

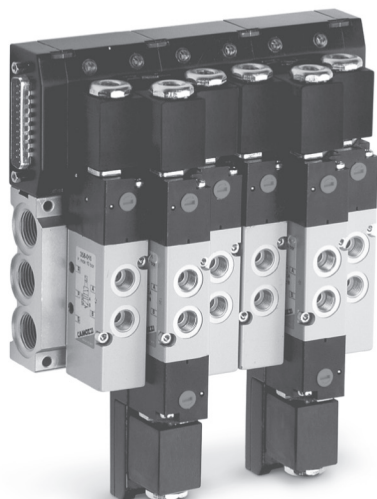
Valve Island Series 3 Plug-In

Plug-In system for electro-pneumatically operated valves Series 3, G1/8 port.

Valve functions: 2x3/2, 5/2 and 5/3-way CO CC CP

2

CONTROL



- » Flexible assembly
- » LEFT and/or RIGHT electrical connection
- » Easy installation

It is possible to combine the electrical modules up to a maximum of 11 valve positions for each side. The pneumatic part is composed by initial, intermediate and terminal modules.

The pneumatic modularity of 2 and 3 positions allows several configurations with different pressure/exhaust zones.

See connectors in the section 2/3.25.

This Plug-In system, realized with electropneumatically operated valves Series 3, G1/8 port, is delivered completely assembled and tested. It allows the mounting of up to 22 valve positions (with two SUB-D 25 RIGHT and LEFT connectors). The electrical part is based on printed circuit boards.

GENERAL DATA AND ELECTRICAL CHARACTERISTICS

Valve construction	spool type with seals
Valve functions	5/2 - 5/3 CC CO 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 valve body
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 NI/min
Nominal diameter	7 mm
Fluid	Filtered air, without lubrication. If lubricated air is used, it is recommended to use ISO VG32 oil, and to never interrupt the lubrication.
Signalling	yellow LED
Voltage	24 V DC
Voltage tolerances	+/- 10%
Duty cycle	ED 100%
Protection class	IP65
Power consumption	3W
Power supply connector	SUB-D 25 poles IP65

CODING EXAMPLE

3P	8	-	E	AB	-	3B3M	-	U	7	7	
-----------	----------	----------	----------	-----------	----------	-------------	----------	----------	----------	----------	--

3P	SERIES: 3 PLUG-IN
8	PORTS: 8 = G1/8
E	NUMBER OF VALVE POSITIONS: see TABLE FOR THE CONFIGURATION OF VALVE ISLAND SERIES 3 PLUG-IN (pag. 2.03.05.03)
AB	CONFIGURATION OF PNEUMATIC AND ELECTRIC MODULES: see TABLE FOR THE CONFIGURATION OF VALVE ISLAND SERIES 3 PLUG-IN (pag. 2.03.05.03)
3B3M	VALVE COMPOSITIONS: see FUNCTIONING OF SOLENOID VALVES SERIES 3 PLUG-IN (pag. 2.3.05.04)
U	SOLENOID MATERIAL: G = PA U = PET
7	SOLENOID DIMENSIONS: 7 = 22x22
7	SOLENOID VOLTAGE: 7 = 24V DC
	VERSIONS: = Standard S = Special to be specified

3P8-EAB-3B3M-U77 = Valve island with 6 positions equipped with 3 Solenoid valves Cod. B and 3 Cod. M, SUB-D connector on the LEFT.

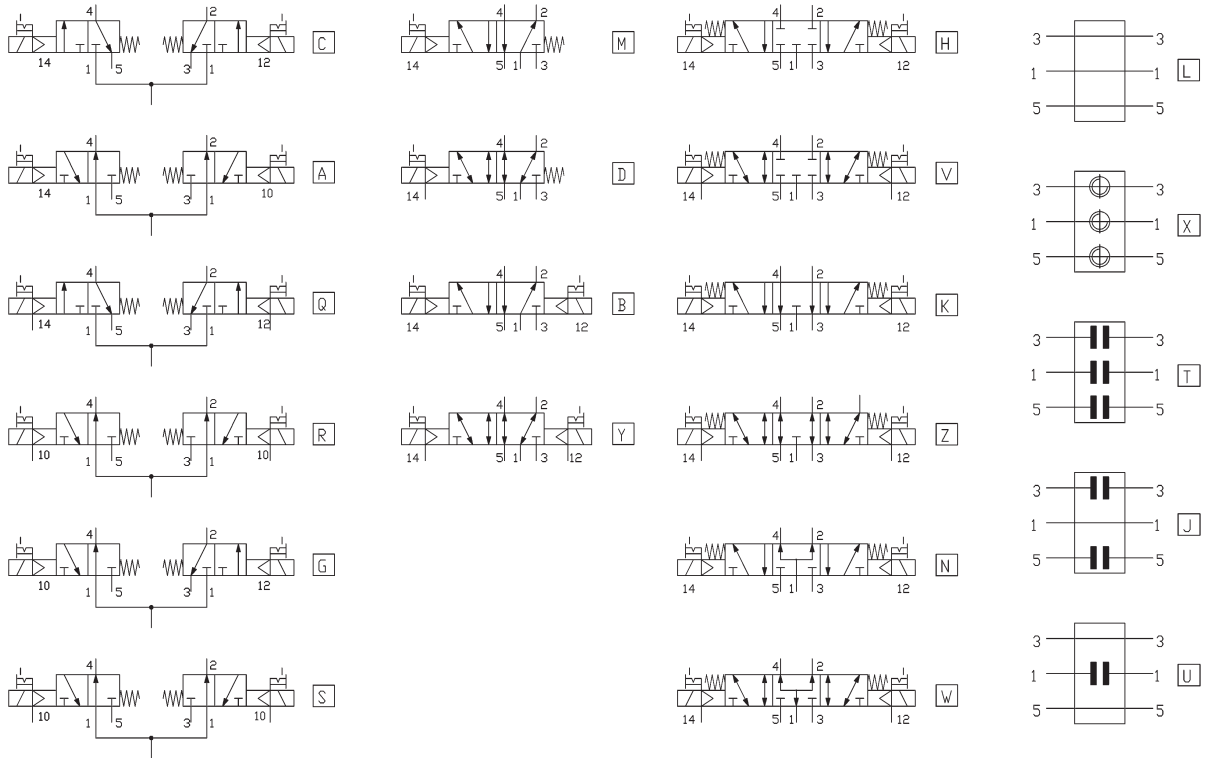
TABLE FOR THE CONFIGURATION OF VALVE ISLAND SERIES 3 PLUG-IN

The valve island code is always read from left to right, the electrical module is positioned on top of the pneumatic manifold, as on the photo on page 2.3.05.01. It is also possible to create 2 or more pressure zones in the valve island by inserting the diaphragm Mod. CNVL-TP between the modules.

The letter represents the number of valve positions	Number of valve positions, showing the combination of the modules from which the valve island is built.	Position of the D-SUB and number of valves to which it is connected. [left]	Position of the D-SUB and number of valves to which it is connected. [right]	Configuration code Positions	Configuration code
A = 2 pos.	[2]	-	2	A	A - A
	(2)	2	-	A	A - B
B = 3 pos.	[3]	-	3	B	A - A
	(3)	3	-	B	A - B
C = 4 pos.	[2] [2]	-	4	C	A - A
	(2) (2)	4	-	C	A - B
D = 5 pos.	[3] [2]	-	5	D	A - A
	(3) (2)	5	-	D	A - B
	[2] [3]	-	5	D	A - C
	(2) (3)	5	-	D	A - D
E = 6 pos.	[3] [3]	-	6	E	A - A
	(3) (3)	6	-	E	A - B
	[2] [2] [2]	-	6	E	B - A
	(2) (2) (2)	6	-	E	B - B
F = 7 pos.	[2] [3] [2]	-	7	F	A - A
	(2)(3)(2)	7	-	F	A - B
	[2] [2] [3]	-	7	F	B - A
	(2) (2) (3)	7	-	F	B - B
	[3] [2] [2]	-	7	F	B - C
	(3) (2) (2)	7	-	F	B - D
	G = 8 pos.	[3] [3] [2]	-	8	G
(3)(3)(2)		8	-	G	A - B
[2] [3] [3]		-	8	G	A - C
(2)(3)(3)		8	-	G	A - D
[2] [2] [2] [2]		-	8	G	B - A
(2)(2)(2) (2)		8	-	G	B - B
[3] [2] [3]		-	8	G	B - C
(3) (2) (3)		8	-	G	B - D
H = 9 pos.	[3] [3] [3]	-	9	H	A - A
	(3)(3)(3)	9	-	H	A - B
	[3] [2] [2] [2]	-	9	H	B - A
	(3)(2)(2) (2)	9	-	H	B - B
	[2] [3] [2] [2]	-	9	H	B - C
	(2) (3) (2) (2)	9	-	H	B - D
	[2] [2] [3] [2]	-	9	H	B - E
	(2) (2) (3) (2)	9	-	H	B - F
	[2] [2] [2] [3]	-	9	H	B - G
	(2) (2) (2) (3)	9	-	H	B - H
I = 10 pos.	[2] [3] [3] [2]	-	10	I	A - A
	(2)(3)(3)(2)	10	-	I	A - B
J = 11 pos.	[2] [3] [3] [3]	-	11	J	A - A
	(2)(3)(3)(3)	11	-	J	A - B
	[3] [3] [3] [2]	-	11	J	A - C
	(3)(3)(3)(2)	11	-	J	A - D
K = 12 pos.	(3) [3] [3] [3]	3	9	K	A - A
	(3)(3)[3] [3]	6	6	K	A - B
	(3) (3)(3) [3]	9	3	K	A - C
L = 13 pos.	(2) [3] [3] [3] [2]	2	11	L	A - A
	(2) (3) [3] [3] [2]	5	8	L	A - B
	(2) (3) (3) [3] [2]	8	5	L	A - C
	(2) (3) (3)(3) [2]	11	2	L	A - D
M = 14 pos.	(2) (3) [3] [3] [3]	5	9	M	A - A
	(2) (3) (3) [3] [3]	8	6	M	A - B
	(2) (3) (3) (3) [3]	11	3	M	A - C
	(3) [3] [3] [3] [2]	3	11	M	A - D
	(3) (3) [3] [3] [2]	6	8	M	A - E
	(3) (3) (3) [3] [2]	9	5	M	A - F
N = 15 pos.	(3) (3) [3] [3] [3]	6	9	N	A - A
	(3) (3) (3) [3] [3]	9	6	N	A - B
O = 16 pos.	(2) (3) [3] [3] [3] [2]	5	11	O	A - A
	(2) (3) (3) [3] [3] [2]	8	8	O	A - B
	(2) (3) (3) (3) [3] [2]	11	5	O	A - C
P = 17 pos.	(2) (3) (3) [3] [3] [3]	8	9	P	A - A
	(2) (3) (3) (3) [3] [3]	11	6	P	A - B
	(3) (3) [3] [3] [3] [2]	6	11	P	A - C
	(3) (3) (3) [3] [3] [2]	9	8	P	A - D
Q = 18 pos.	(3) (3) (3) [3] [3] [3]	9	9	Q	A - A
R = 19 pos.	(2) (3) (3) [3] [3] [3] [2]	8	11	R	A - A
	(2) (3) (3) (3) [3] [3] [2]	11	8	R	A - B
S = 20 pos.	(2) (3) (3) (3) [3] [3] [3]	11	9	S	A - A
	(3) (3) (3) [3] [3] [3] [2]	9	11	S	A - B
T = 21 pos.*	(3) (3) [3] [3] [3] [3] [3]	10	11	T	A - A
	(3) (3) (3) [3] [3] [3] [3]	11	10	T	A - B
U = 22 pos.	(2) (3) (3) (3) [3] [3] [3] [2]	11	11	U	A - A

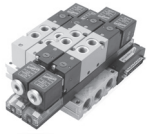
* = in this configuration the electric modularity doesn't correspond to the pneumatic modularity.

FUNCTIONING OF SOLENOID VALVES SERIES 3 PLUG-IN



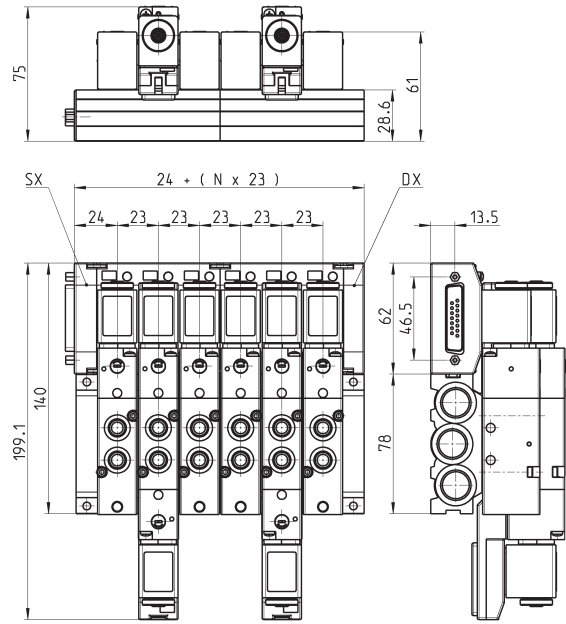
Mod.	Function	Actuation/return	Pilot supply	Working pressure (bar)	Pilot pressure (bar)	Code
338D-015-02	2 x 3/2 NC	solenoid/spring	Internal	2,5 ÷ 10	-	C
348D-015-02	2 x 3/2 NO	solenoid/spring	Internal	2,5 ÷ 10	-	A
398D-015-02	1 x 3/2 NC + 1 x 3/2 NO	solenoid/spring	Internal	2,5 ÷ 10	-	G
358-015-02	5/2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

Valve island Series 3 Plug-In



In case a solenoid valve type M is inserted in a free position, the following components must be ordered:
 2x screws Cod. CNVL/21
 1x interface seal Cod. CNVL-3H/7N

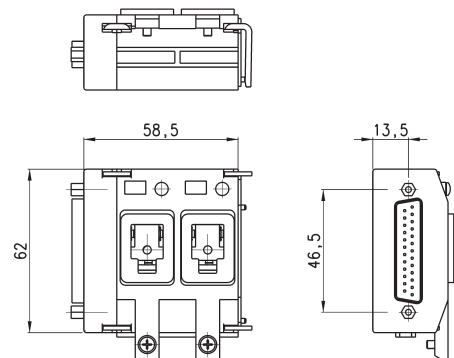
In case a solenoid valve type B is inserted in a free position, the following component must be ordered:
 1x electrical module Cod. 3PAC-R-IF1



N = number of valve positions

Initial left electrical Module - 2 positions

To be mounted with manifold CNVL-3H2



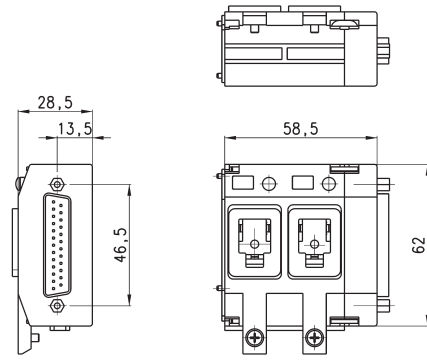
Mod.

3PAC-R-LS2

2/3.05.05

Initial right electrical Module - 2 positions

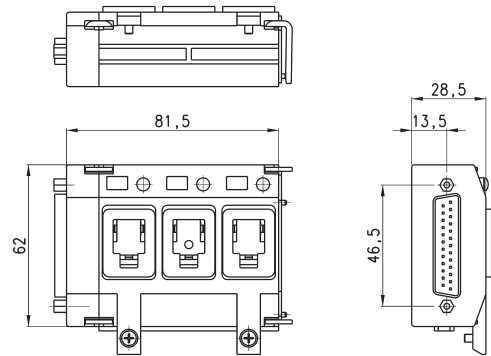
To be mounted with manifold CNVL-3H2



Mod.
3PAC-R-RS2

Initial left electrical Module - 3 positions

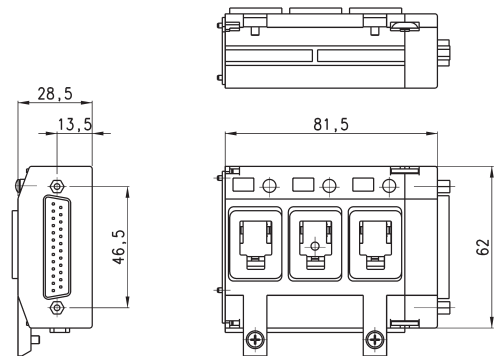
To be mounted with manifold CNVL-3H3



Mod.
3PAC-R-LS3

Initial right electrical Module - 3 positions

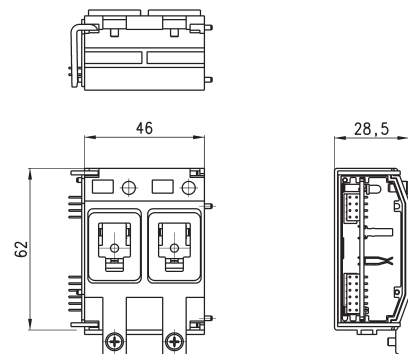
To be mounted with manifold CNVL-3H3



Mod.
3PAC-R-RS3

Intermediate left electrical Module - 2 positions

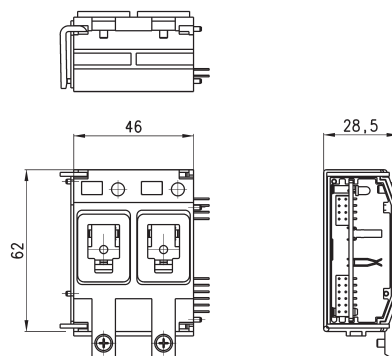
To be mounted with manifold CNVL-3H2



Mod.
3PAC-R-LI2


Intermediate right electrical Module - 2 positions

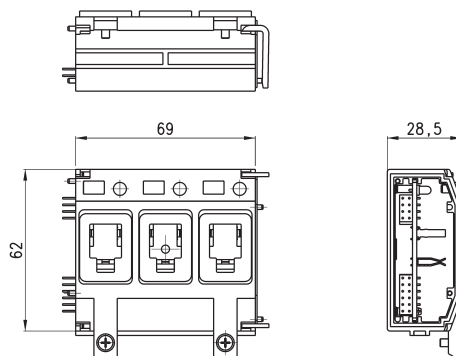
To be mounted with manifold CNVL-3H2


 Mod.
3PAC-R-RI2
2

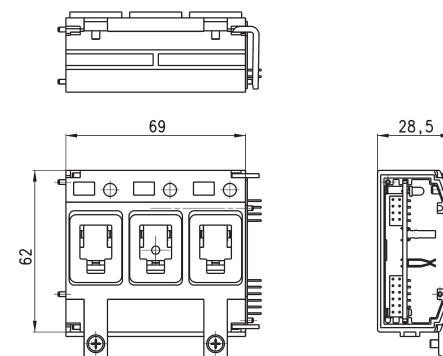
CONTROL

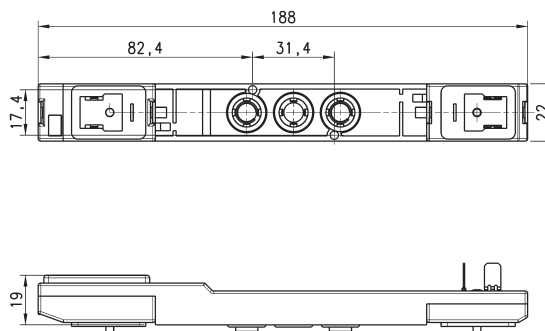

Intermediate left electrical Module - 3 positions

To be mounted with manifold CNVL-3I3


 Mod.
3PAC-R-LI3
Intermediate right electrical Module - 3 positions

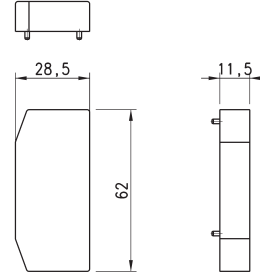
To be mounted with manifold CNVL-3I3


 Mod.
3PAC-R-RI3
Electrical Module for a bistable solenoid valve

 Supplied with:
 2x screws for valve mounting
 2x screws for solenoid mounting
 1x interface seal
 2x interface seals for solenoid

 Mod.
3PAC-R-IF1

2/3.05.07

End cap for electric module



DIMENSIONS

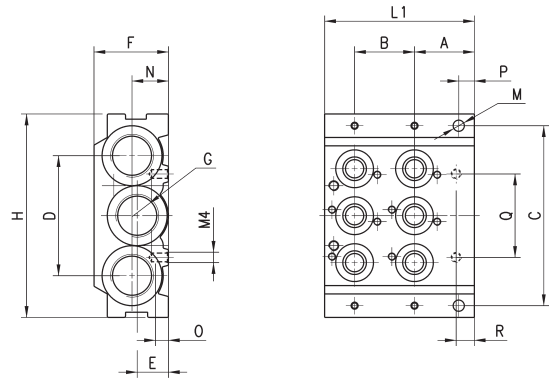
Mod.

3PAC-R-TP1

Initial/terminal pneumatic Module - 2 positions



Supplied with:
 3x O-rings
 2x fixing screws
 2x junction plugs
 6x interface seals module/valve



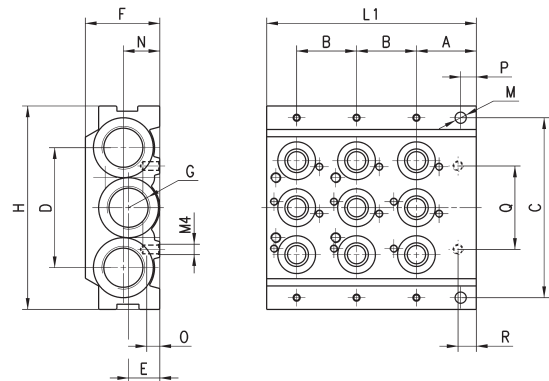
DIMENSIONS

Mod.	A	B	C	D	E	F	G	H	L1	M	N	O	P	Q	R
CNVL-3H2	23	23	69,5	46	12	29	3/8	78	57,5	4,3	14	5	6	32	7

Initial/terminal pneumatic Module - 3 positions



Supplied with:
 3x O-rings
 2x fixing screws
 2x junction plugs
 9x interface seals module/valve



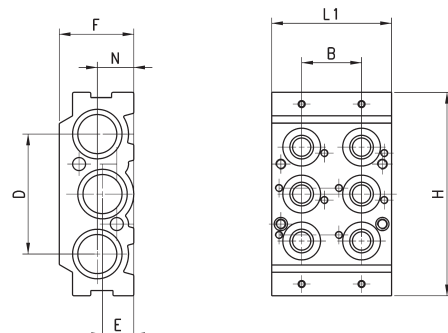
DIMENSIONS

Mod.	A	B	C	D	E	F	G	H	L1	M	N	O	P	Q	R
CNVL-3H3	23	23	69,5	46	12	29	3/8	78	80,5	4,3	14	5	6	32	7

Intermediate pneumatic Module - 2 positions



Supplied with:
 3x O-Rings
 2x fixing screws
 2x junction plugs
 6x interface seals module/valve



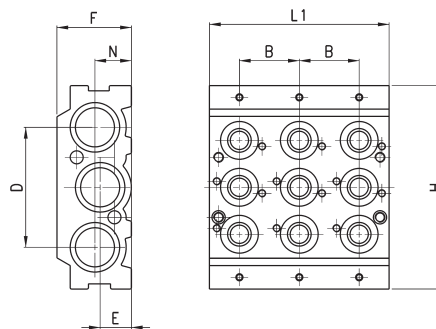
DIMENSIONS

Mod.	B	D	E	F	H	L1	N
CNVL-3I2	23	46	12	29	78	46	14

Intermediate pneumatic Module - 3 positions



Supplied with:
 3x O-rings
 2x fixing screws
 2x junction plugs
 9x interface seals module/valve

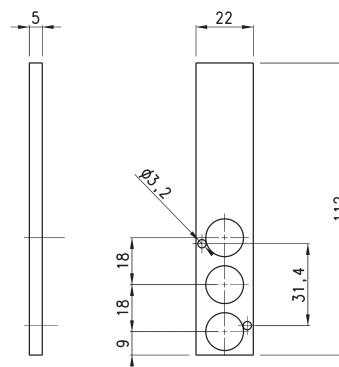


Mod.	B	D	E	F	H	L1	N
CNVL-3I3	23	46	12	29	78	69	14

Excluder tap for free position (cod. L)

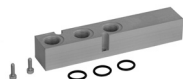


Supplied with:
 3x O-rings
 2x screws

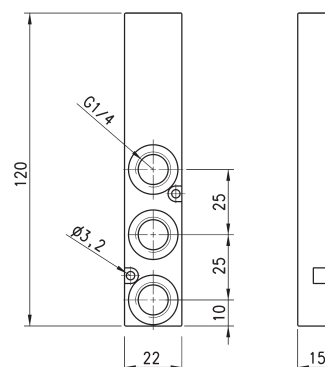


Mod.	CNVL/1L
------	----------------

Intermediate plate for manifolds with outlets (cod. X)



Supplied with:
 3x O-rings
 2x screws



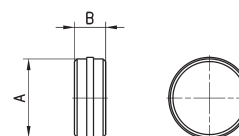
Mod.	CNVL-3P1
------	-----------------

Diaphragm for separation channels 1 - 3 - 5 (cod. U - J or T)



Supplied with:
 1x diaphragm.

If you need cod. U, please order N° 1 piece.
 If you need cod. J, please order N° 2 pieces.
 If you need cod. T, please order N° 3 pieces.



Mod.	A	B
CNVL-3H-TP	15,6	6