The AG series valves, based on the original UNIVER shutter technology (1973), are renowned for their high reliability and consistent long-term performance. Designed for demanding industrial applications, they offer 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

VACUUM VERSION

Also available with vacuum actuation

		AG m³/h Vacuum
	G1/8 (Ø 5,5)	1,5
	G1/4 (Ø 8) G3/8 (Ø 10)	4 10
	G1/2 (Ø 15) G3/4 (Ø 19)	20 35
	G1 (Ø 25)	90
	G1 1/2 (Ø 39)	180

Shutter system
Original UNIVER since 1973

Shutter valves for compressed air G1/8 – G1/4 – G3/8 – G1/2 – G3/4 – G1 – G1 1/2

- Original Univer shutter system, recognized by the market over the years
- Air-operated version
- A complete range of solenoid and vacuum servo valves with G1/8 ÷ G1 1/2 ports to meet all requirements
- The internal shutter system ensures reliability and long service life

Fluid	Filtered air 50 µm, with or without lubrication - vacuum
Temperature Ambient	+ 50 °C
Temperature fluid	-5 ÷ +60 °C
Commutation system	Poppet
Vie/Position	2/2 NC (on request), 3/2 NC, 3/2 NO, 3/2 NC-NO
Control	Indirect with air or vacuum
Return	Automatic with vacuum
Manual override	Impulse screw-operated, 2 positions
Corpo valvola	zamak (G1/8 to G1), aluminum (G1 1/2)
Seals	Vacuum valve, air-operated (conical polyurethane shutters and Vulkollan diaphragm)
	Direct vacuum valve, vacuum-operated (silicone shutters)
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	G1/2	G3/4	G1	G1 1/2
Nominal bore (mm)	5,5	8	10	15	19	25	39
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					

3/3 SOLENOID VALVE FOR VACUUM WITH EXTERNAL PILOT AIR SUPPLY

G1/8

AG-3001

AG-3002

G1/4

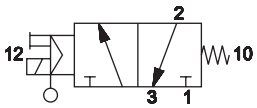
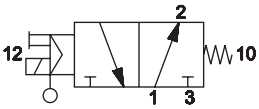
AG-3009

AG-3010

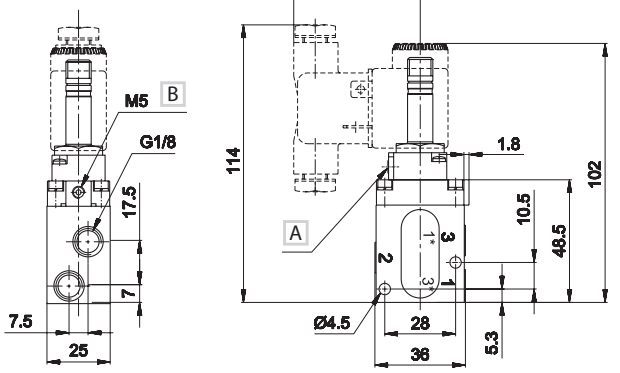
G3/8

AG-3011

AG-3012

Code	Way	Spool	thread 12	Riturn 10	Ø mm	Resp. Time (ms) Ecc.	Resp. Time (ms) Dis.	Min. control pressure bar	Pump max m³/h	Max vacuum mm Hg	Max vacuum Torr	Weight Kg	Coil	
AG-3001	3/2 NC	G1/8	electric amplified	mechanical spring	5,5	14	25	1,5	1,5	759,5	0,5	0,25	U1	
AG-3009		G1/4	electric amplified	mechanical spring	8	16	27	2,5	4	759,5	0,5	0,58	U2	
AG-3011		G3/8	electric amplified	mechanical spring	10	16	27	2,5	10	759,5	0,5	0,56	U2	
AG-3002	3/2 NO	G1/8	electric amplified	mechanical spring	5,5	14	25	1,5	1,5	759,5	0,5	0,25	U1	
AG-3010		G1/4	electric amplified	mechanical spring	8	16	27	2,5	4	759,5	0,5	0,58	U2	
AG-3012		G3/8	electric amplified	mechanical spring	10	16	27	2,5	10	759,5	0,5	0,56	U2	

G1/8

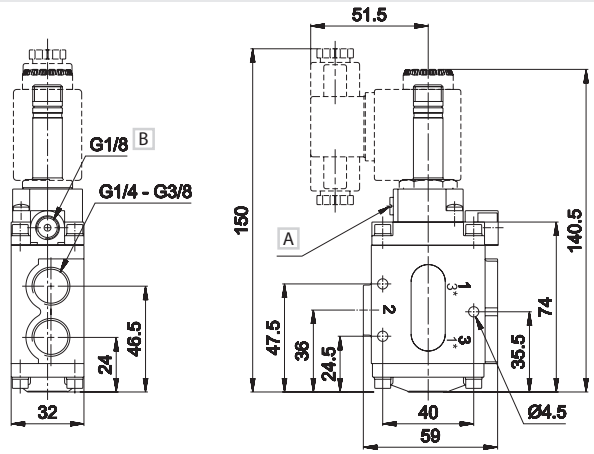


1 = Supply port (vacuum)
2 = Use
3 = Exhaust

A Manual override

B Supply port for external servoassistance of the pilot

G1/4 - G3/8



1 = Supply port (vacuum)
2 = Use
3 = Exhaust

A Manual override

B Supply port for external servoassistance of the pilot

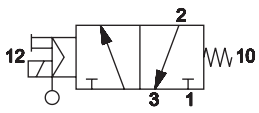
Electrovalves are supplied without coil and connector

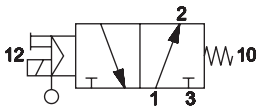
3/2 SOLENOID VALVE FOR VACUUM WITH EXTERNAL PILOT AIR SUPPLY

G1/2	G3/4	G1
AG-3020	AG-3040	AG-3050
AG-3021	AG-3041	AG-3051

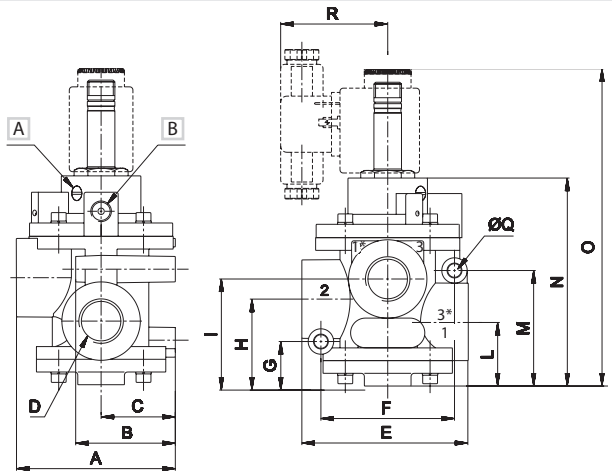
G1" 1/2
AG-3062
AG-3063

Code	Way	Spool	thread	Riturn	Ø	Resp. Time (ms)		Min. control pressure	Pump	Max vacuum		Weight	Coil
			12	10	mm	Ecc.	Dis.	bar	max m³/h	mm Hg	Torr	Kg	
AG-3020	3/2 NC	G1/2	electric amplified	mechanical spring	15	16	40	3	20	759,5	0,5	1,19	U2
AG-3040		G3/4	electric amplified	mechanical spring	19	16	40	3	35	759,5	0,5	1,13	U2
AG-3050		G1	electric amplified	mechanical spring	25	18	42	3	90	759,5	0,5	1,62	U2
AG-3062		G1" 1/2	electric amplified	mechanical spring	39	60	38	4	180	759,5	0,5	2,25	U2
AG-3021	3/2 NO	G1/2	electric amplified	mechanical spring	15	16	40	3	20	759,5	0,5	1,19	U2
AG-3041		G3/4	electric amplified	mechanical spring	19	16	40	3	35	759,5	0,5	1,13	U2
AG-3051		G1	electric amplified	mechanical spring	25	18	42	3	90	759,5	0,5	1,62	U2
AG-3063		G1" 1/2	electric amplified	mechanical spring	39	60	38	4	180	759,5	0,5	2,25	U2





G1/2 - G3/4 - G1



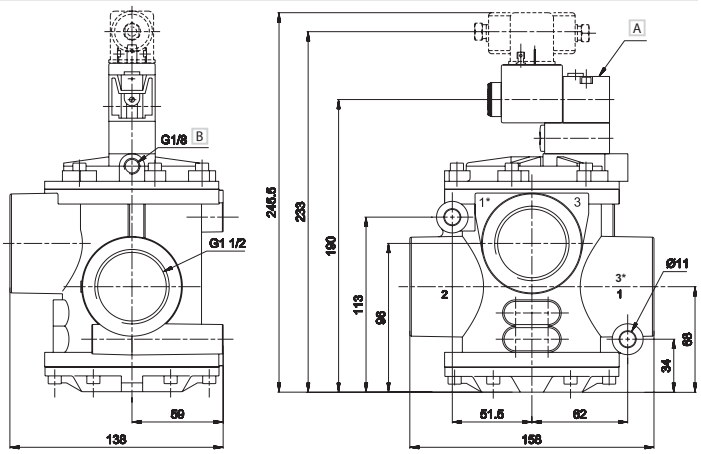
	A	B	C	D	E	F	G	H	I	L	M	N	O	Q	R
G1/2	75	47	35	G1/2	78,5	63	21	41	50,5	30	54,5	100	150	6,4	50,5
G3/4	75	47	35	G3/4	78,5	63	21	41	50,5	30	54,5	100	150	6,4	50,5
G1	89	55	40	G1	101	76	25,5	51	64	38	62,5	115	167	8,4	50

1 = Supply port (vacuum)
2 = Use
3 = Exhaust

A Manual override

B Supply port for external servoassistance of the pilot

G1" 1/2



1 = Supply port (vacuum)
2 = Use
3 = Exhaust

A Manual override

B Supply port for external servoassistance of the pilot

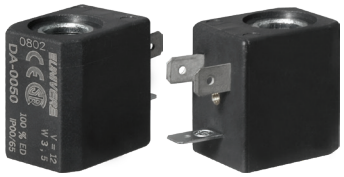
Electrovalves are supplied without coil and connector

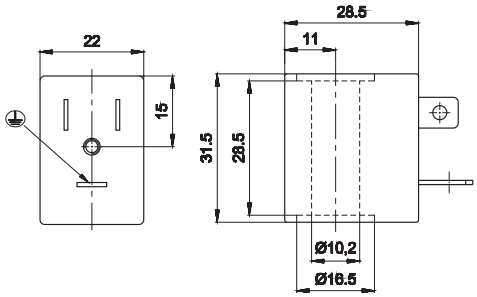
COILS

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.

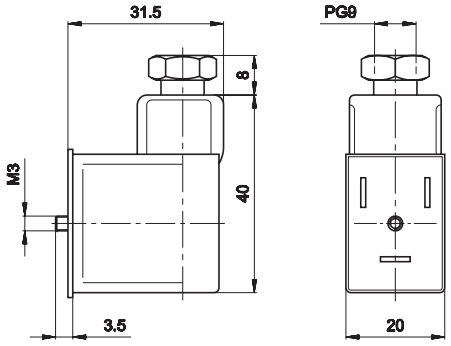
U1 22 MM COIL





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

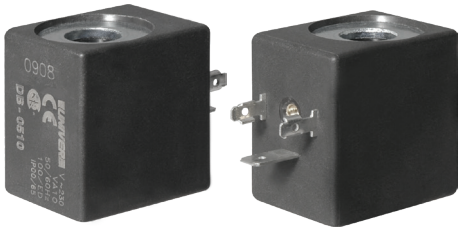


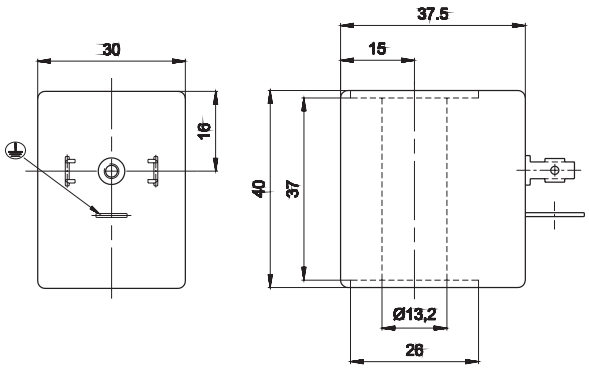
Code	Coils	Protection according	Cable connection	Rotation
AM-5110	U1	IP65	PG9	180°

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



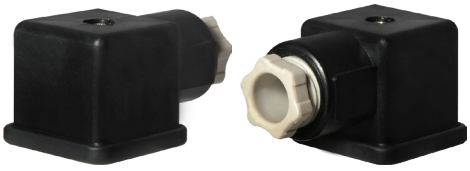


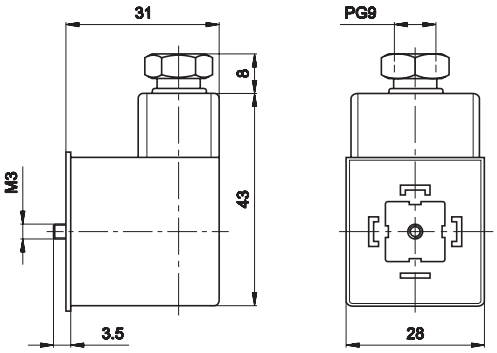
Code	Duty cycle ED(a) %	Power consumption W		Tension tolerance %	Rated voltage	Weight Kg
		Hold	Hold			
DB-0501	100	11	11	±10	12 V DC	0,06
DB-0502	100	11	11	±10	24 V DC	0,06
DB-0507	100	10 VA (Max)	16 VA (Max)	±10	24 V AC/50-60 HZ	0,06
DB-0509	100	10 VA (Max)	16 VA (Max)	±10	110 V AC/50-60 HZ	0,06
DB-0510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

3/2 PNEUMATIC VALVE FOR VACUUM WITH EXTERNAL AIR OFORATION

G1/8

AG-3071

AG-3072

G1/4

AG-3073

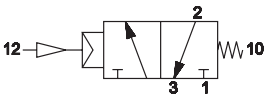
AG-3074

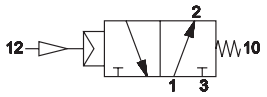
G3/8

AG-3075

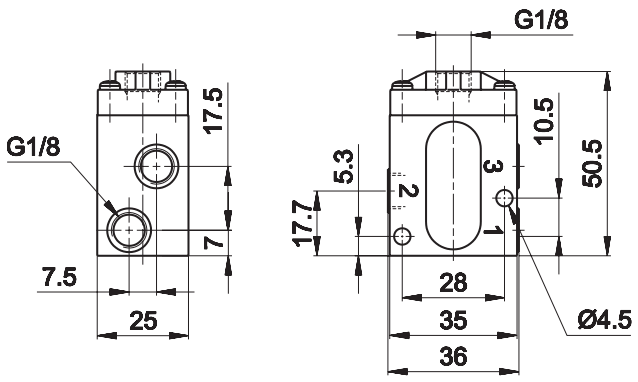
AG-3076

Code	Way	Spool	Control 12	Riturn 10	Ø mm	Resp. Time (ms) Ecc.	Resp. Time (ms) Dis.	Min. control pressure bar	Pump max m³/h	Max vacuum mm Hg	Max vacuum Torr	Weight Kg
AG-3071	3/2 NC	G1/8	pneumatic amplified	mechanical spring	5,5	3	6	1,5	1,5	759,5	0,5	0,21
AG-3073		G1/4	pneumatic amplified	mechanical spring	8	4	8	2,5	4	759,5	0,5	0,54
AG-3075		G3/8	pneumatic amplified	mechanical spring	10	4	8	2,5	10	759,5	0,5	0,52
AG-3072	3/2 NO	G1/8	pneumatic amplified	mechanical spring	5,5	3	6	1,5	1,5	759,5	0,5	0,21
AG-3074		G1/4	pneumatic amplified	mechanical spring	8	4	8	2,5	4	759,5	0,5	0,54
AG-3076		G3/8	pneumatic amplified	mechanical spring	10	4	8	2,5	10	759,5	0,5	0,52



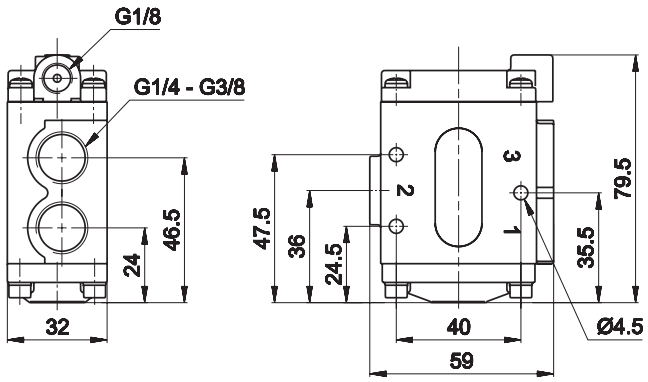


G1/8



1 = Supply port (vacuum)
2 = Use
3 = Exhaust

G1/4 - G3/8

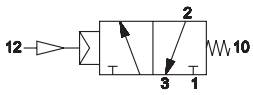


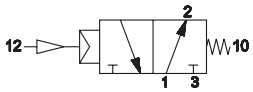
1 = Supply port (vacuum)
2 = Use
3 = Exhaust

3/2 PNEUMATIC VALVE FOR VACUUM WITH EXTERNAL AIR OFORATION

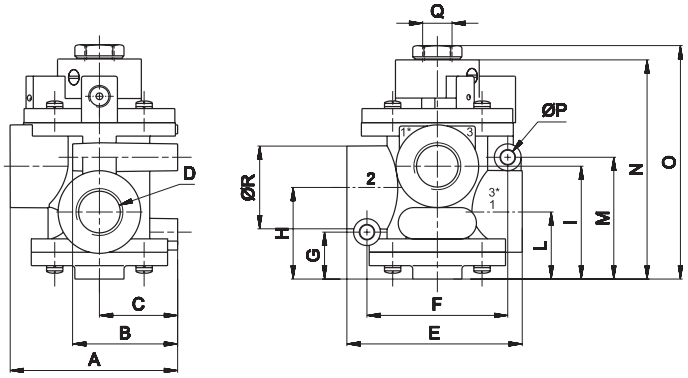
G1/2	G3/4	G1	G1" 1/2
AG-3081	**AG-3091**	**AG-3100**	**AG-3110**
AG-3082	**AG-3092**	**AG-3101**	**AG-3111**

Code	Way	Spool	Control	Riturn	Ø	Resp. Time (ms)		Min. control pressure	Pump	Max vacuum		Weight
			12	10	mm	Ecc.	Dis.	bar	max m³/h	mm Hg	Torr	Kg
AG-3081	3/2 NC	G1/2	pneumatic amplified	mechanical spring	15	6	15	3	20	759,5	0,5	1,16
AG-3091		G3/4	pneumatic amplified	mechanical spring	19	6	15	3	35	759,5	0,5	1,10
AG-3100		G1	pneumatic amplified	mechanical spring	25	7	16	3	90	759,5	0,5	1,59
AG-3110		G1" 1/2	pneumatic amplified	mechanical spring	39	65	25	4	180	759,5	0,5	2,19
AG-3082	3/2 NO	G1/2	pneumatic amplified	mechanical spring	15	6	15	3	20	759,5	0,5	1,16
AG-3092		G3/4	pneumatic amplified	mechanical spring	19	6	15	3	35	759,5	0,5	1,10
AG-3101		G1	pneumatic amplified	mechanical spring	25	7	16	3	90	759,5	0,5	1,59
AG-3111		G1" 1/2	pneumatic amplified	mechanical spring	39	65	25	4	180	759,5	0,5	2,19





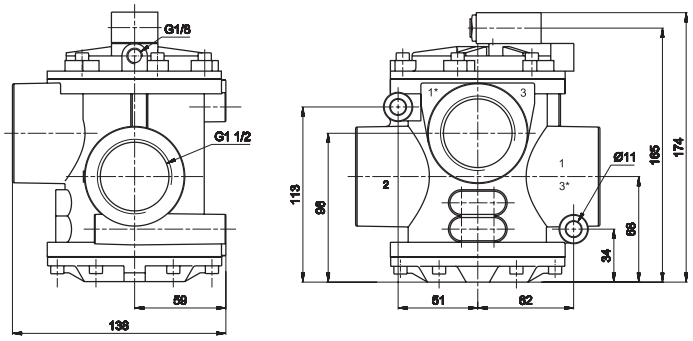
G1/2 - G3/4 - G1



	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 (vacuum)
2 = Use
3 = Exhaust

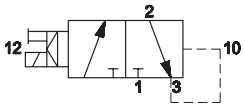
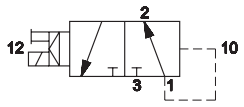
G1" 1/2



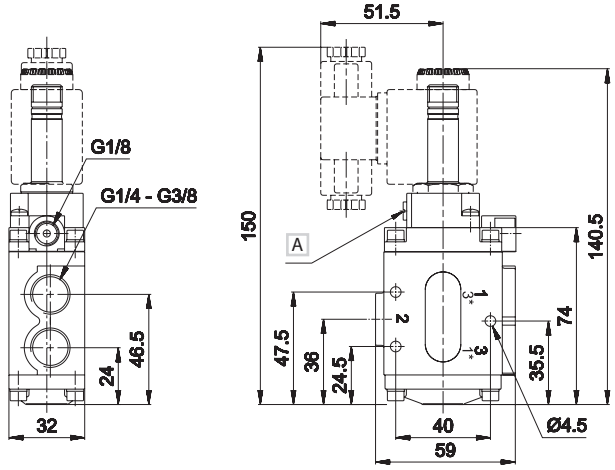
1 = Supply port (vacuum)
2 = Use
3 = Exhaust

3/2 SOLENOID VALVE FOR DIRECT VACUUM WITH PILOT VACUUM SUPPLY

G1/4	G3/8
AG-3210	AG-3214
AG-3211	AG-3215

Code	Way	Spool	Control	Riturn	Ø	Resp. Time (ms)		Pump	Min vacuum		Max vacuum		Weight	Coil	
			12	10	mm	Ecc.	Dis.	max m³/h	mm Hg	Torr	mm Hg	Torr	Kg		
AG-3210	3/2 NC	G1/4	electric amplified	vacuum	8	25	16	4	150	610	759,5	0,5	0,52	U2	
AG-3214		G3/8	electric amplified	vacuum	10	25	16	10	150	610	759,5	0,5	0,56	U2	
AG-3211	3/2 NO	G1/4	electric amplified	vacuum	8	20	14	4	150	610	759,5	0,5	0,58	U2	
AG-3215		G3/8	electric amplified	vacuum	10	20	14	10	150	610	759,5	0,5	0,56	U2	

G1/4 - G3/8



1 = Supply port (vacuum)
2 = Use
3 = Exhaust

A Manual override

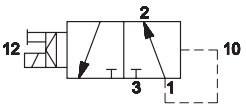
B For G1/8 plug

Electrovalves are supplied without coil and connector

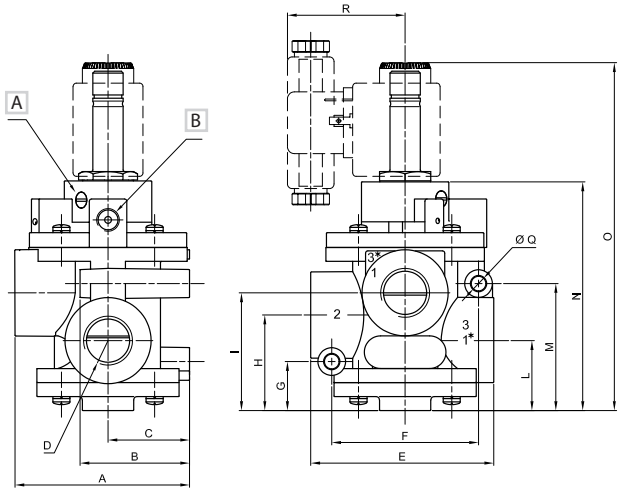
3/2 SOLENOID VALVE FOR DIRECT VACUUM WITH PILOT VACUUM SUPPLY

G1/2	G3/4	G1	G1" 1/2
AG-3222	AG-3232	AG-3242	AG-3256
AG-3223	AG-3233	AG-3243	AG-3257

Code	Way	Spool	Control 12	Riturn 10	Ø mm	Resp. Time (ms) Ecc.	Resp. Time (ms) Dis.	Pump max m³/h	Min vacuum mm Hg	Min vacuum Torr	Max vacuum mm Hg	Max vacuum Torr	Weight Kg	Coil
AG-3222	3/2 NC	G1/2	electric amplified	vacuum	15	30	15	20	150	610	759,5	0,5	1,19	U2
AG-3232		G3/4	electric amplified	vacuum	19	30	15	35	150	610	759,5	0,5	1,13	U2
AG-3242		G1	electric amplified	vacuum	25	38	18	90	150	610	759,5	0,5	1,62	U2
AG-3256		G1 1/2	electric amplified	vacuum	39	75	50	100	150	610	759,5	0,5	2	U2
AG-3223	3/2 NO	G1/2	electric amplified	vacuum	15	20	18	20	150	610	759,5	0,5	1,19	U2
AG-3233		G3/4	electric amplified	vacuum	19	20	18	35	150	610	759,5	0,5	1,13	U2
AG-3243		G1	electric amplified	vacuum	25	25	20	90	150	610	759,5	0,5	1,62	U2
AG-3257		G1 1/2	electric amplified	vacuum	39	70	60	100	150	610	759,5	0,5	2	U2



G1/2 - G3/4 - G1



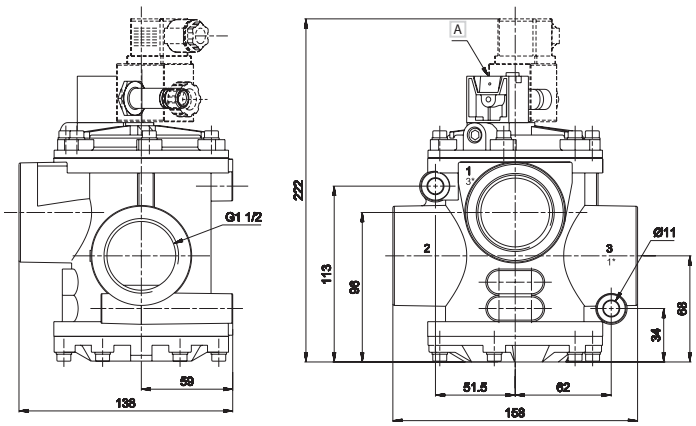
	A	B	C	D	E	F	G	H	I	L	M	N	O	Q	R
G1/2	75	47	35	G1/2	78,5	63	21	41	50,5	30	54,5	100	150	6,4	50,5
G3/4	75	47	35	G3/4	78,5	63	21	41	50,5	30	54,5	100	150	6,4	50,5
G1	88,5	55	40	G1	101	76	25,5	51	64	38	62,5	115	167	8,4	50

1 = Supply port (vacuum)
2 = Use
3 = Exhaust

A Manual override

B For G1/8 plug

G1" 1/2



1 = Supply port (vacuum)
2 = Use
3 = Exhaust

A Manual override

Electrovalves are supplied without coil and connector

2/2 - 3/2 SOLENOID VALVE FOR VACUUM WITH DIRECT OFORATION

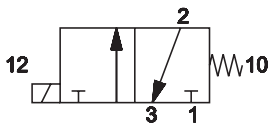
G1/4

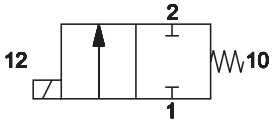
AG-3310
AG-3311
AG-3312
AG-3313
AG-3300
AG-3301
AG-3302
AG-3303

G1/2

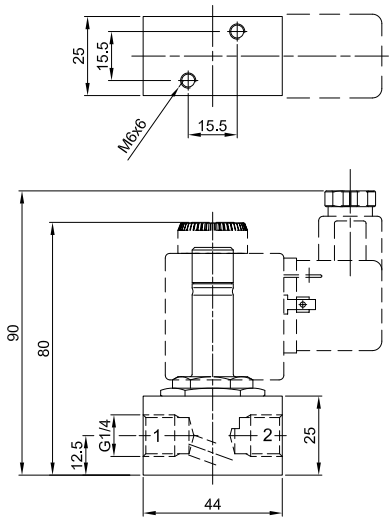
AG-3330
AG-3331
AG-3332
AG-3320
AG-3321
AG-3322

Code	Way	Spool	Control	Riturn	Ø	Resp. Time (ms)		Pump	Max vacuum		Weight	Coil
			12	10	mm	Ecc.	Dis.	max m³/h	mm Hg	Torr	Kg	
AG-3310		G1/4	electric	mechanical spring	3-3	10	10	1,8	759,5	759,5	0,22	**U2**
AG-3311		G1/4	electric	mechanical spring	4-3	12	8	2,5	759,5	759,5	0,22	**U2**
AG-3312		G1/4	electric	mechanical spring	5-3	13	8	4	759,5	759,5	0,22	**U2**
AG-3313	3/2 NC	G1/4	electric	mechanical spring	6-3	15	8	5	759,5	759,5	0,22	**U2**
AG-3330		G1/2	electric	mechanical spring	8-3	17	8	6	759,5	759,5	0,25	**U2**
AG-3331		G1/2	electric	mechanical spring	10-3	20	10	7,5	759,5	759,5	0,25	**U2**
AG-3332		G1/2	electric	mechanical spring	11-3	18	10	10	759,5	759,5	0,25	**U2**
AG-3300		G1/4	electric	mechanical spring	3	10	-	1,8	759,5	759,5	0,22	**U2**
AG-3301		G1/4	electric	mechanical spring	4	12	-	2,5	759,5	759,5	0,22	**U2**
AG-3302		G1/4	electric	mechanical spring	5	13	-	4	759,5	759,5	0,22	**U2**
AG-3303	2/2 NC	G1/4	electric	mechanical spring	6	15	-	5	759,5	759,5	0,22	**U2**
AG-3320		G1/2	electric	mechanical spring	8	17	-	6	759,5	759,5	0,25	**U2**
AG-3321		G1/2	electric	mechanical spring	10	20	-	7,5	759,5	759,5	0,25	**U2**
AG-3322		G1/2	electric	mechanical spring	11	28	-	10	759,5	759,5	0,25	**U2**

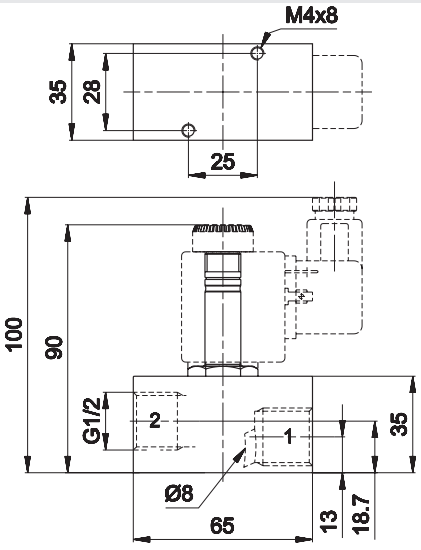




G 1/4



G 1/2



1 = Supply port (vacuum)
2 = Use
3 = Exhaust (fixed Ø 3 mm)

1 = Supply port (vacuum)
2 = Use
3 = Exhaust (fixed Ø 3 mm)

Electrovalves are supplied without coil and connector

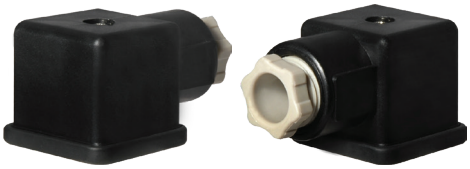
U2 COIL – 17 VA

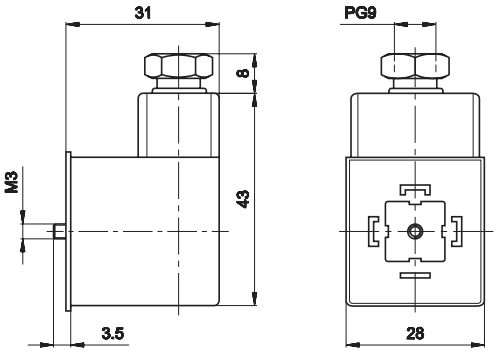
2/2 - 3/2 Solenoid valve for vacuum with direct oforation G1/4 - G1/2

Bobina U2 - 17 VA

DB-0607	24V AC - 50/60 Hz
DB-0608	110V AC - 50/60 Hz
DB-0610	220V AC - 50/60 Hz

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.

Electrovalves are supplied without coil and connector