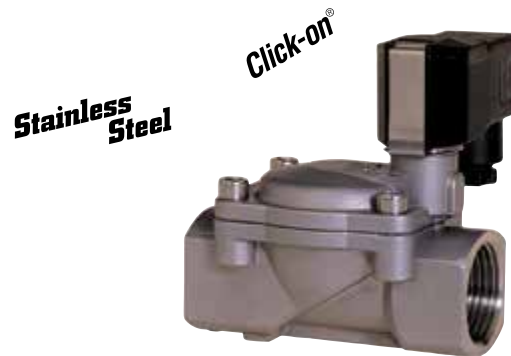


- > Port size: DN 8 ... 50,  
1/4" ... 2" (ISO G/NPT)
- > High flow rate
- > Damped operation
- > Functional compact design
- > Solenoid interchangeable without tools (Click-on®)



### Technical features

**Medium:**  
Slightly aggressive gases and liquid fluids

**Switching function:**  
Normally closed

**Operation:**  
Indirectly solenoid actuated

**Mounting position:**  
Optional, preferably solenoid vertical on top

**Flow direction:**  
Determined

**Port size:**  
G1/4, G3/8, G1/2, G3/4, G1, G1 1/4, G1 1/2, G2

**Operating pressure:**  
See table

**Differential pressure:**  
0,1 bar (1,45 psi) required

**Fluid temperature:**  
-10° ... +90°C (+14° ... +194°F)

**Ambient temperature:**  
-10° ... +50°C (+14° ... +122°F)

**Material:**  
Body: Stainless steel (1.4408)  
Seat seal: NBR  
Internal parts: Stainless steel, PVDF

For contaminated fluids insertion of a strainer is recommended.

### Technical data - standard models

| Symbol | Port size | Orifice (mm) | Valve length (mm) | Flow kv value *1 (m³/h) | Operating pressure *2 (bar) | Weight (kg)        | Model Solenoid in d.c./a.c. |
|--------|-----------|--------------|-------------------|-------------------------|-----------------------------|--------------------|-----------------------------|
|        | G1/4      | 8            | 60                | 1,9                     | 0,1 ... 16                  | 0,47               | 8273000.9101.xxxxx          |
|        | 1/4 NPT   | 8            | 60                | 1,9                     | 0,1 ... 16                  | 0,47               | 8274000.9101.xxxxx          |
|        | G3/8      | 10           | 60                | 3                       | 0,1 ... 16                  | 0,45               | 8273100.9101.xxxxx          |
|        | 3/8 NPT   | 10           | 60                | 3                       | 0,1 ... 16                  | 0,45               | 8274100.9101.xxxxx          |
|        | G1/2      | 12           | 67                | 3,8                     | 0,1 ... 16                  | 0,5                | 8273200.9101.xxxxx          |
|        | 1/2 NPT   | 12           | 67                | 3,8                     | 0,1 ... 16                  | 0,5                | 8274200.9101.xxxxx          |
|        | G3/4      | 20           | 80                | 6,1                     | 0,1 ... 16                  | 0,65               | 8273300.9101.xxxxx          |
|        | 3/4 NPT   | 20           | 80                | 6,1                     | 0,1 ... 16                  | 0,65               | 8274300.9101.xxxxx          |
|        | G1        | 25           | 95                | 9,5                     | 0,1 ... 16                  | 0,95               | 8273400.9101.xxxxx          |
|        | 1 NPT     | 25           | 95                | 9,5                     | 0,1 ... 16                  | 0,95               | 8274400.9101.xxxxx          |
|        | G1 1/4    | 32           | 132               | 23                      | 0,1 ... 10                  | 2,6                | 8273500.9101.xxxxx          |
|        | 1 1/4 NPT | 32           | 132               | 23                      | 0,1 ... 10                  | 2,6                | 8274500.9101.xxxxx          |
|        | G1 1/4    | 32           | 132               | 23                      | 0,1 ... 16                  | 2,6                | 8273500.9151.xxxxx          |
|        | 1 1/4 NPT | 32           | 132               | 23                      | 0,1 ... 16                  | 2,6                | 8274500.9151.xxxxx          |
|        | G1 1/2    | 40           | 132               | 25                      | 0,1 ... 10                  | 2,84               | 8273600.9101.xxxxx          |
|        | 1 1/2 NPT | 40           | 132               | 25                      | 0,1 ... 10                  | 2,84               | 8274600.9101.xxxxx          |
|        | G1 1/2    | 40           | 132               | 25                      | 0,1 ... 16                  | 2,84               | 8273600.9151.xxxxx          |
|        | 1 1/2 NPT | 40           | 132               | 25                      | 0,1 ... 16                  | 2,84               | 8274600.9151.xxxxx          |
|        | G2        | 50           | 160               | 41                      | 0,1 ... 10                  | 3,85               | 8273700.9101.xxxxx          |
|        | 2 NPT     | 50           | 160               | 41                      | 0,1 ... 10                  | 3,85               | 8274700.9101.xxxxx          |
| G2     | 50        | 160          | 41                | 0,1 ... 16              | 3,85                        | 8273700.9151.xxxxx |                             |
| 2 NPT  | 50        | 160          | 41                | 0,1 ... 16              | 3,85                        | 8274700.9151.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 25 mm²/s (cSt)

**Option selector**

827\*\*\*\*\*

| Thread form                                                                                                                | Substitute |
|----------------------------------------------------------------------------------------------------------------------------|------------|
| ISO G                                                                                                                      | 3          |
| NPT                                                                                                                        | 4          |
| Port size                                                                                                                  | Substitute |
| 1/4"                                                                                                                       | 0          |
| 3/8"                                                                                                                       | 1          |
| 1/2"                                                                                                                       | 2          |
| 3/4"                                                                                                                       | 3          |
| 1"                                                                                                                         | 4          |
| 1 1/4"                                                                                                                     | 5          |
| 1 1/2"                                                                                                                     | 6          |
| 2"                                                                                                                         | 7          |
| Valve options                                                                                                              | Substitute |
| Normally open (NO),<br>from G1 1/4 with solenoid 9151<br>0,1 ... 16 bar (14,5 ... 232 psi)                                 | 01         |
| Manual override                                                                                                            | 02         |
| Seat seal FPM,<br>Fluid temperature -5 ... +110°C                                                                          | 03         |
| Seat seal EPDM,<br>for hot water,<br>Fluid temperature +110°C<br>0,3 ... 16 bar (up to G1)<br>0,3 ... 10 bar (from G1 1/4) | 14         |
| Core tube stainless steel,<br>Seat seal FPM,<br>Fluid temperature +110°C<br>for a.c. solenoid with rectifier               | 50         |
| Version for drinking water<br>with test according to KTW                                                                   | 88         |

| Frequency                                                               | Substitute |
|-------------------------------------------------------------------------|------------|
| See table frequency codes                                               | xx         |
| Voltage                                                                 | Substitute |
| See Voltage codes                                                       | xxx        |
| Solenoid options                                                        | Substitute |
| G1/4 ... 1<br>Operating pressure<br>0,1 ... 16 bar (14,5 ... 232 psi)   | 9101       |
| G1 1/4 ... 2<br>Operating pressure<br>0,1 ... 10 bar (14,5 ... 145 psi) | 9101       |
| G1 1/4 ... 2<br>Operating pressure<br>0,1 ... 16 bar (14,5 ... 232 psi) | 9151       |

**Standard solenoid systems**

| Voltage and Frequency Solenoid 9101 *1) *2) |           |            |           |                   |         |  |
|---------------------------------------------|-----------|------------|-----------|-------------------|---------|--|
| Code                                        | Code      | Voltage    | Frequency | Power consumption |         |  |
| Voltage                                     | Frequency |            |           | Inrush            | Holding |  |
| 024                                         | 00        | 24 V d.c.  | -         | 8 W               | 8 W     |  |
| 024                                         | 50        | 24 V a.c.  | 50 Hz     | 15 VA             | 12 VA   |  |
| 110                                         | 50        | 110 V a.c. | 50 Hz     | 15 VA             | 12 VA   |  |
| 120                                         | 60        | 120 V a.c. | 60 Hz     | 15 VA             | 12 VA   |  |
| 230                                         | 50        | 230 V a.c. | 50 Hz     | 15 VA             | 12 VA   |  |
| Voltage and Frequency Solenoid 9151 *1) *2) |           |            |           |                   |         |  |
| 024                                         | 00        | 24 V d.c.  | -         | 18 W              | 18 W    |  |
| 024                                         | 50        | 24 V a.c.  | 50 Hz     | 45 VA             | 35 VA   |  |
| 110                                         | 50        | 110 V a.c. | 50 Hz     | 45 VA             | 35 VA   |  |
| 120                                         | 60        | 120 V a.c. | 60 Hz     | 45 VA             | 35 VA   |  |
| 230                                         | 50        | 230 V a.c. | 50 Hz     | 45 VA             | 35 VA   |  |

\*1) <sub>US</sub> Coil only

\*2) **Attention!** Standard core tube with copper shading coil.  
Look for fluid resistant further options

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

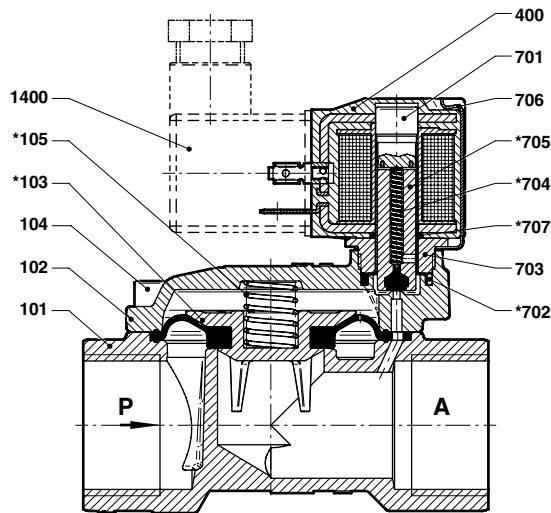


**Additional solenoid systems**

| ATEX category | Protection class                                 | Solenoid | Standard voltages                 |
|---------------|--------------------------------------------------|----------|-----------------------------------|
| I/2GD         | EEx m II T4 T 130°C<br>with 3 m connection cable | 9136     | 24 V d.c., 110 V a.c., 230 V a.c. |

**Attention!**

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

**Section View**
**G1/4 ... 2**  
**1/4 ... 2 NPT**


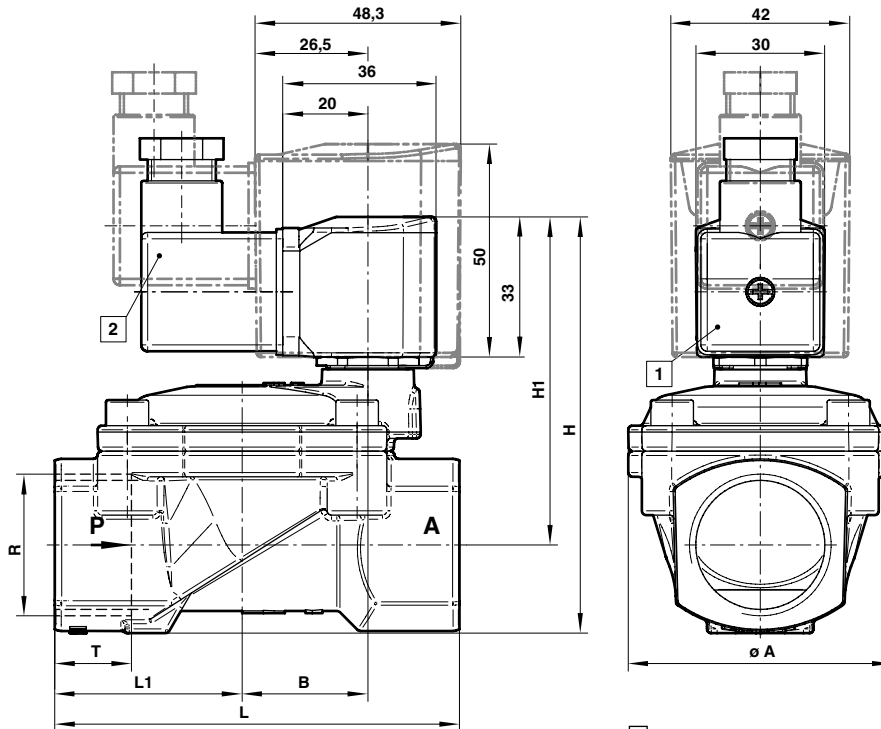
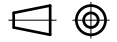
| No.  | Description       |
|------|-------------------|
| 101  | Valve body        |
| 102  | Valve cover       |
| *103 | Diaphragm         |
| 104  | Allen head screw  |
| *105 | Pressure spring   |
| 400  | Solenoid          |
| 701  | Core tube         |
| *702 | O-ring            |
| 703  | Screw piece       |
| *704 | Pressure spring   |
| *705 | Plunger           |
| 706  | Spring clip       |
| *707 | O-ring            |
| 1400 | Socket (included) |

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

**Dimensions**

**G1/4 ... 2**  
**1/4 ... 2 NPT**

Dimensions in mm  
Projection/First angle



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

| Port size R | A   | B    | H     | H1   | L   | L1   | T    | Model              |
|-------------|-----|------|-------|------|-----|------|------|--------------------|
| G1/4        | 44  | 19,5 | 78,5  | 67   | 60  | 27,5 | 12   | 8273000.9101.xxxxx |
| 1/4 NPT     | 44  | 19,5 | 78,5  | 67   | 60  | 27,5 | 10   | 8274000.9101.xxxxx |
| G3/8        | 44  | 19,5 | 78,5  | 67   | 60  | 27,5 | 12   | 8273100.9101.xxxxx |
| 3/8 NPT     | 44  | 19,5 | 78,5  | 67   | 60  | 27,5 | 10,5 | 8274100.9101.xxxxx |
| G1/2        | 44  | 19,5 | 81    | 67   | 67  | 31   | 14   | 8273200.9101.xxxxx |
| 1/2 NPT     | 44  | 19,5 | 81    | 67   | 67  | 31   | 13,5 | 8274200.9101.xxxxx |
| G3/4        | 50  | 24   | 88    | 71,5 | 80  | 36,5 | 16   | 8273300.9101.xxxxx |
| 3/4 NPT     | 50  | 24   | 88    | 71,5 | 80  | 36,5 | 14   | 8274300.9101.xxxxx |
| G1          | 62  | 29,5 | 97,5  | 77   | 95  | 44   | 18   | 8273400.9101.xxxxx |
| 1 NPT       | 62  | 29,5 | 97,5  | 77   | 95  | 44   | 17   | 8274400.9101.xxxxx |
| G 1 1/4     | 92  | 44,5 | 124,5 | 95,5 | 132 | 60   | 20   | 8273500.9101.xxxxx |
| 1 1/4 NPT   | 92  | 44,5 | 124,5 | 95,5 | 132 | 60   | 17   | 8274500.9101.xxxxx |
| G1 1/2      | 92  | 44,5 | 124,5 | 95,5 | 132 | 60   | 22   | 8273600.9101.xxxxx |
| 1 1/2 NPT   | 92  | 44,5 | 124,5 | 95,5 | 132 | 60   | 17   | 8274600.9101.xxxxx |
| G2          | 109 | 54,5 | 142,5 | 108  | 160 | 74   | 24   | 8273700.9101.xxxxx |
| 2 NPT       | 109 | 54,5 | 142,5 | 108  | 160 | 74   | 17,5 | 8274700.9101.xxxxx |

**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) satisfied.