#### Phone ++49 5731/791-0 Fax ++49 5731/791-179 www.buschjost.com



2/2-way valves DN 15 to DN 50 For neutral gases and liquid fluids Indirectly solenoid actuated **Diaphragm valves** 

Flange connection, pressure rating PN 16 Operating pressure 0.1 to 10/16 bar

# **Description (standard valve)**

Solenoid valve for air, water

Switching function: Flow direction: Fluid temperature: Ambient temperature: Mounting position:

normally closed determined -10 °C up to max. +90 °C -10 °C up to max. +50 °C optional, preferably solenoid vertical on top

# Material

Body: Seal seat: Internal parts:

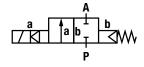
Cast steel. Brass NBR Stainless steel, PVDF resp. Brass from DN 32

For contaminated fluids insertion of a strainer is recommended (see Buschjost - accessories).

# **Features**

- · High flow rate
- · Damped operation
- Functional compact design
- Solenoid interchangeable without tools (Click-on®)
- Fluids of Group 2 acc. Pressure Equipment Directive 97/23/EC

### Symbol



# **Ordering information**

To order, quote model number from table overleaf, e.g. 8303400.9101 for a DN 25 valve.



83030

# Click-on





# **Characteristic data**

Valves

Part Number Solenoid with or $\sim$	Nominal Diameter (mm)	Operating pressure * min. (bar)	max. (bar)	ky-value ** (Base m³/h)	Weight (kg)
8303200.9101	15	0.1	16	3.8	2.6
8303300.9101	20	0.1	16	6.1	2.8
8303400.9101	25	0.1	16	9.5	3.2
8303500.9101	32	0.1	10	23.0	5.8
8303500.9151	32	0.1	16	23.0	5.9
8303600.9101	40	0.1	10	25.0	6.1
8303600.9151	40	0.1	16	25.0	6.2
8303700.9101	50	0.1	10	41.0	8.4
8303700.9151	50	0.1	16	41.0	8.5

\* for gases and liquid fluids up to 25 mm²/s (cSt)

\*\* C<sub>V</sub>-value (US)  $\approx$  k<sub>V</sub>-value x 1.2

# Solenoid 9101 / 9151

Standard voltages

DC	$ m AC\sim$ 50 Hz	$ m AC\sim 60~Hz$
24 V	24 V	-
-	110 V	120V
-	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 +20 °C. In operation the power consumption of the solenoid decreases by approx. 30 %.

Solenoid	DC	AC $\sim$ Inrush Holding	
9101 *	8 W	15 VA	12 VA / 7 W
9151 *	18 W	45 VA	35 VA / 17 W

# \* 🕵 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.

State voltage [V] and frequency [Hz]

# **Further Options (Valves)**

XXXXX01.XXXX	Normally open (NO), 0.1 to 16 bar, from DN 32 only with solenoid 9151
XXXXX <b>02</b> .XXXX	Manual override
XXXXX <b>03</b> .XXXX	Seat seal FPM, fluid temperature -5 °C up to +110 °C
XXXXX14.XXXX	Seat seal EPDM, for hot water, fluid temperature –20 °C up to +110 °C; 0.3 to 16 bar up to DN 25 0.3 to 10 bar from DN 32
XXXXX <b>47</b> .XXXX	Flanges acc.to ASME B 16.5 150 lb/sq.ln.
On request	Further versions

# **Further Options (Solenoids)**

XXXXXXX.9136	Protection class Will 2 GD EEx m II T4 T 130 °C, With 3 m connection cable for AC/DC
XXXXXXX.9186	Protection class ⓑ II 2 GD EEx m II T4 T 140 °C
XXXXXXX.4682	Solenoid in protection class
XXXXXXX.4683	Solenoid in protection class
On request	Further versions

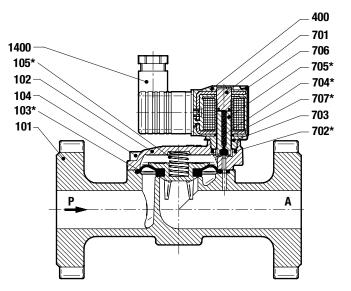




# Section view

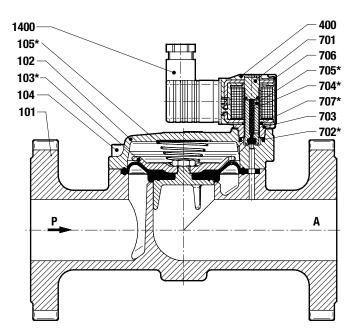
up to DN 25

- 101 Valve body
  102 Valve cover
  \*103 Diaphragm
  104 Straight pin
  \*105 Pressure spring
  400 Solenoid
  701 Core tube
  \*702 O-ring
  703 Screw piece
  \*704 Pressure spring
  \*705 Core
  706 Spring clip
- \*707 0-ring
- 1400 Socket (included)



from DN 32

- 101 Valve body
- 102 Valve cover
- \*103 Diaphragm
- 104 Straight pin
- \*105 Pressure spring
- 400 Solenoid
- 701 Core tube
- \*702 0-ring
- 703 Screw piece
- \*704 Pressure spring
- \*705 Core
- 706 Spring clip
- \*707 0-ring
- 1400 Socket (included)



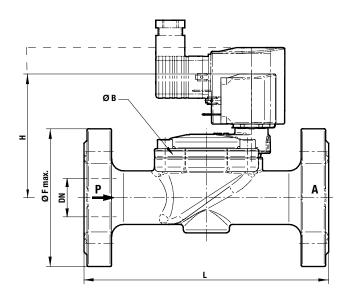
\*These individual parts form a complete wearing unit. When ordering spare parts please state Cat no and series no.





# **General Dimensions**

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



Part Number	Nominal Diameter (mm)	L (mm)	H (mm)	Ø F max. (mm)	Ø B (mm)
8303200.9101	15	130	69	96	44
8303300.9101	20	150	77	110	50
8303400.9101	25	160	81	115	62
8303500.9101	32	180	97	140	92
8303500.9151	32	180	114	140	92
8303600.9101	40	200	102	150	92
8303600.9151	40	200	119	150	92
8303700.9101	50	230	113	165	109
8303700.9151	50	230	131	165	109

Contact face acc. to DIN EN 1092-1/B

#### Note to Pressure Equipment Directive (PED):

The valves of this series, including the connection size DN 25 (G 1), 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 refers not to the PED. Thus the declaration of conformity is not longer applicable for this directive.

For valves > DN 25 (G 1) Art. 3 § (1) No.1.4 applies. The basic requirements of the Enclosure I of the PED must be fulfilled. The CE-sign at the valve includes the PED. A certificate of conformity of this directive will be available on request.

#### 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 Compatibility Guideline (2004/108/EG) satisfield.

