



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



Fluid	50 µm filtered air, with or without lubrication	
Ambient temperature	10 ÷ +50 °C	
Fluid temperature	+50 °C Max	
Commutation system	mixed system	
Ways/Positions	5/2	
Pressure	max 10 bar	
Control	indirect electro - pneumatic	
Return	pneumomechanical spring	
Connections	ISO 5599/1 interface	
	taglia 1	taglia 2
Nominal Ø (mm)	8	10
Nominal flow rate (NI/min)	1480	2300
Valve body	acetalic resin	
Seals	NBR	
Spool	Aluminum	
Cover	zamak	
Electropilot	AA series	
Coil	U1 - 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 position	



Reference standard

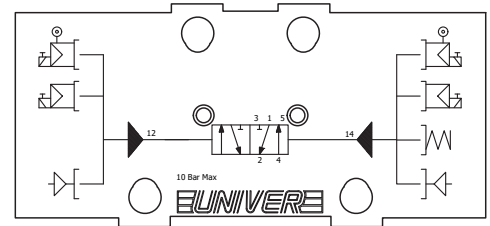
II 2G Ex h IIC T5 Gb



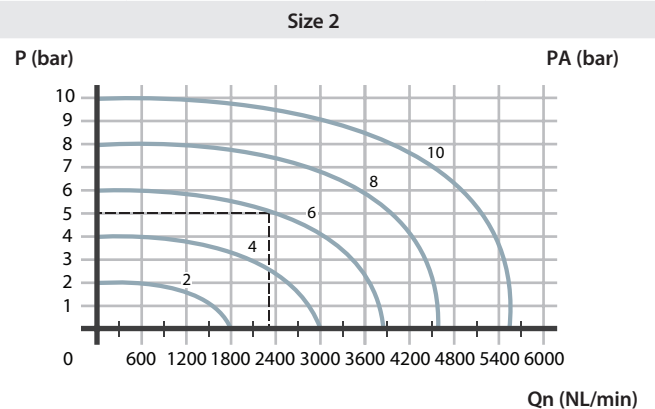
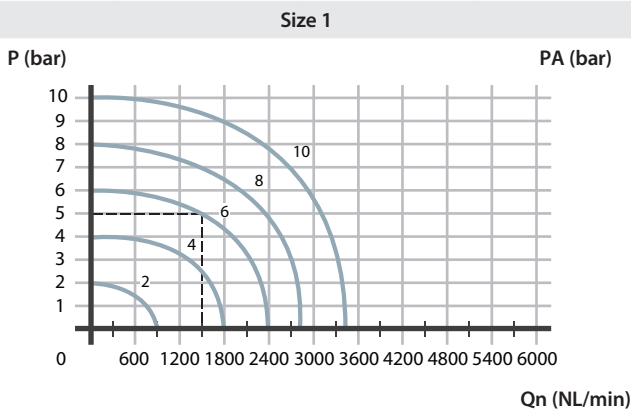
II 2D Ex h III C T100°C Db



MULTIFUNCTIONAL SYSTEM



FLOW RATE CHARACTERISTICS



P (bar) = Working pressure

PA (bar) = apply pressure

Qn (NL/min) = Flow rate

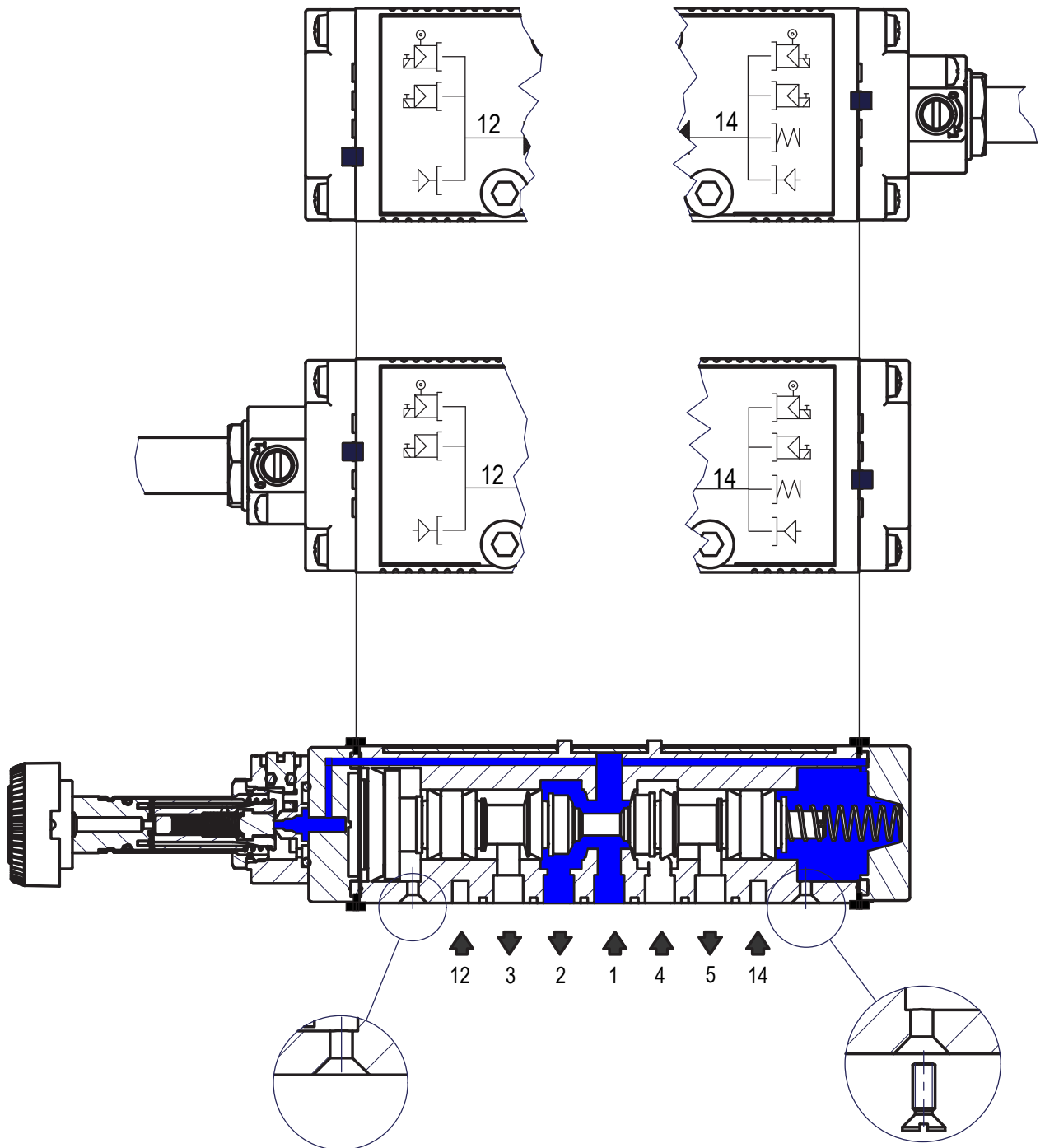
MULTIFUNCTIONAL SYSTEM

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.

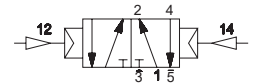
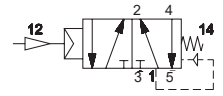
The drawing below shows the characteristics of the valve: multifunction system obtained by positioning selective seals and the possibility to replace the electric cover by the pneumatic one, if passing from electropneumatic to pneumatic functions.

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.

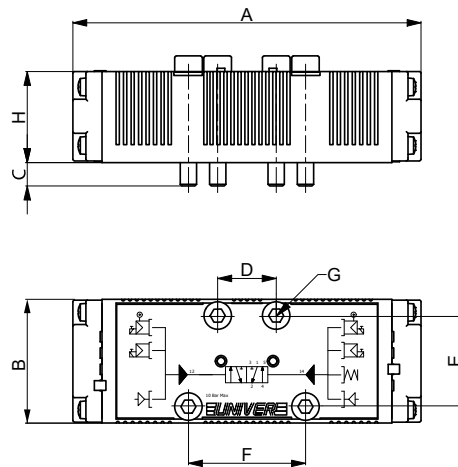


PNEUMATIC IMPULSE

Code	Way	Control	Return	Size	Pressure bar	Response Time (ms)		Weight Kg
						En.	De-en	
AE-1009	5/2	pneumatic amplified	pneumatic + spring	1	2 ÷ 10	5	10	0,17
AE-1120	5/2	pneumatic amplified	pneumatic + spring	2	2,3 ÷ 10	8	10	0,80
AE-1010	5/2	pneumatic amplified	pneumatic amplified	1	1 ÷ 10	3	3	0,17
AE-1121	5/2	pneumatic amplified	pneumatic amplified	2	1 ÷ 10	3	3	0,21



PNEUMATIC IMPULSE

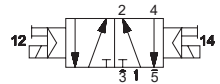
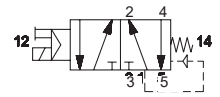


	A	B	C	D	E	F	G	H
Size 1	108	38	7	18	28	36	M5x35	28
Size 2	120	50	7	24	38	48	M6x35	28

Solenoid valves are supplied without coil and connector

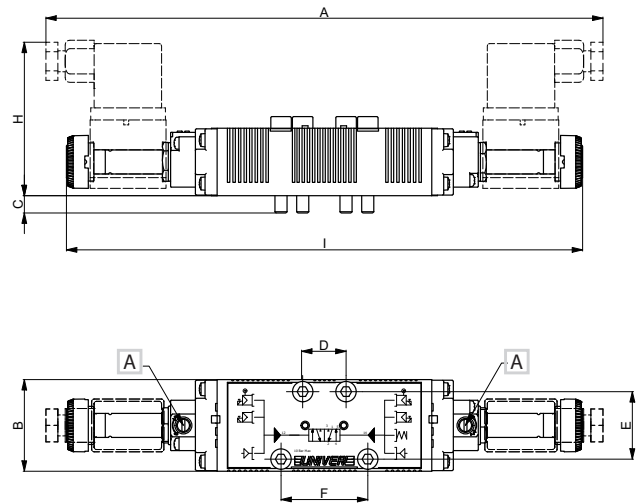
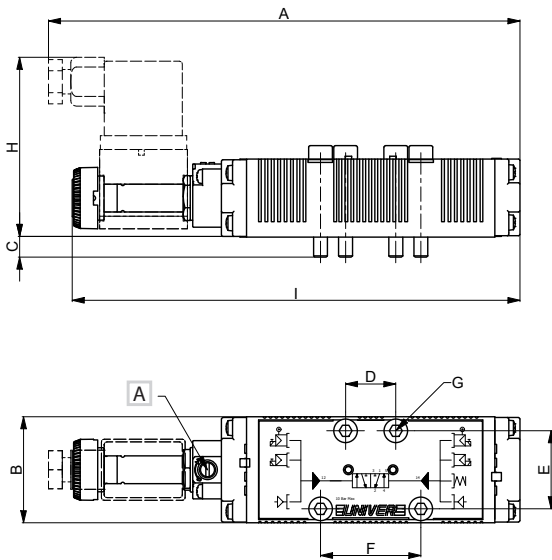
ELECTRIC IMPULSE

Code	Way	Control	Return	Size	Pressure bar	Response Time (ms)		Weight Kg
						En.	De-en	
AE-1000	5/2	electric amplified	pneumatic + spring	1	2 ÷ 10	18	24	0,23
AE-1100	5/2	electric amplified	pneumatic + spring	2	2,3 ÷ 10	22	18	0,27
AE-1003	5/2	electric amplified	electric amplified	1	1 ÷ 10	16	16	0,28
AE-1103	5/2	electric amplified	electric amplified	2	1 ÷ 10	24	24	0,30



SINGLE ELECTRIC IMPULSE

DOUBLE ELECTRIC IMPULSE



[A] Manual control

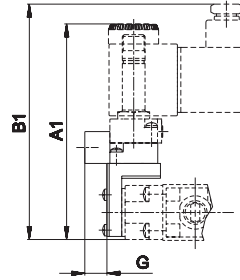
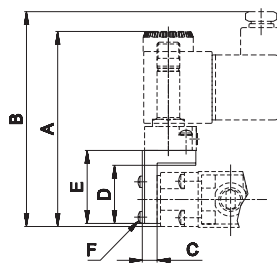
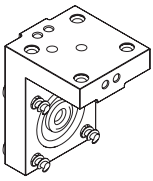
[A] Manual control

	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

	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

Solenoid valves are supplied without coil and connector

"H" SOLENOID VARIANT BRACKET



AM-5151 + AM-5148

"H" option angle plate weight: 0,035 Kg

	A	A1	B	B1	C	D	E	F	G
G1/8	87,7	96,7	95,5	104,5	6,5	25,5	32	2,9X10	9,7
G1/4	88,7	97,7	96,5	105,5	6,5	25,5	32	2,9X10	9,7

SUB-BASE - ISO 1

single sub-base, side connections

single modular or Manifold subbase, dorsal connections with separate exhausts

Manifold universal system sub-base, dorsal and side connections conveyed exhausts

Manifold universal system inlet plate

Manifold universal system diaphragm



BF-1060 G1/8 in-line connections
BF-1061 G1/4 in-line connections



BF-1062 G1/8 dorsal connections
BF-1063 G1/4 dorsal connections



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



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



BF-1070

SUB-BASE - ISO 2

single sub-base, side connections

single sub-base, dorsal connections

Manifold universal system sub-base, dorsal and side connections conveyed exhausts

Manifold universal system inlet plate

Manifold universal system diaphragm



BF-1150 G1/4 in-line connections
BF-1151 G3/8 in-line connections



BF-1152 G1/4 dorsal connections
BF-1153 G3/8 dorsal connections



BF-1160 G1/4 dorsal and side connections
BF-1161 G3/8 dorsal and side connections



BF-1154 G1/2 in-line connections
BF-1155 G1/2 dorsal connections



BF-1162

(a) = Solenoid valves operating at 110 V – 230 V must be built-in (EN 60204-1).

In continuous operation, the operating temperature does not affect the coil's performance, provided the unit is installed in a well-ventilated area.

COILS

Omologazione CSA/UL

Possibility of replacement without intervention in the pneumatic circuit
Other voltages available upon request

360° rotation on the pilot. Coil winding: H class

Ambient temperature: -10 ÷ +45 °C. Fluid temperature: -10 ÷ +95 °C.

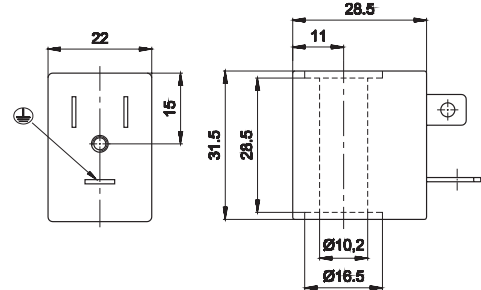
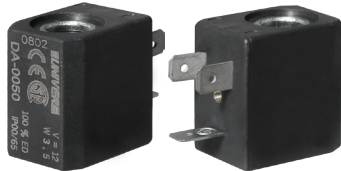
The solenoid valves functioning with 100V-230V must be incorporated (EN60204-1)

Under continuous service a maximum temperature will not compromise the functioning of the coil provided that the working position is ventilated.

Protection class IP65, if used with connector.

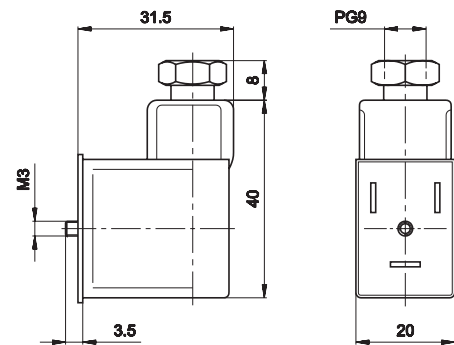


U1 22 MM COIL



Code	Duty cycle ED (a) %	Power consumption W		Tolerance tension %	Rated voltage	Weight Kg
		Hold	Inrush			
DA-0050	100	3,5	3,5	±10	12 V DC	0,06
DA-0051	100	3,5	3,5	±10	24 V DC	0,06
DA-0106	100	5,4 VA (Max)	7,8 VA (Max)	±10	24 V AC/50-60 HZ	0,06
DA-0108	100	5,4 VA (Max)	7,8 VA (Max)	±10	110 V AC/50-60 HZ	0,06
DA-0124	100	5,4 VA (Max)	7,8 VA (Max)	±10	230 V AC/50-60 HZ	0,06

CONNECTOR FOR COIL U1



Code	Series coils	Protection rating	Cable connection	Guidance
AM-5110	U1	IP65	PG9	180°

LED available upon request.