# 2/2-way valves DN 8 to DN 50

For neutral gases and liquids **Indirectly solenoid actuated Piston valves** Internal threads G 1/4 to G 2 or 1/4 NPT to 2 NPT Operating pressure 0.5 to 40 bar

# Buschjost



85300 85310

# **Description (standard valve)**

Solenoid valve for air, water and other neutral fluids

Switching function: normally closed Flow direction: determined

Fluid temperature: -20 °C up to max. +90 °C Ambient temperature: -20 °C up to max. +50 °C Mounting position: optional, preferably solenoid

vertical on top



Body: Brass (CW617N)

Seat seal: NBR

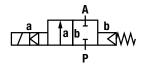
Internal parts: Stainless steel, Brass, PTFE

For contaminated fluids insertion of a strainer is recommended.

#### **Features**

- · Compact piston valve
- · High flow rate
- Damped operation
- · Functional compact design
- Solenoid interchangeable without tools (Click-on")
- Stainless steel piston bushing

## **Symbol**



#### **Ordering information**

To order, quote model number from table overleaf, e. g. 8530400.9151 for a DN 25 valve.





#### **Characteristic Data**

Valves

Part Number Solenoid with	Nominal Diameter (mm)	Connection Size	Operating Pressure * min. (bar)	max. (bar)	k <sub>V</sub> -value ** (Base m³/h)	Weight Total (kg)
8530000.9151 8531000.9151	8	G 1/4 1/4 NPT	0.5	40	2.2	0.83
8530100.9151 8531100.9151	10	G 3/8 3/8 NPT	0.5	40	3.4	0.82
8530200.9151 8531200.9151	12	G 1/2 1/2 NPT	0.5	40	4.4	0.85
8530300.9151 8531300.9151	20	G 3/4 3/4 NPT	0.5	40	7.0	1.25
8530400.9151 8531400.9151	25	G 1 1 NPT	0.5	40	10.5	1.70
8530500.9151 8531500.9151	32	G 1 1/4 1 1/4 NPT	0.5	40	25.0	4.10
8530600.9151 8531600.9151	40	G 1 1/2 1 1/2 NPT	0.5	40	27.0	3.85
8530700.9151 8531700.9151	50	G 2 2 NPT	0.5	40	43.0	5.60

<sup>\*</sup> for gases and liquid fluids up to 40 mm<sup>2</sup>/s (cSt)

#### Solenoid 9151

Standard voltage

DC	AC $\sim$ 50 Hz	AC $\sim$ 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  $+20\,^{\circ}$ C. In operation the power consumption of the solenoid decreases by approx. 30 %.

Solenoid	DC	AC $\sim$		
		Inrush	Holding	
9151 *	18 W	45 VA	35 VA	



#### Attention

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

State voltage [V] and frequency [Hz]

## **Further Options (Valves)**

XXXXX**01**.XXXX Normally open (NO);

from DN 32: operating pressure 0.5 to 30 bar

XXXXX**02**.XXXX Manual override XXXXX**03**.XXXX Seat seal FPM;

fluid temperature -10 °C up to +110 °C

XXXXX**14**.XXXX Seat seal EPDM; for hot water.

max. fluid temperature +110 °C

On request Further versions

### **Further Options (Solenoids)**

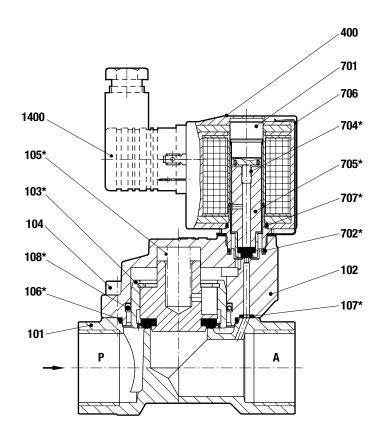
On request Further versions



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



#### **Section View**



- 101 Valve body
- 102 Valve cover
- \*103 Valve plate
- 104 Allen head screw
- \*105 Pressure spring
- \*106 Gasket
- \*107 O-ring
- \*108 Lip seal
- 400 Solenoid
- 701 Core tube
- \*702 O-ring
- \*704 Pressure spring
- \*705 Plunger
- 706 Spring clip
- \*707 O-ring
- 1400 Electrical connector (included)

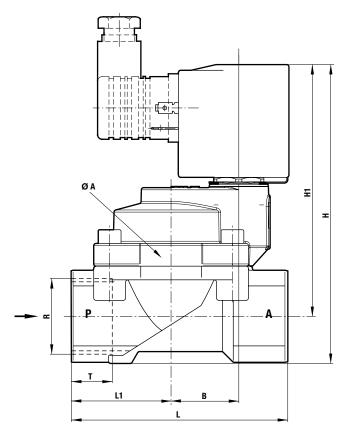


<sup>\*</sup> These individual parts form a complete wearing unit. When ordering spare parts please state Cat. No. and Series No.



#### **General Dimensions**

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



Part Number	Nominal Diameter (mm)	Connection Size	Ø A (mm)	H (mm)	H 1 (mm)	L (mm)	L 1 (mm)	T (mm)
8530000.9151 8531000.9151	8	G 1/4 1/4 NPT	44	105.0	93.5	60	27.5	12
8530100.9151 8531100.9151	10	G 3/8 3/8 NPT	44	105.0	93.5	60	27.5	12
8530200.9151 8531200.9151	12	G 1/2 1/2 NPT	44	107.5	93.5	67	31.0	14
8530300.9151 8531300.9151	20	G 3/4 3/4 NPT	50	119.0	102.5	80	36.5	16
8530400.9151 8531400.9151	25	G 1 1 NPT	62	131.5	110.5	95	44.0	18
8530500.9151 8531500.9151	32	G 1 1/4 1 1/4 NPT	92	166.0	137.0	132	60.0	20
8530600.9151 8531600.9151	40	G 1 1/2 1 1/2 NPT	92	166.0	137.0	132	60.0	22
8530700.9151 8531700.9151	50	G 2 2 NPT	109	186.0	151.5	160	74.0	24

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

The valves of this series, including the connection size DN 25 (G 1), are according to Art. 3  $\S$  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.

