

2/2 Directional Valves DN 8 to 12



For neutral gaseous and liquid fluids
Direct solenoid actuated
Poppet valves
Internal thread G 1/4 to G 1/2
Operating pressure 0 to 50 bar (see table)

Catalog Register
A 4

Publication 7500954.06.08.94



Description

Solenoid valve for air, water, oil
Max. viscosity 40 mm²/s

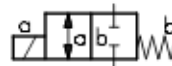
Flow direction: Optional
Temperature min.: -10 °C (deeper temperature on request)
Temperature max.: Fluid +80 °C
Ambience +60 °C
Mounting position: Optional, preferably vertical
Material used:
– Body: Brass
– Seat seal: NBR (Perbunan)
– Inner parts: Stainless steel, brass

For contaminated fluids insertion of a dirt trap is recommended (see accessories).

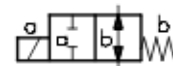


Features

- Working from 0 bar up
- Suitable for medium-high vacuum range down to $1,33 \cdot 10^{-2}$ mbar
- Valve seals in either direction
- Approved for marine engineering
- For liquid fuel (DIN 32725)



Switching function:
Normally closed



Switching function:
Normally open

Parameters

DN	Line connection	Operating pressure with gases and liquids up to 40 mm ² /s [bar]		k _v -value (C _v (US) ≈ k _v x 1.2)	Weight [kg]	Sectional drawing No.	Dimensional drawing No.	Cat. No.		Cat. No.	
		min.	max.					Valve	Solenoid DC	Valve	Solenoid AC

Switching function: Normally closed

8	G 1/4	0	3	0.87	2.1	01	01	2104050.1300	2104050.1301²⁾
8	G 1/4	0	15	0.87	2.1	01	01	1520450.1300	1520450.1301¹⁾
8	G 3/8	0	3	0.87	2.1	01	01	2104150.1300	2104150.1301²⁾
8	G 3/8	0	15	0.87	2.1	01	01	1520550.1300	1520550.1301
8	G 1/2	0	3	0.87	2.1	01	01	2104250.1300	2104250.1301²⁾
8	G 1/2	0	15	0.87	2.1	01	01	1520650.1300	1520650.1301
12	G 3/8	0	15	1.0	2.5	01	02	2102150.1300	2102150.1301
12	G 3/8	0	50	1.0	3.6	01	03	2101750.1500	2101750.1501
12	G 1/2	0	15	1.0	2.5	01	02	2102250.1300	2102250.1301¹⁾
12	G 1/2	0	50	1.0	3.6	01	03	2101850.1500	2101850.1501¹⁾

Switching function: Normally open

8	G 1/4	0	3	0.87	2.1	02	04	2104350.1300	2104350.1301²⁾
8	G 1/4	0	15	0.87	2.1	02	04	1521350.1300	1521350.1301¹⁾
8	G 3/8	0	3	0.87	2.1	02	04	2104450.1300	2104450.1301²⁾
8	G 3/8	0	15	0.87	2.1	02	04	1521450.1300	1521450.1301
8	G 1/2	0	3	0.87	2.1	02	04	2104550.1300	2104550.1301²⁾
8	G 1/2	0	15	0.87	2.1	02	04	1521550.1300	1521550.1301
12	G 3/8	0	15	1.0	2.5	02	05	2112150.1300	2112150.1301
12	G 3/8	0	50	1.0	3.6	02	03	2111750.1500	2111750.1501
12	G 1/2	0	15	1.0	2.5	02	05	2112250.1300	2112250.1301¹⁾
12	G 1/2	0	50	1.0	3.6	02	03	2111850.1500	2111850.1501¹⁾

State voltage [V] and frequency [Hz]

- 1) Equipped with solenoids 1309. 1310. 1509. 1510 these valves are approved for marine engineering by:
GL Germanischer Lloyd, LR Lloyd's Register of Shipping, DNV Det Norske Veritas, PRS Polski Rejestr Statkow, USSR Register of Shipping
- 2) Suitable for vacuum (with seat seal Viton suitable for high vacuum)

Solenoids

Standard voltages	DC	AC 40 ... 60 Hz	Other voltages on request
	24 V	24 V 110 V 220 V 230 V	

Design to VDE 0580
100 % duty cycle

For more technical details on solenoids see:
Publication 7500779 (solenoids 13XX),
Publication 7500778 (solenoids 15XX).

Current draw:

Solenoid	DC	Solenoid	AC	
			Inrush	Holding
1300	20 W	1301	24 VA	24 VA
1500	39 W	1501	42 VA	42 VA

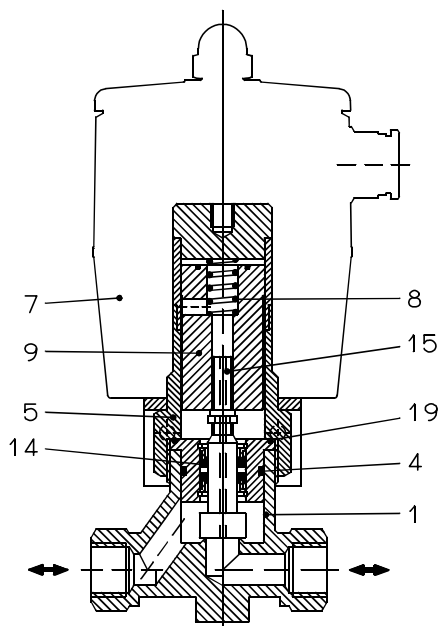
Degree of protection to DIN 40050: IP 65
Cable gland Pg 13.5

Further versions on request

- Seat seal FKM (Viton)
- With manual override 350 (lever)
- Solenoids in protection classes (Ex)s, EEx m
- Solenoids in protection classes (Sch)d (Ex)d, EEx d

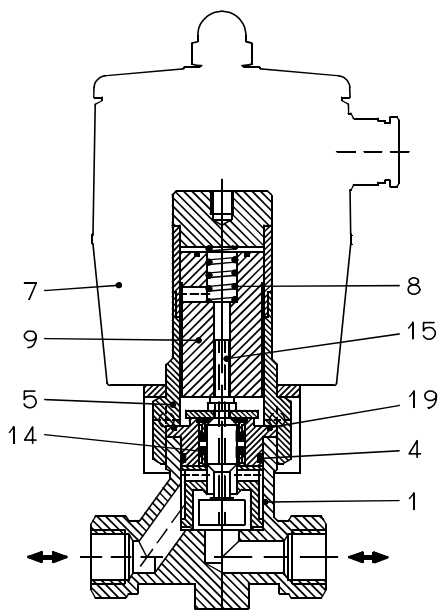
Sectional drawings

01



- 1 Body
- 4 O-ring *
- 5 Core tube
- 7 Solenoid
- 8 Spring *
- 9 Plunger
- 14 Grooved ring *
- 15 Spindle assly. *
- 19 O-ring *

02



- 1 Body
- 4 O-ring *
- 5 Core tube
- 7 Solenoid
- 8 Spring *
- 9 Plunger
- 14 Grooved ring *
- 15 Spindle assly. *
- 19 O-ring *

All parts marked with an asterisk are included in spare parts kits.
When ordering spares, please state also valve Cat. No.

Spare parts kits

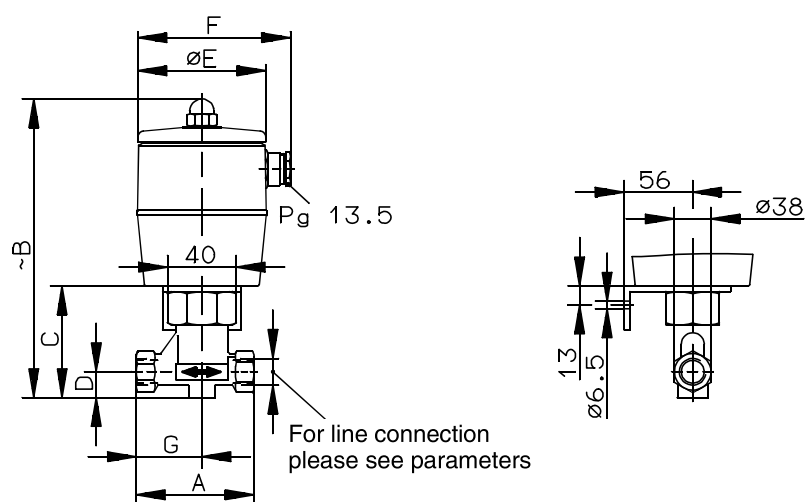
For normally closed design

Cat. No. Valve	Cat. No. Spare parts kit
1520450	0592490
1520550	0592490
1520650	0592490
2101750	0592494
2101850	0592494
2102150	0592418
2102250	0592418

For normally open design

Cat. No. Valve	Cat. No. Spare parts kit
1521350	0593224
1521450	0593224
1521550	0593224
2111750	0592495
2111850	0592495
2112150	0592419
2112250	0592419

Dimensional drawing



Dimensional drawing No.	Laid length A	Height B	C	D	Width ØE	F	G	H
01	80	203	77	21	86	102	44	30
02	90	208	82	22	86	102	51	38
03	90	230	87	22	92	108	51	38
04	80	206	80	21	86	102	44	30
05	90	213	87	22	86	102	51	38