

AE

Light series valves for ISO 5599/1 sub-base mounting

Light series: technopolymer valve body with metall cover
Interchangeability: ISO 5599/1 sub-base mounting (size 1 and 2)
Reliability: the mixed internal system (poppet-spool) guarantees long life
Performance: high flow rate (size 1 = 1480 NI/min - size 2 = 2300 NI/min), fast commutation, functioning without lubrication
Multifunction: possibility to get different functions just changing the position of the selective seal

Available ATEX version upon request



TECHNICAL CHARACTERISTICS

Ambient temperature	-10 ÷ +50 °C	
Fluid temperature	+50 °C Max	
Fluid	50 µm filtered air, with or without lubrication	
Commutation system	mixed system	
Ways/Positions	5/2	
Pressure	max 10 bar	
Control	indirect electro - pneumatic and pneumatic	
Return	pneumomechanical spring	
Connections	ISO 5599/1 interface (BF series sub-base)	
	size 1	size 2
Nominal Ø (mm)	8	10
Nominal flow rate (NI/min)	1480	2300

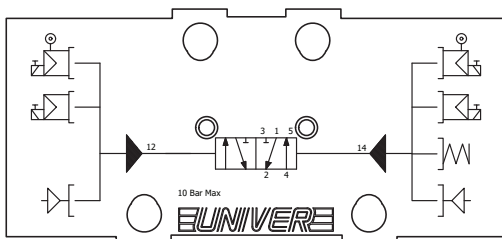
CONSTRUCTIVE CHARACTERISTICS

Valve body	acetalic resin
Seals	nitrile rubber - polyurethane
Spool	Aluminum
Cover	zamak

ELECTRIC CHARACTERISTICS

Electropilot	U1 - AA series
Coil	DA series
Power consumption	3,5 W (DC) - 5 VA (AC)
Voltage	12 V DC - 24 V DC - 24 V AC - 110 V AC - 230 V AC
Connector	AM-5110
Manual override	impulse screw - 2 positions

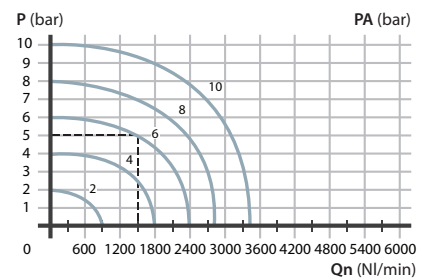
MULTIFUNCTIONAL SYSTEM



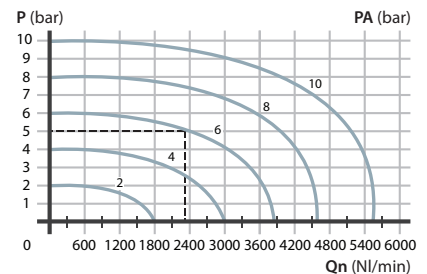
For technical details, see page 3.2-16

Flow rate characteristics

>> Size 1

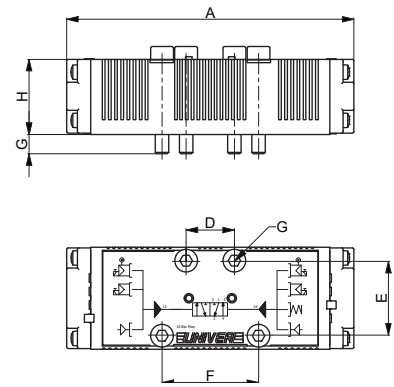


>> Size 2



P = Working pressure
 PA = Supply pressure
 Qn = Nominal flow rate

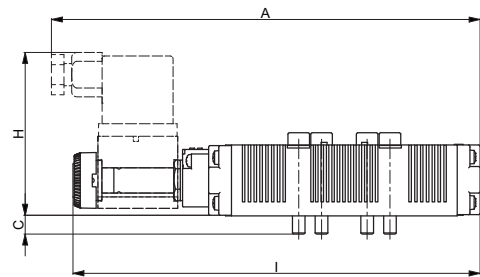
Single/double pneumatic impulse



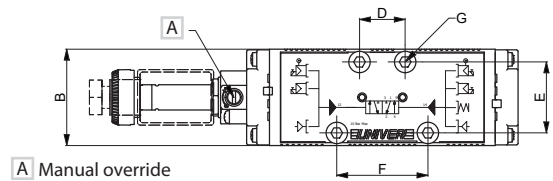
	A	B	C	D	E	F	G	H
size 1	108	38	7	18	28	36	M5x35	28
size 2	120	50	7	24	38	48	M6x35	28

	Symbol	Control	Return	Size	Pressure bar	Response Time (ms)		Weight Kg	Part no.
						En.	De-en.		
5/2		pneumatic amplified	pneumomechanical spring	1	2÷10	5	10	0,17	AE-1009
				2	2,3÷10	8	10	0,80	
5/2		pneumatic amplified	pneumatic amplified	1	1÷10	3	3	0,17	AE-1010
				2	1÷10	3	3	0,21	

Single electric impulse

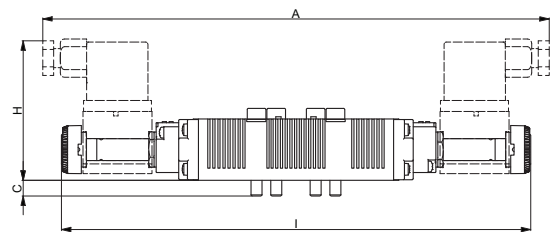
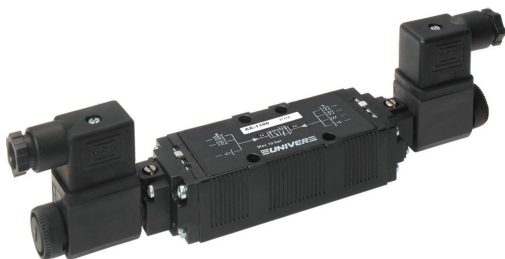


	A	B	C	D	E	F	G	H	I
size 1	171	38	7	18	28	36	M5x35	64	161
size 2	183	50	7	24	38	48	M6x35	64	173

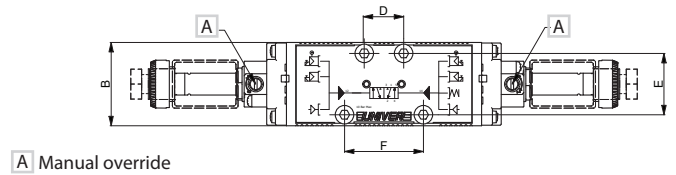


	Symbol	Control	Return	Size	Pressure bar	Response Time (ms)		Weight Kg	Part no.
						En.	De-en.		
5/2		electric amplified	pneumomechanical spring	1	2÷10	18	24	0,23	AE-1000
				2	2,3÷10	22	18	0,27	

Double electric impulse



	A	B	C	D	E	F	G	H	I
size 1	234	38	7	18	28	36	M5x35	64	208
size 2	246	50	7	24	38	48	M6x35	64	220

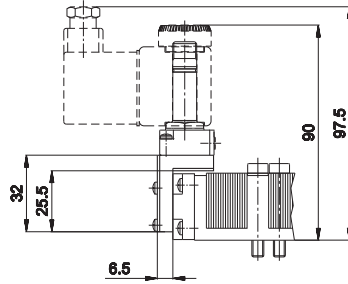
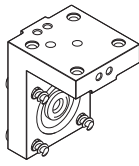


	Symbol	Control	Return	Size	Pressure bar	Response Time (ms)		Weight Kg	Part no.
						En.	De-en.		
5/2		electric amplified	electric amplified	1	1÷10	16	16	0,28	AE-1003
				2	1÷10	24	24	0,30	

Electrovalves are supplied without coil, connector and locking ring

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AM-5151



"H" option solenoid square
weight: 0,035 Kg

>> ISO 1 - ISO 2 sub-base



ISO 1 - single sub-base, side connections
BF-1060
G1/8 in-line connections
BF-1061
G1/4 in-line connections



ISO 1 - single modular or Manifold subbase, dorsal connections with separate exhausts
BF-1062
G1/8 dorsal connections
BF-1063
G1/4 dorsal connections



ISO 1 - Manifold universal system sub-base, dorsal and side connections conveyed exhausts
BF-1071
G1/8 dorsal and side connections
BF-1071S
G1/8 side pneumatic impulse
BF-1072
G1/4 dorsal and side connections
BF-1072S
G1/4 side pneumatic impulse



ISO 1 - Manifold universal system inlet plate
BF-1064
G3/8 in-line connections
BF-1065
G3/8 on top connections
BF-1066
G3/8 dorsal connections
BF-1068
G3/8 only in-line connections



ISO 1 - Manifold universal system diaphragm
BF-1070



ISO 2 - single sub-base, side connections
BF-1150
G1/4 in-line connections
BF-1151
G3/8 in-line connections



ISO 2 - single sub-base, dorsal connections
BF-1152
G1/4 dorsal connections
BF-1153
G3/8 dorsal connections



ISO 2 - Manifold universal system sub-base, dorsal and side connections conveyed exhausts
BF-1160
G1/4 dorsal and side connections
BF-1161
G3/8 dorsal and side connections



ISO 2 - Manifold universal system inlet plate
BF-1154
G1/2 in-line connections
BF-1155
G1/2 dorsal connections



ISO 2 - Manifold universal system diaphragm
BF-1162

For sub-base dimensions refer to section "Standardized valves>BE/BE12"

Subject to change

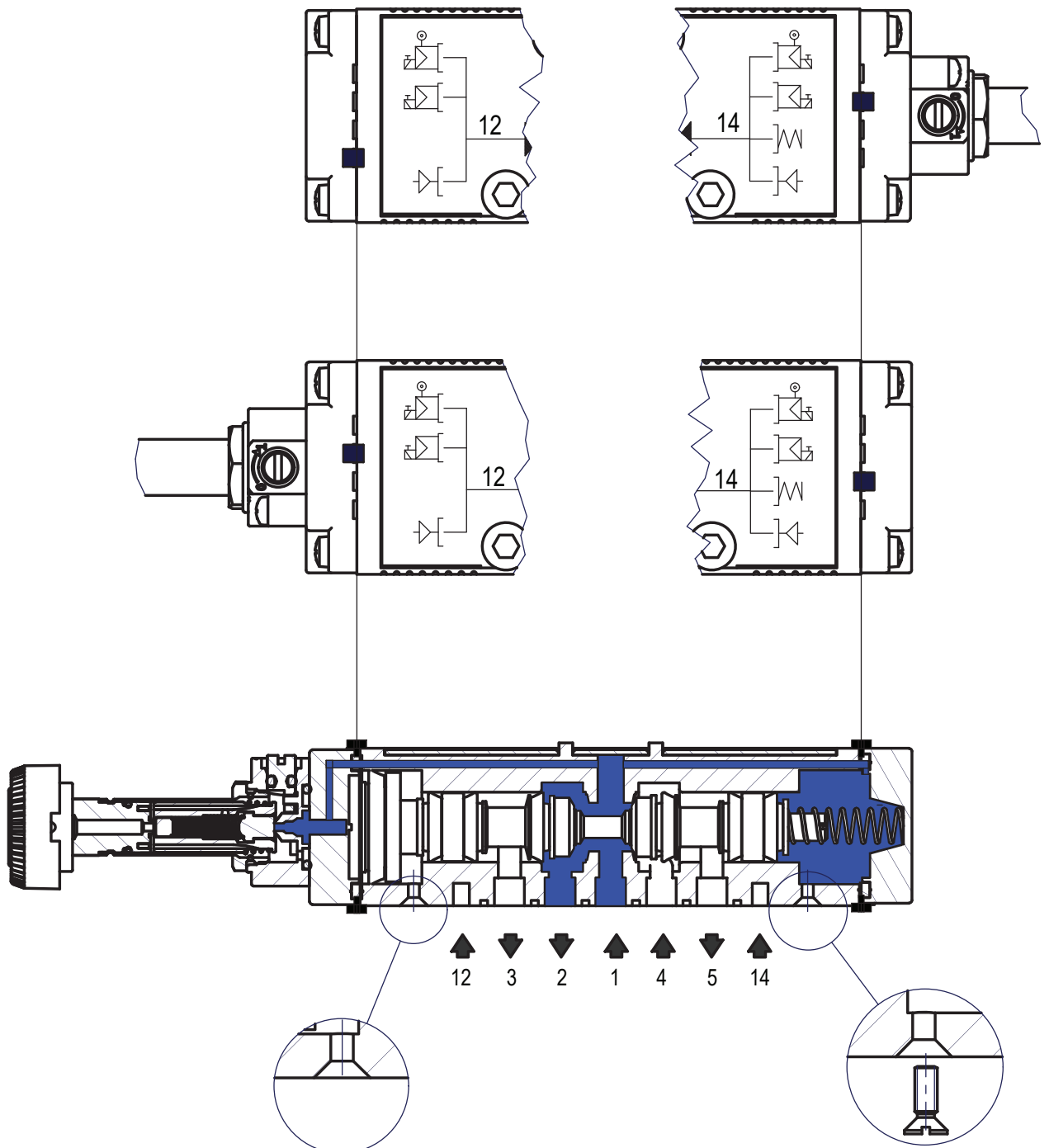
MULTIFUNCTIONAL SYSTEM

This is a well-known series which has been produced for quite long time now, and which has been well received by customers. The well-proved internal spool-poppet system, the use of special compound for the seals, the advanced technology which permits the production of the valve body in light material (plastics) allow long life, quick commutation, high flow rates without lubrication at reasonable costs.

In cases where the specifications are not binding, it might be convenient to choose this series of valve for sub-base mounting.

The drawing below shows the characteristics of the valve: multifunction system obtained by positioning selective seals and the possibility to replace the electric cover by the pneumatic one, if passing from electropneumatic to pneumatic functions.

It is also shown the inversion of the positions of the control (which is in 12) and return (which is in 14) and the necessity to use the screw for closing the exhaust port where the piston of the amplified control is not used.



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