

2/2-way valves DN 8 to DN 50

For neutral gases and liquid fluids

Diaphragm valves

Seat valves

Internal thread G 1/4 to G 2 resp. 1/4 NPT to 2 NPT

Operating pressure 0.2 to 16 bar

82170

82270

Pilot pressure (min > = Operating pressure, max. 16 bar)

G 1/4 - G 1/2	1 - 16 bar, max. 6 bar higher than operating pressure
1/4 NPT - 1/2 NPT	1 - 16 bar, max. 6 bar higher than operating pressure
G 3/4 - G 2	1 - 16 bar, max. 1 bar higher than operating pressure
3/4 NPT - 2 NPT	1 - 16 bar, max. 1 bar higher than operating pressure

Description (standard valve)

Switching function:	NO; NC with pilot pressure
Flow direction:	determined
Fluid temperature:	-10 to max. of +60°C
Ambient temperature:	-10 to max. of +50 °C
Differential pressure:	0,2 bar required
Mounting position:	optional
Steuerfluid:	air max. +60 °C



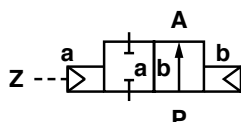
Material

Body:	brass
Internal parts:	brass, stainless steel
Seals:	NBR
Seat seal:	fabric diaphragm NBR with valve plate

Features

- For high contaminated fluids
- Solenoid hermetically sealed from fluid
- Small dimension
- Vacuum as an option
- Compact valve for industrial applications

Symbol



Ordering information

To order, quote model number from table overleaf, e.g. 8217400.8821 for a G DN 25 valve.

Characteristic data

Valves

Part Number Standard solenoid	Part Number Pulse solenoid	Nominal Diame- ter (mm)	Connection size	Operating pressure *		k _v -value ** (Base m ³ /h)	Weight (kg)	
				min. (bar)	max. (bar)		Standard solenoid	Pulse solenoid
8217000.9301 8227000.9301	8217000.8821 8227000.8821	8	G 1/4 1/4 NPT	0.2	16	1.7	1.32	1.45
8217100.9301 8227100.9301	8217100.8821 8227100.8821	10	G 3/8 3/8 NPT	0.2	16	3.4	1.27	1.40
8217200.9301 8227200.9301	8217200.8821 8227200.8821	12	G 1/2 1/2 NPT	0.2	16	4.0	1.22	1.35
8217300.9301 8227300.9301	8217300.8821 8227300.8821	20	G 3/4 3/4 NPT	0.2	16	11.0	1.97	2.10
8217400.9301 8227400.9301	8217400.8821 8227400.8821	25	G 1 1 NPT	0.2	16	13.0	1.82	1.95
8217500.9301 8227500.9301	8217500.8821 8227500.8821	32	G 1 1/4 1 1/4 NPT	0.2	16	28.0	3.17	3.20
8217600.9301 8227600.9301	8217600.8821 8227600.8821	40	G 1 1/2 1 1/2 NPT	0.2	16	31.0	2.92	3.00
8217700.9301 8227700.9301	8217700.8821 8227700.8821	50	G 2 2 NPT	0.2	16	46.0	4.17	4.30

* for gases and liquid fluids up to 80 mm²/s (cSt)

State voltage [V] and frequency [Hz]

** C_v-value (US) ≈ k_v-value x 1.2

Solenoid 9301

Standard voltages

DC ---	AC ~ 50 Hz	AC ~ 60 Hz
24 V	24 V	–
–	110 V	120 V
–	230 V	220 V

Design acc. to DIN VDE 0580

Voltage range ±10 %

100 % duty cycle

Protection class acc. to EN 60529 IP65

Socket Form A acc. to DIN EN 175301-803 (included)

Power Consumption

According to DIN VDE 0580 at coil temperature of +20 °C. In operation the power consumption of the solenoid decreases by approx. 30 %.

Solenoid	DC ---	AC ~	
		Inrush	Holding
9301 *	18 W	106 VA	35 VA

*  Coil only

Attention!

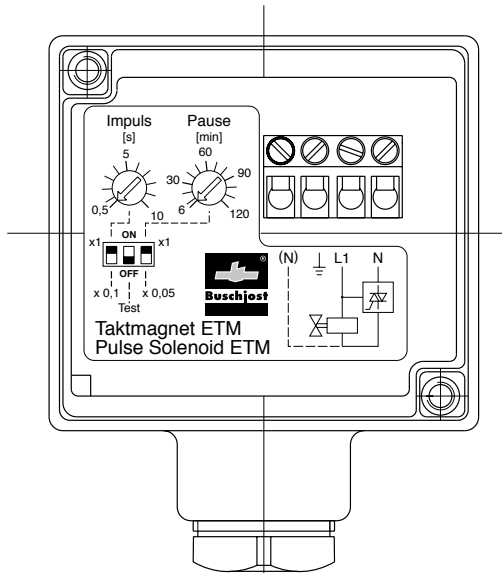
The conditions imposed on the Ex approvals lead to reduction of the permissible standard temperature ranges in the cases of explosion protected solenoids.

Further Options (Valves)

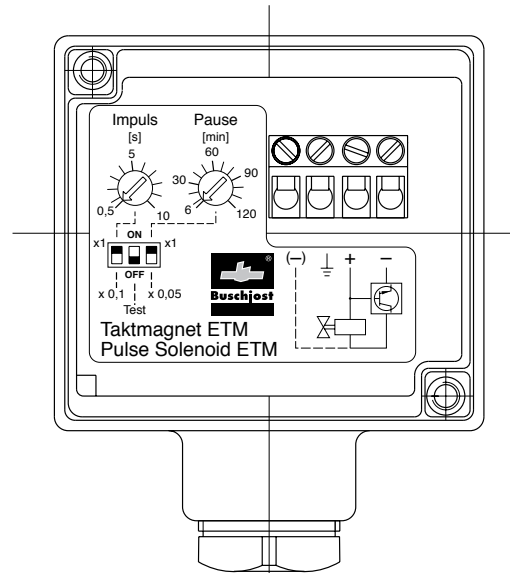
- XXXXX03.XXXX fabric diaphragm FPM with valve plate
T_{max} +110 °C, operating pressure 0.2 to 16 bar,
control pressure = operating pressure
G 1/4 to G 1/2:
max. control pressure 6 bar higher than operating pressure, but max. control pressure 16 bar
G 3/4 to G 2:
max. control pressure 1 bar higher than operating pressure, but max. control pressure 16 bar,
- XXXXX51.XXXX fabric diaphragm NBR with valve plate
T_{max} +90 °C; operating pressure 0.2 to 16 bar,
control pressure = operating pressure
G 3/4 to G 2:
max. control pressure 6 bar higher than operating pressure, but max. control pressure 16 bar
- XXXXX52.XXXX fabric diaphragm FPM with valve plate
T_{max} +110 °C, operating pressure 0.2 to 16 bar,
control pressure = operating pressure
G 3/4 to G 2:
max. control pressure 6 bar higher than operating pressure, but max. control pressure 16 bar
- XXXXX53.XXXX suitable for vacuum. With pressure spring under diaphragm, FPM-fabric diaphragm
T_{max} +110 °C, operating pressure –0.9 to 16 bar,
control pressure 1 to 16 bar, max. control pressure 6 bar higher than operating pressure
- XXXXX54.XXXX suitable for vacuum. With pressure spring under diaphragm, NBR-fabric diaphragm
T_{max} +90 °C, operating pressure –0.9 to 16 bar,
control pressure 1 to 16 bar, max. control pressure 6 bar higher than operating pressure

Further Options (Solenoids)

XXXXXX.8821 Solenoid with built-in electronic timer, for 230 V 50 Hz, 110 V 50 Hz, 120 V 60 Hz or 24 V DC
 pulse duration: 0.05 s to 10.0 s
 break duration: 17 s to 120 min



Pulse Solenoid 8821 AC

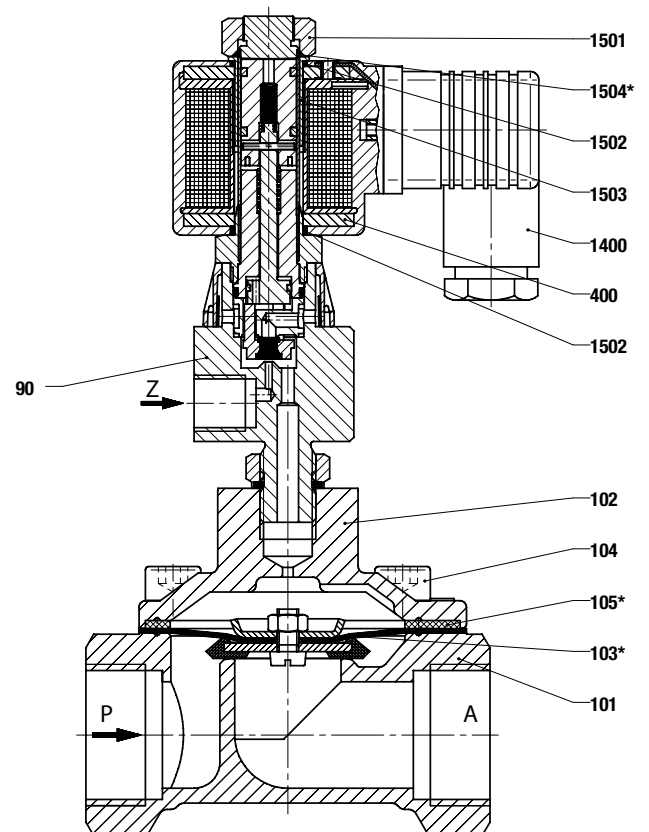


Pulse Solenoid 8821 DC

For more technical details see data sheet for pulse solenoid 8821 Nr. D109602.

Section View

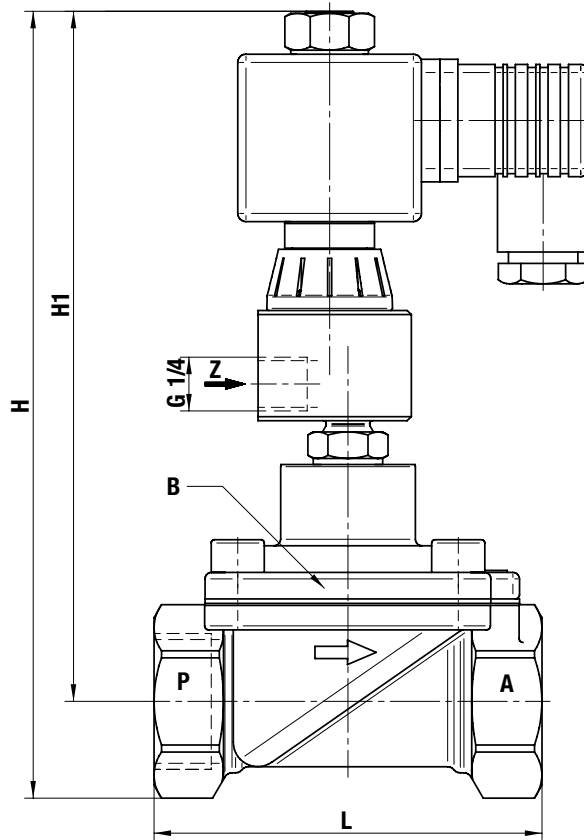
- 90 Pilot valve 8497850.9300.00000, complete
- 101 Valve body
- 102 Body cover
- *103 Diaphragm
- 104 Oval head cap screw up to G 1/2
Hexagon screw from G 3/4
- *105 Seal ring, not for G 3/4 and G 1
- 400 Solenoid
- 1400 Socket
- 1501 Hexagon nut
- 1502 O-ring
- 1503 Flange sleeve
- *1504 O-ring



* These individual parts form a complete wearing unit.
 When ordering spare parts please state Cat No and Series No.

General Dimensions

Solenoid rotatable 360°
 Socket turnable 4 x 90°
 (Socket included)



Part Number	Nominal Diameter (mm)	Connection size	L (mm)	B* (mm)	H (mm)	H1 (mm)
8217000.XXXX 8227000.XXXX	8	G 1/4 1/4 NPT	67	44	158	143
8217100.XXXX 8227100.XXXX	10	G 3/8 3/8 NPT	67	44	158	143
8217200.XXXX 8227200.XXXX	12	G 1/2 1/2 NPT	67	44	158	143
8217300.XXXX 8227300.XXXX	20	G 3/4 3/4 NPT	95	70	191	167
8217400.XXXX 8227400.XXXX	25	G 1 1 NPT	95	70	191	167
8217500.XXXX 8227500.XXXX	32	G 1 1/4 1 1/4 NPT	132	96	213	180
8217600.XXXX 8227600.XXXX	40	G 1 1/2 1 1/2 NPT	132	96	213	180
8217700.XXXX 8227700.XXXX	50	G 2 2 NPT	160	112	231	291

B* = max. depth

Note to Pressure Equipment Directive (PED):

The valves of this series are according to Art. 3 § 3 of the Pressure Equipment Directive (PED) 97/23/EG.

This means interpretation and production are in accordance to engineers practice wellknown in the member countries.

The CE-sign at the valve does not refer to the PED. Thus the declaration of conformity is not longer applicable for this directive.

Note to Electromagnetic Compatibility Guideline (EEC):

The valves shall be provided with an electrical circuit which ensures the limits of the harmonised standards EN 61000-6-3 and EN 61000-6-1 are observed, and hence the requirements of the Electromagnetic Guideline (2004/108/EC) satisfied.