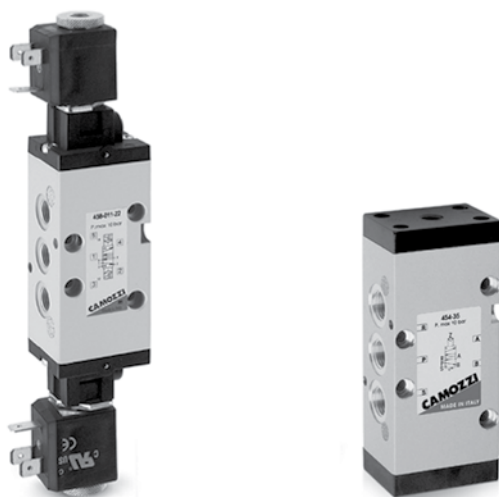


Valves and Solenoid valves Series 4

3/2, 5/2 and 5/3 way C.C. C.O. C.P.
Ports G1/8 - G1/4 - G1/2



The Series 4 valves have been designed with 3/2, 5/2, 5/3 in two main versions which are:

- Electropneumatically actuated and spring
- Electropneumatically actuated and return

Series 4 is equipped with a manual override which permits a stable operation.

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).

GENERAL DATA

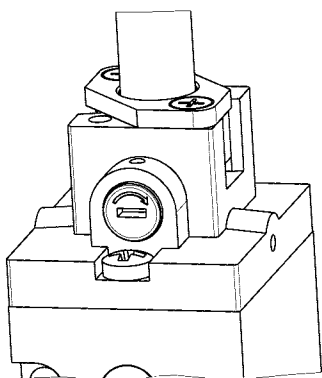
Construction	spool - type
Valve functions	3/2 - 2x3/2 - 5/2 - 5/3 way / pos.
Materials	AL body, stainless steel spool, NBR PU seals
Ports	G1/8 - G1/4 - G1/2
Installation	in any position
Operating temperature	0 ÷ 60°C (using dry air at -20°C)
Operating pressure	see tables
Fluid	filtered air, without lubrication. If lubricated air is used, it is recommended to use ISOVG32 oil. Once applied the lubrication should never be interrupted.

CODING EXAMPLE

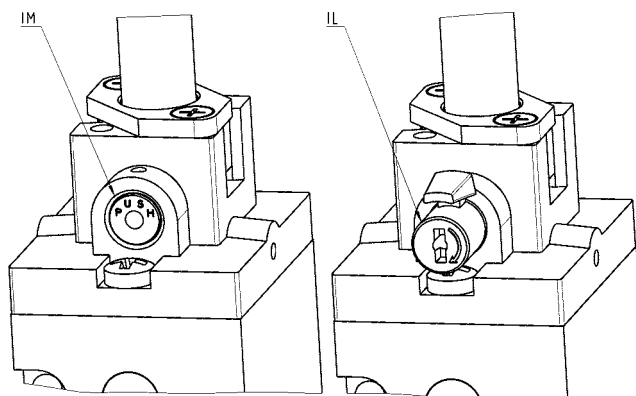
4	5	4	-	015	-	22	-	U	7	7	
4	SERIES										
5	N° OF PORTS/POSITIONS: 3 = 3/2 N.C. 4 = 3/2 N.O. 5 = 5/2 6 = 5/3 C.C. 7 = 5/3 C.O.										
4	PORTS: 8 = G1/8 4 = G1/4 2C = G1/2										
015	ACTUATION: 011 = double solenoid (horizontal solenoids) V11 = double solenoid (vertical solenoids) only Series 4 G1/4 015 = single solenoid, spring return (horizontal solenoids) V15 = single solenoid, spring return (vertical solenoid) only Series 4 G1/4 016 = single solenoid, pneumatic spring return (horizontal solenoid) V16 = single solenoid, pneumatic spring return (vertical solenoid) only Series 4 G1/4 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										
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



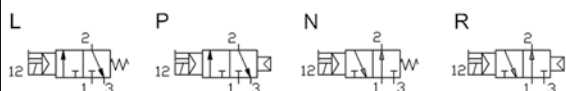
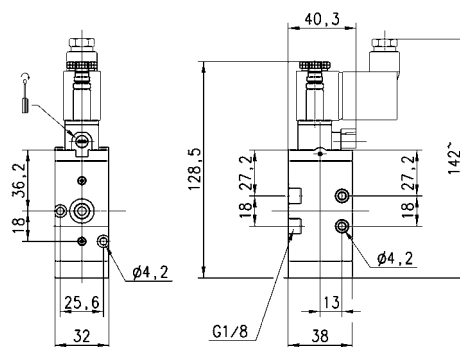
Example of solenoid valve with a bistable standard manual override.



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 solenoid valve G1/8, monostable - Mod. 438... and 448...

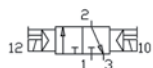
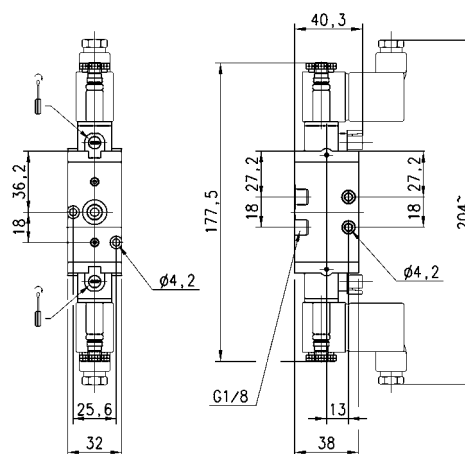
These solenoid valves, which have electropneumatic actuation and spring return, are available in the N.C. (closed) or N.O. (open) version.



Mod.	Function	Flow rate (l/min)	Operating pressure (bar)	Symbol
438-015-22	3/2 N.C.	650	2,5 ÷ 10	L
438-016-22	3/2 N.C.	650	2,5 ÷ 10	P
448-015-22	3/2 N.O.	650	2,5 ÷ 10	N
448-016-22	3/2 N.O.	650	2,5 ÷ 10	R

3/2-way solenoid valve G1/8, bistable - Mod. 438-011...

These solenoid valves, which have electropneumatic actuation and return, assume the N.C. (closed) or N.O. (open) operating status depending on the last pulse received.

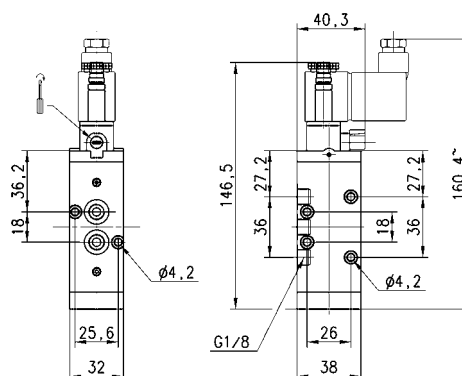


Mod.	Function	Flow rate (l/min)	Operating pressure (bar)
438-011-22	3/2	650	2 ÷ 10

5/2-way solenoid valves, G1/8, monostable - Mod 458...



These solenoid valves, which have electropneumatic actuation and spring return, are suitable for operating double-acting cylinders.

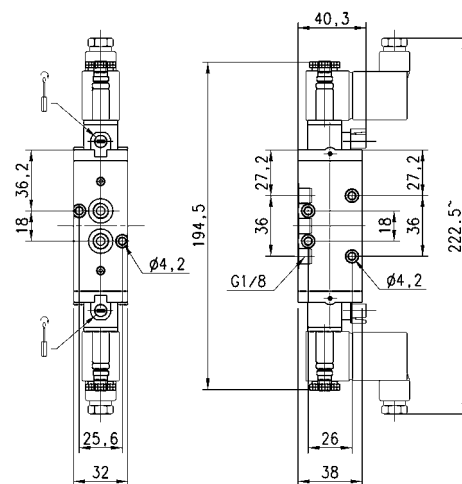


Mod.	Function	Flow rate (NI/min)	Operating pressure (bar)	Symbol
458-015-22	5/2	650	2,5 ÷ 10	V
458-016-22	5/2	650	2,5 ÷ 10	Z

5/2-way solenoid valves, G1/8, bistable - Mod 458-011...



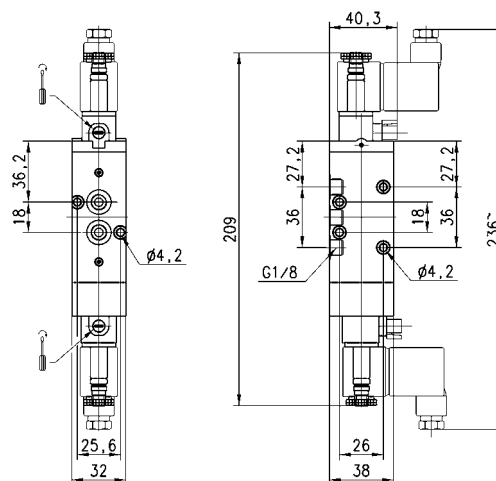
These solenoid valves, with electropneumatic actuation and return, are suitable for operating double-acting cylinders.



Mod.	Function	Flow rate (NI/min)	Operating pressure (bar)
458-011-22	5/2	650	2 ÷ 10

5/3-way solenoid valve, G1/8 - Mod. 468-011... and 478-011...

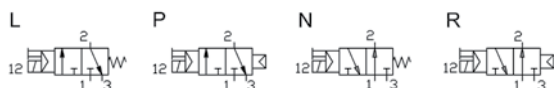
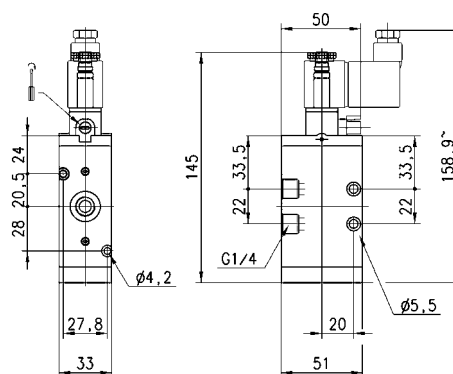
C.C. = Centres Closed
C.O. = Centres Open



Mod.	Function	Flow rate (NI/min)	Operating pressure (bar)	Symbol
468-011-22	5/3 C.C.	600	2 ÷ 10	B1
478-011-22	5/3 C.O.	600	2 ÷ 10	C1

3/2-way solenoid valve, G1/4, monostable Mod. 434 and Mod. 444

These solenoid valves, which have electropneumatic actuation and spring return, are available in the N.C. (closed) or N.O. (open) version.

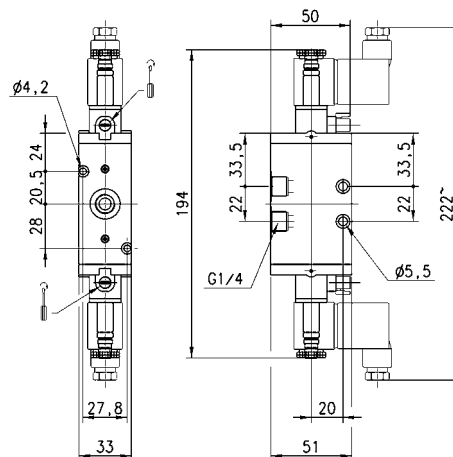


Mod.	Function	Flow rate (NI/min)	Operating pressure (bar)	Symbol
434-015-22	3/2 N.C.	1250	2 ÷ 10	L
434-016-22	3/2 N.C.	1250	2 ÷ 10	P
444-015-22	3/2 N.O.	1250	2 ÷ 10	N
444-016-22	3/2 N.O.	1250	2 ÷ 10	R

3/2-way solenoid valve, G1/4, bistable - Mod. 434-011...



These solenoid valves, which have electropneumatic actuation and return, assume the N.C. (closed) or N.O. (open) position depending on the last pulse received.

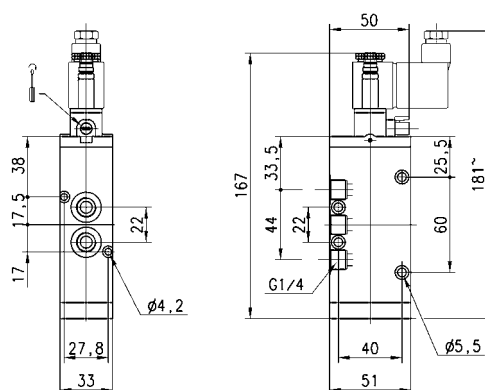


Mod.	Function	Flow rate (l/min)	Operating pressure (bar)
434-011-22	3/2	1250	2 + 10

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



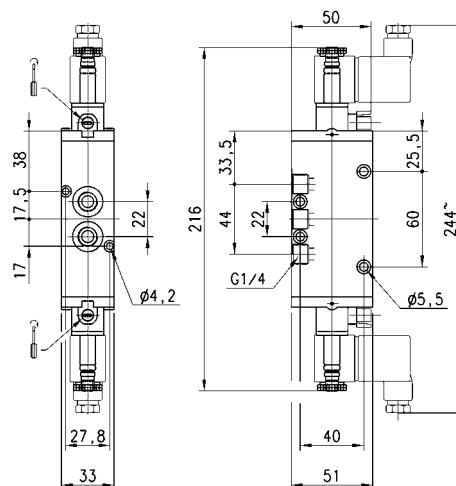
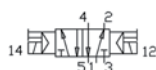
These solenoid valves, which have electropneumatic actuation and spring return, are suitable for operating double-acting cylinders.



Mod.	Function	Flow rate (l/min)	Operating pressure (bar)	Symbol
454-015-22	5/2	1250	2,5 ÷ 10	V
454-016-22	5/2	1250	2,5 ÷ 10	Z

5/2-way solenoid valve, G1/4, bistable - Mod. 454-011...

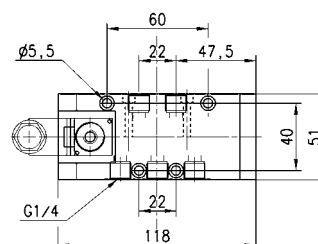
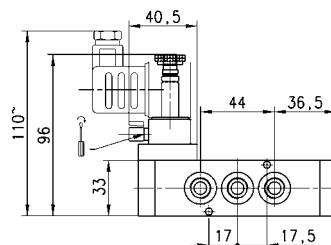
These solenoid valves, which have electropneumatic actuation and return, are suitable for operating double-acting cylinders.



Mod.	Function	Flow rate (NI/min)	Operating pressure (bar)
454-011-22	5/2	1250	2 ÷ 10

5/2-way solenoid valve, G1/4, monostable - Mod. 454-V...

These solenoid valves, which have electropneumatic actuation and spring or pneumatic spring return are suitable for operating double-acting cylinders.

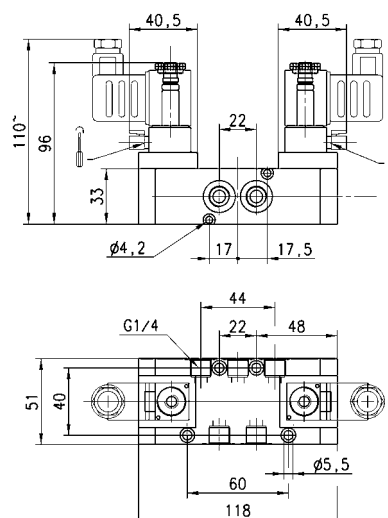
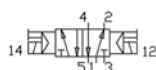


Mod.	Function	Flow rate (NI/min)	Operating pressure (bar)	Symbol
454-V15-22	5/2	1250	2,5 ÷ 10	V
454-V16-22	5/2	1250	2,5 ÷ 10	Z

5/2-way solenoid valve, G1/4, bistable - Mod. 454-V11...



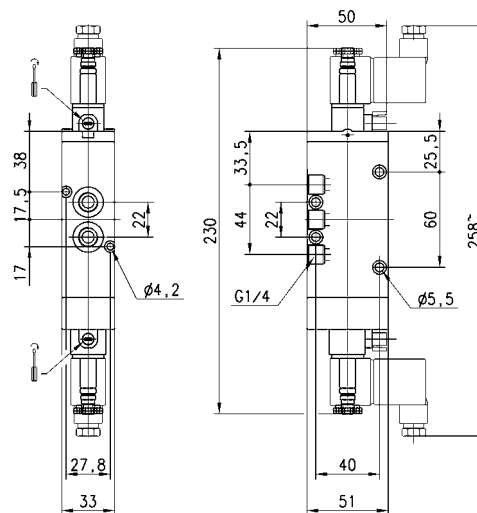
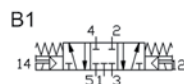
These solenoid valves, which have electropneumatic actuation and return, are suitable for operating double-acting cylinders.



Mod.	Function	Flow rate (l/min)	Operating pressure (bar)
454-V11-22	5/2	1250	2 ÷ 10

5/3-way solenoid valve, G1/4 - Mod. 464-011... e 474-011...

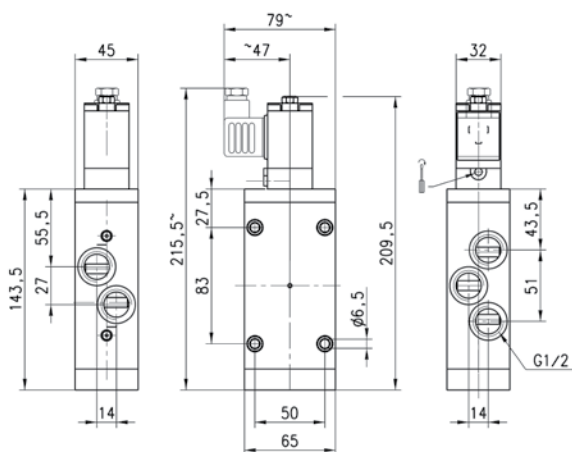
C.C. = Centres Closed
C.O. = Centres Open



Mod.	Function	Flow rate (Nl/min)	Operating pressure (bar)	Symbol
464-011-22	5/3 C.C.	1250	3 ÷ 10	B1
474-011-22	5/3 C.O.	1250	3 ÷ 10	C1

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

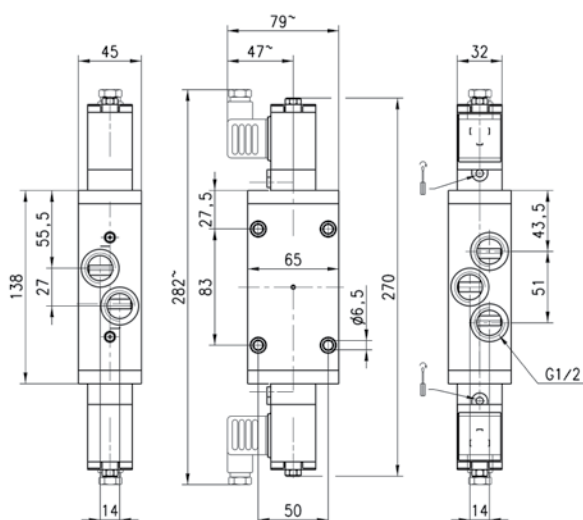
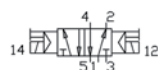
These solenoid valves, which have electropneumatic actuation and spring or pneumatic spring return are suitable for operating double-acting cylinders.



Mod.	Function	Flow rate (NI/min)	Operating pressure (bar)	Symbol
452C-015-50-A6*	5/2	2500	2,5 ÷ 10	V
452C-016-50-A6*	5/2	2500	2,5 ÷ 10	Z

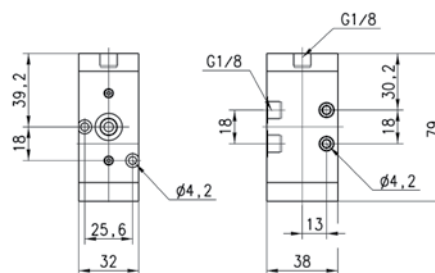
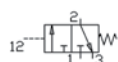
5/2-way solenoid valve, G1/2, bistable - Mod. 452C-011...

These solenoid valves, which have electropneumatic actuation and return, are suitable for operating double-acting cylinders.



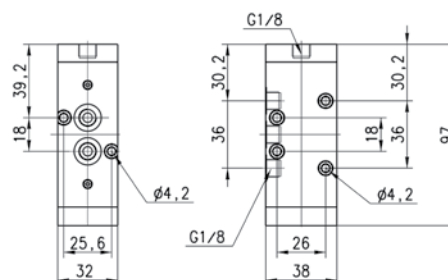
Mod.	Function	Flow rate (NI/min)	Operating pressure (bar)
452C-011-50-A6*	5/2	2500	2 ÷ 10

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



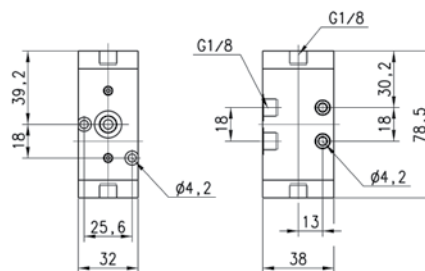
Mod.	Mounting	Function	Flow rate (Nl/min)	min. pilot Pressure (bar)
438-35	without base/on manifold	3/2 N.C.	700	2,5

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

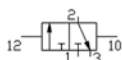


Mod.	Mounting	Function	Flow rate (Nl/min)	min. pilot Pressure (bar)
458-35	without base/on manifold	5/2	700	2,5

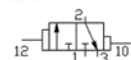
3/2-way valve, G1/8 port, bistable



I1

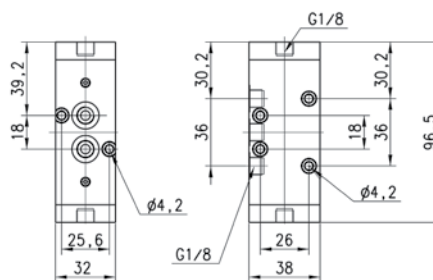


M1

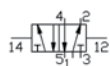


Mod.	Mounting	Function	Flow rate (NI/min)	min. pilot Pressure (bar)	Symbol
438-33	without base/on manifold	3/2 N.C.	700	2	I1
438-34	without base/on manifold	3/2 N.C.	700	2	M1

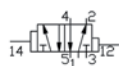
5/2-way valve, G1/8 port, bistable



R1

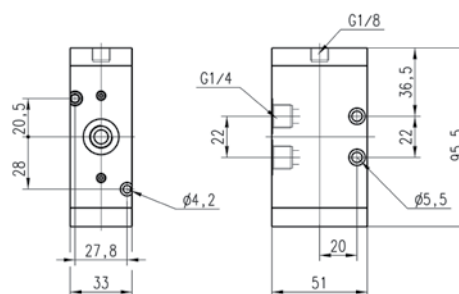
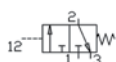


T1



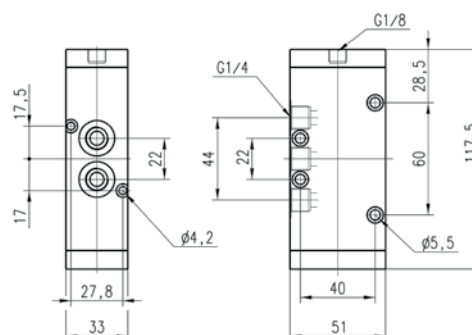
Mod.	Mounting	Function	Flow rate (NI/min)	min. pilot Pressure (bar)	Symbol
458-33	without base/on manifold	5/2	700	2	R1
458-34	without base/on manifold	5/2	700	2	T1

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



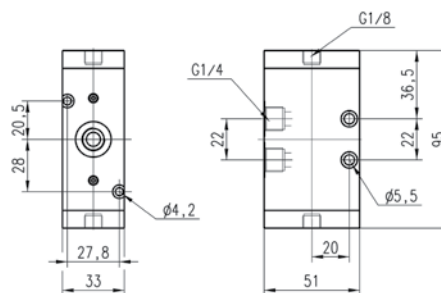
Mod.	Mounting	Function	Flow rate (NI/min)	min. pilot Pressure (bar)
434-35	without base/on manifold	3/2 N.C.	1250	2,5

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

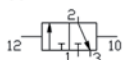


Mod.	Mounting	Function	Flow rate (NI/min)	min. pilot Pressure (bar)
454-35	without base/on manifold	5/2	1250	2,5

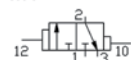
3/2-way valve, G1/4 port, bistable



I1

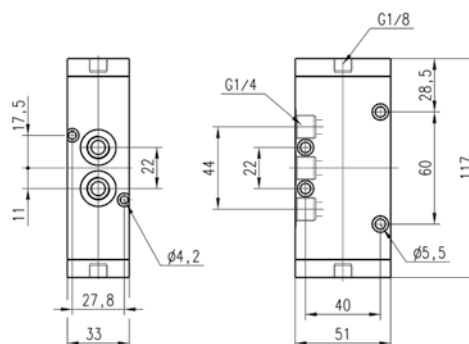


M1

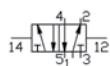


Mod.	Mounting	Function	Flow rate (NI/min)	min. pilot Pressure (bar)	Symbol
434-33	without base/on manifold	3/2 N.C.	1250	2	I1
434-34	without base/on manifold	3/2 N.C.	1250	2	M1

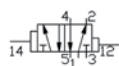
5/2-way valve, G1/4 port, bistable



R1



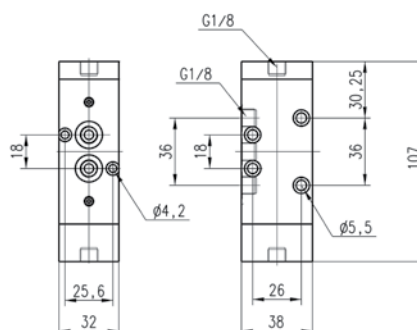
T1



Mod.	Mounting	Function	Flow rate (NI/min)	min. pilot Pressure (bar)	Symbol
454-33	without base/on manifold	5/2	1250	2	R1
454-34	without base/on manifold	5/2	1250	2	T1

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

C.C. = Centres Closed

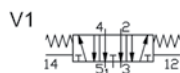
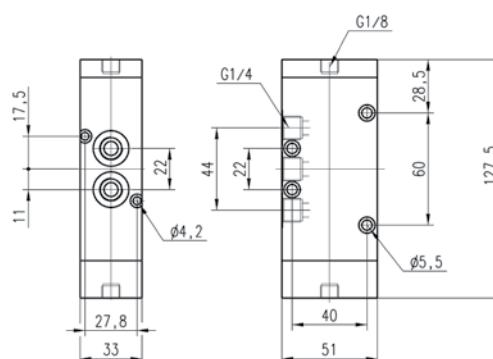


Mod.	Mounting	Function	Flow rate (NI/min)	min. pilot Pressure (bar)
468-33	without base/on manifold	5/3 C.C.	700	2,5

5/3-way C.C. C.O. valve, G1/4, monostable, central stable position

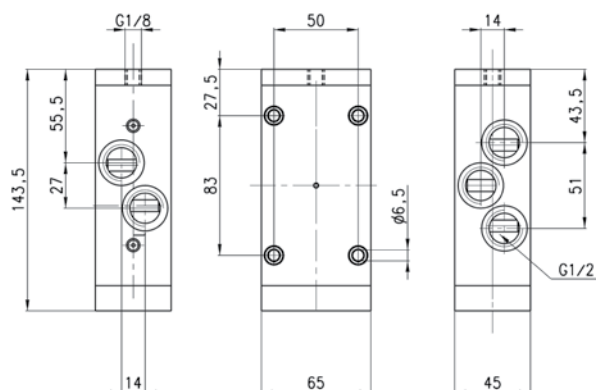
C.C. = Centres Closed

C.O. = Centres Open



Mod.	Mounting	Function	Flow rate (NI/min)	min. pilot Pressure (bar)	Symbol
464-33	without base/on manifold	5/3 C.C.	1250	2,5	U1
474-33	without base/on manifold	5/3 C.O.	1200	2,5	V1

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

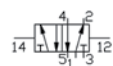


Mod.	Mounting	Function	Flow rate (Nl/min)	min. pilot Pressure (bar)
452C-35	in line	5/2	2500	2,5

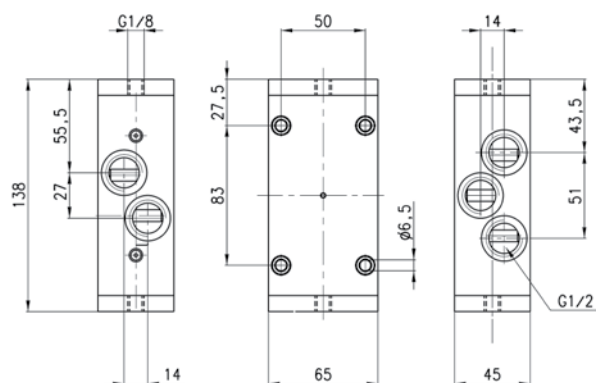
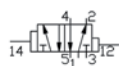
5/2-way valve, G1/2 port, bistable



R1



T1



Mod.	Mounting	Function	Flow rate (Nl/min)	min. pilot Pressure (bar)	Symbol
452C-33	in line	5/2	2500	2	R1
452C-34	in line	5/2	2500	2	T1

Manifold bars with separate exhausts (low version)

out of production

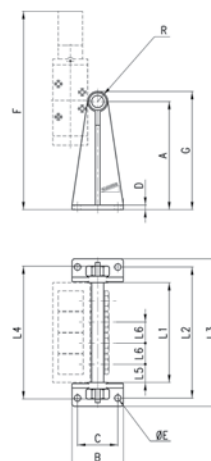


For Series 4 valves, G1/8 and G1/4.

The following is supplied:

- 2x feet
- 1x manifold
- 1x inlet fitting
- 1x plug
- 4x washers

The fixing screws of the valves mod. 1635-01 and the washers mod.2661 must be ordered separately.



DIMENSIONS

Mod.	N° of valves	A	B	C	D	ØE	F	G	R	L1	L2	L3	L4	L5	L6	Suitable for
CNV-418-2	2	73	56	44	5	7	189	83	G1/4	73	107	125	106	20	33	Series 4-G1/8
CNV-418-3	3	73	56	44	5	7	189	83	G1/4	106	140	158	139	20	33	Series 4-G1/8
CNV-418-4	4	73	56	44	5	7	189	83	G1/4	139	173	191	172	20	33	Series 4-G1/8
CNV-418-5	5	73	56	44	5	7	189	83	G1/4	172	206	224	205	20	33	Series 4-G1/8
CNV-418-6	6	73	56	44	5	7	189	83	G1/4	205	239	257	238	20	33	Series 4-G1/8
CNV-414-2	2	95	56	44	5	7	221	110	G3/8	86	128	148	120	25	36	Series 4-G1/4
CNV-414-3	3	95	56	44	5	7	221	110	G3/8	122	164	184	156	25	36	Series 4-G1/4
CNV-414-4	4	95	56	44	5	7	221	110	G3/8	158	200	220	192	25	36	Series 4-G1/4
CNV-414-5	5	95	56	44	5	7	221	110	G3/8	194	236	256	228	25	36	Series 4-G1/4
CNV-414-6	6	95	56	44	5	7	221	110	G3/8	230	272	292	264	25	36	Series 4-G1/4

Manifold bars with separate exhausts (high version)

out of production

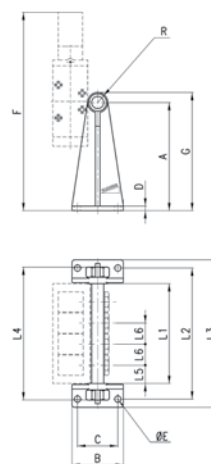


For Series 4 valves, G1/8 and G1/4.

The following is supplied:

- 2x feet
- 1x manifold
- 1x inlet fitting
- 1x plug
- 4x washers

The fixing screws of the valves mod. 1635-01 and the washers mod.2661 must be ordered separately.



DIMENSIONS

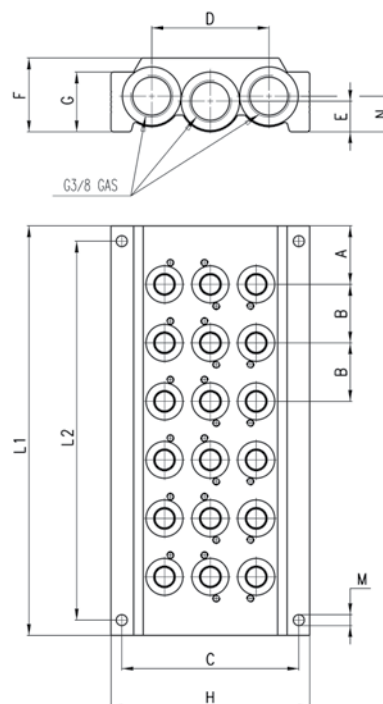
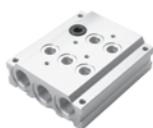
Mod.	N° of valves	A	B	C	D	ØE	F	G	R	L1	L2	L3	L4	L5	L6	Suitable for
CNV-428-2	2	118	56	44	5	7	234	128	G1/4	73	107	125	106	20	33	Series 4-G1/8
CNV-428-3	3	118	56	44	5	7	234	128	G1/4	106	140	158	139	20	33	Series 4-G1/8
CNV-428-4	4	118	56	44	5	7	234	128	G1/4	139	173	191	172	20	33	Series 4-G1/8
CNV-428-5	5	118	56	44	5	7	234	128	G1/4	172	206	224	205	20	33	Series 4-G1/8
CNV-428-6	6	118	56	44	5	7	234	128	G1/4	205	239	257	238	20	33	Series 4-G1/8
CNV-424-2	2	133	56	44	5	7	259	148	G3/8	86	128	148	120	25	36	Series 4-G1/4
CNV-424-3	3	133	56	44	5	7	259	148	G3/8	122	164	184	156	25	36	Series 4-G1/4
CNV-424-4	4	133	56	44	5	7	259	148	G3/8	158	200	220	192	25	36	Series 4-G1/4
CNV-424-5	5	133	56	44	5	7	259	148	G3/8	194	236	256	228	25	36	Series 4-G1/4
CNV-424-6	6	133	56	44	5	7	259	148	G3/8	230	272	292	264	25	36	Series 4-G1/4

Manifold base with common exhausts

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

The following is supplied :

- 1x manifold
- 1x pair of fixing screws per valve position
- 3x OR seal per valve position
- 2x guides per valve position



DIMENSIONS

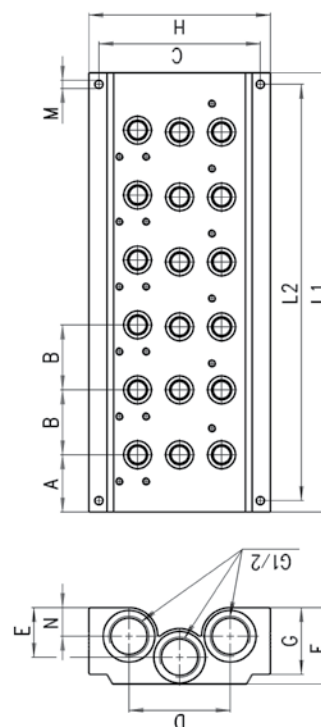
Mod.	A	B	C	D	E	F	G	H	L1	L2	M	N
CNVL-42	28	33	69,5	46	12	29	23,5	78	89	77	4,3	14
CNVL-43	28	33	69,5	46	12	29	23,5	78	122	110	4,3	14
CNVL-44	28	33	69,5	46	12	29	23,5	78	155	143	4,3	14
CNVL-45	28	33	69,5	46	12	29	23,5	78	188	176	4,3	14
CNVL-46	28	33	69,5	46	12	29	23,5	78	221	209	4,3	14

Manifold base with common exhausts

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

The following is supplied :

- 1x manifold
- 1x pair of fixing screws per valve position
- 3x OR seal per valve position
- 2x guides per valve position

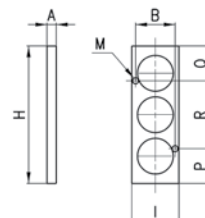
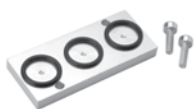


DIMENSIONS

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 item is used to blank one or more stations on a manifold base Mod.CNVL...,
The following is supplied:
2x fixing screws
3x O-Rings

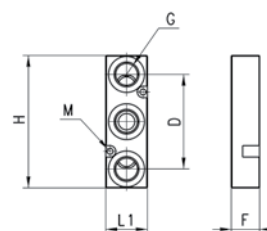


DIMENSIONS

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

Intermediate plate for manifold with outlets

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

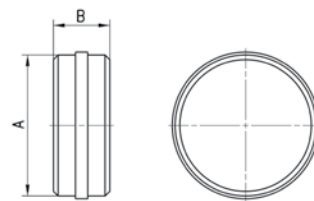


DIMENSIONS

Mod.	G	H	M	G	L1	D
CNVL-4P	G1/4	73	3,2	29	25	50

Diaphragm

MODULES SEPARATION BLANKING PLUG



DIMENSIONS

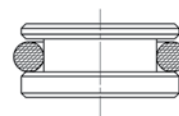
Mod.	A	B
CNVL-4H-TP	23,8	8

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