  
6x interface seals valve/manifold (CNVL-3H2)  
or 2x interface seals valve/manif. (CNVL-4H2),  
4x fixing screws for valves

Mod. **CNVL-3H2**  
**CNVL-4H2**



**Intermediate module with 3 positions**

The following is supplied:  
3x interface O-Rings manifold/manifold,  
2x fixing nuts,  
2x junction plugs,  
9x interface seals valve/manifold (CNVL-3I3)  
or 3x interface seals valve/manif. (CNVL-4I3),  
6x fixing screws for valves

Mod. **CNVL-3I3**  
**CNVL-4I3**



**Intermediate module with 2 positions**

The following is supplied:  
3x interface O-Rings manifold/manifold;  
2x fixing nuts,  
2x junction plugs,  
6x interface seals valve/manifold (CNVL-3I2)  
or 2x interface seals valve/manif. (CNVL-4I2),  
4x fixing screws for valves

Mod. **CNVL-3I2**  
**CNVL-4I2**



**Intermediate module with 1 position**

The following is supplied:  
3x interface O-Rings manifold/manifold,  
2x fixing nuts,  
2x junction plugs,  
3x interface seals valve/manifold (CNVL-3I1)  
or 1x interface seal valve/manif. (CNVL-4I1),  
2x fixing screws for valves

Mod. **CNVL-3I1**  
**CNVL-4I1**



**Terminal module**

The following is supplied:  
2x fixing nuts

Mod. **CNVL-3H**  
**CNVL-4H**



**Interface module manifold between Series 3 G1/8 and G1/4**

The following is supplied:

3x interface seal,  
2x screws,  
2x pins,  
4x plugs,  
6x O-Rings

Mod. **CNVL-4H-3H**



**Intermediate plate for additional inlet and exhaust pressure**

The following is supplied:

3x O-Rings,  
2x fixing screws

Mod. **CNVL-3H**  
**CNVL-4H**



**Separation diaphragm**

For separation of channel: 1 - 3 - 5.

The following is supplied:

1x diaphragm

Mod. **CNVL-3H-TP** for Series 3, G1/8  
**CNVL-4H-TP** for Series 3, G1/4



**Blanking plug for TCNVL manifolds**

The following is supplied:

1x blanking plug,  
1x O-Ring

Mod. **TCNVL/3** for Series 3, G1/8  
**TCNVL/5** for Series 3, G1/4



**Blanking plate**

Accessory for Series CNVL manifolds

The following is supplied:

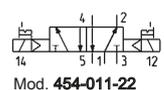
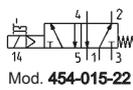
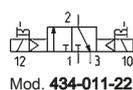
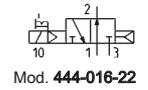
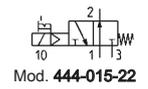
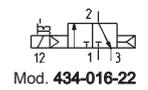
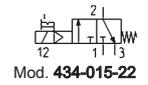
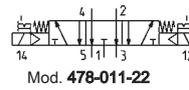
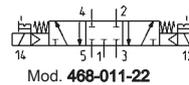
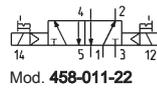
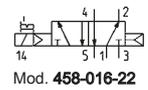
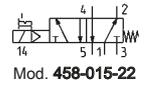
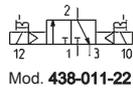
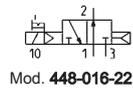
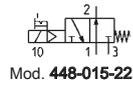
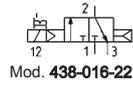
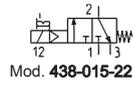
2x fixing screws,  
3x O-Rings

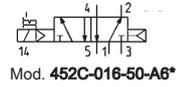
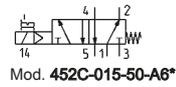
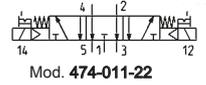
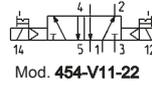
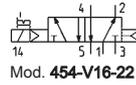
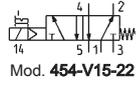
Mod. **CNVL/1**  
**CNVL/4**



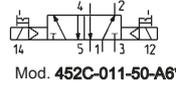
# Series 4 valves and solenoid valves

3/2-way, 5/2-way, 5/3-way CC CO  
Ports: G1/8, G1/4, G1/2

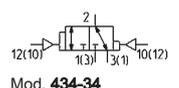
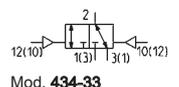
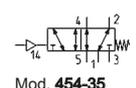
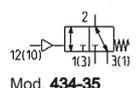
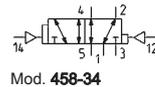
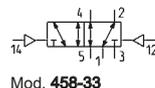
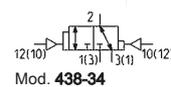
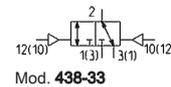
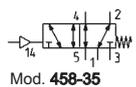
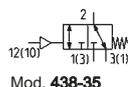
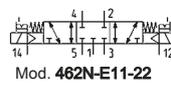
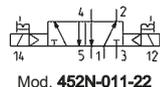
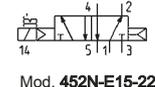
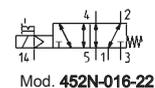


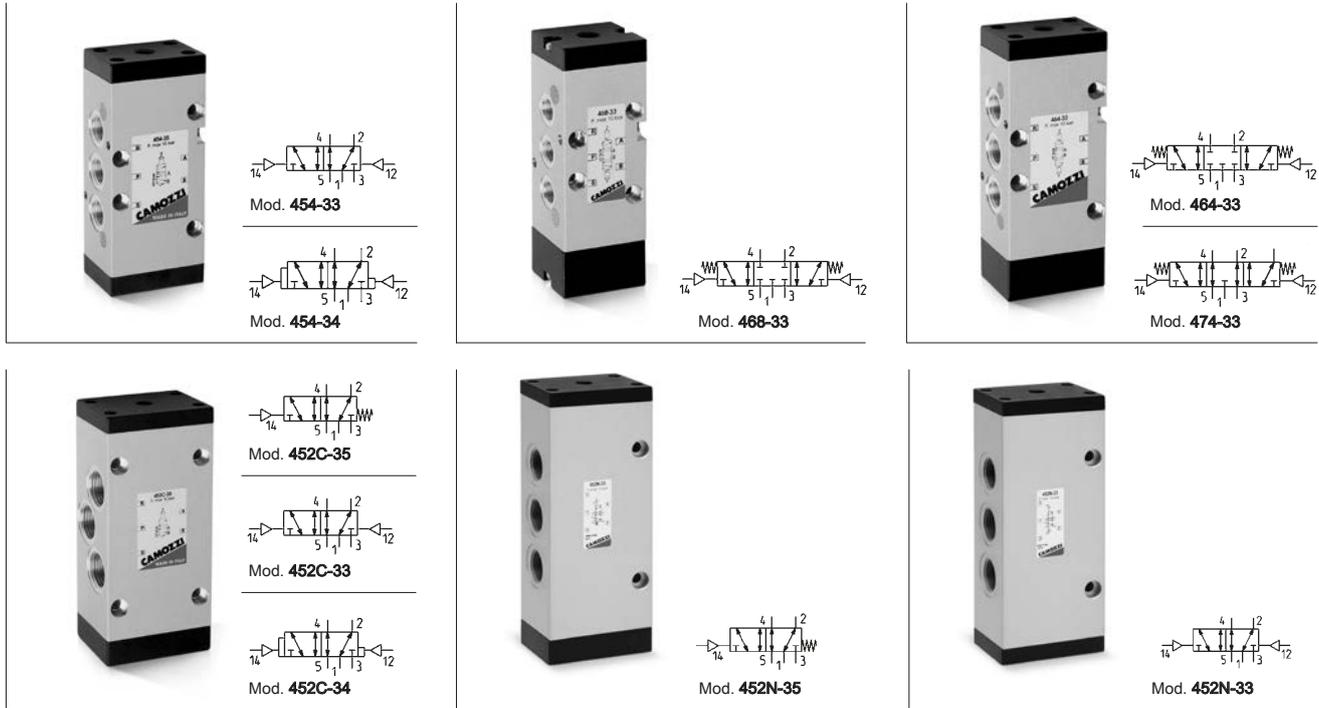


\* = choose the most suitable solenoid (see the coding example)



\* = choose the most suitable solenoid (see the coding example)





**CODING EXAMPLE**

4	5	4	-	015	-	22	-	U7	7
---	---	---	---	-----	---	----	---	----	---

<b>4</b>	SERIES
<b>5</b>	NUMBER OF WAYS - POSITIONS: 3 = 3/2 NC 4 = 3/2 NO 5 = 5/2 6 = 5/3 CC 7 = 5/3 CO
<b>4</b>	PORTS: 8 = G1/8 - 4 = G1/4 - 2C = G1/2 - 2N = G1/2 (high flow)
<b>015</b>	ACTUATION: 011 = double solenoid (horizontal solenoids) V11 = double solenoid (vertical solenoids) for G1/4 port only E11 = double solenoid external servo-command E15 = single solenoid external servo-command 015 = single solenoid, spring return (horizontal solenoids) V15 = single solenoid, spring return (vertical solenoid) for G1/4 port only 016 = single solenoid, pneumatic spring return (horizontal solenoid) V16 = single solenoid, pneumatic spring return (vertical solenoid) for G1/4 port only 33 = pneumatic pneumatic 34 = pneumatic differential 35 = pneumatic spring
<b>22</b>	SOLENOID INTERFACE: 22 = mech. sol. 22 x 22 50 = mech. sol. 32 x 32 (G1/2 only)
<b>U7</b>	SOLENOID MATERIAL / DIMENSIONS: A6 = PPS / 32 x 32 (G1/2 only) A8 = PPS / 30 x 30 G7 = PA / 22 x 22 G8 = PA / 30 x 30 (24 V DC only) G9 = PA / 22 x 58 H8 = PA 6 V0 / 30 x 30 U7 = PET / 22 x 22

7	SOLENOID VOLTAGE:											
		U7**	G7**	A8**	H8**	G9**		U7**	G7**	A8**	H8**	G9**
B	24V AC 50/60Hz	-	-	5VA	5,3VA	-	1	6V DC	5,1W	5,1W	-	-
C	48V AC 50/60Hz	-	-	-	5,3VA	-	2	12V DC	5W	5W	-	-
D	110V AC 50/60Hz	-	-	5VA	5,3VA	-	3	24V DC	5W	5W	4W	5,4W
E	230V AC 50/60Hz	-	-	5VA	5,3VA	-	4	48V DC	5,3W	5,3W	4W	-
F	380V AC 50/60Hz	7VA	7VA	-	-	-	6	110V DC	4,2W	4,2W	-	-
H	24V 50/60Hz	3,5VA	3,5VA	-	-	-	7	24V DC	3,1W	3,1W	-	-
	12V DC	3,1W	3,1W	-	-	-		48V AC 50/60Hz	3,5VA	3,5VA	-	-
K	72V DC	4,8W	4,8W	-	-	-	71*	24V DC	3,1W	3,1W	-	-
	110V AC 50/60Hz	3,8VA	3,8VA	-	-	-		48V AC 50/60Hz	3,5VA	3,5VA	-	-
	125V AC 50/60Hz	5,5VA	5,5VA	-	-	-	9	48V DC	3,1W	3,1W	-	-
K1*	72V DC	5,6W	5,6W	-	-	-	10	110V DC	3,2W	3,2W	-	-
	110V AC 50/60Hz	5,8VA	5,8VA	-	-	-	* = only for valve models NO in line					
	125V AC 50/60Hz	8,3VA	8,3VA	-	-	-	** = substitute 0 with letter or number at the beginning of the line					
J	230V AC 50/60Hz	3,5VA	3,5VA	-	-	-						
	240V AC 50/60Hz	4VA	4VA	-	-	-						

TYPE OF MANUAL OVERRIDE:	
	= bistable, standard
IL	= bistable, lever type (available on demand)
IM	= monostable (available on demand)

**Accessories**

**Manifold base with common exhausts**

For valves Series 4, G1/8 (3/2, 5/2 or 5/3-way)

The following is supplied with:

- 1x manifold,
- 1x pair of fixing screws for valve position,
- 1x interface seal for valve positions,
- 2x guides for valve position

Mod. **CNVL-42**  
**CNVL-43**  
**CNVL-44**  
**CNVL-45**  
**CNVL-46**



**Manifold base with common exhausts**

For valves Series 4, G1/4 (3/2, 5/2 or 5/3-way)

The following is supplied:

- 1x manifold,
- 1x pair of fixing screws for valve position,
- 1x interface seal for valve positions,
- 2x guides for valve position

Mod. **CNVL-52**  
**CNVL-53**  
**CNVL-54**  
**CNVL-55**  
**CNVL-56**



**Blanking plate**

The following is supplied:

- 2x fixing screws,
- 3x O-Rings

Mod. **CNVL/2** for Series 4, G1/8  
**CNVL/3** for Series 4, G1/8



**Blanking plug**

Accessory for Series CNVL manifolds

The following is supplied:

- 1x blanking plug,
- 1x O-Ring

Mod. **TCNVL/3** for Series 4, G1/8  
**TCNVL/5** for Series 4, G1/8



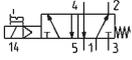
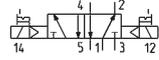
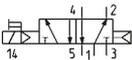
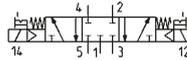
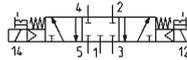
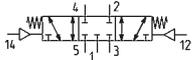
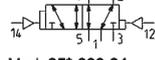
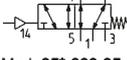
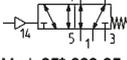
# Series 9 valves and solenoid valves

5/2-way, 5/3-way CC CO

Ports: G1/4 (size 1), G3/8 (size 2), G1/2 (size 3)

According to the standard ISO 5599/1



	 Mod. <b>95*-000-P15-23</b>		 Mod. <b>95*-000-P11-23</b>
	 Mod. <b>95*-000-P16-23</b>		 Mod. <b>96*-000-P11-23</b>
	 Mod. <b>95*-000-33</b>		 Mod. <b>96*-000-33</b>
	 Mod. <b>95*-000-34</b>		 Mod. <b>95*-000-35</b>
	 Mod. <b>97*-000-33</b>		 Mod. <b>97*-000-33</b>

\* = size ISO

2

CONTROL

## CODING EXAMPLE

**9** | **5** | **1** | **-** | **000** | **-** | **P16** | **-** | **23** | **-** | **U7** | **7**

<b>9</b>	SERIES												
<b>5</b>	NUMBER OF WAYS - POSITIONS: 5 = 5/2 6 = 5/3 CC 7 = 5/3 CO												
<b>1</b>	SIZE: 1 = size 1 2 = size 2 3 = size 3												
<b>000</b>	BODY DESIGN: 000 = valve body												
<b>P 16</b>	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)												
<b>23</b>	SOLENOID INTERFACE: 23 = A531 - BC2 Cnomo norm												
<b>U7</b>	SOLENOID MATERIAL / SOLENOID DIMENSIONS: A8 = PPS / 30 x 30 G7 = PA / 22 x 22 G8 = PA / 30 x 30 (24 V DC only) G9 = PA / 22 x 58 H8 = PA 6 V0 / 30 x 30 U7 = PET / 22 x 22												
<b>7</b>	SOLENOID VOLTAGE:												
		<b>U7**</b>	<b>G7**</b>	<b>A8**</b>	<b>H8**</b>	<b>G9**</b>		<b>U7**</b>	<b>G7**</b>	<b>A8**</b>	<b>H8**</b>	<b>G9**</b>	
B	24V AC 50/60Hz	-	-	5VA	5,3VA	-		1	6V DC	5,1W	5,1W	-	-
C	48V AC 50/60Hz	-	-	-	5,3VA	-		2	12V DC	5W	5W	-	-
D	110V AC 50/60Hz	-	-	5VA	5,3VA	-		3	24V DC	5W	5W	4W	5,4W
E	230V AC 50/60Hz	-	-	5VA	5,3VA	-		4	48V DC	5,3W	5,3W	4W	-
F	380V AC 50/60Hz	7VA	7VA	-	-	-		6	110V DC	4,2W	4,2W	-	-
H	24V 50/60Hz	3,5VA	3,5VA	-	-	-		7	24V DC	3,1W	3,1W	-	-
	12V DC	3,1W	3,1W	-	-	-		48V AC 50/60Hz	3,5VA	3,5VA	-	-	
K	72V DC	4,8W	4,8W	-	-	-		71*	24V DC	3,1W	3,1W	-	-
	110V AC 50/60Hz	3,8VA	3,8VA	-	-	-			48V AC 50/60Hz	3,5VA	3,5VA	-	-
	125V AC 50/60Hz	5,5VA	5,5VA	-	-	-		9	48V DC	3,1W	3,1W	-	-
K1*	72V DC	5,6W	5,6W	-	-	-		10	110V DC	3,2W	3,2W	-	-
	110V AC 50/60Hz	5,8VA	5,8VA	-	-	-		* = Only for valve models NO in line					
	125V AC 50/60Hz	8,3VA	8,3VA	-	-	-		** = Substitute 0 with letter or number at the beginning of the line					
J	230V AC 50/60Hz	3,5VA	3,5VA	-	-	-							
	240V AC 50/60Hz	4VA	4VA	-	-	-							

**Accessories**

**Single sub-base side outlets**  
(VDMA 24345)  
Mod. 901-F1A  
902-F2A  
903-F3A



**Single sub-base with rear outlets**  
(VDMA 24345)  
Mod. 901-G1A  
902-G2A  
903-G3A



**Manifold sub-base with com. exhausts and inlet**  
(VDMA 24345)  
The following is supplied:  
2x fixing screws,  
3x O-ring  
Mod. 901-C1A  
902-C2A  
903-C3A



**End block for manifold sub-base**  
(VDMA 24345)  
The following is supplied:  
2x end blocks (1 pair),  
2x fixing screws,  
3x OR  
Mod. 901-H1  
902-H2  
903-H3



**Interface with front outlets**  
(VDMA 24345)  
The following is supplied:  
2x fixing screws,  
2x OR  
Mod. 901-N1  
902-N2  
903-N3



**End blocks for manifold bases with front outlets**  
The following is supplied:  
2x end blocks (1 pair),  
2x fixing screws,  
3x OR  
Mod. 901-HN1



**Manifold bases with common inlet and exhaust ports and front outlet**  
The following is supplied:  
2x fixing screws,  
3x OR  
Mod. 901-N1A



**Mounting example**  
Separation tap lines 1 - 3 - 5  
to be used with manifold  
type 901-C1A and 902-C2A  
Mod. 901-C1A/TP  
902-C2A/TP



**Separation joint**  
To be used with manifold type 901N  
1 - 3 - 5 closed  
Mod. 901-N1A/T



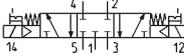
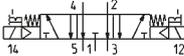
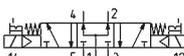
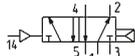
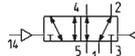
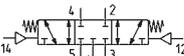
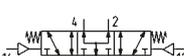
**Separation joint**  
To be used with manifold type 901N  
1 closed  
Mod. 901-N1A/TP



# Series 7 valves and solenoid valves

VDMA 24563 (ISO 15407-1)  
5/2-way, 5/3-way CC CO CP



 <p>* = size ISO Mod. 75*-000-P16-15-W20</p> 	 <p>* = size ISO Mod. 75*-000-P11-15-W20</p> 	 <p>* = size ISO Mod. 78*-000-P11-15-W20</p>  <p>Mod. 76*-000-P11-15-W20</p>  <p>Mod. 77*-000-P11-15-W20</p> 
 <p>* = size ISO Mod. 75*-000-36</p> 	 <p>* = size ISO Mod. 75*-000-33</p> 	 <p>* = size ISO Mod. 78*-000-33</p>  <p>Mod. 76*-000-33</p>  <p>Mod. 77*-000-33</p> 

2

CONTROL

## CODING EXAMPLE

**7** | **5** | **1** | **-** | **N** | **1** | **A** | **-** | **P16** | **-** | **15** | **-** | **W** | **2** | **3**

<b>7</b>	SERIES:
<b>5</b>	NUMBER OF WAYS - POSITIONS: 5 = 5/2 - 6 = 5/3 CC - 7 = 5/3 CO - 8 = 5/3 CP
<b>1</b>	SIZES: 1 = size 26 mm - 2 = size 18 mm
<b>N</b>	SUBBASE: N = sub-base with front outlets
<b>1</b>	PORTS: 1 = G1/4 (Size 26 mm) - 2 = G1/8 (Size 18 mm)
<b>A</b>	NUMBER OF SUBBASES: A = 1* B = 2* C = 3* D = 4* E = 5* F = 6* G = 7* H = 8* K = 9* L = 10* M = 11* N = 12* P = 13* R = 14* S = 15*
<b>P16</b>	ACTUATION: 33 = pneumatic, bistable - 36 = pneumatic, monostable - P11 = electro-pneumatic, bistable - P16 = electro-pneumatic, monostable
<b>15</b>	SOLENOID INTERFACE: 15 = 15x15
<b>W</b>	SOLENOID TYPES: W = Series W (24V - 48V DC only) - P = Series P*
<b>2</b>	CONNECTION: 1 = wire 300 mm (Series W, only 24V DC)** - 2 = 2 pins (Series W 24V - 48V DC/AC) - 5 = 2 pins+earth (Series P)**
<b>3</b>	SOLENOID VOLTAGE: 3 = 24V DC - 4 = 48V DC** - 6 = 110V DC (with Series P solenoid only)** - B = 24V 50/60 Hz (with Series P solenoid only)** C = 48V 50/60 Hz (with Series P solenoid only)** - D = 110V 50/60 Hz (with Series P solenoid only)**

NOTE:  
\* complete with the two end blocks  
\*\* on request

**Accessories**

**End blocks for subbase**

with conveyed inlets and exhausts and front outlets

The following is supplied:

- 1x seal,
- 2x fixing screws
- Mod. **701C-HN1**  
**702C-HN2**



**Intermediate supply module for manifold bases**

with conveyed inlets and exhausts and front outlets

The following is supplied:

- 1x seal,
- 2x fixing screws
- Mod. **701C-N1N**  
**702C-N2N**



**Manifold subbase**

with conveyed inlets and exhausts and front outlets

The following is supplied:

- 1x seal,
- 2x fixing screws
- Mod. **701C-N1A** for separate pilots  
**702C-N2A** for separate pilots  
**701C-N1C**  
**702C-N2C**



**Diaphragm for subbase**

with conveyed inlet and exhausts and side outlets

- Mod. **701C-N1A-TP**  
**702C-N2A-TP**



**Excluder tap for subbase**

The following is supplied:

- 1x seal,
- 2x screws
- Mod. **701-TP**  
**702-TP**



**Interface between ISO 01 and ISO 02**

The following is supplied:

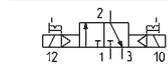
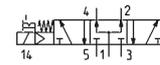
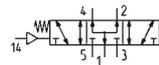
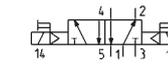
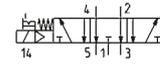
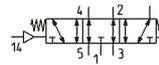
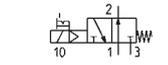
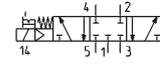
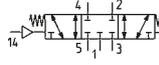
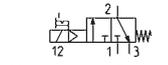
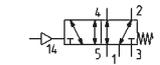
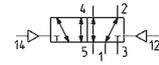
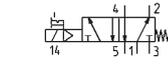
- 1x tap S2610 3/8,
- 5x OR,
- 2x screws
- Mod. **701C-702C-A**



# Series NA valves and solenoid valves

3/2, 5/2, 5/3 CC CO CP

With holes configured according NAMUR standards



\* = choose the suitable solenoid (see the coding example)

2

CONTROL

## CODING EXAMPLE

NA	5	4N	-	15	-	02	-	U7	7
----	---	----	---	----	---	----	---	----	---

<b>NA</b>	SERIES NAMUR								
<b>5</b>	NUMBER OF WAYS - POSITIONS: 3 = 3/2 NC 4 = 3/2 NO 5 = 5/2 6 = 5/3 CC 7 = 5/3 CO 8 = 5/3 CP								
<b>4N</b>	PORTS: 4N = G1/4 supply ports according NAMUR standards								
<b>15</b>	ACTUATION: 11 = double solenoid 15 = single solenoid, spring return 33 = pneumatic pneumatic 35 = pneumatic, spring								
<b>02</b>	SOLENOID INTERFACE: 02 = mech. sol. 22 x 22								
<b>U</b>	SOLENOID MATERIAL / SOLENOID DIMENSIONS: A8 = PPS / 30 x 30 G7 = PA / 22 x 22 G8 = PA / 30 x 30 (24 V DC only) G9 = PA / 22 x 58 H8 = Self-extinguishing PA, Explosion-proof (30 x 30) U7 = PET / 22 x 22								
<b>7</b>	SOLENOID VOLTAGE:								
		<b>U7**</b>	<b>G7**</b>	<b>A8**</b>	<b>H8**</b>	<b>G9**</b>			
B	24V AC 50/60Hz	-	-	5VA	5,3VA	-			
C	48V AC 50/60Hz	-	-	-	5,3VA	-			
D	110V AC 50/60Hz	-	-	5VA	5,3VA	-			
E	230V AC 50/60Hz	-	-	5VA	5,3VA	-			
F	380V AC 50/60Hz	7VA	7VA	-	-	-			
H	24V 50/60Hz	3,5VA	3,5VA	-	-	-			
	12V DC	3,1W	3,1W	-	-	-			
K	72V DC	4,8W	4,8W	-	-	-			
	110V AC 50/60Hz	3,8VA	3,8VA	-	-	-			
	125V AC 50/60Hz	5,5VA	5,5VA	-	-	-			
K1*	72V DC	5,6W	5,6W	-	-	-			
	110V AC 50/60Hz	5,8VA	5,8VA	-	-	-			
	125V AC 50/60Hz	8,3VA	8,3VA	-	-	-			
J	230V AC 50/60Hz	3,5VA	3,5VA	-	-	-			
	240V AC 50/60Hz	4VA	4VA	-	-	-			
1	6V DC	5,1W	5,1W	-	-	-			
2	12V DC	5W	5W	-	-	-			
3	24V DC	5W	5W	4W	5,4W	4/2W			
4	48V DC	5,3W	5,3W	4W	-	-			
6	110V DC	4,2W	4,2W	-	-	-			
7	24V DC	3,1W	3,1W	-	-	-			
	48V AC 50/60 Hz	3,5VA	3,5VA	-	-	-			
71*	24V DC	3,1W	3,1W	-	-	-			
	48V AC 50/60Hz	3,5VA	3,5VA	-	-	-			
9	48V DC	3,1W	3,1W	-	-	-			
10	110V DC	3,2W	3,2W	-	-	-			

\* = Only for valve models NO in line    \*\* = Substitute 0 with letter or number at the beginning of the line

# Solenoids U7\*, U7\*EX, G7\*, A8\*, G93, B\*, H8\* and GP\*

Version A and B

Connection according to DIN 43650 and DIN 40050 standards

For further details see the Solenoids section (2.2.35) on the Camozzi's catalogue



VOLTAGES		
Mod.		
<b>U7H</b>	24V - 50/60 Hz	3.5 VA
	12V DC	3.1 W
<b>U7K/ U7K1</b>	72V DC	5.6 W
	110V - 50/60Hz	5.8 VA
	125V - 50/60Hz	8.3 VA
<b>U7J</b>	230V - 50/60Hz	3.5 VA
	240V - 50/60Hz	4 VA
<b>U79</b>	48V DC	3.1 W
<b>U710</b>	110V DC	3.2 W
<b>U77/ U771</b>	24V DC	3.1 W
	48V - 50/60Hz	3.5 VA
<b>U7F</b>	380V - 50/60Hz	7 VA
<b>U72</b>	12V DC	5 W
<b>U73</b>	24V DC	5 W



VOLTAGES		
Mod.		
<b>G7H</b>	24V - 50/60 Hz	3.5 VA
	12V DC	3.1 W
<b>G7K/ G7K1</b>	72V DC	5.6 W
	110V - 50/60Hz	5.8 VA
	125V - 50/60Hz	8.3 VA
<b>G7J</b>	230V - 50/60Hz	3.5 VA
	240V - 50/60Hz	4 VA
<b>G79</b>	48V DC	3.1 W
<b>G710</b>	110V DC	3.2 W
<b>G77/ G771</b>	24V DC	3.1 W
	48V - 50/60Hz	3.5 VA
<b>G72</b>	12V DC	5 W
<b>G73</b>	24V DC	5 W



VOLTAGES		
Mod.		
<b>A8B</b>	24V - 50/60Hz	5 VA
<b>A8D</b>	110V - 50/60Hz	5 VA
<b>A8E</b>	220V - 50/60Hz	5 VA
<b>A83</b>	24V DC	4 W



VOLTAGES		
Mod.		
<b>G93</b>	24 V DC	4,2 W



VOLTAGES		
Mod.		
<b>B7B</b>	24 V - 50/60 Hz	9 VA
<b>B7D</b>	110 V - 50/60 Hz	9 VA
<b>B7E</b>	230 V - 50/60 Hz	9 VA
<b>B72</b>	12 V - DC	10 W
<b>B73</b>	24 V - DC	10 W
<b>B8B/B8BK</b>	24 V - 50 Hz	15 VA
<b>B8D/B8DK</b>	110 V - 50/60 Hz	15 VA
<b>B8E/B8EK</b>	230 V - 50/60 Hz	15 VA
<b>B82/B82K</b>	12 V - DC	19 W
<b>B83/B83K</b>	24 V - DC	19 W
<b>B9B</b>	24 V - 50 Hz	29 VA
<b>B9D</b>	110 V - 50/60 Hz	29 VA
<b>B9E</b>	230 V - 50 Hz	29 VA
<b>B93</b>	24 V - DC	30 W



VOLTAGES		
Mod.		
<b>GPH</b>	12 V DC	3 W
<b>GP7</b>	24 V DC	3 W

Solenoid Mod. H8.. for potentially explosive ambients (ATEX)



VOLTAGES		
Mod.		
<b>H83</b>	24 V - DC	5,4 W
<b>H8B</b>	24 V - 50/60 Hz	5,3 VA
<b>H8C</b>	48 V - 50/60 Hz	5,3 VA
<b>H8D</b>	110 V - 50/60 Hz	5,3 VA
<b>H8E</b>	230 V - 50/60 Hz	5,3 VA

In potentially explosive ambients

it is necessary to use a distance plate between the valve and the actuator.

For valves Series NA use mod. **NA54-PC**



## Connectors

Connectors DIN 43650 for solenoids Mod. U7/U7\*EX, G7 and B7

- Mod. **122-601**
- 122-701**
- 122-702**
- 122-703**
- 122-800**
- 122-800EX \***



\* only for ATEX certified solenoids mod. U7\*EX, with anti-screwing off screw mod. TORX

Connectors DIN 43650 with moulded cable for solenoids Mod. U7/U7\*EX, G7 and B7

- Mod. **122-550-1** (cable 1000 mm)
- 122-550-5** (cable 5000 mm)
- 122-571-3** (cable 3000 mm)



Pre-wired connectors for solenoids Mod. G9

- Mod. **122-892C** (cable 2000 mm)
- 122-893C** (cable 2000 mm)



Connectors DIN 43650 for solenoids Mod. A8 and Mod. B8/B9

- Mod. **124-800**
- 124-702**
- 124-701**
- 124-703**



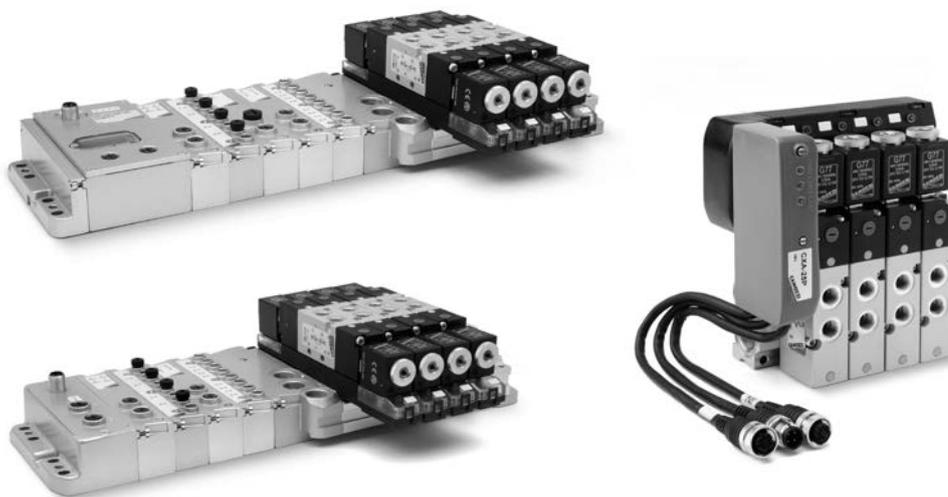
## Series 3 Plug-In valve islands, Multipole and Fieldbus

New versions

Plug-In system for Series 3 solenoid valves, G1/8 port.

Valve functions: 2x3/2, 5/2 and 5/3-way CO CC CP. Multipole with a 25-pin Sub-D connector

It can interface with all major serial communication protocols



The Multipole version of Series 3 Plug-In valve island can be easily installed thanks to the front position of the Sub-D connector.

The accessories of the new connection system to the Series CX serial nets enable to handle up a multipole valve island by means of a Sub-D connector or through a node integrated in the island.

The modularity of the electric and pneumatic parts allows to install up to a maximum of 22 solenoids on 22 valve positions.

The electric and pneumatic modules have 2- and 3-position modularity. To optimize the signals distribution, electric modules are available for monostable and bistable valves. The pneumatic modularity enables the creation of zones with differentiated pressure.

Manuals, instruction sheets and configuration files are available on the site <http://catalogue.camozzi.com> or by means of the QR code indicated on the label of the product.

### GENERAL DATA

#### PNEUMATIC SECTION

Valve construction	spool type with seals
Valve functions	5/2 - 5/3 CC - 5/3 CO - 5/3 CP - 2x3/2 NO - 2x3/2 NC - 1 3/2 NO + 1 3/2 NC
Materials	AL body, stainless steel spool, NBR seals, technopolymer
Mounting	through-out holes in the manifold
Ports	valve = G1/8 - manifold = G3/8
Installation	in any position
Operating temperature	from 0°C to 60°C (with dry air at -20°C)
Nominal flow rate	Qn 700 Nl/min
Nominal diameter	7 mm
Fluid	Filtered air, class 7.4.4 according to ISO 8573-1-2010, without lubrication. If lubricated air is used, it is recommended to use ISO VG32 oil, and to never interrupt the lubrication.

#### ELECTRICAL SECTION - MULTIPOLE VERSION

Max absorption	3 A
Type of connection	Multipole 25-pin male Sub-D
Supply voltage	24 V DC +/- 10%
Max number of solenoids	22 on 22 valve positions
Signalling	yellow LED
Duty cycle	ED 100%
Protection class	IP65

#### ELECTRICAL SECTION - FIELDBUS VERSION

General characteristics	see the section about the Series CX multi-serial module on page 106
Max absorption	digital outputs/analogic inputs and outputs 3A digital/analogic inputs 3 A
Voltage tolerances	logic supply 24 V DC +/- 10% power supply 24 V DC +/- 10%

**CODING EXAMPLE - MULTIPOLE VERSION**

**3 | P | 8 | - | 03A | - | BDACAC | - | 2BC3MU2BMXU2B2M | - | G77**

<b>3</b>	SERIES
<b>P</b>	TYPE: P = Plug-In
<b>8</b>	SIZE: 8 = 1/8
<b>03A</b>	CONNECTION: 000 = no connector/cable  CONNECTOR WITH CABLE AXIAL OUTPUT: 03A = 3 m 05A = 5 m 10A = 10 m 15A = 15 m 20A = 20 m 25A = 25 m  CONNECTOR WITH CABLE RADIAL OUTPUT: 03R = 3 m 05R = 5 m 10R = 10 m 15R = 15 m 20R = 20 m 25R = 25 m  CONNECTOR WITHOUT CABLE: 4XA = 25 pin axial 4XR = 25 pin radial
<b>BDACAC</b>	CONFIGURATION OF SUBBASE: A = 2 positions with bistable board B = 3 positions with bistable board C = 2 positions with monostable board D = 3 positions with monostable board
<b>2BC3MU2BMXU2B2M</b>	VALVE FUNCTION: E = empty position  M = 5/2 Monostable, internal servo-pilot supply B = 5/2 Bistable, internal servo-pilot supply C = 2 x 3/2 NC, internal servo-pilot supply A = 2 x 3/2 NO, internal servo-pilot supply G = 1 x 3/2 NC + 1 x 3/2 NO, internal servo-pilot supply H = 5/3 Closed Centres, internal servo-pilot supply K = 5/3 Exhaust Centres, internal servo-pilot supply N = 5/3 Pressure Centres, internal servo-pilot supply  D = 5/2 Monostable, external servo-pilot supply Y = 5/2 Bistable, external servo-pilot supply Q = 2 x 3/2 NC, external servo-pilot supply R = 2 x 3/2 NO, external servo-pilot supply S = 1 x 3/2 NC + 1 x 3/2 NO, external servo-pilot supply V = 5/3 Closed Centres, external servo-pilot supply Z = 5/3 Exhaust Centres, external servo-pilot supply W = 5/3 Pressure Centres, external servo-pilot supply  L = plate with closed free position X = supply plate and supplementary exhausts  T = diaphragm on channels 1, 3, 5 U = diaphragm in supply 1 J = diaphragm exhausts 3 and 5
<b>G77</b>	SOLENOID MATERIAL: G = PA U = PET

3P8-03R-ADCB-2B3MT2M3V-G77: valve island with 10 positions, radial connector and 3-meter cable.  
Bases: the first with 2 bistables positions, the second with 3 monostable pos., the third with 2 monostable pos., the fourth with 3 bistable pos.  
Valves: 2 bistable, 3 monostables, diafragm on channels 1,3,5, 2 monostables, 3 Closed Centres, 3 V Solenoids.

## CODING EXAMPLE - FIELDBUS VERSION

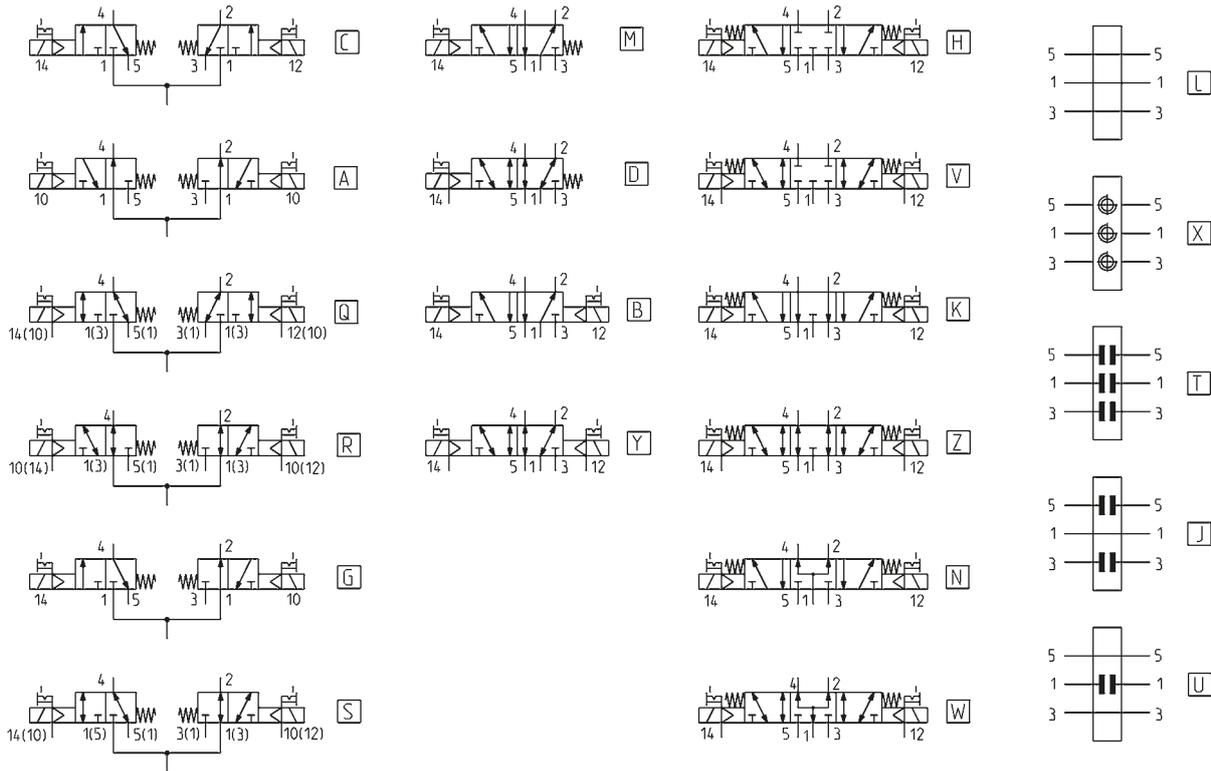
**3 S 8 - 01 - 2AQRS - BDACAC - 2BC3MU2BMXU2B2M - G77**

<b>3</b>	SERIES
<b>S</b>	CONNECTION: S = Fieldbus
<b>8</b>	SIZE: 8 = 1/8
<b>01</b>	PROTOCOL: 01 = PROFIBUS-DP 02 = DeviceNet 03 = CANopen 04 = EtherNet/IP 05 = EtherCAT 06 = PROFINET 99 = Expansion Module
<b>2AQRS</b>	INPUT / OUTPUT MODULES: 0 = no module A = 8 digital inputs M8 B = 4 digital inputs M8 C = 2 analog inputs 4-20 mA D = 2 analog inputs 0-10 V E = 1 analog input 4-20 mA + 1 input 0-10 V Q = 4 M12 duo digital outputs R = 2 analog outputs 4-20 mA T = 2 analog outputs 0-10 V U = 1 analog output 4-20 mA + 1 output 0-10 V V = 1 analog output 4-20 mA + 1 input 0-10 V Z = 1 analog output 4-20 mA + 1 input 4-20 mA K = 1 analog output 0-10 V + 1 input 0-10 V Y = 1 analog output 0-10 V + 1 input 4-20 mA S = Initial subnet module
<b>BDACAC</b>	CONFIGURATION OF SUBBASE: A = 2 positions with bistable board B = 3 positions with bistable board C = 2 positions with monostable board D = 3 positions with monostable board
<b>2BC3MU2BMXU2B2M</b>	VALVE FUNCTION: E = empty position  M = 5/2 Monostable, internal servo-pilot supply B = 5/2 Bistable, internal servo-pilot supply C = 2 x 3/2 NC, internal servo-pilot supply A = 2 x 3/2 NO, internal servo-pilot supply G = 1 x 3/2 NC + 1 x 3/2 NO, internal servo-pilot supply H = 5/3 Closed Centres, internal servo-pilot supply K = 5/3 Exhaust Centres, internal servo-pilot supply N = 5/3 Pressure Centres, internal servo-pilot supply  D = 5/2 Monostable, external servo-pilot supply Y = 5/2 Bistable, external servo-pilot supply Q = 2 x 3/2 NC, external servo-pilot supply R = 2 x 3/2 NO, external servo-pilot supply S = 1 x 3/2 NC + 1 x 3/2 NO, external servo-pilot supply V = 5/3 Closed Centres, external servo-pilot supply Z = 5/3 Exhaust Centres, external servo-pilot supply W = 5/3 Pressure Centres, external servo-pilot supply  L = plate with closed free position X = supply plate and supplementary exhausts  T = diaphragm on channels 1, 3, 5 U = diaphragm in supply 1 J = diaphragm exhausts 3 and 5
<b>G77</b>	SOLENOID MATERIAL: G = PA U = PET

2

CONTROL

**FUNCTIONS OF SOLENOID VALVES SERIES 3**



Mod.	Function	Actuation/return	Servo-pilot	Working pressure (bar)	Pilot pressure (bar)	Code
338D-015-02	2 x 3/2 NC	solenoid/spring	internal	2,5 + 10	-	<b>C</b>
348D-015-02	2 x 3/2 NO	solenoid/spring	internal	2,5 + 10	-	<b>A</b>
398D-015-02	1 x 3/2 NC + 1 x 3/2 NO	solenoid/spring	internal	2,5 + 10	-	<b>G</b>
358-015-02	5/2 monostable	solenoid/spring	internal	2,5 + 10	-	<b>M</b>
358-011-02	5/2 bistable	solenoid/solenoid	internal	1,5 + 10	-	<b>B</b>
368-011-02	5/3 CC	solenoid/solenoid	internal	2 + 10	-	<b>H</b>
378-011-02	5/3 CO	solenoid/solenoid	internal	2 + 10	-	<b>K</b>
388-011-02	5/3 CP	solenoid/solenoid	internal	2 + 10	-	<b>N</b>
338D-E15-02	2 x 3/2 NC	solenoid/spring	external	-0,9 + 10	2,5 + 10	<b>Q</b>
348D-E15-02	2 x 3/2 NO	solenoid/spring	external	-0,9 + 10	2,5 + 10	<b>R</b>
398D-E15-02	1 x 3/2 NC + 1 x 3/2 NO	solenoid/spring	external	-0,9 + 10	2,5 + 10	<b>S</b>
358-E15-02	5/2 monostable	solenoid/spring	external	-0,9 + 10	2,5 + 10	<b>D</b>
358-E11-02	5/2 bistable	solenoid/solenoid	external	-0,9 + 10	1,5 + 10	<b>Y</b>
368-E11-02	5/3 CC	solenoid/solenoid	external	-0,9 + 10	2 + 10	<b>V</b>
378-E11-02	5/3 CO	solenoid/solenoid	external	-0,9 + 10	2 + 10	<b>Z</b>
388-E11-02	5/3 CP	solenoid/solenoid	external	-0,9 + 10	2 + 10	<b>W</b>
CNVL/1L	free position (electrical and pneumatic cover)	-	-	-	-	<b>L</b>
CNVL-3P1	plate for supply and outlets	-	-	-	-	<b>X</b>
CNVL-3H-TP (x1)	diaphragm for supply (1)	-	-	-	-	<b>U</b>
CNVL-3H-TP (x2)	diaphragm for outlets (3-5)	-	-	-	-	<b>J</b>
CNVL-3H-TP (x3)	diaphragm for supply (1) and outlets (3-5)	-	-	-	-	<b>T</b>

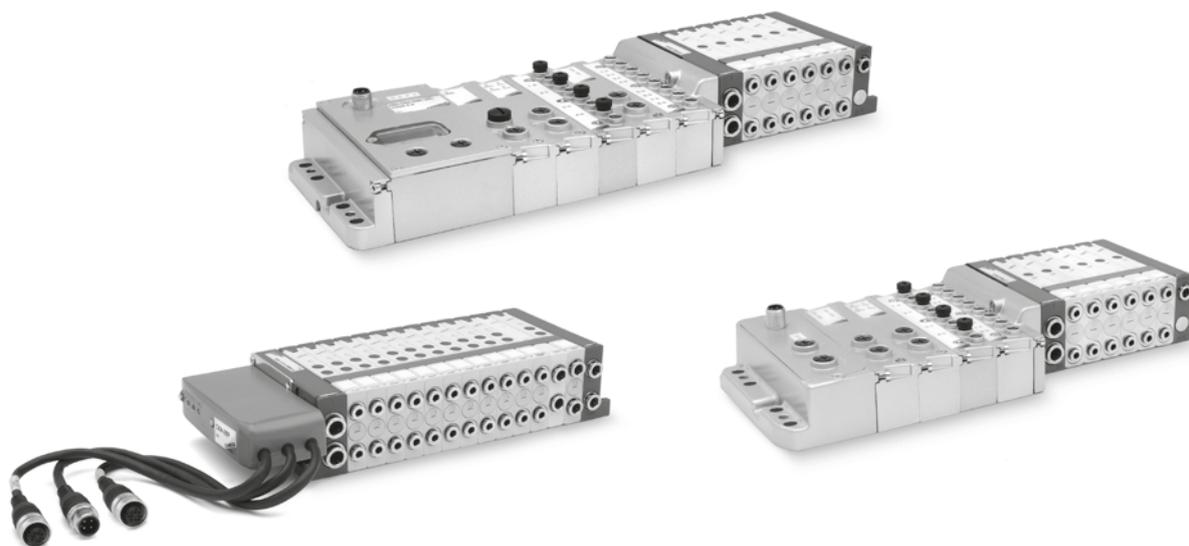
## Series F valve islands, Multipole and Fieldbus

New version

Multipole integrated electrical connection (PNP)

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

It can interface with all major serial communication protocols



The Multipole version of Series F valve island can be easily integrated with the accessories of the new Series CX multiserial module, thus connecting to the different serial nets provided. It is also possible to manage a standard multipole island by means of a Sub-D adapter or through an integrated node in the island. The typical Series F single modularity allows the installation of up to 24 solenoids on 24 valve positions, even in the Fieldbus version. The use of technopolymer in this Series has allowed to realize a valve island which is characterized by small dimensions, high flow and reduced weight.

The reduced dimensions, its flexibility during the assembly as well as the wide range of valve functions make Series F a highly innovative product which is suitable for several application requirements. Usable silencers (Mod. 2939). Manuals, instruction sheets and configuration files are available on the site <http://catalogue.camozzi.com> or by means of the QR code indicated on the label of the product.

### GENERAL CHARACTERISTICS

#### PNEUMATIC SECTION

<b>Valve construction</b>	spool with seals
<b>Valve functions</b>	5/2 monostable and bistable - 5/3 CC - 2x2/2 NO2x2/2 NC - 1x2/2 NC + 1x2/2 NO - 2x3/2 NO - 2x3/2 NC - 1x3/2 NC + 1x3/2 NO
<b>Materials</b>	aluminium spool, HNBR seals, other seals in NBR, brass cartridges, technopolymer body and end covers
<b>Connections</b>	Inlets 2 and 4, size 1 (12 mm) = tube $\varnothing$ 4; $\varnothing$ 6 Inlets 2 and 4, size 2 (14 mm) = tube $\varnothing$ 4; $\varnothing$ 6; $\varnothing$ 8 Supply 1, size 1 and 2 = tube $\varnothing$ 8; $\varnothing$ 10 Servo pilot 12/14, size 1 and 2 = tube $\varnothing$ 6 Exhausts 3/5, size 1 and 2 = tube $\varnothing$ 8; $\varnothing$ 10 Exhausts 82/84, size 1 and 2 = tube $\varnothing$ 6
<b>Temperature</b>	0 + 50°C
<b>Air specifications</b>	Filtered compressed air, non lubricated, class 6.4.4 according to ISO 8573-1:2010 standard. If lubrication is necessary, please use only oils with maximum viscosity of 32 Cst and the version with external servo-pilot supply. The servo-pilot supply air quality class must be 6.4.4 according to ISO 8573-1:2010 standard.
<b>Valve sizes</b>	12 mm - 14 mm
<b>Working pressure</b>	- 0,9 + 10 bar
<b>Pilot pressure</b>	3 + 7 bar - 4.5 + 7 bar (with working pressure exceeding 6 bar for the versions 2x2/2 and 2x3/2)
<b>Flow rate</b>	250 NI/min (12 mm) - 500 NI/min (14 mm)
<b>Mounting position</b>	any position
<b>Duty cycle</b>	ED 100%
<b>Protection class (according to EN 60529)</b>	IP40

#### ELECTRICAL SECTION - MULTIPOLE VERSION

<b>Supply voltage</b>	24 V DC +/- 10%
<b>Max number of solenoids</b>	24
<b>Max number of valve functions</b>	24 (monostable)
<b>Type of Sub-D connection</b>	Sub-D 25 pin
<b>Max absorption</b>	0.8 A

#### ELECTRICAL SECTION - FIELDBUS VERSION

<b>General characteristics</b>	see the section about the Series CX multi-serial module on page 106
<b>Max absorption</b>	digital outputs / analogic outputs and inputs 3 A - digital/analogic inputs 3 A
<b>Supply voltage</b>	logic supply 24 V DC +/- 10% - power supply 24 V DC +/- 10%
<b>Max number of operable coils</b>	24 on 24 valve functions (monostable)

**CODING EXAMPLE - MULTIPOLE VERSION**

**F P 2 R M T A - MB2CMUL2B - 2QR3SLQR**

<b>F</b>	SERIES
<b>P</b>	TYPE: P = pneumatic A = accessories
<b>2</b>	SIZE: 1 = 12 mm 2 = 14 mm
<b>R</b>	MANUAL OVERRIDE: P = pressure actuation control R = actuation control with push & turn device
<b>M</b>	ELECTRICAL CONNECTION: M = multipole
<b>T</b>	CARTRIDGES FOR LEFT TERMINAL: S = tube Ø 8 T = tube Ø 10  Note: the cartridges for the right terminal are for tube Ø 6.
<b>A</b>	SERVO-PILOT SUPPLY: A = internal B = external
<b>MB2CMUL2B</b>	SOLENOID VALVES AND ADDITIONAL PLATES *: M = 5/2 monostable D = 5/2 monostable with bistable electric board B = 5/2 bistable C = 2x3/2 NC A = 2x3/2 NO G = 3/2 NC + 3/2 NO E = 2x2/2 NC F = 2x2/2 NO I = 2/2 NC + 2/2 NO V = 5/3 CC L = free position with passing electric board W = free position with bistable electric board Z = free position with monostable electric board X = supplementary supply and exhaust T = separated supply and exhaust U = separated supply, supplementary exhaust K = supplementary supply, separated exhaust
<b>2QR3SLQR</b>	CARTRIDGES FOR SOLENOID VALVES AND ADDITIONAL PLATES *: Q = tube Ø 4 R = tube Ø 6 S = tube Ø 8 (not for Size 1) L = free position (no cartridges) W = free position with bistable electric board (no cartridges) Z = free position with monostable electric board (no cartridges)
<p>* in case of identical and consecutive codes, in the choices "SOLENOID VALVES AND ADDITIONAL PLATES" and "CARTRIDGES FOR SOLENOID VALVES AND ADDITIONAL PLATES", replace the letters with the number. With the choice "CARTRIDGES FOR SOLENOID VALVES AND ADDITIONAL PLATES" both of the following connections are defined: 2 and 4; 1 and 3/5.</p> <p>Examples: FP2RMTA-MBCCMULMMBB-QQRSSLRRRQRR FP2RMTA-MB2CMUL3M2B-2QR2SL3RQ2R</p>	

2

CONTROL

## CODING EXAMPLE - FIELDBUS VERSION

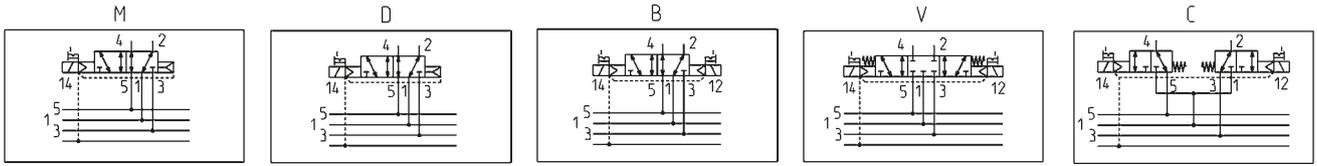
F	P	2	R	01	T	A	-	ABCR	-	MB2CMUL2B	-	2QR3SLQR
---	---	---	---	----	---	---	---	------	---	-----------	---	----------

<b>F</b>	SERIES
<b>P</b>	TYPE: P = pneumatic A = accessories
<b>2</b>	SIZE: 1 = 12 mm 2 = 14 mm
<b>R</b>	MANUAL OVERRIDE: P = pressure actuation control R = actuation control with push & turn device
<b>01</b>	PROTOCOL: 01 = PROFIBUS-DP 02 = DeviceNet 03 = CANopen 04 = EtherNet/IP 05 = EtherCAT 06 = PROFINET 99 = Expansion Module
<b>T</b>	CARTRIDGES FOR PNEUMATIC/ELECTRICAL TERMINAL: S = tube Ø 8 T = tube Ø 10  Note: the cartridges for the right terminal are for tube Ø 6.
<b>A</b>	SERVO-PILOT SUPPLY: A = internal B = external
<b>ABCR</b>	INPUT / OUTPUT MODULES: 0 = no module A = 8 digital inputs M8 B = 4 digital inputs M8 C = 2 analog inputs 4-20 mA D = 2 analog inputs 0-10 V E = 1 analog input 4-20 mA + 1 input 0-10 V Q = 4 M12 duo digital outputs R = 2 analog outputs 4-20 mA T = 2 analog outputs 0-10 V U = 1 analog output 4-20 mA + 1 output 0-10 V V = 1 analog output 4-20 mA + 1 input 0-10 V Z = 1 analog output 4-20 mA + 1 input 4-20 mA K = 1 analog output 0-10 V + 1 input 0-10 V Y = 1 analog output 0-10 V + 1 input 4-20 mA S = Initial subnet module
<b>MB2CMUL2B</b>	SOLENOID VALVES AND ADDITIONAL PLATES: M = 5/2 monostable D = 5/2 monostable with bistable electric board B = 5/2 bistable C = 2x3/2 NC A = 2x3/2 NO G = 3/2 NC + 3/2 NO E = 2x2/2 NC F = 2x2/2 NO I = 2/2 NC + 2/2 NO V = 5/3 CC L = free position with passing electric board W = free position with bistable electric board Z = free position with monostable electric board X = supplementary supply and exhaust T = separated supply and exhaust U = separated supply, supplementary exhaust K = supplementary supply, separated exhaust
<b>2QR3SLQR</b>	CARTRIDGES FOR SOLENOID VALVES AND ADDITIONAL PLATES: Q = tube Ø 4 R = tube Ø 6 S = tube Ø 8 (not for Size 1) L = free position (no cartridges) W = free position with bistable electric board (no cartridges) Z = free position with monostable electric board (no cartridges)

2

CONTROL

**AVAILABLE FUNCTIONS - SOLENOID VALVES SYMBOLS for FP..R - manual override WITH push&turn device**



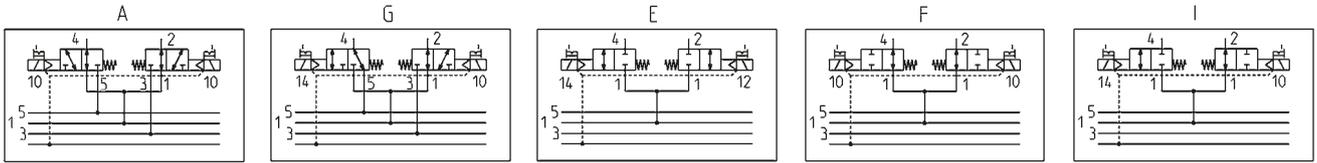
M = 5/2, monostable

D = 5/2, monostable with bistable board

B = 5/2, bistable

V = 5/3, Centres Closed

C = 2x3/2 NC



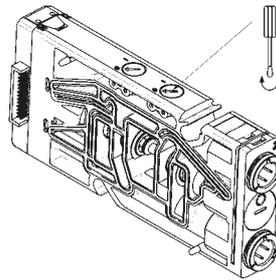
A = 2x3/2 NO

G = 1x3/2 NC + 1x3/2 NO

E = 2x2/2 NC

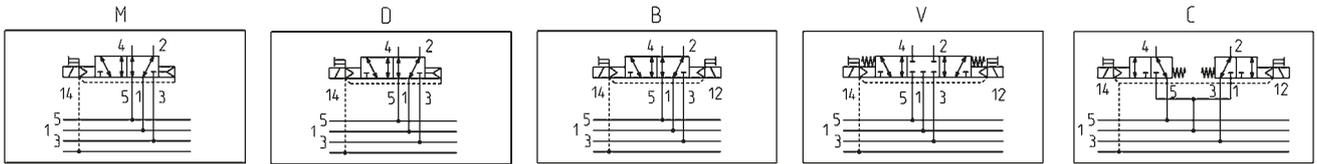
F = 2x2/2 NO

I = 1x2/2 NC + 1x2/2 NO



Manual override, version R :  
pressure actuation control with PUSH & TURN device.

**AVAILABLE FUNCTIONS - SOLENOID VALVES SYMBOLS for FP..P - manual override WITHOUT push&turn device**



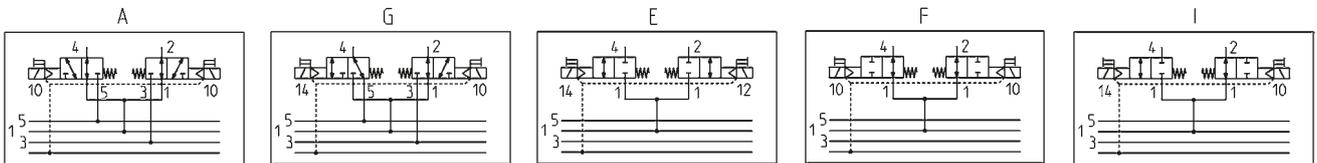
M = 5/2, monostable

D = 5/2, monostable with bistable board

B = 5/2, bistable

V = 5/3, Centres Closed

C = 2x3/2 NC



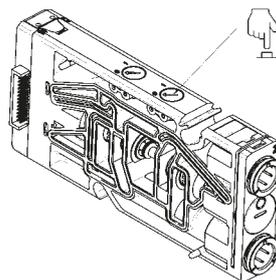
A = 2x3/2 NO

G = 1x3/2 NC + 1x3/2 NO

E = 2x2/2 NC

F = 2x2/2 NO

I = 1x2/2 NC + 1x2/2 NO



Manual override, version P :  
pressure actuation control without PUSH & TURN device (PUSH only).

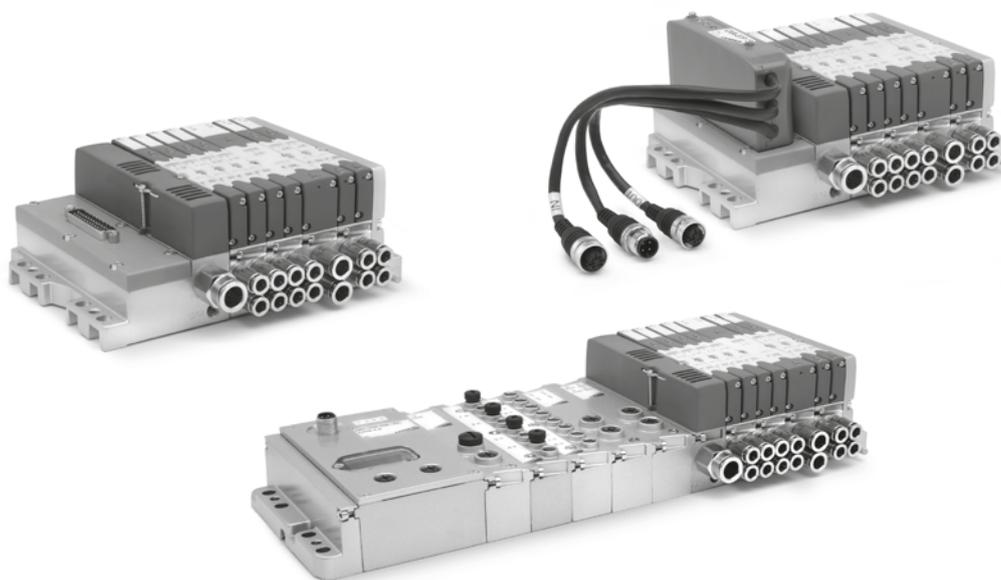
## CODING EXAMPLES of SINGLE VALVE (spare part) and TERMINALS (accessories)

CODING EXAMPLE OF A SINGLE SOLENOID VALVE		CODING EXAMPLE OF INTERMEDIATE PLATES	
<b>FP2V-MQR</b>		<b>FP2V-WQ</b>	
<b>F</b>	Series	<b>F</b>	Series
<b>P</b>	Type: P = pneumatic	<b>P</b>	Type: P = pneumatic
<b>2</b>	Size: 1 = 12 mm 2 = 14 mm	<b>2</b>	Size: 1 = 12 mm 2 = 14 mm
<b>V</b>	Solenoid valve or additional plate	<b>V</b>	Solenoid valve or additional plate
<b>-</b>		<b>-</b>	
<b>M</b>	Type of function: M = 5/2 monostable D = 5/2 monostable with bistable board B = 5/2 bistable C = 2 x 3/2 NC A = 2 x 3/2 NO G = 3/2 NC + 3/2 NO E = 2 x 2/2 NC F = 2 x 2/2 NO I = 2/2 NC + 2/2 NO V = 5/3 CC	<b>W</b>	Type of function: L = free position W = free position with bistable board Z = free position with monostable board X = supplementary power supply and exhaust T = separated power supply and exhaust U = separated power supply and supplementary exhaust K = supplementary power supply and separated exhaust
<b>Q</b>	Cartridges for solenoid valves: Q = Ø4 R = Ø6 S = Ø8 (not for Size 1)	<b>Q</b>	Cartridges for plates: Q = Ø4 R = Ø6 S = Ø8 (not for Size 1) L = free position (no cartridges) W = free position with bistable board (no cartridges) Z = free position with monostable board (no cartridges)
<b>R</b>	Type of manual override: R = push and turn (bistable) P = pressure (monostable)		
CODING EXAMPLE OF A LEFT TERMINAL		CODING EXAMPLE OF A RIGHT TERMINAL	
<b>FA2T-S</b>		<b>FA2T-AR</b>	
<b>F</b>	Series	<b>F</b>	Series
<b>A</b>	Accessory	<b>A</b>	Accessory
<b>2</b>	Size: 1 = 12 mm 2 = 14 mm	<b>2</b>	Size: 1 = 12 mm 2 = 14 mm
<b>T</b>	Type of accessory: T = terminal	<b>T</b>	Type of accessory: T = terminal
<b>-</b>		<b>-</b>	
<b>S</b>	Cartridges: = no cartridge S = Ø8 T = Ø10	<b>A</b>	Type of servo-pilot: A = internal B = external
		<b>R</b>	Cartridges: R = Ø6

# Series HN valve islands, Multipole and Fieldbus

New version

Multipole connection with 25 or 37 pins  
Serial connection with the most common communication protocols  
Valve functions: 2x2/2; 2x3/2; 5/2; 5/3 CC



Thanks to the large range of options available, the Series HN valve islands represent an excellent solution for different applications, particularly in automation systems. Small dimensions, high flow, pneumatic and electric modularity, electric connections on boards, possibility to interface with the multi-serial node Series CX, optimization of the signal

distribution thanks to subbases for monostable and bistable solenoid valves are only some of the features that make this series a particularly innovative product. Manuals, instruction sheets and configuration files are available on the site <http://catalogue.camozzi.com> or by means of the QR code indicated on the table of the product.

## GENERAL DATA

### PNEUMATIC SECTION

<b>Valve construction</b>	spool type with seals
<b>Valve functions</b>	5/2 monostable and bistable - 5/3 CC - 2 x 2/2 NO - 2 x 2/2 NC - 1 x 2/2 NC+ 1 x NO - 2 x 3/2 NC - 2 x 3/2 NO 1 x 3/2 NC+ 1 x 3/2 NO
<b>Materials</b>	spool in aluminium, spool seals in HNBR, other seals in NBR, cartridges in brass, body and end covers in technopolymer, subbases in aluminium
<b>Connections</b>	Inlets 2 and 4, size 10,5 mm: M7, tube $\varnothing$ 4, tube $\varnothing$ 6 Inlets 2 and 4, size 21 mm: G1/8, tube $\varnothing$ 6, tube $\varnothing$ 8 Supply 1: G1/4, tube $\varnothing$ 8, tube $\varnothing$ 10 Supply 12/14: M7 Exhausts 3 and 5: G1/4 or with integrated silencer Exhausts 82/84: M7
<b>Temperature</b>	0 + 50°C
<b>Air specifications</b>	Filtered compressed air, non lubricated, class 6.4.4 according to ISO 8573-1:2010. If lubrication is necessary, please only use oils with maximum viscosity of 32 Cst and the version with external servo-pilot supply. The servo-pilot supply air quality class must be 6.4.4 according to ISO 8573-1:2010 (do not lubricate).
<b>Valve sizes</b>	10.5mm (2 valves for each subbase) - 21mm (1 valve for each subbase)
<b>Working pressure</b>	- 0,9 + 10 bar
<b>Pilot pressure</b>	3 + 7 bar - 4.5 + 7 bar (with working pressure exceeding 6 bar for the versions 2x2/2 and 2x3/2)
<b>Flow rate</b>	400 Nl/min (10.5 mm) - 700 Nl/min (21 mm)
<b>Mounting position</b>	any position
<b>Protection class</b>	IP 65

### ELECTRICAL SECTION - MULTIPOLE VERSION

<b>Type of Sub-D connector</b>	25 or 37 pins
<b>Max. absorption</b>	0.8 A (with Sub-D connector 25 pins) - 1 A (with Sub-D connector 37 pins)
<b>Supply voltage</b>	24 V DC +/- 10%
<b>Max. number of coils to operate</b>	24 on 20 valve positions (with Sub-D connector 25 pins) - 32 on 28 valve positions (with Sub-D connector 37 pins)
<b>Valve signalling</b>	yellow led

### ELECTRICAL SECTION - FIELDBUS VERSION

<b>General data</b>	see the section about the Series CX multi-serial module on page 106
<b>Max absorption</b>	digital outputs / analog outputs and inputs 3A - digital/analog inputs 3A
<b>Supply voltage</b>	logic supply 24 V DC +/- 10% - power supply 24 V DC +/- 10%
<b>Max. number of coils to operate</b>	32 on 28 valve positions

**CODING EXAMPLE - MULTIPOLE VERSION**

<b>HN</b>	<b>5</b>	<b>M</b>	<b>-</b>	<b>03A</b>	<b>-</b>	<b>2Q4AZ2A</b>	<b>-</b>	<b>2B8M4C</b>	<b>-</b>	<b>A</b>
-----------	----------	----------	----------	------------	----------	----------------	----------	---------------	----------	----------

<b>HN</b>	SERIES											
<b>5</b>	SIZE: 1 = 10.5 2 = 21 5 = Mixed											
<b>M</b>	ELECTRICAL CONNECTION: M = Multipole 25 pin PNP N = Multipole 25 pin NPN H = Multipole 37 pin PNP L = Multipole 37 pin NPN											
<b>03A</b>	CONNECTION: 000 = without connector/cable			CONNECTOR WITH CABLE AXIAL OUTPUT: 03A = 3m 05A = 5m 10A = 10m 15A = 15m 20A = 20m 25A = 25m			CONNECTOR WITHOUT CABLE: 4XA = 25 pins axial 4XR = 25 pins radial 9XA = 37 pins axial 9XR = 37 pins radial			CONNECTOR WITH CABLE RADIAL OUTPUT: 03R = 3m 05R = 5m 10R = 10m 15R = 15m 20R = 20m 25R = 25m		
<b>2Q4AZ2A</b>	SUBBASES FOR 2 SOLENOID VALVES SIZE 1 (*): A (AZ) = M7 threads B (BZ) = 4 fittings for tube Ø4 C (CZ) = 4 fittings for tube Ø6 D (DZ) = channel 1, 3, 5 closed; M7 threads E (EZ) = channel 1, 3, 5 closed; cartridges tube Ø4 F (FZ) = channel 1, 3, 5 closed; cartridges tube Ø6 G (GZ) = channel 3, 5 closed; M7 threads H (HZ) = channel 3, 5 closed; cartridges tube Ø4 I (IZ) = channel 3, 5 closed; cartridges tube Ø6 L (LZ) = channel 1 closed; M7 threads M (MZ) = channel 1 closed; cartridges tube Ø4 N (NZ) = channel 1 closed; cartridges tube Ø6  (*) Subbases with "Z" at the end of their code are used with monostable solenoid valves  FOR SOLENOID VALVES SIZE 2: Q = G 1/8 threads R = cartridges for tube Ø6 S = cartridges for tube Ø8			SUBBASES FOR PNEUMATIC SUPPLY: X = supplementary supply and exhaust Y = supplementary supply and exhaust with integrated silencer W = supply from the exhausts  FOR ELECTRICAL SUPPLY: K = separation of electrical supply			SEALS:  T = diaphragm on channels 1, 3, 5 U = diaphragm on channel 1 V = diaphragm on channels 3, 5					
<b>2B8M4C</b>	SOLENOID VALVES Size 1 and 2: 0 = island without solenoid valves M = 5/2 Monostable B = 5/2 Bistable V = 5/3 Centres Closed C = 2 x 3/2 NC A = 2 x 3/2 NO G = 1 x 3/2 NC + 1 x 3/2 NO E = 2 x 2/2 NC F = 2 x 2/2 NO I = 1 x 2/2 NC + 1 x 2/2 NO L = free position			SOLENOID VALVE + PRESSURE REGULATOR on channel 1 (size 2 only): N = 5/2 Monostable P = 5/2 Bistable Q = 5/3 Centres Closed R = 2 x 3/2 NC S = 2 x 3/2 NO T = 1 x 3/2 NC + 1 x 3/2 NO U = 2 x 2/2 NC X = 2 x 2/2 NO Y = 1 x 2/2 NC + 1 x 2/2 NO								
<b>A</b>	THREADED TERMINAL PLATES: A = 1, 12/14 in common 3/5, 82/84 threaded ports B = 1, 12/14 separated 3/5, 82/84 threaded ports C = 1, 12/14 in common 3/5, 82/84 with integrated silencer D = 1, 12/14 separated 3/5, 82/84 with integrated silencer			TERMINAL PLATES with FITTINGS FOR TUBE Ø 8 on PORT 1: E = 1, 12/14 in common 3/5, 82/84 conveyable F = 1, 12/14 separated 3/5, 82/84 conveyable G = 1, 12/14 in common 3/5, 82/84 with integrated silencer H = 1, 12/14 separated 3/5, 82/84 with integrated silencer			TERMINAL PLATES with FITTINGS FOR TUBE Ø 10 on PORT 1: I = 1, 12/14 in common 3/5, 82/84 conveyable L = 1, 12/14 separated 3/5, 82/84 conveyable M = 1, 12/14 in common 3/5, 82/84 with integrated silencer N = 1, 12/14 separated 3/5, 82/84 with integrated silencer					

In presence of identical consequent codes both for the subbases as for the valves you need to substitute the letter with the number.  
 Ex: HN5M-03A-ABCS-MMCCBBB-A is converted to HN5M-03A-ABCS-2M2C3B-A.

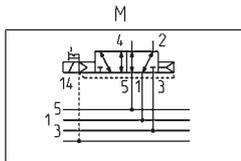
**CODING EXAMPLE - FIELDBUS VERSION**

<b>HN</b>	<b>5</b>	<b>01</b>	<b>-</b>	<b>ABCD</b>	<b>-</b>	<b>2Q4AZ2A</b>	<b>-</b>	<b>2B8M4C</b>	<b>-</b>	<b>A</b>
-----------	----------	-----------	----------	-------------	----------	----------------	----------	---------------	----------	----------

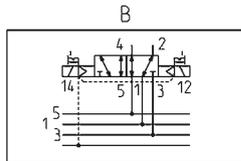
<b>HN</b>	SERIES									
<b>5</b>	SIZE: 1 = 10.5 2 = 21 5 = Mixed									
<b>01</b>	PROTOCOL: 01 = PROFIBUS-DP 02 = DeviceNet 03 = CANopen 04 = EtherNet/IP 05 = EtherCAT 06 = PROFINET 99 = Expansion module									
<b>ABCD</b>	INPUT / OUTPUT MODULES: 0 = no module			INPUT / OUTPUT MODULES: A = 8 Digital Inputs M8 B = 4 Digital Inputs M8 C = 2 Analog Inputs 4-20mA D = 2 Analog Inputs 0-10V E = 1 Analog Input 4-20mA + 1 Input 0-10V Q = 4 Digital Outputs M12 duo R = 2 Analog Outputs 4-20mA T = 2 Analog Outputs 0-10V U = 1 Analog Output 4-20mA + 1 Output 0-10V V = 1 Analog Output 4-20mA + 1 Input 0-10V Z = 1 Analog Output 4-20mA + 1 Input 4-20mA K = 1 Analog Output 0-10V + 1 Input 0-10V Y = 1 Analog Output 0-10V + 1 Input 4-20mA				INPUT / OUTPUT MODULES: S = Initial subnet module		
<b>2Q4AZ2A</b>	SUBBASES FOR 2 SOLENOID VALVES SIZE 1 (*): A (AZ) = M7 threads B (BZ) = 4 fittings for tube Ø4 C (CZ) = 4 fittings for tube Ø6 D (DZ) = channel 1, 3, 5 closed; M7 threads E (EZ) = channel 1, 3, 5 closed; cartridges tube Ø4 F (FZ) = channel 1, 3, 5 closed; cartridges tube Ø6 G (GZ) = channel 3, 5 closed; M7 threads H (HZ) = channel 3, 5 closed; cartridges tube Ø4 I (IZ) = channel 3, 5 closed; cartridges tube Ø6 L (LZ) = channel 1 closed; M7 threads M (MZ) = channel 1 closed; cartridges tube Ø4 N (NZ) = channel 1 closed; cartridges tube Ø6  (* Subbases with "Z" at the end of their code are used with monostable solenoid valves  FOR SOLENOID VALVES SIZE 2: Q = G 1/8 threads R = cartridges for tube Ø6 S = cartridges for tube Ø8					SUBBASES FOR PNEUMATIC SUPPLY: X = supplementary supply and exhaust Y = supplementary supply and exhaust with integrated silencer W = supply from the exhausts  FOR ELECTRICAL SUPPLY: K = separation of electrical supply			SEALS:  T = diaphragm on channels 1, 3, 5 U = diaphragm seal on channel 1 V = diaphragm seal on channels 3, 5	
<b>2B8M4C</b>	SOLENOID VALVES Size 1 and 2: 0 = island without solenoid valves M = 5/2 Monostable B = 5/2 Bistable V = 5/3 Centres Closed C = 2 x 3/2 NC A = 2 x 3/2 NO G = 1 x 3/2 NC + 1 x 3/2 NO E = 2 x 2/2 NC F = 2 x 2/2 NO I = 1 x 2/2 NC + 1 x 2/2 NO L = free position					SOLENOID VALVE + PRESSURE REGULATOR on channel 1 (size 2 only): N = 5/2 Monostable P = 5/2 Bistable Q = 5/3 Centres Closed R = 2 x 3/2 NC S = 2 x 3/2 NO T = 1 x 3/2 NC + 1 x 3/2 NO U = 2 x 2/2 NC X = 2 x 2/2 NO Y = 1 x 2/2 NC + 1 x 2/2 NO				
<b>A</b>	THREADED TERMINAL PLATES: A = 1, 12/14 in common 3/5, 82/84 threaded ports B = 1, 12/14 separated 3/5, 82/84 threaded ports C = 1, 12/14 in common 3/5, 82/84 with integrated silencer D = 1, 12/14 separated 3/5, 82/84 with integrated silencer			TERMINAL PLATES with CARTRIDGES Ø 8: E = 1, 12/14 in common 3/5, 82/84 conveyable F = 1, 12/14 separated 3/5, 82/84 conveyable G = 1, 12/14 in common 3/5, 82/84 with integrated silencer H = 1, 12/14 separated 3/5, 82/84 with integrated silencer			TERMINAL PLATES with CARTRIDGES Ø 10: I = 1, 12/14 in common 3/5, 82/84 conveyable L = 1, 12/14 separated 3/5, 82/84 conveyable M = 1, 12/14 in common 3/5, 82/84 with integrated silencer N = 1, 12/14 separated 3/5, 82/84 with integrated silencer			

X, Y and K sub-bases will be equipped with threads or cartridges of the same size of port 1, see the choice "Type of terminal plates". In presence of identical consequent codes both for sub-bases and for valves, you need to substitute the letter with the number.  
Ex: HN501-ABCD-ABCS-MMCCBBB-A is converted to HN501- ABCD-ABCS-2M2C3B-A.

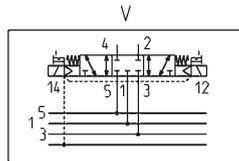
**AVAILABLE FUNCTION - SYMBOLS FOR SOLENOID VALVES**



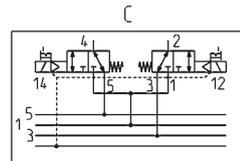
M = 5/2-way, Monostable



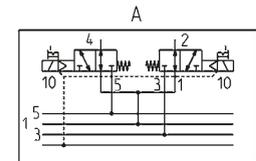
B = 5/2-way, Bistable



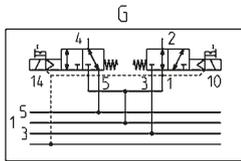
V = 5/3-way Centres Closed



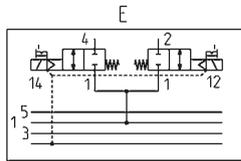
C = 2 x 3/2-way NC



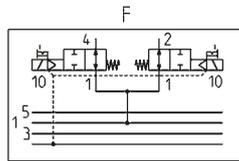
A = 2 x 3/2-way NO



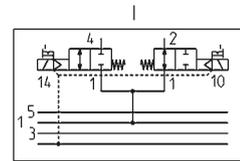
G = 1 x 3/2-way NC + 1 x 3/2-way NO



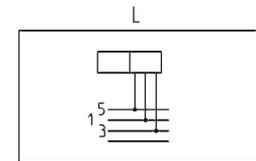
E = 2 x 2/2-way NC



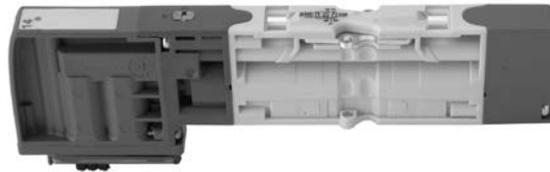
F = 2 x 2/2-way NO



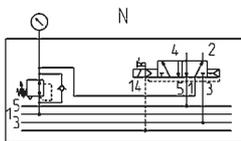
I = 1 x 2/2-way NC + 1 x 2/2-way NO



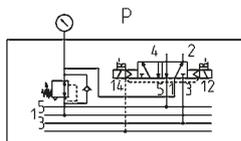
L = free position



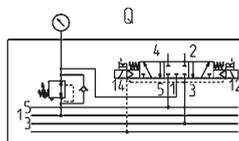
**AVAILABLE FUNCTIONS - SYMBOLS FOR SOLENOID VALVES WITH PRESSURE REGULATOR**



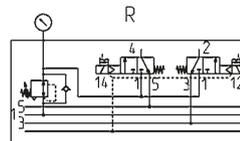
N = 5/2-way, Monostable



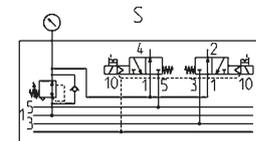
P = 5/2-way, Bistable



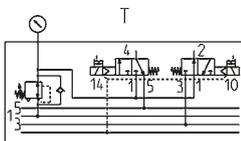
Q = 5/3-way Centres Closed



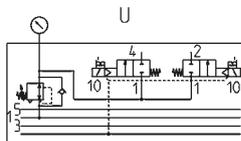
R = 2 x 3/2-way NC



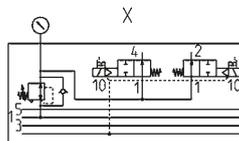
S = 2 x 3/2-way NO



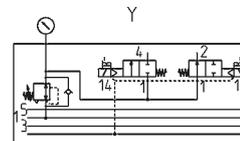
T = 1 x 3/2-way NC + 1 x 3/2-way NO



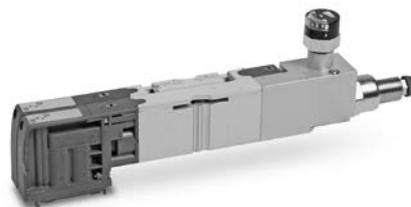
U = 2 x 2/2-way NC



X = 2 x 2/2-way NO



Y = 1 x 2/2-way NC + 1 x 2/2-way NO



It can be assembled on subbase size 21 only.



**CODING EXAMPLE OF MULTIPOLE AND FIELDBUS INTERFACES - Accessories**

<b>HN</b>	<b>A</b>	<b>0</b>	<b>M</b>	<b>-</b>	<b>A</b>
-----------	----------	----------	----------	----------	----------

<b>HN</b>	SERIES
<b>A</b>	TYPE: A = Accessory
<b>0</b>	SIZE: 0 = not defined
<b>M</b>	ELECTRICAL CONNECTION: M = 25 pin PNP Multipole N = 25 pin NPN Multipole H = 37 pin PNP Multipole L = 37 pin NPN Multipole I = HN interface with Series CX
<b>A</b>	TERMINALS: A = 1, 12/14 in common - 3/5, 82/84 with thread B = 1, 12/14 separated - 3/5, 82/84 with thread C = 1, 12/14 in common - 3/5, 82/84 with silencer D = 1, 12/14 separated - 3/5, 82/84 with silencer  NOTE: The Right Terminal is supplied with seals and fixing screws and available as accessory with the commercial code HA0T-H

Detailed descriptions of the available accessories can be found in the valve island catalogue

**CODING EXAMPLE OF SINGLE VALVE (Spare part)**

<b>H</b>	<b>P</b>	<b>1</b>	<b>V</b>	<b>-</b>	<b>M</b>
----------	----------	----------	----------	----------	----------

<b>H</b>	SERIES
<b>P</b>	TYPE: P = pneumatic
<b>1</b>	SIZE: 1 = 10,5 2 = 21
<b>V</b>	TYPE OF ACCESSORY: V = Solenoid valve
<b>M</b>	SOLENOID VALVE: M = 5/2 Monostable B = 5/2 Bistable V = 5/3 Centres Closed C = 2 x 3/2 NC A = 2 x 3/2 NO G = 1 x 3/2 NC + 1 x 3/2 NO E = 2 x 2/2 NC F = 2 x 2/2 NO I = 1 x 2/2 NC + 1 x 2/2 NO L = free position  SOLENOID VALVE + REGULATOR + SUBBASE N = 5/2 Monostable P = 5/2 Bistable Q = 5/3 Centres Closed R = 2 x 3/2 NC S = 2 x 3/2 NO T = 1 x 3/2 NC + 1 x 3/2 NO U = 2 x 2/2 NC X = 2 x 2/2 NO Y = 1 x 2/2 NC + 1 x 2/2 NO

Detailed descriptions of the available accessories can be found in the valve island catalogue

**CODING EXAMPLE OF SUBBASES - Accessories**

<b>H</b>	<b>A</b>	<b>1</b>	<b>R</b>	<b>-</b>	<b>A</b>
----------	----------	----------	----------	----------	----------

<b>H</b>	SERIES
<b>A</b>	TYPE: A = accessories
<b>1</b>	SIZE: 0 = for X-Y-K-T-U-V-Z 1 = 10,5 2 = 21
<b>R</b>	TYPE OF ACCESSORY: R = subbase for multipole connection G = seal W = subbase without electronic board (option valid only for position 2a) See the components list in the valve island catalogue
<b>A</b>	SUBBASE: A = through - M7 threads AZ = through - M7 threads, monostable D = channel 1, 3, 5 closed - M7 threads DZ = channel 1, 3, 5 closed - M7 threads, monostable G = channel 3, 5 closed - M7 threads GZ = channel 3, 5 closed - M7 threads, monostable Q = through - G1/8 threads X = supplementary supply and exhaust Y = supplementary supply and exhaust with integrated silencer W = supply from the exhausts K = separation of electrical supply and supplementary pneumatic supply  SEAL: T = diaphragm seal for the closure of channels 1, 3, 5 U = diaphragm seal for the closure of channel 1 V = diaphragm seal for the closure of channels 3, 5 P = through

NOTE: subbases are always supplied without connection fittings

Detailed descriptions of the available accessories can be found in the components list on the valve island catalogue

## Series Y valve islands, Individual, Multipole and Fieldbus

Valve islands with pneumatics and electronics integrated

Available versions: Individual, Multipole, Fieldbus (Profibus-DP, DeviceNet, CANopen)

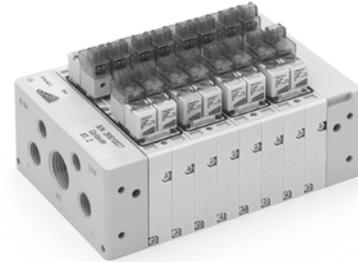
Valve functions: 2x2/2, 2x3/2, 5/2, 5/3 CC



### Individual version YP1K

Valve islands with individual electrical connection

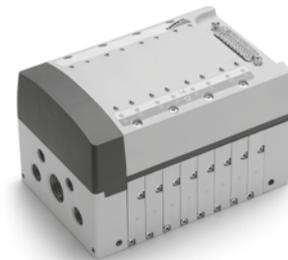
The electrical connection is realised by means of single connectors which are mounted on electro-pilots Series K. The modules which compose the valve islands can be of 2, 4, 6 or 8 valve positions and they can be separated from each other by different types of seals. Although the number of valve positions can be unlimited, it is recommended to insert an intermediate plate for supplementary supply after every 8 positions. The manual override and the signalling LED which are used in this valve islands are the same which are traditionally used on electro-pilots.



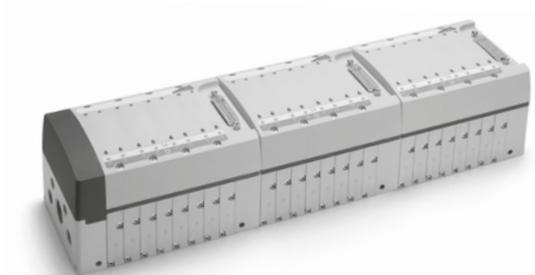
### Multipole version YP1M

Valve islands with Multipole electrical connection

The modules which compose the valve islands can be of 2, 4, 6 or 8 valve positions and they can be separated from each other by different types of seals. The electronics commonly used in the fieldbus versions allow the connection of the same expansion module on initial modules using different Protocols. The Multipole cover is available in three sizes, with 4, 6 or 8 valve positions. Every valve position can be freely equipped with monostable or bistable valves. It is possible to join many valve islands by placing an intermediate plate for supplementary supply under the Sub-D plug of the module which has to be connected. The use of a plate for supplementary supply Mod. X allows to have many Sub-D plugs on a sole structure. It is possible to join several valve islands to create a sole structure with as many Sub-D plugs as covers. It is recommended to insert an intermediate plate for supplementary supply after every 8 positions.



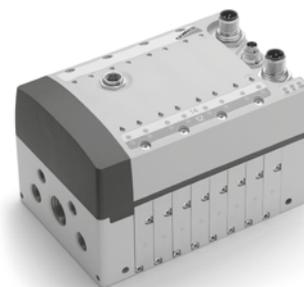
Multipole connection is possible



### Fieldbus version YP1P - YP1D - YP1C

Valve islands with electrical Fieldbus connection initial module

The initial module cover has always 8 valve positions. The initial module only can be connected with Fieldbus (Profibus-DP and other protocols) and 24V DC electrical supply. Each initial module can accommodate up to 32 coils, which are present in the initial or in the connected expansion modules, and 48 inlets. It recognizes automatically the position of the coils assigning them an address which follows a certain sequence. Otherwise it is possible to set a specific address through the use of a PC. It is recommended to insert an intermediate plate for supplementary supply after every 8 positions.



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



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



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



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



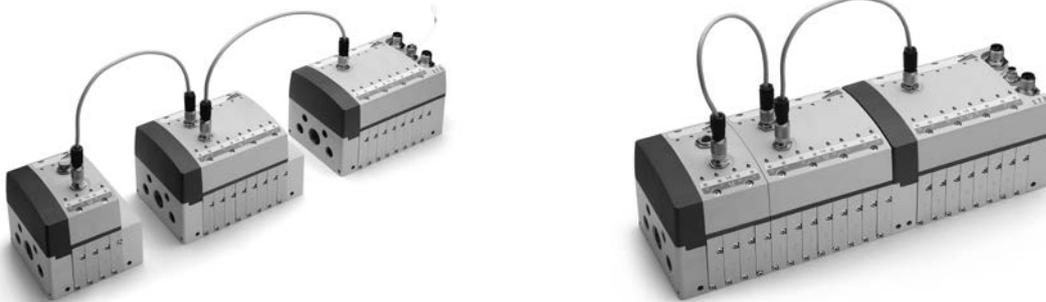
Valve islands with Fieldbus connection  
(expansion module 4 positions for combined  
assembly)



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

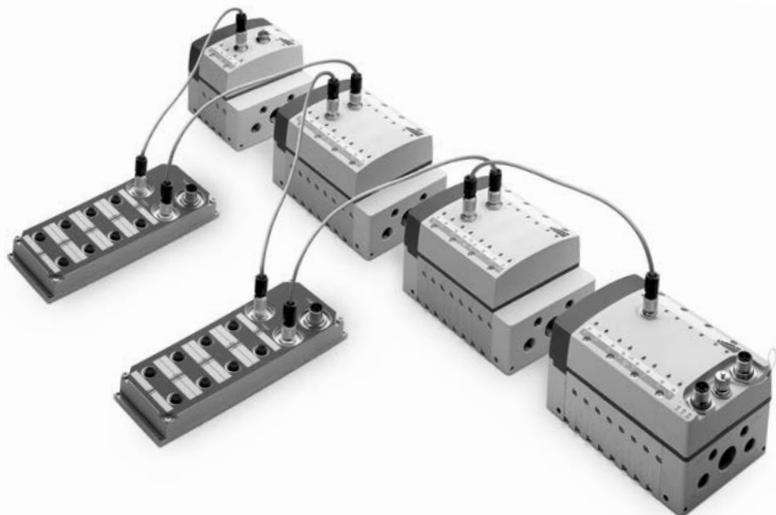


#### Possibility of Fieldbus connection

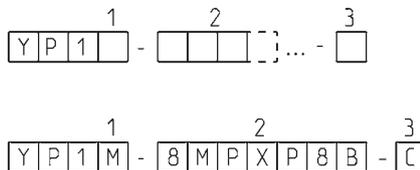
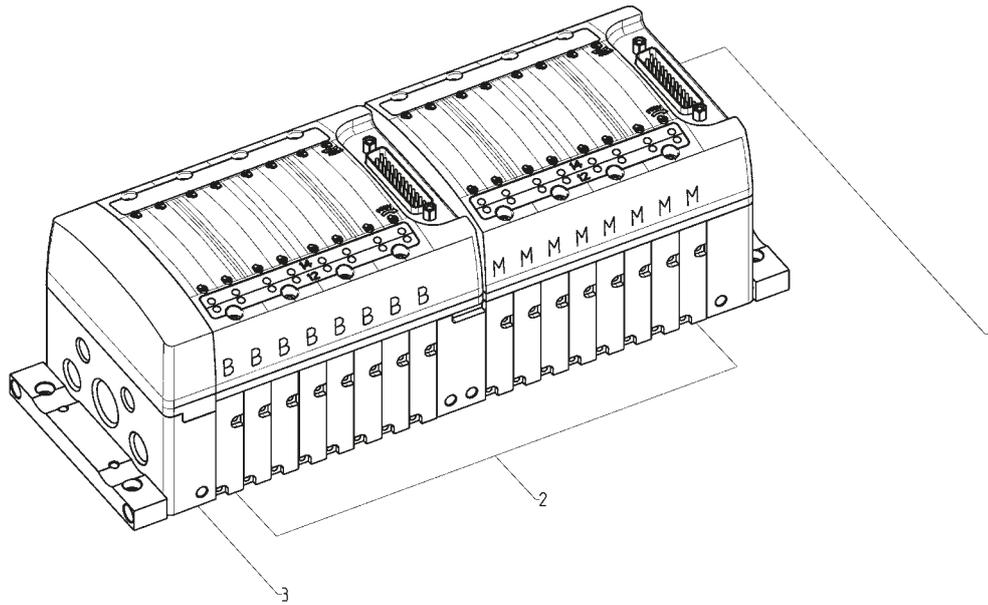


#### Electrical digital input module ME-1600 DL

The Digital Input Module allows for connection of 16 electrical input signals via 8M12 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.



**CODING**



(1) Code	Type of electrical connection	(2) Code	Type of valve	(3) Code	Type of terminal plates
<b>K</b>	Individual	-	-	-	-
<b>M</b>	Multipole (PNP)	-	-	-	-
<b>P</b>	Profibus-Dp	-	-	-	-
<b>D</b>	DeviceNet	-	-	-	-
<b>C</b>	CANopen	-	-	-	-
<b>E</b>	Expansion	-	-	-	-
-	-	<b>M</b>	5/2 Monostable	-	-
-	-	<b>B</b>	5/2 Bistable	-	-
-	-	<b>V</b>	5/3 CC	-	-
-	-	<b>I</b>	2 x 2/2 1 NO + 1 NC	-	-
-	-	<b>E</b>	2 x 2/2 NC	-	-
-	-	<b>F</b>	2 x 2/2 NO	-	-
-	-	<b>G</b>	2 x 3/2 1 NO + 1 NC	-	-
-	-	<b>C</b>	2 x 3/2 NC	-	-
-	-	<b>A</b>	2 x 3/2 NO	-	-
-	-	<b>L</b>	Free position	-	-
-	-	<b>W</b>	Additional supply module from 2 and 4	-	-
-	-	<b>T</b>	Diaphragm seal (modules separation)	-	-
-	-	<b>P</b>	Through seal (modules separation)	-	-
-	-	<b>T/</b>	Diaphragm seal (modules and cover separation)	-	-
-	-	<b>P/</b>	Through seal (modules and cover separation)	-	-
-	-	<b>U</b>	Diaphragm seal 3/5 opened	-	-
-	-	<b>H</b>	Diaphragm seal 3/5-11 opened	-	-
-	-	<b>N</b>	Diaphragm seal 1-11 opened	-	-
-	-	<b>U/</b>	Diaphragm seal 3/5 opened, modules and cover separ.	-	-
-	-	<b>K</b>	Module with 2 positions and 3/5-11 closed	-	-
-	-	<b>R</b>	Module with 2 positions and 3/5-1-11 closed	-	-
-	-	<b>O</b>	Module with 2 positions and 1-11 closed	-	-
-	-	<b>Q</b>	Module with 2 positions and 3/5 closed	-	-
-	-	<b>X</b>	Additional supply module	-	-
-	-	-	-	<b>A</b>	in common 1/11 - 12/14 individual 82/84 - 3/5
-	-	-	-	<b>B</b>	in common 1/11 individual 12/14 - 82/84 - 3/5
-	-	-	-	<b>C</b>	individual 1/11 - 12/14 - 82/84 - 3/5
-	-	-	-	<b>D</b>	in common 1/11 - 12/14 individual 82/84 - 3/5
-	-	-	-	<b>E</b>	in common 1/11 individual 12/14 - 82/84 - 3/5
-	-	-	-	<b>F</b>	individual 1/11 - 12/14 - 82/84 - 3/5
-	-	-	-	<b>G</b>	in common 1/11 - 12/14 individual 82/84 - 3/5
-	-	-	-	<b>H</b>	in common 1/11 individual 12/14 - 82/84 - 3/5
-	-	-	-	<b>J</b>	individual 1/11 - 12/14 - 82/84 - 3/5
-	-	-	-	<b>Z</b>	modules without terminal plate

## Series CX multi-serial module


**New**

Interface with: PROFIBUS, CANopen, DeviceNet, EtherNet/IP, PROFINET, EtherCAT  
Compatible with all Camozzi valve islands



The Series CX serial module, with IP65 protection class, interface with all major serial communication protocols as well as the new generation EtherCAT, EtherNet/IP and PROFINET protocols.  
The highly resistant aluminium structure makes it suitable for mountings even in hard application conditions.  
This serial module can be coupled with electric input and output modules and is able to handle up to a maximum of 1024 I/O. Its interface modules

enable direct connection to Series F, HN and 3 valve islands.  
Through a subnet the connection system can be extended to remote valve islands.  
Manuals, instruction sheets and configuration files are available on the site <http://catalogue.camozzi.com> or by means of the QR code indicated on the table of the product

### GENERAL DATA

Number of digital output	1024
Number of digital input	1024
Maximum input absorption	1,5 A
Maximum output absorption	3 A
Logical supply voltage *	24 V DC +/-10%
Power supply voltage *	24 V DC +/-10%
Protection	overload and reverse polarity
Protection class	IP65
Conform with standards	EN-61326-1 EN-61010-1
Operating temperature	0 ÷ 50°C
Material	Aluminium

\* = the voltage range can change according to the range required by the external connected elements

### CODING EXAMPLE

CX	05	-	2AC	-	QT2S
----	----	---	-----	---	------

<b>CX</b>	SERIES
<b>05</b>	PROTOCOL: 01 = PROFIBUS 02 = DeviceNet 03 = CANopen 04 = EtherNet/IP 05 = EtherCAT 06 = PROFINET 99 = Expansion Module
<b>2AC</b>	INPUTS: 0 = no module nA = 8 digital inputs M8 nB = 4 digital inputs M8 nC = 2 IN 4-20 mA nD = 2 IN 0-10 V nE = 1 IN 4-20 mA + 1 IN 0-10 V
<b>QT2S</b>	OUTPUTS: 0 = no module nQ = 4 M12 duo digital outputs nR = 2 OUT 4-20 mA nT = 2 OUT 0-10 V nU = 1 OUT 4-20 mA + 1 OUT 0-10 V nV = 1 OUT 4-20 mA + 1 IN 0-10 V nZ = 1 OUT 4-20 mA + 1 IN 4-20 mA nK = 1 OUT 0-10 V + 1 IN 0-10 V nY = 1 OUT 0-10 V + 1 IN 4-20 mA nS = initial subnet module

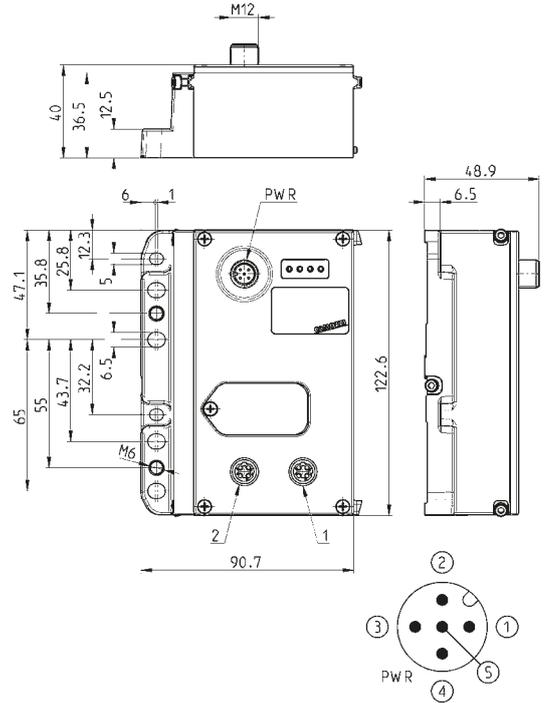
Fieldbus protocols - Technical data

Protocol	Max nr of nodes defined by the protocol	Communication speed defined by the protocol	Max number of I/O	LED 1 Yellow-Green	LED 2 Yellow-Green	LED 3 Red-Green	LED 4 Red
<b>PROFIBUS</b>	32/127	9,6 kBit/s per 1000 m 12 Mbit/s per < 100 m	1024 Input 1024 Output	absent	Green RUN	Red DIA	Red BF
<b>CANopen</b>	127	125 kBit/s 500 m 1 Mbit/s per 4 m	1024 Input 1024 Output	absent	Green IO	Red DIA	Red BF
<b>DeviceNet</b>	64	125 kBit/s 500 m 500 kbit/s per 100 m	1024 Input 1024 Output	absent	Green RUN	Red NS	Red MF
<b>PROFINET</b>	unlimited	100 Mbit/s per 100 m	1024 Input 1024 Output	Yellow LNK1	Yellow LNK2	Green PWR	Red DIA
<b>EtherNet/IP</b>	unlimited	100 Mbit/s per 100 m	1024 Input 1024 Output	Yellow LNK1	Yellow LNK2	Green PWR	Red DIA
<b>EtherCAT</b>	unlimited	100 Mbit/s per 100 m	1024 Input 1024 Output	Yellow LNK1	Yellow LNK2	Green PWR	Red DIA

2

CONTROL

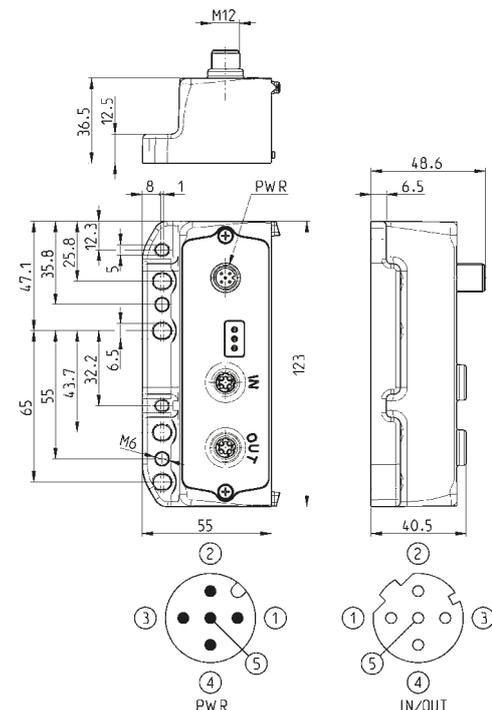
CPU Module - pin configuration



Mod.	Coding reference	Fieldbus Protocol	2	1	Bus-IN connector	Bus-OUT connector
<b>CX01-0-0</b>	01	PROFIBUS	Bus-IN	Bus-OUT	M12 B 5 pin male	M12 B 5 pin female
<b>CX02-0-0</b>	02	DeviceNet	Bus-IN	Bus-OUT	M12 A 5 pin male	M12 A 5 pin female
<b>CX03-0-0</b>	03	CANopen	Bus-IN	Bus-OUT	M12 A 5 pin male	M12 A 5 pin female
<b>CX04-0-0</b>	04	EtherNet/IP	Bus-OUT	Bus-IN	M12 D 5 pin female	M12 D 5 pin female
<b>CX05-0-0</b>	05	EtherCAT	Bus-OUT	Bus-IN	M12 D 5 pin female	M12 D 5 pin female
<b>CX06-0-0</b>	06	PROFINET	Bus-OUT	Bus-IN	M12 D 5 pin female	M12 D 5 pin female

Expansion Module - pin configuration

Note: to connect the Expansion with the subnet, we recommend the use of cables Mod. CS-SB04HB-... or CS-SC04HB-...

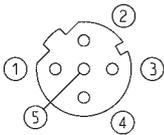


Mod.	Coding reference	Fieldbus Protocol	Bus-IN and Bus-OUT connector
<b>CX99-0-0</b>	99	Subnet expansion	M12 D 5 pin female

Initial subnet module Mod. ME3-0000-SL

This module can be connected only in presence of a CPU or Expansion module and can be mixed with other either digital or analog Input and Output devices.

Every subnet can have an extension of maximum 100 metres, with a maximum of 8 interruptions. Up to maximum 5 initial modules can be connected, one aside another or along the subnet in order to create a tree structure, in series or both, in order to optimize the length of the cables and the topology of the subnet in different applications. The module is equipped with the Bus-OUT connection only of subnet type M12 D 5 pin female.



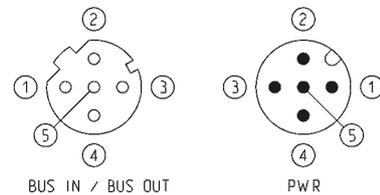
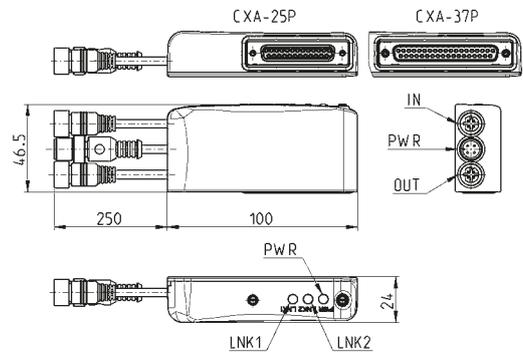
Mod.	Coding reference	Bus-OUT connection	Max number of modules for subnet	Max extension of subnet per module
ME3-0000-SL	S	M12D 5 pin female	5	100 m

Sub-D adaptor module 25 and 37 pin Mod. CXA-25P and CXA-37P



Led 1 = Yellow LNK1  
 Led 2 = Yellow LNK2  
 Led 3 = Green PWR, supply present and OK

It is an Expansion module of the subnet and can be connected to all valve islands with Sub-D 25 pin connection (Series F, HN and 3) or 37 pin connection (Series HN). It has its own M12A 4 pin male connection for the supply of the valves connected, distinguishing both logic supply and power supply and two M12 D 5 pin female connections for the Bus-IN and Bus-OUT of the subnet. The subnet can have a length of maximum 100 metres. The 25 pin adaptor module manages a fixed number of 24 digital outputs, while the 37 pin adaptor module manages a fixed number of 32 digital outputs. In both cases, every output can provide a maximum of 3 W to 24 V DC, with PWM outputs for which it is possible to set the working frequency value.



Mod.	Interface	Digital Outs	Bus-IN connection	Bus-OUT connection	PWR connection	Supply	Power for every Output
CXA-25P	Sub-D 25 pin	24	M12D 5 pin female	M12D 5 pin female	M12A 4 pin male	24 V DC	3 W
CXA-37P	Sub-D 37 pin	32	M12D 5 pin female	M12D 5 pin female	M12A 4 pin male	24 V DC	3 W

# Connectors and accessories for valve islands

2

CONTROL

Straight Sub-D 25-pole female connector for Series 3 Plug-In, Y Multipole and F Mod.

**G3X-3 G4X-10**  
**G3X-5 G4X-15**  
**G3X-10 G4X-20**  
**G3X-15 G4X-25**  
**G3X-20**  
**G3X-25**  
**G4X-3**  
**G4X-5**



Angular Sub-D 25-pole female connector for Series 3 Plug-In, Y Multipole and F Mod.

**G3X1-3 G4X1-10**  
**G3X1-5 G4X1-15**  
**G3X1-10 G4X1-20**  
**G3X1-15 G4X1-25**  
**G3X1-20**  
**G3X1-25**  
**G4X1-3**  
**G4X1-5**



Power supply straight female connector M12 4 poles.

It can be used with Series 3 Fieldbus, Y, HN and CX Mod.  
**CS-LF04HB**



Power supply angular female connector M12 4 poles.

It can be used with Series 3 Fieldbus, Y, HN and CX Mod.  
**CS-LR04HB**



Bus-In straight female connectors M12/M12B 5 poles.

They can be used with Series 3 Fieldbus, Y, HN and CX Mod.  
**CS-LF05HC**  
**CS-MF05HC**



Bus-In angular female connectors M12/M12B 5 poles.

They can be used with Series 3 Fieldbus, Y, HN and CX Mod.  
**CS-LR05HC**  
**CS-MR05HC**



Bus-Out straight male connectors M12/M12B 5 poles.

They can be used with Series 3 Fieldbus, HN and CX Mod.  
**CS-LM05HC**  
**CS-MM05HC**



Bus-Out angular male connectors M12/M12B 5 poles.

They can be used with Series 3 Fieldbus, HN and CX Mod.  
**CS-LS05HC**  
**CS-MS05HC**



Male connectors M12/M12B with terminal resistance. These connectors with serial terminal resistance can be used with Series 3 Fieldbus, HN and CX Mod.

**CS-MQ05H0**  
**CS-LP05H0**



Male cable entry connector M8 3 poles for inputs modules.

It can be used with Series HN and CX Mod.  
**CS-DM03HB**



Male connector M9 with terminal resistance Cam.II.Net.

This connector with sub-serial terminal resistance can be used with Series 3 Fieldbus, HN and CX Mod.  
**CS-FP05H0**



Straight male connector DUO M12 5 poles. For the connection of digital input modules ME-1600-DL and digital output modules ME-0004-DL Mod.

**CS-LD05HF**



Angular male connector DUO M12 5 poles. For the connection of digital input modules ME-1600-DL and digital output modules ME-0004-DL Mod.

**CS-LH05HF**



Connectors with crimped cable for Series Y, Individual version Mod.

**121-803** (cable 300 mm)  
**121-806** (cable 600 mm)  
**121-810** (cable 1000 mm)  
**121-830** (cable 3000 mm)



Programming cable for Series Y Mod.

**CS-FZ03AD-C500**



Expansion cable for Series Y and HN Mod.

**CS-FW05HE-D025**  
**CS-FW05HE-D100**  
**CS-FW05HE-D250**  
**CS-FW05HE-D500**  
**CS-FW05HE-DA00**



Extension with connector M8, 3 Pin Male / Female. For the connection of digital input modules ME-0008-DC (see the section Series 3 Fieldbus, HN and CX) Mod.

**CS-DW03HB-C250**  
**CS-DW03HB-C500**



Cable with straight connectors For PROFINET, EtherCAT, EtherNet/IP and subnet Mod.

**CS-SB04HB-D100**  
**CS-SB04HB-D500**  
**CS-SB04HB-DA00**



Cable with 90° angular connectors For PROFINET, EtherCAT, EtherNet/IP and subnet Mod.

**CS-SC04HB-D100**  
**CS-SC04HB-D500**  
**CS-SC04HB-DA00**



USB SERIAL converter for programming cable. For Series Y Mod.

**G8X3-G8W-1**



Adaptor and panel mount for Ethernet RJ45 to M12 D networks For PROFINET, EtherCAT, EtherNet/IP Mod.

**CS-SE04HB-F050**



25M-25F Sub-D adaptor For Series Y valve islands with CXA-25P Mod.

**G2X-G2W**



Blanking plug for Series 3 Fieldbus, HN and CX Modules Mod.

**CS-DFTP**  
**CS-LFTP**



Subnet terminating resistor Mod.

**CS-SU04H0**



Male wiring connector for Bus-IN and Bus-OUT. For PROFINET, EtherCAT, EtherNet/IP and for the subnet Mod.

**CS-SM04H0**



Mounting brackets for DIN rail. Suitable for Series 3 Fieldbus, Y, HN, F and CX manifolds. Supplied with: 2x plates, 2x screws M4x6 UNI 5931 Mod.

**PCF-E520**



Profibus-DP data line tee. Connection cable for Expansion Modules Series Y Mod.

**CS-AA03EC**



CANopen / DeviceNet data line tee. Connection cable for Expansion Modules Series Y and HN Mod.

**CS-AA05EC**



## Series 2 mechanically operated minivalves

3/2-way

Ports: M5. Cartridge ø 4

  <p>Mod. <b>234-945</b> <b>235-945</b></p>  <p>Mod. <b>244-945</b> <b>245-945</b></p>	  <p>Mod. <b>234-985</b> <b>235-985</b></p>  <p>Mod. <b>244-985</b> <b>245-985</b></p>
  <p>Mod. <b>234-955</b> <b>235-955</b></p>  <p>Mod. <b>244-955</b> <b>245-955</b></p>	  <p>Mod. <b>234-965</b> <b>235-965</b></p>  <p>Mod. <b>244-965</b> <b>245-965</b></p>

**2**

CONTROL

### CODING EXAMPLE

<b>2</b>	<b>3</b>	<b>4</b>	<b>-</b>	<b>94</b>	<b>5</b>
<b>2</b>	SERIES				
<b>3</b>	FUNCTION: 3 = 3/2-way NC 4 = 3/2-way NO				
<b>4</b>	PORTS: 4 = cartridge ø 4 5 = M5				
<b>94</b>	ACTUATION: 94 = plunger 95 = lever/roller 96 = unidirectional lever 98 = plunger, panel mounting				
<b>5</b>	RESETTING: 5 = spring return				

## Series 1 and 3 mechanically operated valves

Series 1: 3/2-way, 5/2-way. Ports: G1/8, G1/4

Series 3: 3/2-way, 5/2-way. Ports: G1/8

2

CONTROL

 Mod. <b>338-945</b>	 Mod. <b>358-945</b>	 Mod. <b>338-955</b>	 Mod. <b>358-955</b>
 Mod. <b>338-965</b>	 Mod. <b>358-965</b>	 Mod. <b>138-945</b>	 Mod. <b>148-945</b>
 Mod. <b>158-945</b>	 Mod. <b>138-955</b>	 Mod. <b>158-955</b>	 Mod. <b>138-965</b>
 Mod. <b>134-945</b>	 Mod. <b>154-945</b>	 Mod. <b>134-955</b>	 Mod. <b>154-955</b>

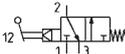
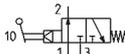
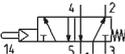
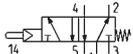
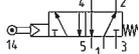
### CODING EXAMPLE

<b>3</b>	<b>3</b>	<b>8</b>	<b>-</b>	<b>94</b>	<b>5</b>
----------	----------	----------	----------	-----------	----------

<b>3</b>	SERIES: 1 3
<b>3</b>	FUNCTION: 3 = 3/2 ways NC 4 = 3/2 ways NO (only Series 1) 5 = 5/2 ways
<b>8</b>	PORTS: 8 = G1/8 4 = G1/4 (only Series 1)
<b>94</b>	ACTUATION: 94 = plunger 95 = lever/roller 96 = unidirectional roller
<b>5</b>	RESETTING: 5 = spring return

# Series 3 and 4 mechanically operated sensor valves

3/2-way, 5/2-way  
Ports: G1/8, G1/4

  <p>Mod. <b>338-D15-9A5</b></p>	  <p>Mod. <b>348-D15-9A5</b></p>	  <p>Mod. <b>358-D15-9A5</b></p>
  <p>Mod. <b>458-015-194</b></p>	  <p>Mod. <b>458-011-294</b></p>	  <p>Mod. <b>454-015-194</b></p>
  <p>Mod. <b>454-011-294</b></p>	  <p>Mod. <b>458-015-195</b></p>	  <p>Mod. <b>458-011-295</b></p>
  <p>Mod. <b>454-015-195</b></p>	  <p>Mod. <b>454-011-295</b></p>	

2

CONTROL

## CODING EXAMPLE

<b>3</b>	<b>3</b>	<b>8</b>	<b>-</b>	<b>D15</b>	<b>-</b>	<b>9A5</b>
----------	----------	----------	----------	------------	----------	------------

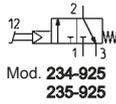
<b>3</b>	SERIES: 3 4
<b>3</b>	FUNCTION: 3 = 3/2-way NC - 4 = 3/2-way NO - 5 = 5/2-way
<b>8</b>	PORTS: 8 = G1/8 - 4 = G1/4
<b>D15</b>	ACTUATION: D15 = pressure drop/spring 015 = pressure/spring 011 = pressure/pressure
<b>9A5</b>	DEVICES: 9A5 = lever sensor, spring return 194 = plunger sensor, spring return 294 = plunger sensor, bistable 195 = lever/roller, spring return 295 = lever/roller, bistable

## Series 3 - pneumatic Series 2 foot operated pedal electrical

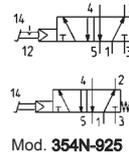
Series 3: G1/4, 5/2-way, normally closed (NC) and normally open (NO)

Series 2: M5, 4/2 tube, 3/2-way, normally closed (NC)

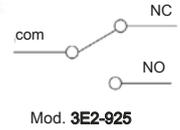
Pneumatic foot operated pedal Series 2



Pneumatic foot operated pedal Series 3



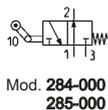
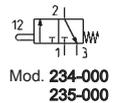
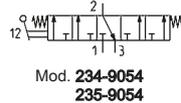
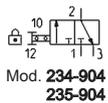
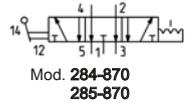
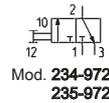
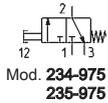
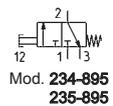
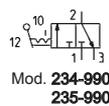
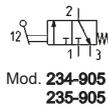
Electrical foot operated pedal Series 3



## Series 2 manually operated console minivalves

3/2-way, 5/3-way CC CO CP

Ports: M5. Cartridge ø 4



Panel hole adaptor ø 30  
Supplied with:  
2x reduction rings



Mod. **200-2230**

End cover



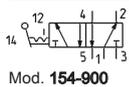
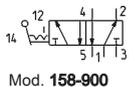
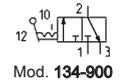
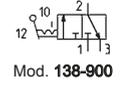
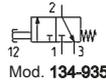
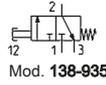
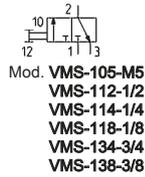
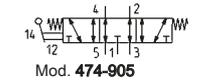
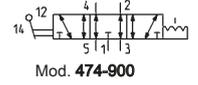
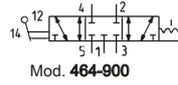
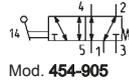
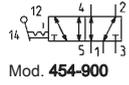
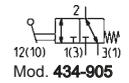
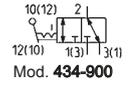
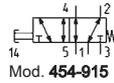
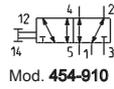
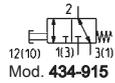
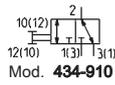
Mod. **210-000**  
**220-000**

CODING EXAMPLE					
2	3	4	-	97	5
<b>2</b>	SERIES				
<b>3</b>	FUNCTION: 3 = 3/2-way NC 4 = 3/2-way NO 8 = 5/3-way CO (function realized with 2x 3/2-way NC valves)				
<b>4</b>	PORTS: 4 = cartridge $\varnothing$ 4 5 = M5				
<b>97</b>	MODE OF OPERATION: 87 = 3 position selector 89 = push button 97 = palm switch 90 = joystick 99 = 2 position selector 92 = pedal 904 = key				
<b>5</b>	RESETTING: 5 = spring return 0 = stable 2 = latching-twist to release 54 = joystick				

## Series 1, 3, 4 and VMS manually operated valves

Series 1, 3 and 4: 3/2-way, 5/2-way, 5/3-way CC CO CP. Ports G1/8, G1/4  
Series VMS: 3/2-way. Ports M5, G1/8, G1/4, G3/8, G1/2 and G3/4

Mod. <b>338-890</b>		Mod. <b>358-990</b>		Mod. <b>338-895</b> Black <b>338-896</b> Green <b>338-897</b> Red	
Mod. <b>358-895</b> Black <b>358-896</b> Green <b>358-897</b> Red		Mod. <b>338-975</b> Black <b>338-976</b> Green <b>338-977</b> Red		Mod. <b>358-975</b> Black <b>358-976</b> Green <b>358-977</b> Red	
Mod. <b>338-910</b>		Mod. <b>358-910</b>		Mod. <b>338-900</b>	
Mod. <b>338-915</b>		Mod. <b>358-915</b>		Mod. <b>338-905</b>	
Mod. <b>358-900</b>		Mod. <b>368-900</b>		Mod. <b>378-900</b>	
Mod. <b>358-905</b>		Mod. <b>368-905</b>		Mod. <b>378-905</b>	



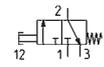
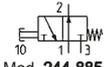
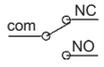
**CODING EXAMPLE**

<b>3</b>	<b>3</b>	<b>8</b>	<b>-</b>	<b>900</b>
----------	----------	----------	----------	------------

<b>3</b>	SERIES: 1 3 4
<b>5</b>	FUNCTION: 3 = 3/2-way NC 5 = 5/2-way 6 = 5/3-way CC 7 = 5/3-way CO
<b>8</b>	PORTS: 8 = G1/8 4 = G1/4
<b>900</b>	RESETTING: 895 = pushbutton, monostable, black 896 = pushbutton, monostable, green 897 = pushbutton, 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

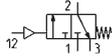
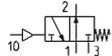
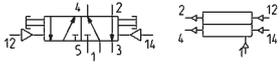
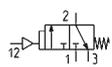
## Series 2 mini-handle valves

Handle with incorporated micro valve 3/2, normally closed (NC) and normally open (NO)  
Handle with incorporated micro switch

 <div style="text-align: center;">   <b>Mod. 234-885</b> </div> <hr/> <div style="text-align: center;">   <b>Mod. 244-885</b> </div>	 <div style="text-align: center;">   <b>Mod. 234-88E</b> </div>
---	--

## Series 2L basic logic valves

Cartridge ø 4 mm  
or - and - yes - not - memory

<p>Basic logic valves AND / OR</p>  <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">   <b>Mod. 2LD-SB4-B (AND)</b> </div> <div style="text-align: center;">   <b>Mod. 2LR-SB4-B (OR)</b> </div> </div>	<p>Basic logic valves YES / NOT</p>  <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">   <b>Mod. 2LS-SB4-B (YES)</b> </div> <div style="text-align: center;">   <b>Mod. 2LT-SB4-B (NOT)</b> </div> </div>
<p>Basic logic valves "Memory"</p>  <div style="text-align: center;">   <b>Mod. 2LM-SB4-B (MEMORY)</b> </div>	<p>Right-angled bracket</p>  <div style="text-align: right;"> <b>Mod. 2LQ-8A</b> </div>
<p>Pneumatically operated 3/2 NC amplifier valve - G1/8 ports</p>  <div style="text-align: center;">   <b>Mod. 2LA-AM</b> </div>	<p>Sender and receiver sensor Series 2L - M5 ports</p>  <div style="text-align: center;">   <b>Mod. 2LB-SR (RECEIVER)</b> </div>  <div style="text-align: center;">   <b>Mod. 2LB-SE (SENDER)</b> </div>

## Series SCS, VNR, VSO, VSC and VMR automatic valves

**Circuit selector Mod. SCS**  
Ports: G1/8



Mod. SCS 668-06

**Series VNR unidirectional valves**  
Ports: M5, G1/8, G1/4, G3/8, G1/2, G3/4, G1



Mod. VNR 205-M5  
VNR 210-1/8  
VNR 843-07  
VNR-238-3/8  
VNR-212-1/2  
VNR-234-3/4

**Series VSO quick exhaust valves**  
Ports: M5, G1/8, cartridge ø4



Mod. VSO 425-M5

**Series VSO quick exhaust valves**  
Ports: M5, G1/8, cartridge ø4



Mod. VSO 426-04

**Series VSC quick exhaust valves**  
Ports: G1/8, G1/4, G1/2



Mod. VSC 588-1/8  
VSC 544-1/4  
VSC 522-1/2

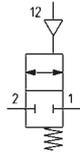
**Valves with adjustable exhaust Mod. VMR**  
Ports: G1/8



Mod. VMR 1/8-B10

# Series VBO and VBU blocking valves

Ports: G1/8, G1/4, G3/8, G1/2

<p>Unidirectional valves</p>   <p>Mod. <b>VBU 1/8</b> <b>VBU 1/4</b> <b>VBU 3/8</b> <b>VBU 1/2</b></p>	<p>Bidirectional valves</p>   <p>Mod. <b>VBO 1/8</b> <b>VBO 1/4</b> <b>VBO 3/8</b> <b>VBO 1/2</b></p>
--	--

CODING EXAMPLE			
<b>VB</b>	<b>U</b>		<b>1/8</b>
<b>VB</b>	SERIES		
<b>U</b>	VERSIONS: U = unidirectional O = bidirectional		
<b>1/8</b>	PORTS: 1/8 = G1/8 1/4 = G1/4 3/8 = G3/8 1/2 = G1/2		

# Series SCU, MCU, SVU, MVU, SCO and MCO flow control valves

Unidirectional and bidirectional banjo flow control regulators

Ports M5, G1/8, G1/4, G3/8, G1/2

2

CONTROL

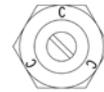


Mod. **SCU 602-M5**  
**SCU 604-1/8**  
**SCU 606-1/4**  
**SCU 608-3/8**



Mod. **MCU 702-M5**  
**MCU 704-1/8**  
**MCU 706-1/4**  
**MCU 708-3/8**

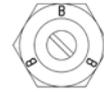
## Types



SCU  
MCU



SVU  
MVU



SCO  
MCO

**SCU - MCU** = direct assembly on cylinders

**SVU - MVU** = direct assembly on valves

**SCO - MCO** = direct assembly on cylinders or valves



Mod. **SVU 602-M5**  
**SVU 604-1/8**  
**SVU 606-1/4**



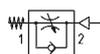
Mod. **MVU 702-M5**  
**MVU 704-1/8**  
**MVU 706-1/4**



Mod. **SCO 602-M5**  
**SCO 604-1/8**  
**SCO 606-1/4**



Mod. **MCO 702-M5**  
**MCO 704-1/8**  
**MCO 706-1/4**



Mod. **SCU 610-1/2**



Mod. **MCU 710-1/2**



CODING EXAMPLE					
<b>M</b>	<b>CU</b>	<b>7</b>	<b>02</b>	<b>-</b>	<b>M5</b>
<b>M</b>	ACTUATION: M = Manual S = Screwdriver				
<b>CU</b>	ASSEMBLY / VALVE TYPE: CU = directly on double-acting cylinders / unidirectional VU = directly on valves / unidirectional CO = directly on valves exhaust / bidirectional				
<b>7</b>	VERSIONS: 6 = needle (screwdriver operated) 7 = needle (manual operated)				
<b>02</b>	NOMINAL DIAMETER: 02 = ø 1,5 max 04 = ø 2 max 06 = ø 4 max 08 = ø 7 max 10 = ø 12 max				
<b>M5</b>	PORTS: M5 = M5 1/8 = G1/8 1/4 = G1/4 3/8 = G3/8 1/2 = G1/2				

**Silenced exhaust controllers**

Mod. SCO + 2905  
 The flow control valve Mod. SCO and the silencer Mod. 2905 are supplied separately



Mod. **SCO 602-M5+2905 M5**  
**SCO 604-1/8+2905 1/8**  
**SCO 606-1/4+2905 1/4**

Series RSW  
 Ports G1/8, G1/4 and G1/2



Mod. **RSW 1/8**  
**RSW 1/4**  
**RSW 3/8**  
**RSW 1/2**

# Series PSCU, PMCU, PSVU, PMVU, PSCO and PMCO flow control valves

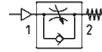
Unidirectional and bidirectional flow regulators with ports M5, G1/8, G1/4, G3/8 and banjo in brass (port M5) or in technopolymer (ports G1/8, G1/4, G3/8)



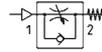
  
Mod. PSCU 602-M5-4  
PSCU 602-M5-6  
PSCU 604-1/8-4  
PSCU 604-1/8-6  
PSCU 604-1/8-8  
PSCU 606-1/4-6  
PSCU 606-1/4-8  
PSCU 606-1/4-10  
PSCU 608-3/8-10  
PSCU 608-3/8-12



  
Mod. PMCU 702-M5-4  
PMCU 702-M5-6  
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



Mod. PSVU 602-M5-4  
PSVU 602 M5-6  
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



Mod. PMVU 702-M5-4  
PMVU 702-M5-6  
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

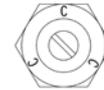


Mod. PSCO 602-M5-4  
PSCO 602-M5-6  
PSCO 604-1/8-4  
PSCO 604-1/8-6  
PSCO 604-1/8-8  
PSCO 606-1/4-6  
PSCO 606-1/4-8  
PSCO 606-1/4-10  
PSCO 608-3/8-10  
PSCO 608-3/8-12

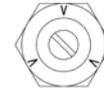


Mod. PMCO 702-M5-4  
PMCO 702-M5-6  
PMCO 704-1/8-4  
PMCO 704-1/8-6  
PMCO 704-1/8-8  
PMCO 706-1/4-6  
PMCO 706-1/4-8  
PMCO 706-1/4-10  
PMCO 708-3/8-10  
PMCO 708-3/8-12

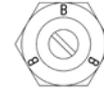
## Types



PSCU  
PMCU



PSVU  
PMVU



PSCO  
PMCO

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

## CODING EXAMPLE

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

**P** SERIES

**M** ACTUATION:  
M = Manual  
S = Screwdriver

**CU** ASSEMBLY:  
CU = on cylinders unidirectional  
VU = on valves unidirectional  
CO = bidirectional

**7** VERSIONS:  
6 = needle (screwdriver operated)  
7 = needle (manual operated)

**04** NOMINAL DIAMETER:  
02 = ø 1.5 MAX  
04 = ø 2 MAX  
06 = ø 4 MAX  
08 = ø 7 MAX

**1/8** PORTS:  
M5 = M5  
1/8 = G1/8  
1/4 = G1/4  
3/8 = G3/8

**4** TUBE:  
4 = ø 4  
6 = ø 6  
8 = ø 8  
10 = ø 10  
12 = ø 12

# Series TMCU, TMVU and TMCO flow control valves

Unidirectional and bidirectional banjo flow control regulators

Nominal diameters  $\varnothing$  2 - 3,8 - 5,8 - 8 mm

Ports G1/8, G1/4, G3/8, G1/2

 <p>Mod. <b>TMCU</b> 972-1/8-4                  TMCU 974-1/8-6                  TMCU 974-1/4-6                  TMCU 976-1/8-8                  TMCU 976-1/4-8                  TMCU 976-3/8-8                  TMCU 978-3/8-10                  TMCU 978-1/2-10</p>	 <p>Mod. <b>TMVU</b> 972-1/8-4                  TMVU 974-1/8-6                  TMVU 974-1/4-6                  TMVU 976-1/8-8                  TMVU 976-1/4-8                  TMVU 976-3/8-8                  TMVU 978-3/8-10                  TMVU 978-1/2-10</p>	 <p>Mod. <b>TMCO</b> 972-1/8-4                  TMCO 974-1/8-6                  TMCO 974-1/4-6                  TMCO 976-1/8-8                  TMCO 976-1/4-8                  TMCO 976-3/8-8                  TMCO 978-3/8-10                  TMCO 978-1/2-10</p>
---	---	---

## CODING EXAMPLE

<b>TM</b>	<b>CU</b>	<b>9</b>	<b>74</b>	<b>-</b>	<b>1/8</b>	<b>-</b>	<b>6</b>
-----------	-----------	----------	-----------	----------	------------	----------	----------

**TM** ACTUATION:  
TM = manual

**CU** ASSEMBLY:  
CU = on cylinders unidirectional  
VU = on valves unidirectional  
CO = bidirectional

**9** VERSIONS:  
9 = manual needle

**74** REGULATION:

	step	$\varnothing$ tube
72 =	2	4
74 =	3,8	6
76 =	5,8	8
78 =	8	10

**1/8** PORTS:  
1/8 = G1/8  
1/4 = G1/4  
3/8 = G3/8  
1/2 = G1/2

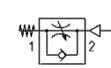
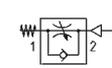
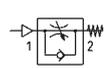
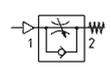
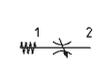
**6** TUBE:  
4 =  $\varnothing$  4 mm  
6 =  $\varnothing$  6 mm  
8 =  $\varnothing$  8 mm  
10 =  $\varnothing$  10 mm

# Series GSCU, GMCU, GSVU, GMVU, GSCO and GMCO flow control valves

Unidirectional and bidirectional banjo flow control regulators  
Nominal diameters 1,5 - 3,5 - 5 mm  
Ports M5, G1/8, G1/4

2

CONTROL

  <p>Mod. <b>GSCU 813-M5-3</b> <b>GSCU 814-M5-4</b> <b>GSCU 803-1/8-6</b> <b>GSCU 804-1/8-8</b> <b>GSCU 805-1/4-8</b> <b>GSCU 806-1/4-10</b></p>	  <p>Mod. <b>GMCU 913-M5-3</b> <b>GMCU 914-M5-4</b> <b>GMCU 903-1/8-6</b> <b>GMCU 904-1/8-8</b> <b>GMCU 905-1/4-8</b> <b>GMCU 906-1/4-10</b></p>	  <p>Mod. <b>GSVU 813-M5-3</b> <b>GSVU 814-M5-4</b> <b>GSVU 803-1/8-6</b> <b>GSVU 804-1/8-8</b> <b>GSVU 805-1/4-8</b> <b>GSVU 806-1/4-10</b></p>
  <p>Mod. <b>GMVU 913-M5-3</b> <b>GMVU 914-M5-4</b> <b>GMVU 903-1/8-6</b> <b>GMVU 904-1/8-8</b> <b>GMVU 905-1/4-8</b> <b>GMVU 906-1/4-10</b></p>	  <p>Mod. <b>GSCO 813-M5-3</b> <b>GSCO 814-M5-4</b> <b>GSCO 803-1/8-6</b> <b>GSCO 804-1/8-8</b> <b>GSCO 805-1/4-8</b> <b>GSCO 806-1/4-10</b></p>	  <p>Mod. <b>GMCO 913-M5-3</b> <b>GMCO 914-M5-4</b> <b>GMCO 903-1/8-6</b> <b>GMCO 904-1/8-8</b> <b>GMCO 905-1/4-8</b> <b>GMCO 906-1/4-10</b></p>

## CODING EXAMPLE

<b>GM</b>	<b>CU</b>		<b>9</b>	<b>03</b>	<b>-</b>	<b>1/8</b>	<b>-</b>	<b>6</b>
-----------	-----------	--	----------	-----------	----------	------------	----------	----------

**GM** ACTUATION:  
GM = manual  
GS = screwdriver

**CU** ASSEMBLY:  
CU = on cylinders unidirectional  
VU = on valves unidirectional  
CO = bidirectional

**9** VERSIONS:  
8 = needle (screwdriver operated)  
9 = needle (manually operated)

**03** FLOW CONTROL RANGE:

	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

**1/8** PORTS:  
M5 = M5  
1/8 = G1/8  
1/4 = G1/4

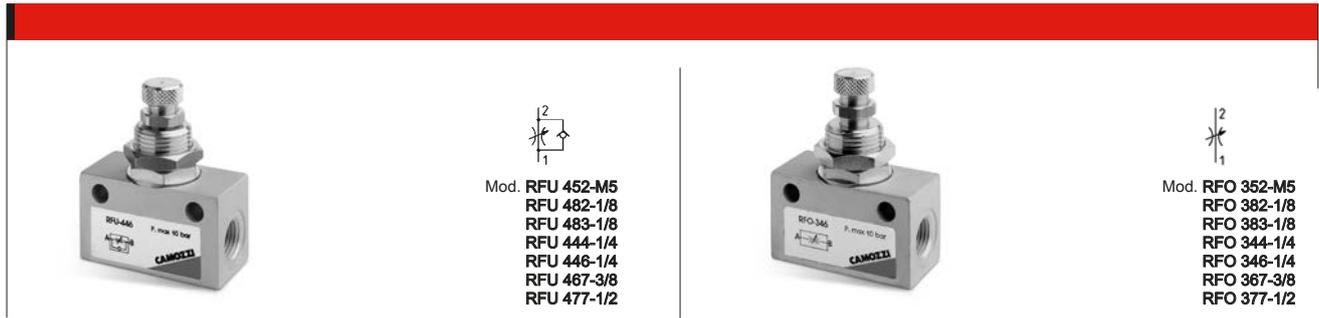
**6** TUBE:  
3  
4 = ø 4 mm  
6 = ø 6 mm  
8 = ø 8 mm  
10 = ø 10 mm

## Series RFU and RFO flow control valves

Unidirectional and bidirectional flow control valves

Ports: M5, G1/8, G1/4, G3/8, G1/2

Nominal diameters M5 = 1,5 mm; G1/8 = 2 and 3 mm; G1/4 = 4 and 6 mm; G3/8 and G1/2 = 7 mm



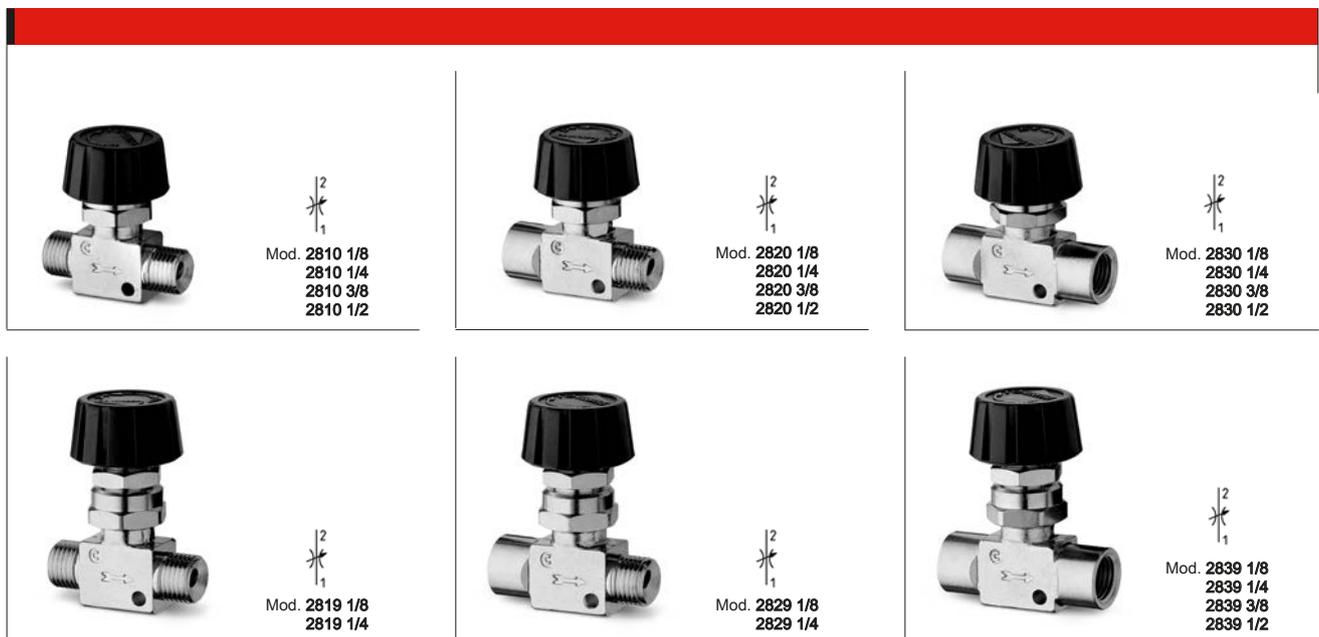
### CODING EXAMPLE

<b>RF</b>	<b>U</b>		<b>4</b>	<b>8</b>	<b>2</b>	<b>-</b>	<b>1/8</b>
<b>RF</b>	SERIES						
<b>U 4</b>	FUNCTION: U 4 = unidirectional O 3 = bidirectional						
<b>8</b>	PORTS: 4 = G1/4 5 = M5 6 = G3/8 7 = G1/2 8 = G1/8						
<b>2</b>	FLOW CONTROL RANGE: 2 = $\varnothing$ 1.5 mm max (for ports M5) $\varnothing$ 2 mm max (for ports 1/8 only) 3 = $\varnothing$ 3 mm max (for ports 1/8 only) 4 = $\varnothing$ 4 mm max (for ports 1/4 only) 6 = $\varnothing$ 6 mm max (for ports 1/4 only) 7 = $\varnothing$ 7 mm max (for ports 3/8, 1/2 only)						
<b>1/8</b>	PORTS: M5 1/8 1/4 3/8 1/2						

## Series 28 flow control valves

Bidirectional flow control valves

Ports G1/8, G1/4, G3/8, G1/2



## Pressure switches, transducers and pressure indicators

Series PM adjustable-diaphragm pressure switches, with setting visual scale, with exchange contacts

Series TRP electro-pneumatic transducers

Series 2950 pressure indicators, ports M5

Series PM adjustable-diaphragm pressure switches  
Normally closed (NC) or normally open (NO)  
Ports G1/8



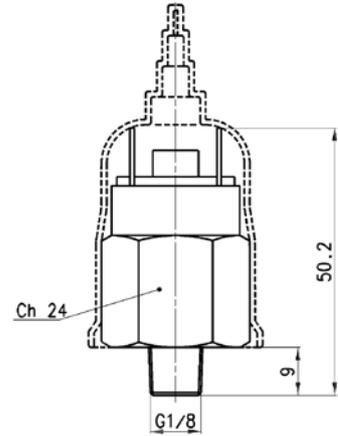
Mod. **PM11-NC**

**NC** = The pressure switch opens an electric contact when it reaches the fixed pressure

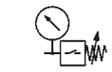


Mod. **PM11-NA**

**NO** = The pressure switch closes an electric contact when it reaches the fixed pressure

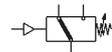


Series PM681-... pressure switches with setting visual scale  
In compliance with EN60730 standards  
Electric connection: PVC cable 2 x 0.22 mm  
Electric contact: Reed SPST NO  
Body in anodized aluminium and threaded fitting in brass  
Hysteresis: 0.8 bar max



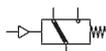
Mod. **PM681-1**  
**PM681-3**

Series PM pressure switch with exchange contacts



Mod. **PM11-SC**

Series TRP transducer is particularly suitable to convert a pneumatic signal into an electrical signal. The contacts are NC (normally closed) or NO (normally open), thus making it possible to generate or eliminate current when the pneumatic signal is present  
Minimum operating pressure 2,5 bar



Mod. **TRP-8**

The pressure indicator Mod. 2950-M5 is passive element (no spring, red colour)  
It is useful for detecting pressure manually without having to remove the connections



Mod. **2950 M5**

Three-pole connector for pressure switch Mod. PM11-SC



Mod. **124-830**  
**124-830EX** (ATEX version)

## Series SWDN electronic vacuum/pressure switches

With digital display  
High precision, easy to use



Mod.  
SWDN-V01-P3-2  
SWDN-V01-P4-2  
SWDN-V01-P4-M  
SWDN-P10-P3-2  
SWDN-P10-P4-2  
SWDN-P10-P4-M

2

CONTROL

### CODING EXAMPLE

SWDN

-

V01

-

P3

-

2

SWDN

SERIES

V01

SET PRESSURE RANGE:  
V01 = from -1 bar to 1 bar  
P10 = from 0 bar to 10 bar

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

2

ELECTRIC CONNECTION:  
2 = cable of 2 meters  
M = M8 4 pin connector

### Accessories

#### Circular M8 4-pole connectors, Female

With PU sheathing, non shielded cable

Protection class: IP65

Mod. **CS-DF04EG-E200** (cable 2 m)

**CS-DF04EG-E500** (cable 5 m)

**CS-DR04EG-E200** (cable 2 m)

**CS-DR04EG-E500** (cable 5 m)



## Series SWCN electronic vacuum/pressure switches

With digital display  
High precision, easy to use



Mod.  
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

#### V01

SET PRESSURE RANGE:  
V01 = from -1 bar to 1 bar  
P10 = from 0 bar to 10 bar

#### 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

#### 2

ELECTRIC CONNECTION:  
2 = cable of 2 meters  
M = M8 4 pin connector

### Accessories

#### Circular M8 4-pole connectors, Female

With PU sheathing, non shielded cable  
Protection class: IP65

Mod. **CS-DF04EG-E200** (cable 2 m)  
**CS-DF04EG-E500** (cable 5 m)  
**CS-DR04EG-E200** (cable 2 m)  
**CS-DR04EG-E500** (cable 5 m)



#### Mounting bracket

Supplied with:  
- 4 fixing screws M4x5 ISO 724 (fine pitch)  
- 1 fixing bracket for surface mounting  
- 1 fixing bracket for wall mounting  
Mod. **SWCN-B**



#### Panel mounting set

Supplied with:  
- 1 pressure switch holder  
- 2 panel mounting brackets  
Mod. **SWCN-F**



#### Panel mounting set + transparent cover

Supplied with:  
- 1 pressure switch holder  
- 2 panel mounting brackets  
- 1 transparent cover  
Mod. **SWCN-FP**



# Series 2901, 2903, 2921, 2931, 2938, 2939, 2905 and RSW silencers

Ports: M5, G1/8, G1/4, G3/8, G1/2, G3/4, G1



Mod. **2901 M5**  
**2901 1/8**  
**2901 1/4-17**  
**2901 1/4-22**  
**2901 3/8**  
**2901 1/2**  
**2901 3/4**  
**2901 1**



Mod. **2903 1/8**



Mod. **2921 1/8**  
**2921 1/4**  
**2921 3/8**  
**2921 1/2**  
**2921 3/4**  
**2921 1**



Mod. **2931 M5**  
**2931 M7**  
**2931 1/8**  
**2931 1/4**  
**2931 3/8**  
**2931 1/2**  
**2931 3/4**  
**2931 1**



Mod. **2938 M5**  
**2938 1/8**  
**2938 1/4**  
**2938 3/8**  
**2938 1/2**



Mod. **2939 4**  
**2939 6**  
**2939 8**  
**2939 10**

Series 2905 silencing bush  
For flow control valves Mod. SCO and MCO



Mod. **2905 1/8**  
**2905 1/4**  
**2905 3/8**

# Series AP directly operated proportional valves

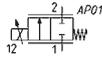
New models

2/2-way proportional valves  
Normally closed (NC). Sizes: 16, 22 mm  
Bodies with rear and lower flanges

2

CONTROL

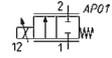
Size 16 mm



- Mod. AP-6210-DR2-GP\*  
AP-6210-FR2-GP\*  
AP-6210-HR2-GP\*  
AP-6210-LR2-GP\*  
AP-6210-DW2-GP\*OX2  
AP-6210-FW2-GP\*OX2  
AP-6210-HW2-GP\*OX2  
AP-6210-LW2-GP\*OX2

\* = choose the desired voltage

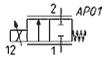
Size 16 mm with lower flanges



- Mod. AP-6215-DR2-GP\*  
AP-6215-FR2-GP\*  
AP-6215-HR2-GP\*  
AP-6215-LR2-GP\*  
AP-6215-DW2-GP\*OX2  
AP-6215-FW2-GP\*OX2  
AP-6215-HW2-GP\*OX2  
AP-6215-LW2-GP\*OX2

\* = choose the desired voltage

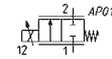
Size 16 mm with rear flanges



- Mod. AP-6214-DR2-GP\*  
AP-6214-FR2-GP\*  
AP-6214-HR2-GP\*  
AP-6214-LR2-GP\*  
AP-6214-DW2-GP\*OX2  
AP-6214-FW2-GP\*OX2  
AP-6214-HW2-GP\*OX2  
AP-6214-LW2-GP\*OX2

\* = choose the desired voltage

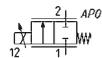
Size 22 mm



- Mod. AP-7211-FR2-U7\*  
AP-7211-HR2-U7\*  
AP-7211-LR2-U7\*  
AP-7211-NR2-U7\*  
AP-7211-QR2-U7\*  
AP-7211-FW2-U7\*OX2  
AP-7211-HW2-U7\*OX2  
AP-7211-LW2-U7\*OX2  
AP-7211-NW2-U7\*OX2  
AP-7211-QW2-U7\*OX2

\* = choose the desired voltage

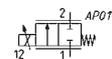
Size 22 mm with lower flanges



- Mod. AP-7215-FR2-U7\*  
AP-7215-HR2-U7\*  
AP-7215-LR2-U7\*  
AP-7215-NR2-U7\*  
AP-7215-QR2-U7\*  
AP-7215-FW2-U7\*OX2  
AP-7215-HW2-U7\*OX2  
AP-7215-LW2-U7\*OX2  
AP-7215-NW2-U7\*OX2  
AP-7215-QW2-U7\*OX2

\* = choose the desired voltage

Size 16 mm with body in PVDF



- Mod. AP-621L-DR3-GP\*  
AP-621L-FR3-GP\*  
AP-621L-HR3-GP\*  
AP-621L-LR3-GP\*  
AP-621L-DW3-U7\*OX2  
AP-621L-FW3-U7\*OX2  
AP-621L-HW3-U7\*OX2  
AP-621L-LW3-U7\*OX2

\* = choose the desired voltage

**CODING EXAMPLE**

**AP** | **-** | **7** | **2** | **1** | **1** | **-** | **L** | **R** | **2** | **-** | **U** | **7** | **11** | **OX2**

<b>AP</b>	SERIES
<b>7</b>	BODY: 6 = Size 16 mm - 7 = Size 22 mm
<b>2</b>	NUMBER OF WAYS: 2 = 2-way
<b>1</b>	VALVE FUNCTION: 1 = NC
<b>1</b>	PORTS: 0 = M5 (size 16 mm only) 1 = G1/8 (size 22 mm only) L = male hose adaptor (for body in PVDF only, size 16 mm) 4 = with rear flange 5 = with lower flange
<b>L</b>	NOMINAL DIAMETER: D = 0.8 mm (for size 16 mm only)      L = 1.6 mm F = 1 mm      N = 2 mm (for size 22 mm only) H = 1.2 mm      Q = 2.4 mm (for size 22 mm only)
<b>R</b>	SEALS MATERIAL: R = NBR - W = FKM
<b>2</b>	BODY MATERIAL: 2 = OT - 3 = PVDF (for size 16 mm only)
<b>U</b>	ENCAPSULATING MATERIAL: G = PA (for size 16 mm only) - U = PET (for size 22 mm only)
<b>7</b>	SOLENOID DIMENSIONS: P = 16x26 DIN EN 175301-803-C (for size 16 mm only) - 7 = 22x22 DIN 43650 B (for size 22 mm only)
<b>11</b>	SOLENOID VOLTAGE: H = 12 V DC 3 W (for size 16 mm only) 7 = 24 V DC 3 W (for size 16 mm only) 11 = 24 V DC 6.5 W (for size 22 mm only) 12 = 12 V DC 6.5 W (for size 22 mm only)
<b>OX2</b>	VERSION: OX2 = version with ASTM G93-03 Certification Level B (FKM seals only) = non-certified NBR version

**Connectors for Series AP directly operated proportional valves**

<p>Connectors DIN 43650, pin spacing 9,4 mm for size 16 mm only Mod. <b>125-800</b></p> 	<p>Connectors DIN 43650, pin spacing 9,4 mm with cable for size 16 mm only Mod. <b>125-550-1</b> (cable 1000 mm)</p> 	<p>In-line connectors with moulded cable for size 16 mm only Mod. <b>125-553-2</b> (cable 2000 mm) <b>125-553-5</b> (cable 5000 mm)</p> 
<p>Connectors DIN 43650 for size 22 mm only Mod. <b>122-800</b> <b>122-800EX *</b></p> <p>* only for ATEX certified solenoids mod. U7*EX, with anti-screwing off screw mod. TORX</p> 	<p>Connectors DIN 43650 with cable for size 22 mm only Mod. <b>122-550-1</b> (cable 1000 mm) <b>122-550-5</b> (cable 5000 mm)</p> 	<p>Connectors DIN 43650 Mod. <b>124-800</b></p> 

# Series CP directly operated proportional solenoid valves

New models

2/2 NC proportional valves

Sizes: 16 and 20 mm

2

CONTROL



## CODING EXAMPLE

CP	-	C	6	2	1	-	G	W	2	-	0	P	3
----	---	---	---	---	---	---	---	---	---	---	---	---	---

<b>CP</b>	SERIES
<b>C</b>	PORTS: C = cartridge S = subbase
<b>6</b>	BODY SIZE: 6 = 16 mm 7 = 20 mm
<b>2</b>	NUMBER OF PORTS: 2 = 2-way
<b>1</b>	FUNCTION: 1 = NC
<b>G</b>	ORIFICE DIAMETRES: F = 1 mm G = 1.5 mm N = 2 mm M = 3 mm P = 3.5 mm
<b>W</b>	GASKETS MATERIAL: W = FKM
<b>2</b>	BODY MATERIAL: 2 = brass
<b>0</b>	OVERMOULDING MATERIAL OF COIL: 0 = cartridge
<b>P</b>	DIMENSIONS OF THE COIL: P = ø 16 7 = ø 20
<b>5</b>	VOLTAGE: 1 = 6 V DC 3.1 W (size 16 mm only) 5 = 11 V DC 3.1 W (size 16 mm only) 3 = 24 V DC 3.1 W (size 16 mm only) 6 = 6 V DC 4.3 W (size 20 mm only) 2 = 12 V DC 4.3 W (size 20 mm only) 4 = 24 V DC 4.3 W (size 20 mm only) 7 = 6 V 4.8 W (only ø 3.5, size 20 mm) 8 = 12 V 4.8 W (only ø 3.5, size 20 mm) 9 = 24 V 4.8 W (only ø 3.5, size 20 mm)

## Series 130 electronic control device for proportional valves

PWM control device, with current control system for directly operated proportional valves



2

CONTROL

### CODING EXAMPLE

130	-	2	2	2
-----	---	---	---	---

#### 130 SERIES

2

VOLTAGE:  
2 = 24 V DC (max power 24 W)  
3 = 12 V DC (max power 12 W)  
4 = 6 V DC (max power 6 W)  
5 = 11 V DC (max power 11 W)

2

POWER:  
1 = 3 W  
2 = 6.5 W  
3 = 3.2 W  
4 = 4.3 W  
5 = 10 W

2

PWM FREQUENCY:  
2 = 500 Hz  
3 = 1 KHz

NOTE: it is possible to realize configurations with voltage, power and PWM frequency values that are not yet foreseen in the coding example. For further information we suggest you to contact our technical department.

### Connectors

Connector DIN 43650  
pin spacing 9,4 mm  
Mod. 125-800



Connector DIN 43650 (PG)  
Mod. 122-800



## Series LR digital proportional servo valves

3/3-way directly operated servo valves for the flow (LRWD2), pressure (LRPD2) and position (LRXD2) control



### CODING EXAMPLE

L	R	W	D	2	-	3	4	-	1	-	A	-	00
<b>L</b>	SERIES: L = proportional servo valves												
<b>R</b>	TECHNOLOGY: R = rotating spool												
<b>W</b>	VERSION: W = flow control - P = pressure - X = position control												
<b>D</b>	ELECTRONICS: D = digital												
<b>2</b>	MODEL: 2 = compact DIN-RAIL												
<b>3</b>	FUNCTION: 3 = 3/3-way												
<b>4</b>	NOMINAL DIAMETER: 4 = 4 mm - 6 = 6 mm												
<b>1</b>	COMMAND SIGNAL (Setpoint): 1 = +/- 10 V - 2 = 0-10 V - 4 = 4-20 mA												
<b>A</b>	INPUT SIGNAL: 2 = 0 - 10 V (LRPD2 and LRXD2 only) 4 = 0 - 5V (LRPD2 and LRXD2 only) 5 = 4 - 20mA (LRPD2 and LRXD2 only)  A = internal encoder (LRWD2 only) B = 1 bar (internal sensor - LRPD2 only) D = 10 bar (internal sensor - LRPD2 only) E = 250 mbar (internal sensor - LRPD2 only) F = +1/-1 bar (internal sensor - LRPD2 only)												
<b>00</b>	CABLE LENGTH: 00 = no cable  2F = straight cable of 2 m 2R = 90° cable of 2 m 5F = straight cable of 5 m 5R = 90° cable of 5 mLRWD2												

### Accessories

#### Fixing foot

Supplied with:  
2x feet  
4x screws  
Mod. **LRADB**



#### Mounting brackets for DIN-rail

DIN EN 50022  
(7,5mm x 35mm - width 1)  
Supplied with:  
2x mounting brackets  
2x screws M4x6 UNI 5931  
2x nuts  
Mod. **PCF-EN531**



#### Electrical tee box

Connection valve-PLC-external transducer  
Mod. **CS-AA08EC**



#### Straight female connector

**M12 8 poles**  
For electric supply and commands  
Mod. **CS-LF08HC** (cable 2 m)



#### Cable with straight female connector

**M12 8 poles**  
For electrical supply and commands  
Mod. **CS-LF08HB-C200** (cable 2 m)  
**CS-LF08HB-C500** (cable 5 m)



#### Cable with angular (90°) female connector

**M12 8 poles**  
For electric supply and commands  
Mod. **CS-LR08HB-C200** (cable 2 m)  
**CS-LR08HB-C500** (cable 5 m)



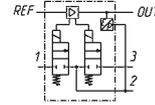
#### USB to Micro USB cable

For the hardware configuration of the Camozzi products  
Mod. **G11W-G12W-2** (cable 2 m)



# Series K8P electronic proportional micro regulator

Proportional regulator for the pressure control



- Mod. **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**

\* = according to the desired command, put: 2 (0-10 V DC) or 3 (4-20 mA)

## CODING EXAMPLE

<b>K8P</b>	<b>-</b>	<b>0</b>	<b>-</b>	<b>D</b>	<b>5</b>	<b>2</b>	<b>2</b>	<b>-</b>	<b>0</b>
------------	----------	----------	----------	----------	----------	----------	----------	----------	----------

### K8P

SERIES

#### 0

BODY DESIGN:

0 = Stand alone - S = Standard Sub-base - L = Light Sub-base - T = Light Sub-base for the pressure remote reading

#### D

WORKING PRESSURE:

D = 0 - 10 bar - E = 0 - 3 bar

#### 5

VALVE FUNCTIONS:

5 = 2-way NC

#### 2

COMMAND:

2 = 0-10 V DC - 3 = 4-20 mA

#### 2

OUTPUT SIGNAL:

2 = 0-10 V

#### 0

CABLE LENGTH:

0 = without cable - 2F = straight cable, 2 m - 2R = right angle cable (90 degrees), 2 m - 5F = straight cable, 5 m - 5R = right angle cable (90 degrees), 5 m

#### 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.

## Accessories

### Standard Sub-base

Note: the use of a silencer on the exhaust is recommended \*  
 \* = Mod. 2939 4

Mod. **K8P-AS**



### Light Sub-base

Note: the use of a silencer on the exhaust is recommended \*  
 \* = Mod. 2931 M5

2938 M5  
 2901 M5

Mod. **K8P-AL**



### Light Sub-base for the pressure remote reading

Note: the use of a silencer on the exhaust is recommended \*  
 \* = Mod. 2931 M5

2938 M5  
 2901 M5

In the version Light sub-base for the pressure remote reading it is also possible to use the fixing bracket B2-E531

Mod. **K8P-AT**



### Mounting brackets for DIN rail

DIN EN 50022 (7,5 mm x 35 mm - width 1)

Supplied with:

1x plates

1x screws M4x6 UNI 5931

Note: this accessory cannot be used with the Light sub-base version.

Mod. **PCF-K8P**



### Bracket for horizontal mounting, for standard sub-base

Supplied with:

1x mounting bracket

2x screws M3x8 UNI 5931

Mod. **K8P-B1**



### Circular M8 4-pole connectors, Female

With PU sheathing, non shielded cable  
 Protection class: IP65

Mod. **CS-DF04EG-E200** (cable 2 m)

**CS-DF04EG-E500** (cable 5 m)

**CS-DR04EG-E200** (cable 2 m)

**CS-DR04EG-E500** (cable 5 m)



# Series MX-PRO electronic proportional regulator

Ports: G1/2

Manifold ports: G1/2

Modular - Available with built-in pressure gauges or ports for gauges



## CODING EXAMPLE

MX	2	-	1/2	-	R	CV	2	0	4	-	LH
----	---	---	-----	---	---	----	---	---	---	---	----

**MX** SERIES

**2** SIZE:  
2 = G1/2

**1/2** PORTS:  
1/2 = G1/2

**R** TYPE OF REGULATOR:  
R = pressure regulator - M = Manifold pressure regulator (G1/2 only)

**CV** COMMAND:  
CV = electrical command 0-10 V DC - CA = electrical command 4-20 mA  
EV = electrical command 0-10 V DC with external servo pilot supply - EA = electrical command 4-20 mA with external servo pilot supply

**2** OPERATING PRESSURE (1 bar = 14,5 psi):  
1 = 0.15 ÷ 3 bar - 2 = 0.5 ÷ 10 bar (standard)

**0** DESIGN TYPE:  
0 = relieving (standard) - 1 = without relieving

**4** PRESSURE GAUGE:  
0 = without pressure gauge (with threaded port 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)

**LH** FLOW DIRECTION:  
= from left to right (standard) - LH = from right to left

For the assembly of a single component with fixing flanges or wall-mounting, see the section "FRL Series MX Assembled" in the chapter 3

## Accessories

### Rapid clamp kit Mod. MX2-...

Kit MX2-X supplied with: 1 rapid clamp, 1 O-ring OR 3125 \*,  
2 exagonal nuts M5, 2 screws M5x69  
Kit MX2-Z supplied with: 1 rapid clamp, 1 O-ring OR 3125 \*,  
1 exagonal 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 steel nuts and screws

Mod.  
**MX2-X**  
**MX2-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 exagonal nuts M5, 2 screws M5x69  
\*\* = it can be separately ordered (cod. 160-39-11/19)

Materials: technopolymer clamp, NBR O-ring,  
zinc-plated steel nuts and screws

Mod.  
**MX2-Y**



### Terminal flanges (IN/OUT)

The kit is supplied with: 1 flange INLET side, 1 flange OUTLET side

Materials: painted aluminium flanges

Mod.  
**MX2-3/8-FL**  
**MX2-1/2-FL**  
**MX2-3/4-FL**



### Rapid clamps kit + flanges

The kit is supplied with:  
**MX2-3/8-HH** 1x MX2-3/8-FL + 2x MX2-X  
**MX2-1/2-HH** 1x MX2-1/2-FL + 2x MX2-X  
**MX2-3/4-HH** 1x MX2-3/4-FL + 2x MX2-X  
**MX2-3/8-JJ** 1x MX2-3/8-FL + 2x MX2-Z  
**MX2-1/2-JJ** 1x MX2-1/2-FL + 2x MX2-Z  
**MX2-3/4-JJ** 1x MX2-3/4-FL + 2x MX2-Z



### Rapid clamps kit with wall fixing brackets + flanges

The kit is supplied with:  
**MX2-3/8-KK** 1x MX2-3/8-FL + 2x MX2-Y  
**MX2-1/2-KK** 1x MX2-1/2-FL + 2x MX2-Y  
**MX2-3/4-KK** 1x MX2-3/4-FL + 2x MX2-Y



### Block for pressure gauge fixing

The kit is supplied with:  
1 block, 1 grain, 2 screws, 1 seal  
Mod.  
**MX2-R26-P**



### O-ring for assembly

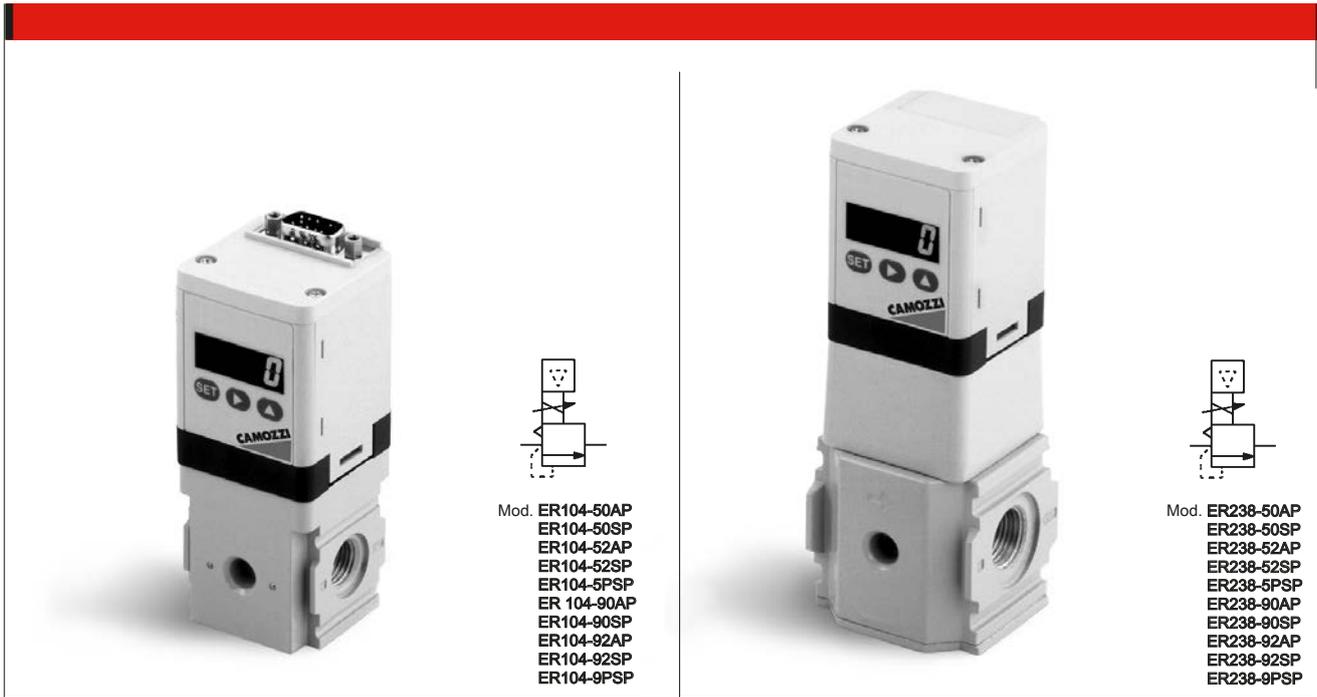
Mod.  
**160-39-11/19**  
(Joint torique OR 3125)



# Series ER100 and ER200 digital electro-pneumatic regulators

Series ER100 ports: G1/4

Series ER200 ports: G1/4, G3/8



Mod. ER104-50AP  
ER104-50SP  
ER104-52AP  
ER104-52SP  
ER104-5PSP  
ER104-90AP  
ER104-90SP  
ER104-92AP  
ER104-92SP  
ER104-9PSP

Mod. ER238-50AP  
ER238-50SP  
ER238-52AP  
ER238-52SP  
ER238-5PSP  
ER238-90AP  
ER238-90SP  
ER238-92AP  
ER238-92SP  
ER238-9PSP

2

CONTROL

## CODING EXAMPLE

ER	1	04	-	5	0	AN
----	---	----	---	---	---	----

<b>ER</b>	SERIES
<b>1</b>	SIZE: 1 = size 1 - 2 = size 2
<b>04</b>	PORT: 04 = G1/4 - 38 = G3/8 (size 2 only)
<b>5</b>	WORKING PRESSURE: 5 = 0 + 5 bar 9 = 0.5 + 9 bar
<b>0</b>	INPUT: 0 = 0 - 10 V DC 1 = 0 - 5 V DC 2 = 4 - 20 mA P = Parallel 10 bit
<b>AN</b>	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)

## Accessories

**Bracket for Series ER100 floor installation**  
Mod. ER1-B1



**Bracket for Series ER100 wall installation**  
Mod. ER1-B2



**Bracket for Series ER200 floor installation**  
Mod. ER2-B1



**Bracket for Series ER200 wall installation**  
Mod. ER2-B2



**Cable and connector for Series ER200 regulator with analog Input**  
Mod. G8X1-1  
G8X1-3



**Cable and connector for Series ER200 regulator with parallel Input**  
Mod. G8X2-1  
G8X2-3



### 3 > Treatment



#### Series MX Modular FRL Units

	<b>Page</b>
<b>Series MX</b>  <b>Filters</b> MX2 ports: G3/8, G1/2, G3/4 MX3 ports: G3/4, G1. Modular Bowl with technopolymer cover and bayonet-type mounting	143
<b>Series MX</b>  <b>Coalescing filters</b> MX2 ports: G3/8, G1/2, G3/4 MX3 ports: G3/4, G1. Modular Bowl with technopolymer cover and bayonet-type mounting	143
<b>Series MX</b>  <b>Activated carbon filters</b> MX2 ports: G3/8, G1/2, G3/4 MX3 ports: G3/4, G1. Modular Bowl with technopolymer cover and bayonet-type mounting	144
<b>Series MX</b>  <b>Pressure regulators</b> MX2 ports: G3/8, G1/2, G3/4 - MX3 ports: G3/4, G1 Manifold ports: G1/2 (MX2 only). Modular Available with built-in pressure gauges or with ports for gauges	144
<b>Series MX</b>  <b>Lubricators</b> MX2 ports: G3/8, G1/2, G3/4 MX3 ports: G3/4, G1. Modular Bowl with technopolymer cover and bayonet-type mounting	145
<b>Series MX</b>  <b>Filter-regulators</b> MX2 ports: G3/8, G1/2, G3/4 MX3 ports: G3/4, G1. Modular Bowl with technopolymer cover and bayonet-type mounting	145
<b>Series MX</b>  <b>Lockable isolation 3/2-way valves</b> MX2 ports: G3/8, G1/2, G3/4 MX3 ports: G3/4, G1. Modular Manual, electro-pneumatic, servo-pilot and pneumatic control	146
<b>Series MX</b>  <b>Soft start valves</b> MX2 ports: G3/8, G1/2, G3/4 MX3 ports: G3/4, G1 Modular	146
<b>Series MX</b>  <b>Take-off blocks</b> MX2 port: G1/2 MX3 port: G1 Modular	146
<b>Series MX</b>  <b>Assembled FRL</b> MX2 ports: G3/8, G1/2, G3/4 MX3 ports: G3/4, G1 Assembly through rapid clamps	147

#### Series MC Modular FRL Units

	<b>Page</b>
<b>Series MC</b>  <b>Filters</b> Ports: G1/4, G3/8, G1/2 Modular Metal bowl and bayonet-type mounting	149
<b>Series MC</b>  <b>Coalescing filters</b> Ports: G1/4, G3/8, G1/2 Modular Metal bowl and bayonet-type mounting	149
<b>Series MC</b>  <b>Pressure regulators</b> Ports: G1/4, G3/8, G1/2 Modular	150
<b>Series MC</b>  <b>Lubricators</b> Ports: G1/4, G3/8, G1/2 Modular With metal bowl and bayonet-type mounting	150
<b>Series MC</b>  <b>Filter-regulators</b> Ports: G1/4, G3/8, G1/2 Modular Metal bowl and bayonet-type mounting	151
<b>Series MC</b>  <b>Lockable isolation 3/2-way valves</b> Electropneumatic, pneumatic and manual version Modular Ports: G1/4, G3/8, G1/2	151
<b>Series MC</b>  <b>Soft start valves</b> Ports: G1/4, G3/8, G1/2 Modular	152
<b>Series MC</b>  <b>Take-off blocks</b> Ports: G1/4, G1/2 Modular	152
<b>Series MC</b>  <b>Assembled FRL</b> Ports: G1/4, G3/8, G1/2	153
<b>Series MC</b>  <b>Manifold pressure regulators</b> Ports: G1/4 Modular	153

## Series MD Modular FRL Units

		Page
Series MD	 <b>Filters</b> Ports with interchangeable cartridges: threaded (1/8, 1/4, 3/8) or integrated with super-rapid fitting for tube with ø 6, 8 and 10 mm. Modular assembly. Bowl with technopolymer cover and bayonet-type mounting	154
Series MD	 <b>Coalescing filters</b> Ports with interchangeable cartridges: threaded (1/8, 1/4, 3/8) or integrated with super-rapid fitting for tube with ø 6, 8 and 10 mm. Modular assembly. Bowl with technopolymer cover and bayonet-type mounting	154
Series MD	 <b>Activated carbon filters</b> Ports with interchangeable cartridges: threaded (1/8, 1/4, 3/8) or integrated with super-rapid fitting for tube with ø 6, 8 and 10 mm. Modular assembly. Bowl with technopolymer cover and bayonet-type mounting	155
Series MD	 <b>Pressure regulators</b> Ports with interchangeable cartridges: threaded (1/8, 1/4, 3/8) or integrated with super-rapid fitting for tube with ø 6, 8 and 10 mm. Versions: single, combined with other functions, Manifold	155
Series MD	 <b>Lubricators</b> Ports with interchangeable cartridges: threaded (1/8, 1/4, 3/8) or integrated with super-rapid fitting for tube with ø 6, 8 and 10 mm. Modular assembly. Bowl with technopolymer cover and bayonet-type mounting	156
Series MD	 <b>Filter-regulators</b> Ports with interchangeable cartridges: threaded (1/8, 1/4, 3/8) or integrated with super-rapid fitting for tube with ø 6, 8 and 10 mm. Modular assembly. Bowl with technopolymer cover and bayonet-type mounting	156
Series MD	 <b>Lockable isolation 3/2-way valves</b> Ports with interchangeable cartridges: threaded (1/8, 1/4, 3/8) or integrated with super-rapid fitting for tube with ø 6, 8 and 10 mm. Modular. Manual, electro-pneumatic, servo-pilot and pneumatic control	157
Series MD	 <b>Soft start valves</b> Ports with interchangeable cartridges: threaded (1/8, 1/4, 3/8) or integrated with super-rapid fitting for tube with ø 6, 8 and 10 mm. Modular assembly	157
Series MD	 <b>Take-off blocks</b> Ports with interchangeable cartridges: threaded (1/8, 1/4, 3/8) or integrated with super-rapid fitting for tube with ø 6, 8 and 10 mm (5-way version) Intermediate joining cartridge (3-way version)	157
Series MD	 <b>Assembled FRL</b> Ports with interchangeable cartridges: threaded (1/8, 1/4, 3/8) or integrated with super-rapid fitting for tube with ø 6, 8 and 10 mm. Modular assembly	158

## FRL Units

		Page
Series N	 <b>Filters and coalescing filters</b> Ports: G1/8, G1/4 Available with transparent PA12 bowl or nickel-plated brass bowl for the small version (N1)	160
Series N	 <b>Pressure regulators</b> Ports: G1/8, G1/4	160
Series N	 <b>Lubricators</b> Ports: G1/8, G1/4 Available with transparent PA12 bowl or nickel-plated brass bowl for the small version (N1)	161
Series N	 <b>Filter-regulators</b> Ports: G1/8, G1/4 Available with transparent PA12 bowl or nickel-plated brass bowl for the small version (N1)	161

## Pressure regulators

		Page
Series CLR	 <b>Micro pressure regulators</b> Ports: G1/8, G1/4 Micro pressure regulators with or without banjo in technopolymer	162
Series M	 <b>Pressure microregulators</b> Ports: G1/8, G1/4	162
Series T	 <b>Pressure microregulators</b> Ports: G1/8, G1/4	163
Series PR	 <b>Precision regulators with manual override</b> Port: G1/4	163

## Accessories for the air treatment

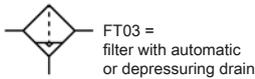
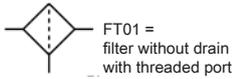
		Page
Series MX, MC, M, N, T	 <b>Accessories for the air treatment</b> Systems of rapid connections designed to make the routing easier	164
Series M043, M053, M063	 <b>Pressure gauges</b> Precision class CL1,6	167
Series PG	 <b>Digital pressure gauges</b> Possibility of a direct mounting with rear or panel connection	167
Series MX, MC, N	 <b>Functioning condensate drains Filtering elements</b> Semi-automatic manual drain; Automatic drain; Depressurisation drain; Depressurisation drain, protected Port 1/8 (without drain)	168

## Series MX filters

MX2 ports: G3/8, G1/2, G3/4 - MX3 ports: G3/4, G1

Modular

Bowl with technopolymer cover and bayonet-type mounting



### CODING EXAMPLE

MX	2	-	3/8	-	F	0	0	-	LH
----	---	---	-----	---	---	---	---	---	----

**MX** SERIES

**2** SIZE:  
2 = G3/8 - G1/2 - G3/4  
3 = G3/4 - G1

**3/8** PORT:  
3/8 = G3/8  
1/2 = G1/2  
3/4 = G3/4  
1 = G1

**F** FILTER

**0** FILTERING ELEMENT:  
0 = 25 µm (standard)  
1 = 5 µm

**0** DRAINING OF CONDENSATE \*:  
0 = semiautomatic-manual drain (standard)  
3 = automatic drain  
5 = depressuring drain, protected  
8 = without drain, with port G1/8

**LH** FLOW DIRECTION:  
= from left to right (standard)  
LH = from right to left

\* = Further details about condensate drains are available at the end of this chapter

3

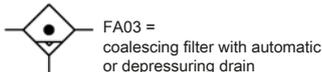
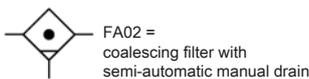
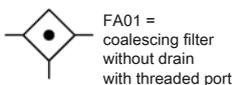
TREATMENT

## Series MX coalescing filters

MX2 ports: G3/8, G1/2, G3/4 - MX3 ports: G3/4, G1

Modular

Bowl with technopolymer cover and bayonet-type mounting



### CODING EXAMPLE

MX	2	-	3/8	-	FC	0	0	-	LH
----	---	---	-----	---	----	---	---	---	----

**MX** SERIES

**2** SIZE:  
2 = G3/8 - G1/2 - G3/4  
3 = G3/4 - G1

**3/8** PORTS:  
3/8 = G3/8  
1/2 = G1/2  
3/4 = G3/4  
1 = G1

**FC** COALESCING FILTER

**0** FILTERING ELEMENT:  
0 = 0,01 µm (standard)  
1 = 1 µm

**0** DRAINING OF CONDENSATE \*:  
0 = semiautomatic-manual drain (standard)  
3 = automatic drain  
5 = depressuring drain, protected  
8 = without drain, with port G1/8

**LH** FLOW DIRECTION:  
= from left to right (standard)  
LH = from right to left

\* = Further details about condensate drains are available at the end of this chapter

## Series MX activated carbon filters

MX2 ports: G3/8, G1/2, G3/4 - MX3 ports: G3/4, G1  
Modular  
Bowl with technopolymer cover and bayonet-type mounting



### CODING EXAMPLE

MX	2	-	3/8	-	FCA	-	LH
----	---	---	-----	---	-----	---	----

<b>MX</b>	SERIES
<b>2</b>	SIZE: 2 = G3/8 - G1/2 - G3/4 3 = G3/4 - G1
<b>3/8</b>	PORT: 3/8 = G3/8 1/2 = G1/2 3/4 = G3/4 1 = G1
<b>FCA</b>	ACTIVATED CARBON FILTER
<b>LH</b>	FLOW DIRECTION: = from left to right (standard) LH = from right to left

## Series MX pressure regulators

MX2 ports: G3/8, G1/2, G3/4 - MX3 ports: G3/4, G1  
Manifold ports: G1/2 (MX2 only)  
Modular. Available with built-in pressure gauges or ports for gauges



### CODING EXAMPLE

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

<b>MX</b>	SERIES
<b>2</b>	SIZE: 2 = G3/8 - G1/2 - G3/4 3 = G3/4 - G1
<b>3/8</b>	PORTS: 3/8 = G3/8 1/2 = G1/2 3/4 = G3/4 1 = G1
<b>R</b>	TYPEN OF REGULATOR: R = pressure regulator M = Manifold pressure regulator (MX2 - G1/2 only)
<b>0</b>	OPERATING PRESSURE (1 bar = 14,5 psi): 0 = 0,5 + 10 bar (standard) 4 = 0 + 4 bar 7 = 0,5 + 7 bar (MX2 only)
<b>0</b>	DESIGN TYPE: 0 = relieving (standard) 1 = without relieving
<b>4</b>	PRESSURE GAUGE: 0 = without pressure gauge (with threaded port for gauges) 2 = with built-in pressure gauge 0-6 and working pressure 0 + 4 bar (MX2 only) 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)
<b>LH</b>	FLOW DIRECTION: = from left to right (standard) LH = from right to left

## Series MX lubricators

MX2 ports: G3/8, G1/2, G3/4 - MX3 ports: G3/4, G1  
Modular  
Bowl with technopolymer cover and bayonet-type mounting



### CODING EXAMPLE

**MX 2 - 3/8 - L 00 - LH**

**MX** SERIES

**2** SIZE:  
2 = G3/8 - G1/2 - G3/4  
3 = G3/4 - G1

**3/8** PORT:  
1/2 = G1/2  
3/4 = G3/4  
1 = G1

**L** LUBRICATOR

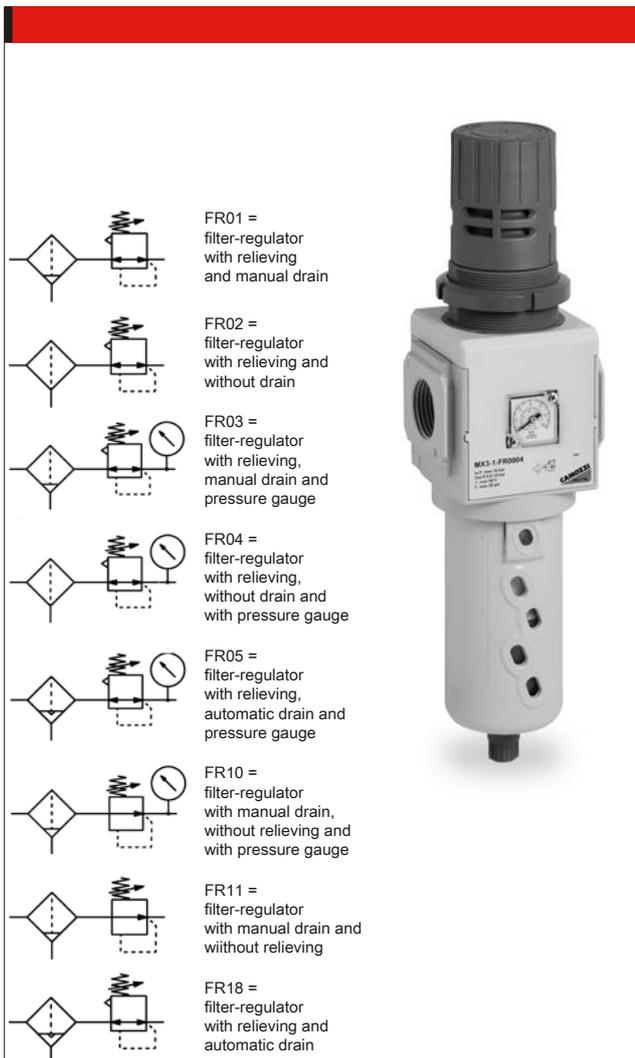
**00** DESIGN TYPE:  
00 = atomized oil

**LH** FLOW DIRECTION:  
= from left to right (standard)  
LH = from right to left

3

## Series MX filter-regulators

MX2 ports: G3/8, G1/2, G3/4 - MX3 ports: G3/4, G1  
Modular  
Bowl with technopolymer cover and bayonet-type mounting



### CODING EXAMPLE

**MX 2 - 3/8 - FR 0 0 0 4 - LH**

**MX** SERIES

**2** SIZE:  
2 = G3/8 - G1/2 - G3/4  
3 = G3/4 - G1

**3/8** PORT:  
3/8 = G3/8  
1/2 = G1/2  
3/4 = G3/4  
1 = G1

**FR** FILTER-REGULATOR

**0** FILTERING ELEMENT WITH DESIGN TYPE:  
0 = 25 µm with relieving (standard)  
1 = 5 µm with relieving  
2 = 25 µm without relieving (with semiautomatic-manual drain only)  
3 = 5 µm without relieving (with semiautomatic-manual drain only)

**0** DRAINING OF CONDENSATE \*:  
0 = semiautomatic-manual drain (standard)  
3 = automatic drain  
5 = depressuring drain, protected  
8 = without drain, with port G1/8

**0** OPERATING PRESSURE:  
0 = 0,5 + 10 bar (standard)  
4 = 0 + 4 bar  
7 = 0,5 + 7 bar (MX2 only)

**4** PRESSURE GAUGE:  
0 = without pressure gauge (with threaded port)  
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)

**LH** FLOW DIRECTION:  
= from left to right (standard)  
LH = from right to left

\* = Further details about condensate drains are available at the end of this chapter

TREATMENT

## Series MX lockable isolation 3/2-way valves

MX2 ports: G3/8, G1/2, G3/4 - MX3 ports: G3/4, G1. Modular  
Manual, electro-pneumatic, servo-pilot and pneumatic control

**VN02** =  
Manually operated valve,  
3/2, bistable,  
lockable in two positions

**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

**VP01** =  
pneumatically operated  
valve, 3/2, monostable,  
mechanical spring

### CODING EXAMPLE

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

**MX** SERIES

**2** SIZE:  
2 = G3/8 - G1/2 - G3/4  
3 = G3/4 - G1

**3/8** PORT:  
3/8 = G3/8  
1/2 = G1/2  
3/4 = G3/4  
1 = G1

**V** 3/2-WAY VALVE

**01** DESIGN TYPE:  
01 = lockable manual control  
16 = electro-pneumatic control  
17 = servo-pilot control  
36 = pneumatic control

**LH** FLOW DIRECTION:  
= from left to right (standard)  
LH = from right to left

## Series MX soft start valves

MX2 ports: G3/8, G1/2, G3/4 - MX3 ports: G3/4, G1  
Modular

**AVP1** =  
Soft start valve

### CODING EXAMPLE

MX	2	-	3/8	-	AV	-	LH
----	---	---	-----	---	----	---	----

**MX** SERIES

**2** SIZE:  
2 = G3/8 - G1/2 - G3/4 - 3 = G3/4 - G1

**3/8** PORT:  
3/8 = G3/8 - 1/2 = G1/2  
3/4 = G3/4 - 1 = G1

**AV** SOFT START VALVE

**LH** FLOW DIRECTION:  
= from left to right (standard)  
LH = from right to left

## Series MX take-off blocks

MX2 port: G1/2 - MX3 port: G1  
Modular

**BL01** =  
take-off block

**BL02** =  
take-off block with VNR

### CODING EXAMPLE

MX	2	-	1/2	-	B	00	-	LH
----	---	---	-----	---	---	----	---	----

**MX** SERIES

**2** SIZE:  
2 = G1/2 - 3 = G1

**1/2** PORT:  
1/2 = G1/2 - 1 = G1

**B** TAKE-OFF BLOCK

**00** DESIGN TYPE:  
00 = without no return valve [ VNR ] (standard)  
01 = with no return valve [ VNR ]  
02 = without no return valve [ VNR ], with double O-ring seat

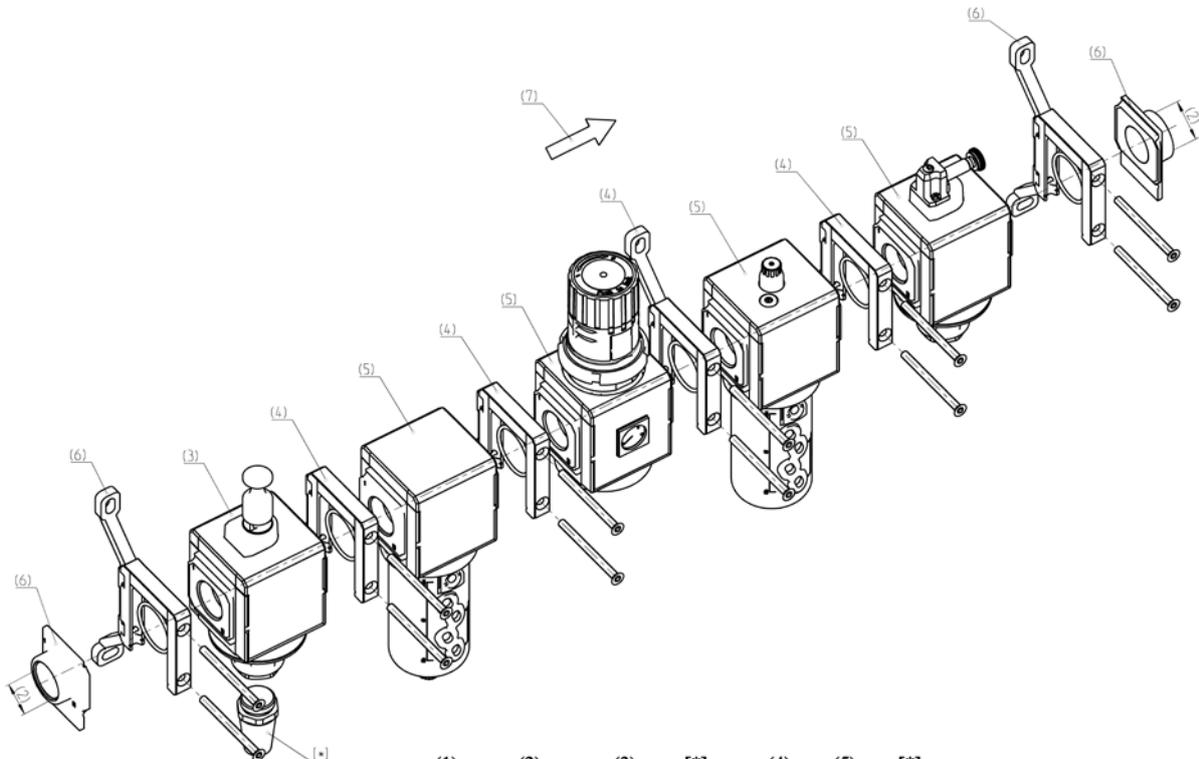
**LH** FLOW DIRECTION:  
= from left to right (standard)  
LH = from right to left

## Series MX assembled FRL

MX2 ports: G3/8, G1/2, G3/4 - MX3 ports: G3/4, G1  
Assembly through rapid clamps



### Configurator of assembled groups Series MX



(1)	(2)	(3)	[*]	(4)	(5)	[*]
MX	2	3/8	V01	+A32	X	F00

$n_x$

X	R004
Y	L00

X	V16	(6)	[**]	(7)
		KK		

Configuration of the assembled group in the drawing below:  
MX2-3/8-V01+A32XF00XR004YL00XV16-KK

## CONFIGURATOR OF ASSEMBLED GROUPS SERIES MX

<b>MX</b>	<b>2</b>	<b>-</b>	<b>3/8</b>	<b>-</b>	<b>V01</b>	<b>X</b>	<b>F00</b>	<b>-</b>	<b>KK</b>	<b>-</b>	<b>LH</b>
-----------	----------	----------	------------	----------	------------	----------	------------	----------	-----------	----------	-----------

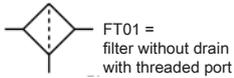
<b>MX</b>		SERIES		
<b>2</b>	(1)	SIZE: 2 = G3/8 - G1/2 - G3/4 3 = G3/4 - G1		
<b>-</b>				
<b>3/8</b>	(2)	IN / OUT THREADS: 3/8 = G3/8 1/2 = G1/2 3/4 = G3/4 1 = G1		
<b>-</b>				
<b>V01</b>	(3)	<p>MODULE + [ * ] (to configure the modules, see the single components pages):</p> <p>F... = Filter FC... = Coalescing filter FCA... = Activated carbons filter R... = Pressure regulator L... = Lubricator FR... = Filter-Regulator V... = Lockable isolation valve AV... = Soft start valve B... = Take-off block (MX2: G1/2 only - MX3: G1 only)</p> <p>[ * ] The following ACCESSORIES can be added after every single module:</p> <table border="0"> <tr> <td> <p>REGULATOR AND FILTER-REGULATOR MX2</p> <p>+A56 = M053-P06 (Pressure gauge) +A57 = M053-P10 (Pressure gauge) +A58 = M063-P12 (Pressure gauge)</p> <p>LOCKABLE ISOLATION VALVE MX2</p> <p>+A30 = 2901 1/2" (Silencier) +A31 = 2921 1/2" (Silencier) +A32 = 2931 1/2" (Silencier) +A33 = 2938 1/2" (Silencier)</p> <p>SOFT START VALVE</p> <p>+A00 = PM11-NA (Pressure switch, normally open) +A01 = PM11-NC (Pressure switch, normally closed)</p> <p>TAKE-OFF BLOCK MX2</p> <p>+A08 = PM11-NA (normally open pressure switch) with fitting for fixing to the module +A09 = PM11-NC (normally closed pressure switch) with fitting for fixing to the module +A03 = PM11-SC with fitting for fixing to the module Example: MX2-3/8-V01+A32XF00-KK-LH</p> </td> <td> <p>REGULATOR AND FILTER-REGULATOR MX3</p> <p>+A60 = M063-P06 (Pressure gauge) +A61 = M063-P12 (Pressure gauge)</p> <p>LOCKABLE ISOLATION VALVE MX3</p> <p>+A34 = 2901 3/4" (Silencier) +A35 = 2921 3/4" (Silencier) +A36 = 2931 3/4" (Silencier)</p> <p>TAKE-OFF BLOCK MX3</p> <p>+A06 = PM11-NA (normally open pressure switch) with fitting for fixing to the module +A07 = PM11-NC (normally closed pressure switch) with fitting for fixing to the module +A02 = PM11-SC with fitting for fixing to the module Example: MX3-3/4-V01+A36XF00-KK-LH</p> </td> </tr> </table>	<p>REGULATOR AND FILTER-REGULATOR MX2</p> <p>+A56 = M053-P06 (Pressure gauge) +A57 = M053-P10 (Pressure gauge) +A58 = M063-P12 (Pressure gauge)</p> <p>LOCKABLE ISOLATION VALVE MX2</p> <p>+A30 = 2901 1/2" (Silencier) +A31 = 2921 1/2" (Silencier) +A32 = 2931 1/2" (Silencier) +A33 = 2938 1/2" (Silencier)</p> <p>SOFT START VALVE</p> <p>+A00 = PM11-NA (Pressure switch, normally open) +A01 = PM11-NC (Pressure switch, normally closed)</p> <p>TAKE-OFF BLOCK MX2</p> <p>+A08 = PM11-NA (normally open pressure switch) with fitting for fixing to the module +A09 = PM11-NC (normally closed pressure switch) with fitting for fixing to the module +A03 = PM11-SC with fitting for fixing to the module Example: MX2-3/8-V01+A32XF00-KK-LH</p>	<p>REGULATOR AND FILTER-REGULATOR MX3</p> <p>+A60 = M063-P06 (Pressure gauge) +A61 = M063-P12 (Pressure gauge)</p> <p>LOCKABLE ISOLATION VALVE MX3</p> <p>+A34 = 2901 3/4" (Silencier) +A35 = 2921 3/4" (Silencier) +A36 = 2931 3/4" (Silencier)</p> <p>TAKE-OFF BLOCK MX3</p> <p>+A06 = PM11-NA (normally open pressure switch) with fitting for fixing to the module +A07 = PM11-NC (normally closed pressure switch) with fitting for fixing to the module +A02 = PM11-SC with fitting for fixing to the module Example: MX3-3/4-V01+A36XF00-KK-LH</p>
<p>REGULATOR AND FILTER-REGULATOR MX2</p> <p>+A56 = M053-P06 (Pressure gauge) +A57 = M053-P10 (Pressure gauge) +A58 = M063-P12 (Pressure gauge)</p> <p>LOCKABLE ISOLATION VALVE MX2</p> <p>+A30 = 2901 1/2" (Silencier) +A31 = 2921 1/2" (Silencier) +A32 = 2931 1/2" (Silencier) +A33 = 2938 1/2" (Silencier)</p> <p>SOFT START VALVE</p> <p>+A00 = PM11-NA (Pressure switch, normally open) +A01 = PM11-NC (Pressure switch, normally closed)</p> <p>TAKE-OFF BLOCK MX2</p> <p>+A08 = PM11-NA (normally open pressure switch) with fitting for fixing to the module +A09 = PM11-NC (normally closed pressure switch) with fitting for fixing to the module +A03 = PM11-SC with fitting for fixing to the module Example: MX2-3/8-V01+A32XF00-KK-LH</p>	<p>REGULATOR AND FILTER-REGULATOR MX3</p> <p>+A60 = M063-P06 (Pressure gauge) +A61 = M063-P12 (Pressure gauge)</p> <p>LOCKABLE ISOLATION VALVE MX3</p> <p>+A34 = 2901 3/4" (Silencier) +A35 = 2921 3/4" (Silencier) +A36 = 2931 3/4" (Silencier)</p> <p>TAKE-OFF BLOCK MX3</p> <p>+A06 = PM11-NA (normally open pressure switch) with fitting for fixing to the module +A07 = PM11-NC (normally closed pressure switch) with fitting for fixing to the module +A02 = PM11-SC with fitting for fixing to the module Example: MX3-3/4-V01+A36XF00-KK-LH</p>			
<b>X</b>	(4)	<p>MODULES CONNECTION</p> <p>X = Rapid clamp kit Z = Rapid clamp kit with wall fixing screw Y = Rapid clamp kit with wall fixing brackets</p>		
<b>F00</b>	(5) + [ * ]	see MODULE (3)		
<b>-</b>				
<b>KK</b>	(6)	<p>TERMINAL CONNECTIONS + [ ** ]</p> <p>= no terminal connection HH = n° 1 rapid clamp kit with flanges (IN / OUT) JJ = n° 1 rapid clamp kit with wall fixing screws + flanges (IN / OUT) KK = n° 1 rapid clamp kit with wall fixing brackets + flanges (IN / OUT)</p> <p>[ ** ] WALL CONNECTION: REGULATOR and FILTER-REGULATOR S = Bracket (only with clamps mod. X o HH) Codes examples: MX3-1-R..XV...S; MX3-1-R..XV...HSH</p>		
<b>-</b>				
<b>LH</b>	(7)	<p>FLOW DIRECTION:</p> <p>= from left to right (standard) LH = from right to left</p>		
	(4) + (5) + [ * ]	REPEATABLE COMBINATION for a "n" number of times		

## Series MC filters

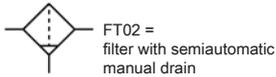
Ports G1/4, G3/8 and G1/2

Modular

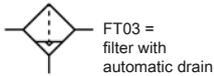
Metal bowl and bayonet-type mounting



FT01 =  
filter without drain  
with threaded port



FT02 =  
filter with semiautomatic  
manual drain



FT03 =  
filter with  
automatic drain

### CODING EXAMPLE

MC	2	02	-	F	0	0
----	---	----	---	---	---	---

#### MC SERIES

**2** SIZE:  
1 = G1/4  
2 = G3/8 - G1/2

**02** PORTS:  
04 = G1/4  
38 = G3/8  
02 = G1/2

#### F FILTER

**0** FILTERING ELEMENT:  
0 = 25µm (standard)  
1 = 5µm

**0** DRAINING OF CONDENSATE \*:  
0 = normal - semiautomatic (standard)  
3 = automatic drain (only for G3/8 and G1/2)  
4 = depressurisation (only G1/4)  
5 = depressurisation, protected  
8 = no drain, port 1/8

\* = Further details about condensate drains are available at the end of this chapter

3

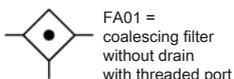
TREATMENT

## Series MC coalescing filters

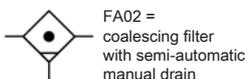
Ports G1/4, G3/8 and G1/2

Modular

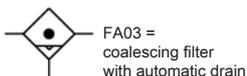
Metal bowl and bayonet-type mounting



FA01 =  
coalescing filter  
without drain  
with threaded port



FA02 =  
coalescing filter  
with semi-automatic  
manual drain



FA03 =  
coalescing filter  
with automatic drain

### CODING EXAMPLE

MC	2	02	-	F	B	0
----	---	----	---	---	---	---

#### MC SERIES

**2** SIZE:  
1 = G1/4  
2 = G3/8 - G1/2

**02** PORTS:  
04 = G1/4  
38 = G3/8  
02 = G1/2

#### F FILTER

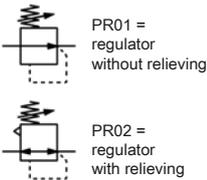
**B** FILTERING ELEMENT:  
B = 0,01µm

**0** DRAINING OF CONDENSATE \*:  
0 = manual - semi-automatic  
3 = automatic (only for G3/8 and G1/2)  
4 = depressurisation (only G1/4)  
5 = depressurisation, protected  
8 = no drain, port 1/8

\* = Further details about condensate drains are available at the end of this chapter

## Series MC pressure regulators

Ports G1/4, G3/8 and G1/2  
Modular



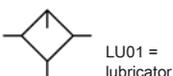
### CODING EXAMPLE

MC	2	02	-	R	0	0
----	---	----	---	---	---	---

<b>MC</b>	SERIES
<b>2</b>	SIZE: 1 = G1/4 2 = G3/8 - G1/2
<b>02</b>	PORTS: 04 = G1/4 38 = G3/8 02 = G1/2
<b>R</b>	REGULATOR
<b>0</b>	OPERATING PRESSURE: 0 = 0.5 + 10 (standard) 1 = 0 + 4 2 = 0 + 2 (only G1/4) 7 = 0.5 + 7 (only G1/4)
<b>0</b>	DESIGN TYPE: 0 = self-relieving (standard) 1 = non-relieving 5 = precise relieving

## Series MC lubricators

Ports G1/4, G3/8 and G1/2  
Modular  
With metal bowl and bayonet-type mounting



### CODING EXAMPLE

MC	2	02	-	L	00
----	---	----	---	---	----

<b>MC</b>	SERIES
<b>2</b>	SIZE: 1 = G1/4 2 = G3/8 - G1/2
<b>02</b>	PORTS: 04 = G1/4 38 = G3/8 02 = G1/2
<b>L</b>	LUBRICATOR
<b>00</b>	DESIGN TYPE: 00 = atomized oil

## Series MC filter-regulators

Ports G1/4, G3/8 and G1/2

Modular

Metal bowl and bayonet-type mounting



### CODING EXAMPLE

MC	2	02	-	D	0	0	-	4
----	---	----	---	---	---	---	---	---

<b>MC</b>	SERIES
<b>2</b>	SIZE: 1 = G1/4 2 = G3/8 - G1/2
<b>02</b>	PORTS: 04 = G1/4 38 = G3/8 02 = G1/2
<b>D</b>	FILTER-REGULATOR
<b>0</b>	FILTERING ELEMENT: 0 = 25µm (standard) 1 = 5µm
<b>0</b>	DRAINING OF CONDENSATE *: 0 = manual semiautomatic, self-relieving 1 = manual semiautomatic, non relieving 3 = automatic, self-relieving (only for G3/8 and G1/2) 4 = depressurisation, self-relieving (only G1/4) 5 = depressurisation, protected, self-relieving 8 = no drain, port G1/8, self-relieving
<b>4</b>	WORKING PRESSURE = 0,5 + 10 2 = 0 + 2 (only G1/4) 4 = 0 + 4 7 = 0,5 + 7 (only G1/4)

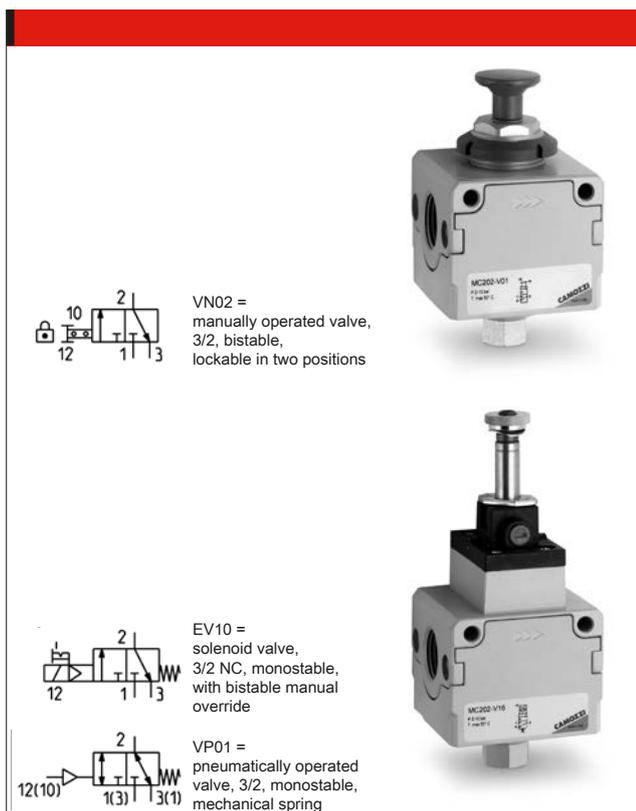
\* = Further details about condensate drains are available at the end of this chapter

## Series MC lockable isolation 3/2-way valves

Electropneumatic, pneumatic and manual version

Ports G1/4, G3/8 and G1/2

Modular



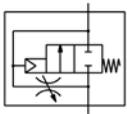
### CODING EXAMPLE

MC	2	02	-	V	16
----	---	----	---	---	----

<b>MC</b>	SERIES
<b>2</b>	SIZE: 1 = G1/4 2 = G3/8 - G1/2
<b>02</b>	PORTS: 04 = G1/4 38 = G3/8 02 = G1/2
<b>V</b>	3/2-WAY VALVE
<b>16</b>	DESIGN TYPE: 16 = electropneumatic 36 = pneumatic 01 = padlock valve (manual command)

## Series MC soft start valves

Ports G1/4, G3/8 and G1/2  
Modular



AVP1 =  
Soft start valve

### CODING EXAMPLE

MC	2	02	-	AV
----	---	----	---	----

**MC** SERIES

**2** SIZE:  
1 = G1/4  
2 = G3/8 - G1/2

**02** PORTS:  
04 = G1/4  
38 = G3/8  
02 = G1/2

**AV** SOFT START VALVE

## Series MC take-off blocks

Ports G1/4 and G1/2  
Modular



BL01 =  
take-off block



BL02 =  
take-off block with VNR

### CODING EXAMPLE

MC	2	-	B	-	VNR
----	---	---	---	---	-----

**MC** SERIES

**2** SIZE:  
1 = G1/4  
2 = G1/2

**B** TAKE OFF BLOCK

**VNR** VERSION:  
VNR = with no return valve

## Series MC assembled FRL

Ports G1/4, G3/8 and G1/2



### CODING EXAMPLE

MC	2	02	-	C	-	5	-	FL
----	---	----	---	---	---	---	---	----

#### MC SERIES

**2** SIZE:  
1 = G1/4  
2 = G3/8 - G1/2

**02** PORT:  
04 = G1/4  
38 = G3/8  
02 = G1/2

**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 NO  
HNC = V01 + D + L + V16 + AV + PRESS NC  
N = V01 + D PN = D + V16 + AV  
QN = V01 + D + V16 + AV  
TN = V01 + D + L + V16 + AV  
U = F13 + FB3 (only for 3/8 - 1/2)  
ZNA = V01 + D + V16 + AV + PRESS NO  
ZNC = V01 + D + V16 + AV + PRESS NC

**5** FILTERING ELEMENT:  
5 = 5 µm (standard)  
25 = 25 µm (upon request)

**FL** VERSION:  
FL = with terminal flanges (without brackets)

LEGEND:  
D = Filter-regulator 0.5-10 bar, semi-automatic-manual drain with relieving, filtering element 5 µm or 25 µm  
L = Lubricator  
V01 = 3/2-way manually operated valve  
F = Filter 5 µm or 25 µm  
R = Regulator 0.5-10 bar with relieving  
V16 = 3/2-way electropneumatically operated valve  
AV = Soft start valve  
PRESS NO = Pressure switch, Normally Open  
PRESS NC = Pressure switch, Normally Closed  
F13 = Filter 5 µm with automatic drain  
FB3 = Coalescing filter 0.01 µm with automatic drain

## Series MC manifold pressure regulators

Ports G1/4  
Modular



### CODING EXAMPLE

MC	1	04	-	M	0	0
----	---	----	---	---	---	---

#### MC SERIES

**1** SIZE:  
1 = G1/4

**04** PORT:  
04 = G1/4

**M** MANIFOLD REGULATOR

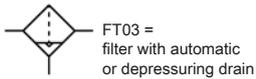
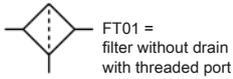
**0** OPERATING PRESSURE:  
0 = 0,5 + 10 (standard)  
1 = 0 + 4  
2 = 0,5 + 2  
7 = 0,5 + 7

**0** CONSTRUCTION:  
0 = self-relieving (standard)  
1 = non-relieving  
5 = precise relieving

## Series MD filters

New

Ports with interchangeable cartridges: threaded (1/8, 1/4, 3/8) or integrated with super-rapid fitting for tube with  $\varnothing$  6, 8 and 10 mm. Modular assembly  
Bowl with technopolymer cover and bayonet-type mounting



### CODING EXAMPLE

MD	1	-	F	0	0	0	-	1/8
----	---	---	---	---	---	---	---	-----

**MD** SERIES

**1** DIMENSION:  
1 = 42 mm

**F** FILTER

**0** FILTERING ELEMENT:  
0 = 25  $\mu$ m  
1 = 5  $\mu$ m

**0** CONDENSATE DRAIN\*:  
0 = semiautomatic-manual drain  
5 = automatic drain, protected depressurisation  
8 = direct G1/8 exhaust

**0** VISUAL BLOCKAGE INDICATOR:  
0 = not present  
1 = present

**1/8** PORTS (IN - OUT)\*:  
= without cartridges  
1/8 = G1/8  
1/4 = G1/4  
3/8 = G3/8  
6 = tube  $\varnothing$  6  
8 = tube  $\varnothing$  8  
10 = tube  $\varnothing$  10

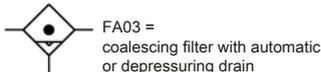
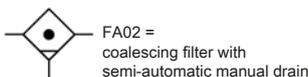
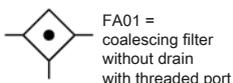
\* NOTE: if the inlet (IN) cartridge is different from the outlet (OUT) cartridge, both dimensions shall be indicated.  
Example: MD1-F000-1/4-10

\* = Further details about condensate drains are available at the end of this chapter

## Series MD coalescing filters

New

Ports with interchangeable cartridges: threaded (1/8, 1/4, 3/8) or integrated with super-rapid fitting for tube with  $\varnothing$  6, 8 and 10 mm. Modular assembly  
Bowl with technopolymer cover and bayonet-type mounting



### CODING EXAMPLE

MD	1	-	FC	0	0	0	-	1/8
----	---	---	----	---	---	---	---	-----

**MD** SERIES

**1** DIMENSION:  
1 = 42 mm

**FC** COALESCING FILTER

**0** FILTERING ELEMENT:  
0 = 0,01  $\mu$ m  
1 = 1  $\mu$ m

**0** CONDENSATE DRAIN\*:  
0 = semiautomatic-manual drain  
5 = automatic drain, protected depressurisation  
8 = direct G1/8 exhaust

**0** VISUAL BLOCKAGE INDICATOR:  
0 = not present  
1 = present

**1/8** PORTS (IN - OUT)\*:  
= without cartridges  
1/8 = G1/8  
1/4 = G1/4  
3/8 = G3/8  
6 = tube  $\varnothing$  6  
8 = tube  $\varnothing$  8  
10 = tube  $\varnothing$  10

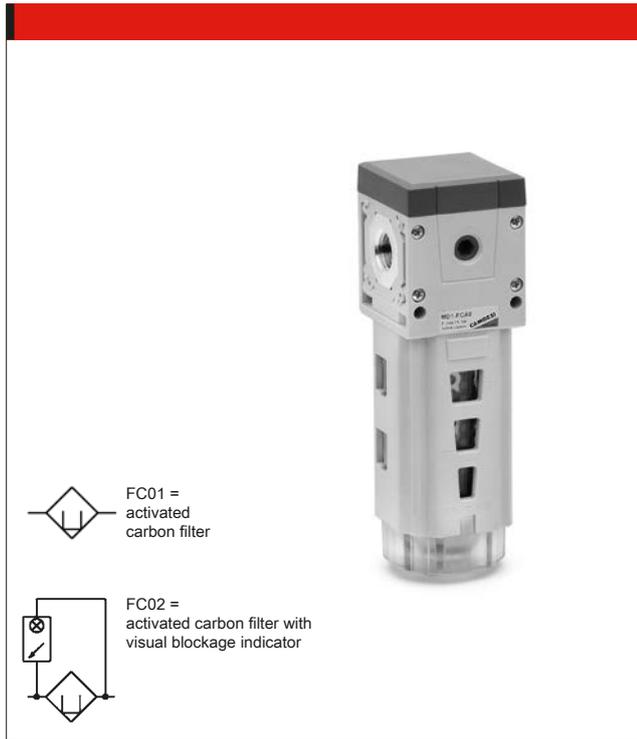
\* NOTE: if the inlet (IN) cartridge is different from the outlet (OUT) cartridge, both dimensions shall be indicated.  
Example: MD1-FC000-1/4-10

\* = Further details about condensate drains are available at the end of this chapter

## Series MD activated carbon filters

New

Ports with interchangeable cartridges: threaded (1/8, 1/4, 3/8) or integrated with super-rapid fitting for tube with  $\varnothing$  6, 8 and 10 mm. Modular assembly  
Bowl with technopolymer cover and bayonet-type mounting



FC01 = activated carbon filter

FC02 = activated carbon filter with visual blockage indicator

### CODING EXAMPLE

MD 1 - FCA 0 - 1/8

**MD** SERIES

**1** DIMENSION:  
1 = 42 mm

**FCA** ACTIVATED CARBON FILTER

**0** VISUAL BLOCKAGE INDICATOR:  
0 = not present  
1 = present

**1/8** PORTS (IN - OUT)\*:  
= without cartridges  
1/8 = G1/8  
1/4 = G1/4  
3/8 = G3/8  
6 = tube  $\varnothing$  6  
8 = tube  $\varnothing$  8  
10 = tube  $\varnothing$  10

\* NOTE: if the inlet (IN) cartridge is different from the outlet (OUT) cartridge, both dimensions shall be indicated.  
Example: MD1-FCA1-1/4-10

## Series MD pressure regulators

New

Ports with interchangeable cartridges: threaded (1/8, 1/4, 3/8) or integrated with super-rapid fitting for tube with  $\varnothing$  6, 8 and 10 mm  
Versions: single, combined with other functions, Manifold



RM01 = manifold regulator with relieving

RM02 = manifold regulator without relieving

RM03 = manifold regulator with relieving and by-pass valve

RM04 = manifold regulator without relieving, with by-pass valve

PR01 = regulator without relieving

PR02 = regulator with relieving

PR03 = regulator with relieving and by-pass valve

PR04 = regulator without relieving, with by-pass valve

### CODING EXAMPLE

MD 1 - R T 0 0 - 1/4 - ■ - ●

**MD** SERIES

**1** DIMENSION:  
1 = 42 mm

**R** TYPER OF REGULATOR:  
R = pressure regulator - M = Manifold pressure regulator

**T** OPERATING PRESSURE (1 bar = 14,5 psi):  
0 = 0.5 ÷ 10 bar  
2 = 0 ÷ 2 bar  
4 = 0 ÷ 4 bar  
7 = 0.5 ÷ 7 bar  
T = calibrated \*\*  
B = locked \*\*

**0** DESIGN TYPE:  
0 = with relieving - 1 = without relieving  
2 = with relieving and by-pass valve - 3 = without relieving, with by-pass valve

**0** PRESSURE GAUGE:  
0 = without pressure gauge (with 1/8 port)

**1/4** PORTS (IN - OUT)\*:  
= without cartridges  
1/8 = G1/8  
1/4 = G1/4  
3/8 = G3/8  
6 = tube  $\varnothing$  6  
8 = tube  $\varnothing$  8  
10 = tube  $\varnothing$  10

\* NOTE: if the inlet (IN) cartridge is different from the outlet (OUT) cartridge, both dimensions shall be indicated.  
Example: MD1-R020-1/4-10

\*\* NOTE: IF THE REGULATOR IS CALIBRATED OR LOCKED, AFTER THE PORTS ADD THE INLET PRESSURE "■" AND THE OUTLET PRESSURE "●"

INLET PRESSURE: ■ = enter the SUPPLY pressure value

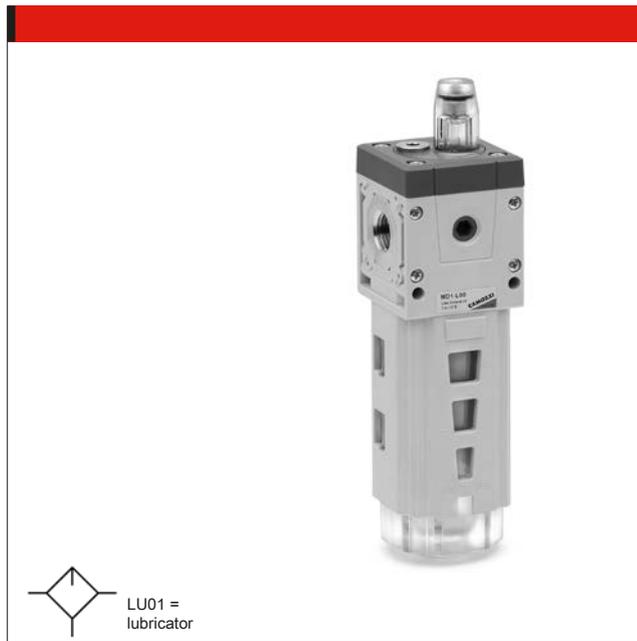
OUTLET PRESSURE: ● = enter the OUTLET pressure value for the LOCKED regulator or the maximum value of the ADJUSTABLE pressure for the CALIBRATED regulator.

Example of a calibrated regulator with Inlet Pressure = 6.3 bar and Outlet Pressure = 4.5 bar.  
Complete part number: MD1-RT00-1/4-6.3-4.5

## Series MD lubricators

New

Ports with interchangeable cartridges: threaded (1/8, 1/4, 3/8) or integrated with super-rapid fitting for tube with  $\varnothing$  6, 8 and 10 mm. Modular assembly  
Bowl with technopolymer cover and bayonet-type mounting



### CODING EXAMPLE

MD 1 - L 0 0 - 1/8

MD SERIES

1 DIMENSION:  
1 = 42 mm

L LUBRICATOR

00 DESIGN TYPE:  
00 = oil mist with refill valve  
10 = oil mist without refill valve

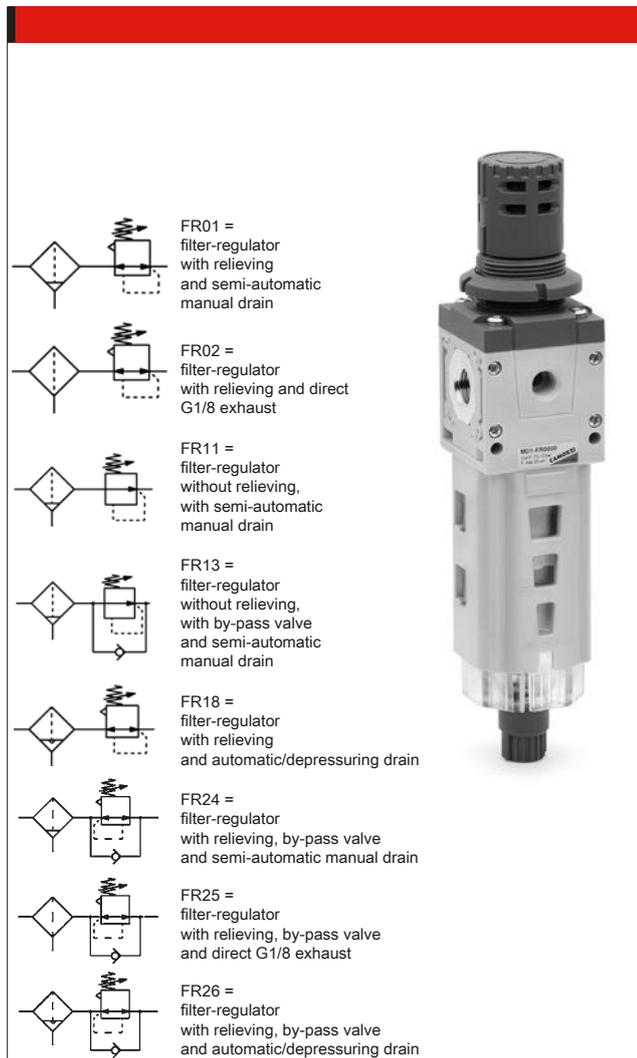
1/8 PORTS (IN - OUT)\*:  
= without ports  
1/8 = G1/8  
1/4 = G1/4  
3/8 = G3/8  
6 = tube  $\varnothing$  6  
8 = tube  $\varnothing$  8  
10 = tube  $\varnothing$  10

\* NOTE: if the inlet (IN) cartridge is different from the outlet (OUT) cartridge, both dimensions shall be indicated.  
Example: MD1-L00-1/4-1/8

## Series MD pressure filter-regulators

New

Ports with interchangeable cartridges: threaded (1/8, 1/4, 3/8) or integrated with super-rapid fitting for tube with  $\varnothing$  6, 8 and 10 mm. Modular assembly  
Bowl with technopolymer cover and bayonet-type mounting



FR01 = filter-regulator with relieving and semi-automatic manual drain

FR02 = filter-regulator with relieving and direct G1/8 exhaust

FR11 = filter-regulator without relieving, with semi-automatic manual drain

FR13 = filter-regulator without relieving, with by-pass valve and semi-automatic manual drain

FR18 = filter-regulator with relieving and automatic/depressuring drain

FR24 = filter-regulator with relieving, by-pass valve and semi-automatic manual drain

FR25 = filter-regulator with relieving, by-pass valve and direct G1/8 exhaust

FR26 = filter-regulator with relieving, by-pass valve and automatic/depressuring drain

### CODING EXAMPLE

MD 1 - FR 0 0 0 0 - 1/8

MD SERIES

1 DIMENSION:  
1 = 42 mm

FR FILTER-REGULATOR

0 FILTERING ELEMENT AND DESIGN TYPE:  
0 = 25  $\mu$ m with relieving  
1 = 5  $\mu$ m with relieving  
2 = 25  $\mu$ m without relieving \*  
3 = 5  $\mu$ m without relieving \*  
4 = 25  $\mu$ m with relieving and by-pass valve  
5 = 5  $\mu$ m with relieving and by-pass valve  
6 = 25  $\mu$ m without relieving, with by-pass valve \*  
7 = 5  $\mu$ m without relieving, with by-pass valve \*  
\* this option is available with semiautomatic-manual drain only

0 CONDENSATE DRAIN:  
0 = semiautomatic-manual drain  
5 = automatic drain, protected depressurisation  
8 = direct G1/8 exhaust

0 OPERATING PRESSURE (1 bar = 14,5 psi):  
0 = 0.5 + 10 bar  
2 = 0 + 2 bar  
4 = 0 + 4 bar  
7 = 0.5 + 7 bar

0 PRESSURE GAUGE:  
0 = without pressure gauge (with 1/8 port)

1/8 PORTS (IN - OUT)\*:  
= without cartridges  
1/8 = G1/8  
1/4 = G1/4  
3/8 = G3/8  
6 = tube  $\varnothing$  6  
8 = tube  $\varnothing$  8  
10 = tube  $\varnothing$  10

\* NOTE: if the inlet (IN) cartridge is different from the outlet (OUT) cartridge, both dimensions shall be indicated.  
Example: MD1-FR0000-1/4-1/8

## Series MD lockable isolation 3/2-way valves

New

Ports with interchangeable cartridges: threaded (1/8, 1/4, 3/8) or integrated with super-rapid fitting for tube with  $\varnothing$  6, 8 and 10 mm. Modular. Manual, electro-pneumatic, servo-pilot and pneumatic control



**VN27** = valve with lockable manual control

**EV10** = valve with electro-pneumatic control, bistable manual override, lever type

**YES1** = valve with pneumatic control

**EV54** = valve with electro-pneumatic control, monostable manual override

**EV55** = valve with electro-pneumatic control without manual override

### CODING EXAMPLE

MD	1	-	V	01	-	1/8
----	---	---	---	----	---	-----

**MD** SERIES

**1** DIMENSION:  
1 = 42 mm

**V** 3/2-WAY VALVE

**01** DESIGN TYPE:  
01 = lockable manual control  
16 = electro-pneumatic control, Push & Turn manual override  
161L = electro-pneumatic control, bistable manual override, lever type  
161M = electro-pneumatic control, monostable manual override  
161T = electro-pneumatic control without manual override  
36 = pneumatic control

**1/8** PORTS (IN - OUT) \*:  
= without cartridges  
1/8 = G1/8 - 1/4 = G1/4 - 3/8 = G3/8  
6 = tube  $\varnothing$  6 - 8 = tube  $\varnothing$  8 - 10 = tube  $\varnothing$  10

\* NOTE: if the inlet (IN) cartridge is different from the outlet (OUT) cartridge, both dimensions shall be indicated. Example: MD1-V01-1/4-1/8

3

TREATMENT

## Series MD soft start valves

New

Ports with interchangeable cartridges: threaded (1/8, 1/4, 3/8) or integrated with super-rapid fitting for tube with  $\varnothing$  6, 8 and 10 mm. Modular assembly



**AVP1** = soft start valve

### CODING EXAMPLE

MD	1	-	AV	-	1/8
----	---	---	----	---	-----

**MD** SERIES

**1** DIMENSION:  
1 = 42 mm

**AV** SOFT START VALVE

**1/8** PORTS (IN - OUT) \*:  
= without cartridges - 1/8 = G1/8 - 1/4 = G1/4 - 3/8 = G3/8  
6 = tube  $\varnothing$  6 - 8 = tube  $\varnothing$  8 - 10 = tube  $\varnothing$  10

\* NOTE: if the inlet (IN) cartridge is different from the outlet (OUT) cartridge, both dimensions shall be indicated. Example: MD1-AV-1/4-1/8

## Series MD take-off blocks

New

Module with interchangeable cartridges: threaded (1/8, 1/4, 3/8) or integrated with super-rapid fitting for tube with  $\varnothing$  6, 8 and 10 mm (5-way version). Intermediate joining cartridge (3-way version)



**BL01** = take-off block

### CODING EXAMPLE

MD	1	-	B	00	-	1/8
----	---	---	---	----	---	-----

**MD** SERIES

**1** DIMENSION:  
1 = 42 mm

**B** TAKE-OFF BLOCK

**00** DESIGN TYPE:  
00 = standard derivation

**1/8** PORTS (IN - OUT) \*:  
= without cartridges - 1/8 = G1/8 - 1/4 = G1/4 - 3/8 = G3/8  
6 = tube  $\varnothing$  6 - 8 = tube  $\varnothing$  8 - 10 = tube  $\varnothing$  10

\* NOTE: if the inlet (IN) cartridge is different from the outlet (OUT) cartridge, both dimensions shall be indicated. Example: MD1-B00-3/8-10

# Series MD assembled FRL

New

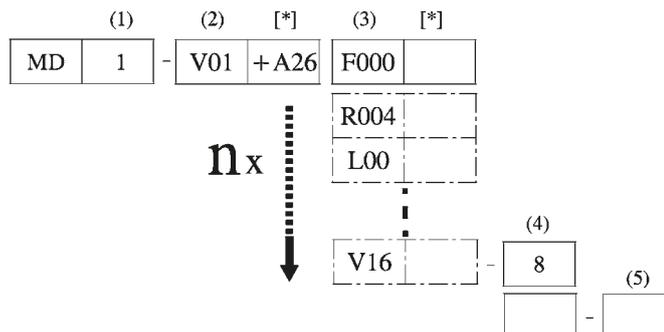
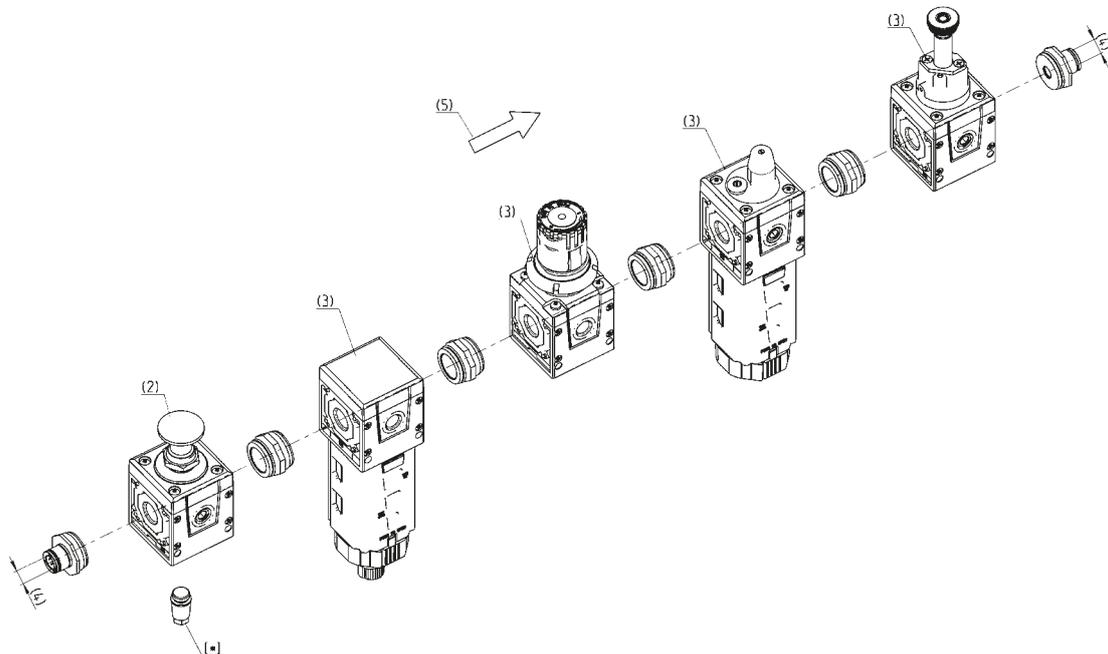
Ports with interchangeable cartridges: threaded (1/8, 1/4, 3/8)  
or integrated with super-rapid fitting for tube with  $\varnothing$  6, 8 and 10 mm  
Modular assembly



3

TREATMENT

## Configuration of Series MD assembled groups



Configuration of the assembled group in the drawing below:  
MD1-V01+A26F000R000L00V16-8

**CONFIGURATOR OF SERIES MD ASSEMBLED GROUPS**

<b>MD</b>	<b>1</b>	<b>-</b>	<b>V01</b>	<b>F000</b>	<b>R004</b>	<b>L00</b>	<b>V16</b>	<b>-</b>	<b>8</b>	<b>-</b>	<b>LH</b>
-----------	----------	----------	------------	-------------	-------------	------------	------------	----------	----------	----------	-----------

<b>MD</b>		SERIES
<b>1</b>	( 1 )	DIMENSION: 1 = 42 mm
<b>-</b>		
<b>V01</b>	( 2 )	<p>MODULE + [ * ] (to configure the modules, see the single components pages):</p> <p>F... = Filter  FC... = Coalescing filter  FCA... = Activated carbons filter  R... = Pressure regulator  L... = Lubricator  FR... = Filter-Regulator  V... = Lockable isolation valve  AV... = Soft start valve  B... = Take-off block</p> <p>[ * ]</p> <p>The following ACCESSORIES can be added after every single module:</p> <p>REGULATOR, FILTER-REGULATOR AND MANIFOLD REGULATOR</p> <p>+A01 = M043-P04 (pressure gauge)  +A02 = M043-P06 (pressure gauge)  +A03 = M043-P10 (pressure gauge)  +A04 = M043-P12 (pressure gauge)  +A05 = SWCN-P10-P3-2 (pressure switch)  +A06 = SWCN-P10-P4-2 (pressure switch)  +A07 = SWCN-P10-P4-M (pressure switch)  +A08 = PG010-PB-1/8 (pressure gauge)</p> <p>LOCKABLE ISOLATION VALVE ...V01 / V16 / V36</p> <p>+A25 = 2901 1/8 (silencier)  +A26 = 2921 1/8 (silencier) - recommended choice  +A27 = 2931 1/8 (silencier)  +A28 = 2938 1/8 (silencier)  +A01 = M043-P04 (pressure gauge)  +A02 = M043-P06 (pressure gauge)  +A03 = M043-P10 (pressure gauge)  +A04 = M043-P12 (pressure gauge)  +A05 = SWCN-P10-P3-2 (pressure switch)  +A06 = SWCN-P10-P4-2 (pressure switch)  +A07 = SWCN-P10-P4-M (pressure switch)  +A08 = PG010-PB-1/8 (pressure gauge)</p> <p>LOCKABLE ISOLATION VALVE...V16</p> <p>+A35 = U7H (coils 12V DC)  +A36 = U77 (coils 24V DC)  +A37 = U79 (coils 48V DC)  +A38 = U7K (coils 110V AC)  +A39 = U7J (coils 230V AC)  +A40 = G7H (coils 12V DC)  +A41 = G77 (coils 24V DC)  +A42 = G79 (coils 48V DC)  +A43 = G7K (coils 110V AC)  +A44 = G7J (coils 230V AC)</p> <p>SOFT START VALVE AND 5-WAY TAKE-OFF BLOCK</p> <p>+A15 = PM11-NC (pressure switch mounted on top)  +A16 = PM11-NA (pressure switch mounted on top)  +A17 = PM681-1 (pressure switch mounted on top)  +A18 = PM681-3 (pressure switch mounted on top)  +A19 = PM11-SC + S2520 1/8-1/4 (pressure switch with fitting mounted on top)  +A05 = SWCN-P10-P3-2 (front mounted pressure switch)  +A06 = SWCN-P10-P4-2 (front mounted pressure switch)  +A07 = SWCN-P10-P4-M (front mounted pressure switch)  +A08 = PG010-PB-1/8 (front mounted pressure switch)</p> <p>INTERMEDIATE JOINING CARTRIDGE WITH DERIVATION (MD1-B)</p> <p>+A17 = PM681-1 (pressure switch mounted on top)  +A18 = PM681-3 (pressure switch mounted on top)</p>
<b>F000</b>	( 3 )	see MODULE (2) + [ * ]
<b>R004</b>	( 3 )	see MODULE (2) + [ * ]
<b>L00</b>	( 3 )	see MODULE (2) + [ * ]
<b>V16</b>	( 3 )	see MODULE (2) + [ * ]
<b>-</b>		
<b>8</b>	( 4 )	<p>PORTS (IN - OUT)**:</p> <p>= without cartridges</p> <p>1/8 = G1/8  1/4 = G1/4  3/8 = G3/8  6 = tube ø 6  8 = tube ø 8  10 = tube ø 10</p>
<b>-</b>		
<b>LH</b>	( 5 )	<p>FLOW DIRECTION:</p> <p>= from left to right (standard)  LH = from right to left</p>

nx = the combination "(3) + (\*)" can be repeated an odd ("n") number of times

\*\* NOTE: if the inlet (IN) cartridge is different from the outlet (OUT) cartridge, both dimensions shall be indicated. Example: MD1-V01F000R004-3/8-8

## Series N filters and coalescing filters

New version

Ports G1/8, G1/4

Available with transparent PA12 bowl or nickel-plated brass bowl for the small version (N1)



CODING EXAMPLE									
N	2	04	-	F	0	0	-		
<b>N</b>	SERIES								
<b>2</b>	SIZE: 1 = small bowl (11 cm <sup>3</sup> ) 2 = normal bowl (28 cm <sup>3</sup> )								
<b>04</b>	PORTS: 08 = G1/8 04 = G1/4								
<b>F</b>	FILTER								
<b>0</b>	FILTERING ELEMENT: 0 = 25µm (standard) 1 = 5µm B = 0.01µm								
<b>0</b>	TYPE OF CONDENSATE DRAIN*: 0 = manual - semiautomatic drain 4 = depressurisation - only normal bowl (2) 5 = depressurisation, protected - only normal bowl (2) 8 = no drain, port G1/8								
	BOWL MATERIAL: = transparent PA12 (standard) TM = nickel-plated brass (only in the small size with semi-automatic manual drain or without drain)								
* = Further details about condensate drains are available at the end of this chapter									

## Series N pressure regulators

Ports G1/8, G1/4



CODING EXAMPLE										
N	12	04	-	R	T	0	-	■	-	●
<b>N</b>	SERIES									
<b>12</b>	SIZE: 12									
<b>04</b>	PORTS: 08 = G1/8 04 = G1/4									
<b>R</b>	REGULATOR									
<b>T</b>	OPERATING PRESSURE: 0 = 0.5 ÷ 10 bar (standard) 1 = 0 ÷ 4 bar 2 = 0 ÷ 2 bar 7 = 0.5 ÷ 7 bar T = calibrated * B = locked *									
<b>0</b>	DESIGN TYPE: 0 = self-relieving 1 = non-relieving									
* NOTE: IF THE REGULATOR IS CALIBRATED OR LOCKED, AFTER THE DESIGN TYPE ADD THE INLET PRESSURE "■" AND THE OUTLET PRESSURE "●"										
INLET PRESSURE: ■ = enter the SUPPLY pressure value										
OUTLET PRESSURE: ● = enter the OUTLET pressure value for the LOCKED regulator or the maximum value of the ADJUSTABLE pressure for the CALIBRATED regulator										
Example of a calibrated regulator with Inlet Pressure = 6.3 bar and Outlet Pressure = 4.5 bar Complete part number: N1204-RT0-6.3-4.5										

## Series N lubricators

New version

Ports G1/8, G1/4

Available with transparent PA12 bowl or nickel-plated brass bowl for the small version (N1)



### CODING EXAMPLE

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

<b>N</b>	SERIES
<b>2</b>	SIZE: 1 = small bowl (26 cm <sup>3</sup> ) 2 = normal bowl (37 cm <sup>3</sup> )
<b>04</b>	PORTS: 08 = G1/8 04 = G1/4
<b>L</b>	LUBRICATOR
<b>00</b>	DESIGN TYPE: 00 = atomized oil
BOWL MATERIAL: = transparent PA12 (standard) TM = nickel-plated brass (only in the small size)	

3

TREATMENT

## Series N filter-regulators

New version

Ports G1/8, G1/4

Available with transparent PA12 bowl or nickel-plated brass bowl for the small version (N1)



### CODING EXAMPLE

N	2	04	-	D	0	0	-	4	-
---	---	----	---	---	---	---	---	---	---

<b>N</b>	SERIES
<b>2</b>	SIZE: 1 = small bowl (11 cm <sup>3</sup> ) 2 = normal bowl (28 cm <sup>3</sup> )
<b>04</b>	PORTS: 08 = G1/8 04 = G1/4
<b>D</b>	FILTER-REGULATOR
<b>0</b>	FILTERING ELEMENT: 0 = 25µm (standard) 1 = 5µm
<b>0</b>	DRAINING OF CONDENSATE AND DESIGN TYPE: 0 = semi-automatic manual drain with self-relieving 1 = semi-automatic manual drain without relieving 4 = depressurisation with self-relieving (with normal bowl only) 5 = protected depressurisation with self-relieving (with normal bowl only) 8 = no drain (direct port 1/8), with self-relieving
<b>4</b>	OPERATING PRESSURE: = 0,5 + 10 bar (standard) 2 = 0 + 2 bar 4 = 0 + 4 bar 7 = 0,5 + 7 bar
BOWL MATERIAL: = transparent PA12 (standard) TM = nickel-plated brass (only in the small size with semi-automatic manual drain or without drain)	

## Series CLR micro pressure regulators

Ports G1/4, G1/8  
 With banjo stem with or without relieving  
 Available with or without banjo in technopolymer

PR03 =  
Regulator with  
relieving and  
by-pass valve

PR04 =  
Regulator without  
relieving and with  
by-pass valve

Mod.  
**CLR 1/8-4**  
**CLR 1/8-6**  
**CLR 1/8-8**  
**CLR 1/4-6**  
**CLR 1/4-8**

Mod.  
**CLR 1/8**  
**CLR 1/4**

### CODING EXAMPLE

CL	R		1/8	-	01	-	4
----	---	--	-----	---	----	---	---

<b>CL</b>	SERIES
<b>R</b>	REGULATOR
<b>1/8</b>	PORTS: 1/8 = G1/8 - 1/4 = G1/4
	DESIGN TYPE: = with relieving 01 = without relieving
<b>4</b>	TUBE: = without banjo 4 = ø 4 mm (G1/8 only) 6 = ø 6 mm 8 = ø 8 mm

## Series M pressure microregulators

Ports G1/8, G1/4

PR01 =  
regulator without  
relieving

PR02 =  
regulator with  
relieving

PR03 =  
regulator with  
relieving and  
by-pass valve

Mod.  
**M008-R00\***  
**M004-R00\***

\* = calibrated or blocked regulator  
available on request

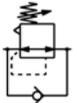
### CODING EXAMPLE

M	0	04	-	R	T	0	-	■	-	●
---	---	----	---	---	---	---	---	---	---	---

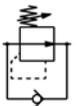
<b>M</b>	SERIES
<b>0</b>	SIZE
<b>04</b>	PORTS: 08 = G1/8 - 04 = G1/4
<b>R</b>	REGULATOR
<b>T</b>	OPERATING PRESSURE: 0 = 0.5 ÷ 10 bar (standard) 1 = 0 ÷ 4 bar 2 = 0 ÷ 2 bar 7 = 0.5 ÷ 7 bar T = calibrated * B = locked *
<b>0</b>	DESIGN TYPE: 0 = self relieving 1 = non relieving 5 = precise setting
	REGULATION TYPE: = without high relief flow (standard) VS = high relief flow
<p>* NOTE: IF THE REGULATOR IS CALIBRATED OR LOCKED, AFTER THE REGULATION TYPE ADD THE INLET PRESSURE "■" AND THE OUTLET PRESSURE "●"</p> <p>INLET PRESSURE: ■ = enter the SUPPLY pressure value</p> <p>OUTLET PRESSURE: ● = enter the OUTLET pressure value for the LOCKED regulator or the maximum value of the ADJUSTABLE pressure for the CALIBRATED regulator</p> <p>Example of a calibrated regulator with Inlet Pressure = 6.3 bar and Outlet Pressure = 4.5 bar                  Complete part number: M04-RT0-6.3-4.5</p>	

## Series T pressure microregulators

Ports G1/8 and G1/4



PR03 =  
regulator with  
relieving and  
by-pass valve



PR04 =  
regulator without  
relieving and  
with by-pass valve

Mod.  
T108-R00  
T104-R00

### CODING EXAMPLE

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

**T** SERIES

**1** SIZE

**08** PORTS:  
08 = G1/8  
04 = G1/4

**R** REGULATOR

**0** OPERATING PRESSURE:  
0 = 0,5 ÷ 10  
1 = 0 ÷ 4  
2 = 0 ÷ 2  
7 = 0 ÷ 7 (standard)

**0** DESIGN TYPE:  
0 = self-relieving  
1 = non relieving

3

TREATMENT

## Series PR precision regulators with manual override

Ports: G1/4



PR02 =  
regulator  
with relieving

### CODING EXAMPLE

PR	1	04	-	M	07
----	---	----	---	---	----

**PR** SERIES

**1** SIZE:  
1 = size 1

**04** PORTS:  
04 = G1/4

**M** TYPE OF ADJUSTMENT:  
M = manual

**07** OPERATING PRESSURE (1 bar = 14,5 psi):  
02 = 0,05 ÷ 2 bar  
04 = 0,05 ÷ 4 bar  
07 = 0,05 ÷ 7 bar (standard)

## Accessories for the air treatment

Systems of rapid connections designed to make the mouting easier

### Rapid clamp kit for Series MX - size 2

Mod.  
**MX2-X**  
**MX2-Z**



Kit MX2-X supplied with:  
1 rapid clamp, 1 O-ring OR 3125 \*,  
2 exagonal nuts M5, 2 screws M5x69  
Kit MX2-Z supplied with:  
1 rapid clamp, 1 O-ring OR 3125 \*,  
1 exagonal 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 steel nuts and screws

### Rapid clamp kit for Series MX - size 3

Mod.  
**MX3-X**  
**MX3-Z**



Kit MX3-X supplied with:  
1 rapid clamp, 1 O-ring OR 38X2,8 \*\*,  
2 square nuts M6, 2 screws M6x75  
Kit MX3-Z supplied with:  
1 rapid clamp, 1 O-ring OR 38X2,8 \*\*,  
1 square nut M6, 1 screw M6x75, 1 screw M6x90 for wall fixing

\*\* = it can be ordered separately (OR 38X2,8 NBR)

Materials: technopolymer clamp, NBR O-ring,  
zinc-plated steel nuts and screws

### Rapid clamp kit with wall fixing brackets for Series MX - size 2

Mod.  
**MX2-Y**



The kit MX2-Y is supplied with:  
1 wall rapid clamp, 1 O-ring OR 3125 \*\*,  
2 exagonal nuts M5, 2 screws M5x69

\*\* = it can be separately ordered (cod. 160-39-11/19)

Materials: technopolymer clamp, NBR O-ring,  
zinc-plated steel nuts and screws

### Rapid clamp kit with wall fixing brackets for Series MX - size 3

Mod.  
**MX3-Y**



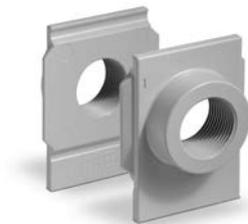
The kit MX3-Y is supplied with:  
1 wall rapid clamp, 1 O-ring OR 38X2,8 \*\*,  
2 square nuts M6, 2 screws M6x75

\*\* = it can be also separately ordered (OR 38X2,8 NBR)

Materials: technopolymer clamp, NBR O-ring,  
zinc-plated steel nuts and screws

### Terminal flanges (IN/OUT) for Series MX

Mod.  
**MX2-3/8-FL**  
**MX2-1/2-FL**  
**MX2-3/4-FL**  
**MX3-3/4-FL**  
**MX3-1-FL**



The kit is supplied with:  
- 1 flange INLET side  
- 1 flange OUTLET side

Materials: painted aluminium flanges

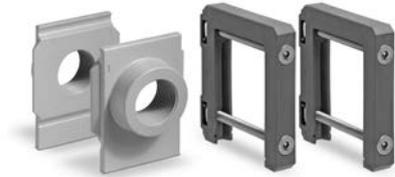
### Fixing bracket for Series MX and Series MC regulators

Mod.  
**MX2-S** for Series MX and Series MC (Mod. MC238 and MC202)  
**MX3-S** for Series MX only



The kit is supplied with  
1 zinc-plated steel bracket

**Rapid clamps kit + flanges for Series MX**



The kit is supplied with:

- MX2-3/8-HH** 1x MX2-3/8-FL + 2x MX2-X
- MX2-1/2-HH** 1x MX2-1/2-FL + 2x MX2-X
- MX2-3/4-HH** 1x MX2-3/4-FL + 2x MX2-X
- MX2-3/8-JJ** 1x MX2-3/8-FL + 2x MX2-Z
- MX2-1/2-JJ** 1x MX2-1/2-FL + 2x MX2-Z
- MX2-3/4-JJ** 1x MX2-3/4-FL + 2x MX2-Z
- MX3-3/4-HH** 1x MX3-3/4-FL + 2x MX3-X
- MX3-1-HH** 1x MX3-1-FL + 2x MX3-X
- MX3-3/4-JJ** 1x MX3-3/4-FL + 2x MX3-Z
- MX3-1-JJ** 1x MX3-1-FL + 2x MX3-Z

**Rapid clamps kit with wall fixing brackets + flanges for Series MX**



The kit is supplied with:

- MX2-3/8-KK** 1x MX2-3/8-FL + 2x MX2-Y
- MX2-1/2-KK** 1x MX2-1/2-FL + 2x MX2-Y
- MX2-3/4-KK** 1x MX2-3/4-FL + 2x MX2-Y
- MX3-3/4-KK** 1x MX3-3/4-FL + 2x MX3-Y
- MX3-1-KK** 1x MX3-1-FL + 2x MX3-Y

**O-ring for Series MX - MC assembly**

Mod.

- 160-39-11/19** (O-ring OR 3125) for Series MX2
- OR 38X2,8 NBR** (O-ring OR 38X2,8) for Series MX3
- 458-33/1** (O-ring OR 2068) for Mod. MC104
- 80-26-11/4T** (O-ring OR 3100) for MC238, MC202 [spare part only]



**Block for Series MX pressure gauge fixing**

Mod.

- MX2-R26-P**
- MX3-R26-P**



The kit is supplied with:

- 1 block
- 1 grain
- 2 screws
- 1 seal

**Terminal flanges for Series MC (kit A)**

Mod.

- MC104-FL**
- MC238-FL**
- MC202-FL**



The kit MC104-FL is supplied with:

- 1x left flange; 1x right flange; 4x screws M4x14; 2x O-Ring 2068

Each of the kits MC202-FL and MC238-FL is supplied with:

- 1x left flange; 1x right flange; 4x screws M5x14; 2x O-Ring 3100

Materials: painted aluminium flanges, zinc-plated steel screws and NBR O-ring

**Mounting bracket for Series MC (kit B)**

for terminals 1/4, 3/8, 1/2

Mod.

- MC104-ST**



The kit MC104-ST is supplied with:

- 2x terminal brackets
- 4x screws M5x10

Materials: zinc-plated steel brackets and screws

**Mounting bracket for Series MC - M - N - T**

For regulators and filter-regulators (G1/4 - G1/8)

Mod.

- C114-ST**



The kit is supplied with:

- 1x zinc-plated steel bracket

**Mounting bracket for Series MC - M - N - T**

For regulators and filter-regulators (G1/4 - G1/8)

Mod.

- C114-ST/1**



The kit is supplied with:

- 1 zinc-plated steel bracket

**Mounting bracket for Series MC - M - N - T**

For regulators and filter-regulators (G1/4 - G1/8)

Mod.

**C114-ST/2**

The kit is supplied with:  
1 zinc-plated steel bracket

**Mounting bracket for Series MC**

For MC238 and MC202

Mod.

**C238-ST/1**

The kit is supplied with:  
1 bracket;  
2 screws M5X65

Materials: zinc-plated steel bracket and screws

**Tie-rods for assembling, Series MC (kit C)**

Mod.

**MC1-TMF****MC2-TMF**

The kit MC1-TMF is supplied with:  
2 male/female tie-rods; 1 O-ring 2068  
The kit MC2-TMF is supplied with:  
2 male/female tie-rods; 1 O-ring 3100

Materials: nickel-plated steel tie-rods and NBR O-ring

**Tie-rods for assembling, Series MC (kit D)**

Mod.

**MC1-TFF****MC2-TFF**

The kit MC1-TFF is supplied with:  
2 female tie-rods  
The kit MC2-TFF is supplied with:  
2 female tie-rods

Materials: nickel-plated steel tie-rods

**Screws for assembling, Series MC (kit E)**

Mod.

**MC1-VM****MC2-VM**

The kit MC1-VM is supplied with:  
2 male screws; 1 O-ring 2068  
The kit MC2-VM is supplied with:  
2 male screws; 1 O-ring 3100

Materials: zinc-plated steel screws and NBR O-ring

**Screws for assembling, Series MC (kit F)**

Mod.

**MC1-VMF****MC2-VMF**

The kit is supplied with:  
2 male screws; 2 female screws;  
1 O-ring (OR 2068 for MC1-VMF; OR 3100 for MC2-VMF)

Materials: zinc-plated steel male screws, nickel-plated steel female screws and NBR O-ring

**Screws for assembling Series MC (kit G) to join 2 bodies type "M"**

Mod.

**MC1-VMD****MC2-VMD**

The kit MC1-VMD is supplied with:  
4 screws M4X10; 4 spacers; 2 O-ring 2068  
The kit MC2-VMD is supplied with:  
4 screws M5X12; 4 spacers; 2 O-ring 3100

Materials: zinc-plated steel screws, brass spacers and NBR O-ring

**Mounting bracket F - L Series N (for N204)**

for filters and lubricators

Mod.

**N204-ST**

The kit is supplied with:  
1 bracket  
2 screws M5X6

Materials: zinc-plated steel bracket and screws

## Pressure gauges Mod. M043.. - M053.. - M063..

Precision class CL1,6

<p>Pressure gauges with radial connection</p>  <p>Mod. M043-R06 M043-R12 M053-R12 M063-R12</p>	<p>Pressure gauges with rear connection</p>  <p>Mod. M043-P02,5 M043-P04 M043-P06 M043-P10 M043-P12 M053-P04 M053-P06 M053-P10 M053-P12 M063-P04 M063-P06 M063-P12</p>	<p>Pressure gauges for panel mounting</p>  <p>Mod. M043-F04 M043-F06 M043-F10 M043-F12 M063-F12</p>
---	---	--

## Series PG digital pressure gauges

Possibility of a direct mounting with rear or panel connection

<p>Series PG digital pressure gauges - battery-powered</p>  <p>Mod. PG010-PB-1/8 PG001-VB-1/8 PG010-PB-1/4 PG001-VB-1/4</p>	<p>Series PG digital pressure gauges - with cable</p>  <p>Mod. PG010-PB-1/8-2 PG001-VB-1/8-2 PG010-PB-1/4-M PG001-VB-1/4-M</p>
---	---

### CODING EXAMPLE

PG	010	-	P	B	-	1/8	-	2
----	-----	---	---	---	---	-----	---	---

<b>PG</b>	SERIES
<b>010</b>	BOTTOM SCALE: 010 = 10 bar 001 = -1 bar
<b>P</b>	PRESSURE RANGE: P = pressure V = vacuum
<b>B</b>	LIGHTING: B = back light
<b>1/8</b>	PNEUMATIC CONNECTIONS: 1/8 = G 1/8 BSPP; M5 1/4 = G 1/4 BSPP; M5 (for battery-powered version only)
<b>2</b>	ELECTRICAL CONNECTION (for version with cable only): 2 = with unshielded 2-pole cable of 2 m M = with cable of 150 mm and M8 4-pole connector

### Accessories for Series PG

#### Mounting brackets

Mod.  
PG-B

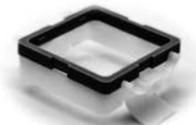
Supplied with:  
1x bracket type  
1x bracket type  
2x screws M3x6



#### Panel mounting adapter

Mod.  
PG-F

Supplied with:  
1x adapter type A  
1x adapter type B



# Functioning condensate drains Filtering elements

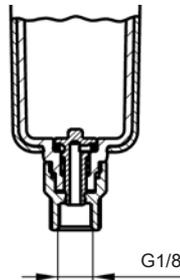
Semi-automatic manual drain; Automatic drain;  
Depressurisation drain; Depressurisation drain, protected  
Port 1/8 (without drain)



## Functioning condensate drains for Series MX, MC and N

### Semi-automatic manual drain (Type: 0 and 1)

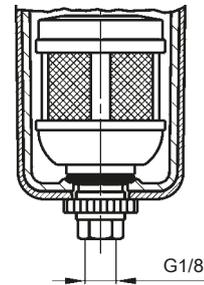
Functioning: with the operator mechanism turned clockwise, each time the pressure falls below 0.3 bar, the draining of condensate will be released; when resetting the pressure, the drain will close again. The release can also be carried out manually; when the bowl is pressurised, the operator mechanism is pushed upwards.



To avoid the discharge of condensate, the operator mechanism should be turned clockwise to completely close the drain.

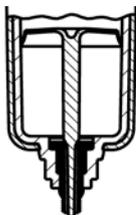
### Automatic drain (Type: 3)

Functioning: the presence of liquid inside the bowl raises the float, thus opening the exhaust valve.



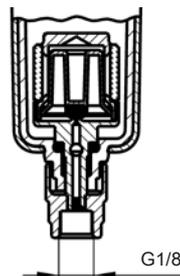
### Depressurisation drain (Type: 4)

Functioning: each time air is required from the inlet, a slight difference of pressure is created between the upper part and lower part of the drain that rises, thus opening the exhaust valve.



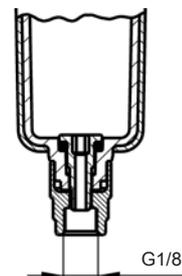
### Depressurisation drain (Type 5)

Solution similar to the Type 4 but requiring a  $\Delta P = 1$  bar. Functioning: this version has a filtering element which prevents any impurities from clogging the exhaust hole.



### Without drain (Type 8)

The solution with port G1/8 is used to assemble the items to the bowl which is realized with a through hole of  $\text{Å}3$  mm and a threaded port G1/8.



## 4 > Connection



### Super-rapid fittings

		<b>Page</b>
Series 6000	<p><b>Super-rapid fittings for plastic tubes</b></p>  <p>Tube external diameters: 3, 4, 5, 6, 8, 10, 12, 14, 16 mm Fittings threads: 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)</p>	171
Series 7000	<p><b>Super-rapid Compact fittings in technopolymer</b></p>  <p>Tube external diameters: 4, 6, 8, 10, 12, 16 mm Fittings threads: metric (M5, M7), BSP (G1/8, G1/4, G3/8, G1/2, G3/4)</p>	175
Series 8000	<p><b>Dual seal super-rapid fittings</b></p>  <p>Tube external diameters: 4, 6, 8, 10, 12 mm Fittings threads: BSP (G1/8, G1/4, G3/8, G1/2)</p>	177
Series X6000	<p><b>Super-rapid fittings in stainless steel 316L</b></p>  <p>Tube external diameters: 4, 6, 8, 10, 12 mm Fittings threads: BSP (G1/8, G1/4, G3/8, G1/2), BSPT (R1/8, R1/4, R3/8, R1/2)</p>	178

## Rapid fittings

		<b>Page</b>
Series 1000	<b>Rapid push-in fittings for plastic tubes</b>	179
	Tube external diameters: 5/3, 6/4, 8/6, 10/8, 12/10, 15/12,5 mm Fittings threads: metric (M5, M6, M12x1, M12x1,25), BSP (G1/8, G1/4, G3/8, G1/2), BSPT (R1/8, R1/4, R3/8, R1/2)	

## Universal fittings

		<b>Page</b>
Series 1000	<b>Universal nose fittings</b>	182
	Nose fittings for plastic, copper and brass tubes ø 4, 6, 8, 10, 12 mm Fittings threads: BSP (G1/8, G1/4), BSPT (R1/8, R1/4, R3/8, R1/2)	

## Fittings accessories

		<b>Page</b>
Series S2000	<b>Pipe fittings Sprint®</b>	183
	Fittings threads: BSP (G1/8, G1/4, G3/8, G1/2), BSPT (R1/8, R1/4, R3/8, R1/2)	
Series 2000	<b>Pipe fittings</b>	184
	Fittings threads: metric (M5), BSP (G1/8, G1/4, G3/8, G1/2, G3/4, G1), BSPT (R1/8, R1/4, R3/8, R1/2, R3/4, R1)	

## Quick-release couplings

		<b>Page</b>
Series 5000	<b>Quick-release couplings</b>	186
	Nominal diameters: 5 and 7 mm Couplings threads: G1/8, G1/4, G3/8, G1/2 Plastic tubes: 6/4, 8/6, 10/8 Rubber hoses: 6x14, 8x17, 10x19, 13x23	
Series 5000L, 5000LT	<b>Quick-release couplings for the conditioning of moulds for plastics</b>	187
	Nominal diameters: 5, 7 mm Couplings threads: G1/8, G1/4, G3/8	

## Tubing, spirals and accessories

		<b>Page</b>
Series T, MPL, PNZ	<b>Tubing, spirals and accessories</b>	188
	Tubes: reinforced PVC Polyamide PA12, Hytrel Polyester, Polyethylene, PU Diameters : 4/2, 5/3, 6/4, 8/6, 10/8, 12/10, 15/12,5 mm	

# Series 6000 super-rapid fittings for plastic tubes

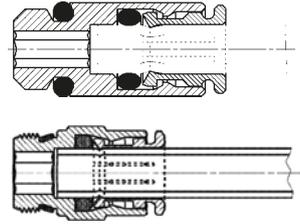
Tube external diameters: 3, 4, 5, 6, 8, 10, 12, 14, 16 mm

Fittings threads: 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)

Series 6000 super-rapid fittings have been designed with a special collet which provides an homogeneous tight on the whole surface of plastic tubes, thus ensuring high reliability and a long service life, also after connections and disconnections of the tube are repeated several times. The wide range of these fittings includes many types of threads: metric, BSP and BSPT. Sprint models are characterized by great reliability of female threads, both BSP and BSPT, with non-flat surfaces. This is possible thanks to a Teflon ring on the male thread, which guarantees a perfect seal between the two threads.

The "Stop Fitting" model is available with a self-retaining device which interrupts the air flow when the tube is disconnected and restores it when reconnected.

New models



- Mod.  
**S6510 4-1/8 S6510 10-1/4**  
**S6510 4-1/4 S6510 10-3/8**  
**S6510 5-1/8 S6510 10-1/2**  
**S6510 5-1/4 S6510 12-1/4**  
**S6510 6-1/8 S6510 12-3/8**  
**S6510 6-1/4 S6510 12-1/2**  
**S6510 6-3/8 S6510 14-3/8**  
**S6510 8-1/8 S6510 14-1/2**  
**S6510 8-1/4 S6510 16-1/2**  
**S6510 8-3/8 S6510 16-3/4**  
**S6510 8-1/2**

Male Connector **Sprint**<sup>®</sup>



- Mod.  
**S6510 4-1/8-LF**  
**S6510 6-1/8-LF**

Male Connector **Sprint**<sup>®</sup>  
with self-retaining device



- Mod. Micro  
**6512 3-M3<sup>°</sup>**  
**6512 3-M5<sup>\*</sup>**  
**6512 4-M7-M<sup>\*</sup>**  
**6512 4-1/8-M<sup>\*^</sup>**  
**6512 6-M7-M<sup>\*</sup>**  
**6512 6-1/8-M<sup>\*^</sup>**  
**6512 8-1/8-M<sup>\*^</sup>**  
**6512 10-1/4-M<sup>\*</sup>**

<sup>°</sup> = with gasket  
<sup>\*</sup> = with O-Ring  
<sup>^</sup> = this model can be used on Series Y valve islands

Metric-BSP Male Connector



- Mod.  
**6512 4-M5 6512 10-1/4**  
**6512 4-M6 6512 10-3/8**  
**6512 4-1/8 6512 12-1/4**  
**6512 4-1/4 6512 12-3/8**  
**6512 5-M5**  
**6512 6-M5**  
**6512 6-M6**  
**6512 6-1/8**  
**6512 6-1/4**  
**6512 8-1/8**  
**6512 8-1/4**  
**6512 8-3/8**

Metric-BSP Male Connector



- Mod.  
**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**

Metric-BSP Female Connector



- Mod.  
**S6520 4-1/8 S6520 8-1/2**  
**S6520 4-1/4 S6520 10-1/4**  
**S6520 5-1/8 S6520 10-3/8**  
**S6520 5-1/4 S6520 10-1/2**  
**S6520 6-1/8 S6520 12-1/4**  
**S6520 6-1/4 S6520 12-3/8**  
**S6520 6-3/8 S6520 12-1/2**  
**S6520 8-1/8 S6520 14-3/8**  
**S6520 8-1/4 S6520 14-1/2**  
**S6520 8-3/8**

Swivel Male Elbow **Sprint**<sup>®</sup>



- Mod. Micro  
**6522 3-M3<sup>°</sup>**  
**6522 3-M5<sup>\*</sup>**  
<sup>°</sup> = with gasket  
<sup>\*</sup> = with O-Ring

Metric Swivel Male Elbow



- Mod.  
**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**

Metric-BSP Swivel Male Elbow



- Mod.  
**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**

Metric Fix Male Elbow



- Mod.  
**6525 6-1/8**  
**6525 6-1/4**  
**6525 8-1/8**  
**6525 8-1/4**

Long Swivel Male Elbow **Sprint**<sup>®</sup>



Complete Metric Adjustable Single Banjo



- Mod.  
**6501 4-M5**

Metric Fix Male Elbow



Mod.  
**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 Male Tee **Sprint®**



Mod. Micro  
**6432 3-M3°**  
**6432 3-M5\***

° = with gasket  
 \* = with O-Ring

Metric Swivel Male Tee



Mod.  
**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**

Metric-BSP Swivel Male Tee



Mod.  
**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**

Lateral Swivel Male Tee **Sprint®**



Mod. Micro  
**6442 3-M3°**  
**6442 3-M5\***

° = with gasket  
 \* = with O-Ring

Lateral Metric Swivel Male Tee



Mod.  
**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**

Lateral Metric-BSP Swivel Male Tee



Mod. Micro  
**6452 3-M3°**  
**6452 3-M5\***

° = with gasket  
 \* = with O-Ring

Metric Swivel Male Y



Mod.  
**6451 4-M5\***  
**6451 6-M5\***  
**S6450 4-1/8°**  
**S6450 6-1/8°**  
**S6450 8-1/8°**  
**S6450 8-1/4°**

\* = Metric Adjustable Male Y  
 (not swivel Model with gasket)  
 ° = Swivel Male Y **Sprint®**



Mod.  
**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**

\* = Complete Metric Swivel Single Banjo

Complete BSP Swivel Single Banjo



Mod.  
**6632 4-1/8**  
**6632 6-1/8**  
**6632 6-1/4**  
**6632 8-1/8**  
**6632 8-1/4**  
**6632 10-1/4**

Complete BSP Swivel Double Banjo



Mod.  
**6620 4-M5°**  
**6620 4-1/8\***  
**6620 6-1/8\***  
**6620 6-1/4\***  
**6620 8-1/8\***  
**6620 8-1/4\***

Double Banjo  
 Assembled with:  
 ° = Mod. SCU, SVU, SCO...  
 \* = Mod. 1631, 1635, SCU, SVU, SCO...



Mod.  
**1631 01-**  
**1631 02-**  
**1631 03-**

01... = Single Banjo Stem  
 02... = Double Banjo Stem  
 03... = Triple Banjo Stem



Mod.  
**6610 4-M5\***   **6610 6-1/8\***  
**6610 4-M6°**   **6610 6-1/4\***  
**6610 4-1/8\***   **6610 8-1/8\***  
**6610 5-M5\***   **6610 8-1/4\***  
**6610 5-M6°**   **6610 8-3/8\***  
**6610 5-1/8\***   **6610 10- 1/4\*\***  
**6610 6-M5\***   **6610 10- 3/8\*\***  
**6610 6-M6°**   **6610 12-1/2^**

Single Banjo  
 Assembled with:  
 \* = Mod. 1631  
 ° = Mod. SCU, SVU, SCO...  
 \* = Mod. 1631, 1635, SCU, SVU, SCO...  
 \*\* = Mod. 1635, SCU, SVU, SCO...  
 ^ = Mod. 1635



Mod.  
**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**

\* = with O-Ring

Metric Male Adaptor **Sprint®**



Mod.  
**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**

45° Male Elbow **Sprint®**

Mod. Micro  
**6590 3**



Bulkhead Connector

Mod.  
**6590 4**  
**6590 5**  
**6590 6**  
**6590 8**  
**6590 10**  
**6590 12**  
**6590 14**



Bulkhead Connector

Mod. Micro  
**6580 3**



Union Connector

Mod.  
**6580 4**  
**6580 5**  
**6580 6**  
**6580 8**  
**6580 10**  
**6580 12**  
**6580 14**  
**6580 16**



Union Connector

Mod.  
**6580 6-4**  
**6580 8-6**  
**6580 10-8**  
**6580 12-10**



Reducer Union Connector

Mod.  
**6593 6-1/8**  
**6593 6-1/4**  
**6593 8-1/8**  
**6593 8-1/4**  
**6593 10-3/8**



BSP Female Bulkhead

Mod. Micro  
**6550 3**



Elbow connector

Mod.  
**6550 4**  
**6550 5**  
**6550 6**  
**6550 8**  
**6550 10**  
**6550 12**  
**6550 14**



Elbow connector

Mod. Micro  
**6540 3**



Tee Connector

Mod.  
**6540 4**  
**6540 5**  
**6540 6**  
**6540 8**  
**6540 10**  
**6540 12**  
**6540 14**



Tee Connector

Mod.  
**6600 4**  
**6600 5**  
**6600 6**  
**6600 8**  
**6600 10**  
**6600 12**



Cross Junction

Mod. Micro  
**6560 3**



Y Union

Mod.  
6560 4  
6560 6  
6560 8  
6560 10



Y Union

Mod.  
6700 3  
6700 4  
6700 5  
6700 6  
6700 8  
6700 10



Cartridge for both metallic and synthetic seat

Mod.  
6750 4  
6750 6  
6750 8  
6750 10  
6750 12



Female Plug

Mod.  
6850 6-4  
6850 8-6



Enlarger Junction

Mod. Micro  
6800 3-4



Reducer Junction

Mod.  
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 10-14  
6800 12-14



Reducer Junction

Mod.  
6950 4  
6950 6  
6950 8  
6950 10  
6950 12  
6950 14



Junction

Mod.  
6555 4-4  
6555 6-6  
6555 8-8  
6555 10-10



Junction Elbow

Mod.  
6708 4  
6708 5  
6708 6  
6708 8  
6708 10  
6708 12  
6708 14



Protection caps  
Colour: Black  
Self-extinguishing material, class V0

Mod. Micro  
6900 3



Plastic Male Plug

Mod.  
6900 4  
6900 5  
6900 6  
6900 8  
6900 10  
6900 12  
6900 14



Plastic Male Plug

Mod.  
SP



The set includes keys to disconnect tubes with diameters between 4 and 12 mm

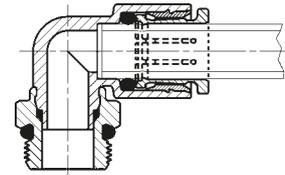
# Series 7000 super-rapid Compact fittings in technopolymer

New models

Tube external diameters: 4, 6, 8, 10, 12, 16 mm

Fittings threads: metric (M5, M7), BSP (G1/8, G1/4, G3/8, G1/2, G3/4)

Series 7000 super-rapid fittings are realized in technopolymer. Compact and lightweight, they are suitable for applications where weight can be a key factor. The special collet, which has been designed properly for this series, provides an homogeneous tight on the whole surface of plastic tubes, thus ensuring high reliability and long service life, also after connections and disconnections of the tube are repeated several times. Series 7000 fittings are the answer to the many requests coming from the Pneumatic and Automation market. The new "Stop Fitting" model is available with a self-retaining device which interrupts the air flow when the tube is disconnected and restores it when reconnected.



 <p>Mod. 7522 4-M5 7522 10-1/4 7522 4-M7 7522 10-3/8 7522 4-1/8 7522 10-1/2 7522 4-1/4 7522 12-1/4 7522 6-M5 7522 12-3/8 7522 6-M7 7522 12-1/2 7522 6-1/8 7522 16-1/2 7522 6-1/4 7522 16-3/4 7522 8-1/8 7522 8-1/4 7522 8-3/8</p> <p>Metric-BSP Male Swivel Elbow</p>	 <p>Mod. 7522 4-1/8-LF 7522 6-1/8-LF</p> <p>Metric-BSP Male Swivel Elbow with self-retaining device</p>	 <p>Mod. 7526 4-1/8 7526 6-1/8 7526 6-1/4 7526 8-1/8 7526 8-1/4</p> <p>Long BSP Male Swivel Elbow</p>
 <p>Mod. 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*</p> <p>Lateral BSP Swivel Male Tee</p> <p>* = model without mounting holes</p>	 <p>Mod. 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</p> <p>BSP Swivel Male Tee</p>	 <p>Mod. 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</p> <p>BSP Swivel Male Multi Tee Reducer</p>
 <p>Mod. 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</p> <p>BSP Swivel Male Y</p>	 <p>Mod. 7572 4-1/8 7572 4-1/4 7572 6-1/8 7572 6-1/4</p> <p>BSP Male Double Y</p>	 <p>Mod. 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</p> <p>Complete BSP Swivel Single Banjo</p>
 <p>Mod. 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</p> <p>Complete BSP Swivel Double Banjo</p>	 <p>Mod. 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</p> <p>Single Banjo Assembled with Mod. 7632 02, 7632 03</p>	 <p>Mod. 7640 4-1/8 7640 6-1/8 7640 6-1/4 7640 8-1/8 7640 8-1/4 7640 10-1/4</p> <p>Double Banjo Assembled with Mod. 7632 02, 7632 03</p>



Mod.  
7632 02-1/8  
7632 02-1/4  
7632 02-3/8

Double Banjo Stem  
Assembled with Mod. 7610, 7640



Mod.  
7632 03-1/8  
7632 03-1/4

Triple Banjo Stem  
Assembled with Mod. 7610, 7640



Mod.  
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

Complete BSP Double Adjustable  
Single Banjo



Mod.  
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

Complete BSP Triple Adjustable  
Single Banjo



Mod.  
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

Complete BSP Double Adjustable  
Double Banjo



Mod.  
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

Complete BSP Triple Adjustable  
Double Banjo



Mod.  
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

Reducer Junction



Mod.  
7555 4-4  
7555 6-6  
7555 8-8  
7555 10-10  
7555 12-12

Junction Elbow



Mod.  
7580 4  
7580 6  
7580 8  
7580 10  
7580 12

Union Connector



Mod.  
7550 4  
7550 6  
7550 8  
7550 10  
7550 12  
7550 16\*

\* = model without  
mounting holes

Elbow Connector



Mod.  
7540 4  
7540 6  
7540 8  
7540 10  
7540 12  
7540 16\*

\* = model without  
mounting holes

Tee Connector



Mod.  
7545 6-4  
7545 8-6  
7545 10-8

Multi Tee Reducer



Mod.  
7560 4  
7560 6  
7560 8  
7560 10  
7560 6-4  
7560 8-6  
7560 10-8

Y Connector - Reducer



Mod.  
7575 6-4  
7575 8-6

Reduced Double Y



Mod.  
7950 4  
7950 6  
7950 8  
7950 10  
7950 12

Plastic Junction

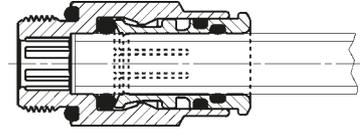
# Series 8000 dual seal super-rapid fittings

New models

Tube external diameters: 4, 6, 8, 10, 12 mm

Fittings threads: BSP (G1/8, G1/4, G3/8, G1/2)

With its vast experience in manufacturing push-in connections for the pneumatics industry and its indepth research into fluid power systems, Camozzi has developed Series 8000 super-rapid fitting evolving from Series 6000, which has been which has been extensively tested in the pneumatic sector. A patented additional seal provides a double tight on the tube, thus ensuring a highly reliable connection and avoiding any possible leakage that may occur. Connection and disconnection of the tube can be repeated several times without the use of proper tools and without compromising the performance of the fitting of the sealing on the tube. The NBR seals are standard and can be easily replaced with FKM and EDM seals.



 <p>Mod. <b>8512 4-1/8</b> <b>8512 6-1/8</b> <b>8512 6-1/4</b> <b>8512 8-1/8</b> <b>8512 8-1/4</b> <b>8512 10-1/4</b> <b>8512 10-3/8</b> <b>8512 12-3/8</b> <b>8512 12-1/2</b></p> <p>BSP Male Connector</p>	 <p>Mod. Micro <b>8522 4-1/8</b> <b>8522 6-1/8</b> <b>8522 6-1/4</b> <b>8522 8-1/8</b> <b>8522 8-1/4</b> <b>8522 10-1/4</b> <b>8522 10-3/8</b> <b>8522 12-3/8</b> <b>8522 12-1/2</b></p> <p>BSP Swivel Male Elbow</p>	 <p>Mod. <b>8432 4-1/8</b> <b>8432 6-1/8</b> <b>8432 8-1/8</b> <b>8432 8-1/4</b></p> <p>BSP Swivel Male Tee</p>
 <p>Mod. <b>8580 4</b> <b>8580 6</b> <b>8580 8</b></p> <p>Union Connector</p>	 <p>Mod. <b>8540 4</b> <b>8540 6</b> <b>8540 8</b></p> <p>Tee Connector</p>	 <p>Mod. <b>8550 4</b> <b>8550 6</b> <b>8550 8</b></p> <p>Elbow Connector</p>

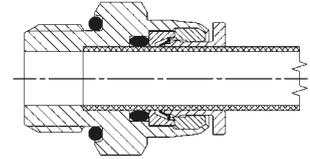
# Series X6000 super-rapid fittings in stainless steel 316L

Tube external diameters: 4, 6, 8, 10, 12 mm

Fittings threads: BSP (G1/8, G1/4, G3/8, G1/2), BSPT (R1/8, R1/4, R3/8, R1/2)

Series X6000 fittings have been designed to offer versatility and ease of installation without any compromise in quality or performance. They are suitable for applications in the pneumatics, fluids, chemical, medical, food and packaging industries.

Series X6000 fittings are practical and safe and allow the connection of fluids even in aggressive environments. The collet ensures excellent grip between the fitting and tubing.

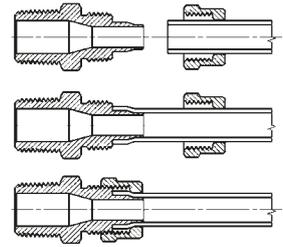


 <p>Mod. X6510 4-1/8 X6510 4-1/4 X6510 6-1/8 X6510 6-1/4 X6510 8-1/8 X6510 8-1/4 X6510 10-1/4 X6510 10-3/8 X6510 10-1/2 X6510 12-1/4 X6510 12-3/8 X6510 12-1/2</p> <p>BSPT Male Connector</p>	 <p>Mod. X6512 4-1/8 X6512 4-1/4 X6512 6-1/8 X6512 6-1/4 X6512 8-1/8 X6512 8-1/4 X6512 10-1/4 X6512 10-3/8 X6512 10-1/2 X6512 12-1/4 X6512 12-3/8 X6512 12-1/2</p> <p>BSP Male Connector</p>	 <p>Mod. 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</p> <p>BSPT Fix Elbow</p>
 <p>Mod. 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</p> <p>BSPT Swivel Elbow</p>	 <p>Mod. 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</p> <p>BSPT Swivel Centre Tee</p>	 <p>Mod. 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</p> <p>BSP Swivel Elbow</p>
 <p>Mod. 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</p> <p>BSP Swivel Centre Tee</p>	 <p>Mod. X6580 4 X6580 6 X6580 8 X6580 10 X6580 12</p> <p>Union Connector</p>	 <p>Mod. X6550 4 X6550 6 X6550 8 X6550 10 X6550 12</p> <p>Elbow Connector</p>
 <p>Mod. X6540 4 X6540 6 X6540 8 X6540 10 X6540 12</p> <p>Tee Connector</p>	 <p>Mod. X6590 4 X6590 6 X6590 8 X6590 10 X6590 12</p> <p>Bulkhead Union Connector</p>	 <p>Mod. X6800 4-6 X6800 4-8 X6800 6-8 X6800 6-10 X6800 6-12 X6800 8-10 X6800 8-12 X6800 10-12</p> <p>Reducer Tube/Stem</p>

## Series 1000 rapid push-in fittings for plastic tubes

Tube external diameters: 5/3, 6/4, 8/6, 10/8, 12/10, 15/12,5 mm  
Fittings threads: metric (M5, M6, M12x1, M12x1,25),  
BSP (G1/8, G1/4, G3/8, G1/2), BSPT (R1/8, R1/4, R3/8, R1/2)

Series 1000 rapid push-in fittings can be easily installed.  
The push-in locking nuts can be tightened both manually and with a spanner even  
in case of stiff tubes like the PA or the Hytrel Polyester.  
The special shape of the guiding cone ensures that the tube cannot be accidentally cut.



Mod.  
1510 5/3-1/8  
1510 6/4-1/8  
1510 6/4-1/4  
1510 6/4-3/8  
1510 6/4-1/2  
1510 6/4-M12x1,25  
1510 8/6-1/8  
1510 8/6-1/4  
1510 8/6-3/8  
1510 8/6-1/2  
1510 10/8-1/8  
1510 10/8-1/4  
1510 10/8-3/8  
1510 10/8-1/2  
1510 12/10-3/8  
1510 12/10-1/2  
1510 15/12,5-1/2

Metric-BSPT Male Connector



Mod.  
1511 5/3-M5\*  
1511 5/3-M6\*  
1511 5/3-1/8  
1511 6/4-M5\*  
1511 6/4-M6\*  
1511 6/4-1/8  
1511 6/4-1/4  
1511 6/4-3/8  
1511 8/6-1/8  
1511 8/6-1/4  
1511 8/6-3/8  
1511 10/8-1/8  
1511 10/8-1/4  
1511 10/8-3/8  
1511 10/8-1/2  
1511 12/10-3/8  
1511 12/10-1/2  
1511 15/12,5-1/2

\* = with O-Ring

Metric Male Connector *Sprint*<sup>®</sup>



Mod.  
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

Swivel Male Connector *Sprint*<sup>®</sup>



Mod.  
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

BSP Female Connector



Mod.  
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

Swivel Male Elbow *Sprint*<sup>®</sup>



Mod.  
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

Fix Metric-BSPT Male Elbow



Mod.  
1501 5/3-M5

Metric Fix Male Elbow



Mod.  
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

BSP Female Elbow



Mod.  
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

Swivel Male Tee *Sprint*<sup>®</sup>



Mod.  
 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 10/8-1/2  
 1410 12/10-3/8  
 1410 12/10-1/2  
 1410 15/12,5-1/2

BSPT Fix Male Tee



Mod.  
 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

Lateral BSPT Male Tee



Mod.  
 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

Complete Metric-BSP  
 Single Adjustable Banjo



Mod.  
 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

Complete Single  
 Adjustable Long Banjo



Single Banjo  
 Assembled with:  
 ° = Mod. 1631, 1635  
 ° = Mod. SCU, SVU, SCO...  
 \* = Mod. 1631, 1635,  
 SCU, SVU, SCO...  
 \*\* = Mod. 1635, SCU, SVU,  
 SCO...  
 ^ = Mod. 1635



Mod.  
 1620 6/4-M5°  
 1620 6/4-1/8°  
 1620 6/4-1/4°  
 1620 8/6-1/8°  
 1620 8/6-1/4°

Double Banjo  
 Assembled with:  
 ° = Mod. 1631, 1635  
 \* = Mod. 1631, 1635, SCU, SVU, SCO...



Mod.  
 1631 01-M5\*  
 1631 01-1/8  
 1631 01-1/4  
 1631 01-3/8  
 1631 01-1/2

\* = zinc-plated  
 steel

Single Banjo Stem  
 Assembled with adjustable fittings  
 Mod. 6610, 6620, 1610, 1620, 2023, 1170



Mod.  
 1635 01-1/8  
 1635 01-1/4  
 1635 01-3/8  
 1635 01-1/2  
 1635 01-M12x1,25\*  
 1635 01-M12x1,5\*

Single Long Banjo Stem  
 Assembled with adjustable fittings  
 Mod. 6610, 6620, 1610, 1620, 2023, 1170  
 \* = Models that can be assembled with  
 1/4 banjo fittings



Mod.  
 1631 02-1/8  
 1631 02-1/4  
 1631 02-3/8  
 1631 02-3/8

Double Banjo Stem  
 Assembled with adjustable fittings  
 Mod. 6610, 6620, 1610, 1620, 2023, 1170



Mod.  
 1635 02-1/8  
 1635 02-1/4  
 1635 02-3/8  
 1635 02-1/2

Double Long Banjo Stem  
 Assembled with adjustable fittings  
 Mod. 6610, 6620, 1610, 1620, 2023, 1170



Mod.  
 1631 03-1/8  
 1631 03-1/4  
 1631 03-3/8

Triple Banjo Stem  
 Assembled with adjustable fittings  
 Mod. 6610, 6620, 1610, 1620, 2023, 1170



Mod.  
 1580 5/3  
 1580 6/4  
 1580 8/6  
 1580 10/8  
 1580 12/10  
 1580 15/12,5  
 1580 8/6-6/4  
 1580 10/8-6/4

Union Connector



Mod.  
1590 5/3  
1590 6/4  
1590 8/6  
1590 10/8  
1590 12/10  
1590 6/4-5/3  
1590 8/6-6/4

Bulkhead Union Reducer



Mod.  
1550 6/4  
1550 8/6  
1550 10/8  
1550 12/10  
1550 15/12,5

Elbow Connector



Mod.  
1540 5/3  
1540 6/4  
1540 8/6  
1540 10/8  
1540 12/10  
1540 15/12,5  
1540 8/6-6/4  
1540 10/8-6/4  
1540 10/8-8/6

Tee Connector



Mod.  
1600 6/4  
1600 8/6

Cross Connector



Mod.  
1470 6/4  
1470 8/6

Adaptor with Junction



Mod.  
2651 1/8  
2651 1/4  
2651 3/8  
2651 1/2  
2651 1

Aluminium Washer



Mod.  
2661 M3  
2661 M5  
2661 M6  
2661 1/8  
2661 1/4  
2661 3/8  
2661 1/2

Plastic Washer



Mod.  
2665 1/8  
2665 1/4  
2665 3/8  
2665 1/2

Plastic Washer



Mod.  
2669 1/8  
2669 1/4  
2669 3/8  
2669 1/2

Plastic Washer



Mod.  
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

Blocking nut



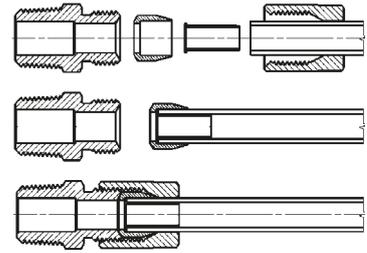
Mod.  
1723 6/4-M10x1  
1723 8/6-M12x1  
1723 10/8-M14x1  
1723 12/10-M16x1  
1723 15/12,5-M20x1

Blocking nut with metal spring

## Series 1000 universal nose fittings

Nose fittings for plastic, copper and brass tubes:  $\varnothing$  4, 6, 8, 10, 12 mm  
 Fittings threads: BSP (G1/8, G1/4), BSPT (R1/8, R1/4, R3/8, R1/2)

Series 1000 nose fittings are used with plastic tubes as well as with copper, brass, steel and aluminium tubes.  
 These fittings, which are suitable for several applications, can be used within pneumatic, oil-pressure and low-pressure hydraulic circuits.  
 The fittings seats, noses and nuts comply with the DIN 3870-3861 standards.

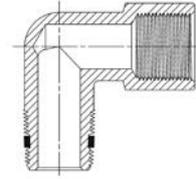


 <p>Mod.                      1050 4-1/8                      1050 6-1/8                      1050 6-1/4                      1050 8-1/8                      1050 8-1/4                      1050 8-3/8                      1050 10-1/4                      1050 10-3/8                      1050 10-1/2                      1050 12-1/4*                      1050 12-3/8*                      1050 12-1/2*</p> <p>* = with bi-conical olive</p> <p>BSPT Male Connector</p>	 <p>Mod.                      1063 4-1/8                      1063 6-1/8                      1063 6-1/4                      1063 8-1/8                      1063 8-1/4</p> <p>BSP Female Connector</p>	 <p>Mod.                      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*</p> <p>* = with bi-conical olive</p> <p>BSPT Fix Male Elbow</p>
 <p>Mod.                      1093 4-1/8                      1093 6-1/8                      1093 6-1/4                      1093 8-1/8                      1093 8-1/4</p> <p>BSP Female Elbow</p>	 <p>Mod.                      1000 4-1/8                      1000 6-1/8                      1000 8-1/4                      1000 10-1/4</p> <p>BSPT Fix Male Tee</p>	 <p>Mod.                      1010 4-1/8                      1010 6-1/8                      1010 8-1/4                      1010 10-1/4</p> <p>Lateral BSPT Fix Male Tee</p>
 <p>Mod.                      1230 4                      1230 6                      1230 8                      1230 10                      1230 12*</p> <p>* = with bi-conical olive</p> <p>Union Connector</p>	 <p>Mod.                      1250 4                      1250 6                      1250 8                      1250 10</p> <p>Bulkhead Connector</p>	 <p>Mod.                      1220 4                      1220 6                      1220 8                      1220 10                      1220 12*</p> <p>* with bi-conical olive</p> <p>Elbow Connector</p>
 <p>Mod.                      1210 4                      1210 6                      1210 8                      1210 10                      1210 12*</p> <p>* = with bi-conical olive</p> <p>Tee Connector</p>	 <p>Single Banjo                      Assembled with                      * = Mod. 1631, 1635, SCU, SCV, SCO...                      ° = Mod. 1635, SCU, SCV, SCO...</p>	 <p>Mod.                      1303 4-1/8                      1303 6-1/8                      1303 8-1/4                      1303 10-3/8                      1303 12-M18x1,5</p> <p>Blocking nut</p>
 <p>Mod.                      1310 4                      1310 6                      1310 8                      1310 10                      1310 12-M18*</p> <p>* = bi-conical olive</p> <p>Olive and Bicone</p>	 <p>Mod.                      1320 4                      1320 6                      1320 8                      1320 10</p> <p>Inserts</p>	

## Series S2000 pipe fittings Sprint®

Fittings threads: BSP (G1/8, G1/4, G3/8, G1/2), BSPT (R1/8, R1/4, R3/8, R1/2)

Series S2000 pipe fittings are characterized by great reliability of female threads, both BSP and BSPT, with non-flat surfaces. The patented Sprint models are provided with a particular torque system which avoids the use of liquid glues or PTFE band, making thus the mounting quicker. Thanks to this system the connection and disconnection of the fitting can be repeated several times without compromising the seal on the thread.

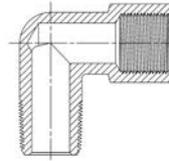


 <p>Mod. S2500 1/8 S2500 1/4 S2500 3/8 S2500 1/2</p> <p>BSPT Nipple <i>Sprint®</i></p>	 <p>Mod. S2530 1/4-1/8 S2530 3/8-1/8 S2530 1/2-1/8 S2530 3/8-1/4 S2530 1/2-1/4 S2530 1/2-3/8</p> <p>BSPT Reducing Nipple <i>Sprint®</i></p>	 <p>Mod. S2520 1/8-1/8 S2520 1/8-1/4 S2520 1/8-3/8 S2520 1/4-1/4 S2520 1/4-3/8 S2520 1/4-1/2 S2520 3/8-3/8 S2520 3/8-1/2 S2520 1/2-1/2</p> <p>BSPT Male Reducing Extension <i>Sprint®</i></p>
 <p>Mod. 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</p> <p>BSPT Reducing <i>Sprint®</i></p>	 <p>Mod. 2541 1/8-1/8 2541 1/4-1/4 2541 3/8-3/8</p> <p>BSPT Swivel Male Nipple <i>Sprint®</i></p>	 <p>Mod. S2010 1/8 S2010 1/4 S2010 3/8 S2010 1/2</p> <p>BSPT Male Elbow <i>Sprint®</i></p>
 <p>Mod. S2020 1/8-1/8 S2020 1/4-1/4 S2020 3/8-3/8 S2020 1/2-1/2</p> <p>Male Female Elbow <i>Sprint®</i></p>	 <p>Mod. S2050 1/8-1/8 S2050 1/4-1/4 S2050 3/8-3/8 S2050 1/2-1/2</p> <p>M.M.F. Tee <i>Sprint®</i></p>	 <p>Mod. S2060 1/8-1/8 S2060 1/4-1/4 S2060 3/8-3/8 S2060 1/2-1/2</p> <p>F.M.F. Tee <i>Sprint®</i></p>
 <p>Mod. S2070 1/8-1/8 S2070 1/4-1/4 S2070 3/8-3/8 S2070 1/2-1/2</p> <p>M.F.F. Tee <i>Sprint®</i></p>	 <p>Mod. S2080 1/8 S2080 1/4 S2080 3/8 S2080 1/2</p> <p>Male Tee <i>Sprint®</i></p>	 <p>Mod. S2090 1/8-1/8 S2090 1/4-1/4 S2090 3/8-3/8 S2090 1/2-1/2</p> <p>M.F.M. Tee <i>Sprint®</i></p>
 <p>Mod. 2612 M5 2612 M7* S2610 1/8 S2610 1/4 S2610 3/8 S2610 1/2</p> <p>BSP Male Plug <i>Sprint®</i> * = Metric Male Plug with O-Ring</p>	 <p>Mod. S2615 1/8 S2615 1/4 S2615 3/8</p> <p>BSPT Male Plug Tapper <i>Sprint®</i></p>	

## Series 2000 pipe fittings

Fittings threads: metric (M5), BSP (G1/8, G1/4, G3/8, G1/2, G3/4, G1), BSPT (R1/8, R1/4, R3/8, R1/2, R3/4, R1)

The wide range of Camozzi pipe fittings, which includes straight, L and Tee, Cross piece male or female couplings, guarantees the necessary support during the design of compressed air systems.



 <p>Mod. 2500 1/8 2500 1/4 2500 3/8 2500 1/2 2500 3/4 2500 1</p> <p>BSPT Nipple</p>	 <p>Mod. 2501 M5 2501 1/8 2501 1/4 2501 3/8 2501 1/2</p> <p>Metric-BSP Nipple</p>	 <p>Mod. 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</p> <p>BSPT Reducing Nipple</p>
 <p>Mod. 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</p> <p>BSPT Male Reducing Extension</p>	 <p>Mod. 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</p> <p>Metric-BSP Reducing Extension</p>	 <p>Mod. 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</p> <p>Metric-BSP Reducing Nipple</p>
 <p>Mod. 2525 1/8-16 2525 1/8-36 2525 1/4-27 2525 1/4-43</p> <p>BSP Male Extension</p>	 <p>Mod. 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</p> <p>BSPT Reducing</p>	 <p>Mod. 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*</p> <p>* = with through-out thread</p> <p>BSP Reducing</p>
 <p>Mod. 2543 M5 2543 1/8 2543 1/4 2543 3/8 2543 1/2</p> <p>Sleeve</p>	 <p>Mod. 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</p> <p>Reducing Sleeve</p>	 <p>Mod. 2611 M5 2611 1/8 2611 1/4 2611 3/8 2611 1/2 2611 1</p> <p>BSP Male Plug</p>
 <p>Mod. 2610 3/4</p> <p>BSPT Male Plug</p>	 <p>Mod. 2613 1/8 2613 1/4 2613 3/8 2613 1/2</p> <p>BSP Female Plug</p>	 <p>Mod. 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</p> <p>2601 12-1/4 2601 12-3/8 2601 12-1/2 2601 17-3/8 2601 17-1/2</p> <p>Metric-BSP Male Hose Adaptor</p>



Mod.  
2013 1/8  
2013 1/4  
2013 3/8  
2013 1/2

BSPT Female Elbow



Mod.  
2010 1/8  
2010 1/4  
2010 3/8  
2010 1/2  
2010 3/4  
2010 1

BSP Male Elbow



Mod.  
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 1-1

BSPT Male Female Elbow  
\* = Metric Male Female Elbow



Mod.  
2050 1/8-1/8  
2050 1/4-1/4  
2050 3/8-3/8  
2050 1/2-1/2

M.M.F. Tee



Mod.  
2060 1/8-1/8  
2060 1/4-1/4  
2060 3/8-3/8  
2060 1/2-1/2

F.M.F. Tee



Mod.  
2080 1/8  
2080 1/4  
2080 3/8  
2080 1/2  
2080 3/4  
2080 1

Male Tee



Mod.  
2070 1/8-1/8  
2070 1/4-1/4  
2070 3/8-3/8  
2070 1/2-1/2

M.F.F. Tee



Mod.  
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 1-1

M.F.M. Tee



Mod.  
2003 1/8  
2003 1/4  
2003 3/8  
2003 1/2

Female Tee



Mod.  
2040 1/8-1/8  
2040 1/4-1/4  
2040 3/8-3/8  
2040 1/2-1/2

Y.F.M.F.



Mod.  
2043 1/8  
2043 1/4  
2043 3/8  
2043 1/2

Female Y



Mod.  
2033 1/8  
2033 1/4  
2033 3/8

Female Cross



Mod.  
2023 M5-M5\*  
2023 M5-M6°  
2023 1/8-1/8\*  
2023 1/4-1/4^  
2023 3/8-3/8^

Single Thread Banjo  
Assembled with:

\* = Mod. 1631  
° = Mod. SCU, SVU, SCO...  
\* = Mod. 1631, 1635, SCU, SVU, SCO...  
^ = Mod. 1635, SCU, SVU, SCO...



Mod.  
3033 1/8  
3033 1/4  
3033 3/8  
3033 1/2

4 Ways Distribution Block with fixing holes  
Material: anodized Aluminium



Mod.  
3043 1/4-3D-1/8  
3043 1/4-4D-1/8  
3043 1/4-5D-1/8  
3043 1/4-6D-1/8  
3043 3/8-3D-1/4  
3043 3/8-4D-1/4  
3043 3/8-5D-1/4  
3043 3/8-6D-1/4  
3043 1/2-3D-3/8  
3043 1/2-4D-3/8  
3043 1/2-5D-3/8  
3043 1/2-6D-3/8

Manifold with double lateral outlets  
Material: anodized Aluminium



Mod.  
3053 1/4-3L-1/8  
3053 1/4-4L-1/8  
3053 1/4-5L-1/8  
3053 1/4-6L-1/8  
3053 3/8-3L-1/4  
3053 3/8-4L-1/4  
3053 3/8-5L-1/4  
3053 3/8-6L-1/4  
3053 1/2-3L-3/8  
3053 1/2-4L-3/8  
3053 1/2-5L-3/8  
3053 1/2-6L-3/8

Manifold with lateral outlets  
Material: anodized Aluminium

# Series 5000 quick-release couplings

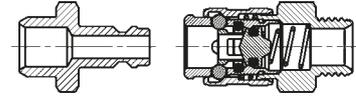
Nominal diameters: 5, 7 mm

Couplings threads: G1/8, G1/4, G3/8, G1/2

Plastic tubes: 6/4, 8/6, 10/8; rubber hoses: 6x14, 8x17, 10x19, 13x23

Series 5000 quick-release couplings are suitable in situations where, for plant engineering or safety reasons, the connection or disconnection of tubing must be repeated several times. These operations can be performed with no need to release the pressure and therefore a considerable amount of time can be saved.

Series 5000 quick-release couplings with mini-profile DN 5 are compatible with couplings Rectus Series 21 - 90, Legris 21. Series 5000 quick-release couplings with European profile DN 7 are compatible with couplings Cejin Series 320.



 <p>BSP Male Quick Coupling</p>	 <p>BSP Male Quick Coupling Bulkhead</p>	 <p>BSP Female Quick Coupling</p>
 <p>Quick Coupling Push-on</p>	 <p>Quick Coupling Bulkhead Push-on</p>	 <p>Quick Coupling Hose Adapter</p>
 <p>Quick Coupling Hose Connector</p>	 <p>Quick Coupling with Spring</p>	 <p>Male Connector</p>
 <p>Female Connector</p>	 <p>Push-on Connector</p>	 <p>Connector with Barb</p>
 <p>Hose Connector</p>	 <p>Connector with Spring</p>	

New

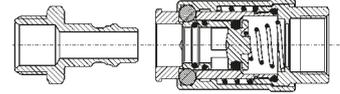
## Series 5000L and 5000LT quick-release couplings for the conditioning of moulds for plastics

Nominal diameters: 5, 7 mm

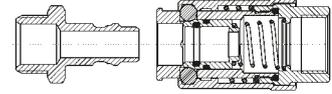
Couplings threads: G1/8, G1/4, G3/8

The Series 5000L and 5000LT couplings have been designed to connect tubes for water, air or oil, used within plastic injection and die casting moulds.

The Series 5000L and 5000LT couplings provide a quick connection and disconnection method for the replacement of heating and conditioning tubes directed towards the mould, as well as tubes coming from water collectors or sources.



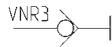
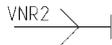
Couplings type "L"



Couplings type "LT"



Mod.  
**5053L 1/8**  
**5053L 1/4**  
**5053LT 1/8**  
**5053LT 1/4**



BSP female  
quick-coupling



Mod.  
**5083L 1/4**  
**5083L 3/8**  
**5083LT 1/4**  
**5083LT 3/8**



BSP female  
quick-coupling



Mod.  
**5150L 1/8**  
**5150L 1/4**  
**5180L 1/4**  
**5180L 3/8**



Male connector

# Tubing, spirals and accessories

Tubes: reinforced PVC, Polyamide PA12, Hytrel Polyester, Polyethylene, PU

Diameters: 4/2, 5/3, 6/4, 8/6, 10/8, 12/10, 15/12,5 mm

Camozzi offers a range of tubes and spirals with specific features which are suitable for several technical requirements. Thanks to high-quality raw materials and with a low specific weight, these products are very small and lightweight. They also show high resistance against stress and flexural vibrations.

The high specularity of internal surfaces for the fluid passage (roughness of about 6 micron) allows to reduce the loosening of loads and to reach very high flows with same diameters. Technopolymers used are particularly resistant to aging, thus ensuring the product a very long life.

 <p>Mod. <b>PV 6/4</b> <b>PV 8/6</b> <b>PV 10/8</b> <b>PV 12/10</b> <b>PV 15/12,5</b></p> <p>Tube in reinforced PVC Standard colour: Blue</p>	 <p>Mod. <b>TRN 4/2</b> <b>TRN 5/3</b> <b>TRN 6/4</b> <b>TRN 8/6</b> <b>TRN 10/8</b> <b>TRN 12/10</b></p> <p>Tube in polyamide PA12 Standard colour: Neutral Colours available on request: Blue - Red - Green - Black - Yellow</p>	 <p>Mod. <b>TRH 4/2-Z</b> <b>TRH 5/3-Z</b> <b>TRH 6/4-Z</b> <b>TRH 8/6-Z</b> <b>TRH 10/8-Z</b> <b>TRH 12/10-Z</b></p> <p>Tubes in Hytrel polyester Standard colour: Blue Colours available on request: Red - Green - Black - Yellow - White</p>
 <p>Mod. <b>TPE 5/3</b> <b>TPE 6/4</b> <b>TPE 8/6</b> <b>TPE 10/8</b></p> <p>Tube in low density polyethylene Standard colour: Neutral Colour available on request: Blue</p>	 <p>Mod. <b>TPC 4/2</b> <b>TPC 6/4</b> <b>TPC 8/6</b> <b>TPC 10/8</b> <b>TPC 12/8</b></p> <p>Tubes in Polyurethane 98 Shore Standard colour: Grey RAL 7012</p>	 <p>Mod. <b>TSP 6/4</b> <b>TSP 8/6</b> <b>TSP 10/8</b> <b>TSP 12/10</b></p> <p>Spiral in Rilsan (PA 11) Standard colour: Blue Other colours available on request</p>
 <p>Mod. <b>MPL-4</b> <b>MPL-6</b> <b>MPL-8</b> <b>MPL-10</b> <b>MPL-12</b> <b>MPL-14</b></p> <p>Plastic tubes clamps Colour: Blue</p>	 <p>Mod. <b>PNZ-12</b> <b>PNZ-25</b></p> <p>Small and large tubes cutter Replacement blades can be ordered separately</p>	 <p>Mod. <b>PNZP-12</b></p> <p>Plastic tubes cutter</p>

## 5 > Vacuum



### Suction pads

		<b>Page</b>
Series VTCF	 <b>Flat suction pads (round)</b> 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, G1/8, G1/4, both male and female.	191
Series VTOF	 <b>Flat suction pads (oval)</b> 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, G1/8, G1/4, both male and female.	192
Series VTCL	 <b>Bellows suction pads (round) (1,5 folds)</b> 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, G1/8, G1/4, both male and female.	193
Series VTCN	 <b>Bellows suction pads (round) (2,5 folds)</b> 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, G1/8, G1/4, both male and female.	194

## Ejectors based on Venturi principle

		<b>Page</b>
Series VEB	<b>Basic ejectors</b> Basic ejectors with no moving parts, based on the Venturi principle. Version "L" for porous workpieces. Version "H" for high vacuum value.	195
Series VEBL	<b>Basic ejectors</b> 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.	195
Series VED	<b>Inline ejectors</b> Vacuum ejectors without moving parts, based on the Venturi principle, used for direct installation on suction pads.	196
Series VEDL	<b>Inline ejectors</b> 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.	196
Series VEC	<b>Compact ejectors</b> Vacuum generators with integrated valves and monitoring system. Possibility to command suction and blow-off individually without using external valves.	197
Series VEM	<b>Compact ejectors</b> Miniaturized vacuum generators with integrated valves and monitoring system. Possibility to command suction and blow-off individually without using external valves.	198

## Accessories

		<b>Page</b>
Series NPF	<b>Flexible suction pad mountings</b> The vulcanisation provides flexibility in all directions. Thread G1/4.	199
Series NPM, NPR	<b>Spring plungers</b> 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.	199
Series VNV	<b>Check valves</b> 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.	199

## Filters

		<b>Page</b>
Series FVD	<b>Inline vacuum filters</b> For use in vacuum systems with minor to medium levels of dirt. Direct mounting on the suction pad.	200
Series FVT	<b>Vacuum cup filters</b> 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.	200

## Pressure / vacuum switches

See chapter 2

## 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, G1/8, G1/4, both male and female



### CODING EXAMPLE

VT	C	F	-	0035	N	-	M3	M
----	---	---	---	------	---	---	----	---

**VT** SERIES:  
VT = suction pad

**C** SHAPE:  
C = round

**F** VERSION:  
F = flat

**0035** DIAMETERS:  
0035 = 3,5 mm  
0050 = 5,0 mm  
0080 = 8,0 mm  
0100 = 10,0 mm  
0150 = 15,0 mm  
0200 = 20,0 mm  
0250 = 25,0 mm  
0300 = 30,0 mm  
0350 = 35,0 mm  
0400 = 40,0 mm  
0500 = 50,0 mm  
0600 = 60,0 mm  
0800 = 80,0 mm  
0950 = 95,0 mm

**N** MATERIALS:  
N = NBR  
S = Silicone

**M3** THREAD SIZE:  
M3 = M3  
M5 = M5  
1/8 = G1/8  
1/4 = G1/4

**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, G1/8, G1/4, both male and female



### CODING EXAMPLE

VT	O	F	-	0070-035	N	-	M3	M
----	---	---	---	----------	---	---	----	---

**VT** SERIES:  
VT = suction pad

**O** SHAPE:  
O = oval

**F** VERSION:  
F = flat

**0070-035** DIMENSIONS:  
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

**N** MATERIALS:  
N = NBR  
S = Silicone

**M3** THREAD SIZE:  
M3 = M3  
M5 = M5  
1/8 = G1/8  
1/4 = G1/4

**M** THREAD:  
M = male  
F = female

## Series VTCL (1,5 folds) bellows suction pads (round)

Bellows suction pads Series VTCL 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, G1/8, G1/4, both male and female



### CODING EXAMPLE

<b>VT</b>	<b>C</b>	<b>L</b>	<b>-</b>	<b>110</b>	<b>N</b>	<b>-</b>	<b>M5</b>	<b>M</b>
-----------	----------	----------	----------	------------	----------	----------	-----------	----------

**VT** SERIES:  
VT = suction pad

**C** SHAPE:  
C = round

**L** VERSION:  
L = bellows 1,5 folds

**110** DIAMETERS:  
110 = 11,0 mm  
140 = 14,0 mm  
160 = 16,0 mm  
200 = 20,0 mm  
250 = 25,0 mm  
330 = 33,0 mm  
430 = 43,0 mm  
530 = 53,0 mm

**N** MATERIALS:  
N = NBR  
S = Silicone

**M5** THREAD SIZE:  
M5 = M5  
1/8 = G1/8  
1/4 = G1/4

**M** THREAD:  
M = male  
F = female

## Series VTCN (2,5 folds) bellows suction pads (round)

Bellows suction pads Series VTCN, available in NBR or Silicone, are suitable to handle uneven workpiece surfaces or workpiece major height differences  
Diameters from 5 to 52 mm with thread size M5, G1/8, G1/4, both male and female



### CODING EXAMPLE

VT	C	N	-	050	N	-	M5	M
----	---	---	---	-----	---	---	----	---

**VT** SERIES:  
VT = suction pad

**C** SHAPE:  
C = round

**N** VERSION:  
N = 2,5 bellows

**050** DIAMETERS:  
050 = 5,0 mm  
070 = 7,0 mm  
090 = 9,0 mm  
120 = 12,0 mm  
140 = 14,0 mm  
180 = 18,0 mm  
200 = 20,0 mm  
250 = 25,0 mm  
320 = 32,0 mm  
420 = 42,0 mm  
520 = 52,0 mm

**N** MATERIALS:  
N = NBR  
S = Silicone

**M5** THREAD SIZE:  
M5 = M5  
1/8 = G1/8  
1/4 = G1/4

**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

**B** VERSION:  
B = basic

**05** NOZZLE DIAMETER (MM):  
05 = 0,5 mm  
07 = 0,7 mm  
10 = 1 mm  
15 = 1,5 mm  
20 = 2 mm  
25 = 2,5 mm  
30 = 3 mm

**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

**BL** VERSION:  
BL = basic light

**10H** NOZZLE DIAMETER:  
05H = 0,5 mm  
07H = 0,7 mm  
10H = 1 mm  
15H = 1,5 mm  
20H = 2 mm  
25H = 2,5 mm

**T2** TYPE OF CONNECTION (ON SUPPLY SIDE):  
T1 = plier - tube Ø4  
T2 = plier - tube Ø6  
T3 = plier - tube Ø8

### Accessories

**Bracket-foot**  
Mod. VEBL-ST



**Fixing elements**  
Mod. 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

<b>VE</b>	<b>D</b>	<b>-</b>	<b>07</b>
-----------	----------	----------	-----------

**VE** SERIES:  
VE = vacuum ejectors

**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

<b>VE</b>	<b>DL</b>	<b>-</b>	<b>05</b>	<b>-</b>	<b>T1</b>
-----------	-----------	----------	-----------	----------	-----------

**VE** SERIES:  
VE = vacuum ejector

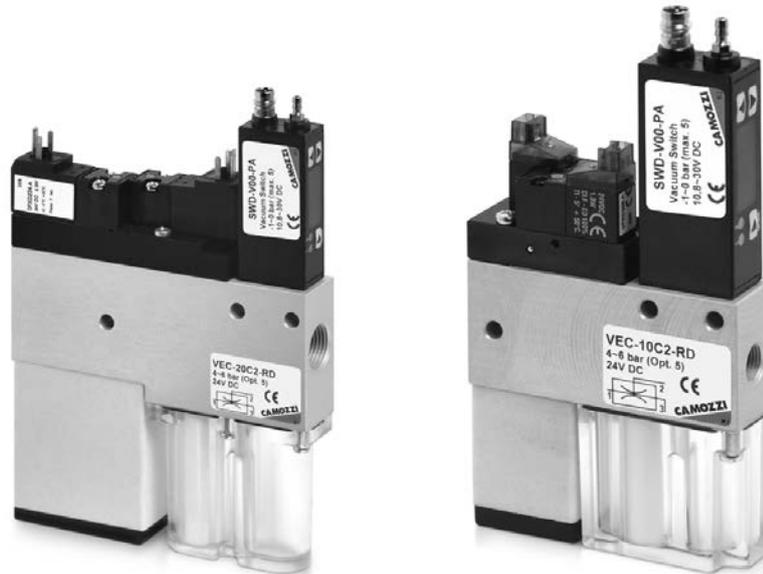
**DL** VERSION:  
DL = inline light

**05** NOZZLE DIAMETER:  
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

**C** VERSION:  
C = compact

**10** NOZZLE DIAMETER (mm):  
10 = 1,0 mm  
15 = 1,5 mm  
20 = 2,0 mm  
25 = 2,5 mm

**C** VALVE FUNCTION:  
C = NC (suction OFF when not activated)  
A = NO (suction ON when not activated)

**2** VERSION:  
2 = with Blow-off valve

**RD** VERSION:  
\* RD = with air saving system and digital vacuum switch (with display). It is supplied complete with connectors and cables.  
\* RE = with air saving system and electronic vacuum switch. It is supplied complete with connectors and cables.  
VD = without air saving system, digital vacuum switch (with display)  
VE = without air saving system, with electronic vacuum switch

\* = The air saving circuit, where used, switches the suction signal to "ON" apart from the fact that the ejector is NC or NO; this means that, in order to switch the internal loop back to "OFF", it is necessary to activate the signal on the coil controlling it (green cable).

### Accessories

**Connectors with crimped cable**  
for Mod. VEC-10 and VEC-15  
Mod. **121-803**  
**121-806**  
**121-810**  
**121-830**



**Connectors DIN 43650 pin spacing 8 mm**  
for Mod. VEC-20 and VEC-25  
Mod. **126-550-1**  
**126-800**  
**126-701**



**Circular M8 4-pole connectors, Female**  
With PU sheathing, non shielded cable  
Protection class: IP65  
Mod. **CS-DF04EG-E200**  
**CS-DF04EG-E500**  
**CS-DR04EG-E200**  
**CS-DR04EG-E500**



## Series VEM compact ejectors

Miniaturized vacuum generators with integrated valves and monitoring system  
Possibility to command suction and blow-off individually without using external valves



### CODING EXAMPLE

VE	M	-	05	C	2	-	VE
----	---	---	----	---	---	---	----

**VE** SERIES:  
VE = vacuum ejector

**M** VERSION:  
M = compact, mini

**05** NOZZLE DIAMETER:  
05 = 0,5 mm  
07 = 0,7 mm  
10 = 1,0 mm

**C** VALVE FUNCTION:  
C = NC (suction OFF when not activated)  
A = NO (suction ON when not activated)

**2** VERSION:  
2 = with Blow-off valve

**VE** VALVE TYPE:  
VE = without air saving system, with electronic vacuum switch

### Accessories

#### Connectors with crimped cable

Mod. 121-803  
121-806  
121-810



#### Circular M8 4-pole connectors, Female

With PU sheathing, non shielded cable  
Protection class: IP65

Mod. CS-DF04EG-E200  
CS-DF04EG-E500  
CS-DR04EG-E200  
CS-DR04EG-E500



## Series NPF flexible suction pad mountings

The vulcanisation provides flexibility in all directions  
Thread G1/4



### CODING EXAMPLE

NPF	-	FM	-	1/4	-	M10 X 1,25
-----	---	----	---	-----	---	------------

<b>NPF</b>	SERIES: NPF = flexible suction pad mountings
------------	---

<b>FM</b>	THREAD VERSION: FM = G1 Female / G2 Male
-----------	---

<b>1/4</b>	FEMALE THREAD G1: 1/4 = G1/4
------------	---------------------------------

<b>M10x1,25</b>	MALE THREAD G2: M10x1,25 = M10x1,25 1/4 = G1/4
-----------------	--

## Series NPM and NPR (non rotating) spring plungers

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
-----	---	----	---	-----	---	----

<b>NPM</b>	SERIES: NPM = spring plunger NPR = spring plunger - non-rotating
------------	--

<b>FM</b>	THREAD VERSION: FM = female / male FF = female / female
-----------	---

<b>1/4</b>	THREAD: M3 = M3 M5 = M5 1/8 = G1/8 1/4 = G1/4
------------	---

<b>75</b>	COMPENSATION STROKE: 05 = 5 mm - 10 = 10 mm - 15 = 15 mm - 20 = 20 mm 25 = 25 mm - 50 = 50 mm - 75 = 75 mm
-----------	--

## 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
-----	---	----	---	----

<b>VNV</b>	SERIES: VNV = check valve
------------	------------------------------

<b>MF</b>	THREAD VERSION: MF = G1 male / G2 female FM = G1 female / G2 male
-----------	---

<b>M5</b>	THREAD: M5 = M5 1/8 = G1/8 1/4 = G1/4 1/2 = G1/2
-----------	--

## 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 = inline filter

**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

**FF** THREAD SIZE:  
FF = female-female

**1/4** CONNECTIONS:  
1/8 = G1/8  
1/4 = G1/4  
3/8 = G3/8  
1/2 = G1/2  
3/4 = G3/4

**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 G1/8, G1/4, G3/8 and G1/2.

The mod. **FVT-FF-3/4-80-B** is used on cup filters with ports G3/4.



*Camozzi  
Automation  
in the world*

**Camozzi Automation spa**  
Società Unipersonale  
Via Eritrea, 20/I  
25126 Brescia  
**Italy**  
Tel. +39 030/37921  
Fax +39 030/2400430  
info@camozzi.com  
www.camozzi.com

**Camozzi Neumatica S.A.**  
Prof. Dr. Pedro Chutro 3048  
1437 Buenos Aires  
**Argentina**  
Tel. +54 11/49110816  
Fax +54 11/49124191  
info@camozzi.com.ar  
www.camozzi.com.ar

**Camozzi GmbH Pneumatic**  
Löfflerweg 18  
A-6060 Hall in Tirol  
**Austria**  
Tel. +43 5223/52888-0  
Fax +43 5223/52888-500  
info@camozzi.at  
www.camozzi.at

**Camozzi Pneumatic**  
66-1, Perehodnaya str.,  
220070, Minsk  
**Belarus**  
Tel. +375 17/3961170 (71)  
Fax +375 17/3961170 (71)  
info@camozzi.by  
www.camozzi.by

**Camozzi do Brasil Ltda.**  
Rua Estácio de Sá, 1042  
13080-010 Campinas SP  
**Brazil**  
Tel. +55 19/21374500  
Fax +55 19/21374530  
sac@camozzi.com.br  
www.camozzi.com.br

**Shanghai Camozzi Pneumatic  
Control Components Co, Ltd.**  
717 Shuang Dan Road, Malu  
Shanghai - 201801  
**China**  
Tel. +86 21/59100999  
Fax +86 21/59100333  
info@camozzi.com.cn  
www.camozzi.com.cn

**Shanghai Camozzi Automation  
Control Co, Ltd.**  
717 Shuang Dan Road, Malu  
Shanghai - 201801  
**China**  
Tel. +86 21/59100999  
Fax +86 21/59100333  
info@camozzi.com.cn  
www.camozzi.com.cn

**Camozzi S.r.o.**  
V Chotejně 700/7  
Praha - 102 00  
**Czech Republic**  
Tel. +420 272/690 994  
Fax +420 272/700 485  
info@camozzi.cz  
www.camozzi.cz

**Camozzi ApS**  
Metalvej 7 F  
4000 Roskilde  
**Denmark**  
Tel. +45 46/750202  
info@camozzi.dk  
www.camozzi.dk

**Camozzi Automation OÜ**  
Osmussaare 8-B204  
13811 Tallinn  
**Estonia**  
Tel. +372 6119055  
Fax +372 6119055  
info@camozzi.ee  
www.camozzi.ee

**Camozzi Pneumatik Sarl**  
5, Rue Louis Gattefossé  
Parc de la Bandonnière  
69800 Saint-Priest  
**France**  
Tel. +33 (0)478/213408  
Fax +33 (0)472/280136  
info@camozzi.fr  
www.camozzi.fr

**Camozzi GmbH Pneumatic**  
Porschestraße 1  
D-73095 Albershausen  
**Germany**  
Tel. +49 7161/91010-0  
Fax +49 7161/91010-99  
info@camozzi.de  
www.camozzi.de

**Camozzi India Private Limited**  
No D-44 Phase II Ext.,  
Hosiery Complex  
Noida - 201 305  
Uttar Pradesh  
**India**  
Tel. +91 120/4055252  
Fax +91 120/4055200  
info@camozzi-india.com  
www.camozzi.in

**Camozzi Pneumatic  
Kazakhstan LLP**  
Shevchenko/Radostovets,  
165b/72g, off. 615  
050009 Almaty  
**Kazakhstan**  
Tel. +7 727/3335334 - 3236250  
Fax +7 727/2377716 (17)  
info@camozzi.kz  
www.camozzi.kz

**Camozzi Malaysia SDN. BHD.**  
30 & 32, Jalan Industri USJ 1/3  
Taman Perindustrian USJ 1  
47600 Subang Jaya  
Selangor  
**Malaysia**  
Tel. +60 3/80238400  
Fax +60 3/80235626  
cammal@camozzi.com.my  
www.camozzi.com.my

**Camozzi Neumatica de Mexico  
S.A. de C.V.**  
Lago Tanganica 707  
Col. Ocho Cedros 2ª sección  
50170 Toluca  
**México**  
Tel. +52 722/2707880 - 2126283  
Fax +52 722/2707860  
camozzi@camozzi.com.mx  
www.camozzi.com.mx

**Camozzi AS**  
Verstedveien 8  
1400 Ski  
**Norway**  
Tel. +47 40644920  
info@camozzi.no  
www.camozzi.no

**Camozzi Pneumatic LLC**  
Chasnikovo,  
Solnechnogorskiy District  
Moscow 141592  
**Russian Federation**  
Tel. +7 495/6650255  
Fax +7 495/6650255  
info@camozzi.ru  
www.camozzi.ru

**Camozzi Iberica SL**  
Avda. Altos Hornos de Vizcaya, 33, L-2  
48901 Barakaldo - Vizcaya  
**Spain**  
Tel. +34 946 558 958  
info@camozzi.es  
www.camozzi.com

**Camozzi Pneumatik AB**  
Box 9214  
Bronsyxegatan 7  
20039 Malmö  
**Sweden**  
Tel. +46 40/6005800  
info@camozzi.se  
www.camozzi.se

**Camozzi Benelux B.V.**  
De Vijf Boeken 1 A  
2911 BL Nieuwerkerk a/d IJssel  
**The Netherlands**  
Tel. +31 180/316677  
Fax +31 180/316616  
info@camozzi.nl  
www.camozzi.nl

**LLC Camozzi**  
Kirillovskaya Str, 1-3, section "D"  
Kiev - 04080  
**Ukraine**  
Tel. +38 044/5369520  
Fax +38 044/5369520  
info@camozzi.ua  
www.camozzi.ua

**Camozzi Pneumatics Ltd.**  
The Fluid Power Centre  
Watling Street  
Nuneaton, Warwickshire  
CV11 6BQ  
**United Kingdom**  
Tel. +44 (0)24/76374114  
Fax +44 (0)24/76347520  
info@camozzi.co.uk  
www.camozzi.co.uk

**Camozzi Pneumatics Inc.**  
Street address:  
2160 Redbud Boulevard, Suite 101  
McKinney, TX 75069-8252  
Remittances:  
P.O. Box 678518  
Dallas, TX 75267-8518  
**USA**  
Tel. +1 972/5488885  
Fax +1 972/5482110  
info@camozzi-usa.com  
www.camozzi-usa.com

**Camozzi Venezuela S.A.**  
Calle 146 con Av. 62  
N°146-180  
P.O. Box 529  
Zona Industrial Maracaibo  
Edo. Zulia  
**Venezuela**  
Tel. +58 261/7360821  
Fax +58 261/7360401  
info@camozzi.com.ve  
www.camozzi.com.ve

**Camozzi R.O.  
in Hochiminh City**  
6<sup>th</sup> Floor, Master Building,  
155 Hai Ba Trung St.,  
Ward 6, District 3  
Hochiminh City  
**Vietnam**  
Tel. +84 8/54477588  
Fax +84 8/54477877  
bhthien@camozzi.com.vn  
www.camozzi.com.vn

*Camozzi  
Automation  
distributors  
in the world*

## Europe

### ZULEX d.o.o.

Safeta Zajke 115b  
Sarajevo  
**Bosnia-Herzegovina**  
Tel. +387 33/776580  
Fax +387 33/776583  
zulex@bih.net.ba  
www.zulex.com.ba

### L.D. GmbH

Zar Samuil Str. 116  
1202 Sofia  
**Bulgary**  
Tel. +359 2/9269011  
Fax +359 2/9269025  
camozzi@d-gmbh.com  
www.ld-gmbh.com

### Bibus Zagreb d.o.o.

Anina 91  
HR 10000 Zagreb  
**Croatia**  
Tel. +385 1/3818004 - 3818006  
Fax +385 1/3818005  
bibus@bibus.hr  
www.bibus.hr

### TS Hydropower Ltd.

Industrial Area N°64  
Aglanzia 21-03  
Nicosia  
**Cyprus**  
Tel. +357 22/332085  
Fax +357 22/338608  
tshydro@cytanet.com.cy

### AVS-Yhtiöt Oy

Rusthollarikatu 8  
02270 Espoo  
**Finland**  
Tel. +358 10/6137100  
Fax +358 10/6137701  
info@avs-yhtiot.fi  
www.avs-yhtiot.fi

### Technomatic control s.a.

Esopou Street  
Kalohori  
570 09 Thessaloniki  
**Greece**  
Tel. +30 2310/778730  
Fax +30 2310/778732  
info@technomatic.gr  
www.technomatic.gr

### Tech-Con Hungária Kft

Véső u. 9-11 (entrance: Süllő u. 8.)  
1133 Budapest  
**Hungary**  
Tel. +36 1/412 4161  
Fax +36 1/412 4171  
tech-con@tech-con.hu  
www.tech-con.hu

### Loft & Raftæki

Hjallabrekka 1  
200 Kópavogur  
**Iceland**  
Tel. +354 564/3000  
Fax +354 564/0030  
gummi@loft.is  
www.loft.is

### DBF TECHNIC SIA

Bauskas iela 20 - 302  
1004 Riga  
**Latvia**  
Tel. +371 296 26916  
Fax +371 6 7808650  
info@pneimatika.lv  
www.pneimatika.lv

### Hidroteka Engineering Services

Chemijos 29E  
LT-51333 Kaunas  
**Lithuania**  
Tel. +370 37/452969  
Fax +370 37/760500  
hidroteka@hidroteka.lt  
www.hidroteka.lt

### Rayair Automation Ltd.

KW23G - Corradino Ind. Estate  
Paola, PLA3000  
Paola, Pla 08  
**Malta**  
Tel. +356 21/672497  
Fax +356 21/805181  
sales@rayair-automation.com  
www.rayair-automation.com

### Bibus Menos Sp. z o.o.

ul. Spadochroniarzy 18  
80-298 Gdańsk  
**Poland**  
Tel. +48 58/6609570  
Fax +48 58/6617132  
info@bibusmenos.pl  
www.bibusmenos.pl

### Teclena - Automizacão, Estudos e Representações, S.A.

Rua Dos Camponeses, n° 390  
Zona Industrial do Vale Sepal  
2400-316 Leiria  
**Portugal**  
Tel. +351 244/860980  
Fax +351 244/812832  
geral@teclena.pt  
www.teclena.pt

### Experts d.o.o.

Mitropolit Teodosij Gologanov, 149  
MK-1000 Skopje  
**Rep. of Macedonia**  
Tel. +389 2/3081970  
Fax +389 2/3084871  
experts@t-home.mk  
www.experts.com.mk

### Tech-Con Industry Srl

Calea Crângasi N°60  
Sector 6 , 060346 Bucharest  
**Romania**  
Tel. +40 21/2219640  
Fax +40 21/2219766  
paul.stoica@tech-congroup.com  
www.tech-con.ro

### Tech-Con d.o.o. Beograd

Cara Dušana 205a  
11080 Zemun - Belgrade  
**Serbia**  
Tel. +381 11/4142790  
Fax +381 11/3166760  
office@tech-con.rs  
www.tech-con.rs

### STAF Automation s.r.o.

Kostiviarska 4944/5  
974 01 Banská Bystrica  
**Slovakia**  
Tel. +421 48/4722777  
Fax +421 48/4722755  
staf@staf.sk  
www.staf.sk

### Kovimex d.o.o.

Podskrajnik 60,  
SI-1380 Cerknica  
**Slovenia**  
Tel. +386 1/7096430  
Fax +386 1/7051930  
kovimex@kovimex.si

### Esperia S.A.

Arangutxi, 13  
Poligono Industrial De Jundiz  
01015 Vitoria  
**Spain**  
Tel. +34 945/290105  
Fax +34 945/290356  
comercial@esperia.es  
www.esperia.es

### Bibus AG

Allmendstrasse 26  
CH-8320 Fehraltorf  
**Switzerland**  
Tel. +41 44/8775011  
Fax +41 44/8775019  
info.bag@bibus.ch  
www.bibus.ch

### Hidrel Hidrolik Elemanlar

**Sanayi Ve Ticaret A.S.**  
Perçemli Sokak, No 11 Tünel Mevkii  
80000 Karakoy - Istanbul  
**Turkey**  
Tel. +90 212/2517318 - 2494881  
Fax +90 212/2920850  
hidrel@superonline.com

>>>

*Camozzi  
Automation  
distributors  
in the world*

## America

**Marco Industrial spa**  
Los Gobellinos # 2584 - Renca  
Santiago  
**Chile**  
Tel. +56 22782 4400  
Fax +56 22646 4623  
marcoindustrial@marco.cl  
www.marcoindustrial.cl

**Euroindustrial Ltda**  
Carrera 25A # 4B-64  
Bogotá  
**Colombia**  
Tel. +57 1/5606140  
Fax +57 1/5609576  
www.euro-industrial.net

**Eurotécnica de Costa Rica AYM, S.A.**  
150 m oeste del cruce de Llorente,  
hacia Epa Tibás  
**Costa Rica**  
Tel. +506 2241/4242 - 4230  
Fax +506 2241/4272  
eurotecnica@eurotecnicacr.com  
www.eurotecnicacr.com

**LT Industrial, EIRL**  
Ave. Charles Summer #53, suite 24B  
Plaza Charles Summer  
Santo Domingo  
**Dominican Republic**  
Tel. +1809-623-5156  
Fax +1829-956-7205  
info@ltindustrialrd.com

**Fluidica Cia. Ltda.**  
Abelardo Moncayo Oe4-08 y Av. América  
Quito, Pichincha  
**Ecuador**  
Tel. +593 2/2440848 - 2/5102004  
Fax +593 2/2440848  
info@fluidica-ec.com  
www.fluidica-ec.com

**Aplitec S.A. de C.V.**  
75 Av. Nte,  
Residencial Escalón Norte II  
Pje Kl #3-C  
San Salvador  
**El Salvador**  
Tel. +503 2557/2666  
Fax +503 2557/2652  
info@aplitecsv.com  
www.aplitecsv.com

**Isotex de Panamá S.A.**  
Plaza Conquistador Local #5  
Panama City  
**Panamá**  
Tel. +507 217/0050 - 217/0106  
Fax +507 217/0049  
gerencia@isotexpanama.com  
info@isotexpanama.com

**Eicepak S.A.C.**  
Av. Los Cipreses N° 484 Los Ficus  
Santa Anita - Lima  
**Perù**  
Tel. +51 1/3628484 - 3627127  
- 3628698  
Fax +51 1/3625602  
eicepak@eicepak.com  
www.eicepak.com

**Cocles S.A.**  
BVAR Artigas 4543 P.O. Box 11800  
Montevideo  
**Uruguay**  
Tel. +598 2/2006428 - 2090446  
Fax +598 2/206428  
cocles@adinet.com.uy  
www.cocles.com.uy

## Middle East

**Compressed Air Technology Co.Saa**  
83 - El Sabteya Str.  
21211 Sabteya ET  
Kairo  
**Egypt**  
Tel. +20 2/25766266 - 25774400  
Fax +20 2/25750113  
neveen@elhaggarmisr.com

**E. Yeruham & Comp. Ltd.**  
34 Hahofer Street  
P.O. Box 11884 Holon  
58117 Holon  
**Israel**  
Tel. +972 3/5567322  
Fax +972 3/5596616  
office@ayeruham.com  
www.ayeruham.com

**Raymond Feghali Co.**  
**For Trade & Industry SARL**  
Naher El-Mott Highway, Zalka  
P.O. BOX 90-723 Jdeideh  
**Lebanon**  
Tel. +961 1/893176 - 894545  
Fax +961 1/879500  
RTF@raymondfehalico.com  
www.raymondfehalico.com

**Techno-Line Trading & Services WLL**  
Ware House 05, Building 2189  
Road 1529, Block 115  
Hidd  
**Kingdom of Bahrain**  
Tel. +973 17783906  
Fax +973 17786906  
techline@batelco.com.bh

**AL-Maram National Co. For Buildings**  
**General Contracting W.L.L.**  
Shuwaikh Industrial Area Pl. Shop No. 9  
Shuwaikh  
**Kuwait**  
Tel./Fax +965 24828108  
almaramkuwait@gmail.com  
www.almaramgtc.com

**Al-Hawaiya for Industrial Solutions**  
Establishment. (ALHA)  
Kilo - 3, Makkah Road  
P.O. Box 11429  
Jeddah 21453  
**Saudi Arabia**  
Tel. +966 2/6885524  
Fax +966 2/6885061  
info@alha.com.sa  
www.alha.com.sa

**I.M.O.**  
**Industrial Machine Trd. Co. L.L.C.**  
P.O. Box 20376  
Sharjah  
**United Arab Emirates**  
Tel. +971 6/5437991  
Fax +971 6/5437994  
imo@eim.ae

## Asia

**PT. Golden Archy Sakti**  
Kompleks Prima Centre Blok B2 No.2  
Jl.Pool PPD - Pesing Poglar No.11,  
Kedaung Kali Angke - Cengkareng,  
Jakarta Barat 11710  
**Indonesia**  
Tel. +62 21/54377888  
Fax +62 21/54377089  
sales@archy.co.id  
www.archy.co.id

**Seika Corporation**  
Aqua Dojima East Bldg.  
16F, 4-4, 1-Chome, Dojimahama,  
Kita-Ku Osaka  
**Japan**  
Tel. +81 6/63453176  
Fax +81 6/63443584  
kuronakat@jp.seika.com

**Polytechnic Automation**  
Suite 604, 6th Floor, K. S.  
Trade Tower,  
New Challi,  
Shahrah-e-Liaquat,  
Karachi - 74000,  
**Pakistan**  
Tel. +9221 32426612  
Fax +9221 32426188  
polytech\_ent@yahoo.com

**Exceltec Automation Inc.**  
608-G, EL-AL Building,  
Quezon Avenue, Tatalon  
Quezon City, 1113  
**Philippines**  
Tel. +632/4161143 - 4161141  
- 7319015  
Fax +632/7121672  
sales.manila@exltec.com

**Exceltec Enviro Pte Ltd**  
Block 3025 Ubi Road 3  
# 03-141  
408653  
**Singapore**  
Tel. +65 67436083  
Fax +65 67439286  
sales@exltec.com

**Taewon-AP**  
Geomdanbuk-ro 40-gil, Buk-gu  
Daegu 41511  
**South Korea**  
Tel. +82 53 384 1058  
Fax +82 53 384 1057  
info@taewon-ap.com  
www.taewon-ap.com

**Korea Flutech Co. Ltd**  
No15-4, 101, Palgong-ro, Dong-gu,  
Daegu, 41005  
**South Korea**  
Tel. +82 53 213 9090  
Fax +82 53 353 5997  
info@kflutech.com  
www.kflutech.com

**Savikma Automation & Engineering Services (Pvt) Ltd.**  
22, Wattegedara Road  
Maharagama  
**Sri Lanka**  
Tel. +94 115642164  
Hot line +94 777800070  
Fax +94 112844777  
saes@sitnet.lk

**Zenith Automation  
International Co., Ltd.**  
1F., No.9, Aly. 1., Ln. 5,  
Sec. 3, Ren'ai Rd.,  
Da'an Dist., Taipei City 10651  
**Taiwan (R.O.C.)**  
Tel. +886 2/2781 1267  
Fax +886 2/3322 8973  
zaisales@z-auto.com.tw  
www.z-auto.com.tw

**Pneumax Co. Ltd.**  
107/1 Chaloen Phrakiat R.9 Rd.,  
Pravet - Bangkok 10250  
**Thailand**  
Tel. +66 2/7268000  
Fax +66 2/7268260  
import@pneumax.co.th  
www.pneumax.co.th

## Africa

**Boudissa Technology Sarl**  
25, Cité 20 Août 1955  
Oued Roumane El Achour  
Algiers - 16403  
**Algeria**  
Tel./Fax +213 (0) 23316751  
Tel./Fax +213 (0) 23316733  
contact@boudissatech.com  
www.boudissatech.com

**DISMATEC**  
**Distribution de Matériels Techniques**  
N° RCCM-CI-ABJ-2010B1882  
16 BP 236 ABIDJAN 16  
**Ivory Coast**  
Tel. +225 21267091  
Fax +225 21262367  
dismatec2002@yahoo.fr

**FHP s.a. Flexibles Haute Pression**  
25 Rue Lt Puissesseau  
Casablanca  
**Morocco**  
Tel. +212 22/301997  
Fax +212 22/301913  
fhpelidrissi@iam.net.ma

**Hydramatics Control Equipment**  
15 Village Crescent,  
Linbro Business Park,  
Sandton Johannesburg 2065  
**South Africa**  
Tel. +2711/6081340 - 1 - 2  
Fax +2786/5516311  
mjones@hydramatics.co.za  
www.hydramatics.co.za

**A.T.C. Automatisme**  
Avenue Habib Bourguiba  
Centra Said - BP 25 2033  
Megrine  
**Tunisia**  
Tel. +216 71/297328  
Fax +216 71/429084  
commercial@atc.com.tn  
www.atc.automatisme.com

## Oceania

**Griffiths Components Pty Ltd**  
605 Burwood Hwy  
Knoxfield Victoria  
Melbourne 3180  
**Australia**  
Tel. +61 3/9800 6500  
Fax +61 3/9801 8553  
enquiry@camozzi.com.au





# Short form catalogue

release 8.8

MIX COMUNICAZIONE - MI

