

Valves and Solenoid valves Series 4

3/2, 5/2 and 5/3-way CC CO CP
Ports G1/8 - G1/4 - 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. Moreover, valves with ports G1/2 only can be supplied with solenoids Series A6 (32x32).

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

GENERAL DATA

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

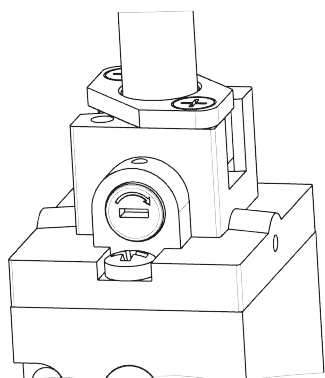
CODING EXAMPLE

4	5	4	-	015	-	22	-	U	7	7
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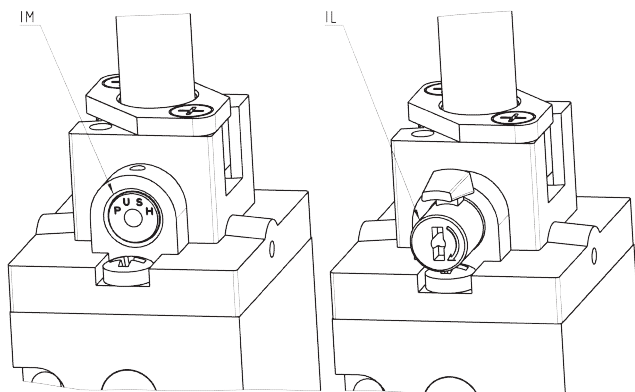
4	SERIES
5	NUMBER OF WAYS - POSITIONS: 3 = 3/2 NC 4 = 3/2 NO 5 = 5/2 6 = 5/3 CC 7 = 5/3 CO
4	PORTS: 8 = G1/8 4 = G1/4 2C = G1/2
015	ACTUATION: 011 = double solenoid (horizontal solenoids) V11 = double solenoid (vertical solenoids) for G1/4 port only 015 = single solenoid, spring return (horizontal solenoids) 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 G1/2
U	SOLENOID MATERIAL: U = PET G = PA A6 = PPS H8 = PA 6 V0 A8 = PPS
7	SOLENOID DIMENSIONS: 6 = 32 x 32 solo G1/2 7 = 22 x 22 8 = 30 x 30 9 = 22 x 58
7	SOLENOID VOLTAGE: see solenoids section on page 2.2.35.01
	TYPE OF MANUAL OVERRIDE: = bistable, standard IL = bistable, lever type (available on demand) IM = monostable (available on demand)

TYPES OF MANUAL OVERRIDE

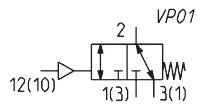
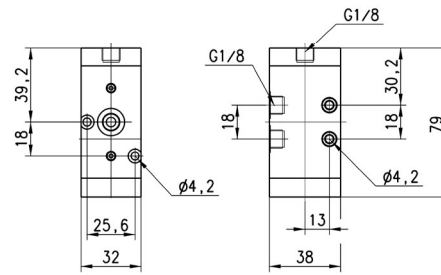
New



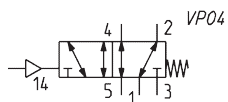
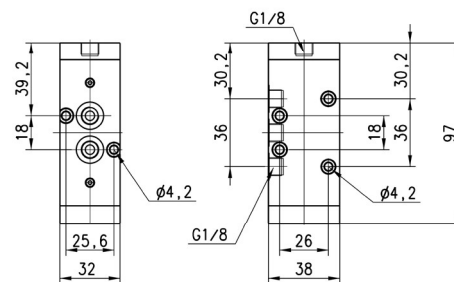
Example of solenoid valve with a bistable standard manual override.



Example of solenoid monostable valve (IM) and bistable valve with a lever type manual override (IL). Both versions are available on demand. To order them it is necessary to add IM or IL at the end of the code. Code ex.: 454-015-22-U77IL.

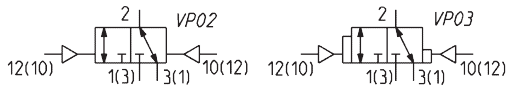
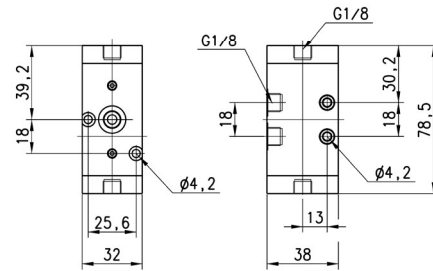
3/2-way valve, G1/8 port, monostable


Mod.	Mounting	Function	Flow rate (NI/min)	min. pilot Pressure (bar)	Working pressure (bar)
438-35	in-line/on manifold	3/2 NC	700	2,5	0 ÷ 10

5/2-way valve, G1/8 port, monostable


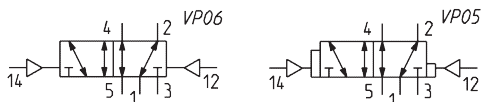
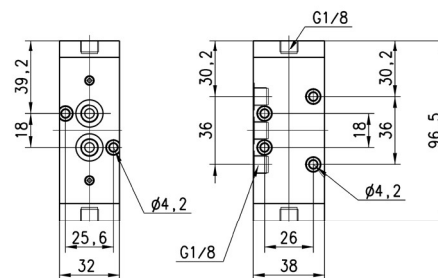
Mod.	Mounting	Function	Flow rate (NI/min)	min. pilot Pressure (bar)	Working pressure (bar)
458-35	in-line/on manifold	5/2	700	2,5	0 ÷ 10

3/2-way valve, G1/8 port, bistable



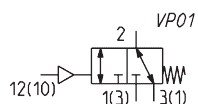
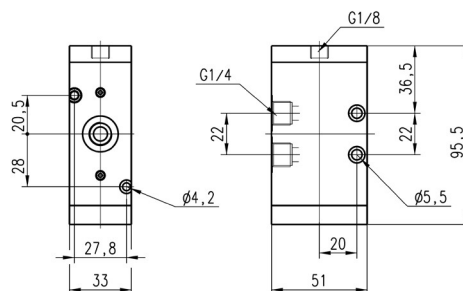
Mod.	Mounting	Function	Flow rate (NI/min)	min. pilot Pressure (bar)	Working pressure (bar)	Symbol
438-33	in-line/on manifold	3/2	700	2	0 + 10	VP02
438-34	in-line/on manifold	3/2	700	2	0 + 10	VP03

5/2-way valve, G1/8 port, bistable



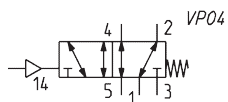
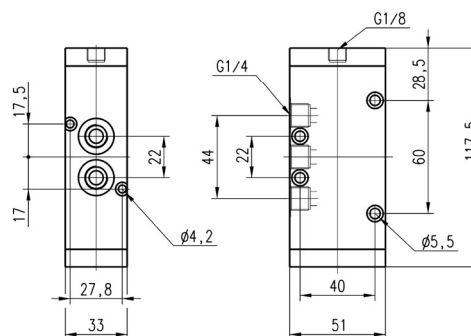
Mod.	Mounting	Function	Flow rate (NI/min)	min. pilot Pressure (bar)	Working pressure (bar)	Symbol
458-33	in-line/on manifold	5/2	700	2	0 + 10	VP06
458-34	in-line/on manifold	5/2	700	2	0 + 10	VP05

3/2-way valve, G1/4 port, monostable



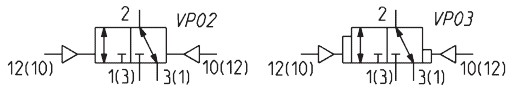
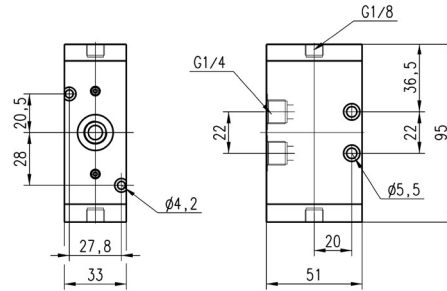
Mod.	Mounting	Function	Flow rate (NI/min)	min. pilot Pressure (bar)	Working pressure (bar)
434-35	in-line/on manifold	3/2 NC	1250	2,5	0 + 10

5/2-way valve, G1/4 port, monostable



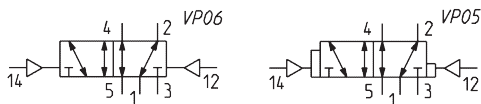
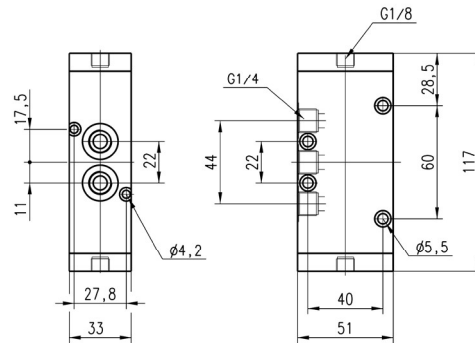
Mod.	Mounting	Function	Flow rate (NI/min)	min. pilot Pressure (bar)	Working pressure (bar)
454-35	in-line/on manifold	5/2	1250	2,5	0 + 10

3/2-way valve, G1/4 port, bistable



Mod.	Mounting	Function	Flow rate (NI/min)	min. pilot Pressure (bar)	Working pressure (bar)	Symbol
434-33	in-line/on manifold	3/2 NC	1250	2	0 + 10	VP02
434-34	in-line/on manifold	3/2 NC	1250	2	0 + 10	VP03

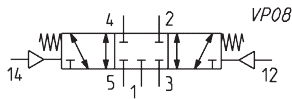
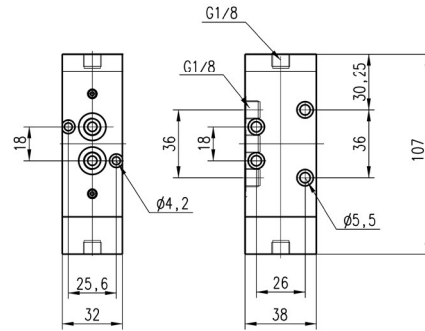
5/2-way valve, G1/4 port, bistable



Mod.	Mounting	Function	Flow rate (NI/min)	min. pilot Pressure (bar)	Working pressure (bar)	Symbol
454-33	in-line/on manifold	5/2	1250	2	0 + 10	VP06
454-34	in-line/on manifold	5/2	1250	2	0 + 10	VP05

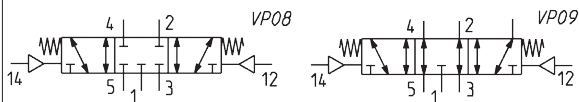
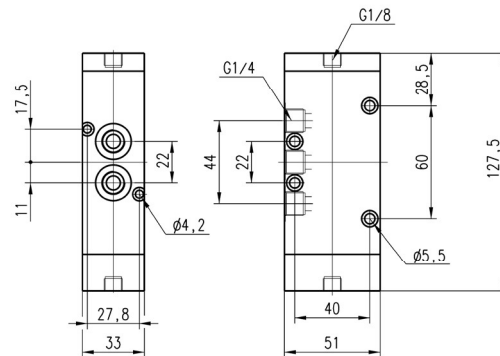
5/3-way C.C. valve, G1/8, monostable, with central stable position

CC = Centres Closed



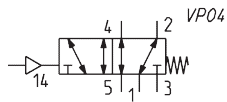
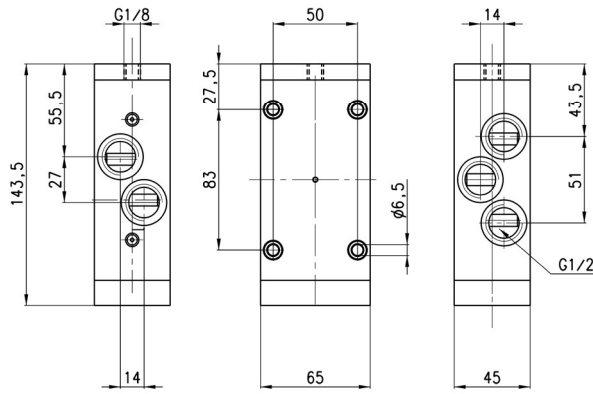
Mod.	Mounting	Function	Flow rate (NI/min)	min. pilot Pressure (bar)	Working pressure (bar)
468-33	in-line/on manifold	5/3 CC	700	2,5	0 + 10

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

 CC = Centres Closed
 CO = Centres Open


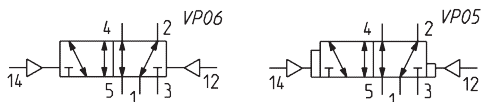
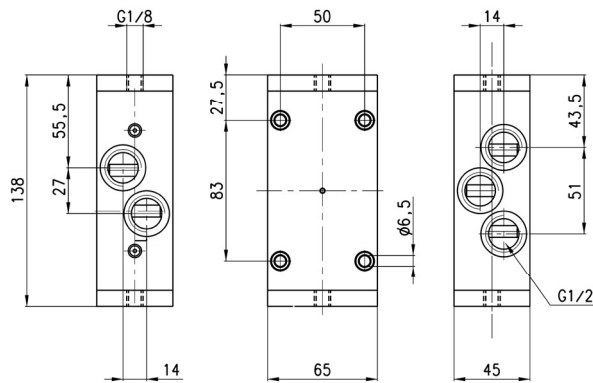
Mod.	Mounting	Function	Flow rate (NI/min)	min. pilot Pressure (bar)	Working pressure (bar)	Symbol
464-33	in-line/on manifold	5/3 CC	1250	2,5	0 + 10	VP08
474-33	in-line/on manifold	5/3 CO	1200	2,5	0 + 10	VP09

5/2-way valve, G1/2 port, monostable



Mod.	Mounting	Function	Flow rate (NI/min)	min. pilot Pressure (bar)	Working pressure (bar)
452C-35	in-line	5/2	2500	2,5	0 + 10

5/2-way valve, G1/2 port, bistable



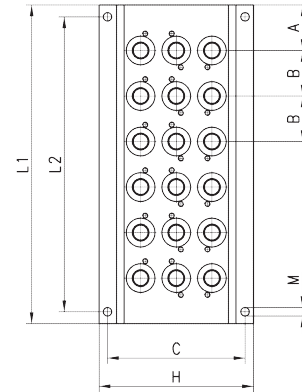
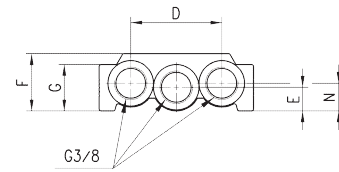
Mod.	Mounting	Function	Flow rate (NI/min)	min. pilot Pressure (bar)	Working pressure (bar)	Symbol
452C-33	in-line	5/2	2500	2	0 + 10	VP06
452C-34	in-line	5/2	2500	2	0 + 10	VP05

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

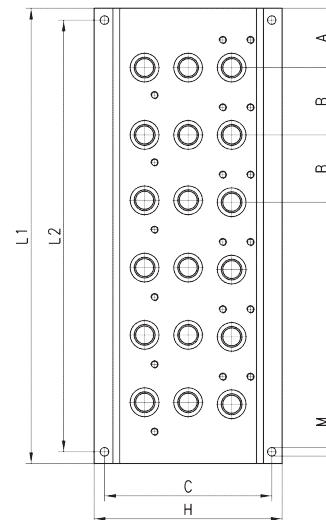
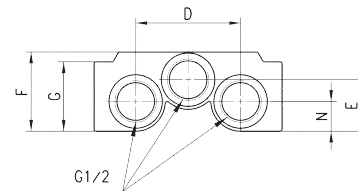
Mod.	A	B	C	D	E	F	G	H	L1	L2	M	N
CNVL-42	28	33	69,5	46	12	29	23,5	78	89	77	4,3	14
CNVL-43	28	33	69,5	46	12	29	23,5	78	122	110	4,3	14
CNVL-44	28	33	69,5	46	12	29	23,5	78	155	143	4,3	14
CNVL-45	28	33	69,5	46	12	29	23,5	78	188	176	4,3	14
CNVL-46	28	33	69,5	46	12	29	23,5	78	221	209	4,3	14

Manifold base with common exhausts

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

The following is supplied :

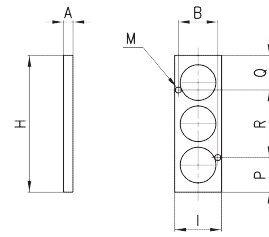
- 1x manifold
- 1x pair of fixing screws for valve position
- 1x interface seal for valve positions
- 2x guides for valve position


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

Blanking plate for CNVL manifolds

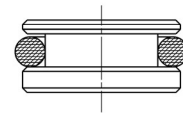
The plate closes the positions that are not used.
 The following is supplied:
 2x fixing screws
 3x O-Rings



DIMENSIONS									
Mod.	A	B	H	I	M	P	Q	R	
CNVL/2 (series 4-1/8)	5	25,6	52	32	4,2	17	17	18	
CNVL/3 (series 4-1/4)	5	27,8	70	32,5	4,2	7,5	3,5	59	

Blanking plug for TCNVL manifolds

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



DIMENSIONS	
Mod.	Series
TCNVL/3	4 G1/8
TCNVL/5	4 G1/4