

Series 4 valves and solenoid valves

New models

3/2, 5/2 and 5/3-way CC, CO
Ports: G1/8, G1/4, G3/8, G1/2



Series 4 solenoid valves have been designed in the 3/2, 5/2, 5/3 versions and with the following two devices of actuation:

- electropneumatically actuated with mechanical spring return
- electropneumatically actuated and return with external and internal air pressure supply

Series 4 valves are equipped with a manual override which allows a stable operation and they are particularly suitable for mounting in arduous conditions.

All these valves can be operated by solenoids Series U, G A8 and H8.

Pneumatically actuated valves 3/2 NC become NO when the supply is on connection 3.

- » The different ports allow flows from 650 to 4000 NL/min
- » New models available: with G3/8 ports and 1800 NL/min flow

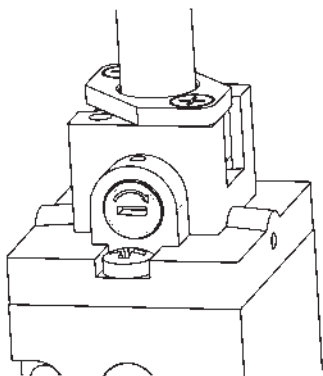
GENERAL DATA

Construction	balanced spool type
Valve functions	3/2 - 5/2 - 5/3-way CC, CO
Materials	AL body and subbases stainless steel spool technopolymer end cover NBR PU seals
Ports	G1/8 - G1/4 - G3/8 - G1/2
Installation	in any position
Operating temperature	0 ÷ 60°C (with dry air at -20°C)
Operating pressure	see table
Medium	filtered air, without lubrication. If lubricated air is used, it is recommended to use ISOVG32 oil. Once applied the lubrication should never be interrupted.

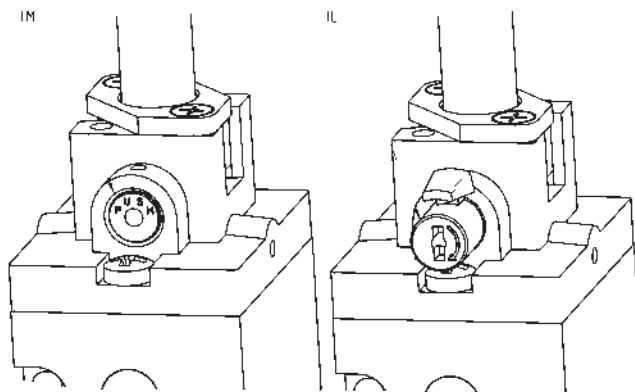
CODING EXAMPLE

4	5	4	-	015	-	22	IL	-	U7	7
4	SERIES									
5	NUMBER OF WAYS - POSITIONS: 3 = 3/2 NC 4 = 3/2 NO 5 = 5/2 6 = 5/3 CC 7 = 5/3 CO									
4	PORTS: 2C = G1/2 2N = G1/2 (high flow) 3 = G3/8 4 = G1/4 8 = G1/8									
015	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									
22	SOLENOID INTERFACE: 22 = mech. sol. 22 x 22 50 = mech. sol. 32 x 32 (only for 452C version)									
IL	TYPE OF MANUAL OVERRIDE: = bistable, standard IL = bistable, lever type (available on demand) IM = monostable (available on demand)									
U7	ENCAPSULATING MATERIAL / SOLENOID DIMENSIONS: A6 = PPS / 32 x 32 (only for 452C version) 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 (see the dedicated section 2.35)									

TYPES OF MANUAL OVERRIDE

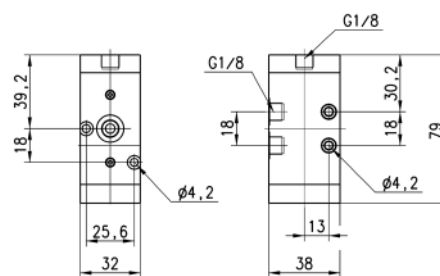
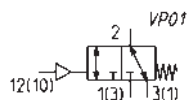


Example of solenoid valve with a bistable standard manual override.



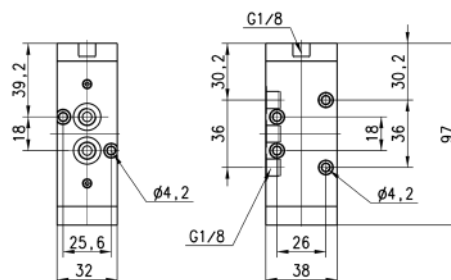
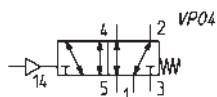
Example of solenoid monostable valve (IM) and bistable valve with a lever type manual override (IL).

3/2-way valve, G1/8 port, monostable Mod. 438-35



Mod.	Mounting	Function	Flow rate Qn (NL/min)	Min. pilot pressure (bar)	Working pressure (bar)
438-35	in-line/on manifold	3/2 NC	700	2.5	-0.9 ÷ 10

5/2-way valve, G1/8 port, monostable Mod. 458-35

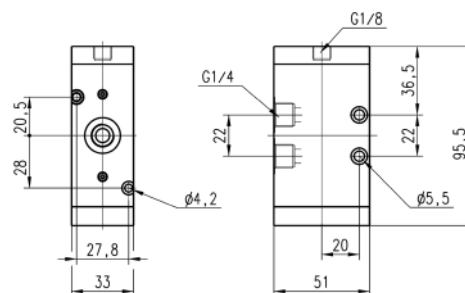
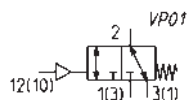


Mod.	Mounting	Function	Flow rate Qn (NL/min)	Min. pilot pressure (bar)	Working pressure (bar)
458-35	in-line/manifold	5/2	700	2.5	-0.9 ÷ 10

3/2-way valve, G1/4 port, monostable Mod. 434-35

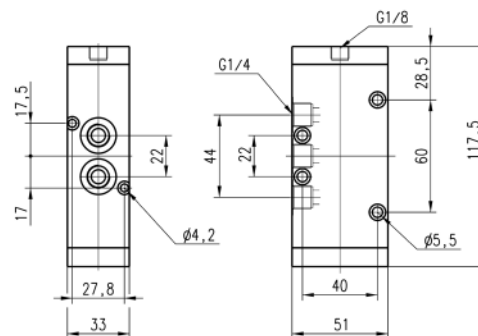
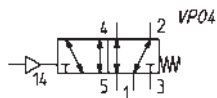


This valve can work NC or NO depending on where the power supply is connected.



Mod.	Mounting	Function	Flow rate Qn (NL/min)	min. pilot Pressure (bar)	Working pressure (bar)
434-35	in-line/on manifold	3/2 NC	1250	2.5	-0.9 ÷ 10

5/2-way valve, G1/4 port, monostable Mod. 454-35

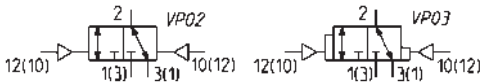
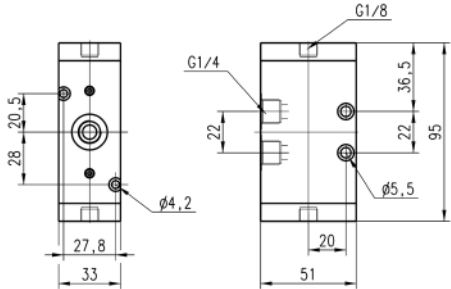


Mod.	Mounting	Function	Flow rate Qn (NL/min)	Min. pilot pressure (bar)	Working pressure (bar)
454-35	in-line/on manifold	5/2	1250	2.5	-0.9 ÷ 10

3/2-way valve, G1/4 port, bistable Mod. 434

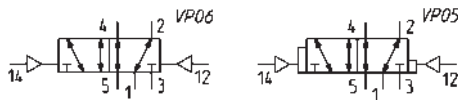
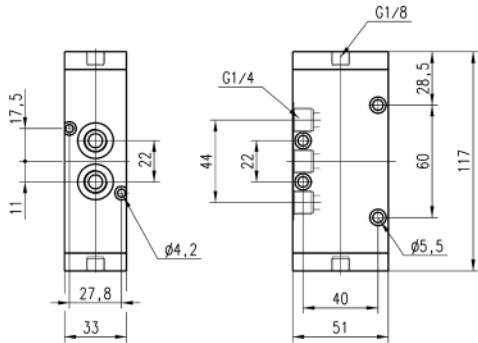


These valves can work NC or NO according to the last pilot signal.



Mod.	Mounting	Function	Flow rate Qn (NL/min)	min. pilot Pressure (bar)	Working pressure (bar)	Symbol
434-33	in-line/on manifold	3/2 NC	1250	2	-0.9 ÷ 10	VP02
434-34	in-line/on manifold	3/2 NC	1250	2	-0.9 ÷ 10	VP03

5/2-way valve, G1/4 port, bistable Mod. 454

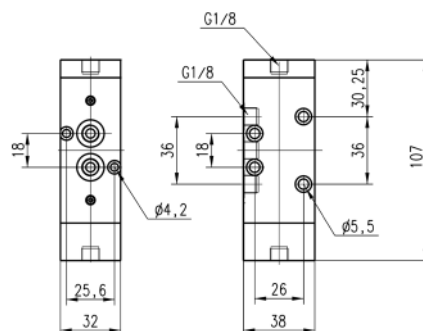
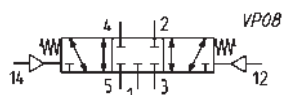


Mod.	Mounting	Function	Flow rate Qn (NL/min)	min. pilot Pressure (bar)	Working pressure (bar)	Symbol
454-33	in-line/on manifold	5/2	1250	2	-0.9 ÷ 10	VP06
454-34	in-line/on manifold	5/2	1250	2	-0.9 ÷ 10	VP05

5/3-way C.C. valve, G1/8, monostable, with central stable position



CC = Centres Closed

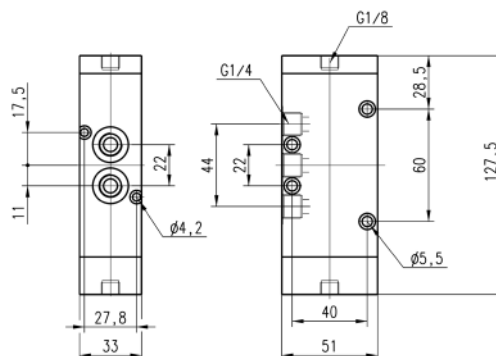
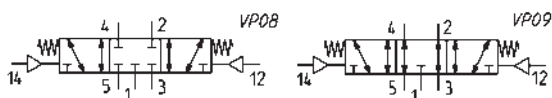


Mod.	Mounting	Function	Flow rate Qn (NL/min)	min. pilot Pressure (bar)	Working pressure (bar)
468-33	in-line/on manifold	5/3 CC	700	2.5	-0.9 ÷ 10

5/3-way CC CO valve, G1/4, monostable, central stable position



CC = Centres Closed
CO = Centres Open



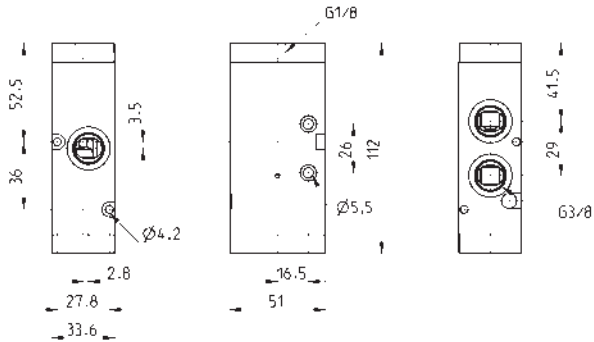
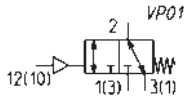
Mod.	Mounting	Function	Flow rate Qn (NL/min)	min. pilot Pressure (bar)	Working pressure (bar)	Symbol
464-33	in-line/on manifold	5/3 CC	1250	2.5	-0.9 ÷ 10	VP08
474-33	in-line/on manifold	5/3 CO	1200	2.5	-0.9 ÷ 10	VP09

3/2-way valve, G3/8 port, monostable Mod. 433-35

New



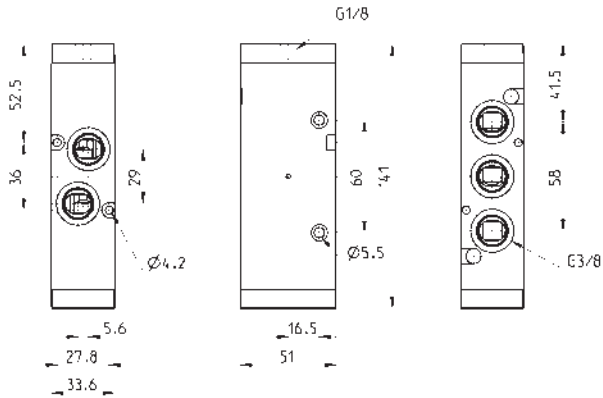
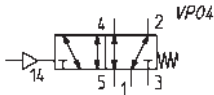
This valve can work NC or NO depending on where the power supply is connected.



Mod.	Mounting	Function	Flow rate Qn (NL/min)	min. pilot Pressure (bar)	Working pressure (bar)
433-35	in-line/on manifold	3/2 NC	1800	2.5	-0.9 ÷ 10

5/2-way valve, G3/8 port, monostable Mod. 453-35

New



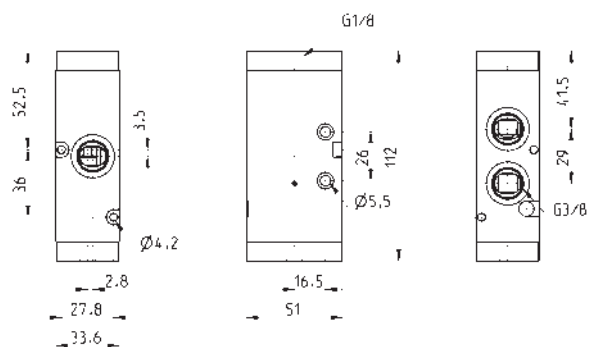
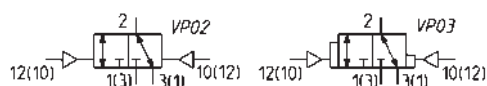
Mod.	Mounting	Function	Flow rate Qn (NL/min)	Min. pilot pressure (bar)	Working pressure (bar)
453-35	in-line/on manifold	5/2	1800	2.5	-0.9 ÷ 10

3/2-way valve, G3/8 port, bistable Mod. 433

New



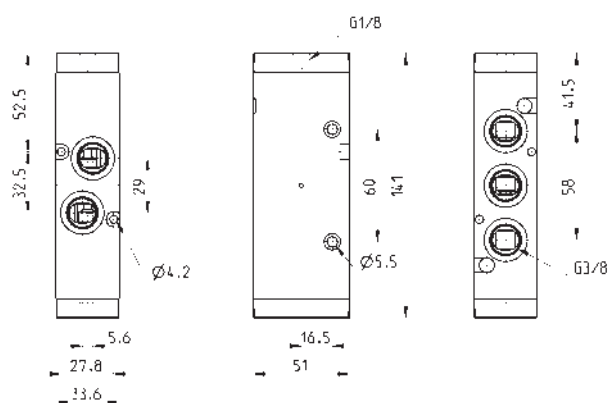
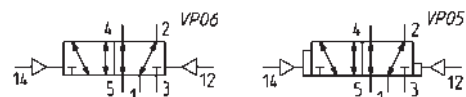
These valves can work NC or NO according to the last pilot signal.



Mod.	Mounting	Function	Flow rate Qn (NL/min)	min. pilot Pressure (bar)	Working pressure (bar)	Symbol
433-33	in-line/on manifold	3/2 NC	1800	2	-0.9 ÷ 10	VP02
433-34	in-line/on manifold	3/2 NC	1800	2	-0.9 ÷ 10	VP03

5/2-way valve, G3/8 port, bistable Mod. 453

New

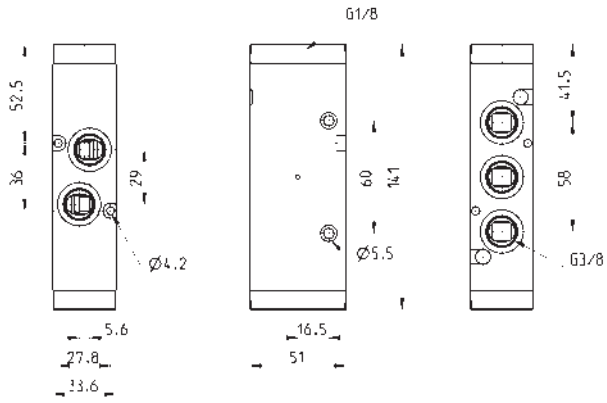
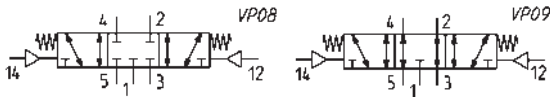


Mod.	Mounting	Function	Flow rate Qn (NL/min)	min. pilot Pressure (bar)	Working pressure (bar)	Symbol
453-33	in-line/on manifold	5/2	1800	2	-0.9 ÷ 10	VP06
453-34	in-line/on manifold	5/2	1800	2	-0.9 ÷ 10	VP05

5/3-way CC CO valve, G3/8, monostable, central stable position

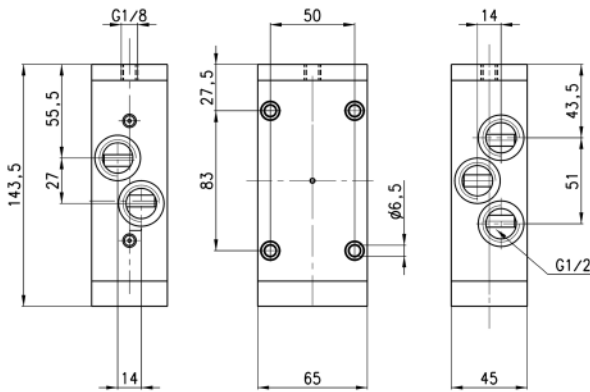
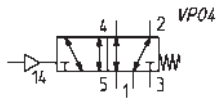


CC = Centres Closed
CO = Centres Open



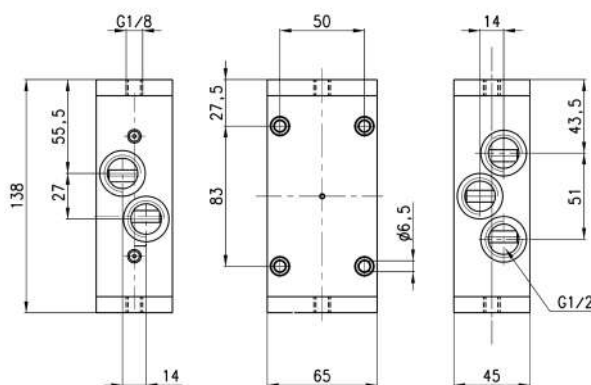
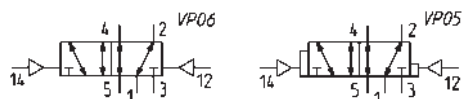
Mod.	Mounting	Function	Flow rate Qn (NL/min)	min. pilot Pressure (bar)	Working pressure (bar)	Symbol
463-33	in-line/on manifold	5/3 CC	1600	2.5	-0.9 ÷ 10	VP08
473-33	in-line/on manifold	5/3 CO	1600	2.5	-0.9 ÷ 10	VP09

5/2-way valve, G1/2 port, monostable Mod. 452C-35



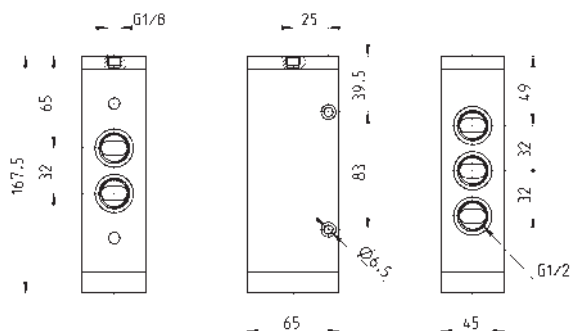
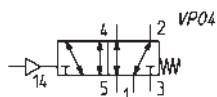
Mod.	Mounting	Function	Flow rate Qn (NL/min)	Min. pilot pressure (bar)	Working pressure (bar)
452C-35	in-line	5/2	2500	2.5	-0.9 ÷ 10

5/2-way valve, G1/2 port, bistable Mod. 452C



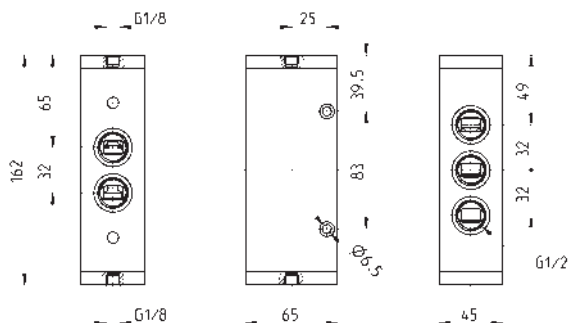
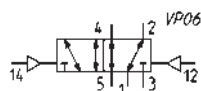
Mod.	Mounting	Function	Flow rate Qn (NL/min)	min. pilot Pressure (bar)	Working pressure (bar)	Symbol
452C-33	in-line	5/2	2500	2	-0.9 ÷ 10	VP06
452C-34	in-line	5/2	2500	2	-0.9 ÷ 10	VP05

5/2-way valve, G1/2 port, monostable Mod. 452N-35



Mod.	Mounting	Function	Flow rate Qn (NL/min)	Min. pilot pressure (bar)	Working pressure (bar)
452N-35	in-line	5/2	4000	2.5	-0.9 ÷ 10

5/2-way valve, G1/2 port, bistable Mod. 452N-33



Mod.	Mounting	Function	Flow rate Qn (NL/min)	min. pilot Pressure (bar)	Working pressure (bar)	Symbol
452N-33	in-line	5/2	4000	2	-0.9 ÷ 10	VP06

Manifold base with common exhausts



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

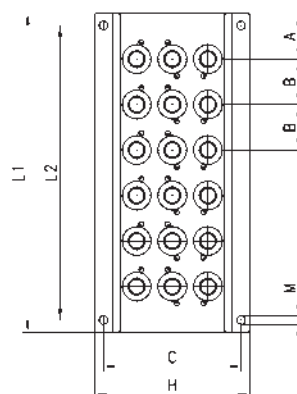
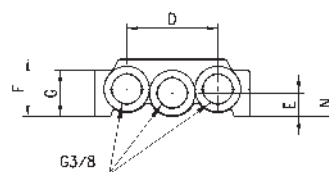
The following is supplied with:

1x manifold

1x pair of fixing screws for valve position

1x interface seal for valve positions

2x guides for valve position

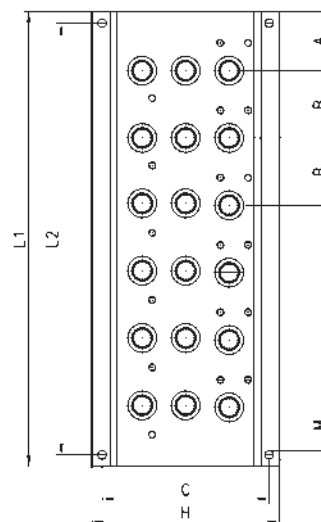
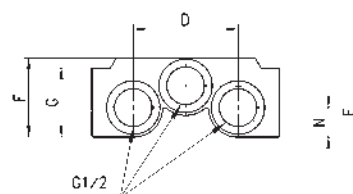


DIMENSIONS												
Mod.	A	B	C	D	E	F	G	H	L1	L2	M	N
CNVL-42	28	33	69.2	46	12	29	23.5	78	89	77	4.3	14
CNVL-43	28	33	69.2	46	12	29	23.5	78	122	110	4.3	14
CNVL-44	28	33	69.2	46	12	29	23.5	78	155	143	4.3	14
CNVL-45	28	33	69.2	46	12	29	23.5	78	188	176	4.3	14
CNVL-46	28	33	69.2	46	12	29	23.5	78	221	209	4.3	14

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



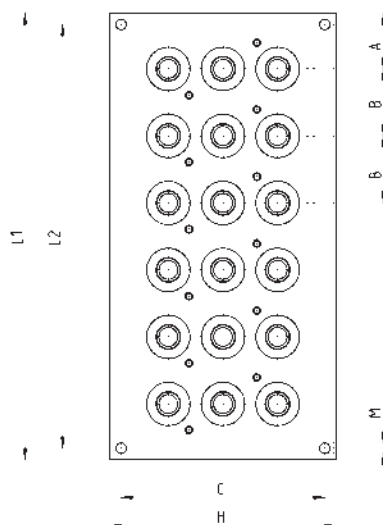
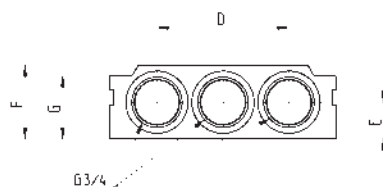
DIMENSIONS												
Mod.	A	B	C	D	E	F	G	H	L1	L2	M	N
CNVL-52	30	34	84.5	53	26	40	35	95	94	82	4.3	15
CNVL-53	30	34	84.5	53	26	40	35	95	128	116	4.3	15
CNVL-54	30	34	84.5	53	26	40	35	95	162	150	4.3	15
CNVL-55	30	34	84.5	53	26	40	35	95	196	184	4.3	15
CNVL-56	30	34	84.5	53	26	40	35	95	230	218	4.3	15

Manifold base with common exhausts

New



For valves Series 4, G3/8 (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



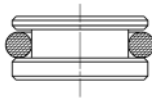
Mod.	A	B	C	D	E	F	G	H	L1	L2	M
CNVL-62	29.5	35	108	70	19.5	39	33.5	120	94.5	82.5	5.5
CNVL-63	29.5	35	108	70	19.5	39	33.5	120	130	118	5.5
CNVL-64	29.5	35	108	70	19.5	39	33.5	120	166	154	5.5
CNVL-65	29.5	35	108	70	19.5	39	33.5	120	201	189	5.5
CNVL-66	29.5	35	108	70	19.5	39	33.5	120	237	225	5.5

Blanking plug Mod. TCNVL for manifolds



The following is supplied:
1x blanking plug
1x O-Ring

TCNVL/3: for Series 4, G1/8
TCNVL/5: for Series 4, G1/4
TCNVL/6: for Series 4, G3/8



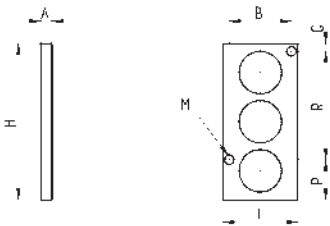
Mod.
TCNVL/3
TCNVL/5
TCNVL/6

Blanking plate Mod. CNVL for manifolds



The following is supplied:
2x fixing screws
3x O-Rings

CNVL/2: for Series 4, G1/8
CNVL/3: for Series 4, G1/4
CNVL/6: for Series 4, G3/8



DIMENSIONS								
Mod.	A	B	H	I	M	P	Q	R
CNVL/2	5	25.6	52	32	4.2	17	17	18
CNVL/3	5	27.8	70	33.5	4.2	18	3.5	48.5
CNVL/6	5	27.8	85	33.5	4.2	24.5	24.5	36

It is used to blank vacant positions of a manifold.