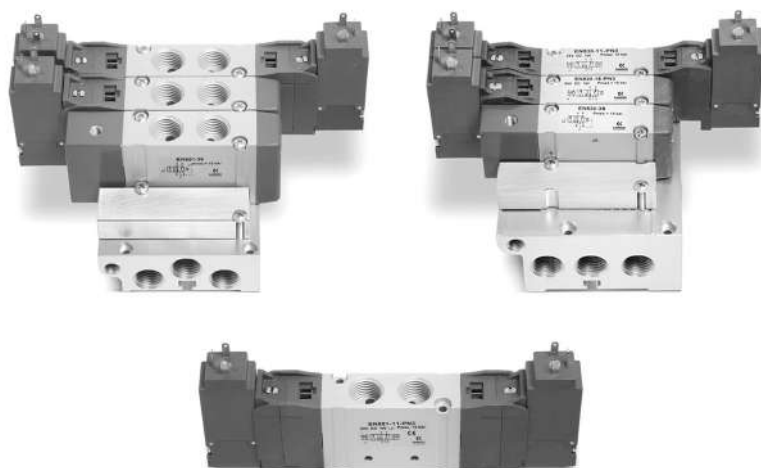


Series EN valves and solenoid valves

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

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

CODING EXAMPLE

EN	5	3	1	-	11	-	PN3
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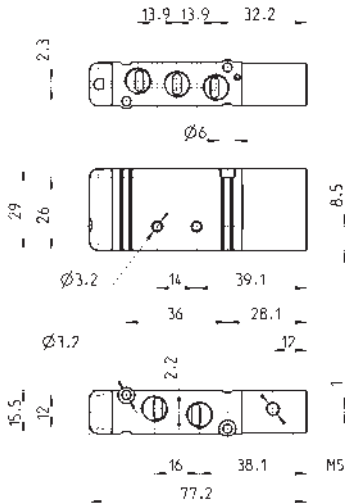
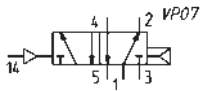
EN	SERIES
5	<p>FUNCTION:</p> <p>5 = 5/2</p> <p>6 = 5/3 Centre Closed</p> <p>7 = 5/3 Centre Open</p> <p>8 = 5/3 Pressure Centre</p>
3	<p>SIZE:</p> <p>3 = size 16</p> <p>5 = size 19</p>
1	<p>BODY TYPE:</p> <p>1 = body with threaded plate</p>
11	<p>ACTUATION:</p> <p>11 = electro-pneumatic, bistable</p> <p>16 = electro-pneumatic, monostable</p> <p>33 = pneumatic bistable</p> <p>36 = pneumatic monostable</p> <p>E11 = electro-pneumatic, bistable with external servo-pilot supply</p> <p>E16 = electro-pneumatic, monostable with external servo-pilot supply</p>
PN3	<p>TYPE OF SOLENOID:</p> <p>PN3 = 24V DC - 1W</p> <p>P13 = 24V DC - 1W</p> <p>PN4 = 48V DC - 2W</p> <p>PN6 = 110V DC - 2W</p> <p>PN7 = 230V - 2W</p> <p>P53 = 24V DC - 2W</p> <p>P54 = 48V DC - 2W</p> <p>P56 = 110V DC - 2W</p> <p>W53 = 24V DC - 2W</p> <p>W54 = 48V DC - 2W</p> <p>In case of applications with alternate current, use a bridge rectifier connector (see the connectors at the end of the section)</p>

Pneumatically actuated valve, monostable - size 16

5/2-way



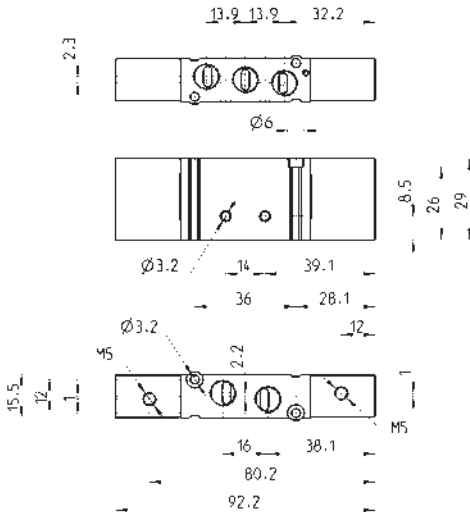
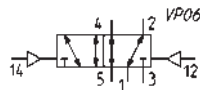
Note: the pilot pressure should never be lower than the operating pressure.



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

Pneumatically actuated valve, bistable - size 16

5/2-way

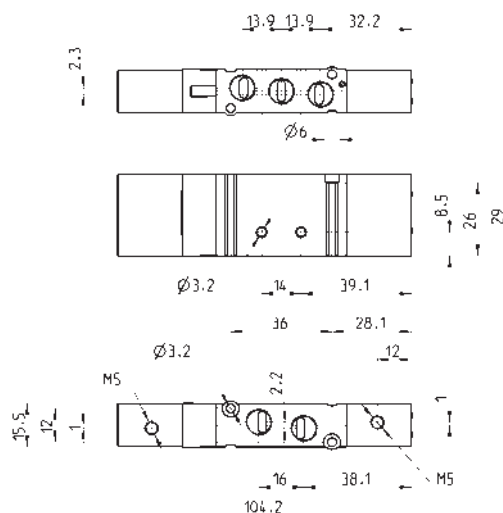
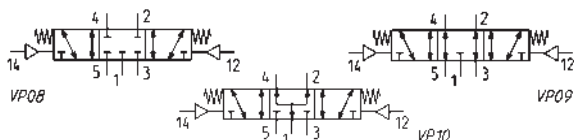


Mod.	Ports	Pilot supply	Pilot supply pressure (bar)	Operating pressure (bar)	Flow (NL/min)
EN531-33	G1/8	M5	2 ÷ 10	-0,9 ÷ 10	550

Pneumatically actuated valve - size 16



5/3-way
CC = Centres closed
CO = Centres open
CP = Pressure Centres



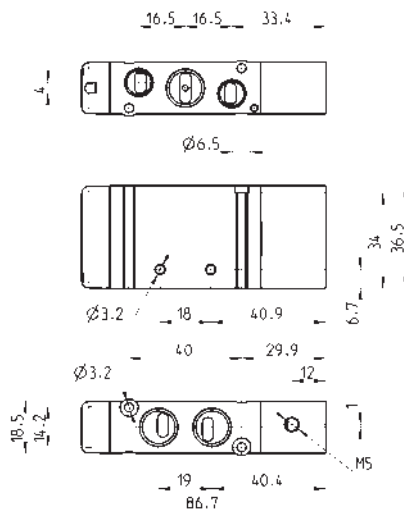
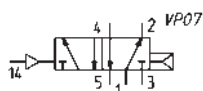
Mod.	Ports	Pilot supply	Pilot supply pressure (bar)	Operating pressure (bar)	Flow (NL/min)	Symbol
EN631-33	G1/8	M5	3 ÷ 10	-0.9 ÷ 10	550	VP08
EN731-33	G1/8	M5	3 ÷ 10	-0.9 ÷ 10	550	VP09
EN831-33	G1/8	M5	3 ÷ 10	-0.9 ÷ 10	550	VP10

Pneumatically actuated valve, monostable - size 19



5/2-way

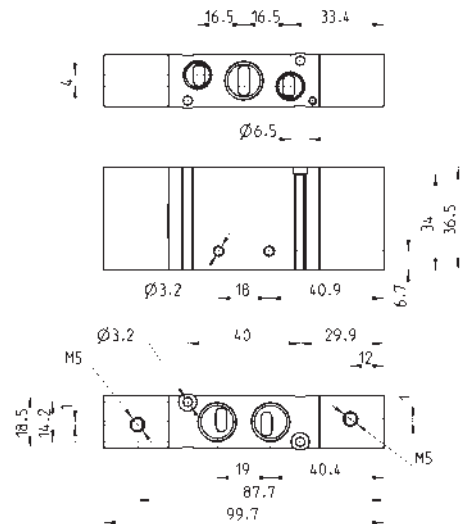
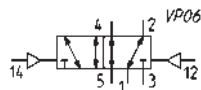
Note: the pilot pressure should never be lower than the operating pressure.



Mod.	Ports 1-2-4	Ports 3-5	Pilot supply	Pilot supply pressure (bar)	Operating pressure (bar)	Flow (NL/min)
EN551-36	G1/4	G1/8	M5	2.5 ÷ 10	-0.9 ÷ 10	920

Pneumatically actuated valve, bistable - size 19

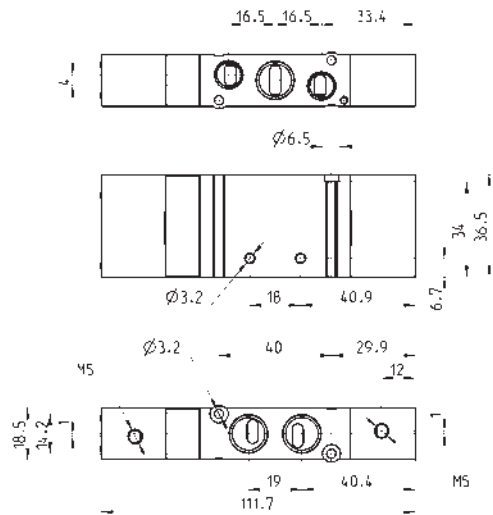
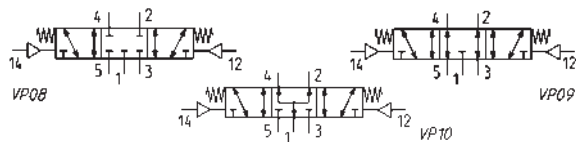
5/2-way



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

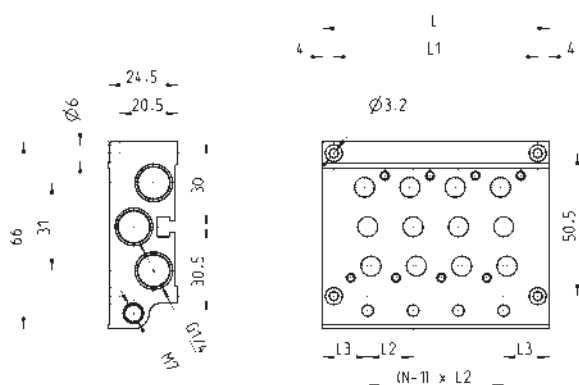
Pneumatically actuated valve - size 19

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 (NL/min)	Symbol
EN651-33	G1/4	G1/8	M5	3 ÷ 10	-0,9 ÷ 10	920	VP08
EN751-33	G1/4	G1/8	M5	3 ÷ 10	-0,9 ÷ 10	920	VP09
EN851-33	G1/4	G1/8	M5	3 ÷ 10	-0,9 ÷ 10	920	VP10

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



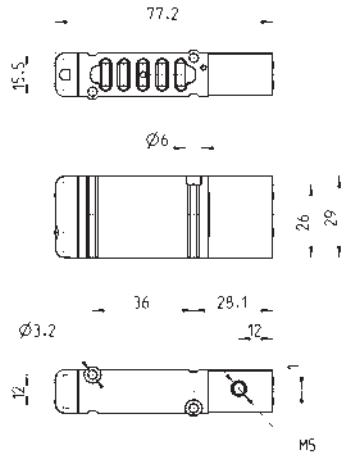
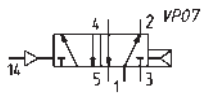
Mod.	Nr of valve positions	L	L1	L2	L3
EN531-1002	2	48	40	16	16
EN531-1003	3	64	56	16	16
EN531-1004	4	80	72	16	16
EN531-1005	5	96	88	16	16
EN531-1006	6	112	104	16	16
EN531-1008	8	144	136	16	16
EN531-1010	10	176	168	16	16
EN531-1012	12	208	200	16	16
EN551-1002	2	53	45	19	17
EN551-1003	3	72	64	19	17
EN551-1004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

CODING EXAMPLE

EN	5	3	0	-	11	-	PN3
EN	SERIES						
5	FUNCTION: 5 = 5/2 6 = 5/3 Centre Closed 7 = 5/3 Centre Open 8 = 5/3 Pressure Centre						
3	SIZE: 3 = size 16 5 = size 19						
0	BODY TYPE: 0 = body for sub-base						
11	ACTUATION: 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						
PN3	TYPE OF SOLENOID: 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 In case of applications with alternate current, use a bridge rectifier connector (see connectors at the end of this section)						

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

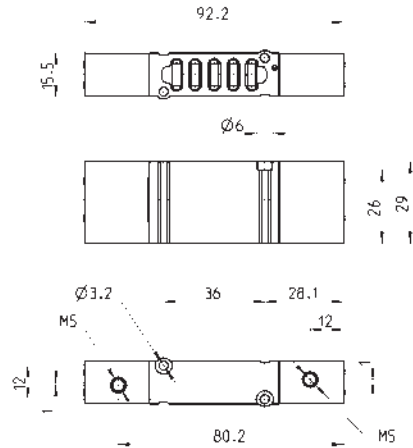
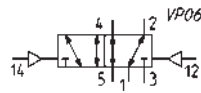
5/2-way



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

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

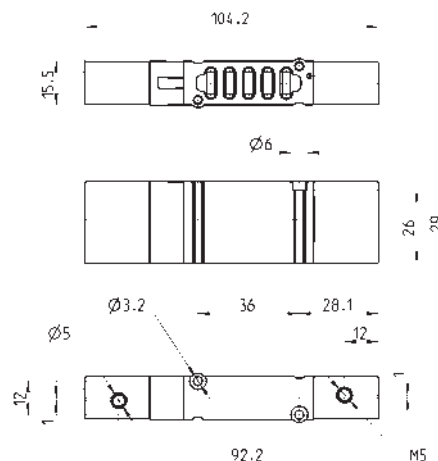
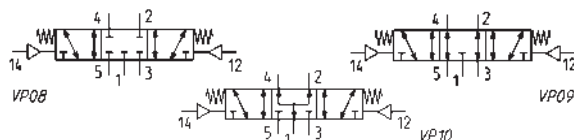
5/2-way



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

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

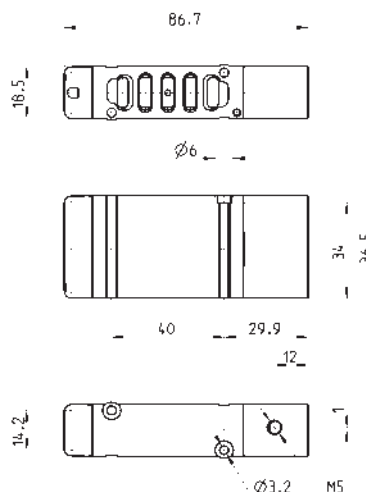
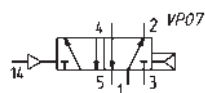
5/3-way
CC = Centres Closed
CO = Centres Open
CP = Centres in Pressure



Mod.	Pilot supply	min. pilot pressure (bar)	Working pressure (bar)	Flow rate (NL/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

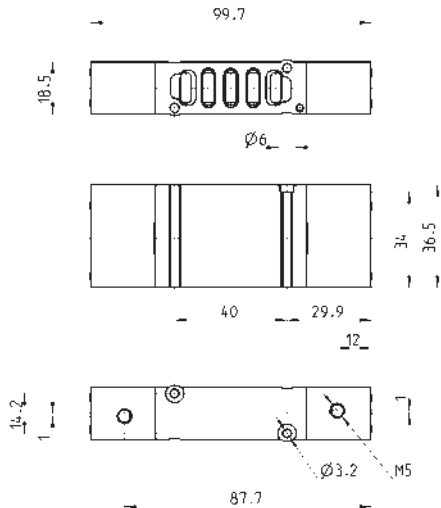
5/2-way



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

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

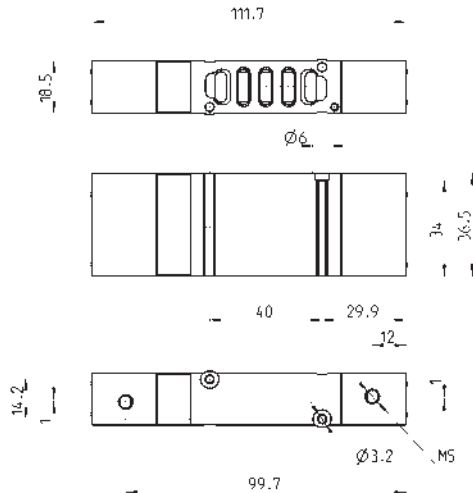
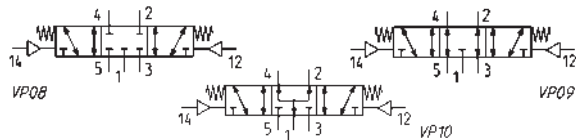
5/2-way



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

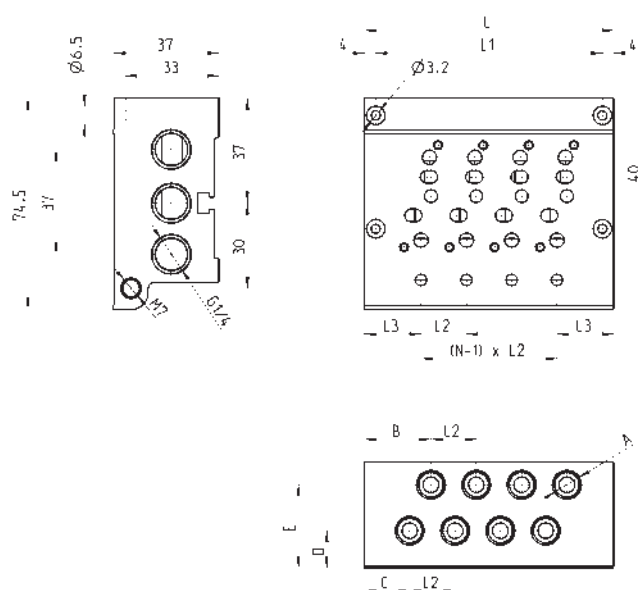
Pneumatically actuated valve with outlets on sub-base - size 19

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 NL/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

Manifold for valves size 16 and 19 (outlets on manifolds)

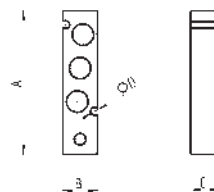


Mod.	Nr of valve positions	A	B	C	D	E	L	l1	l2	l3
EN530-2102	2	G1/8	23,5	16	12,8	29	56	48	16	20
EN530-2103	3	G1/8	23,5	16	12,8	29	72	64	16	20
EN530-2104	4	G1/8	23,5	16	12,8	29	88	80	16	20
EN530-2105	5	G1/8	23,5	16	12,8	29	104	96	16	20
EN530-2106	6	G1/8	23,5	16	12,8	29	120	112	16	20
EN530-2108	8	G1/8	23,5	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

Blanking plate for manifolds - valves with outlets on the body



The following is supplied:
1x blanking plate
2x screws
1x seal

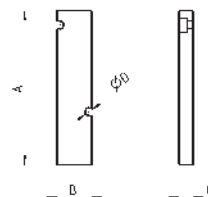


Mod.	Size	A	B	C	ØD
TP-EN531	16	60	14,5	12	3,2
TP-EN551	19	62	17,3	12	3,2

Blanking plate for manifolds - base mounted valves



The following is supplied:
1x blanking plate
2x screws
1x seal



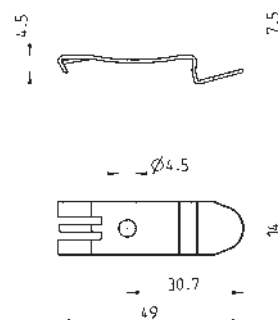
Mod.	Size	A	B	C	ØD
TP-EN530	16	64	14,7	6	3,2
TP-EN550	19	64	17	6	3,2

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