

The AF series valves, based on the original UNIVER poppet technology (1973), are recognized for their high reliability and consistent performance over time. Designed for demanding industrial applications, they ensure high flow rates, fast switching, and long service life even in harsh environments, helping to reduce downtime and maintenance costs.

WIDE RANGE

G1/8 ÷ G1 1/2 2/2 - 3/2 NC-NO

COMPRESSED AIR VERSION

HIGH FLOW RATE

Up to 35000 NI/min (G1 1/2)



		AF NI/min Compressed air
	G1/8 (Ø 5,5)	580
	G1/4 (Ø 8) G3/8 (Ø 10)	1100 1500
	G1/2 (Ø 15) G3/4 (Ø 19)	5400 6500
	G1 (Ø 25)	13500
	G1 1/2 (Ø 39)	35000

Shutter system
Original UNIVER since 1973





Poppet valves for compressed air Wide range: G1/8 - G1/4 - G3/8 - G1/2 - G3/4 - G1 - G1 1/2

- Original Univer poppet system recognized by the market over the years
- Suitable for applications requiring high flow rates and a high number of cycles
- G1 - 2/2 version for bag filter cleaning



Fluid	Filtered air 50 µm, with or without lubrication
Pressure	Max 10 bar (1 MPa)
Temperature Ambient	+50 °C
Temperature fluid	-5 to +60 °C
Commutation system	Poppet
Ways/Position	2/2 NC (on request), 3/2 NC, 3/2 NO, 3/2 NC-NO
Control	Pneumatic, indirectly operated electro-pneumatic
Return	Pneumo-mechanical spring
Manual override	Impulse screw-operated, 2 positions
Valve body	Zamak (G1/8 to G1), aluminum (G1 1/2)
Seals	Conical poppets in polyurethane and Vulkollan diaphragm
Operators	Zamak (G1/8 to G1), aluminum (G1 1/2)
Spool	Aluminum (G1/8 to G3/8), steel + plastic (G1/2 to G1 1/2)
Voltage	12 V DC - 24 V DC - 24 V AC - 110 V AC - 230 V AC



Reference standard

II 2G Ex h IIC T5 Gb



II 2D Ex h IIIC T100°C Db



II 3 GD c nA II T5 -10 °C ≤ Ta ≤ 45°C IP65



CHARACTERISTICS

Connections	G1/8	G1/4	G3/8	G1/4	G3/8	G1/2	G3/4	G1	G1 1/2
Nominal bore (mm)	5,5	8	10	8	10	15	19	25	39
Nominal flow rate (NI/min)	580	1100	1500	1100	1500	5400	6500	13500	35000
Electropilot	AA			AB					
Coil	U1 - DA			U2 - DB					
Power consumption	3,5 W (DC) - 5 VA (AC)			11 W (DC) - 10 VA (AC)					
Connector	AM-5110			AM-5111					

SOLENOID VALVES



G1/8

AF-2500

AF-2501



G1/4

AF-2510

AF-2517

AF-2511

AF-2518

G3/8

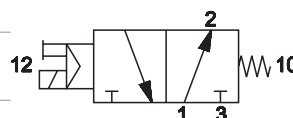
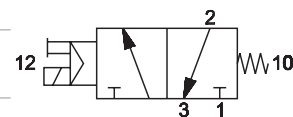
AF-2520

AF-2524

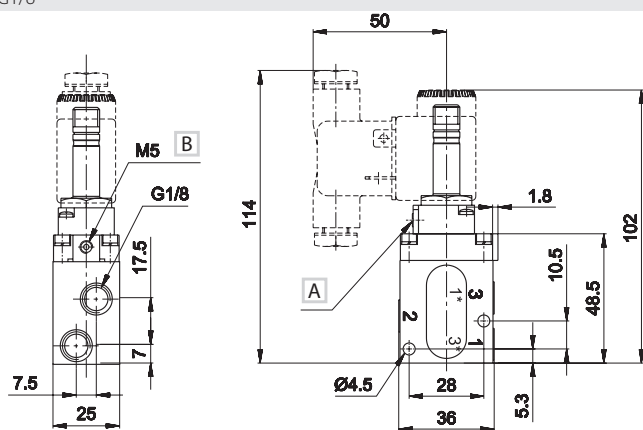
AF-2521

AF-2525

Code	Way	Spool	Control	Return	Flow rate	Ø	Resp. time (ms)		Pressure bar		Weight	Coil
			12	10	(Nl/min)	mm	En.	De-en.	min.	max.	Kg	
AF-2500	3/2 NC	G1/8	electric amplified	pneumatic + spring	580	5,5	15	20	1,5	10	0,25	U1
AF-2510		G1/4	electric amplified	pneumatic + spring	1100	8	20	23	1,6	10	0,58	U1
AF-2517		G1/4	electric amplified	pneumatic + spring	1100	8	20	23	1,6	10	0,70	U2
AF-2520		G3/8	electric amplified	pneumatic + spring	1500	10	20	23	1,6	10	0,56	U1
AF-2524		G3/8	electric amplified	pneumatic + spring	1500	10	20	23	1,6	10	0,70	U2
AF-2501	3/2 NO	G1/8	electric amplified	pneumatic + spring	580	5,5	15	20	1,5	10	0,25	U1
AF-2511		G1/4	electric amplified	pneumatic + spring	1100	8	15	20	1,6	10	0,58	U1
AF-2518		G1/4	electric amplified	pneumatic + spring	1100	8	15	20	1,6	10	0,70	U2
AF-2521		G3/8	electric amplified	pneumatic + spring	1500	10	15	20	1,6	10	0,56	U1
AF-2525		G3/8	electric amplified	pneumatic + spring	1500	10	15	20	1,6	10	0,70	U2



G1/8



1 = Supply port
2 = Use
3 = Exhaust

A Manual override

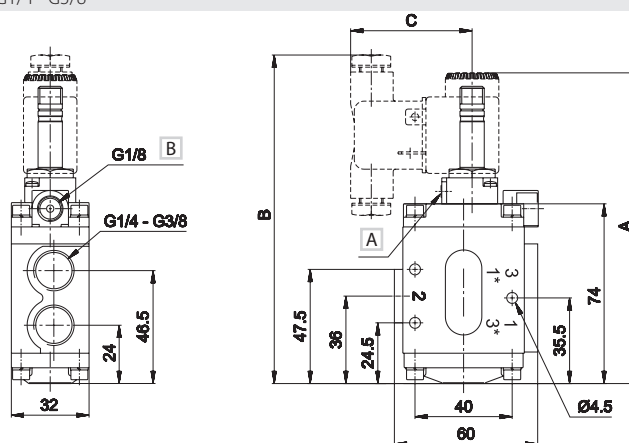
B External servoassistance of the pilot

Upon request:

- external servoassistance of the pilot
- G1/4 - G3/8 U2 without manual override
- for 2/2 version put a plug into the exhaust

Electrovalves are supplied without coil, connector

G1/4 - G3/8



	A	B	C
U1	129	136	50
U2	140.5	150	51.5

1 = Supply port
2 = Use
3 = Exhaust

A Manual override

B External servoassistance of the pilot

SOLENOID VALVES



G1/2
AF-2530
AF-2531

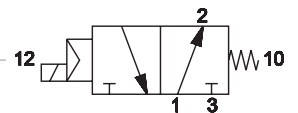
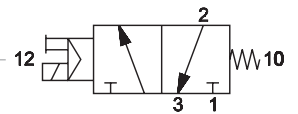
G3/4
AF-2540
AF-2541

G1
AF-2545
AF-2546

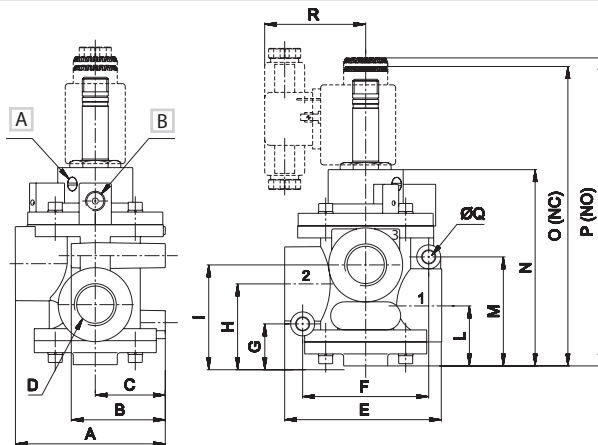


G1" 1/2
AF-2565
AF-2561

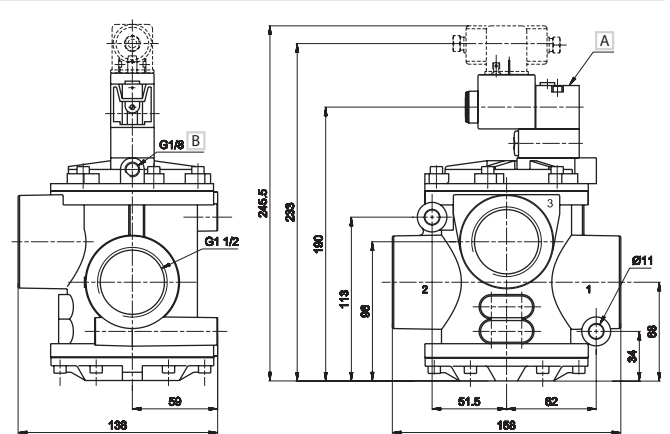
Code	Way	Spool	Control	Return	Flow rate	Ø	Resp. time (ms)		Pressure bar		Weight	Coil
			12	10	(Nl/min)	mm	En.	De-en.	min.	max.	Kg	
AF-2530	3/2 NC	G1/2	electric amplified	pneumatic + spring	5400	15	17	27	2	10	1,19	U2
AF-2540		G3/4	electric amplified	pneumatic + spring	6500	19	17	27	2	10	1,13	U2
AF-2545		G1	electric amplified	pneumatic + spring	13500	25	20	32	2,2	10	1,62	U2
AF-2565	3/2 NO	G1" 1/2	electric amplified	pneumatic + spring	35000	39	47	22	2,5	10	2,27	U2
AF-2531		G1/2	electric amplified	pneumatic + spring	5400	15	22	22	3	10	1,19	U2
AF-2541		G3/4	electric amplified	pneumatic + spring	6500	19	22	22	3	10	1,13	U2
AF-2546		G1	electric amplified	pneumatic + spring	13500	25	23	23	3	10	1,62	U2
AF-2561		G1" 1/2	electric amplified	pneumatic + spring	35000	39	20	20	3	10	2,27	U2



G1/2 - G3/4 - G1



G1" 1/2



	A	B	C	D	E	F	G	H	I	L	M	N	O	P	Q	R
G1/2	75	47	35	G1/2	78,5	63	21	41	50,5	30	54,5	100	150	154	6,4	50,5
G3/4	75	47	35	G3/4	78,5	63	21	41	50,5	30	54,5	100	150	154	6,4	50,5
G1	89	55	40	G1	101	76	25,5	51	64	38	62,5	115	167	175	8,4	50

1 = Supply port
2 = Use
3 = Exhaust

A Manual override

B External servoassistance of the pilot

1 = Supply port
2 = Use
3 = Exhaust

A Manual override

B External servoassistance of the pilot

Upon request:
- external servoassistance of the pilot
Electrovalves are supplied without coil and connector

COILS

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.

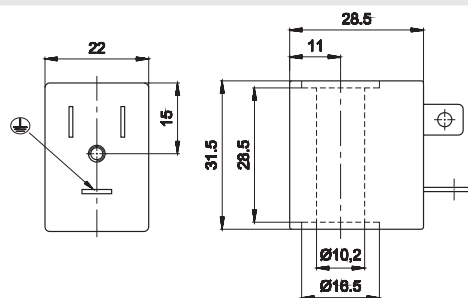
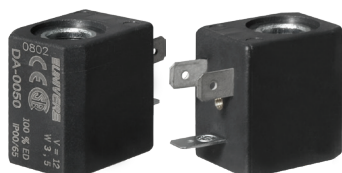
The solenoid valves functioning with 100V-230V must be incorporated (EN60204-1)

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.

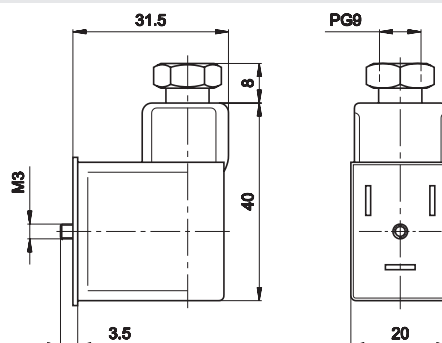


U1 22 MM COIL



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

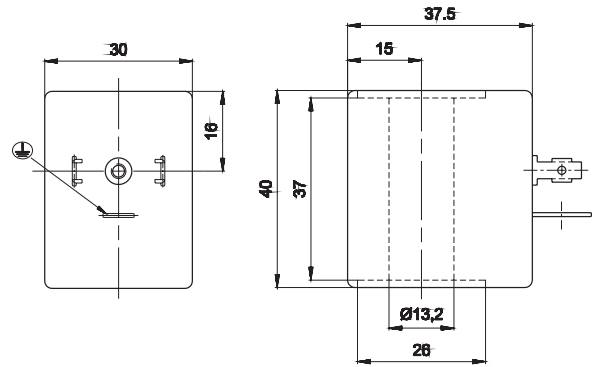
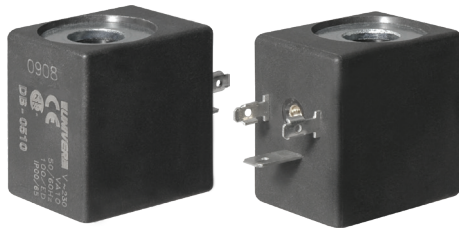


Code	Coils	Protection according	Cable connection	Rotation
AM-5110	U1	IP65	PG9	180°

LED available upon request.

(a) = 110V - 230V solenoid valves must be built-in (EN-60204-1)

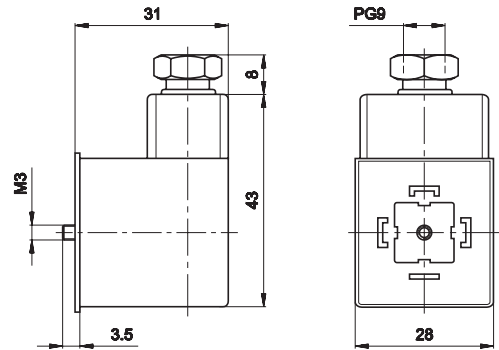
Under continuous service a maximum temperature will not compromise the functioning of the coil provided that the working position is ventilated

U2 30 MM COIL


Code	Duty cycle ED(a) %	Power consumption W		Tension tolerance %	Rated voltage	Weight Kg
		Hold	Hold			
DB-0501	100	11	11	±10	12 V DC	0,06
DB-0502	100	11	11	±10	24 V DC	0,06
DB-0507	100	10 VA (Max)	16 VA (Max)	±10	24 V AC/50-60 HZ	0,06
DB-0509	100	10 VA (Max)	16 VA (Max)	±10	110 V AC/50-60 HZ	0,06
DB-0510	100	10 VA (Max)	16 VA (Max)	±10	230 V AC/50-60 HZ	0,06

(a) = 110V - 230V solenoid valves must be built-in (EN-60204-1)

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

DIN 43650 Connector for series U2/U3


Code	Coils	Protection according	Cable connection	Rotation
AM-5111	U2/U3	IP65	PG9	360°

LED available upon request.

SERVO VALVE



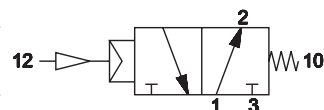
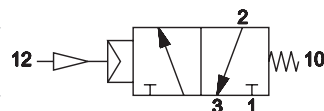
G1/8
AF-2600
AF-2700



G1/4
AF-2601
AF-2701

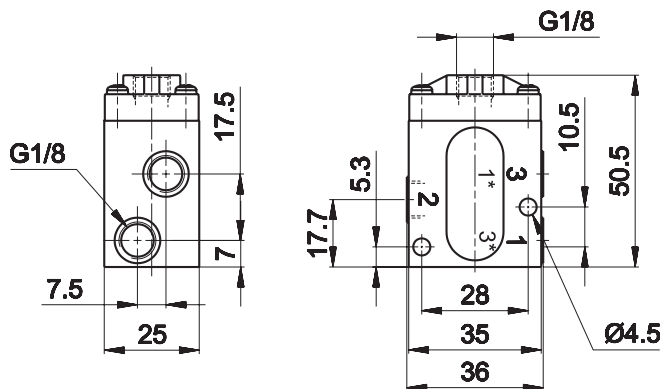
G3/8
AF-2606
AF-2706

Code	Way	Spool	Control		Return	Flow rate (NI/min)	Ø mm	Resp. time (ms)		Pressure bar		Weight Kg
			12	10				En.	De-en.	Supply	Control	
AF-2600		G1/8	pneumatic amplified	pneumatic + spring		580	5,5	5	8	6	3,5	0,21
AF-2601	3/2 NC	G1/4	pneumatic amplified	pneumatic + spring		1100	8	5	7	6	4	0,54
AF-2606		G3/8	pneumatic amplified	pneumatic + spring		1500	10	5	7	6	4	0,52
AF-2700		G1/8	pneumatic amplified	pneumatic + spring		580	5,5	5	8	6	3,5	0,21
AF-2701	3/2 NO	G1/4	pneumatic amplified	pneumatic + spring		1100	8	5	7	6	4	0,54
AF-2706		G3/8	pneumatic amplified	pneumatic + spring		1500	10	5	7	6	4	0,52

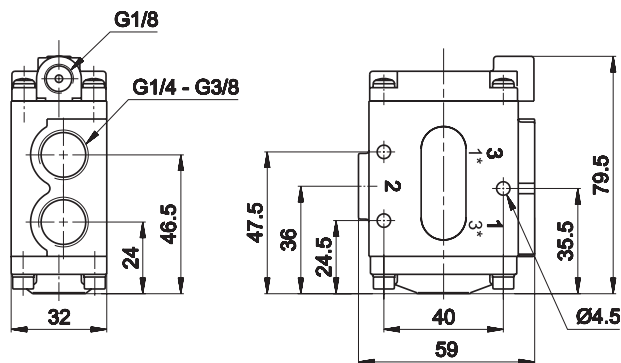


G1/8

G1/4 - G3/8



1 = Supply port
2 = Use
3 = Exhaust



1 = Supply port
2 = Use
3 = Exhaust

Upon request:
- 2/2-way and pneumatic servo-controlled versions available
- For the 2/2-way version, fit a plug to the outlet

SERVO VALVE



G1/2
AF-2603

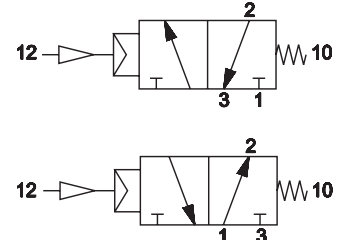
G3/4
AF-2610

G1
AF-2615



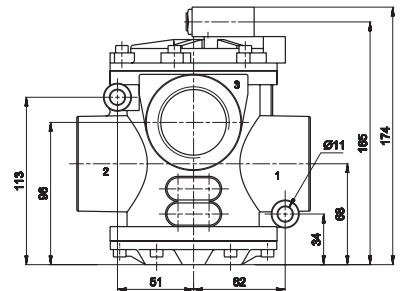
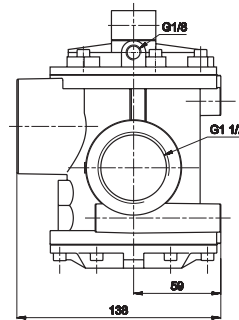
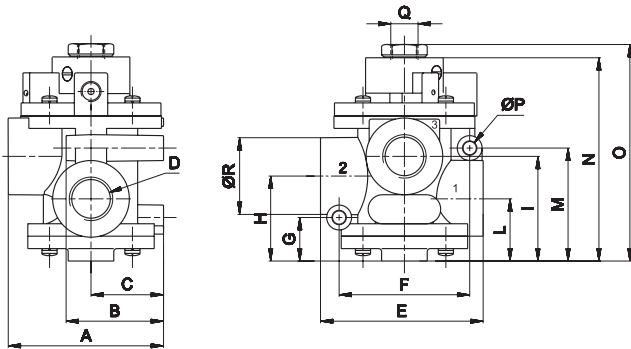
G1" 1/2
AF-2620

Code	Way	Spool	Control	Return	Flow rate (NI/min)	Ø mm	Resp. time (ms)		Pressure bar		Weight Kg
			12	10			En.	De-en.	Supply	Control	
AF-2603		G1/2	pneumatic amplified	pneumatic + spring	5400	15	7	10	6	4	1,27
AF-2610	3/2 NC	G3/4	pneumatic amplified	pneumatic + spring	6500	19	7	10	6	4	1,10
AF-2615	3/2 NO	G1	pneumatic amplified	pneumatic + spring	13500	25	10	12	6	4	1,59
AF-2620		G1" 1/2	pneumatic amplified	pneumatic + spring	35000	39	36	15	6	4	2,19



G1/2 - G3/4 - G1

G1" 1/2



	A	B	C	D	E	F	G	H	I	L	M	N	O	P	Q	R
G1/2	75	47	35	G1/2	78,5	63	21	41	50,5	30	54,5	100	105	6,4	G1/4	37
G3/4	75	47	35	G3/4	78,5	63	21	41	50,5	30	54,5	100	105	6,4	G1/4	37
G1	88,5	55	40	G1	101	76	25,5	51	64	38	62,5	115	120,5	8,4	G1/4	45

1 = Supply port
2 = Use
3 = Exhaust

1 = Supply port
2 = Use
3 = Exhaust

Upon request:
- external pilot power supply
Electrovalves are supplied without coil and connector

2/2 SOLENOID VALVE FOR BLOWING



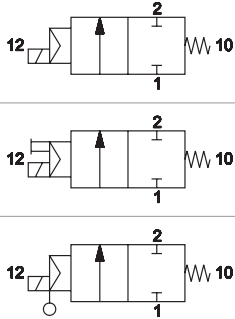
G1

AF-2550

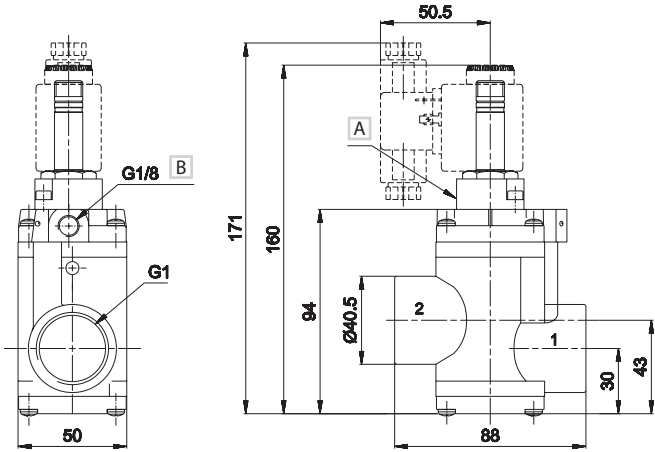
AF-2551

AF-2552

Code	Way	Spool	Control	Return	Flow rate	Ø	Resp. time (ms)			Pressure bar		Weight	Coil		
			12	10	(NI/min)mm	En.	De-en.	min.	max.	supply	control	Kg			
AF-2550	2 / 2 NC	G1	elettrico amplificato	pneumatico + molla	1600	25	23	55	2	10	-	-	1,06	U2	
AF-2551	2 / 2 NC	G1	elettrico amplificato	pneumatico + molla	1600	25	23	55	2	10	-	-	1,06	U2	
AF-2552	2 / 2 NC	G1	elettrico amplificato	pneumatico + molla	1600	25	23	35	-	-	6	4	1,06	U2	



G1

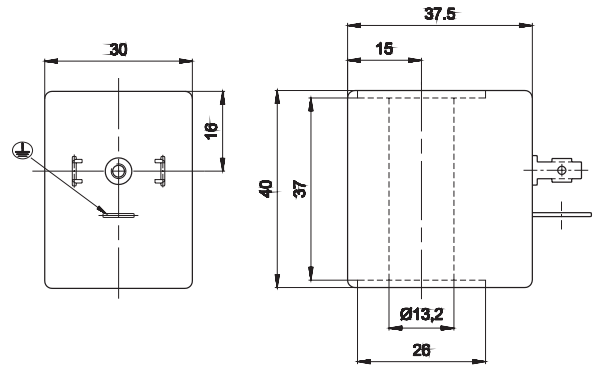
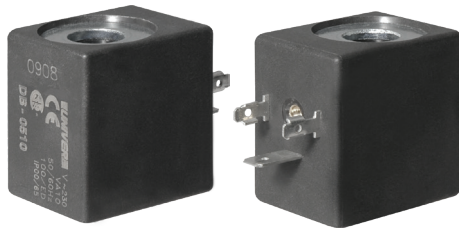


1 = Supply port
2 = Use

- A** Manual override [AF-2551](#)
B External servoassistance of the pilot [AF-2552](#)

Electrovalves are supplied without coil and connector

U2 30 MM COIL

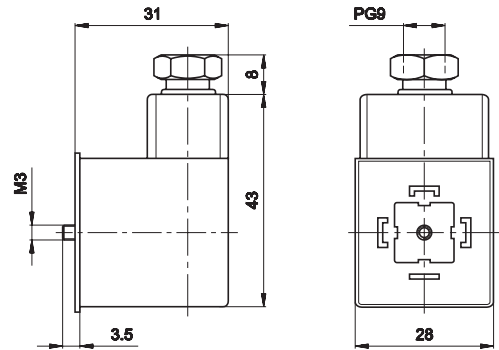


Code	Duty cycle ED(a) %	Power consumption W		Tension tolerance %	Rated voltage	Weight Kg
		Hold	Hold			
DB-0501	100	11	11	±10	12 V DC	0,06
DB-0502	100	11	11	±10	24 V DC	0,06
DB-0507	100	10 VA (Max)	16 VA (Max)	±10	24 V AC/50-60 HZ	0,06
DB-0509	100	10 VA (Max)	16 VA (Max)	±10	110 V AC/50-60 HZ	0,06
DB-0510	100	10 VA (Max)	16 VA (Max)	±10	230 V AC/50-60 HZ	0,06

(a) = 110V - 230V solenoid valves must be built-in (EN-60204-1)

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

DIN 43650 Connector for series U2/U3



Code	Coils	Protection according	Cable connection	Rotation
AM-5111	U2/U3	IP65	PG9	360°

LED available upon request.

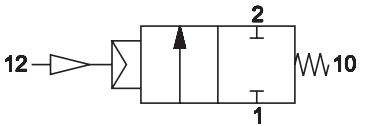
2/2 PNEUMATIC VALVE FOR BLOWING WITH EXT. OFORATION



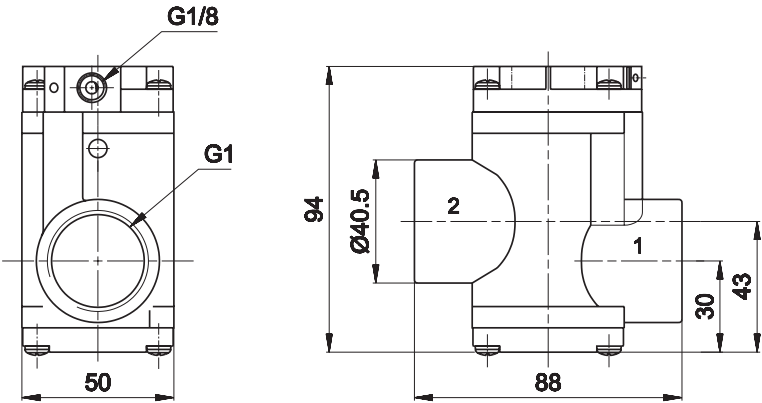
G1

AF-2617

Code	Way	Spool	Control	Riturn	Flow rate	Ø	Resp. time (ms)		Pressure bar		Weight
							En.	De-en.	supply	control	

AF-2617	2 / 2	NC	G1	pneumatico amplificato	pneumatico + molla	1600	25	12	25	6	4	1	
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G1



1 = Supply port
2 = Use