**CAMOZZI**
Automation

VALVE ISLANDS, INDIVIDUAL AND MULTIPOLE
SERIES Y

Valve island with integrated Pneumatics and Electronics.
Available versions: Individual, Multipole.
Valve functions: 2x2/2; 2x3/2; 5/2; 5/3 CC

FIELDBUS AND MULTIPOLES SYSTEMS

1
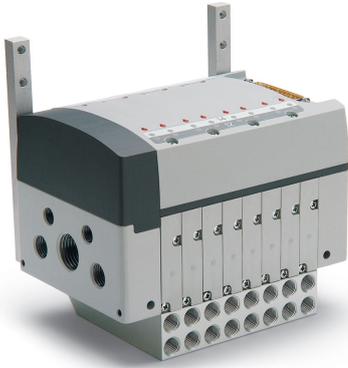
- Multipole modularity:
  - 4, 6, 8 positions

- Pneumatic modularity:
  - 2, 4, 6 and 8 valve positions

- Valve size: 12,5 mm

- Flow rate: 800 Nl/min

- Point-to-Point electrical connection with Micro and M8 connector

Sub-bases and valve bodies are integrated in a sole "module".
Different kinds of cartridges and spools are inserted in the module to configure the desired valve function.
The valve island can be expanded and modified and its maintenance is easy and safe.

Manuals, instruction sheets and configuration files can be found on shop.camozzi.com or on the QR code on the label of the product.

General Data

PNEUMATIC SECTION	
Valve construction	Spool with seals
Valve functions	5/2 monostable and bistable 5/3 CC 2 x 2/2 NC 2 x 2/2 NO 1 x 2/2 NC + 1 x 2/2 NO 2 x 3/2 NC 2 x 3/2 NO 1 x 3/2 NC + 1 x 3/2 NO
Materials	Aluminium spool brass cartridge seals in NBR end covers and covers in technopolymer
Connections	Outlets 2 and 4: G1/8 Inlets 1 and 11: G1/4 Pilot ports: 12/14 and respective exhaust 82/84 G1/8 Exhausts 3/5: G1/2
Temperature	0 ÷ 50°C
Air specifications	Filtered compressed air, non lubricated, class [3:4:3] according to ISO 8573.1 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 [3:4:3] according to ISO 8573.1 standard.
Dimensions/size	12,5 mm
Working pressure	-0,9 ÷ 10 bar (with external servo pilot supply)
Pilot pressure	3 ÷ 7 bar
Flow rate	800 Nl/min
ELECTRICAL SECTION	
Max. absorption	1300mA continuous 1600mA latch
Operating temperature	0 ÷ 50°C
Continuous current	ED 100%
Protection class	IP65
Relative humidity	30-90% +25°C 30-50% +50°C
Conform with standards	EN 61326-1 EN 61010-1

VALVE ISLANDS, INDIVIDUAL AND MULTIPOLE
SERIES Y - MOUNTING EXAMPLES

How to compose the valve island

- One or more pneumatic modules with either 2, 4, 6 or 8 valve positions incorporating the sub-base with two separated channels for supply and exhaust, and the seat for the valves. It is possible to join the different modules together with pins and fixing screws, thus increasing the number of valve positions;
- Two terminal plates (right and left) on which it is possible to connect pressure inlets and exhausts;
- Seals among the various elements;
- Cartridges and spools which reproduce the different valve functions (further information on the following pages);
- One or more covers which integrate electronics and pilots distributing signals to valves (further information on the following pages).
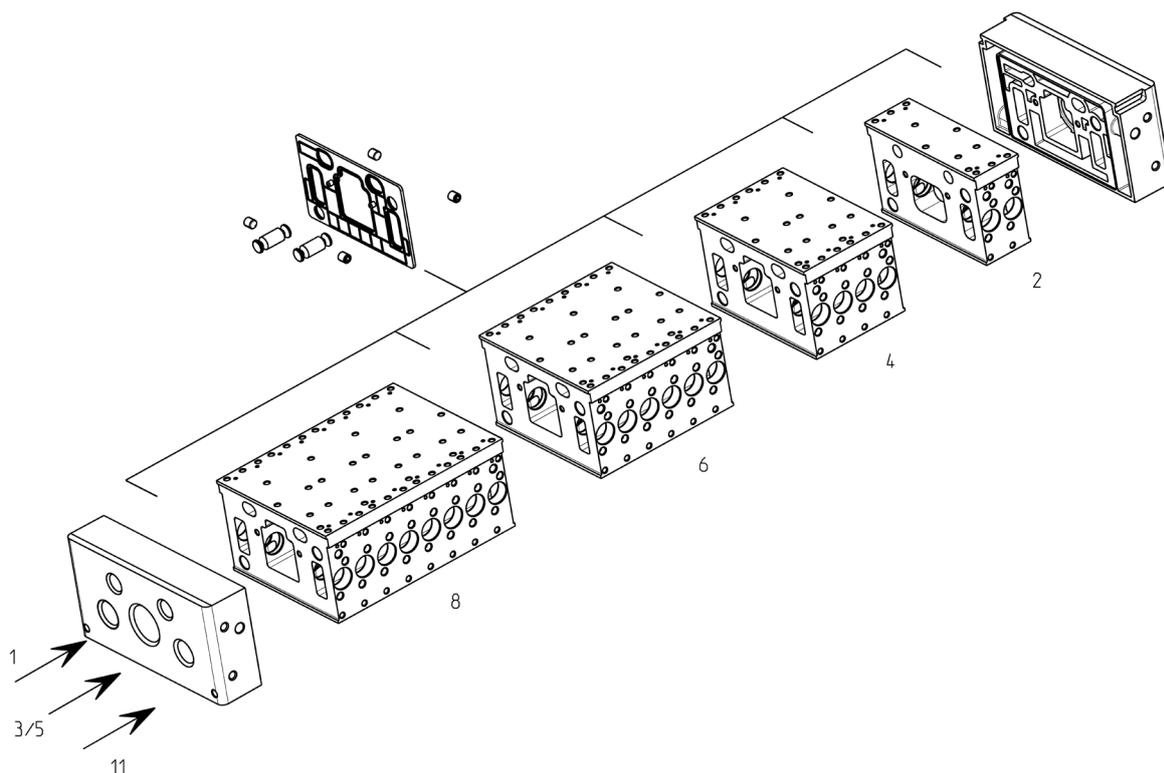
Plate for supplementary supply and exhaust

The two independent supplies allow the same valve to have different pressure values on outlets 2 and 4. In this way a higher pressure can be used for the working operations and a lower pressure for the repositioning of the actuators, reducing the costs for generating compressed air.
The modularity of 2, 4, 6 or 8 valve positions allows, through the specific seals, to subdivide the island in pressure/exhaust zones without loosing valve positions. Functions W or X can be used to supply the intermediate pressure zones of an island.
To avoid any possible problem during exhaust, the exhaust itself has been increased and it passes through on both sides.
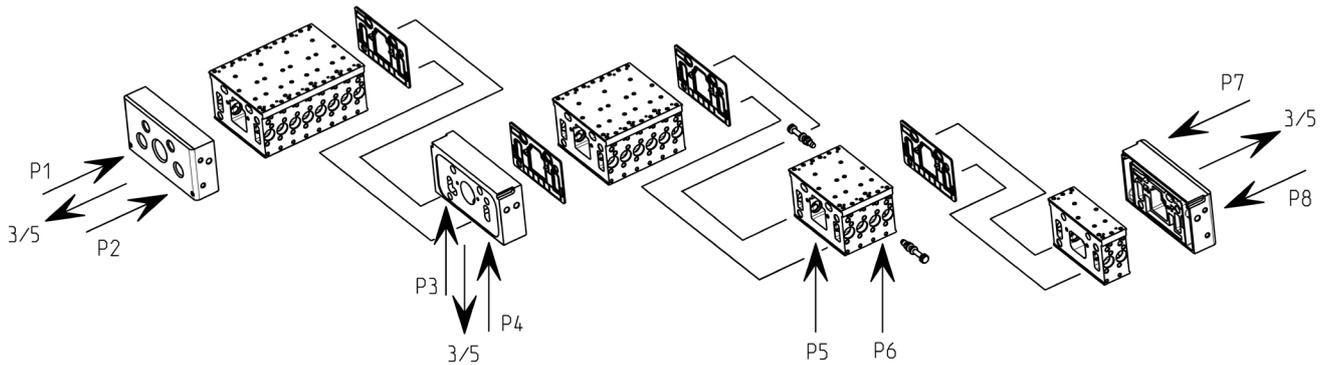
## Connection by means of terminal plates

The connection to the compressed air source by means of terminal plates enables different types of connection.
The fitting Mod. 6512* (for dimensions see section 4/1.05) can be connected to inlets 2 and 4.

* it is possible to connect the following fittings, supplied with O-ring:
6512-4-1/8-M
6512-6-1/8-M
6512-8-1/8-M
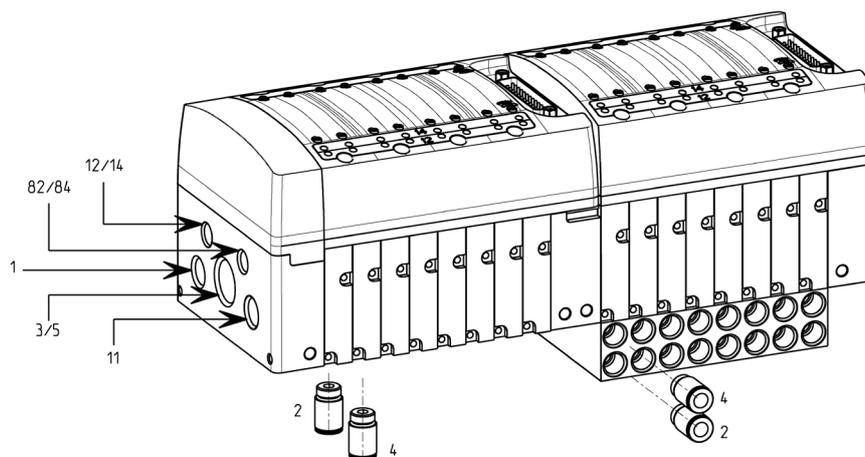
Supply (1-11)	Exhaust (3/5)	Servo-pilot supply (12/14)	Servo-pilot exhaust (82/84)	Inlets (2-4)
G1/4	G1/2	G1/8	G1/8	G1/8

VALVE ISLANDS, INDIVIDUAL AND MULTIPOLE
SERIES Y - TECHNICAL DATA

Terminal plates - pneumatic connections from left and right
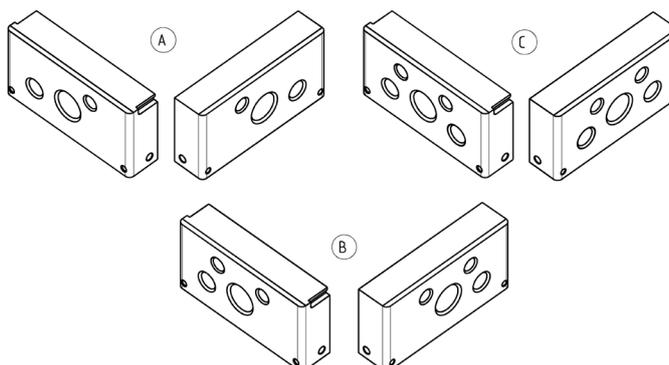
Code	Common connections	Separated connections
A	1 - 11 12/14	82/84 3/5
B	1 - 11	12/14 82/84 3/5
C	-	1 - 11 12/14 82/84 3/5

Terminal plates - pneumatic connections from the right
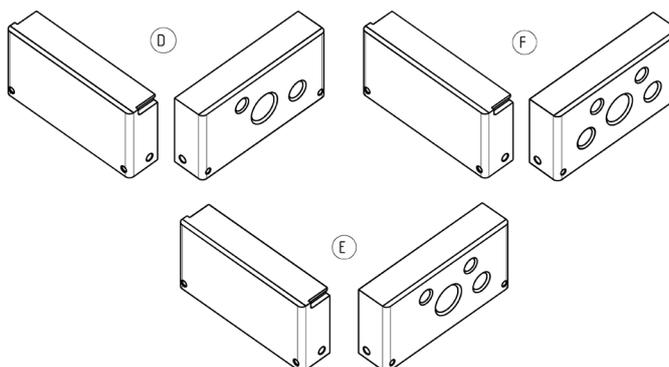
Code	Common connections	Separated connections
D	1 - 11 12/14	82/84 3/5
E	1 - 11	12/14 82/84 3/5
F	-	1 - 11 12/14 82/84 3/5

Terminal plates - pneumatic connections from the left
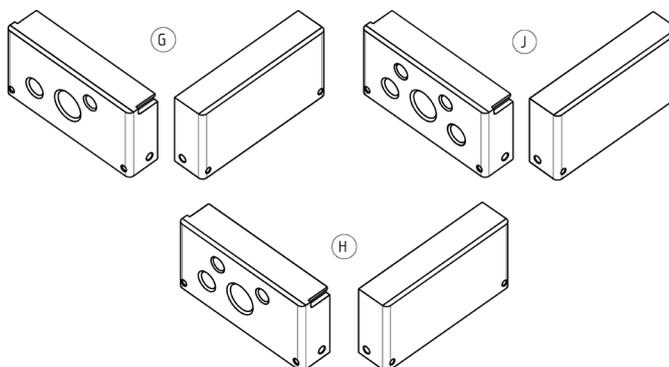
Code	Common connections	Separated connections
G	1 - 11 12/14	82/84 3/5
H	1 - 11	12/14 82/84 3/5
J	-	1 - 11 12/14 82/84 3/5

VALVE ISLANDS / 2025/03

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VALVE ISLANDS, INDIVIDUAL AND MULTIPOLE
SERIES Y - PNEUMATIC SYMBOLS

FIELDBUS AND MULTIPOLES SYSTEMS

1

Available functions
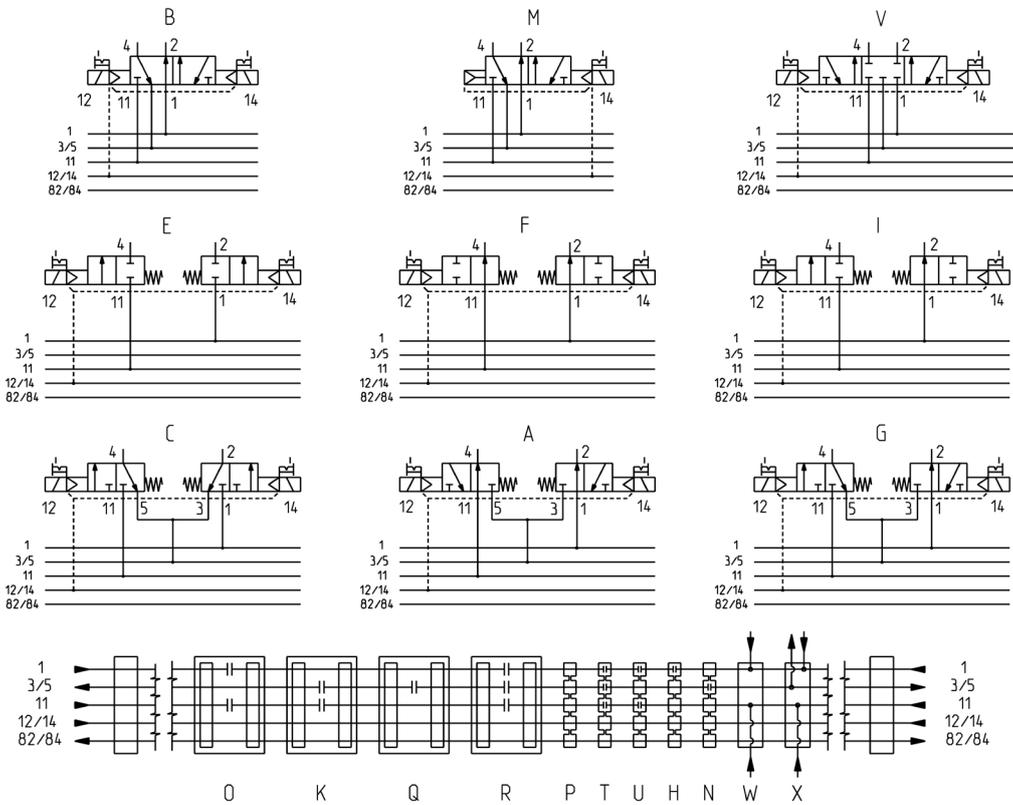
Code	Function	Actuation/return	Working pressure (bar)	Pilot pressure (bar)	Symbol
M	5/2 Monostable	solenoid/pneumatic spring	-0,9 ÷ 10	3 ÷ 7	M
B	5/2 Bistable	solenoid/solenoid	-0,9 ÷ 10	3 ÷ 7	B
V	5/3 Centres Closed	solenoid/solenoid	-0,9 ÷ 10	3 ÷ 7	V
I	2 x 2/2 (1 NO + 1 NC)	solenoid/solenoid	-0,9 ÷ 10	3 ÷ 7	I
E	2 x 2/2 (NC)	solenoid/solenoid	-0,9 ÷ 10	3 ÷ 7	E
F	2 x 2/2 (NO)	solenoid/solenoid	-0,9 ÷ 10	3 ÷ 7	F
G	2 x 3/2 (1 NO + 1 NC)	solenoid/solenoid	-0,9 ÷ 10	3 ÷ 7	G
C	2 x 3/2 (NC)	solenoid/solenoid	-0,9 ÷ 10	3 ÷ 7	C
A	2 x 3/2 (NO)	solenoid/solenoid	-0,9 ÷ 10	3 ÷ 7	A
L	Free position	-	-	-	L
W	Additional supply from 2 and 4	-	-	-	W
T	Diaphragm seal (module's separation)	-	-	-	T
P	Through seal (module's separation)	-	-	-	P
T/	Diaphragm seal (separation of both modules and covers)	-	-	-	T
P/	Through seal (separation of both modules and covers)	-	-	-	P
U	Diaphragm seal 3/5 open	-	-	-	U
H	Diaphragm seal 3/5 - 11 open	-	-	-	H
N	Diaphragm seal 1 - 11 open	-	-	-	N
U/	Diaphragm seal 3/5 open (separation of both modules and covers)	-	-	-	U
K	Expansion module, 2 positions with 3/5 - 11 closed	-	-	-	K
R	Expansion module, 2 positions with 3/5 - 1 - 11 closed	-	-	-	R
O	Expansion module, 2 positions with 1- 11 closed	-	-	-	O
Q	Expansion module, 2 positions with 3 - 5 closed	-	-	-	Q
X	Module for additional supply	-	-	-	X

Cartridges and spools for the creation of valve functions

The different valve functions are obtained by inserting the cartridges and spools in the seats of the pneumatic module.
These seats have been designed at right angles with respect to the terminal plates.
The shape of cartridges and spools depends on the valve function required.

Example:
(A) = Cartridge and spool for a 3/2-way function
(B) = End cover
(C) = Cartridge and spool for a 5/2-way function

The modification or maintenance of a valve position is obtained removing the end cover "B" and replacing both the cartridge and the spool.
During modification/maintenance, the tubing for the pneumatic connection can stay connected to the island, thus simplifying and optimising the whole operation.
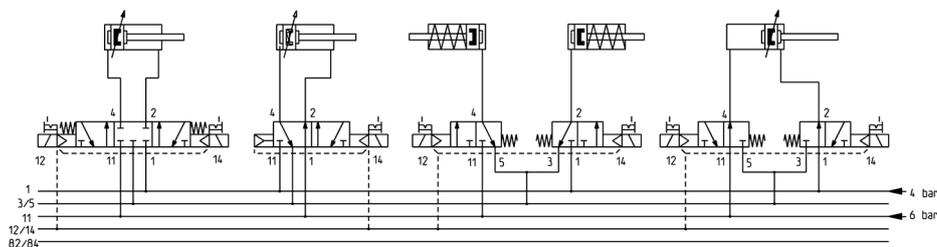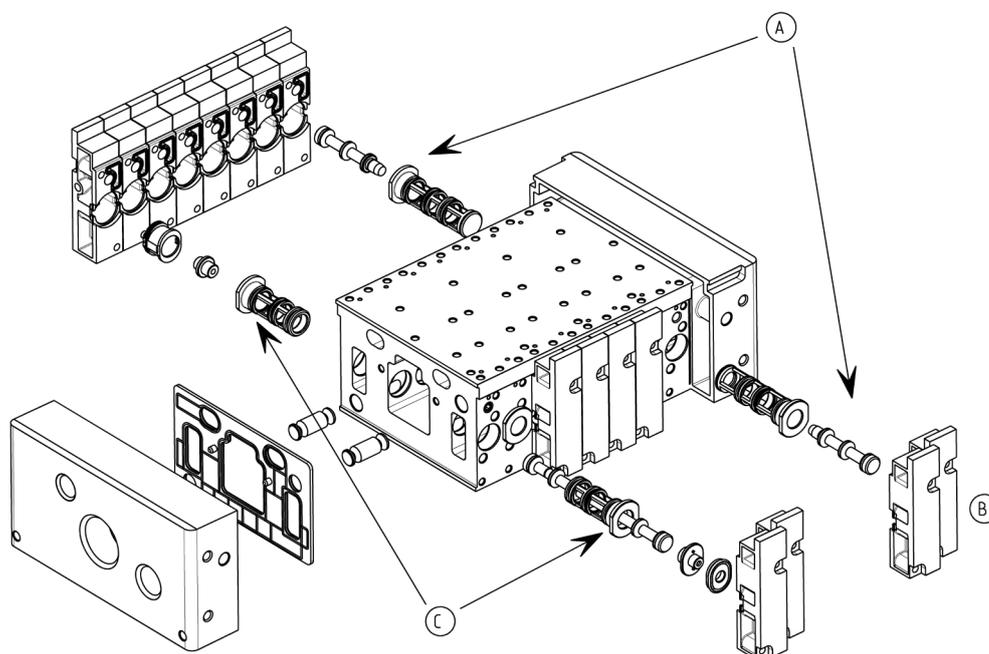
## Individual version - dimensions

n = number of valves
n1 = number of supplementary power supply modules (cod. X)

VALVE ISLANDS, INDIVIDUAL AND MULTIPOLE
SERIES Y - DIMENSIONS

Individual version - dimensions

n = number of valves
n1 = number of supplementary power supply modules (cod. X)

VALVE ISLANDS / 2025/03

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VALVE ISLANDS, INDIVIDUAL AND MULTIPOLE
SERIES Y - TECHNICAL DATA

FIELDBUS AND MULTIPOLES SYSTEMS

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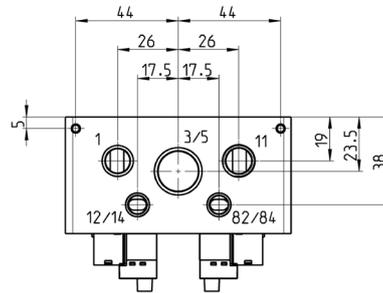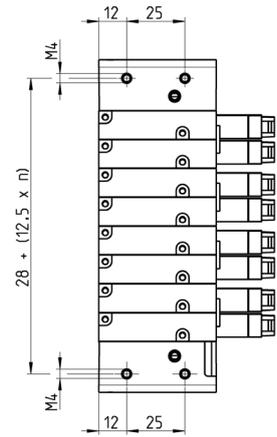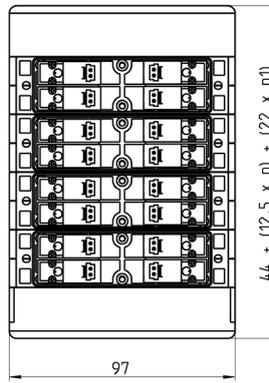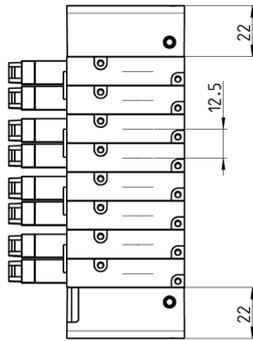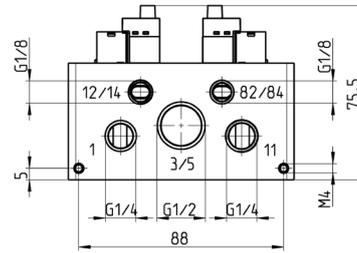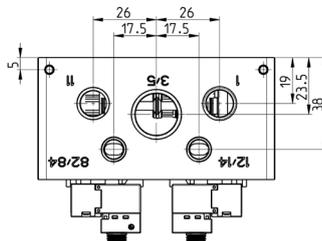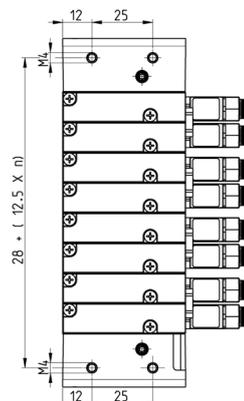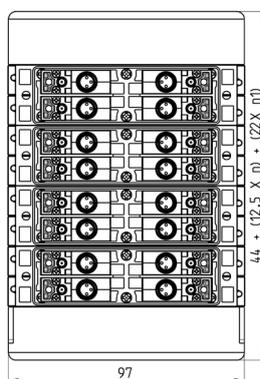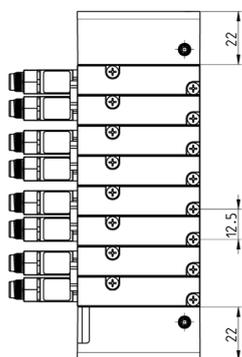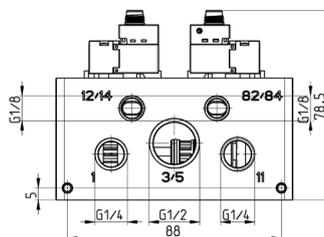
Covers - Multipole version

The Multipole cover is available in three sizes and allows the connection to valve islands with 4, 6 or 8 valve positions.
Every position can be freely equipped with either monostable or bistable solenoid.
It is possible to join two or more valve islands placing a plate for intermediate supply, type "X", under every Sub-D plug.
Pneumatic modules can be composed of 2, 4, 6 or 8 valve positions and separated by various seals.
A module for additional supply type "X" or a function "W" must be always inserted between two seals separating channels 1 and 11.

VALVE ISLANDS, INDIVIDUAL AND MULTIPOLE
SERIES Y - DIMENSIONS

Multipole version - dimensions

A = 8 positions
B = 6 positions
C = 4 positions
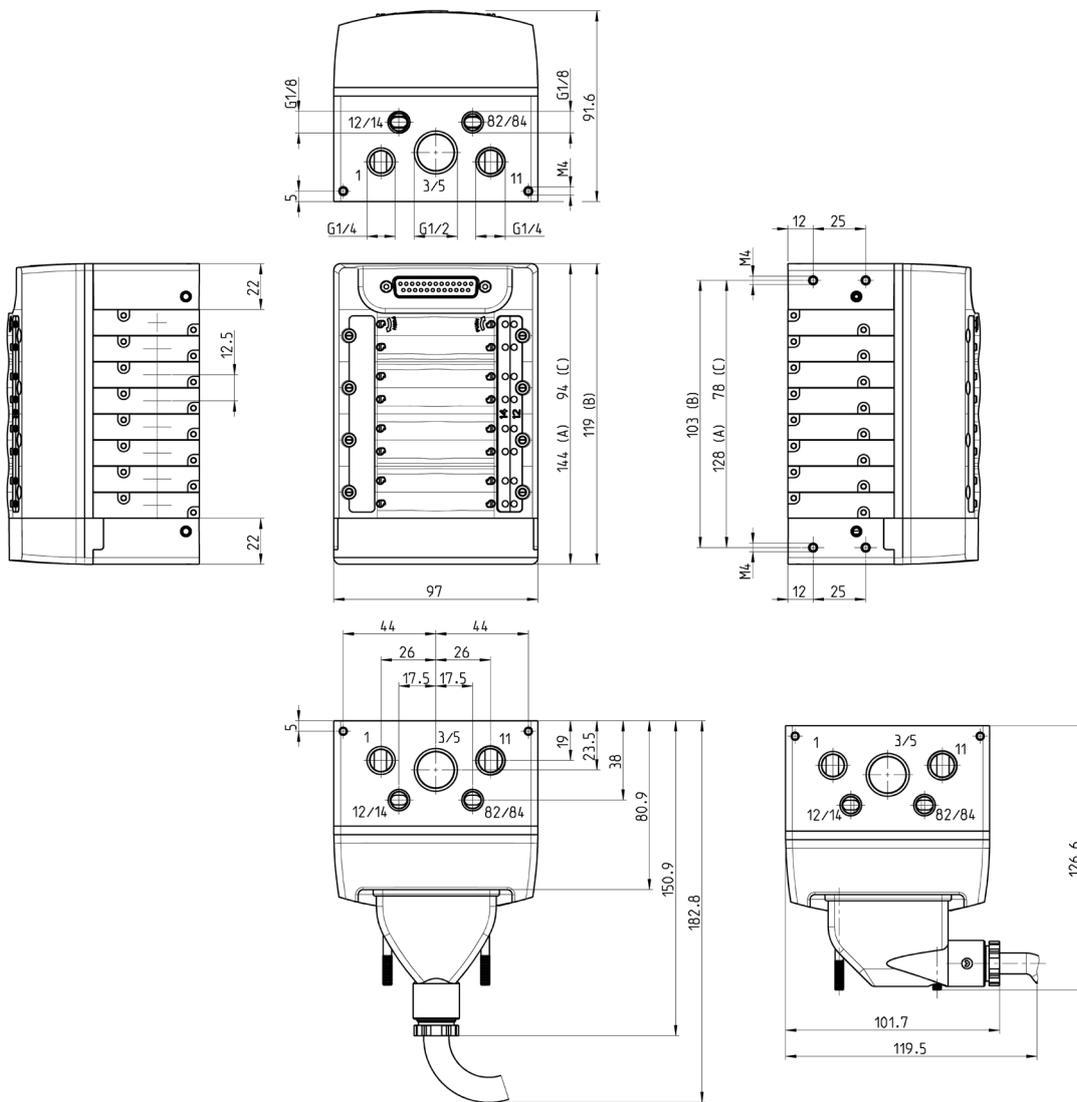
Coding
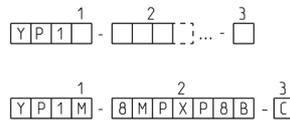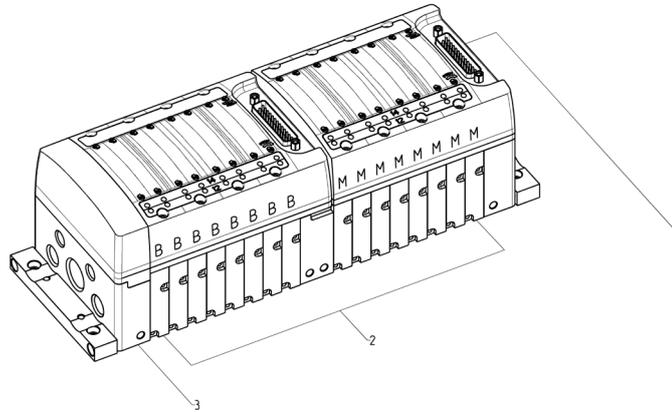
(1) Type of electrical connection	(2) Type of valve	(3) Type of terminal plates
K Individual	-	-
W Individual M8	-	-
M Multipole (PNP)	-	-
-	**M** 5/2 Monostable	-
-	**B** 5/2 Bistable	-
-	**V** 5/3 CC	-
-	**I** 2x2/2 1 NO + 1 NC	-
-	**E** 2x2/2 NC	-
-	**F** 2x2/2 NO	-
-	**G** 2x3/2 1 NO + 1 NC	-
-	**C** 2x3/2 NC	-
-	**A** 2x3/2 NO	-
-	**L** Free position	-
-	**W** Additional supply module from 2 and 4	-
-	**T** Diaphragm seal (modules separation)	-
-	**P** Through seal (modules separation)	-
-	**T/** Diaphragm seal (modules and cover separation)	-
-	**P/** Through seal (modules and cover separation)	-
-	**U** Diaphragm seal 3/5 opened	-
-	**H** Diaphragm seal 3/5-11 opened	-
-	**N** Diaphragm seal 1-11 opened	-
-	**U/** Diaphragm seal 3/5 opened, modules and cover separ.	-
-	**K** Module with 2 positions and 3/5-11 closed	-
-	**R** Module with 2 positions and 3/5-1-11 closed	-
-	**O** Module with 2 positions and 1-11 closed	-
-	**Q** Module with 2 positions and 3/5 closed	-
-	**X** Additional supply module	-
-	-	**A** in common 1/11 - 12/14 individual 82/84 - 3/5
-	-	**B** in common 1/11 individual 12/14 - 82/84 - 3/5
-	-	**C** individual 1/11 - 12/14 - 82/84 - 3/5
-	-	**D** in common 1/11 - 12/14 individual 82/84 - 3/5
-	-	**E** in common 1/11 individual 12/14 - 82/84 - 3/5
-	-	**F** individual 1/11 - 12/14 - 82/84 - 3/5
-	-	**G** in common 1/11 - 12/14 individual 82/84 - 3/5
-	-	**H** in common 1/11 individual 12/14 - 82/84 - 3/5
-	-	**J** individual 1/11 - 12/14 - 82/84 - 3/5
-	-	**Z** modules without terminal plate

Products designed for industrial applications. General terms and conditions for sale are available on www.camozzi.com
This document contains a description of the products offered by Camozzi Automation at time of publication.
For more complete and up to date information about the Camozzi Automation product range, please refer to our online catalogue at https://shop.camozzi.com

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VALVE ISLANDS, INDIVIDUAL AND MULTIPOLE
**SERIES Y - TECHNICAL DATA**

Coding example

Valve island with Multipole connection made of:
4x solenoid valves type M
Diaphragm seal Mod. T for the separation of pressure zones
4x solenoid valves type B
Through-out seal Mod. P
Intermediate additional supply module Mod. X
Through-out seal Mod. P
Terminals with individual connection
4x solenoid valves type C
Diaphragm seal Mod. T for the separation of pressure zones
4x solenoid valves type M

Code:
YP1M-4MT4BPXP4CT4M-C

For the code composition see the coding table on the previous page.
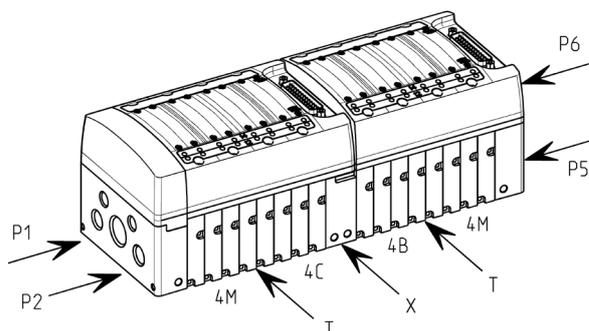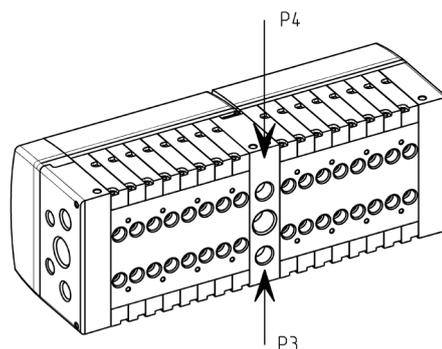
Sub-D adaptor module 25 pin Mod. CXA-25P

It is an Expansion module of the serial subnet that can be made through a CX3 multi-serial module and can be connected to all valve islands with Sub-D 25 pin connection. It can manage up to a maximum of 24 Output. It has its own M12 A 4 pin male connection for the supply of the valves connected, distinguishing both logic supply and power supply and two M12 D 4 pin female connections for the Bus-IN and Bus-OUT of the subnet. The subnet can have a maximum length of maximum 100 metres. The power of a single Output is 3 W to 24 V DC. Thanks to the PWM technique it is possible to set a power reduction to only maintain operation.

Led 1 = Yellow LNK1
Led 2 = Yellow LNK2
Led 3 = Green PWR, supply present and OK
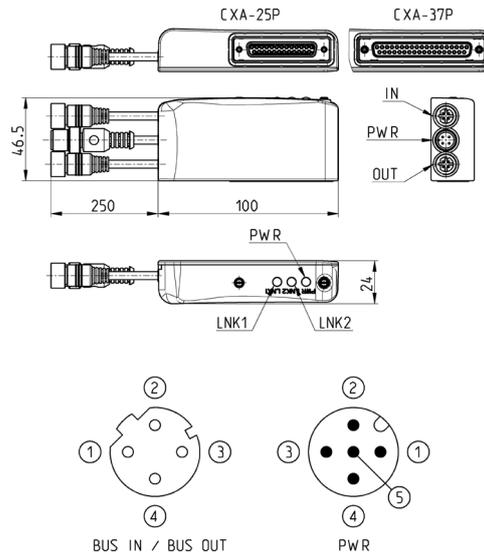
Mod.	Interface	Digital Outs	Bus-IN connection	Bus-OUT connection	PWR connection	Supply	Power for every Output
CXA-25P	Sub-D 25 pin	24	M12D 4 pin female	M12D 4 pin female	M12A 4 pin male	24 V DC	3 W

25M-25F Sub-D adaptor
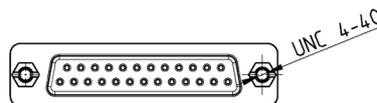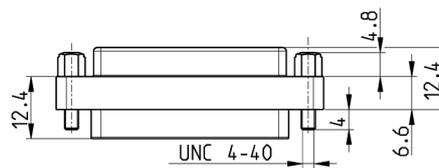
Mod.	Description	Type of connector	Connection	Cable length (m)
G2X-G2W	moulded adaptor	in line	Sub-D 25 pin female - male	-

VALVE ISLANDS, INDIVIDUAL AND MULTIPOLE
SERIES Y - ACCESSORIES

Connector Mod. 121-8.. for Individual version
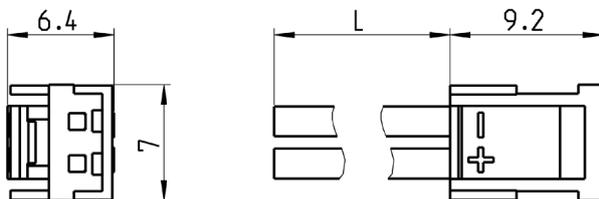
Mod.	Description	Colour	L = cable length (mm)	cable holding
121-803	crimped cable	black	300	crimping
121-806	crimped cable	black	600	crimping
121-810	crimped cable	black	1000	crimping
121-830	crimped cable	black	3000	crimping

3-wire extension with M8 3-pin female connector for "C" actuation

With PU sheathing, non shielded cable.
Protection class: IP65

1 BN = Brown +/-
4 BK = Black +/-
3 BU = Blue NC
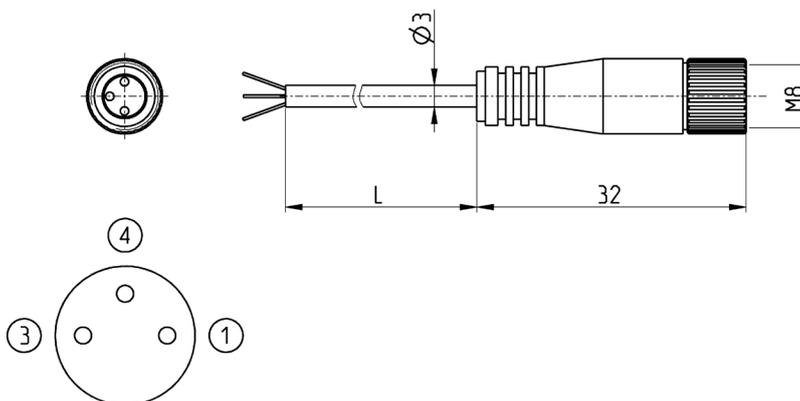
Mod.	L = cable length (m)
CS-2	2
CS-5	5
CS-10	10

Extension with M8 connector, 3 pin male/female (Non shielded)
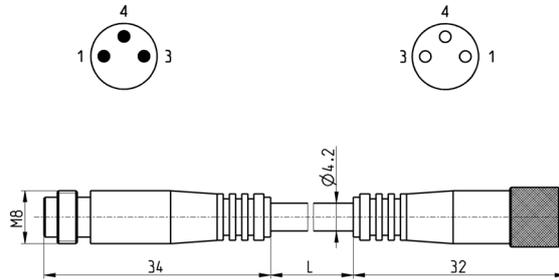
Mod.	Description	Type of connector	Connection	L [cable length] (m)
CS-DW03HB-C250	moulded cable	straight	M8 3 pin male / female	2,5
CS-DW03HB-C500	moulded cable	straight	M8 3 pin male / female	5

Straight Sub-D 25 pin female connector with axial cable

Protection class IP65
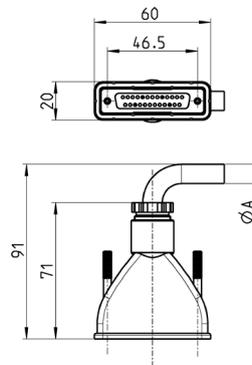
Mod.	⌀A	PIN	Cable length (m)
G3X-3	7,7	16	3
G3X-5	7,7	16	5
G3X-10	7,7	16	10
G3X-15	7,7	16	15
G3X-20	7,7	16	20
G3X-25	7,7	16	25
G4X-3	9	25	3
G4X-5	9	25	5
G4X-10	9	25	10
G4X-15	9	25	15
G4X-20	9	25	20
G4X-25	9	25	25

VALVE ISLANDS, INDIVIDUAL AND MULTIPOLE
SERIES Y - ACCESSORIES

Right angle Sub-D 25 pin female connector with axial cable

Protection class IP65
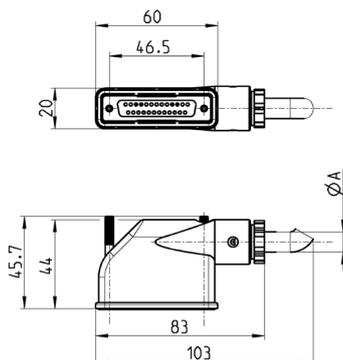
Mod.	$\varnothing$A	PIN	Cable length (m)
G3X1-3	7,7	16	3
G3X1-5	7,7	16	5
G3X1-10	7,7	16	10
G3X1-15	7,7	16	15
G3X1-20	7,7	16	20
G3X1-25	7,7	16	25
G4X1-3	10	25	3
G4X1-5	10	25	5
G4X1-10	10	25	10
G4X1-15	10	25	15
G4X1-20	10	25	20
G4X1-25	10	25	25

Interface with 8 valve positions

Supplied with:
1x interface 8 pos.
8x screws M3x25 UNI 5931
16x interface seals

Outlets 2 and 4 are located in the lower part of the module and can be oriented on end-covers side using this interface sub-base.
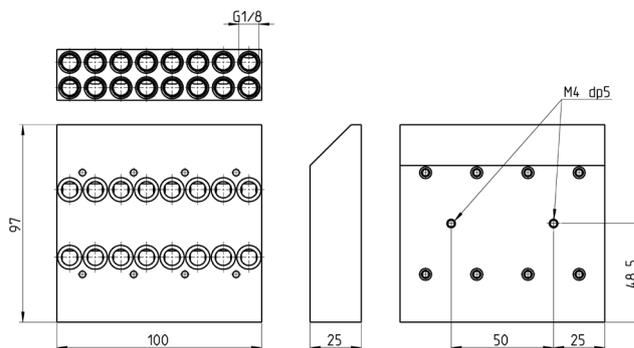
Mod.
YA1K-N8

Interface with 6 valve positions

Supplied with:
1x interface 6 pos.
6x screws M3x25 UNI 5931
12x interface seals

Outlets 2 and 4 are located in the lower part of the module and can be oriented on end-covers side using this interface sub-base.
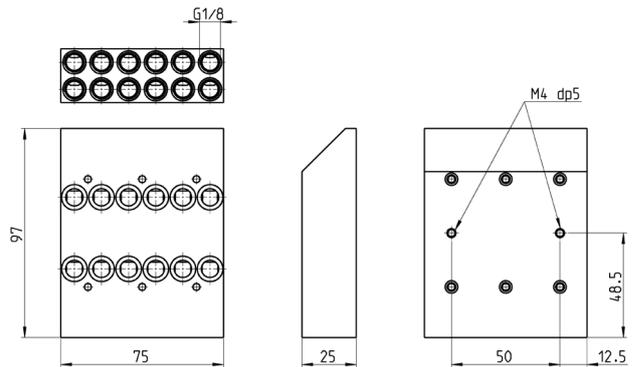
Mod.
YA1K-N6

Interface with 4 valve positions

Supplied with:
1x interface 4 pos.
4x screws M3x25 UNI 5931
8x interface seals

Outlets 2 and 4 are located in the lower part of the module and can be oriented on end-covers side using this interface sub-base.
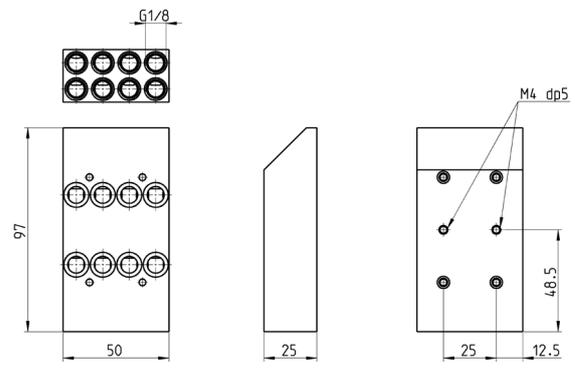
Mod.
YA1K-N4

Interface with 2 valve positions

Supplied with:
1x interface 2 pos.
2x screws M3x25 UNI 5931
4x interface seals

Outlets 2 and 4 are located in the lower part of the module and can be oriented on end-covers side using this interface sub-base.

Mod.
YA1K-N2

VALVE ISLANDS, INDIVIDUAL AND MULTIPOLE
SERIES Y - ACCESSORIES
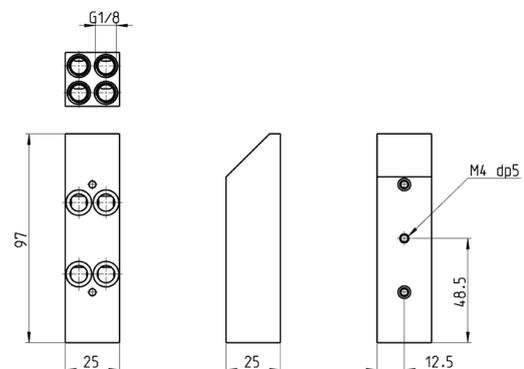
Intermediate plate for supplementary supplies and exhausts cod. X
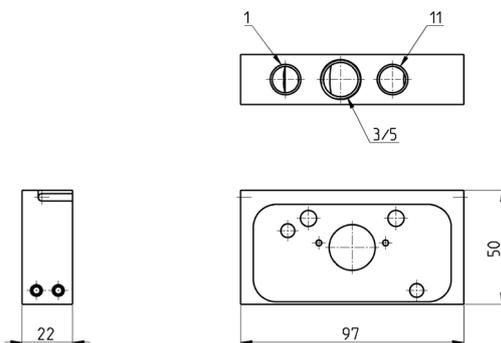
Mod.	1	3/5	11
YA1K-N1X/1	G1/4	G3/8	G1/4

Solenoid valve Mod. KL040-A63AY-03P - spare part for Series YP1K


EV04
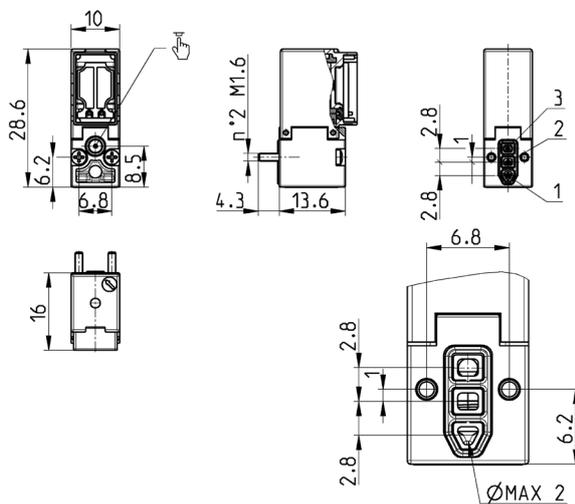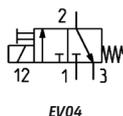
Mod.
KL040-A63AY-03P

Solenoid valve Mod. KL040-A63AY-13P - spare part for Series YP1K

EV04
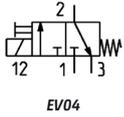
Supplied with:
1x interface seal
2x screws M1,6x16 UNI 10227
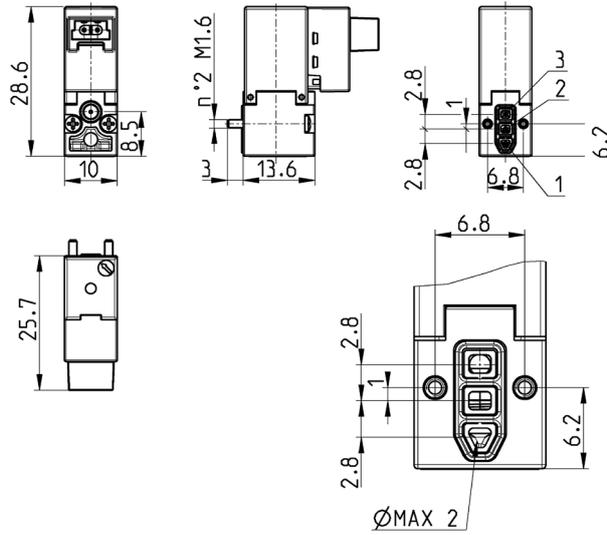
Mod.
KL040-A63AY-13P

Solenoid valve Mod. KL040-A63AY-M3P - spare part for Series YP1W
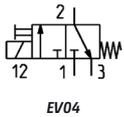
EV04

Supplied with:
1x interface seal
2x screws M1,6x16 UNI 10227

Mod.
KL040-A63AY-M3P

VALVE ISLANDS, INDIVIDUAL AND MULTIPOLE
SERIES Y - ACCESSORIES
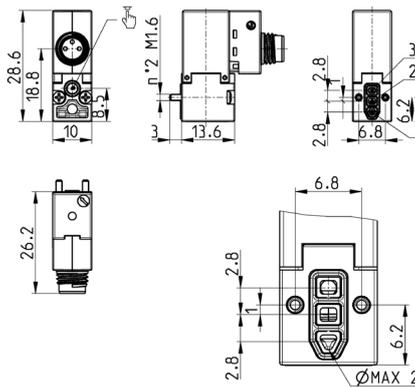
Vertical foot

Supplied with:
2x vertical feet
2x screws M4x10 UNI 5931
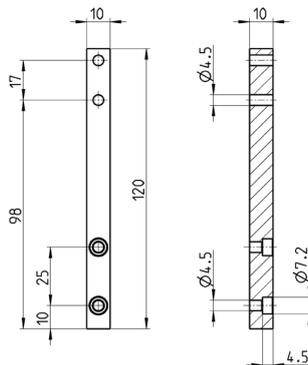
Mod.
YA1K-B2

Horizontal foot

Supplied with:
2x horizontal feet
2x screws M4x14 UNI 5931
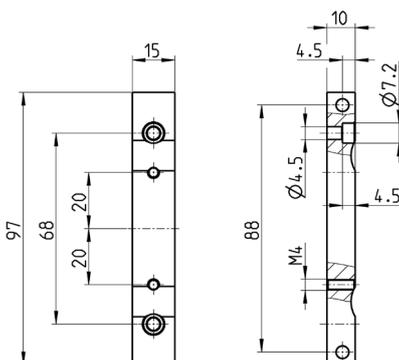
Mod.
YA1K-B1

Mounting brackets for DIN rail

DIN EN 50022 (7,5mm x 35mm - width 1)
Suitable for all manifolds.

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

Mod.
PCF-E520