# 2/2-way valves DN 8 to DN 25

**For hot water and steam**
**Indirectly solenoid actuated**
**Diaphragm valves**
**Internal thread G 1/4 to G 1 or 1/4 NPT to 1 NPT**
**Operating pressure 0.1 to 10 bar**

**82470**
**82680**

## Description (standard valve)

Solenoid valve for hot water and steam

| | |
|---|---|
| Switching function: | normally closed |
| Flow direction: | determined |
| Differential pressure: | 0.1 bar required |
| Fluid temperature: | 0 °C up to max. +150 °C |
| Ambient temperature: | –10 °C up to max. +60 °C |
| Mounting position: | as required, preferably with solenoid vertical on top |

Click-on®



## Material

| | |
|---|---|
| Body: | Brass (CW617N) |
| Seat seal: | HNBR |
| Internal parts: | Stainless steel, brass |

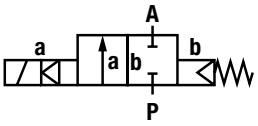
For contaminated fluids insertion of a strainer is recommended (see **Buschjost** - accessories).

## Features

- High flow rate
- Damped operation
- Functional compact design
- Solenoid interchangeable without tools (***Click-on***®)
- Particularly suitable as a water valve according to DIN EN 60730-2-8

EC type examination up to ND 25
acc. to DIN EN 60730-2-8
Solenoid Valves
Test laboratory
TÜV Rheinland / Brandenburg

## Symbol




## Ordering information

To order, quote model number from table overleaf, e.g. 8247400.9101 for a DN 25 valve.



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## Characteristic data

Valves

| Part Number Solenoid ⎓ or ∼ | Nominal Diameter (mm) | Connection size | Valve length (mm) | Operating pressure * min. (bar) | max. (bar) | $k_V$-value ** (Base $m^3/h$) | Weight (kg) |
|---|---|---|---|---|---|---|---|
| 8247000.9101<br>8268000.9101 | 8 | G 1/4<br>1/4 NPT | 60 | 0.1 | 10 | 1.70 | 0.47 |
| 8247100.9101<br>8268100.9101 | 10 | G 3/8<br>3/8 NPT | 60 | 0.1 | 10 | 2.70 | 0.45 |
| 8247200.9101<br>8268200.9101 | 12 | G 1/2<br>1/2 NPT | 67 | 0.1 | 10 | 3.40 | 0.50 |
| 8247300.9101<br>8268300.9101 | 20 | G 3/4<br>3/4 NPT | 80 | 0.1 | 10 | 5.50 | 0.65 |
| 8247400.9101<br>8268400.9101 | 25 | G 1<br>1 NPT | 95 | 0.1 | 10 | 8.50 | 0.95 |

* for gases and liquid fluids up to 25 $mm^2/s$ (cSt)
** $C_V$-value (US) ≈ $k_V$-value x 1.2

State voltage [V] and frequency [Hz

## Solenoid 9101

Standard voltage

| DC ⎓ | AC ∼ 50 Hz | 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)
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 |
|---|---|---|---|
| **9101 *** | 8 W | 15 VA | 12 VA |

* c SP us coil only

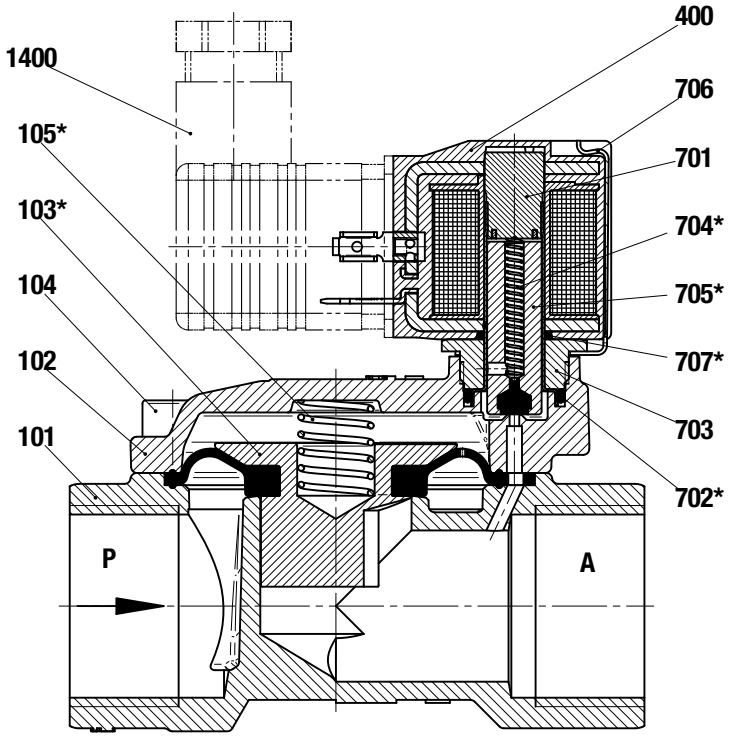
**Attention!**
The conditions imposed on the Ex approvals lead to reduction of the permissible standard temperature ranges in the cases of explosion protected solenoids.

## Further options (Valves)

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

On request Further versions

## Section View

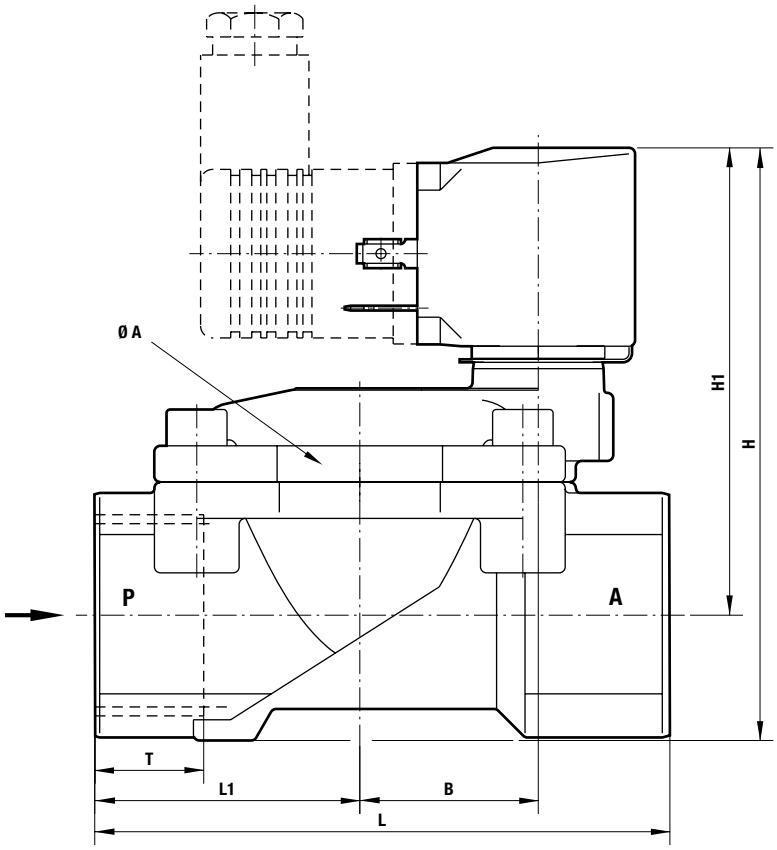



101 Valve body
102 Valve cover
*103 Diaphragm
104 Allen head screw
*105 Pressure spring
400 Solenoid
701 Core tube
*702 O-ring
703 Screw piece
*704 Pressure spring
*705 Core
706 Spring clip
*707 O-ring
1400 Electrical connector (included)

* 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) | Connection size | Ø A (mm) | B (mm) | H (mm) | H1 (mm) | L (mm) | L1 (mm) | T (mm) |
|---|---|---|---|---|---|---|---|---|---|
| 8247000.9101<br>8268000.9101 | 8 | G 1/4<br>1/4 NPT | 44 | 19,5 | 78.5 | 67 | 60 | 27.5 | 12.0 |
| 8247100.9101<br>8268100.9101 | 10 | G 3/8<br>3/8 NPT | 44 | 19,5 | 78.5 | 67 | 60 | 27.5 | 12.0 |
| 8247200.9101<br>8268200.9101 | 12 | G 1/2<br>1/2 NPT | 44 | 19,5 | 81.,0 | 67 | 67 | 31.0 | 14.0 |
| 8247300.9101<br>8268300.9101 | 20 | G 3/4<br>3/4 NPT | 50 | 24,0 | 88.0 | 71.5 | 80 | 36.5 | 16.0 |
| 8247400.9101<br>8268400.9101 | 25 | G 1<br>1 NPT | 62 | 29,5 | 97.5 | 77 | 95 | 44.0 | 18.0 |

**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.