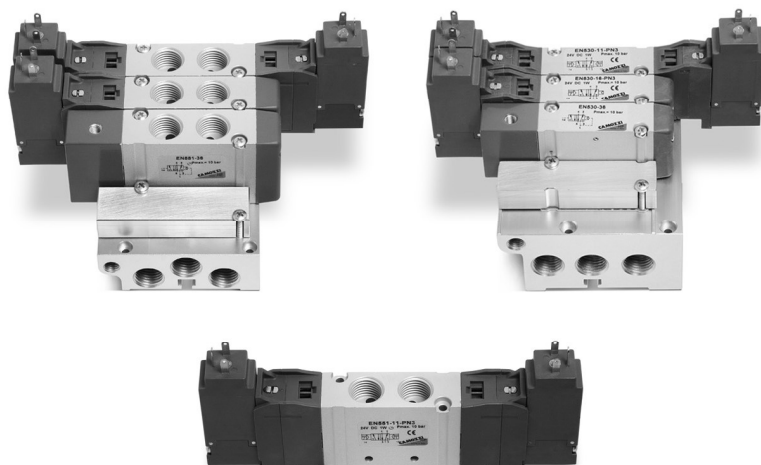


# Valves and Solenoid valves Series EN

5/2-way, 5/3-way CC - CO - CP

With outlets on the body - For individual or manifold assembly

Size 16 - 19 mm



- » Mounting on any flat surface
- » Reduced dimensions
- » Aluminium body and end-covers in technopolymer
- » Space saving

Camozzi has developed a new series of valves to be used in applications requiring a reduced space of installation and in situations where the valves need to be located as near as possible to the operating elements. The single valves can be mounted on any flat surface, allowing compact machine design, which is also enhanced by the reduced dimensions of the valve itself. Thanks to their robust aluminium bodies, the valves Series EN offer the highest reliability.

This new generation of solenoid valves is the evolution of the previous Series E, size 16 - 19 mm valve with ports threaded into the body. As this valve is completely interchangeable with Series E, part of the code is maintained though the valve has a completely new shape and new components.

## GENERAL DATA

<b>Construction</b>	spool-type
<b>Valve functions</b>	5/2 - 5/3 CC - 5/3 CO - 5/3 CP
<b>Materials</b>	body, spool, bases = AL end-covers = technopolymer joints = NBR PU
<b>Ports</b>	G1/8 - G1/4
<b>Temperature</b>	0°C min. + 50° C max
<b>Fluid</b>	filtered air without lubricant. If lubricated air is used, it is recommended to use ISOVG32 oil and to never interrupt lubrication.
<b>Voltage</b>	see coding
<b>Voltage tolerance</b>	± 10%
<b>Power consumption</b>	2W, 1W
<b>Class of insulation</b>	class F
<b>Protection class</b>	IP65 with connector DIN 40050

**CODING EXAMPLE**

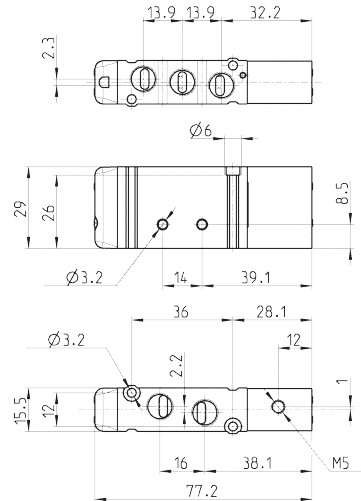
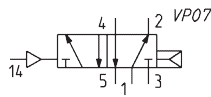
<b>EN</b>	<b>5</b>	<b>3</b>	<b>1</b>	<b>-</b>	<b>11</b>	<b>-</b>	<b>PN3</b>
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<b>EN</b>	SERIES
<b>5</b>	<p>FUNCTION:</p> <p>5 = 5/2          6 = 5/3 Centre Closed          7 = 5/3 Centre Open          8 = 5/3 Pressure Centre</p>
<b>3</b>	<p>SIZE:</p> <p>3 = size 16          5 = size 19</p>
<b>1</b>	<p>BODY TYPE:</p> <p>1 = body with threaded plate</p>
<b>11</b>	<p>ACTUATION:</p> <p>11 = electro-pneumatic, bistable          16 = electro-pneumatic, monostable          33 = pneumatic bistable          36 = pneumatic monostable          E11 = electro-pneumatic, bistable with external servo-pilot supply          E16 = electro-pneumatic, monostable with external servo-pilot supply</p>
<b>PN3</b>	<p>TYPE OF SOLENOID:</p> <p>PN3 = 24V DC - 1W          PN4 = 48V DC - 2W          PN6 = 110V DC - 2W          PN7 = 230V - 2W          P13 = 24V DC - 1W          P54 = 48V DC - 2W          P56 = 110V DC - 2W          W53 = 24V DC - 2W          W54 = 48V DC - 2W</p> <p>In case of applications with alternate current, use a bridge rectifier connector ( see pag. 2/2.07.39)</p>

**Pneumatically actuated valve, monostable - size 16**

5/2-way

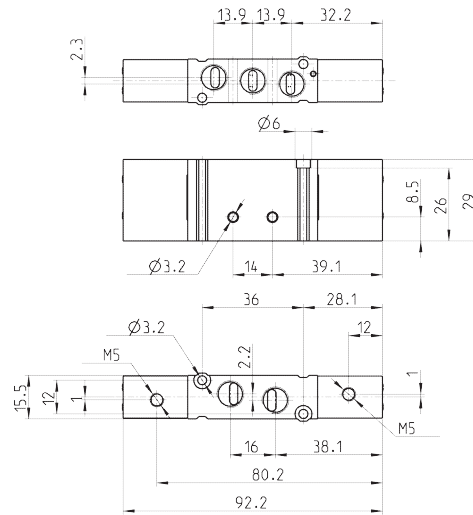
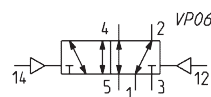
Note: the pilot pressure should never be lower than the operating pressure.



Mod.	Ports	Pilot supply	Pilot supply pressure (bar)	Operating pressure (bar)	Flow (NI/min)
EN531-36	G1/8	M5	2,5 + 10	-0,9 + 10	550

**Pneumatically actuated valve, bistable - size 16**

5/2-way

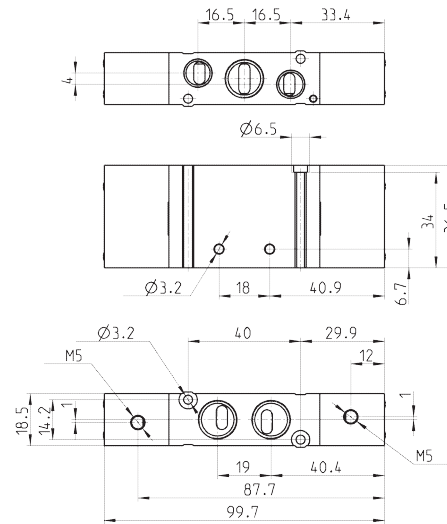
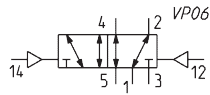


Mod.	Ports	Pilot supply	Pilot supply pressure (bar)	Operating pressure (bar)	Flow (NI/min)
EN531-33	G1/8	M5	2 + 10	-0,9 + 10	550



**Pneumatically actuated valve, bistable - size 19**

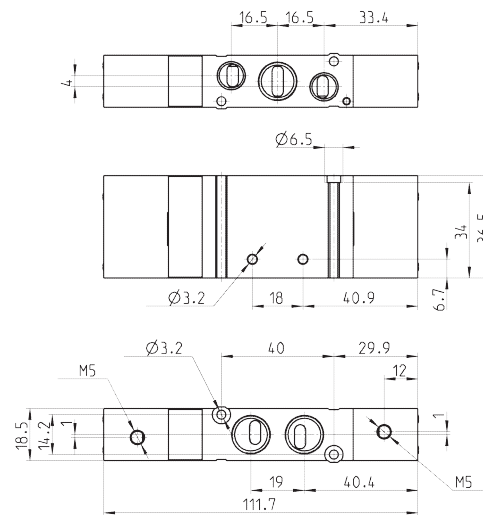
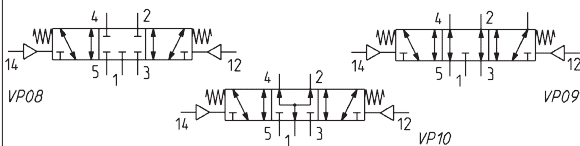
5/2-way



Mod.	Ports 1-2-4	Ports 3-5	Pilot supply	Pilot supply pressure (bar)	Operating pressure (bar)	Flow (NI/min)
<b>EN551-33</b>	G1/4	G1/8	M5	2 + 10	-0,9 + 10	920

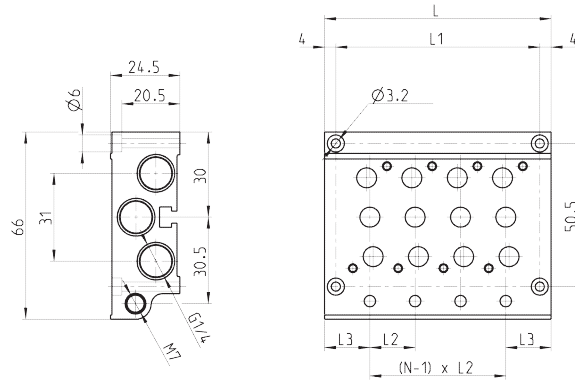
**Pneumatically actuated valve - size 19**

5/3-way

 CC = Centres closed  
 CO = Centres open  
 CP = Pressure Centres


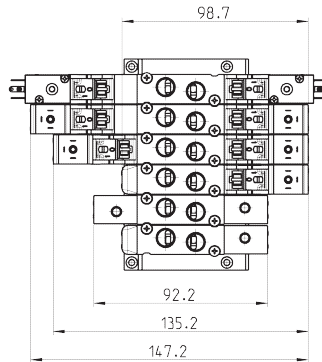
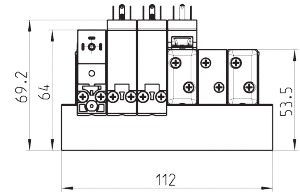
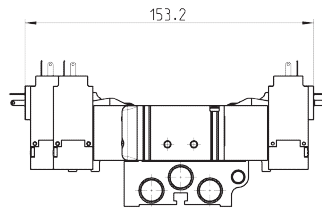
Mod.	Ports 1-2-4	Ports 3-5	Pilot supply	Pilot supply pressure (bar)	Operating pressure (bar)	Flow (NI/min)	Symbol
<b>EN651-33</b>	G1/4	G1/8	M5	3 + 10	-0,9 + 10	920	VP08
<b>EN751-33</b>	G1/4	G1/8	M5	3 + 10	-0,9 + 10	920	VP09
<b>EN851-33</b>	G1/4	G1/8	M5	3 + 10	-0,9 + 10	920	VP10

Manifold for valves size 16 and 19 (outlets on the body valve)

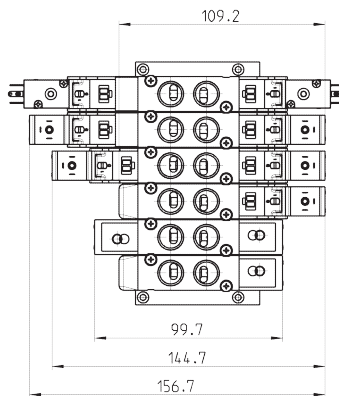
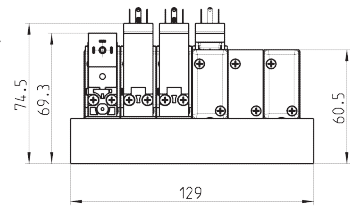
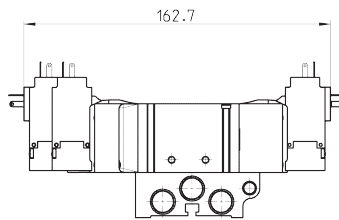
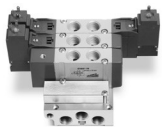


Mod.	Nr of valve positions	L	L1	L2	L3
EN531-1002	2	48	40	16	16
EN531-1003	3	64	56	16	16
EN531-1004	4	80	72	16	16
EN531-1005	5	96	88	16	16
EN531-1006	6	112	104	16	16
EN531-1008	8	144	136	16	16
EN531-1010	10	176	168	16	16
EN531-1012	12	208	200	16	16
EN551-1002	2	53	45	19	17
EN551-1003	3	72	64	19	17
EN551-1004	4	91	83	19	17
EN551-1005	5	110	102	19	17
EN551-1006	6	129	121	19	17
EN551-1008	8	167	159	19	17
EN551-1010	10	205	197	19	17
EN551-1012	12	243	235	19	17

Manifolds complete with valves with outlets on the body - size 16  
ports G1/8



Manifolds complete with valves with outlets on the body - size 19  
ports G1/4



**CODING EXAMPLE**

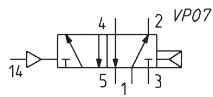
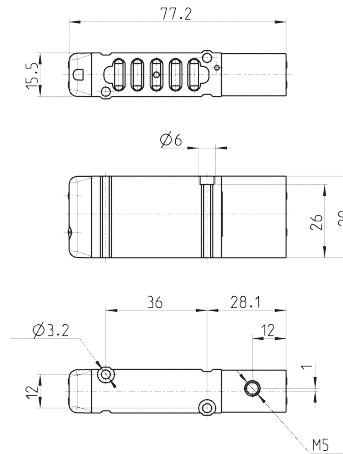
<b>EN</b>	<b>5</b>	<b>3</b>	<b>0</b>	<b>-</b>	<b>11</b>	<b>-</b>	<b>PN3</b>
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<b>EN</b>	SERIES
<b>5</b>	<p>FUNCTION:</p> <p>5 = 5/2          6 = 5/3 Centre Closed          7 = 5/3 Centre Open          8 = 5/3 Pressure Centre</p>
<b>3</b>	<p>SIZE:</p> <p>3 = size 16          5 = size 19</p>
<b>0</b>	<p>BODY TYPE:</p> <p>0 = body for sub-base</p>
<b>11</b>	<p>ACTUATION:</p> <p>11 = electro-pneumatic, bistable          16 = electro-pneumatic, monostable          33 = pneumatic bistable          36 = pneumatic monostable          E11 = electro-pneumatic, bistable with external servo-pilot supply          E16 = electro-pneumatic, monostable with external servo-pilot supply</p>
<b>PN3</b>	<p>TYPE OF SOLENOID:</p> <p>PN3 = 24V DC - 1W          PN4 = 48V DC - 2W          PN6 = 110V DC - 2W          PN7 = 230V - 2W          P13 = 24V DC - 1W          P54 = 48V DC - 2W          P56 = 110V DC - 2W          W53 = 24V DC - 2W          W54 = 48V DC - 2W</p> <p>In case of applications with alternate current, use a bridge rectifier connector ( see pag. 2/2.07.40)</p>



**Monostable pneumatic valve with outlets on sub-base - size 16**

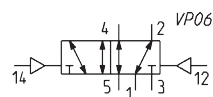
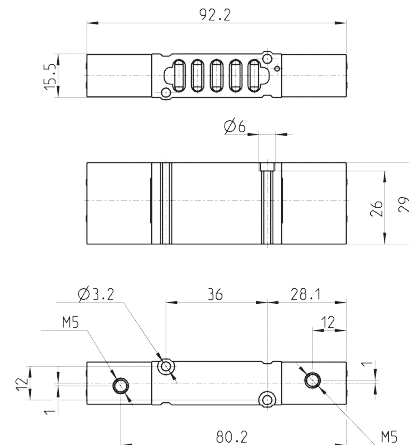
5/2-way



Mod.	Pilot supply	min. pilot Pressure (bar)	Working pressure (bar)	Flow rate (NI/min)
EN530-36	M5	2,5	2,5 + 10	610

**Bistable pneumatic valve with outlets on sub-base - size 16**

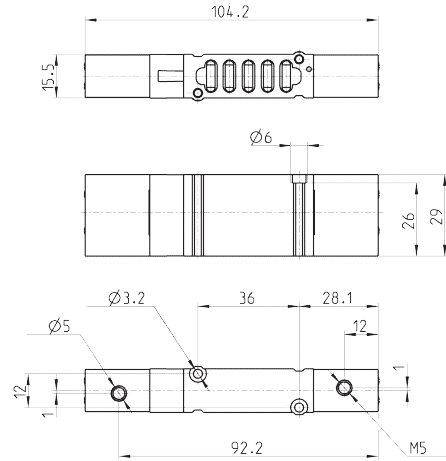
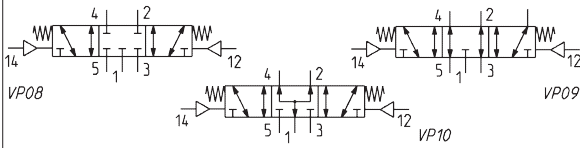
5/2-way



Mod.	Pilot supply	min. pilot pressure (bar)	Working pressure (bar)	Flow rate (NI/min)
EN530-33	M5	2	-0,9 + 10	610

Pneumatically actuated valve with outlets on sub-base - size 16

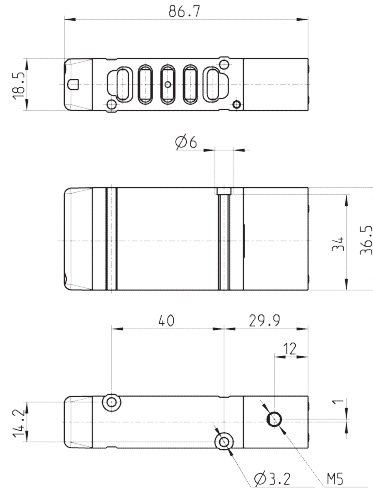
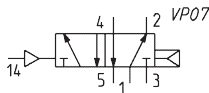
5/3-way  
 CC = Centres Closed  
 CO = Centres Open  
 CP = Centres in Pressure



Mod.	Pilot supply	min. pilot pressure (bar)	Working pressure (bar)	Flow rate (NI/min)	Symbol
EN630-33	M5	3	-0,9 ÷ 10	610	VP08
EN730-33	M5	3	-0,9 ÷ 10	610	VP09
EN830-33	M5	3	-0,9 ÷ 10	610	VP10

Pneumatic valve, monostable with outlets on sub-base - size 19

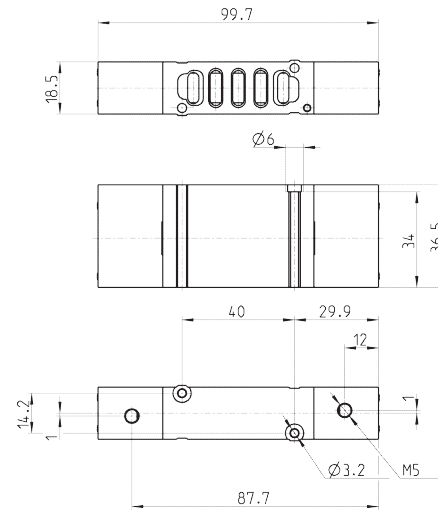
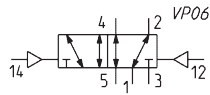
5/2-way



Mod.	Pilot supply	min. pilot pressure (bar)	working P. (bar)	Flow rate (NI/min)
EN550-36	M5	2,5	2 ÷ 10	1000

**Pneumatic valve, bistable with outlets on sub-base - size 19**

5/2-way



Mod.	Pilot supply	min. pilot pressure (bar)	Working pressure (bar)	Flow rate NI/min
EN550-33	M5	2	-0,9 + 10	1000

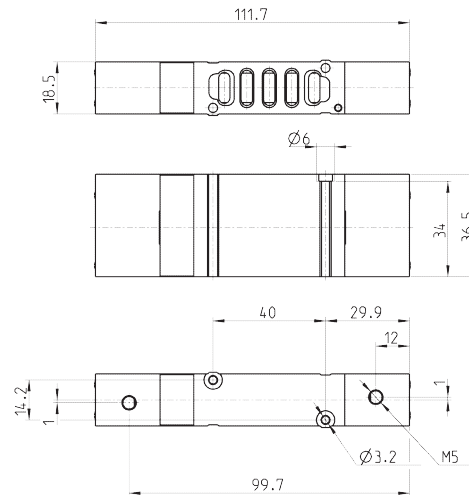
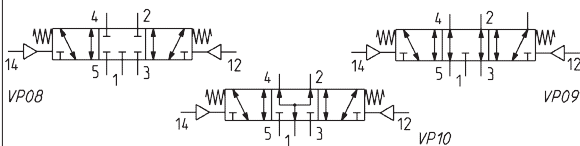
**Pneumatically actuated valve with outlets on sub-base - size 19**

5/3-way

CC = Centres Closed

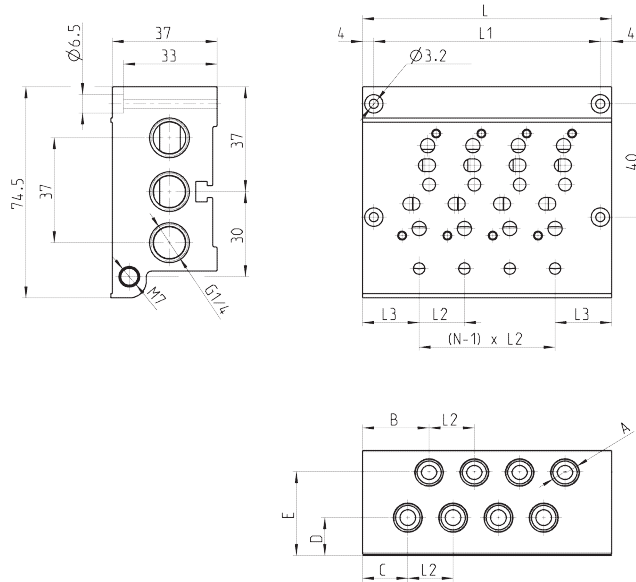
CO = Centres Open

CP = Centres in Pressure



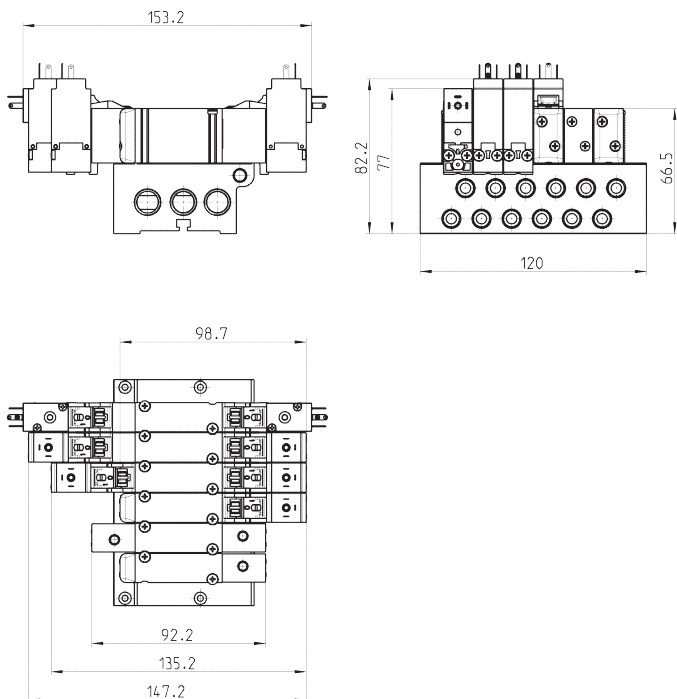
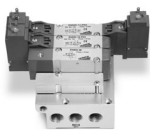
Mod.	Pilot supply	min. pilot pressure (bar)	working P. bar	Flow rate NI/min	Symbol
EN650-33	M5	3	-0,9 + 10	1000	VP08
EN750-33	M5	3	-0,9 + 10	1000	VP09
EN850-33	M5	3	-0,9 + 10	1000	VP10

Sub-base for valves size 16 and 19 (outlets on manifolds)

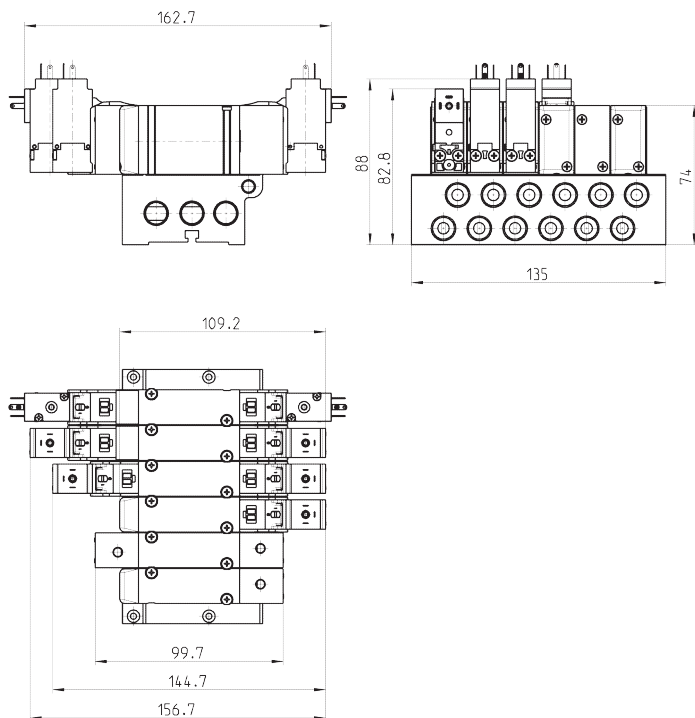
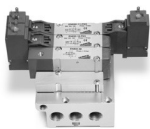


Mod.	Nr of valve positions	A	B	C	D	E	L	L1	L2	L3
EN530-2102	2	G1/8	23,5	16	12,8	29	56	48	16	20
EN530-2103	3	G1/8	23,5	16	12,8	29	72	64	16	20
EN530-2104	4	G1/8	23,5	16	12,8	29	88	80	16	20
EN530-2105	5	G1/8	23,5	16	12,8	29	104	96	16	20
EN530-2106	6	G1/8	23,5	16	12,8	29	120	112	16	20
EN530-2108	8	G1/8	23,5	16	12,8	29	152	144	16	20
EN530-2110	10	G1/8	23,5	16	12,8	29	184	176	16	20
EN530-2112	12	G1/8	23,5	16	12,8	29	216	208	16	20
EN550-2102	2	G1/4	23	15,5	10,5	28,2	59	51	19	20
EN550-2103	3	G1/4	23	15,5	10,5	28,2	78	70	19	20
EN550-2104	4	G1/4	23	15,5	10,5	28,2	97	89	19	20
EN550-2105	5	G1/4	23	15,5	10,5	28,2	116	108	19	20
EN550-2106	6	G1/4	23	15,5	10,5	28,2	135	127	19	20
EN550-2108	8	G1/4	23	15,5	10,5	28,2	173	165	19	20
EN550-2110	10	G1/4	23	15,5	10,5	28,2	211	203	19	20
EN550-2112	12	G1/4	23	15,5	10,5	28,2	249	241	19	20

Manifolds complete with base moutend valves - size 16



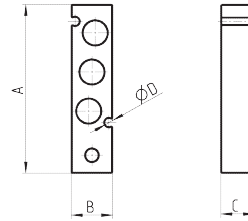
Manifolds complete with base moutend valves - size 19



Blanking plate for manifolds - valves with outlets on the body

The following is supplied:

- 1x blanking plate
- 2x screws
- 1x seal

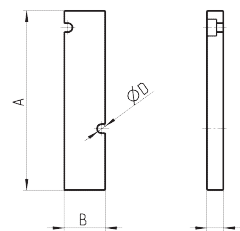


Mod.	Size	A	B	C	ØD
TP-EN531	16	60	14,5	12	3,2
TP-EN551	19	62	17,3	12	3,2

Blanking plate for manifolds - base mounted valves

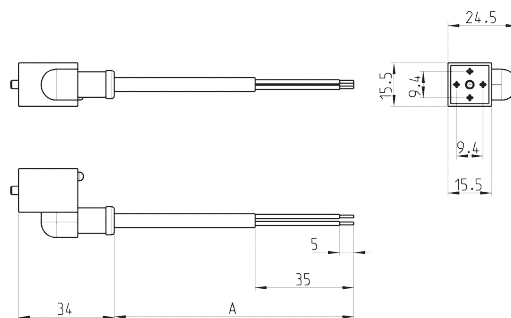
The following is supplied:

- 1x blanking plate
- 2x screws
- 1x seal



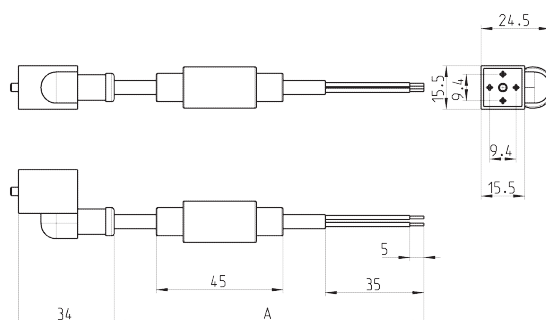
Mod.	Size	A	B	C	ØD
TP-EN530	16	64	14,7	6	3,2
TP-EN550	19	64	17	6	3,2

## Connectors 24DC PN with led for solenoids P and PN



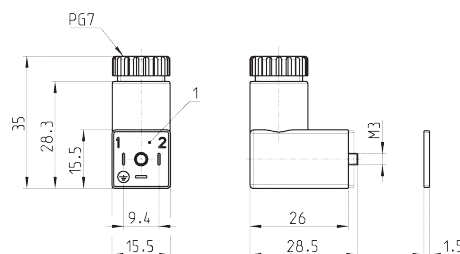
Mod.	A
125-503-2	2 m
125-503-5	5 m

## Line connectors V-AC PN with bridge rectifier for solenoids P-PN



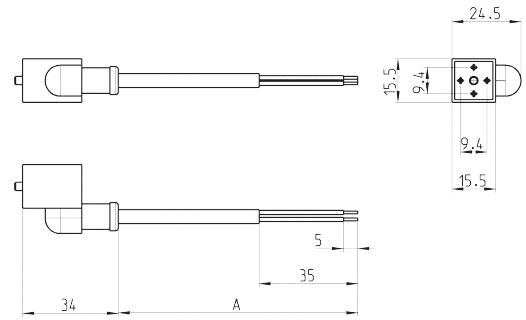
Mod.	A
125-903-2	2 m
125-903-5	5 m

## Connectors DIN 43650



Mod.	Solenoid type	A
125-800	P	9,4
126-800	W	8

In-line connectors with cable



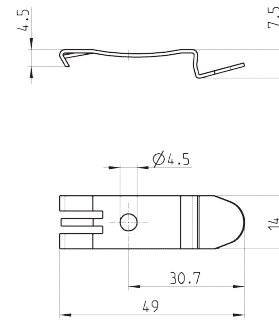
Mod.	A
<b>125-553-2</b>	2 m
<b>125-553-5</b>	5 m

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  
2x nuts



Mod.	PCF-EN531
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