

# 82080

## 2/2-way seat valves

- > Port size: DN 3 ... 8, G1/4 ... 3/8
- > Suitable for aggressive fluids
- > Functional design
- > Compact solenoid with integrated core tube
- > Core tube protected with PTFE-bellow
- > Unsusceptible to calcification and magnetization of foreign particles
- > International approvals



### Technical features

**Medium:**

Aggressive gases and fluids

**Switching function:**

Normally closed

**Operation:**

Directly solenoid actuated

**Type:**

Seat valve operating without differential pressure

**Mounting position:**

Optional, preferably solenoid vertical on top

**Flow direction:**

Determined

**Port size:**

G1/4, G3/8

**Operating pressure:**

0 ... 7 bar (0 ... 101 psi)

**Fluid temperature:**

-10° ... +110°C (+14° ... +230°F)

**Ambient temperature:**

-10° ... +50°C (+14° ... +122°F)

**Material:**

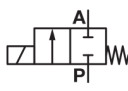
Body: PVDF

Seat seal: EPDM

Internal parts: PTFE-bellows

For contaminated fluids (particle > 1 mm) insertion of a strainer is recommended.

### Technical data – standard models

Symbol	Port size	Orifice (mm)	Flow kv value *1) (m³/h)	Operating pressure *2)		Weight (kg)	Model	
				(bar)	(psi)		Solenoid in V d.c.	Solenoid in V a.c.
	G1/4	3	0,23	0 ... 7	0 ... 101	0,3	8208000.8050.xxxxx	8208000.8051.xxxxx
	G3/8	3	0,23	0 ... 7	0 ... 101	0,3	8208100.8050.xxxxx	8208100.8051.xxxxx
	G1/4	4,5	0,42	0 ... 5	0 ... 72	0,3	8208060.8050.xxxxx	8208060.8051.xxxxx
	G3/8	4,5	0,42	0 ... 5	0 ... 72	0,3	8208160.8050.xxxxx	8208160.8051.xxxxx
	G1/4	6	0,62	0 ... 2	0 ... 29	0,3	8208070.8050.xxxxx	8208070.8051.xxxxx
	G3/8	6	0,62	0 ... 2	0 ... 29	0,3	8208170.8050.xxxxx	8208170.8051.xxxxx
	G1/4	8	0,83	0 ... 1	0 ... 14	0,3	8208080.8050.xxxxx	8208080.8051.xxxxx
	G3/8	8	0,83	0 ... 1	0 ... 14	0,3	8208180.8050.xxxxx	8208180.8051.xxxxx

xxxxx Please insert voltage and frequency codes

\*1) Cv-value (US) = kv value x 1,2

\*2) For gases and liquid fluids up to 80 mm³/s (cSt)

**Option selector**

Port size	Substitute
1/4	0
3/8	1
Orifice (mm)	Substitute
3	0
4,5	6
6	7
8	8
Valve options	Substitute
Seat seal FPM, max. fluid temperature +110°C	3
Seat and soft seal PTFE, max. fluid temperature +110°C	6

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Frequency	Substitute
See table frequency codes	xx
Voltage	Substitute
See voltage codes	xxx
Solenoid options	Substitute
G1/4 ... 3/8 Solenoid in V d.c.	8050
G1/4 ... 3/8 Solenoid in V a.c.	8051

**Standard solenoid systems**

Voltage and Frequency Solenoid 8050					
Code Voltage	Code Frequency	Voltage	Frequency	Power consumption	
				Inrush	Holding
024	00	24 V d.c.	-	12 W	12 W
Voltage and Frequency Solenoid 8051					
110	49	110 V a.c. *3)	40 ... 60 Hz	13 VA	13 VA
120	49	120 V a.c. *3)	40 ... 60 Hz	13 VA	13 VA
230	49	230 V a.c. *3)	40 ... 60 Hz	13 VA	13 VA

\*3) A.c. only with rectifier plug

Further versions on request!

**Electrical details for all solenoid systems**

<b>Design</b>	DIN VDE 0580
<b>Voltage range</b>	±10%
<b>Duty cycle</b>	100% ED
<b>Protection class</b>	EN 60529 IP65
<b>Socket</b>	Form A acc. to DIN EN 175301-803 (included)

According to DIN VDE 0580 at a solenoid temperature of +20°C. At operating state temperature the input power of a coil decreases by up to ca. 30% due to physical reasons.

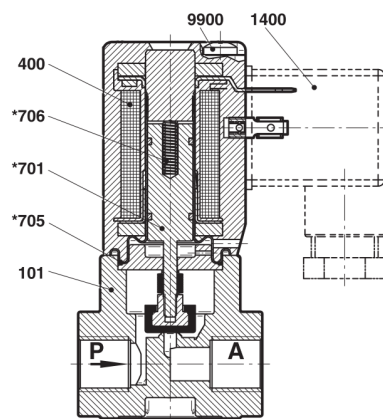
**Additional solenoid systems for hazardous areas**

ATEX-category	ATEX-protection class	IP-protection class	Solenoid	Standard voltages
II 2G	Ex eb mb IIC T3 Gb	IP66	6202	24 V d.c., 110 V a.c., 230 V a.c.
II 2D	Ex mb tb IIIB T150°C Db			

**Attention!**

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

**Section View**  
G1/4 ... 3/8



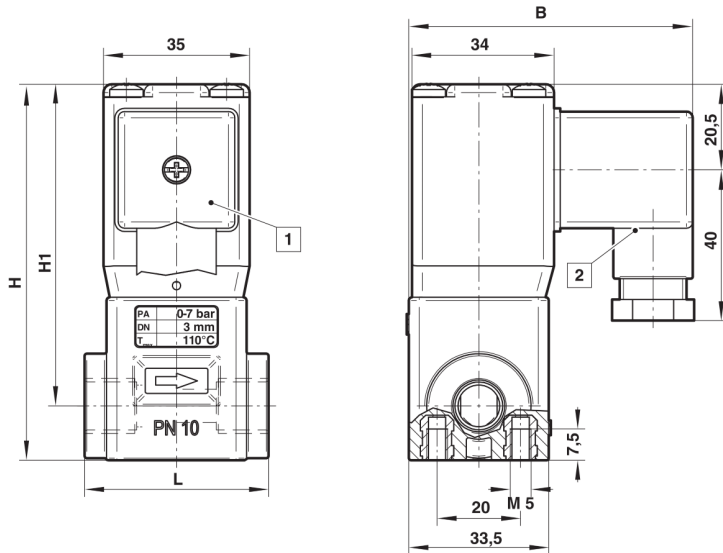
No.	Description
101	Valve body
400	Solenoid
*701	Plunger
*705	O-ring
*706	Pressure spring
1400	Socket (included)
9900	Oval head cap screw

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

**Dimensions**

**G1/4 ... 3/8**

Dimensions in mm  
Projection/First angle



- 1 Solenoid rotatable 4 x 90°
- 2 Socket turnable 4 x 90°  
(Socket included)

Port size R	Orifice (mm)	B *4)	H	H1	L	Model
G1/4	3	70	90	77	44	8208000.805x.xxxxx
G3/8	3	70	90	77	44	8208100.805x.xxxxx
G1/4	4,5	70	90	77	44	8208060.805x.xxxxx
G3/8	4,5	70	90	77	44	8208160.805x.xxxxx
G1/4	6	70	90	77	44	8208070.805x.xxxxx
G3/8	6	70	90	77	44	8208170.805x.xxxxx
G1/4	8	70	90	77	44	8208080.805x.xxxxx
G3/8	8	70	90	77	44	8208180.805x.xxxxx

\*4) max. depth

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

The valves of this series are according to Art. 4 § 3 of the Pressure Equipment Directive (PED) 2014/68/EU. 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 Compatibility Guideline (2014/30/EU) satisfied.

**Note to EAC marking:**

The EAC-marked products comply with the applicable requirements stated in the technical regulations of the Eurasian Economic Union.