

2/2-way valves DN 8 to DN 50
 for slightly aggressive gaseous and liquid fluids
 Indirectly solenoid actuated
 Diaphragm valves
 Internal threads G 1/4 to G 2 or 1/4" NPT to 2" NPT
 Operating pressure 0.1 to 16 bar

Click-on®
Stainless Steel

82730
 82740

Description (standard valve)

Solenoid valve for e.g. slightly aggressive gaseous and liquids

| | |
|----------------------|---|
| Switching function: | Normally closed |
| Flow direction: | determined |
| Fluid temperature: | -10°C to max. +90°C |
| Ambient temperature: | -10°C to max. +50°C |
| Mounting position: | optional, preferably solenoid vertical on top |

Material

| | |
|-----------------|-------------------------------------|
| Body and Cover: | Stainless steel (1.4408 / AISI 316) |
| Seat seal: | NBR |
| Internal parts: | Stainless steel, PVDF |

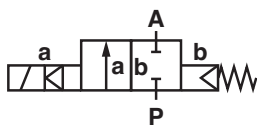


For contaminated fluids insertion of a strainer is recommended (see accessories).

Features

- High flow rate
- Damped operation
- Clear compact design
- Solenoid interchangeable without tools (*Click-on®*)

Symbol



Ordering information

To order, quote model number from table overleaf, e.g. 8273000.9101 for a G 1/4 valve with standard solenoid.

Characteristic data

See page 2 valve and solenoid informations

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
<http://www.buschjost.com>
mail@buschjost.de

Characteristic data

Valves

| Part Number with DC or AC solenoid | Nominal Diameter (mm) | Port size | Valve length (mm) | Operating pressure* | | kv-value** (Base m ³ /h) | Weight (kg) |
|---------------------------------------|--------------------------|-----------------------|----------------------|---------------------|------|--|-------------|
| | | | | min. | max. | | |
| 8273000.9101 8274000.9101 | 8 | G 1/4 1/4" NPT | 60 | 0.1 | 16 | 1.90 | 0.47 |
| 8273100.9101 8274100.9101 | 10 | G 3/8 3/8" NPT | 60 | 0.1 | 16 | 3.00 | 0.45 |
| 8273200.9101 8274200.9101 | 12 | G 1/2 1/2" NPT | 67 | 0.1 | 16 | 3.80 | 0.50 |
| 8273300.9101 8274300.9101 | 20 | G 3/4 3/4" NPT | 80 | 0.1 | 16 | 6.10 | 0.65 |
| 8273400.9101 8274400.9101 | 25 | G 1 1" NPT | 95 | 0.1 | 16 | 9.50 | 0.95 |
| 8273500.9101 8274500.9101 | 32 | G 1 1/4 1 1/4" NPT | 132 | 0.1 | 10 | 23 | 2.60 |
| 8273500.9151 8274500.9151 | 32 | G 1 1/4 1 1/4" NPT | 132 | 0.1 | 16 | 23 | 2.84 |
| 8273600.9101 8274600.9101 | 40 | G 1 1/2 1 1/2" NPT | 132 | 0.1 | 10 | 25 | 2.42 |
| 8273600.9151 8274600.9151 | 40 | G 1 1/2 1 1/2" NPT | 132 | 0.1 | 16 | 25 | 2.66 |
| 8273700.9101 8274700.9101 | 50 | G2 2" NPT | 160 | 0.1 | 10 | 41 | 3.62 |
| 8273700.9151 8274700.9151 | 50 | G2 2" NPT | 160 | 0.1 | 16 | 41 | 3.86 |

State voltage [V] and frequency [Hz]

* with gaseous and liquid fluids up to 25 mm³/s (cSt)
 ** C_v-value (US) ≈ k_v-value x 1.2

9101 / 9151 Solenoid

Standard voltages

| DC === | AC ~ 50 Hz | AC ~ 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 acc. to DIN EN 175301-803 (included)

Attention! Standard core tube with copper shading coil

Look for fluid resistant further options

Power Consumption

According to DIN VDE 0580 at coil temperature +20 °C. In operating the solenoid coil decrease the power consumption appr. 30 %.

| Solenoid | DC === | AC ~ Inrush | AC ~ 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 temperatures ranges in the case of explosion protected solenoids.

For technical details see catalogue register "Solenoids".

Options (Valves)

- XXXXX01.XXXX Normally open (NO)
 - XXXXX02.XXXX Manual override
 - XXXXX03.XXXX Seat seal FPM,
max. fluid temperature +110°C
 - XXXXX14.XXXX Seat seal EPDM, for hot water,
max. fluid temperature +110°C;
0.3 to 16 bar up to DN 25
 - XXXXX81.XXXX Core tube stainless steel,
Seat seal FPM,
max. fluid temperature +110°C,
for AC voltage: solenoid with rectifier
- On request Further versions

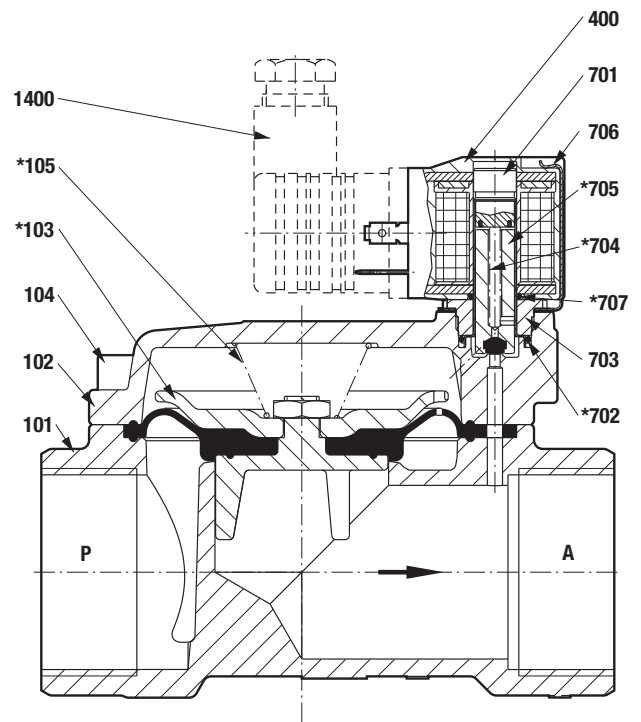
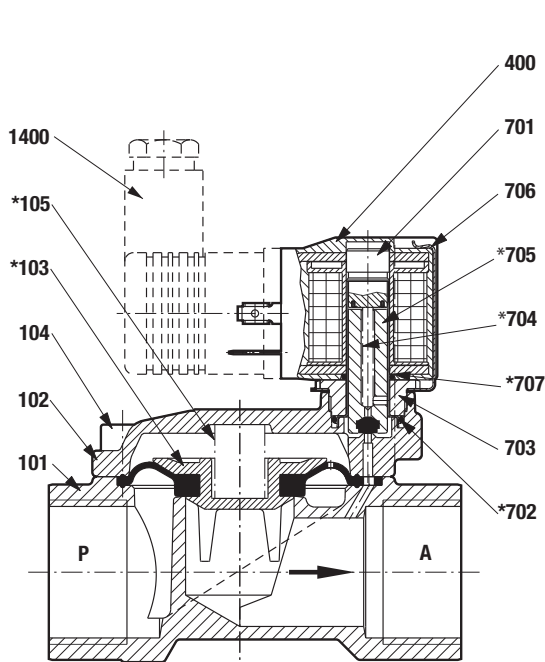
Options (Solenoids)

- XXXXXX.9136 Solenoid in protection class
 II 2 GD EEx m II T4 T 130°C,
with 3 m connection cable, for AC/DC
- On request Further versions

Section View

to G 1 e.g. 1" NPT

up to G 1 1/4 e.g. 1 1/4" NPT

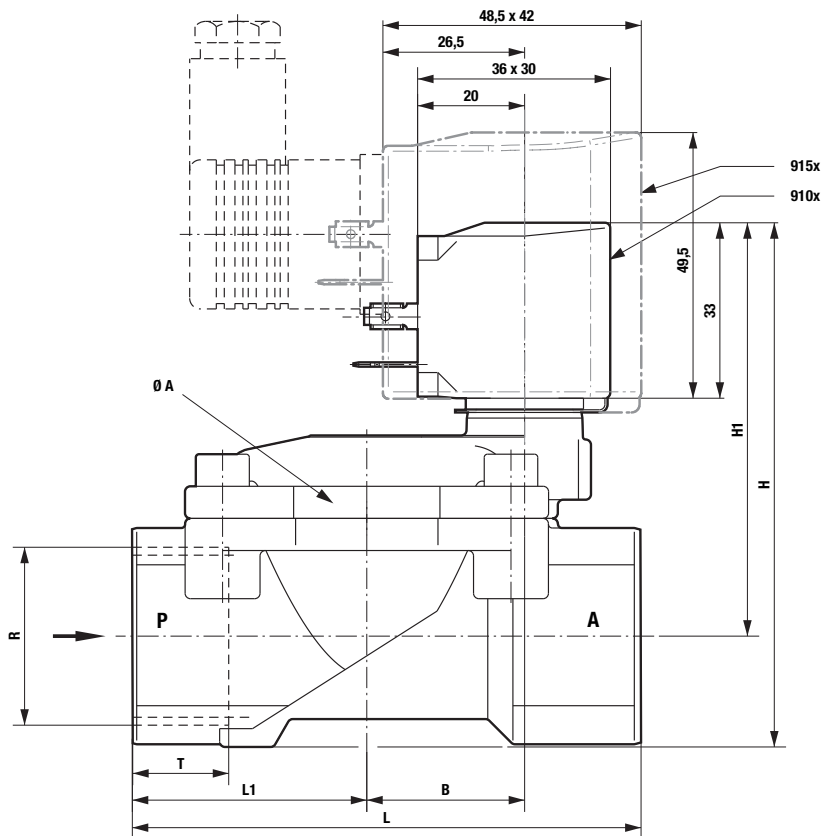


- 101 Valve body
- 102 Valve cover
- *103 Diaphragm
- 104 Socket head cap screw
- *105 Pressure spring
- 400 Solenoid
- 701 Core tube
- *702 O-ring
- 703 Screw piece
- *704 Pressure spring
- *705 Core
- 706 Spring clip
- *707 O-ring
- 1400 Socket (included)

* 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 | Ø A | B | H | H1 | L | L1 | R | T |
|------------------------------|-----|------|-------|-------|-----|------|-----------------------|--------------|
| 827300.9101 827400.9101 | 44 | 19.5 | 78.5 | 67.0 | 60 | 27.5 | G 1/4 1/4" NPT | 12.0 10.0 |
| 8273100.9101 8274100.9101 | 44 | 19.5 | 78.5 | 67.0 | 60 | 27.5 | G 3/8 3/8" NPT | 12.0 10.5 |
| 8273200.9101 8274200.9101 | 44 | 19.5 | 81.0 | 67.0 | 67 | 31.0 | G 1/2 1/2" NPT | 14.0 13.5 |
| 8273300.9101 8274300.9101 | 50 | 24.0 | 88.0 | 71.5 | 80 | 36.5 | G 3/4 3/4" NPT | 16.0 14.0 |
| 8273400.9101 8274400.9101 | 62 | 29.5 | 97.5 | 77.0 | 95 | 44.0 | G 1 1" NPT | 18.0 17.0 |
| 8273500.9101 8274500.9101 | 92 | 44.5 | 124.5 | 95.5 | 132 | 60.0 | G 1 1/4 1 1/4" NPT | 20.0 17.0 |
| 8273500.9151 8274500.9151 | 92 | 44.5 | 124.5 | 95.5 | 132 | 60.0 | G 1 1/4 1 1/4" NPT | 20.0 17.0 |
| 8273600.9101 8274600.9101 | 92 | 44.5 | 124.5 | 95.5 | 132 | 60.0 | G 1 1/2 1 1/2" NPT | 22.0 17.0 |
| 8273600.9151 8274600.9151 | 92 | 44.5 | 124.5 | 95.5 | 132 | 60.0 | G 1 1/2 1 1/2" NPT | 22.0 17.0 |
| 8273700.9101 8274700.9101 | 109 | 54.5 | 142.5 | 108.0 | 160 | 74.0 | G 2 2" NPT | 24.0 17.5 |
| 8273700.9151 8274700.9151 | 109 | 54.5 | 142.5 | 108.0 | 160 | 74.0 | G 2 2" NPT | 24.0 17.5 |

Hinweis zur Druckgeräterichtlinie (DGRL):

Die Ventile dieser Baureihe entsprechen Art. 3 Abs. (3) der Druckgeräterichtlinie (DGRL) 97/23/EG. Das bedeutet Auslegung und Herstellung nach der im Mitgliedsstaat geltenden guten Ingenieurpraxis. Die CE-Kennzeichnung am Ventil bezieht sich nicht auf die DGRL. Somit entfällt die Konformitätserklärung nach dieser Richtlinie.

Hinweis zur EMV-Richtlinie:

Durch eine geeignete elektrische Beschaltung der Ventile ist sicherzustellen, dass die Grenzwerte der harmonisierten Normen EN 61000-6-3 und EN 61000-6-2 eingehalten werden und damit die Richtlinie 89/336/EWG (Elektromagnetische Verträglichkeit) erfüllt ist.