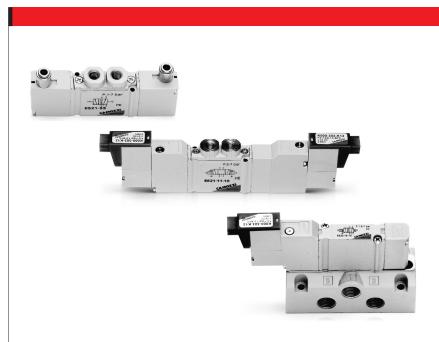


# Valves and Solenoid valves Series E

5/2-way monostable/bistable - 5/3 CC CO CP With outlets on the body - For individual or manifold assembly Size 10,5 mm



Series E valves have been designed to allow high flows with small overall dimensions. These valves are manufactured in three different sizes and are suitable for individual use or for mounting on manifolds. The manifolds allow a common inlet as well as the two exhausts and the pilot exhaust in common.

# GENERAL DATA

-	
Construction	spool-type
Valve functions	5/2, 5/3 CC CO CP
Materials	zamak body, aluminium spool and sub-bases; technopolymer end-covers, joints NBR
Ports	valve = M5; manifold = M5 - tube Ø4; sub-base = G1/8
Temperature	0°C min + 50°C max
Fluid	filtered air (5 µm or lower), without lubricant; if lubricated air is used, it is recommended to use ISOVG32 oil. Once applied the lubrication should never be interrupted.
Solenoid voltage	see coding
Voltage tolerance	± 10%
Power consumption	1W
Class of insulation	class F
Protection class	IP50

2

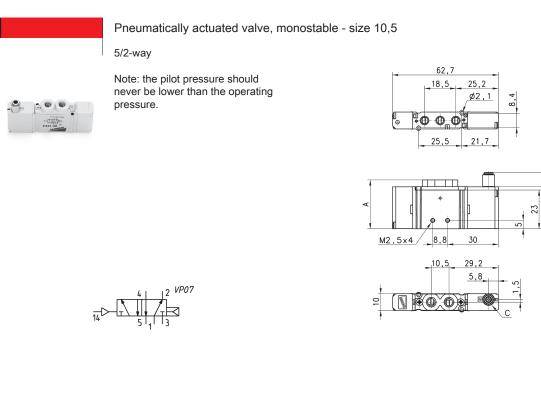
CONTROL

COE	DING EXAMPLE
E	5 2 1 - 11 - 10 - K 1 3
Е	SERIES
5	FUNCTION:         2 = 5/2 supply from the exhausts         5 = 5/2         6 = 5/3 Centres Closed         7 = 5/3 Centres Open         8 = 5/3 Centres in Pressure
2	SIZE: 2 = 10,5 mm
1	BODY TYPE: 1 = body with threaded plate
11	ACTUATION: 11 = electro-pneumatic, bistable 16 = electro-pneumatic, monostable 33 = pneumatic bistable - tube 3 36 = pneumatic monostable - tube 4 C33 = pneumatic monostable - tube 4 C36 = pneumatic monostable - tube 4
10	INTERFACE: 10
Κ	TYPE OF SOLENOID: K
1	SOLENOID DIMENSION: 1 = 10x10
3	SOLENOID VOLTAGE: 1 = 6V DC 2 = 12V DC 3 = 24V DC

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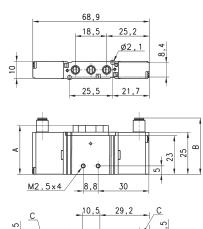


### DIMENSIONS

DIMENSION	5							
Mod.	А	В	С	Ports 1-3-5	Ports 2-4	min. pil P. (bar)	working P. (bar)	Flow rate (NI/min)
E521-36	29	33,4	Ø 3	M5	M5	2,5	2,5 ÷ 7	200
E521-C36	29	39,1	Ø 4	M5	M5	2,5	2,5 ÷ 7	200



Pneumatically actuated valve, bistable - size 10,5 5/2-way

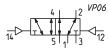


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57,3

5,8

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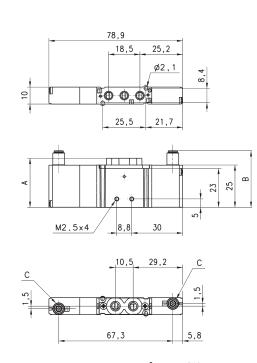


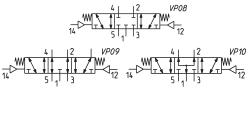
DIMENSION	S							
Mod.	А	В	С	Ports 1-3-5	Ports 2-4	min. pil P. (bar)	working P. (bar)	Flow rate (NI/min)
E521-33	29	33,4	Ø 3	M5	M5	1	-09 ÷ 7	200
E521-C33	29	39,1	Ø 4	M5	M5	1	-09 ÷ 7	200

CONTROL

# Pneumatically actuated valve - size 10,5

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

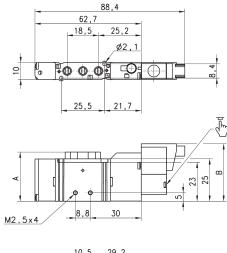


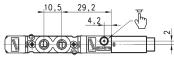


DIMENSIO	NS								
Mod.	А	В	С	Ports 1-3-5	Ports 2-4 r	min. pil P. (ba	ar) working P. (bar) Fl	ow rate NL/m	in Symbol
E621-33	29	33,4	Ø 3	M5	M5	1	-0,9 ÷ 7	200	VP08
E621-C33	29	39,1	Ø 4	M5	M5	1	-0,9 ÷ 7	200	VP08
E721-33	29	33,4	Ø 3	M5	M5	1	-0,9 ÷ 7	200	VP09
E721-C33	29	39,1	Ø 4	M5	M5	1	-0,9 ÷ 7	200	VP09
E821-33	29	33,4	Ø3	M5	M5	1	-0,9 ÷ 7	200	VP10
E821-C33	29	39,1	Ø 4	M5	M5	1	-0,9 ÷ 7	200	VP10

#### Electropneumatically actuated valve, monostable - size 10,5

5/2-way





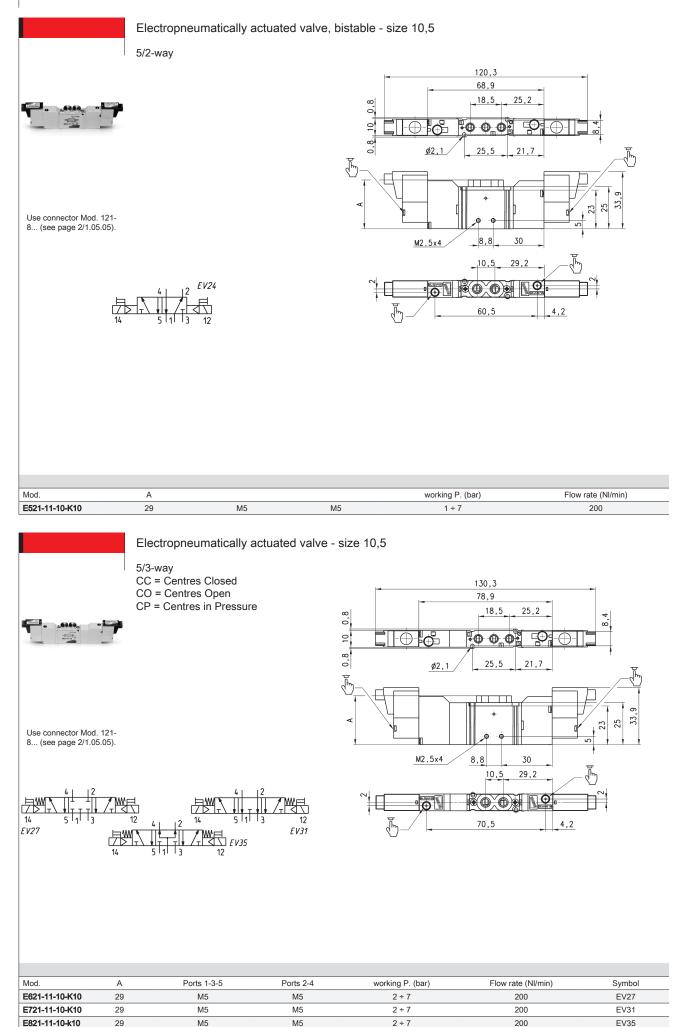


For solenoid valves with solenoid type K, use connector 121-8...

DIMENSIONS					
Mod.	А	Ports 1-3-5	Ports 2-4	working P. (bar)	Flow rate (NI/min)
E521-16-10-K10	29	M5	M5	2,5 ÷ 7	200



CONTROL



COD	NING EXAMPLE
E	5 2 0 - 11 - 10 - K 1 3
Е	SERIES:
5	FUNCTION: 2 = 5/2 supply from the exhausts 5 = 5/2 6= 5/3 Centres Closed 7= 5/3 Centres Open 8= 5/3 Centres in Pressure
2	SIZE: 2 = 10,5 mm
0	BODY TYPE: 0 = body for sub-base
11	ACTUATION: 11 = electropneumatic bistable 16 = electropneumatic monostable 33 = pneumatic bistable - tube Ø 3 36 = pneumatic monostable - tube Ø 4 C36 = pneumatic monostable - tube Ø 4
10	INTERFACE: 10
K	TYPE OF SOLENOID: K
1	SOLENOID DIMENSIONS: 1 = 10x10
3	SOLENOID VOLTAGE: 1 = 6V DC 2 = 12V DC 3 = 24V DC

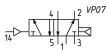


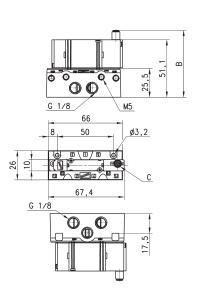
# Pneumatically actuated valve, monostable - size 10,5

#### 5/2-way



The single base is ordered separately from the valve. The pilot pressure should never be lower than the operating pressure.





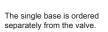
#### DIMENSIONS

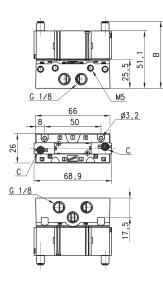
DIVIENDICINO					
Mod.	В	С	min. pil P. (bar)	working P. bar	Flow rate (NI/min)
E520-36	59,5	Ø3	2,5	2,5 ÷ 7	280
E520-C36	65,2	Ø4	2,5	2,5 ÷ 7	280



Pneumatically actuated valve, bistable - size 10,5

5/2-way





DIMENSIONS					
Mod.	В	С	min. pil P. (bar)	working P. (bar)	Flow rate (NI/min)
E520-33	59,5	Ø3	1	-0,9 ÷ 7	280
E520-C33	65.2	Ø4	1	-0.9 ÷ 7	280

2

CONTROL

Symbol

VP08

VP08

VP09

VP09

VP10

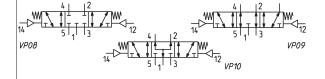
VP10

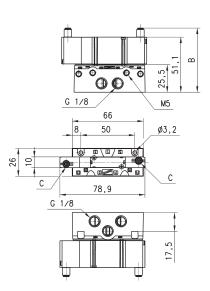
### Pneumatically actuated valve - size 10,5



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

The single base is ordered separately from the valve.





DIMENSIONS					
Mod.	В	С	min. pil P. (bar)	working P. (bar)	Flow rate (NI/min)
E620-33	59,5	Ø3	2	-0,9 ÷ 7	280
E620-C33	65,5	Ø4	2	-0,9 ÷ 7	280
E720-33	59,5	Ø3	2	-0,9 ÷ 7	280
E720-C33	65,5	Ø4	2	-0,9 ÷ 7	280

-0;9 ÷ 7

-0,9 ÷ 7

# Electropneumatically actuated valve, monostable - size 10,5

2

2

5/2-way

Ø3

Ø4



59,5

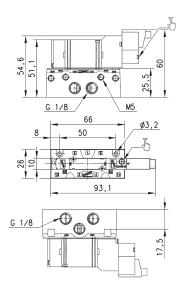
65,5

E820-33

E820-C33

In case of separate pilot supply, the pilot pressure should never be lower than the operating pressure.

The single base is ordered separately from the valve.



280

DIMENSIONS		
Mod.	working P. (bar)	Flow rate (NI/min)
E520-16-10-K10	2 ÷ 7	280



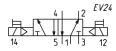
CONTROL

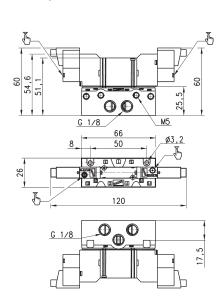
Electropneumatically actuated valve, bistable - size 10,5

5/2-way

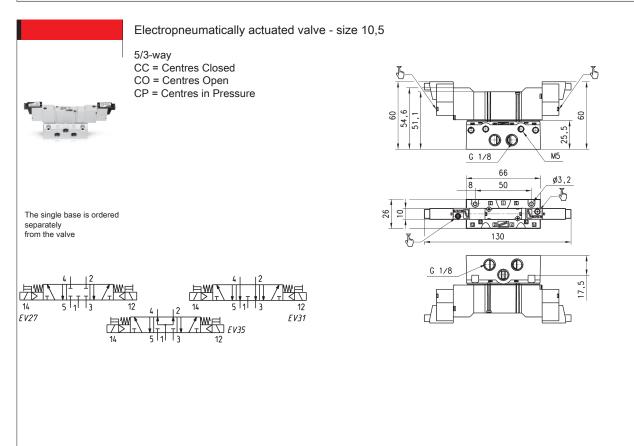


The single base is ordered separately from the valve.





Mod.	working P. bar	Flow rate NI/min
E520-11-10-K10	2 ÷ 7	280



Mod.	working P. bar	Flow rate NI/min	Symbol
E620-11-10-K10	2 ÷ 7	280	EV27
E720-11-10-K10	2 ÷ 7	280	EV31
E820-11-10-K10	2 ÷ 7	280	EV35



# Torque for securing screws on manifolds and single sub-base

CONTROL

Mod.	Size (mm)	Torque (Nm)
E52	10,5	0,3 ÷ 0,35

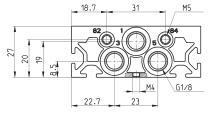
COD	ING EXAMPLE					
E5	2	1	-	1	0	02
E5	SERIES					
2	SIZE: 2 = size 10,5					
1	BODY TYPE: 0 = body for sub-base assembly 1 = body with threads or tube port					
1	TYPE OF SUB-BASE: 0 = single sub-base with side outlets 1 = manifold for threaded valve 2 = manifold for body mounted valve					
0	PORTS: 0 = for valves with outlets on the body 1 = threaded C = tube 4					
02	N° OF POSITIONS: 01 = single 03, 04, 06, 08, 10, 12 = multiple					

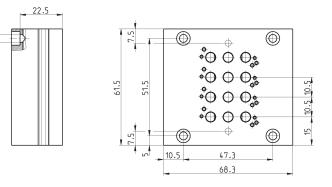
NOTE: When constructing manifolds with 10 or more stations, it is recommended, in order to reduce the risk of pressure drop within the assembly, that pressure is supplied to port 1 at each end of the block. The exhaust ports 3 and 5 at each end should also be utilized (size 10,5 and 16 mm). The same provision should be made for 5 station manifolds of the 19 mm valves. Manifolds complete with ports for external pilot supply are available on request.

# Manifolds for valves with outlets on the body Size 10,5

Notes

The manifolds have been manufactured with common inlet and exhausts 3 and 5 (size G1). There are also common exhausts for pilots 82 and 84 (size G2). Manifolds with G3 ports are also supplied on request for external pilot supply.





Note: the manifolds are supplied complete with the seals and the valves, fixing screws.

4.2

DIMENSIONS           Mod.         Size         Nr positions         02         03         04         05         06         07         08         09         10         11         12           E521-10         10,5         L1         40,5         51         61,5         72         82,5         93         103,5         114         124,5         135         145,5           E521-10         10,5         L2         44         41         51,5         62         72,5         83         93,5         104         114,5         125         135,5														
<b>E521-10</b> 10,5 L1 40,5 51 61,5 72 82,5 93 103,5 114 124,5 135 145,5	DIMENSIO	NS												
	Mod.	Size	Nr positions	02	03	04	05	06	07	08	09	10	11	12
<b>E521-10</b> 10,5 L2 44 41 51,5 62 72,5 83 93,5 104 114,5 125 135,5	E521-10	10,5	L1	40,5	51	61,5	72	82,5	93	103,5	114	124,5	135	145,5
	E521-10	10,5	L2	44	41	51,5	62	72,5	83	93,5	104	114,5	125	135,5

DIMENSI	SNC																								
Mod.	Size	G1	G2	G3	Α	В	С	D	E	F	G	н	I	L	М	M1	N	0	Р	R	S	Т	U	V	Z
E521-10	10,5	G1/8	M5	M5	15	10,5	13,4	16,5	22	22	22,5	4,2	10,5	5	47,3	68,3	18,6	7,5	31	22,6	23	8,5	19	20	27

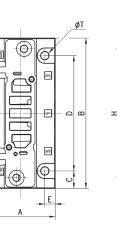
CONTROL

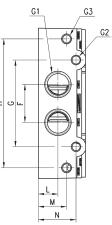
Single sub-base for base mounted valves - size 10,5



Note: The valve and its single sub-base are available on request.

- U -		
	<u>G1</u>	12 022
	1	2
	۹ –	
		71 78
R		-
- V -		





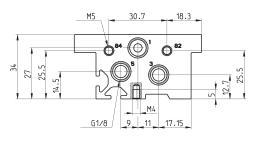
	10																				_
DIMENSION	15																				
Mod.	Size	G1	G2	G3	А	В	С	D	Е	F	G	Н	L	Μ	Ν	Р	R	S	Т	U	V
E520-0101	10.5	G1/8	M5	M5	26	66	8	50	4	15	37.3	57.3	8.2	17	18	24.5	8.2	17.2	32	17.5	25.5

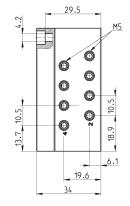
# Manifolds for base mounted valves size 10,5

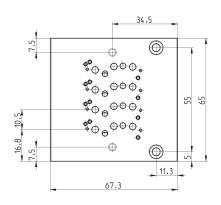


The manifolds have been manufactured with common inlet 1 and exhaust 3 and 5 (see size G2). There are also common exhausts for pilots 82 and 84 (size G3). Manifolds with G4 ports are also supplied on

request for external pilot supply.







	-												
DIMENSION	IS												
Mod.	Size	Nr positions	02	03	04	05	06	07	08	09	10	11	12
E520-21	10,5	L1	44	54,5	65	75,5	86	96,5	107	117,5	128	138,5	149
E520-21	10,5	L2	34	44,5	55	65,5	76	86,5	97	107,5	118	128,5	139
E520-2C	10,5	L1	44	54,5	65	75,5	86	96,5	107	117,5	128	138,5	149
E520-2C	10,5	L2	34	44,5	55	65,5	76	86,5	97	107,5	118	128,5	139

#### DIMENSIONS

 Mod.
 Size
 G
 G2
 G3
 G4
 A
 B
 C
 D
 E
 F
 G
 H
 I
 L
 M
 M1
 M2
 N
 O
 P
 Q
 R
 R1
 S
 S1
 T
 TI
 U
 V
 V
 V
 Z

 E520-21
 10.5
 M5
 M1.0
 10.5
 18.0
 13.6
 6.1
 19.6
 29.5
 42
 18.3
 5
 67.3
 11.3
 18.3
 15.2
 30.7
 29.5
 22.6
 14.5
 9
 27
 11
 12.7
 25.5
 34
 7.5
 34.5

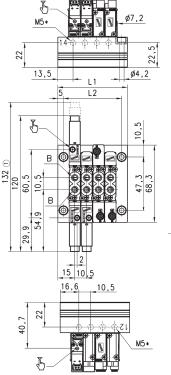
 E520-22
 10.5
 47.0
 10.5
 18.8
 13.6
 6.1
 19.6
 29.5
 42
 18.3
 5
 67.3
 11.3
 18.3
 15.2
 30.7
 29.5
 22.6
 14.5
 9
 27
 11
 12.7
 25.5
 34
 7.5
 34.5

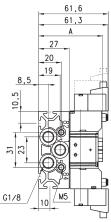
 E520-22
 10.5
 47.0
 10.5
 18.6
 1.9
 6.1
 19.6
 29.5
 42
 18.3
 5

# Manifolds with valves with outlets on the body - size 10.5

5/2 and 5/3, ports M5







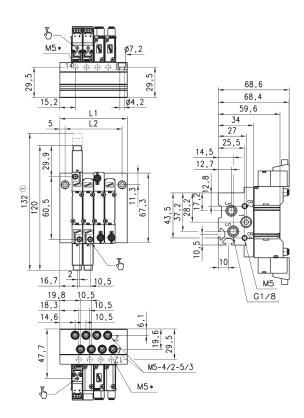
DIMEN	SIONS				
Mod.	А	В	L1 - L2 N° 1 Position	L1 - L2 N° 2 Positions	Fixed quote for position
E521	56,6	M5	40,5 - 30,5	51 - 41	10,5
E52C	65,1	4/2	40,5 - 30,5	51 - 41	10,5

① Size referred to 5/3 valve M5\* Separate pilot supply on request.



Manifolds with v	valves for	subbase	- size 10.5
		3000030	3120 10.0

5/2 and 5/3

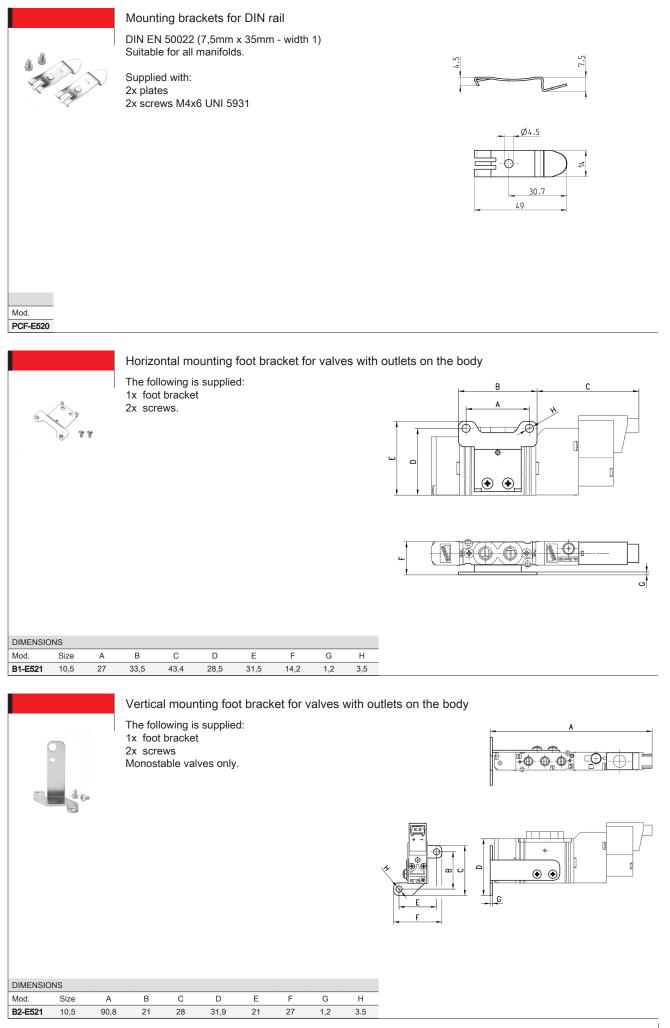


DIMENSION	IS										
N° Positions	2	3	4	5	6	7	8	9	10	11	12
L1	44	54,5	65	75,5	86	96,5	107	117,5	128	138,5	149
L2	34	44,5	55	65,5	76	86,5	97	107,5	118	128,5	139

① Size referred to 5/3 valve M5\* Separate pilot supply on request.

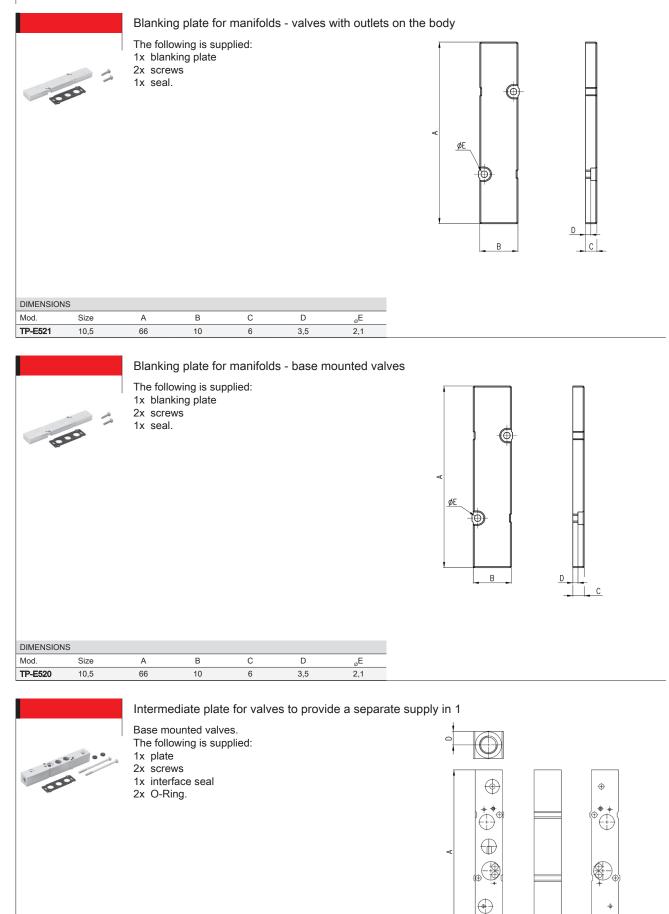


CONTROL





CONTROL



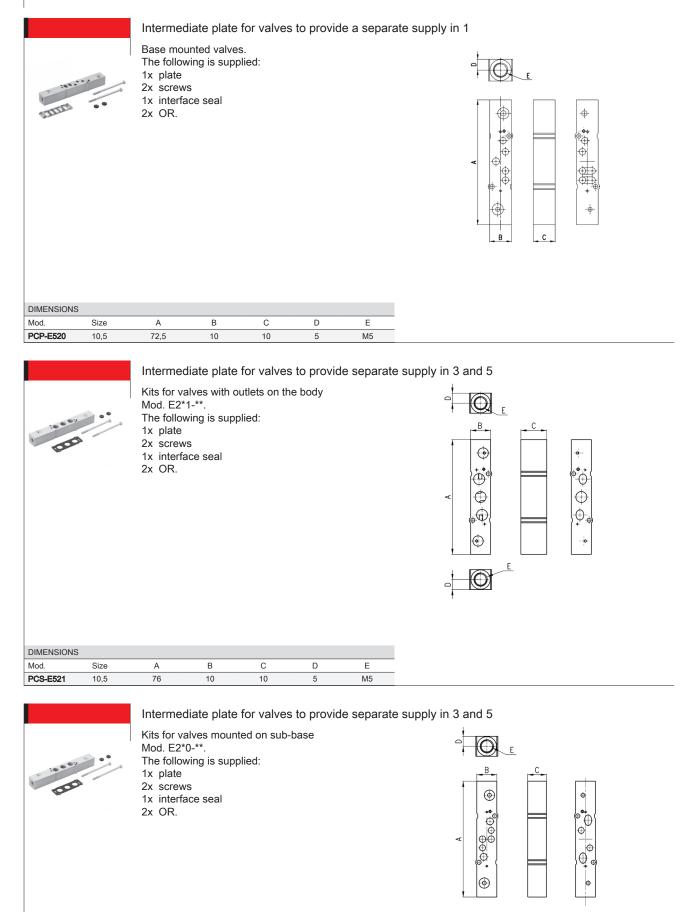
DIMENSIONS						
Mod.	Size	А	В	С	D	E
PCP-E521	10,5	72,5	10	10	5	M5

С

В



CONTROL



 DIMENSIONS

 Mod.
 Size
 A
 B
 C
 D
 E

 PCS-E520
 10,5
 76
 10
 10
 5
 M5

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