

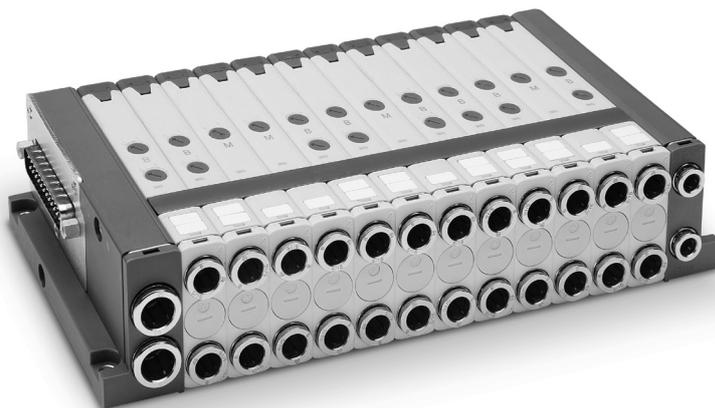
Valve Islands Series F

New

Multipole integrated electrical connection (PNP)
Valve functions: 2x2/2; 2x3/2; 5/2; 5/3 CC

2

CONTROL



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.

Compatible connectors:
see the section "Connectors for Valve Islands" (page 2/3.25.01).

Usable silencers:
see the section "Silencers"
(page 2/9.05.03 - Mod. 2939).

- » Valve size: 12 and 14 mm
- » Modularity: single
- » Valve positions: from 2 to 24
- » Manual override: Push or Push & Turn

GENERAL AND ELECTRICAL CHARACTERISTICS

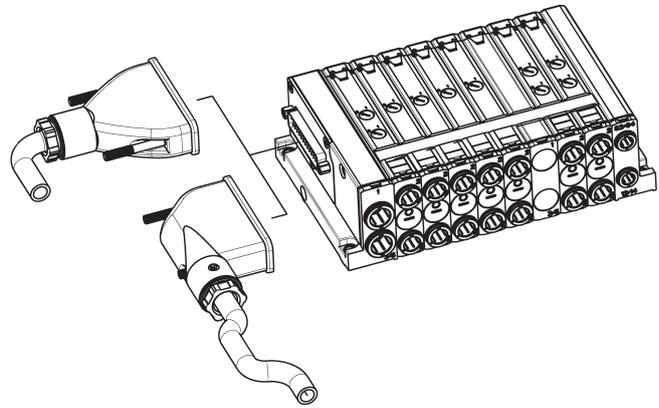
New

PNEUMATIC SECTION	
Valve construction	spool with seals
Valve functions	5/2 monostable and bistable 5/3 CC 2x2/2 NO 2x2/2 NC 1x2/2 NC + 1x2/2 NO 2x3/2 NO 2x3/2 NC 1x3/2 NC + 1x3/2 NO
Materials	aluminium spool HNBR seals other seals in NBR brass cartridges technopolymer body and end covers
Connections	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
Temperature	0 ÷ 50°C
Air specifications	Filtered air class 5.4.4 according to ISO 8573.1 If lubrication is necessary, we recommend you to use only oils with maximum viscosity of 32 Cst.
Valve sizes	12 mm 14 mm
Working pressure	- 0,9 ÷ 10 bar
Pilot pressure	3 ÷ 7 bar
Flow rate	250 NI/min (12 mm) 500 NI/min (14 mm)
Mounting position	any position
ELECTRIC SECTION	
Voltage	24 V DC +/- 10%
Power consumption	0.6 W per coil
Duty cycle	ED 100%
Protection class (according to EN 60529)	IP40 (with connection plug inserted)
Max number of solenoids	24
Max number of valve positions	24 (monostable)

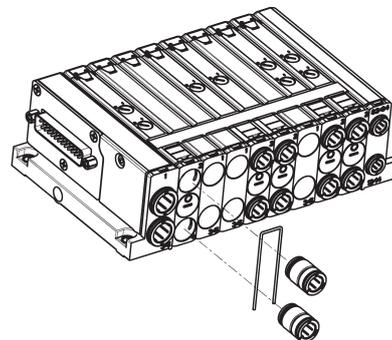
Valve Island Series F - multipole version
New

The multipole version can be connected quickly and safely thanks to the pre-wired electrical connection. These connections are available in different versions, with cable of different lengths and in-line or 90° outlets.

With connectors mod. G4X-G9W-3 and G4X-G9W-5 it is possible to connect up to a maximum number of 23 solenoids.


Valve Island Series F - interchangeable connections
New

The cartridge fittings are interchangeable and thanks to a fixing clip one can be substituted with another according to the size of the tube that has to be connected: Ø4, Ø6 and Ø8 for solenoid valves and Ø6, Ø8 for supply and exhaust.

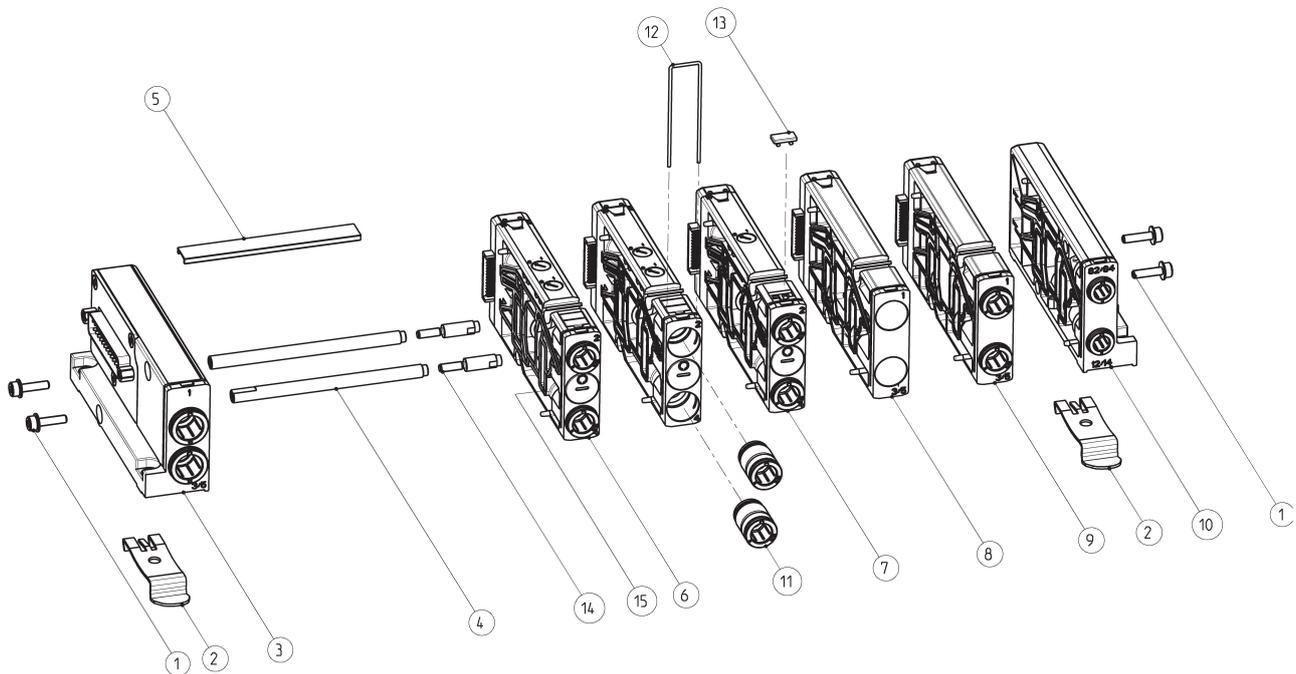


Multipole version - list of components

New

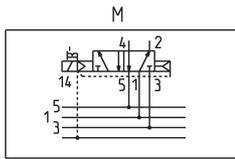
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CONTROL

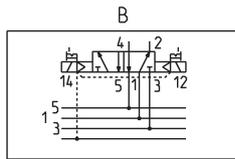


LIST OF COMPONENTS

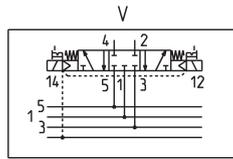
1	Grip screws with built-in washer
2	Bracket for the DIN rail connection
3	Left terminal
4	Tie-rods
5	Tie-rod plastic cover
6	Bistable solenoid valve
7	Monostable solenoid valve
8	Intermediate plate for free position
9	Intermediate plate for pressure zones with supplementary inlet and exhaust
10	Right terminal
11	Interchangeable cartridge fittings
12	Fixing clip for the cartridge fittings
13	Identification plates
14	Joint bolt for odd positions
15	Interface seal that cannot be lost

AVAILABLE FUNCTIONS - SOLENOID VALVES SYMBOLS for version FP..R - push/turn manual override


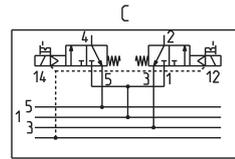
M = 5/2, monostable



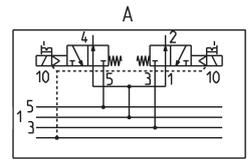
B = 5/2, bistable



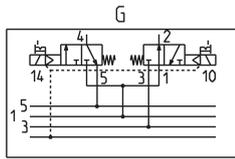
V = 5/3, Centres Closed



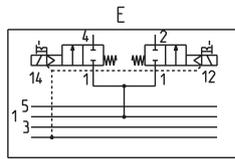
C = 2x3/2 NC



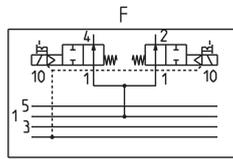
A = 2x3/2 NO



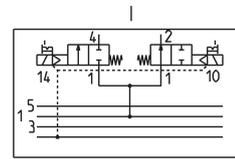
G = 1x3/2 NC + 1x3/2 NO



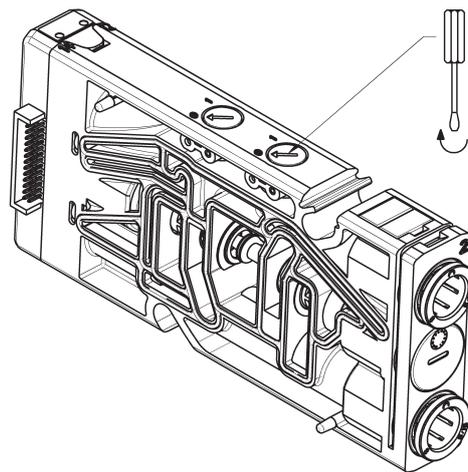
E = 2x2/2 NC



F = 2x2/2 NO

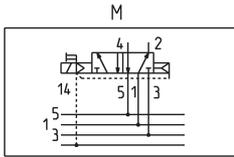


I = 1x2/2 NC + 1x2/2 NO

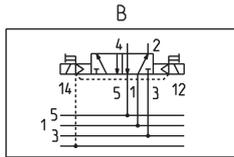


Manual override, version R :
pressure actuation control with PUSH & TURN device.

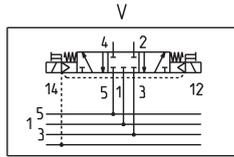
AVAILABLE FUNCTIONS - SOLENOID VALVES SYMBOLS for version FP..P - push manual override



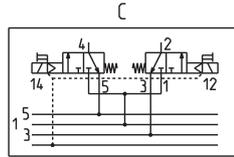
M = 5/2, monostable



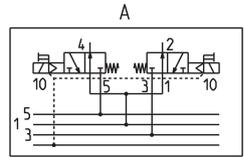
B = 5/2, bistable



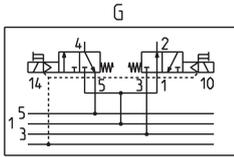
V = 5/3, Centres Closed



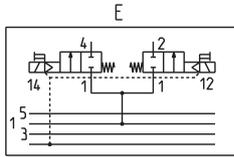
C = 2x3/2 NC



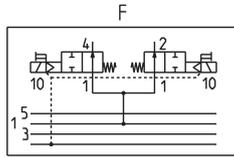
A = 2x3/2 NO



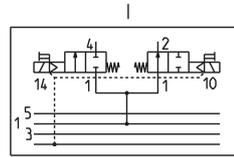
G = 1x3/2 NC + 1x3/2 NO



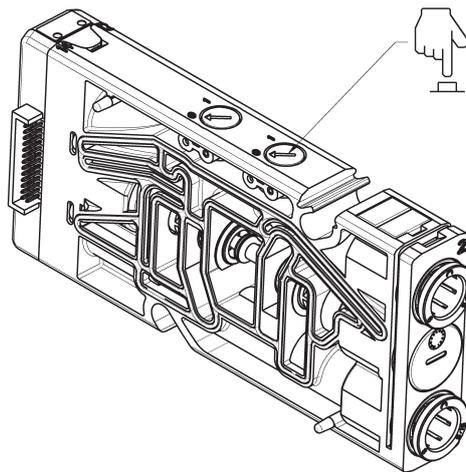
E = 2x2/2 NC



F = 2x2/2 NO



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



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

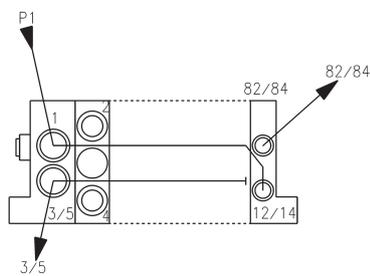
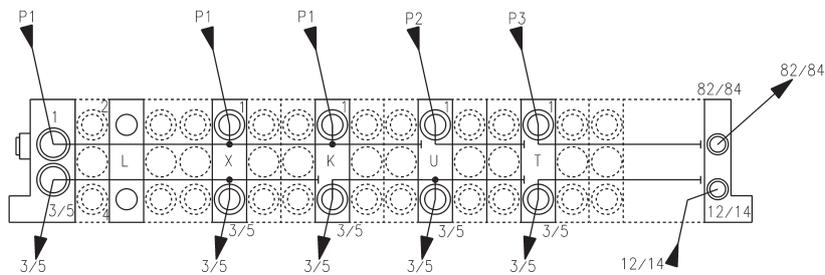
AVAILABLE FUNCTIONS - INTERMEDIATE AND TERMINALS

New

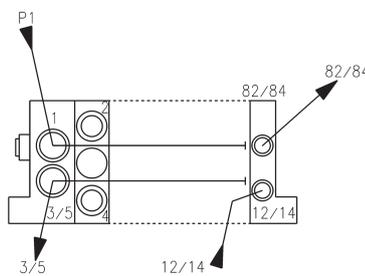
Example of valve island with differentiated pressures and exhausts.

DRAWING LEGEND:

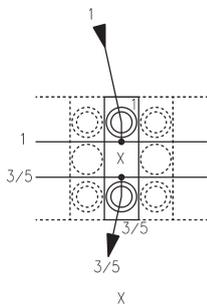
- A = internal servo-pilot
- B = external servo-pilot
- X = supplementary power supply and exhaust
- K = supplementary power supply, separated exhaust
- U = separated power supply, supplementary exhaust
- T = separated power supply and exhaust
- L = free position



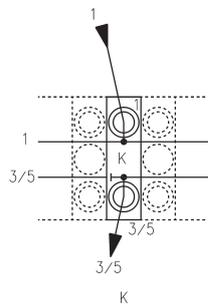
A



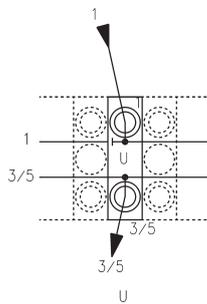
B



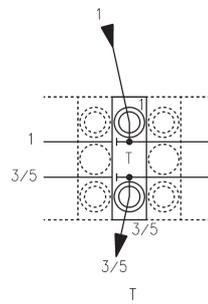
X



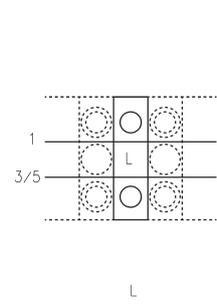
K



U



T

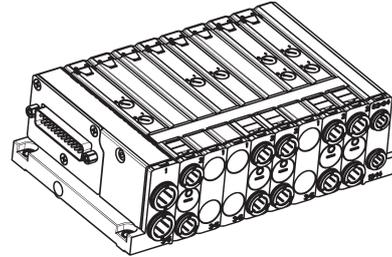


L

Multipole version - characteristics


New

- This multipole valve island can be equipped up to the maximum number of 24 solenoids or 24 valve positions (24 monostable).
- Zones with differentiated pressure can be created.
- Available with logic PNP connection.
- Internal electrical wiring on boards.
- Pre-wired cable connection outlets (25 pin).



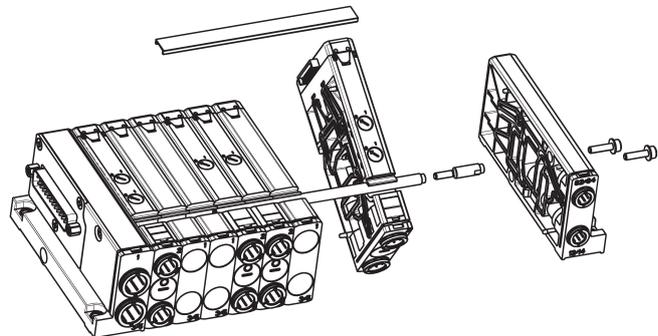
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CONTROL

Multipole version - how to modify the VALVE ISLAND (example)

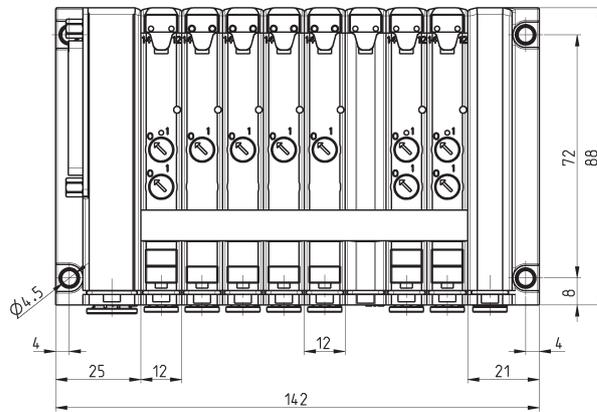
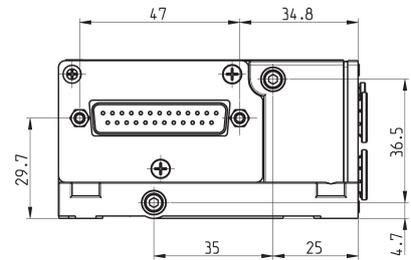
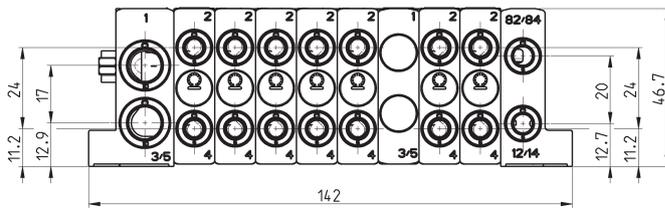
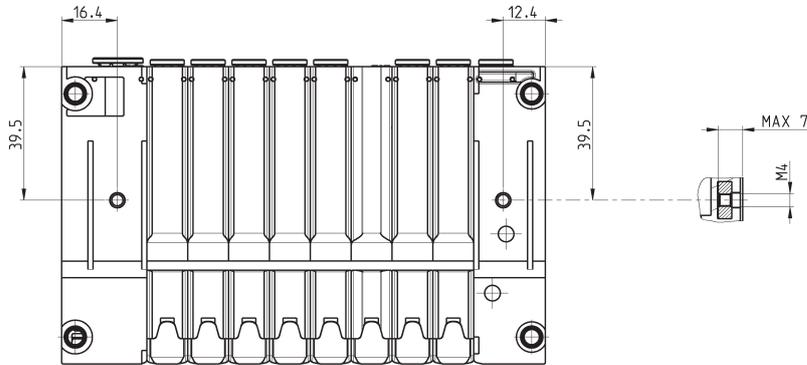

New

- In order to integrate or modify the valve island, it is enough to loosen the tie-rods, separate the valve function that has to be replaced and turn it so that it can be discharged.
- Tie-rods can be supplied with even positions from 2 to 24 (see page 2/3.16.13).
- A single position joint bolt is supplied in case of a valve island with odd positions (see page 2/3.16.13).



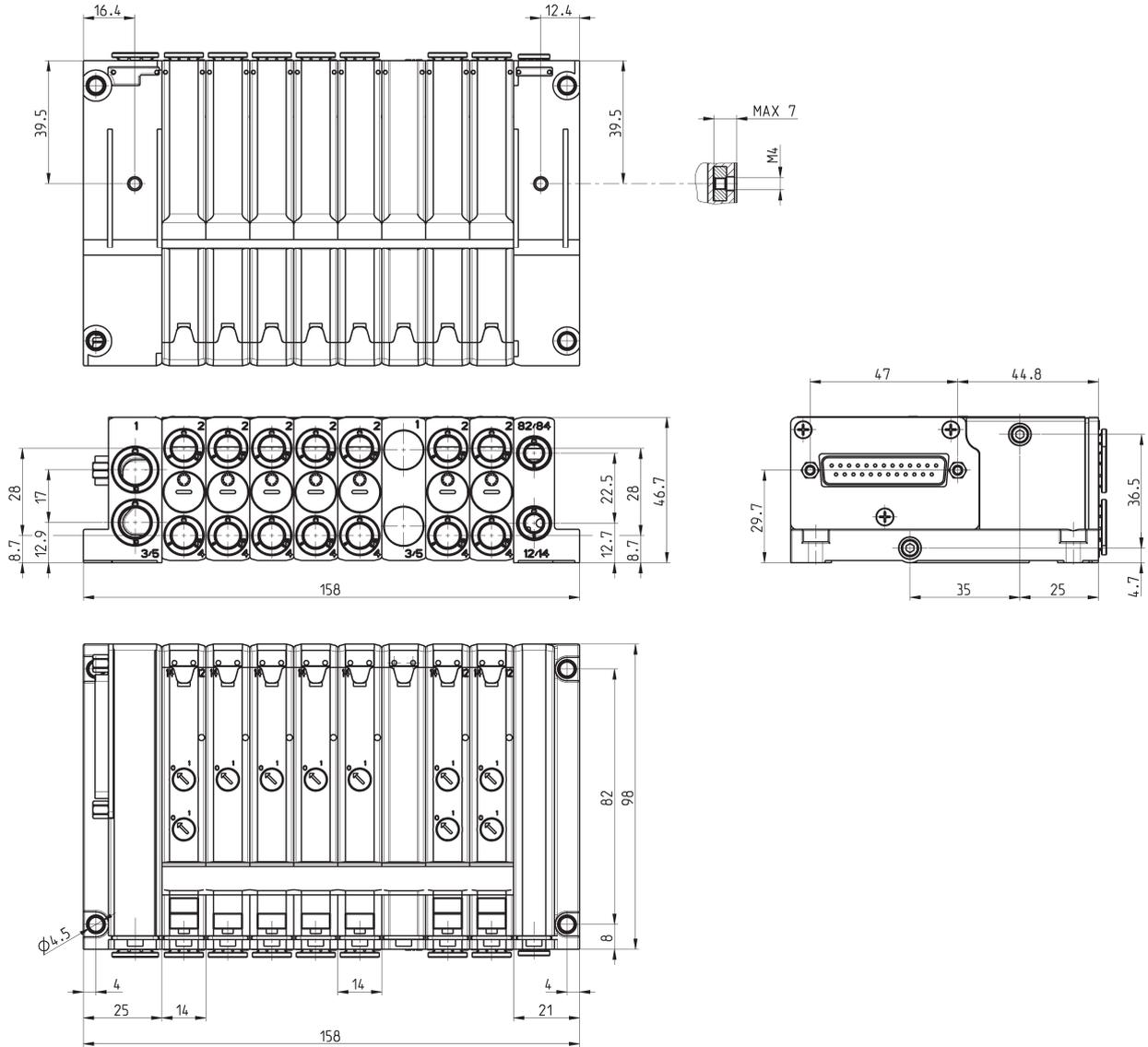
Multipole version - dimensions of size 1

New



Multipole version - dimensions of size 2

New

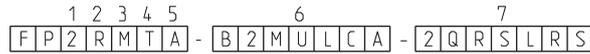
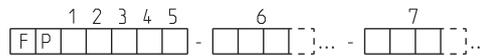
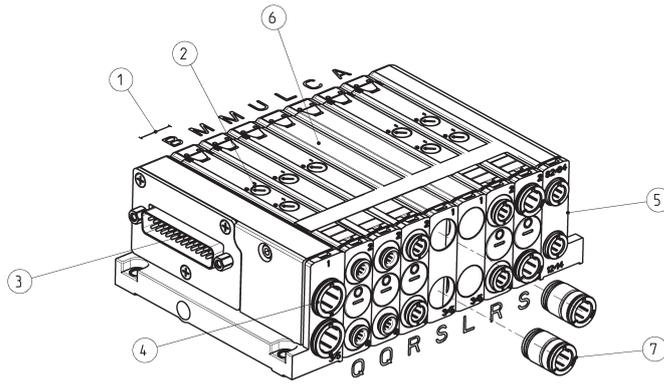


CODING EXAMPLE - MULTIPOLE VERSION

F	P	2	R	M	T	A	-	B2MULCA	-	2QRSLRS
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F	Series
P	Type: P = pneumatic A = accessories
2	Size: 1 = 12 mm 2 = 14 mm
R	Manual override: P = pressure actuation control R = actuation control with push & turn device
M	Electrical connection: M = multipole
T	Cartridges for left terminal: S = tube Ø 8 T = tube Ø 10
A	Type of servo-pilot: A = internal B = external Note: the cartridges for the right terminal are for tube Ø 6.
-	
B2MULCA	Type of solenoid valves and additional plates *: M = 5/2 monostable 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 X = supplementary power supply and exhaust T = separated power supply and exhaust U = separated power supply, supplementary exhaust K = supplementary power supply, separated exhaust
-	
2QRSLRS	Cartridges for solenoid valves and additional plates *: Q = tube Ø 4 R = tube Ø 6 S = tube Ø 8 L = free position
<p>* NOTE: in case of identical and consecutive codes, in the choices " type of solenoid valves and additional plates " and " cartridges for solenoid valves and additional plates ", letters have to be substituted with numbers. With the choice " cartridges for solenoid valves and additional plates " both connections (2 and 4) (1 and 3/5) are defined.</p> <p>Examples: FP2RMTA-MBCCMULMMBB-QQRSSLRQR FP2RMTA-MB2CMUL3M2B-2QR2SL3RQ2R</p>	

CODING - MULTIPOLE VERSION



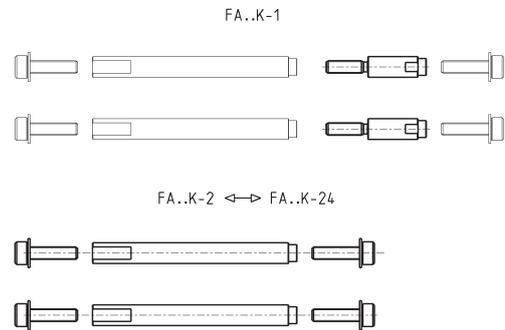
FP (1)	(2)	(3)	(4)	(5)	(6)	(7)
Size	Manual override	Electrical override	Cartridges for left terminal	Type of servo-pilot	Type of solenoid valve or plate	Cartridges for solenoid valves or plates
1 12 mm	P pressure	M multipole	S Ø8	A internal	M 5/2 monostable	Q Ø4
2 14 mm	R push and turn		T Ø10	B external	B 5/2 bistable	R Ø6
			L free position		C 2x3/2 NC	S Ø8
					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	
					X supplementary power supply and exhaust	
					T separated power supply and exhaust	
					U separated power supply, supplementary exhaust	
					K supplementary power supply, separated exhaust	

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

CODING EXAMPLE OF A SOLENOID VALVE		
FP2V-MQR		
F	Series	
P	Type: P = pneumatic	
2	Size: 1 = 12 mm 2 = 14 mm	
V	Solenoid valve or additional plate	
-		
M	Type of function: M = 5/2 monostable 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 L = free position 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	
Q	Cartridges dimensions: = no cartridge Q = Ø4 R = Ø6 S = Ø8 (not for size 1)	
R	Type of manual override: R = push and turn (bistable) P = pressure (monostable)	
CODING EXAMPLE OF A LEFT TERMINAL		CODING EXAMPLE OF A RIGHT TERMINAL
FA2T-S		FA2T-AR
F	Series	F Series
A	Accessory	A Accessory
2	Size: 1 = 12 mm 2 = 14 mm	2 Size: 1 = 12 mm 2 = 14 mm
T	Type of accessory: T = left terminal	T Type of accessory: T = right terminal
-		
S	Cartridges: = no cartridge S = Ø8 T = Ø10	A Type of servo-pilot: A = internal B = external
		R Cartridges: R = Ø6

Tie-rods

New



Mod.	Valve positions	NOTE
FA2K-2	2	*
FA2K-4	4	*
FA2K-6	6	*
FA2K-8	8	*
FA2K-10	10	*
FA2K-12	12	*
FA2K-14	14	*
FA2K-16	16	*
FA2K-18	18	*
FA2K-20	20	*
FA2K-22	22	*
FA2K-24	24	*
FA2K-1	-	**

* Tie-rod.
The supply includes
2 tie-rods and 4 screws.

** Joint bolt for odd positions.
The supply includes 2 joint bolts.

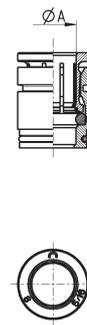
Interchangeable cartridges for valves/plates and for terminals

New



TABLE LEGEND:
 V F1 = solenoid valve or additional plate, size 1
 Tdx F1 = right terminal, size 1
 Tsx F1 = left terminal, size 1
 V F2 = solenoid valve or additional plate, size 2
 Tdx F2 = right terminal, size 2
 Tsx F2 = left terminal, size 2

✕ = compatible

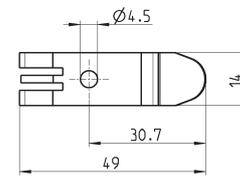


Mod.	ØA	V F1	Tdx F1	Tsx F1	V F2	Tdx F2	Tsx F2
6700 4-F1	4	✕					
6700 4-F2	4				✕		
6700 6-F1	6	✕	✕			✕	
6700 6-F2	6				✕		
6700 8-F1	8			✕			✕
6700 8-F2	8				✕		
6700 10-F1	10			✕			✕

Mounting brackets for DIN rail

New


DIN EN 50022 (7,5mm x 35mm - width 1)

 Supplied with:
 2x plates
 2x screws M4x6 UNI 5931


Mod.

PCF-E520

Identification plates

New

 The packaging contains
 45 identification plates 9x45.

Mod.

HP1/E

Tie-rod plastic cover

New

 When ordering the cover, specify the length,
 measured in metres.

Mod.

LAMINA-EST-32