2/2-way valves DN 3 to DN 8

For aggressive gases and fluids
Directly solenoid actuated
Seat valves with sealed core tube / medium separated
Internal thread G 1/4 to G 3/8
Operating pressure 0 to 7 bar (see table)

82080

Description (standard valve)

Seat valve for aggressive gases and fluids

Type:	seat valve operating without differential pressure
Switching function:	normally closed
Flow direction:	determined
Fluid temperature:	–10 °C up to max. +110 °C
Ambient temperature:	–10 °C up to max. +50 °C
Mounting position:	as required, preferably with solenoid vertical on top

Material

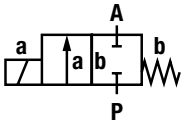
Body:	PVDF
Seat seal:	EPDM
Internal parts:	PTFE-bellows

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

Features

- Suitable for aggressive fluids
- Functional design
- Compact solenoid with integrated core tube
- Sealed core tube with PTFE-bellows
- Unsusceptible to calcification and magnetization of foreign particles

Symbol



Ordering Information

To order, quote model number from table overleaf, e.g. 8208000.8050 for a DN 3 valve.

Buschjost GmbH
Valve Technology and Systems

Detmolder Straße 256
D-32545 Bad Oeynhausen
PO Box 10 02 52-53
D-32502 Bad Oeynhausen

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

Characteristic data

Valves

Part Number Solenoid with ⎓	Part Number Solenoid with ∿	Nominal Diameter (mm)	Connection size	Operating pressure * min. (bar)	max. (bar)	k_V-value ** (Base m^3/h)	Weight (kg)
8208000.8050	8208000.8051	3.0	G 1/4	0	7	0.23	0.3
8208100.8050	8208100.8051	3.0	G 3/8	0	7	0.23	0.3
8208060.8050	8208060.8051	4.5	G 1/4	0	5	0.42	0.3
8208160.8050	8208160.8051	4.5	G 3/8	0	5	0.42	0.3
8208070.8050	8208070.8051	6.0	G 1/4	0	2	0.62	0.3
8208170.8050	8208170.8051	6.0	G 3/8	0	2	0.62	0.3
8208080.8050	8208080.8051	8.0	G 1/4	0	1	0.83	0.3
8208180.8050	8208180.8051	8.0	G 3/8	0	1	0.83	0.3

* for gases and liquid fluids up to 80 mm^2/s (cSt)
** C_V-value (US) ≈ k_V-value x 1.2

State voltage [V] and frequency [Hz]

Solenoid 8050 / 8051

Standard voltages

DC ⎓	AC ∿ 40 Hz – 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)
AC with rectifier plug

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
8050	12 W	–	–
8051	–	13 VA	13 VA

Attention!
The conditions imposed on the Ex approvals lead to reduction to the permissible temperature ranges in the case of explosion protected solenoids.

Further Options (Valves)

XXXXX**03**.XXXX Seat seal FPM, max. fluid temperature +110 °C

XXXXX**06**.XXXX Seat seal PTFE, max. fluid temperature +110 °C

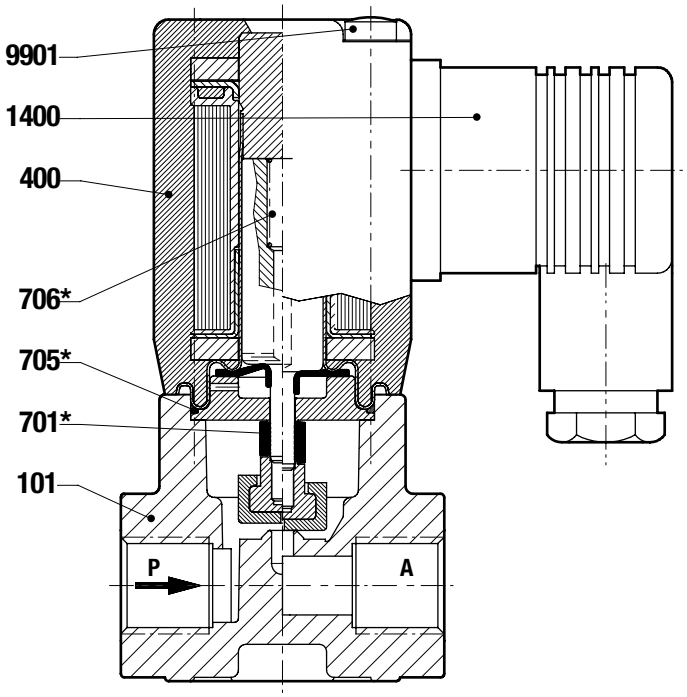
On request Further versions

Further Options (Solenoids)

XXXXXXX.**8042** Solenoid in potection class ⟨Ex⟩ II 2 GD EEx me II T3 T 140 °C

On request Further versions

Section View

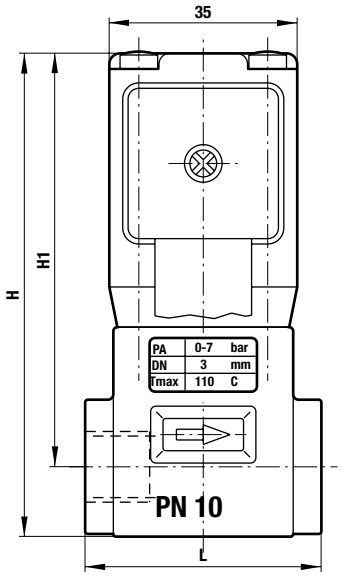


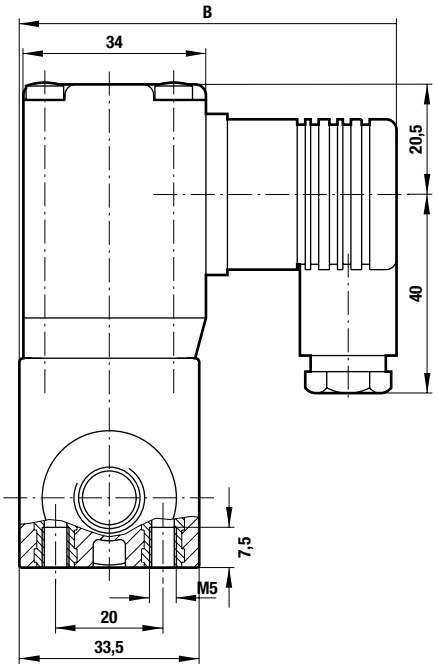
101	Valve body
400	Solenoid
*701	Bellow assembly
*705	O-ring
*706	Pressure spring
1400	Electrical connector
9901	Oval head cap screw

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

General Dimensions

Solenoid and Socket turnable 4 x 90°
(Socket included)





Part Number	Nominal Diameter (mm)	Connection size	B * (mm)	H (mm)	H1 (mm)	L (mm)
82080XX.8050	3	G 1/4	70	90	77	44
82080XX.8051	3	G 3/8	70	90	77	44
82081XX.8050	4.5	G 1/4	70	90	77	44
82081XX.8051	4.5	G 3/8	70	90	77	44

* 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 comformity 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 harmoniised standards EN 61000-6-3 and EN 61000-6-1 are observed, and hence the requirements of the Electromagnetic Guildeline (2004/108/EC) satisfield.