



2/2-way solenoid valve

NC - Valve normally closed (as standard)

NO - Valve normally open (as option)

Pilot operated diaphragm valve

The mentioned minimum pressure difference between inlet and outlet is necessary for proper operation.

In standard (NC) the valve closes with spring power.

■ Solenoid valve for gaseous and liquid media

TECHNICAL SPECIFICATIONS

Type of control	Pilot operated, differential pressure necessary
Design	Seat valve with diaphragm seal
Connection	Sleeve connection G 1/4 - G 3 DIN ISO 228/1 (BSP) <small>Further connections like NPT on request</small>
Installation	Actuator upright or lateral
Pressure	0,3 - 20 bar (see table on page 2)
Medium	Clean, neutral gaseous and liquid media
Max. viscosity	22 mm ² /s
Temperature range	Medium: -10 °C / +80 °C Environment: -10 °C / +50 °C* <small>Taking into account other influencing parameters</small>
Body material	Brass 2.0402 Stainless steel 1.4581
Metallic inner parts	Brass and st. steel
Sealing	NBR, FKM, EPDM
Supply voltage	AC~ 24V, 110V, 230V DC= 12V, 24V <small>Other supply voltages on request</small>
Voltage tolerance	-10% / +10%
Power consumption	.182 = 6,8 Watt .178 = 5,2 Watt ⚠ .032 = 11 Watt .148 = 10 Watt ⚠ .012 = 18 Watt
Type of control	IP65 according to DIN 60529
Duty factor	100% ED-VDE 0580
Connection type	Device plug DIN 43650
Ex-proof	acc. to 2014/34/EU (ATEX)

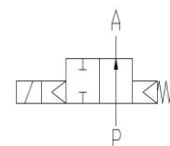
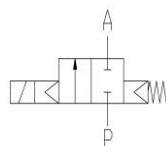
VALVE FEATURES

- Pressure difference is required
- High life time
- Simple compact valve design
- High-quality materials
- Reliable and sturdy sealing elements
- Long-term availability of spare parts

FUNCTION

NC – non energized closed

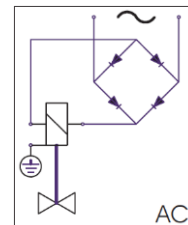
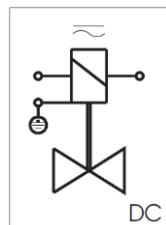
NO – non-energized open



CONNECTION DIAGRAM

For AC/DC coils

For DC coils
w/ integr. rectifier



CERTIFICATES

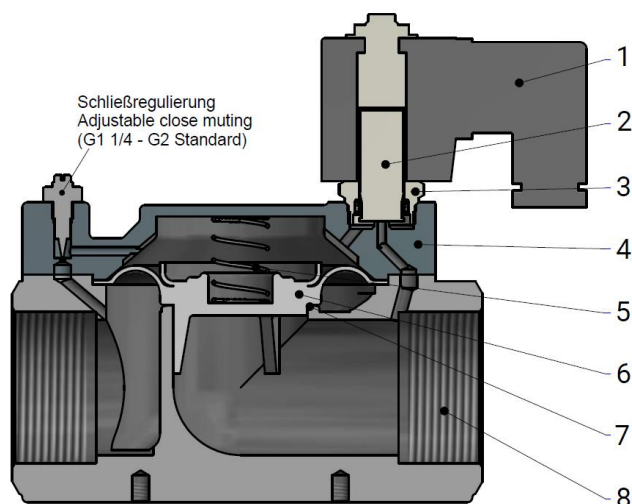


TECHNICAL FEATURES

G	Seat Ø mm	Kv-value m³/h	Standard type	max. pressure for coils NC		max. pressure for coils ATEX NC	
				.182	.032	.178	.148
1/4	13,5	1,6	.4021/..01/	0,3-20	0,3-20	0,3-10	0,3-20
3/8	13,5	3,3	.4022/..01/	0,3-20	0,3-20	0,3-10	0,3-20
1/2	13,5	3,8	.4023/..01/	0,3-20	0,3-20	0,3-10	0,3-20
3/4	27,5	11,0	.4024/..01/	0,3-16	0,3-20	0,3-10	0,3-20
1	27,5	13	.4025/..01/	0,3-16	0,3-20	0,3-10	0,3-20
1 1/4	40	30	.4026/..01/	-	0,5-16	-	0,5-16
1 1/2	40	32	.4027/..01/	-	0,5-16	-	0,5-16
2	50	45	.4028/..01/	-	0,5-16	-	0,5-16
2 1/2	65	on req.	.4029/1001/XX	-	0,3-10	-	-
3	80	on req.	.4030/1001/XX	-	0,3-10	-	-

The Kv values in the table apply to the larger drive

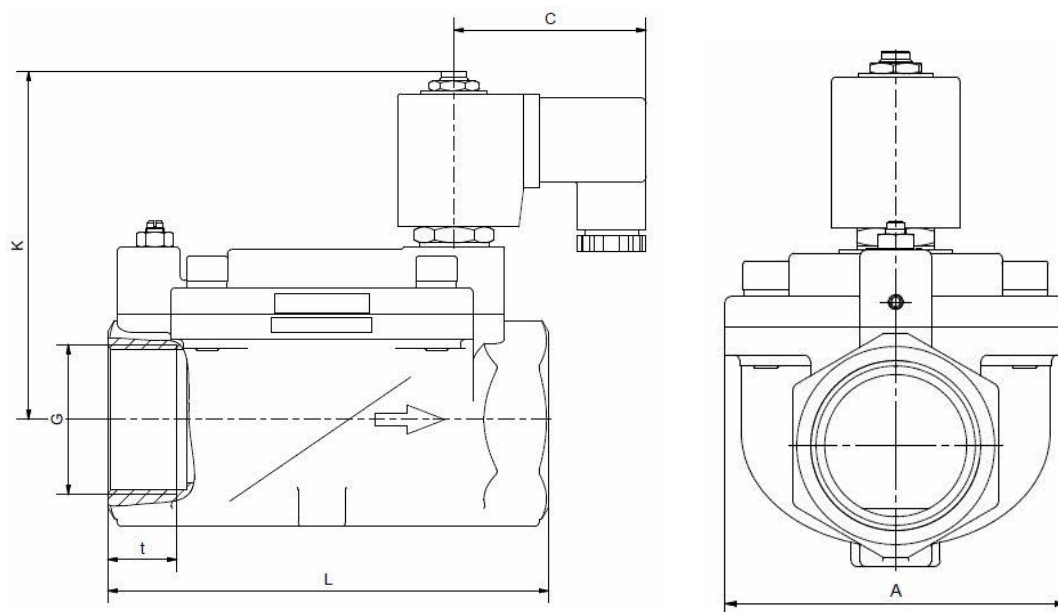
G	Seat Ø mm	Kv-value m³/h	Standard type	max. pressure for coils NO	
				.012	.148
1/4	13,5	1,6	.4021/..01/.	0,3-20	0,3-20
3/8	13,5	3,3	.4022/..01/	0,3-20	0,3-20
1/2	13,5	3,8	.4023/..01/	0,3-20	0,3-20
3/4	27,5	11,0	.4024/..01/	0,3-20	0,3-20
1	27,5	13	.4025/..01/	0,3-20	0,3-20
1 1/4	40	30	.4026/..01/	0,5-16	-
1 1/2	40	32	.4027/..01/	0,5-16	-
2	50	45	.4028/..01/	0,5-16	-
2 1/2	65	on req.	.4029/1001/XX	0,3-10	-
3	80	on req.	.4030/1001/XX	0,3-10	-



Description

- 1 Solenoid coil
- 2 Plunger
- 3 Tube
- 4 Bonnet
- 5 Spring
- 6 Diaphragm
- 7 Valve seat
- 8 Valve body

DIMENSIONS



Coil	.182 / .178				
Type	4021	4022	4023	4024	4025
G	1/4	3/8	1/2	3/4	1
A	48	48	48	70	70
C	51	51	51	51	51
K	75	75	75	87	87
L	67	67	67	96	96
t	12	12	12	16	16
kg	0,9	0,85	0,8	1,65	1,5

*Differing dimension "C" for ATEX coils

Coil	.032 / .012 / .148							
Type	4021	4022	4023	4024	4025	4026	4027	4028
G	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
A	48	48	48	70	70	96	96	112
C	61	61	61	61	61	61	61	61
K	90	90	90	102	102	110	110	120
L	67	67	67	96	96	140	140	168
t	12	12	12	16	16	22	22	22
kg	0,9	0,85	0,8	1,65	1,5	3,1	2,9	4,0

*Differing dimension "C" for ATEX coils

INFORMATION

- It is imperative to observe the installation and safety instructions in our operating and service manuals.
- Required ordering information: valve type, function NC/NO, pressure range, connection, nominal width, medium, flow rate, medium and ambient temperatures, connection voltage.
- **For information on the heating and performance of solenoid coils, refer to the corresponding "Coils" data sheet.**
- **Detailed production-specific drawings and other technical information will be made available when an order is placed.**

PLEASE NOTE

Each individual application decides which valve type is required, the main factor being the resistance of the materials to the operating medium. The correct selection of materials requires knowledge of the concentration, temperature and degree of contamination of the medium. Other criteria include the operating pressure and max. volumetric flow, since, in addition to high temperatures, high pressures and high flow rates must also be taken into account when selecting the materials.

All materials used for our valves, be it housing, seals or magnets, will be carefully selected in view of the different application areas. Any information given is non-binding and serves for orientation only. No claims under warranty can be derived therefrom.

ORDERING CODE

Type	Connection		Body	Sealing		Coil		Option	
. 4 0	2 3	/	1 0	0 1	/	. 1 8	2	- x x	
21	G 1/4		08	St.steel 1.4581		18	10,5 VA / 6,8 W	2	Standard IP65
22	G 3/8		10	Brass 2.0402		03	15 VA / 11 W	8	2014/34/EU (ATEX)
23	G 1/2					01	24 VA / 18,5 W		
24	G 3/4			01 NBR		17	5,3 VA / 5,2 W		NO normally open
25	G 1			02 FKM		14	8,5 VA / 10 W		
26	G 5/4			06 EPDM					
27	G 6/4								
28	G 2								

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