



## Direct-acting 2/2-way plunger valve

- Direct-acting and compact small valve up to DN 2.4
- Slipped over coil system
- Simple and fast flange or manifold mounting
- Quick coupling (push-in fitting) for push-in connectors
- Explosion-proof variants

Product variants described in the data sheet may differ from the product presentation and description.

### Type description

The 7011 valve is a direct-acting plunger valve. The stopper and the core guide tube are welded together to increase pressure resistance and leak-tightness. Various housing and seal material combinations are available depending on the actual application. A Bürkert-specific flange variant (SFB) enables the space-saving arrangement of valves on a multiple manifold. The range is supplemented by variants conforming to DVGW EN 161 and explosion-proof variants. Push-in fittings can be selected for a flexible hose connection. In combination with a plug conforming to DIN EN 175301 - 803 shape B, the valves satisfy degree of protection IP65.

## Table of contents

|                                                               |           |
|---------------------------------------------------------------|-----------|
| <b>1. General technical data</b>                              | <b>4</b>  |
| 1.1. Standard version.....                                    | 4         |
| 1.2. DVGW version.....                                        | 5         |
| 1.3. ATEX/IECEX cable version .....                           | 5         |
| <b>2. Circuit functions</b>                                   | <b>6</b>  |
| <b>3. Approvals and conformities</b>                          | <b>6</b>  |
| 3.1. General notes .....                                      | 6         |
| 3.2. Conformity .....                                         | 6         |
| 3.3. Standards.....                                           | 6         |
| 3.4. Explosion protection.....                                | 6         |
| 3.5. North America (USA/Canada) .....                         | 6         |
| 3.6. Drinking water .....                                     | 7         |
| 3.7. Foods and beverages/Hygiene .....                        | 7         |
| 3.8. Others .....                                             | 7         |
| Fuel gases .....                                              | 7         |
| <b>4. Materials</b>                                           | <b>7</b>  |
| 4.1. Bürkert resistApp .....                                  | 7         |
| 4.2. Material specifications .....                            | 8         |
| Standard version circuit function A .....                     | 8         |
| Standard version circuit function B .....                     | 8         |
| ATEX/IECEX cable version .....                                | 9         |
| <b>5. Dimensions</b>                                          | <b>10</b> |
| 5.1. Standard version.....                                    | 10        |
| Threaded version.....                                         | 10        |
| Flange version .....                                          | 10        |
| Flange pattern .....                                          | 11        |
| 5.2. ATEX/IECEX cable version .....                           | 11        |
| Threaded version.....                                         | 11        |
| Flange version .....                                          | 12        |
| Flange pattern .....                                          | 13        |
| 5.3. Coil versions .....                                      | 13        |
| Versions according to industry standard form B .....          | 13        |
| Further electrical connections.....                           | 14        |
| 5.4. Single manifold.....                                     | 14        |
| 5.5. Multiple manifold.....                                   | 15        |
| Manifolds for valves with 20 mm coil (SG2) .....              | 15        |
| Manifolds for valves with 24.5 mm coil (SG3) resp. WW B ..... | 15        |
| <b>6. Device/Process connections</b>                          | <b>16</b> |
| 6.1. Pin assignment.....                                      | 16        |
| Pin assignment vacuum applications.....                       | 16        |
| <b>7. Performance specifications</b>                          | <b>17</b> |
| 7.1. Power consumption .....                                  | 17        |
| Standard version, coil size 24.5 mm.....                      | 17        |
| Standard version, coil size 20 mm.....                        | 18        |

|                                                                                 |           |
|---------------------------------------------------------------------------------|-----------|
| <b>8. Ordering information</b>                                                  | <b>19</b> |
| 8.1. Bürkert eShop .....                                                        | 19        |
| 8.2. Bürkert product filter .....                                               | 19        |
| 8.3. Bürkert Product Enquiry Form .....                                         | 19        |
| 8.4. Ordering chart .....                                                       | 20        |
| Standard version according to industry standard form B, coil size 24.5 mm ..... | 20        |
| DVGW version.....                                                               | 23        |
| ATEX/IECEX cable version .....                                                  | 24        |
| Standard version according to industry standard form B, coil size 20 mm .....   | 24        |
| Additional options .....                                                        | 27        |
| 8.5. Ordering chart accessories.....                                            | 27        |
| Single manifold .....                                                           | 27        |
| Multiple manifold.....                                                          | 27        |
| Accessories for manifolds .....                                                 | 27        |
| Accessories for G 1/8" threaded connections.....                                | 27        |
| Cable plug Type 2516, form C according to DIN EN 175301 - 803 .....             | 28        |
| Cable plug Type 2507, form B according to industry standard.....                | 29        |

DTS 1000446515 EN Version: K Status: RL (released | freigegeben | validé) printed: 18.12.2024

## 1. General technical data

### 1.1. Standard version

|                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product properties</b>                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Dimensions                                         | Further information can be found in chapter <a href="#">“5. Dimensions” on page 10.</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Material</b>                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Seal                                               | FKM, EPDM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Body                                               | Brass, polyamide (PA), stainless steel 1.4305/303                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Manual override                                    | Optional                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Weight</b>                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Standard version<br>24.5 mm solenoid coil          | 146 g (with G 1/8)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Standard version<br>20 mm solenoid coil            | 120 g (with G 1/8)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Orifice                                            | DN 1.2...DN 2.4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Circuit function                                   | A and B<br>Further information can be found in chapter <a href="#">“2. Circuit functions” on page 6.</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Thermal insulation class of<br>solenoid coil       | Epoxy coil class H                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Performance data</b>                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Nominal operating mode</b>                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Single valve                                       | Continuous operation 100 % ED resp. 50 % ED                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| For block mounting on multiple<br>manifold         | With 4 W/5 W solenoid coil 100 % ED (at max. 55 °C)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Switching time <sup>1.)</sup>                      | Opening 8...15 ms<br>Closing 10...17 ms                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Electrical data</b>                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Operating voltage                                  | 24 V DC, 24 V/60 Hz, 110 V/50 Hz, 120 V/60 Hz, 230 V/50 Hz, 240 V/60 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Power consumption                                  | Further information can be found in chapter <a href="#">“7. Performance specifications” on page 17.</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Voltage tolerance                                  | ± 10 %                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Medium data</b>                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Operating medium                                   | Neutral gases and fluids (e.g. compressed air, water, hydraulic oil, technical vacuum)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Medium temperature                                 | - 10 °C...+ 100 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Viscosity                                          | Max. 21 mm <sup>2</sup> /s                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Process/Port connection &amp; communication</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Electrical connection                              | <ul style="list-style-type: none"> <li>According to DIN EN 175301 - 803 form C for cable plug <b>Type 2516</b> ▶<br/>Further information can be found in chapter <a href="#">“Cable plug Type 2516, form C according to DIN EN 175301 - 803” on page 28.</a></li> <li>According to industry standard form B for cable plug <b>Type 2507</b> ▶<br/>Further information can be found in chapter <a href="#">“Cable plug Type 2507, form B according to industry standard” on page 29.</a></li> <li>Flat pin terminal as protection class III device</li> <li>Flying leads connection on request for coil size 20 mm</li> </ul> |
| Port connection                                    | M5, G 1/8, NPT 1/8, flange                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Approvals and conformities</b>                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Degree of protection                               | IP65 with cable plug and ATEX/IECEx cable version                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| North America (USA/Canada)                         | Further information can be found in chapter <a href="#">“3.5. North America (USA/Canada)” on page 6.</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Drinking water                                     | Further information can be found in chapter <a href="#">“3.6. Drinking water” on page 7.</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Foods and beverages/Hygiene                        | Further information can be found in chapter <a href="#">“3.7. Foods and beverages/Hygiene” on page 7.</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Environment and installation</b>                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Installation position                              | As required, preferably with actuator upright                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Ambient temperature                                | Max. + 55 °C resp. 75 °C (depending on power level)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

1.) Measurement at + 20 °C, 6 bar at the valve outlet acc. to DIN ISO 12238:2001, opening: pressure build-up 0...10 %, closing: pressure reduction 100...90 %

## 1.2. DVGW version

The solenoid valve Type 7011 DVGW is primarily intended as an automatic safety shut-off valve for fuel gases. A strainer is installed in the inlet of the valve.

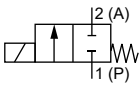
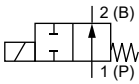
| Product properties                  |                                                                                                                                                                   |
|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Material</b>                     |                                                                                                                                                                   |
| Seal                                | NBR                                                                                                                                                               |
| Body                                | Brass, stainless steel 1.4305/303                                                                                                                                 |
| Circuit function                    | A                                                                                                                                                                 |
| <b>Performance data</b>             |                                                                                                                                                                   |
| Operating pressure                  | Max. 42 bar (depending on orifice and coil power)                                                                                                                 |
| <b>Medium data</b>                  |                                                                                                                                                                   |
| Operating medium                    | Fuel gases (e.g. town gas, district gas, liquid gas, hydrogen)<br>Further information can be found in chapter <a href="#">“4.1. Bürkert resistApp” on page 7.</a> |
| Medium temperature                  | - 20 °C...+ 80 °C                                                                                                                                                 |
| <b>Approvals and conformities</b>   |                                                                                                                                                                   |
| Fuel gases                          | Further information can be found in chapter <a href="#">“3.8. Others” on page 7.</a>                                                                              |
| Standards                           | DIN EN 161:2016, DIN EN 16678:2016                                                                                                                                |
| <b>Environment and installation</b> |                                                                                                                                                                   |
| Ambient temperature                 | - 20 °C...+ 55 °C                                                                                                                                                 |

## 1.3. ATEX/IECEx cable version

| Product properties                                 |                                                                                                    |
|----------------------------------------------------|----------------------------------------------------------------------------------------------------|
| <b>Material</b>                                    |                                                                                                    |
| Seal                                               | FKM, EPDM                                                                                          |
| Body                                               | Brass, stainless steel 1.4305/303                                                                  |
| <b>Connection</b>                                  |                                                                                                    |
| Thread                                             | G 1/8, NPT 1/8, RC 1/8, M5, UNF 10 - 32                                                            |
| Flange                                             | Flange “FK01”                                                                                      |
| Circuit function                                   | A and B                                                                                            |
| Available coil size                                | SG3 (24.5 mm width)                                                                                |
| <b>Performance data</b>                            |                                                                                                    |
| Operating pressure                                 | Max. 34 bar (depending on orifice and coil power)                                                  |
| <b>Medium data</b>                                 |                                                                                                    |
| Operating medium                                   | Neutral gases and fluids (e.g. compressed air, water, hydraulic oil, technical vacuum)             |
| <b>Medium temperature<sup>1.)</sup></b>            |                                                                                                    |
| FKM                                                | - 10 °C...+ 100 °C                                                                                 |
| EPDM                                               | - 30 °C...+ 100 °C                                                                                 |
| <b>Process/Port connection &amp; communication</b> |                                                                                                    |
| Electrical connection                              | ATEX/IECEx cable version with 3 m moulded-in cable                                                 |
| <b>Approvals and conformities</b>                  |                                                                                                    |
| Explosion protection                               | Further information can be found in chapter <a href="#">“3.4. Explosion protection” on page 6.</a> |
| Degree of protection                               | IP65 with cable plug and ATEX/IECEx cable version                                                  |
| <b>Environment and installation</b>                |                                                                                                    |
| <b>Ambient temperature<sup>1.)</sup></b>           |                                                                                                    |
| FKM                                                | - 10 °C...+ 55 °C (max. + 60 °C on request)                                                        |
| EPDM                                               | - 30 °C...+ 55 °C (max. + 60 °C on request)                                                        |

1.) The minimum temperature depends on the seal material.

## 2. Circuit functions

| Symbol                                                                            | Description                                                                                    |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
|  | <b>Circuit function A (CF A)</b><br>2/2-way solenoid valve<br>Direct-acting<br>Normally closed |
|  | <b>Circuit function B (CF B)</b><br>2/2-way solenoid valve<br>Direct-acting<br>Normally open   |

## 3. Approvals and conformities

### 3.1. General notes

- The approvals and conformities listed below must be stated when making enquiries. This is the only way to ensure that the product complies with all required specifications.
- Not all available versions can be supplied with the below mentioned approvals or conformities.

### 3.2. Conformity

In accordance with the Declaration of Conformity, the product is compliant with the EU Directives.

### 3.3. Standards

The applied standards which are used to demonstrate compliance with the EU Directives are listed in the EU-Type Examination Certificate and/or the EU Declaration of Conformity.

### 3.4. Explosion protection

| Approval                                                                            | Description                                                                                                                                                                                                                                                                                                                             |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <b>Optional: Explosion protection (valid for coils with fixed cable outlet)</b><br><br><b>ATEX:</b><br>EPS 21 ATEX 1 128 X<br>II 2G Ex mb IIC T4 Gb<br>II 2D Ex mb IIIC T130 °C Db<br><br><b>IECEx:</b><br>IECEx EPS 21.0045X<br>Ex mb IIC T4 Gb<br>Ex mb IIIC T130 °C Db<br><br>Fixed cable is halogen-free according to IEC 60754 - 1 |

### 3.5. North America (USA/Canada)

| Approval                                                                            | Description                                                                                                                                                                                                                                             |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <b>Valid for coils: UL Recognized for the USA and Canada</b><br>The coils are UL Recognized for the USA and Canada according to: <ul style="list-style-type: none"> <li>UL 429 (electrically operated valves)</li> <li>CAN/CSA-C22.2 No. 139</li> </ul> |

### 3.6. Drinking water

| Conformity                                                                        | Description                                                                                                                                                                                                                                                                                                                                                                                                          |
|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <b>Suitable for use in drinking water applications</b><br>The materials comply with the assessment principles (UBA) for materials in contact with drinking water (TrinkwasserV).<br><br><b>PA body:</b><br>PF36: Suitable for products with a maximum temperature of 60 °C (warm water)<br><br><b>PPS/brass/stainless steel body:</b><br>PF39: Suitable for products with a maximum temperature of 85 °C (hot water) |

### 3.7. Foods and beverages/Hygiene

| Conformity                                                                         | Description                                                                                                                                                                                                                                                        |
|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FDA                                                                                | <b>FDA – Code of Federal Regulations (valid for the variable code PL02, PL03)</b><br>All wetted materials are compliant with the Code of Federal Regulations published by the FDA (Food and Drug Administration, USA) according to the manufacturer's declaration. |
| USP                                                                                | <b>United States Pharmacopeial Convention (USP) (valid for the variable code PL04)</b><br>All wetted materials are biocompatible according to the manufacturer's declaration.                                                                                      |
|  | <b>EC Regulation 1935/2004 of the European Parliament and of the Council (valid for the variable code PL01, PL02)</b><br>All wetted materials are compliant with EC Regulation 1935/2004/EC according to the manufacturer's declaration.                           |

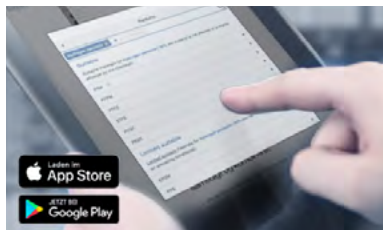
### 3.8. Others

#### Fuel gases

| Conformity                                                                          | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <b>Fuel gases (valid for the variable code PO19)</b><br>The products comply with: <ul style="list-style-type: none"> <li>Regulation (EU) 2016/426 – Appliances burning gaseous fuels and</li> <li>DVGW DIN EN 161 (Automatic shut-off valves for gas burners and gas appliances) and</li> <li>DIN EN 16678, Class A or Class D (Safety and control devices for gas burners and gas burning appliances – Automatic shut-off valves for operating pressure of above 500 kPa up to and including 6300 kPa)</li> </ul> |
|  | <b>Optional: DIN EN 549:2023-07 certification</b><br>The wetted valve seals are compliant with DIN EN 549:2023-07 (Rubber materials for seals and diaphragms for gas appliances and gas equipment) for medium temperatures of - 20 °C...+ 80 °C.                                                                                                                                                                                                                                                                   |

## 4. Materials

### 4.1. Bürkert resistApp



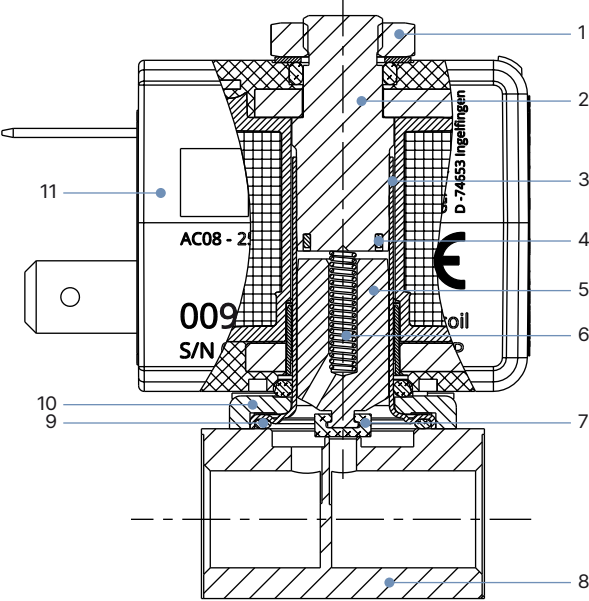
#### Bürkert resistApp – Chemical resistance chart

You want to ensure the reliability and durability of the materials in your individual application case? Verify your combination of media and materials on our website or in our resistApp.

[Start chemical resistance check](#)

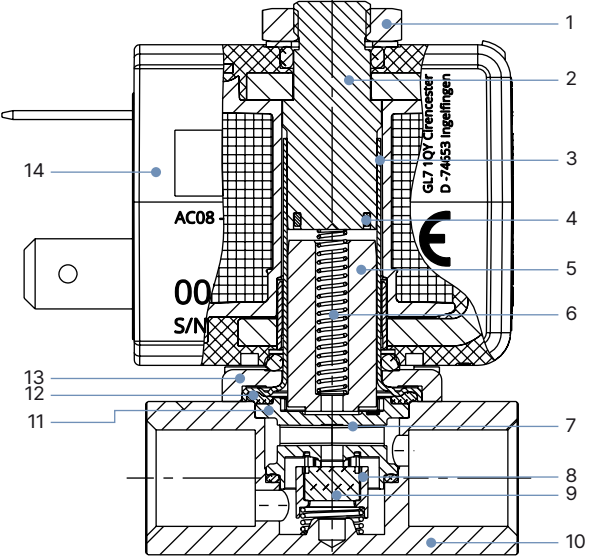
4.2. Material specifications

Standard version circuit function A



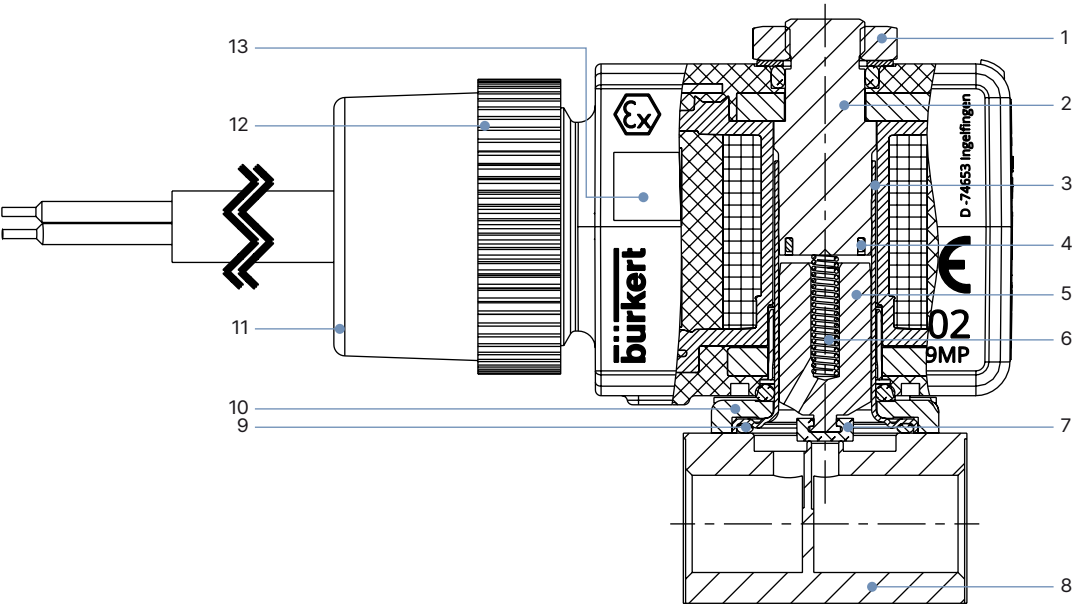
| No. | Element         | Material                                                                                                                                                                      |
|-----|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1   | Locknut         | DIN 176<br>Surface finish thick film passivated<br>KOSA0101                                                                                                                   |
| 2   | Stopper         | Stainless steel 1.4113/434                                                                                                                                                    |
| 3   | Core guide tube | Stainless steel 1.4303 ST/305L                                                                                                                                                |
| 4   | Shading ring    | Copper (optional silver)                                                                                                                                                      |
| 5   | Core            | Stainless steel 1.4113/434                                                                                                                                                    |
| 6   | Spring          | Stainless steel 1.4310/301                                                                                                                                                    |
| 7   | Seal            | FKM/EPDM                                                                                                                                                                      |
| 8   | Valve body      | Brass, stainless steel 1.4305/303,<br>PA (polyamide)                                                                                                                          |
| 9   | O-Ring          | FKM/EPDM                                                                                                                                                                      |
| 10  | Flange          | <ul style="list-style-type: none"><li>Surface finish thick film passivated<br/>KOSA0101 (brass version)</li><li>Nickel-plated surface<br/>(stainless steel version)</li></ul> |
| 11  | Coil            | Epoxy                                                                                                                                                                         |

Standard version circuit function B



| No. | Element         | Material                                                                                                                                                                      |
|-----|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1   | Locknut         | DIN 176<br>Surface finish thick film passivated<br>KOSA0101                                                                                                                   |
| 2   | Stopper         | Stainless steel 1.4113/434                                                                                                                                                    |
| 3   | Core guide tube | Stainless steel 1.4303 ST/305L                                                                                                                                                |
| 4   | Shading ring    | Copper (optional silver)                                                                                                                                                      |
| 5   | Core            | Stainless steel 1.4113/434                                                                                                                                                    |
| 6   | Spring          | Stainless steel 1.4310/301                                                                                                                                                    |
| 7   | Insert          | PEEK GF30                                                                                                                                                                     |
| 8   | Seal holder     | PEEK GF30                                                                                                                                                                     |
| 9   | Seat seal       | FKM                                                                                                                                                                           |
| 10  | Valve body      | Brass, stainless steel 1.4305/303,<br>PA (polyamide)                                                                                                                          |
| 11  | Seal            | FKM/EPDM                                                                                                                                                                      |
| 12  | O-Ring          | FKM/EPDM                                                                                                                                                                      |
| 13  | Flange          | <ul style="list-style-type: none"><li>Surface finish thick film passivated<br/>KOSA0101 (brass version)</li><li>Nickel-plated surface<br/>(stainless steel version)</li></ul> |
| 14  | Coil            | Epoxy                                                                                                                                                                         |

ATEX/IECEx cable version



| No. | Element         | Material                                                                                                                                                                          |
|-----|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1   | Locknut         | DIN 176<br>Surface finish thick film passivated<br>KOSA0101                                                                                                                       |
| 2   | Stopper         | Stainless steel 1.4113/434                                                                                                                                                        |
| 3   | Core guide tube | Stainless steel 1.4303 ST/305L                                                                                                                                                    |
| 4   | Shading ring    | Copper (optional silver)                                                                                                                                                          |
| 5   | Core            | Stainless steel 1.4113/434                                                                                                                                                        |
| 6   | Spring          | Stainless steel 1.4310/301                                                                                                                                                        |
| 7   | Seal            | FKM/EPDM                                                                                                                                                                          |
| 8   | Valve body      | Brass, stainless steel 1.4305/303,<br>PA (polyamide)                                                                                                                              |
| 9   | O-Ring          | FKM/EPDM                                                                                                                                                                          |
| 10  | Flange          | <ul style="list-style-type: none"><li>• Surface finish thick film passivated<br/>KOSA0101 (brass version)</li><li>• Nickel-plated surface<br/>(stainless steel version)</li></ul> |
| 11  | Sealing ring    | Silicone                                                                                                                                                                          |
| 12  | Union nut       | PA (Polyamide)                                                                                                                                                                    |
| 13  | Coil            | Epoxy                                                                                                                                                                             |

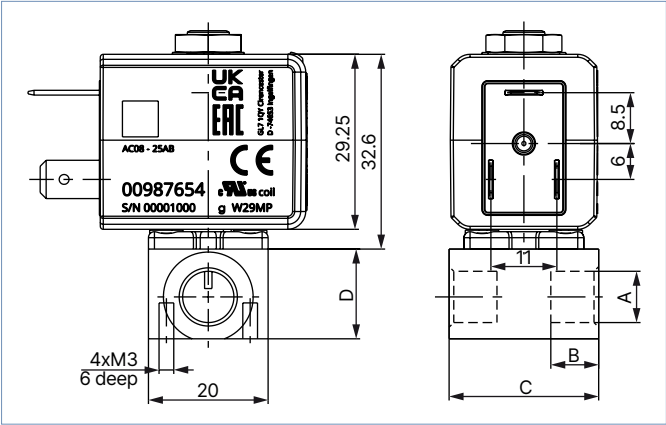
5. Dimensions

5.1. Standard version

Threaded version

Note:

- Dimensions in mm
- Versions according to industry standard form B

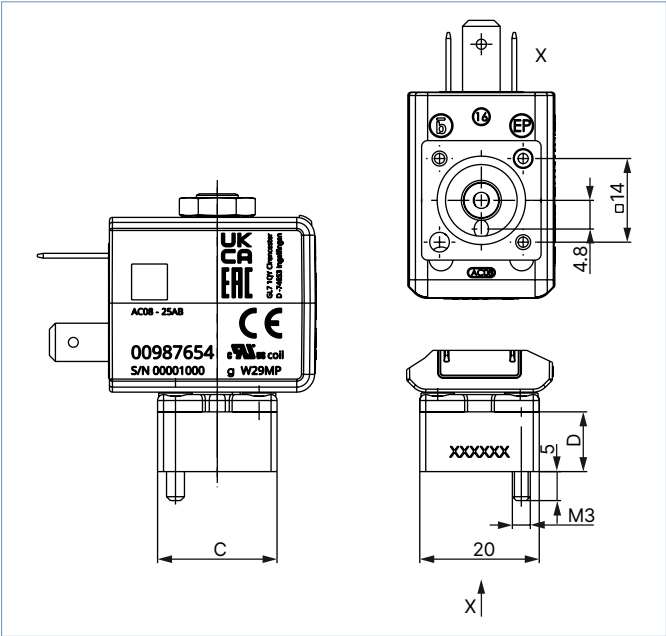


| Port connection | A       | B    | C    | D    |
|-----------------|---------|------|------|------|
|                 |         | [mm] | [mm] | [mm] |
| Thread WW A     | M5      | 5    | 20   | 10   |
|                 | G 1/8   | 8    | 25   | 15   |
|                 | NPT 1/8 | 7    | 25   | 15   |
| Thread WW B     | G 1/8   | 8    | 34   | 14   |
|                 | NPT 1/8 | 7    | 34   | 14   |

Flange version

Note:

- Dimensions in mm
- Versions according to industry standard form B

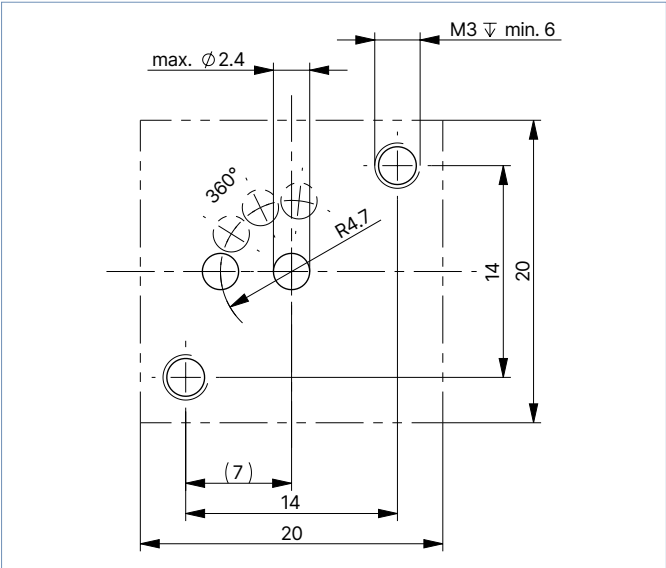


| Port connection | A | B    | C    | D    |
|-----------------|---|------|------|------|
|                 |   | [mm] | [mm] | [mm] |
| Flange WW A     | – | –    | 20   | 10   |
| Flange WW B     | – | –    | 25   | 15   |

**Flange pattern**

**Note:**

- Dimensions in mm
- On the connection side, the geometries are to be realised as shown in the following drawing.
- Flange version (FK01) according to FST 1000225877

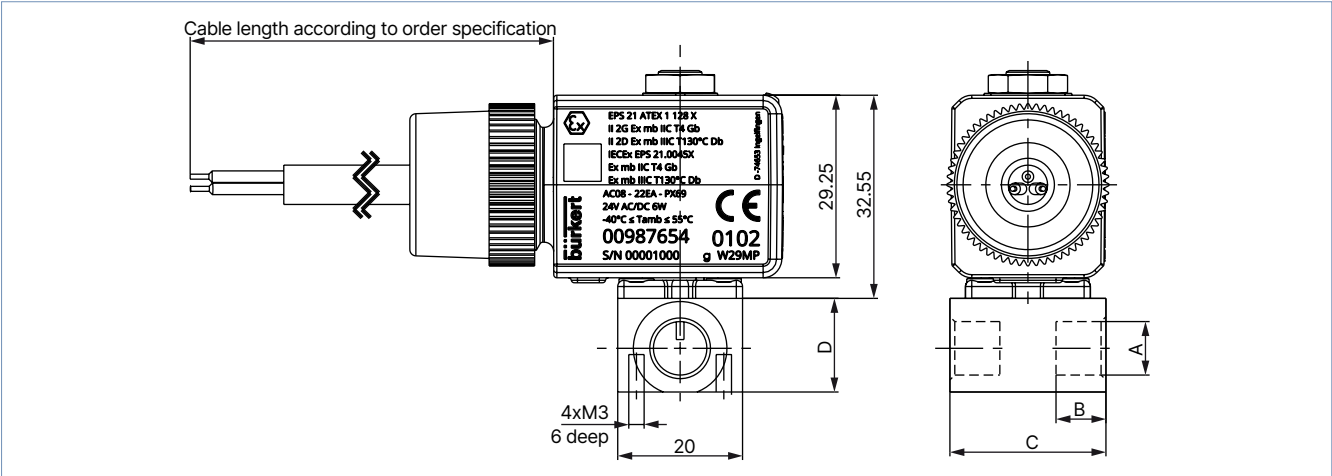


**5.2. ATEX/IECEx cable version**

**Threaded version**

**Note:**

Dimensions in mm

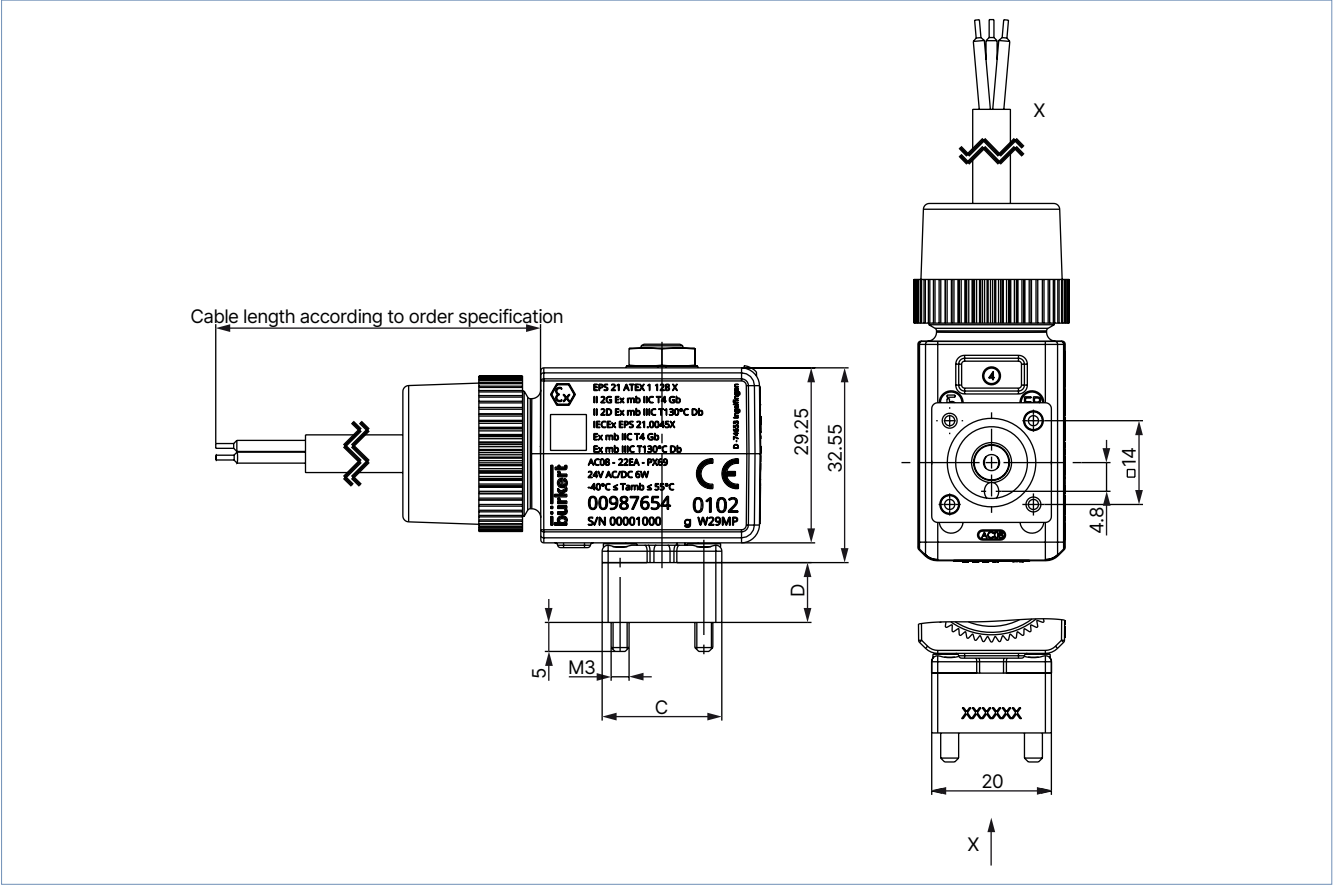


| Port connection | A     | B    | C    | D    |
|-----------------|-------|------|------|------|
|                 |       | [mm] | [mm] | [mm] |
| Thread          | M5    | 5    | 20   | 10   |
| Thread          | G 1/8 | 8    | 25   | 15   |

Type 7011

Flange version

**Note:**  
Dimensions in mm

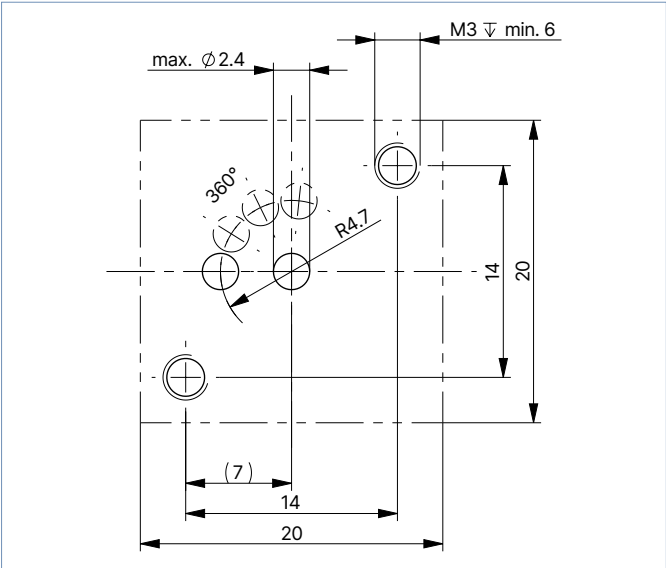


| Port connection | A | B    | C    | D    |
|-----------------|---|------|------|------|
|                 |   | [mm] | [mm] | [mm] |
| Flange WW A     | - | -    | 20   | 11   |
| Flange WW B     | - | -    | 25   | 15   |

Flange pattern

Note:

- Dimensions in mm
- On the connection side, the geometries are to be realised as shown in the following drawing.
- Flange version (FK01) according to FST 1000225877



5.3. Coil versions

Versions according to industry standard form B

Note:

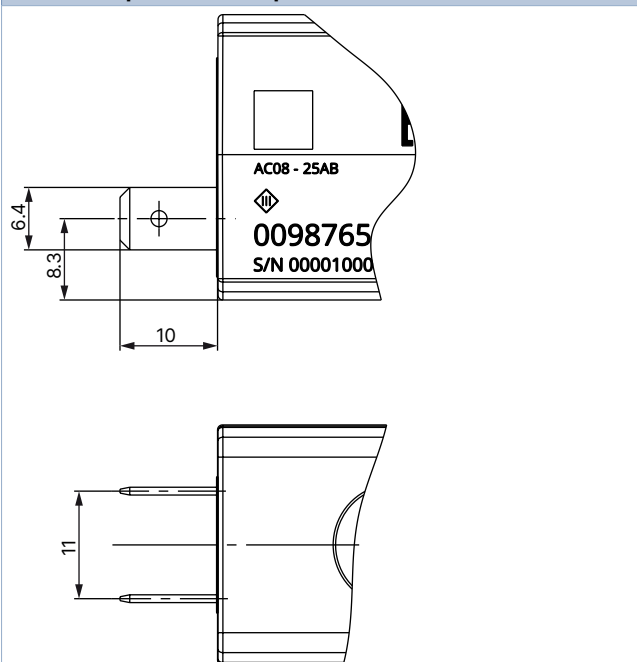
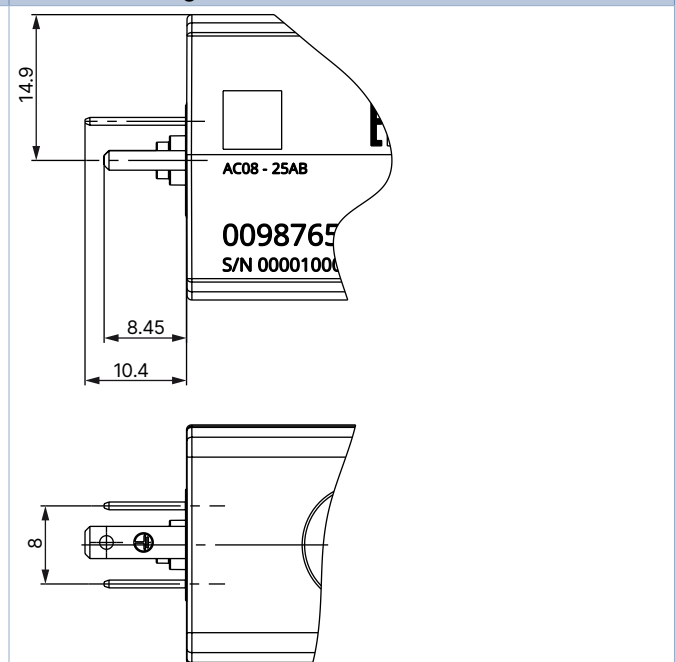
Dimensions in mm

| Coil size 2 (20 mm) | Coil size 3 (24.5 mm) |
|---------------------|-----------------------|
|                     |                       |

Further electrical connections

Note:

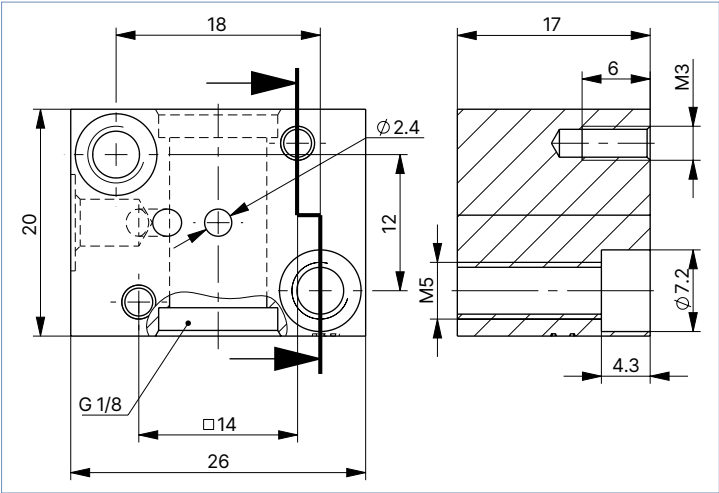
- Dimensions in mm
- Specifications apply to coil sizes 20 mm and 24.5 mm

| Version flat pin terminal as protection class III device                           | Version according to DIN EN 175301 - 803 form C                                     |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |

5.4. Single manifold

Note:

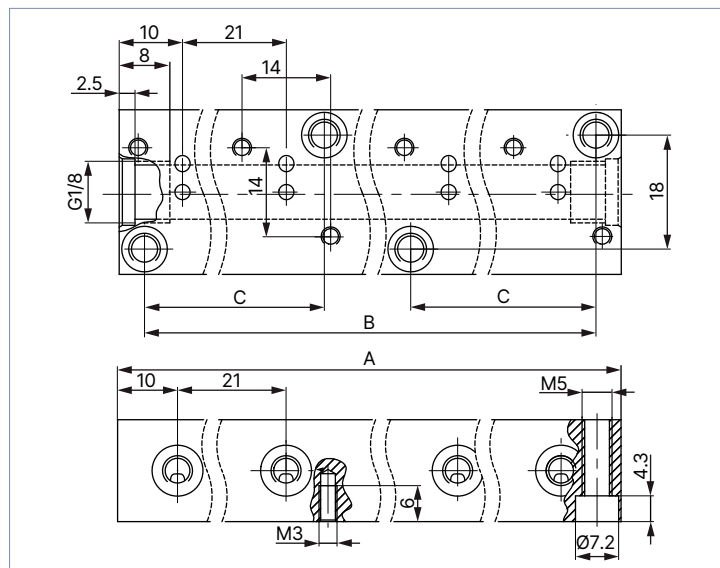
Dimensions in mm



| Quantity of valve places | A [mm] | B [mm] | C [mm] | Article no. |
|--------------------------|--------|--------|--------|-------------|
| 1                        | 20     | 12     | —      | 005312 𐀀    |

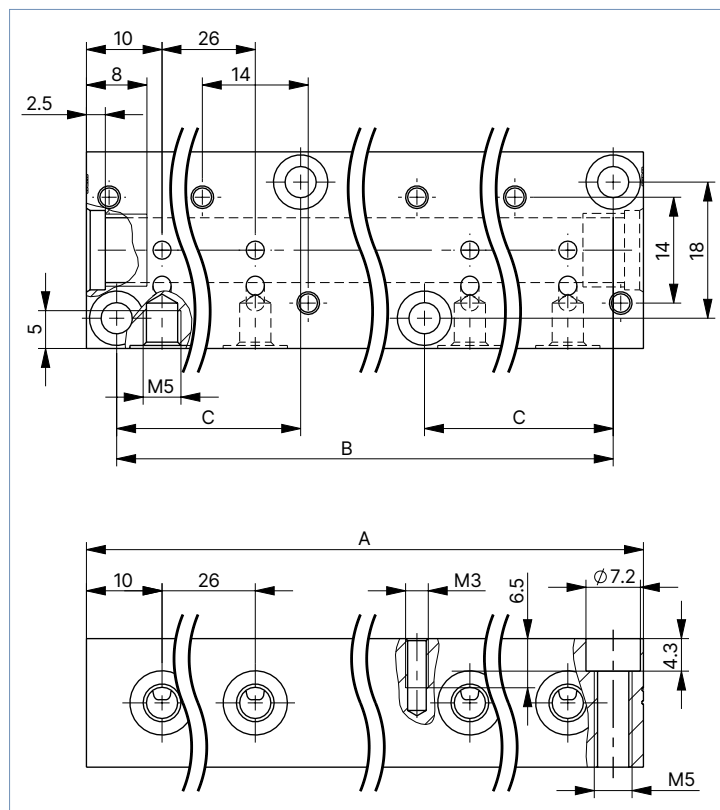
### Manifolds for valves with 20 mm coil (SG2)

- Dimensions in mm
- Can only be combined with Type 7011 valves with coil size 20 mm



| Quantity of<br>valve places | A    | B    | C    | Article no.                                                                                |
|-----------------------------|------|------|------|--------------------------------------------------------------------------------------------|
|                             | [mm] | [mm] | [mm] |                                                                                            |
| 2                           | 41   | 33   | –    | 005355  |
| 3                           | 62   | 54   | –    | 005313  |
| 4                           | 83   | 75   | –    | 005314  |
| 5                           | 104  | 96   | –    | 005315  |
| 6                           | 125  | 117  | –    | 005316  |
| 7                           | 146  | 138  | –    | 005893  |
| 8                           | 167  | 159  | 54   | 005166  |
| 9                           | 188  | 180  | 54   | 005241  |
| 10                          | 209  | 201  | 75   | 005819  |
| 11                          | 230  | 222  | 75   | 005242  |
| 12                          | 251  | 243  | 96   | 005222  |

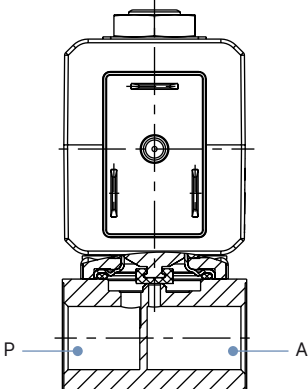
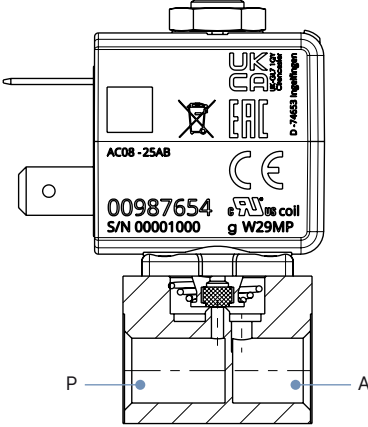
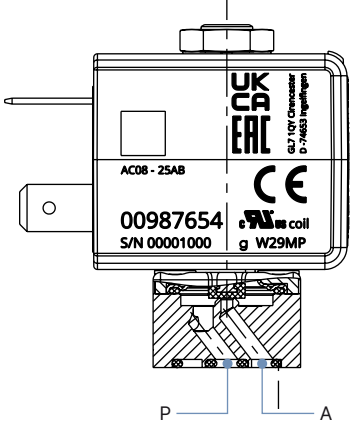
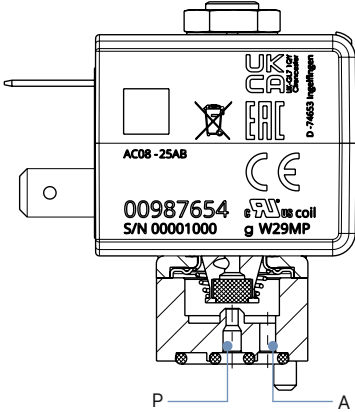
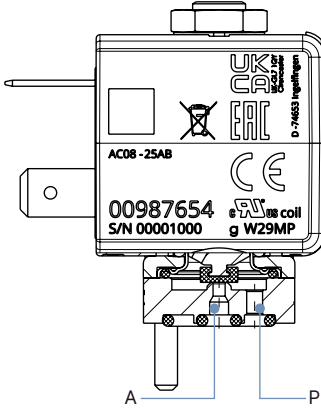
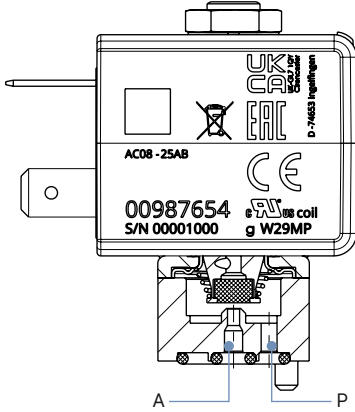
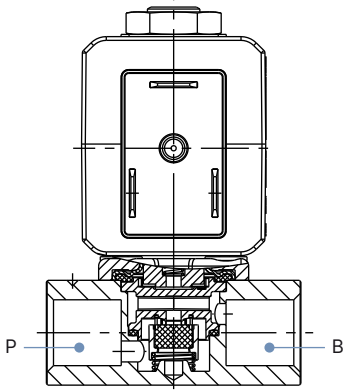
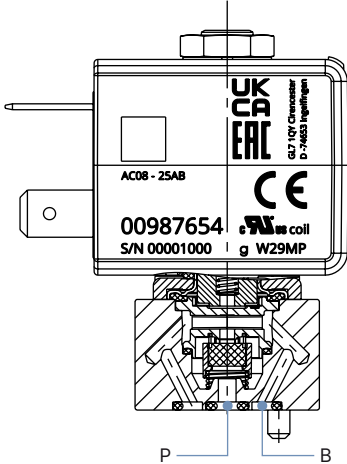
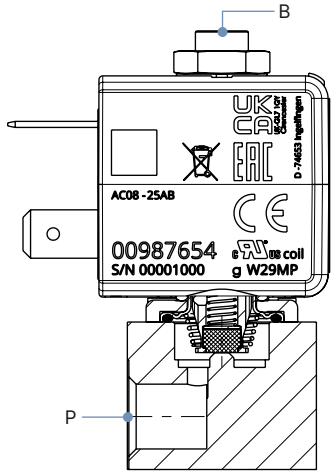
- Dimensions in mm
- Can be combined with Type 7011 valves with coil size 24.5 mm resp. for Type 7011 valves with WW B



| Quantity of<br>valve places | A    | B    | C    | Article no.                                                                                    |
|-----------------------------|------|------|------|------------------------------------------------------------------------------------------------|
|                             | [mm] | [mm] | [mm] |                                                                                                |
| 2                           | 46   | 38   | –    | 60021427  |
| 3                           | 72   | 64   | –    | 60021342  |
| 4                           | 98   | 90   | –    | 60021429  |
| 5                           | 124  | 116  | –    | 60021428  |
| 6                           | 150  | 142  | –    | 60021442  |
| 7                           | 176  | 168  | –    | 20060327  |
| 8                           | 202  | 194  | 64   | 20060338  |
| 9                           | 228  | 220  | 64   | 20060341  |
| 10                          | 254  | 246  | 90   | 20015744  |
| 11                          | 280  | 272  | 90   | 20060374  |
| 12                          | 306  | 298  | 116  | 20060376  |

6. Device/Process connections

6.1. Pin assignment

| Threaded version WW A                                                               | Threaded version WW A (+MC14)                                                       | Flange version WW A                                                                   |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|    |    |    |
| Flange version WW A (+MC14)                                                         | Flange version WW A (+AA05)                                                         | Flange version WW A (+AC45+AD33 / +AD33+NA02)                                         |
|   |   |   |
| Threaded version WW B                                                               | Flange version WW B                                                                 | Flange version WW B (+AD01)                                                           |
|  |  |  |

Pin assignment vacuum applications

In vacuum applications the existing flow direction must be maintained. Vacuum must therefore always be applied to A.  
(Other terminal assignment on request)

## 7. Performance specifications

### 7.1. Power consumption

Standard version, coil size 24.5 mm

| Coil            | Orifice | Electrical power |         |     |          |         | Switching times <sup>1)</sup> |         |
|-----------------|---------|------------------|---------|-----|----------|---------|-------------------------------|---------|
|                 |         | Inrush AC        | Hold AC |     | DC       |         | Opening                       | Closing |
|                 | [mm]    | [VA]             | [VA]    | [W] | Cold [W] | Hot [W] | [ms]                          | [ms]    |
| 24 V/DC/7 W     | 1.2     | –                | –       | –   | 7        | 5.5     | 8...15                        | 10...17 |
|                 | 1.6     |                  |         |     |          |         |                               |         |
|                 | 2.0     |                  |         |     |          |         |                               |         |
|                 | 2.4     |                  |         |     |          |         |                               |         |
| 24 V/50 Hz/6 W  | 1.2     | 14               | 8       | 6   | –        | –       |                               |         |
|                 | 1.6     |                  |         |     |          |         |                               |         |
|                 | 2.0     |                  |         |     |          |         |                               |         |
|                 | 2.4     |                  |         |     |          |         |                               |         |
| 230 V/50 Hz/6 W | 1.2     | 14               | 8       | 6   | –        | –       |                               |         |
|                 | 1.6     |                  |         |     |          |         |                               |         |
|                 | 2.0     |                  |         |     |          |         |                               |         |
|                 | 2.4     |                  |         |     |          |         |                               |         |
| 24 V/DC/5.5 W   | 1.2     | –                | –       | –   | 5.5      | 4.5     |                               |         |
|                 | 1.6     |                  |         |     |          |         |                               |         |
|                 | 2.0     |                  |         |     |          |         |                               |         |
|                 | 2.4     |                  |         |     |          |         |                               |         |
| 24 V/50 Hz/4 W  | 1.2     | 12               | 6.5     | 4   | –        | –       |                               |         |
|                 | 1.6     |                  |         |     |          |         |                               |         |
|                 | 2.0     |                  |         |     |          |         |                               |         |
|                 | 2.4     |                  |         |     |          |         |                               |         |
| 230 V/50 Hz/4 W | 1.2     | 12               | 6.5     | 4   | –        | –       |                               |         |
|                 | 1.6     |                  |         |     |          |         |                               |         |
|                 | 2.0     |                  |         |     |          |         |                               |         |
|                 | 2.4     |                  |         |     |          |         |                               |         |
| 24 V/DC/14 W    | 1.2     | –                | –       | –   | 14       | 11      |                               |         |
|                 | 1.6     |                  |         |     |          |         |                               |         |
|                 | 2.0     |                  |         |     |          |         |                               |         |
|                 | 2.4     |                  |         |     |          |         |                               |         |
| 24 V/DC/11 W    | 1.2     | –                | –       | –   | 11       | 8.5     |                               |         |
|                 | 1.6     |                  |         |     |          |         |                               |         |
|                 | 2.0     |                  |         |     |          |         |                               |         |
|                 | 2.4     |                  |         |     |          |         |                               |         |

1.) Measurement at +20 °C, 6 bar<sup>2.)</sup> at the valve outlet acc. to DIN ISO 12238:2001, opening: pressure build-up 0...10 %, closing: pressure reduction 100...90 %

2.) Pressure data: Overpressure to atmospheric pressure and air as a medium

## Standard version, coil size 20 mm

| Coil                | Orifice | Electrical power |         |     |          |         | Switching times <sup>1)</sup> |         |
|---------------------|---------|------------------|---------|-----|----------|---------|-------------------------------|---------|
|                     |         | Inrush AC        | Hold AC |     | DC       |         | Opening                       | Closing |
|                     | [mm]    | [VA]             | [VA]    | [W] | Cold [W] | Hot [W] | [ms]                          | [ms]    |
| 24 V / DC / 6.5 W   | 1.2     | –                | –       | –   | 6.5      | 5       | 8...15                        | 10...17 |
|                     | 1.6     |                  |         |     |          |         |                               |         |
|                     | 2.0     |                  |         |     |          |         |                               |         |
|                     | 2.4     |                  |         |     |          |         |                               |         |
| 24 V / 50 Hz / 6 W  | 1.2     | 11               | 7       | 6   | –        | –       |                               |         |
|                     | 1.6     |                  |         |     |          |         |                               |         |
|                     | 2.0     |                  |         |     |          |         |                               |         |
|                     | 2.4     |                  |         |     |          |         |                               |         |
| 230 V / 50 Hz / 6 W | 1.2     | 11               | 7       | 6   | –        | –       |                               |         |
|                     | 1.6     |                  |         |     |          |         |                               |         |
|                     | 2.0     |                  |         |     |          |         |                               |         |
|                     | 2.4     |                  |         |     |          |         |                               |         |
| 24 V / DC / 5 W     | 1.2     | –                | –       | –   | 5        | 4       |                               |         |
|                     | 1.6     |                  |         |     |          |         |                               |         |
|                     | 2.0     |                  |         |     |          |         |                               |         |
|                     | 2.4     |                  |         |     |          |         |                               |         |
| 24 V / 50 Hz / 4 W  | 1.2     | 9                | 5       | 4   | –        | –       |                               |         |
|                     | 1.6     |                  |         |     |          |         |                               |         |
|                     | 2.0     |                  |         |     |          |         |                               |         |
|                     | 2.4     |                  |         |     |          |         |                               |         |
| 230 V / 50 Hz / 4 W | 1.2     | 9                | 5       | 4   | –        | –       |                               |         |
|                     | 1.6     |                  |         |     |          |         |                               |         |
|                     | 2.0     |                  |         |     |          |         |                               |         |
|                     | 2.4     |                  |         |     |          |         |                               |         |
| 24 V / DC / 14 W    | 1.2     | –                | –       | –   | 14       | 11      |                               |         |
|                     | 1.6     |                  |         |     |          |         |                               |         |
|                     | 2.0     |                  |         |     |          |         |                               |         |
|                     | 2.4     |                  |         |     |          |         |                               |         |
| 24 V / DC / 11 W    | 1.2     | –                | –       | –   | 11       | 9       |                               |         |
|                     | 1.6     |                  |         |     |          |         |                               |         |
|                     | 2.0     |                  |         |     |          |         |                               |         |
|                     | 2.4     |                  |         |     |          |         |                               |         |

1.) Measurement at + 20 °C, 6 bar<sup>2.)</sup> at the valve outlet acc. to DIN ISO 12238:2001, opening: pressure build-up 0...10 %, closing: pressure reduction 100...90 %

2.) Pressure data: Overpressure to atmospheric pressure and air as a medium

## 8. Ordering information

### 8.1. Bürkert eShop



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### 8.2. Bürkert product filter

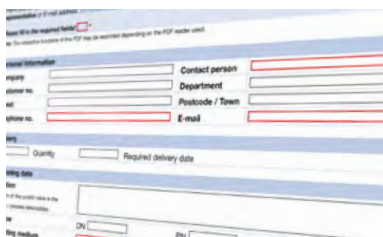


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### 8.3. Bürkert Product Enquiry Form



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Would you like to make a specific product enquiry based on your technical requirements? Use our Product Enquiry Form for this purpose. There you will find all the relevant information for your Bürkert contact. This will enable us to provide you with the best possible advice.

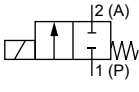
[Fill out the form now](#)

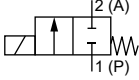
## 8.4. Ordering chart

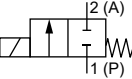
Standard version according to industry standard form B, coil size 24.5 mm

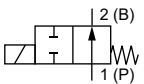
### Note:

All valves are delivered without a cable plug.

| Circuit function                                                                                                                                               | Port connection | Orifice | K <sub>v</sub> value water <sup>1)</sup> | Voltage/<br>Frequency/<br>Power | Maximum<br>duty cycle | Pressure range <sup>2)</sup> |              |                           |              | Article no. |                      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|---------|------------------------------------------|---------------------------------|-----------------------|------------------------------|--------------|---------------------------|--------------|-------------|----------------------|
|                                                                                                                                                                |                 |         |                                          |                                 |                       | Ambient temperature 75 °C    |              | Ambient temperature 55 °C |              | Brass body  | Stainless steel body |
|                                                                                                                                                                |                 | [mm]    | [m³/h]                                   | [V/Hz/W]                        |                       | Water<br>[bar]               | Air<br>[bar] | Water<br>[bar]            | Air<br>[bar] |             |                      |
| <b>CF A</b><br>2/2-way solenoid valve<br>Direct-acting<br>Normally closed<br> | M5              | 1.2     | 0.045                                    | 24/DC/7                         | 100 % ED              | –                            | –            | 0...23                    | 0...23       | 380543      | 389721               |
|                                                                                                                                                                |                 |         |                                          | 24/50/6                         |                       | –                            | –            | 0...45                    | 0...45       | 389723      | 389726               |
|                                                                                                                                                                |                 |         |                                          | 230/50/6                        |                       | –                            | –            | 0...45                    | 0...45       | 389738      | 389739               |
|                                                                                                                                                                |                 |         |                                          | 24/DC/5.5                       |                       | 0...16                       | 0...16       | –                         | –            | 389740      | 389742               |
|                                                                                                                                                                |                 |         |                                          | 24/DC/5.5                       |                       | –                            | –            | 0...19                    | 0...19       | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/50/4                         |                       | 0...42                       | 0...42       | 0...42                    | 0...42       | 389744      | 389746               |
|                                                                                                                                                                |                 |         |                                          | 230/50/4                        |                       | 0...42                       | 0...42       | 0...42                    | 0...42       | 389751      | 389750               |
|                                                                                                                                                                |                 |         |                                          | 24/DC/14                        | 50 % ED               | –                            | –            | 0...45                    | 0...45       | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/11                        |                       | 0...35                       | 0...35       | –                         | –            | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/11                        |                       | –                            | –            | 0...37                    | 0...37       | o. r.       | o. r.                |
|                                                                                                                                                                |                 | 1.6     | 0.060                                    | 24/DC/7                         | 100 % ED              | –                            | –            | 0...12                    | 0...13       | 385450      | 389753               |
|                                                                                                                                                                |                 |         |                                          | 24/50/6                         |                       | –                            | –            | 0...30                    | 0...30       | 389757      | 389755               |
|                                                                                                                                                                |                 |         |                                          | 230/50/6                        |                       | –                            | –            | 0...30                    | 0...30       | 389759      | 389761               |
|                                                                                                                                                                |                 |         |                                          | 24/DC/5.5                       |                       | 0...9                        | 0...9        | –                         | –            | 389765      | 389762               |
|                                                                                                                                                                |                 |         |                                          | 24/DC/5.5                       |                       | –                            | –            | 0...10.5                  | 0...10.5     | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/50/4                         |                       | 0...24                       | 0...24       | 0...24                    | 0...24       | 389781      | 389783               |
|                                                                                                                                                                |                 |         |                                          | 230/50/4                        |                       | 0...24                       | 0...24       | 0...24                    | 0...24       | 389786      | 389785               |
|                                                                                                                                                                |                 |         |                                          | 24/DC/14                        | 50 % ED               | –                            | –            | 0...25                    | 0...25       | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/11                        |                       | 0...20                       | 0...20       | –                         | –            | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/11                        |                       | –                            | –            | 0...22                    | 0...22       | o. r.       | o. r.                |
|                                                                                                                                                                |                 | 2.0     | 0.110                                    | 24/DC/7                         | 100 % ED              | –                            | –            | 0...9                     | 0...9        | 385455      | 389787               |
|                                                                                                                                                                |                 |         |                                          | 24/50/6                         |                       | –                            | –            | 0...22                    | 0...22       | 389791      | 389789               |
|                                                                                                                                                                |                 |         |                                          | 230/50/6                        |                       | –                            | –            | 0...22                    | 0...22       | 389793      | 389794               |
|                                                                                                                                                                |                 |         |                                          | 24/DC/5.5                       |                       | 0...6.5                      | 0...6.5      | –                         | –            | 389797      | 389795               |
|                                                                                                                                                                |                 |         |                                          | 24/DC/5.5                       |                       | –                            | –            | 0...7                     | 0...7        | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/50/4                         |                       | 0...18                       | 0...18       | 0...18                    | 0...18       | 389799      | 393079               |
|                                                                                                                                                                |                 |         |                                          | 230/50/4                        |                       | 0...18                       | 0...18       | 0...18                    | 0...18       | 389801      | 389802               |
|                                                                                                                                                                |                 |         |                                          | 24/DC/14                        | 50 % ED               | –                            | –            | 0...19                    | 0...19       | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/11                        |                       | 0...14                       | 0...14       | –                         | –            | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/11                        |                       | –                            | –            | 0...16                    | 0...16       | o. r.       | o. r.                |
|                                                                                                                                                                |                 | 2.4     | 0.130                                    | 24/DC/7                         | 100 % ED              | –                            | –            | 0...3.5                   | 0...5        | 385457      | 389805               |
|                                                                                                                                                                |                 |         |                                          | 24/50/6                         |                       | –                            | –            | 0...13                    | 0...13       | 389807      | 389809               |
|                                                                                                                                                                |                 |         |                                          | 230/50/6                        |                       | –                            | –            | 0...13                    | 0...13       | 389811      | 389812               |
|                                                                                                                                                                |                 |         |                                          | 24/DC/5.5                       |                       | 0...3                        | 0...3.5      | –                         | –            | 389813      | 389815               |
|                                                                                                                                                                |                 |         |                                          | 24/DC/5.5                       |                       | –                            | –            | 0...3.5                   | 0...4        | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/50/4                         |                       | 0...10                       | 0...10       | 0...10                    | 0...10       | 389817      | 389819               |
|                                                                                                                                                                |                 |         |                                          | 230/50/4                        |                       | 0...10                       | 0...10       | 0...10                    | 0...10       | 389821      | 389822               |
|                                                                                                                                                                |                 |         |                                          | 24/DC/14                        | 50 % ED               | –                            | –            | 0...9                     | 0...10       | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/11                        |                       | 0...6.5                      | 0...7        | –                         | –            | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/11                        |                       | –                            | –            | 0...7.5                   | 0...8        | o. r.       | o. r.                |

| Circuit function                                                                                                                                               | Port connection | Orifice | K <sub>v</sub> value water <sup>1)</sup> | Voltage/<br>Frequency/<br>Power | Maximum<br>duty cycle | Pressure range <sup>2)</sup> |              |                           |              | Article no. |                      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|---------|------------------------------------------|---------------------------------|-----------------------|------------------------------|--------------|---------------------------|--------------|-------------|----------------------|
|                                                                                                                                                                |                 |         |                                          |                                 |                       | Ambient temperature 75 °C    |              | Ambient temperature 55 °C |              | Brass body  | Stainless steel body |
|                                                                                                                                                                |                 | [mm]    | [m³/h]                                   | [V/Hz/W]                        |                       | Water<br>[bar]               | Air<br>[bar] | Water<br>[bar]            | Air<br>[bar] |             |                      |
| <b>CF A</b><br>2/2-way solenoid valve<br>Direct-acting<br>Normally closed<br> | G 1/8           | 1.2     | 0.045                                    | 24/DC/7                         | 100 % ED              | –                            | –            | 0...23                    | 0...23       | 375821      | 375828               |
|                                                                                                                                                                |                 |         |                                          | 24/50/6                         |                       | –                            | –            | 0...45                    | 0...45       | 389532      | 389540               |
|                                                                                                                                                                |                 |         |                                          | 230/50/6                        |                       | –                            | –            | 0...45                    | 0...45       | 375968      | 375979               |
|                                                                                                                                                                |                 |         |                                          | 24/DC/5.5                       |                       | 0...16                       | 0...16       | –                         | –            | 375852      | 375860               |
|                                                                                                                                                                |                 |         |                                          | 24/DC/5.5                       |                       | –                            | –            | 0...19                    | 0...19       | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/50/4                         |                       | 0...42                       | 0...42       | 0...42                    | 0...42       | 389537      | 389544               |
|                                                                                                                                                                |                 |         |                                          | 230/50/4                        |                       | 0...42                       | 0...42       | 0...42                    | 0...42       | 376005      | 376013               |
|                                                                                                                                                                |                 |         |                                          | 24/DC/14                        | 50 % ED               | –                            | –            | 0...45                    | 0...45       | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/11                        |                       | 0...35                       | 0...35       | –                         | –            | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/11                        |                       | –                            | –            | 0...37                    | 0...37       | o. r.       | o. r.                |
|                                                                                                                                                                |                 | 1.6     | 0.060                                    | 24/DC/7                         | 100 % ED              | –                            | –            | 0...12                    | 0...13       | 374309      | 375829               |
|                                                                                                                                                                |                 |         |                                          | 24/50/6                         |                       | –                            | –            | 0...30                    | 0...30       | 389657      | 389658               |
|                                                                                                                                                                |                 |         |                                          | 230/50/6                        |                       | –                            | –            | 0...30                    | 0...30       | 375969      | 375980               |
|                                                                                                                                                                |                 |         |                                          | 24/DC/5.5                       |                       | 0...9                        | 0...9        | –                         | –            | 375853      | 375861               |
|                                                                                                                                                                |                 |         |                                          | 24/DC/5.5                       |                       | –                            | –            | 0...10.5                  | 0...10.5     | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/50/4                         |                       | 0...24                       | 0...24       | 0...24                    | 0...24       | 389661      | 389662               |
|                                                                                                                                                                |                 |         |                                          | 230/50/4                        |                       | 0...24                       | 0...24       | 0...24                    | 0...24       | 376006      | 376015               |
|                                                                                                                                                                |                 |         |                                          | 24/DC/14                        | 50 % ED               | –                            | –            | 0...25                    | 0...25       | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/11                        |                       | 0...20                       | 0...20       | –                         | –            | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/11                        |                       | –                            | –            | 0...22                    | 0...22       | o. r.       | o. r.                |
|                                                                                                                                                                |                 | 2.0     | 0.110                                    | 24/DC/7                         | 100 % ED              | –                            | –            | 0...9                     | 0...9        | 375822      | 375830               |
|                                                                                                                                                                |                 |         |                                          | 24/50/6                         |                       | –                            | –            | 0...22                    | 0...22       | 389677      | 389680               |
|                                                                                                                                                                |                 |         |                                          | 230/50/6                        |                       | –                            | –            | 0...22                    | 0...22       | 375970      | 375981               |
|                                                                                                                                                                |                 |         |                                          | 24/DC/5.5                       |                       | 0...6.5                      | 0...6.5      | –                         | –            | 375854      | 375862               |
|                                                                                                                                                                |                 |         |                                          | 24/DC/5.5                       |                       | –                            | –            | 0...7                     | 0...7        | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/50/4                         |                       | 0...18                       | 0...18       | 0...18                    | 0...18       | 389672      | 389669               |
|                                                                                                                                                                |                 |         |                                          | 230/50/4                        |                       | 0...18                       | 0...18       | 0...18                    | 0...18       | 376007      | 376016               |
|                                                                                                                                                                |                 |         |                                          | 24/DC/14                        | 50 % ED               | –                            | –            | 0...19                    | 0...19       | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/11                        |                       | 0...14                       | 0...14       | –                         | –            | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/11                        |                       | –                            | –            | 0...16                    | 0...16       | o. r.       | o. r.                |
|                                                                                                                                                                |                 | 2.4     | 0.130                                    | 24/DC/7                         | 100 % ED              | –                            | –            | 0...3.5                   | 0...5        | 375823      | 375831               |
|                                                                                                                                                                |                 |         |                                          | 24/50/6                         |                       | –                            | –            | 0...13                    | 0...13       | 393638      | 393689               |
|                                                                                                                                                                |                 |         |                                          | 230/50/6                        |                       | –                            | –            | 0...13                    | 0...13       | 375971      | 375982               |
|                                                                                                                                                                |                 |         |                                          | 24/DC/5.5                       |                       | 0...3                        | 0...3.5      | –                         | –            | 375855      | 375863               |
|                                                                                                                                                                |                 |         |                                          | 24/DC/5.5                       |                       | –                            | –            | 0...3.5                   | 0...4        | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/50/4                         |                       | 0...10                       | 0...10       | 0...10                    | 0...10       | 389696      | 389697               |
|                                                                                                                                                                |                 |         |                                          | 230/50/4                        |                       | 0...10                       | 0...10       | 0...10                    | 0...10       | 376008      | 376017               |
|                                                                                                                                                                |                 |         |                                          | 24/DC/14                        | 50 % ED               | –                            | –            | 0...9                     | 0...10       | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/11                        |                       | 0...6.5                      | 0...7        | –                         | –            | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/11                        |                       | –                            | –            | 0...7.5                   | 0...8        | o. r.       | o. r.                |

| Circuit function                                                                                                                                                  | Port connection  | Orifice | K <sub>v</sub> value<br>water <sup>1)</sup> | Voltage/<br>Frequency/<br>Power | Maximum<br>duty cycle | Pressure range <sup>2)</sup> |          |                              |          | Article no. |                         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|---------|---------------------------------------------|---------------------------------|-----------------------|------------------------------|----------|------------------------------|----------|-------------|-------------------------|
|                                                                                                                                                                   |                  |         |                                             |                                 |                       | Ambient<br>temperature 75 °C |          | Ambient<br>temperature 55 °C |          | Brass body  | Stainless<br>steel body |
|                                                                                                                                                                   |                  | Water   | Air                                         | Water                           |                       | Air                          | FKM seal |                              |          |             |                         |
|                                                                                                                                                                   |                  | [mm]    | [m³/h]                                      | [V/Hz/W]                        |                       | [bar]                        | [bar]    | [bar]                        | [bar]    |             |                         |
| <b>CF A</b><br>2/2-way solenoid<br>valve<br>Direct-acting<br>Normally closed<br> | Flange<br>(FK01) | 1.2     | 0.045                                       | 24/DC/7                         | 100 % ED              | –                            | –        | 0...23                       | 0...23   | 375836      | 375844                  |
|                                                                                                                                                                   |                  |         |                                             | 24/50/6                         |                       | –                            | –        | 0...45                       | 0...45   | 389699      | 389700                  |
|                                                                                                                                                                   |                  |         |                                             | 230/50/6                        |                       | –                            | –        | 0...45                       | 0...45   | 375987      | 375996                  |
|                                                                                                                                                                   |                  |         |                                             | 24/DC/5.5                       |                       | 0...16                       | 0...16   | –                            | –        | 375868      | 375876                  |
|                                                                                                                                                                   |                  |         |                                             | 24/DC/5.5                       |                       | –                            | –        | 0...19                       | 0...19   | o. r.       | o. r.                   |
|                                                                                                                                                                   |                  |         |                                             | 24/50/4                         |                       | 0...42                       | 0...42   | 0...42                       | 0...42   | 389704      | 389703                  |
|                                                                                                                                                                   |                  |         |                                             | 230/50/4                        |                       | 0...42                       | 0...42   | 0...42                       | 0...42   | 376023      | 376031                  |
|                                                                                                                                                                   |                  |         |                                             | 24/DC/14                        | 50 % ED               | –                            | –        | 0...45                       | 0...45   | o. r.       | o. r.                   |
|                                                                                                                                                                   |                  |         |                                             | 24/DC/11                        |                       | 0...35                       | 0...35   | –                            | –        | o. r.       | o. r.                   |
|                                                                                                                                                                   |                  |         |                                             | 24/DC/11                        |                       | –                            | –        | 0...37                       | 0...37   | o. r.       | o. r.                   |
|                                                                                                                                                                   |                  | 1.6     | 0.060                                       | 24/DC/7                         | 100 % ED              | –                            | –        | 0...12                       | 0...13   | 375837      | 375845                  |
|                                                                                                                                                                   |                  |         |                                             | 24/50/6                         |                       | –                            | –        | 0...30                       | 0...30   | 389705      | 389706                  |
|                                                                                                                                                                   |                  |         |                                             | 230/50/6                        |                       | –                            | –        | 0...30                       | 0...30   | 375988      | 375997                  |
|                                                                                                                                                                   |                  |         |                                             | 24/DC/5.5                       |                       | 0...9                        | 0...9    | –                            | –        | 375869      | 375877                  |
|                                                                                                                                                                   |                  |         |                                             | 24/DC/5.5                       |                       | –                            | –        | 0...10.5                     | 0...10.5 | o. r.       | o. r.                   |
|                                                                                                                                                                   |                  |         |                                             | 24/50/4                         |                       | 0...24                       | 0...24   | 0...24                       | 0...24   | 389708      | 389709                  |
|                                                                                                                                                                   |                  |         |                                             | 230/50/4                        |                       | 0...24                       | 0...24   | 0...24                       | 0...24   | 376024      | 376032                  |
|                                                                                                                                                                   |                  |         |                                             | 24/DC/14                        | 50 % ED               | –                            | –        | 0...25                       | 0...25   | o. r.       | o. r.                   |
|                                                                                                                                                                   |                  |         |                                             | 24/DC/11                        |                       | 0...20                       | 0...20   | –                            | –        | o. r.       | o. r.                   |
|                                                                                                                                                                   |                  |         |                                             | 24/DC/11                        |                       | –                            | –        | 0...22                       | 0...22   | o. r.       | o. r.                   |
|                                                                                                                                                                   |                  | 2.0     | 0.110                                       | 24/DC/7                         | 100 % ED              | –                            | –        | 0...9                        | 0...9    | 375838      | 375846                  |
|                                                                                                                                                                   |                  |         |                                             | 24/50/6                         |                       | –                            | –        | 0...22                       | 0...22   | 389711      | 389712                  |
|                                                                                                                                                                   |                  |         |                                             | 230/50/6                        |                       | –                            | –        | 0...22                       | 0...22   | 375989      | 375999                  |
|                                                                                                                                                                   |                  |         |                                             | 24/DC/5.5                       |                       | 0...6.5                      | 0...6.5  | –                            | –        | 375870      | 375878                  |
|                                                                                                                                                                   |                  |         |                                             | 24/DC/5.5                       |                       | –                            | –        | 0...7                        | 0...7    | o. r.       | o. r.                   |
|                                                                                                                                                                   |                  |         |                                             | 24/50/4                         |                       | 0...18                       | 0...18   | 0...18                       | 0...18   | 389714      | 389715                  |
|                                                                                                                                                                   |                  |         |                                             | 230/50/4                        |                       | 0...18                       | 0...18   | 0...18                       | 0...18   | 376025      | 376033                  |
|                                                                                                                                                                   |                  |         |                                             | 24/DC/14                        | 50 % ED               | –                            | –        | 0...19                       | 0...19   | o. r.       | o. r.                   |
|                                                                                                                                                                   |                  |         |                                             | 24/DC/11                        |                       | 0...14                       | 0...14   | –                            | –        | o. r.       | o. r.                   |
|                                                                                                                                                                   |                  |         |                                             | 24/DC/11                        |                       | –                            | –        | 0...16                       | 0...16   | o. r.       | o. r.                   |
|                                                                                                                                                                   |                  | 2.4     | 0.130                                       | 24/DC/7                         | 100 % ED              | –                            | –        | 0...3.5                      | 0...5    | 375839      | 375847                  |
|                                                                                                                                                                   |                  |         |                                             | 24/50/6                         |                       | –                            | –        | 0...13                       | 0...13   | 389716      | 389717                  |
|                                                                                                                                                                   |                  |         |                                             | 230/50/6                        |                       | –                            | –        | 0...13                       | 0...13   | 375990      | 376000                  |
|                                                                                                                                                                   |                  |         |                                             | 24/DC/5.5                       |                       | 0...3                        | 0...3.5  | –                            | –        | 375871      | 375879                  |
|                                                                                                                                                                   |                  |         |                                             | 24/DC/5.5                       |                       | –                            | –        | 0...3.5                      | 0...4    | o. r.       | o. r.                   |
|                                                                                                                                                                   |                  |         |                                             | 24/50/4                         |                       | 0...10                       | 0...10   | 0...10                       | 0...10   | 389719      | 389718                  |
|                                                                                                                                                                   |                  |         |                                             | 230/50/4                        |                       | 0...10                       | 0...10   | 0...10                       | 0...10   | 376026      | 376034                  |
|                                                                                                                                                                   |                  |         |                                             | 24/DC/14                        | 50 % ED               | –                            | –        | 0...9                        | 0...10   | o. r.       | o. r.                   |
|                                                                                                                                                                   |                  |         |                                             | 24/DC/11                        |                       | 0...6.5                      | 0...7    | –                            | –        | o. r.       | o. r.                   |
|                                                                                                                                                                   |                  |         |                                             | 24/DC/11                        |                       | –                            | –        | 0...7.5                      | 0...8    | o. r.       | o. r.                   |

| Circuit function                                                                                                                                             | Port connection | Orifice | K <sub>v</sub> value water <sup>1.)</sup> | Voltage/Frequency/Power | Maximum duty cycle | Pressure range <sup>2.)</sup> |              |                           |              | Article no. |                      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|---------|-------------------------------------------|-------------------------|--------------------|-------------------------------|--------------|---------------------------|--------------|-------------|----------------------|
|                                                                                                                                                              |                 |         |                                           |                         |                    | Ambient temperature 75 °C     |              | Ambient temperature 55 °C |              | Brass body  | Stainless steel body |
|                                                                                                                                                              |                 | [mm]    | [m³/h]                                    | [V/Hz/W]                |                    | Water<br>[bar]                | Air<br>[bar] | Water<br>[bar]            | Air<br>[bar] |             |                      |
| <b>CF B</b><br>2/2-way solenoid valve<br>Direct-acting<br>Normally open<br> | G 1/8           | 2.0     | 0.100                                     | 24 / DC / 7             | 100 % ED           | –                             | –            | –                         | 0...12       | 20007424 ㉔  | o. r.                |
|                                                                                                                                                              |                 |         |                                           | 24 / 50 / 6             |                    | –                             | –            | –                         | 0...14.5     | o. r.       | o. r.                |
|                                                                                                                                                              |                 |         |                                           | 230 / 50 / 6            |                    | –                             | –            | –                         | 0...14.5     | 20007106 ㉔  | o. r.                |
|                                                                                                                                                              |                 |         |                                           | 24 / DC / 5.5           |                    | –                             | 0...10       | –                         | –            | 20007425 ㉔  | o. r.                |
|                                                                                                                                                              |                 |         |                                           | 24 / 50 / 4             |                    | –                             | 0...13       | –                         | –            | o. r.       | o. r.                |
|                                                                                                                                                              |                 |         |                                           | 230 / 50 / 4            |                    | –                             | 0...13       | –                         | –            | 20007423 ㉔  | o. r.                |
|                                                                                                                                                              | Flange (FK01)   | 2.0     | 0.100                                     | 24 / DC / 7             | 100 % ED           | –                             | –            | –                         | 0...12       | 20009528 ㉔  | o. r.                |
|                                                                                                                                                              |                 |         |                                           | 24 / 50 / 6             |                    | –                             | –            | –                         | 0...14.5     | o. r.       | o. r.                |
|                                                                                                                                                              |                 |         |                                           | 230 / 50 / 6            |                    | –                             | –            | –                         | 0...14.5     | 20009536 ㉔  | o. r.                |
|                                                                                                                                                              |                 |         |                                           | 24 / DC / 5.5           |                    | –                             | 0...10       | –                         | –            | 20009530 ㉔  | o. r.                |
|                                                                                                                                                              |                 |         |                                           | 24 / 50 / 4             |                    | –                             | 0...13       | –                         | –            | o. r.       | o. r.                |
|                                                                                                                                                              |                 |         |                                           | 230 / 50 / 4            |                    | –                             | 0...13       | –                         | –            | 20009532 ㉔  | o. r.                |

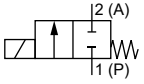
o. r. = on request

1.) Measurement at + 20 °C, 6 bar<sup>2.)</sup> at the valve inlet and free outlet

2.) Pressure data: overpressure to atmospheric pressure and air as a medium

**DVGW version****Note:**

- With NBR seal and brass body (class B)
- According to gas appliance directive: valve class A, valve group 2

| Circuit function                                                                                                                                                 | Port connection | Orifice | K <sub>v</sub> value water <sup>1.)</sup> | Voltage/Frequency/Power | Maximum duty cycle | Pressure range <sup>2.)3.)</sup> |  | Article no. |                      |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|---------|-------------------------------------------|-------------------------|--------------------|----------------------------------|--|-------------|----------------------|
|                                                                                                                                                                  |                 |         |                                           |                         |                    | Ambient temperature 55 °C        |  | Brass body  | Stainless steel body |
|                                                                                                                                                                  |                 | [mm]    | [m³/h]                                    | [V/Hz/W]                |                    | Air<br>[bar]                     |  |             |                      |
| <b>CF A</b><br>2/2-way solenoid valve<br>Direct-acting<br>Normally closed<br> | G 1/8           | 1.2     | 0.040                                     | 24 / DC / 7             | 100 % ED           | 0...23                           |  | 20010449 ㉔  | o. r.                |
|                                                                                                                                                                  |                 |         |                                           | 24 / DC / 5.5           |                    | 0...19                           |  | 20010443 ㉔  | o. r.                |
|                                                                                                                                                                  |                 |         | 0.045                                     | 24 / 50 / 4             |                    | 0...42                           |  | –           | o. r.                |
|                                                                                                                                                                  |                 |         |                                           | 230 / 50 / 4            |                    | 0...42                           |  | 20010456 ㉔  | o. r.                |
|                                                                                                                                                                  |                 | 1.6     | 0.055                                     | 24 / DC / 7             | 100 % ED           | 0...13                           |  | 20010450 ㉔  | o. r.                |
|                                                                                                                                                                  |                 |         |                                           | 24 / DC / 5.5           |                    | 0...10.5                         |  | 20009374 ㉔  | o. r.                |
|                                                                                                                                                                  |                 |         | 0.060                                     | 24 / 50 / 4             |                    | 0...24                           |  | –           | o. r.                |
|                                                                                                                                                                  |                 |         |                                           | 230 / 50 / 4            |                    | 0...24                           |  | 20010460 ㉔  | o. r.                |
|                                                                                                                                                                  |                 | 2.0     | 0.070                                     | 24 / DC / 7             | 100 % ED           | 0...9                            |  | 20010451 ㉔  | o. r.                |
|                                                                                                                                                                  |                 |         |                                           | 24 / DC / 5.5           |                    | 0...7                            |  | 20010446 ㉔  | o. r.                |
|                                                                                                                                                                  |                 |         | 0.110                                     | 24 / 50 / 4             |                    | 0...18                           |  | –           | o. r.                |
|                                                                                                                                                                  |                 |         |                                           | 230 / 50 / 4            |                    | 0...18                           |  | 20010461 ㉔  | o. r.                |
|                                                                                                                                                                  |                 | 2.4     | 0.090                                     | 24 / DC / 7             | 100 % ED           | 0...5                            |  | 20010454 ㉔  | o. r.                |
|                                                                                                                                                                  |                 |         |                                           | 24 / DC / 5.5           |                    | 0...4                            |  | 20010447 ㉔  | o. r.                |
|                                                                                                                                                                  |                 |         | 0.130                                     | 24 / 50 / 6             |                    | 0...10                           |  | –           | o. r.                |
|                                                                                                                                                                  |                 |         |                                           | 230 / 50 / 6            |                    | 0...10                           |  | 20010464 ㉔  | o. r.                |

o. r. = on request

– = not available

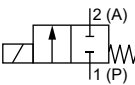
1.) Measurement at + 20 °C, 6 bar<sup>2.)</sup> at the valve inlet and free outlet

2.) Pressure data: Overpressure to atmospheric pressure and air as a medium

## ATEX/IECEx cable version

## Note:

- The maximum medium temperature must never exceed the permitted temperature class (T4: + 135 °C) minus 5 K.
- Only single mounting permissible
- Standard with 3 m cable, other lengths are available on request.

| Circuit function                                                                                                                                               | Port connection | Orifice | K <sub>v</sub> value water <sup>1.)</sup> | Voltage/Frequency/Power | Maximum duty cycle | Pressure range <sup>2.)3.)</sup> |        | Article no. |                      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|---------|-------------------------------------------|-------------------------|--------------------|----------------------------------|--------|-------------|----------------------|
|                                                                                                                                                                |                 |         |                                           |                         |                    | Ambient temperature 55 °C        |        | Brass body  | Stainless steel body |
|                                                                                                                                                                |                 | Water   | Air                                       | FKM seal                |                    |                                  |        |             |                      |
|                                                                                                                                                                |                 | [mm]    | [m³/h]                                    | [V/Hz/W]                |                    | [bar]                            | [bar]  |             |                      |
| <b>CF A</b><br>2/2-way solenoid valve<br>Direct-acting<br>Normally closed<br> | G ⅛             | 1.2     | 0.045                                     | 24 / AC/DC / 6          | 100 % ED           | 0...16                           | 0...16 | 20009727 ㉞  | 20053228 ㉞           |
|                                                                                                                                                                |                 |         |                                           | 24 / 50 / 6             |                    | 0...34                           | 0...34 | 20012934 ㉞  | 20053229 ㉞           |
|                                                                                                                                                                |                 |         |                                           | 230 / 50 / 6            |                    | 0...34                           | 0...34 | 20014398 ㉞  | 20053230 ㉞           |
|                                                                                                                                                                |                 | 1.6     | 0.060                                     | 24 / AC/DC / 6          | 100 % ED           | 0...10                           | 0...10 | 20009728 ㉞  | 20030686 ㉞           |
|                                                                                                                                                                |                 |         |                                           | 24 / 50 / 6             |                    | 0...18                           | 0...18 | 20012935 ㉞  | 20053234 ㉞           |
|                                                                                                                                                                |                 |         |                                           | 230 / 50 / 6            |                    | 0...18                           | 0...18 | 20014408 ㉞  | 20053235 ㉞           |
|                                                                                                                                                                |                 | 2.0     | 0.110                                     | 24 / AC/DC / 6          | 100 % ED           | 0...7                            | 0...7  | 20009725 ㉞  | 20053236 ㉞           |
|                                                                                                                                                                |                 |         |                                           | 24 / 50 / 6             |                    | 0...13                           | 0...13 | 20012931 ㉞  | 20053237 ㉞           |
|                                                                                                                                                                |                 |         |                                           | 230 / 50 / 6            |                    | 0...13                           | 0...13 | 20025748 ㉞  | 20053240 ㉞           |
|                                                                                                                                                                |                 | 2.4     | 0.130                                     | 24 / AC/DC / 6          | 100 % ED           | 0...3.5                          | 0...4  | 20009729 ㉞  | 20053243 ㉞           |
|                                                                                                                                                                |                 |         |                                           | 24 / 50 / 6             |                    | 0...6.5                          | 0...7  | 20012938 ㉞  | 20053244 ㉞           |
|                                                                                                                                                                |                 |         |                                           | 230 / 50 / 6            |                    | 0...6.5                          | 0...7  | 20014416 ㉞  | 20053245 ㉞           |

o. r. = on request

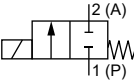
1.) Measurement at + 20 °C, 6 bar<sup>2.)</sup> at the valve inlet and free outlet

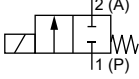
2.) Pressure data: overpressure to atmospheric pressure and air as a medium

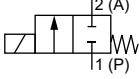
## Standard version according to industry standard form B, coil size 20 mm

## Note:

All valves are delivered without a cable plug.

| Circuit function                                                                                                                                                 | Port connection | Orifice | K <sub>v</sub> value water <sup>1.)</sup> | Voltage/Frequency/Power | Maximum duty cycle | Pressure range <sup>2.)</sup> |                           | Article no. |                      |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|---------|-------------------------------------------|-------------------------|--------------------|-------------------------------|---------------------------|-------------|----------------------|
|                                                                                                                                                                  |                 |         |                                           |                         |                    | Ambient temperature 75 °C     | Ambient temperature 55 °C | Brass body  | Stainless steel body |
|                                                                                                                                                                  |                 | [mm]    | [m³/h]                                    | [V/Hz/W]                |                    | Air [bar]                     | Air [bar]                 | FKM seal    |                      |
| <b>CF A</b><br>2/2-way solenoid valve<br>Direct-acting<br>Normally closed<br> | M5              | 1.2     | 0.045                                     | 24 / DC / 6.5           | 100 % ED           | –                             | 0...13                    | o. r.       | o. r.                |
|                                                                                                                                                                  |                 |         |                                           | 24 / 50 / 6             |                    | –                             | 0...35                    | o. r.       | o. r.                |
|                                                                                                                                                                  |                 |         |                                           | 230 / 50 / 6            |                    | –                             | 0...35                    | o. r.       | o. r.                |
|                                                                                                                                                                  |                 |         |                                           | 24 / DC / 5             |                    | 0...9                         | –                         | o. r.       | o. r.                |
|                                                                                                                                                                  |                 |         |                                           | 24 / DC / 5             |                    | –                             | 0...11                    | o. r.       | o. r.                |
|                                                                                                                                                                  |                 |         |                                           | 24 / 50 / 4             |                    | 0...27                        | 0...27                    | o. r.       | o. r.                |
|                                                                                                                                                                  |                 |         |                                           | 230 / 50 / 4            |                    | 0...27                        | 0...27                    | o. r.       | o. r.                |
|                                                                                                                                                                  |                 |         |                                           | 24 / DC / 14            | 50 % ED            | –                             | 0...32                    | o. r.       | o. r.                |
|                                                                                                                                                                  |                 |         |                                           | 24 / DC / 11            |                    | 0...25                        | –                         | o. r.       | o. r.                |
|                                                                                                                                                                  |                 |         |                                           | 24 / DC / 11            |                    | –                             | 0...30                    | o. r.       | o. r.                |
|                                                                                                                                                                  |                 | 1.6     | 0.060                                     | 24 / DC / 6.5           | 100 % ED           | –                             | 0...8.5                   | o. r.       | o. r.                |
|                                                                                                                                                                  |                 |         |                                           | 24 / 50 / 6             |                    | –                             | 0...24                    | o. r.       | o. r.                |
|                                                                                                                                                                  |                 |         |                                           | 230 / 50 / 6            |                    | –                             | 0...24                    | o. r.       | o. r.                |
|                                                                                                                                                                  |                 |         |                                           | 24 / DC / 5             |                    | 0...5.5                       | –                         | o. r.       | o. r.                |
|                                                                                                                                                                  |                 |         |                                           | 24 / DC / 5             |                    | –                             | 0...6.5                   | o. r.       | o. r.                |
|                                                                                                                                                                  |                 |         |                                           | 24 / 50 / 4             |                    | 0...17                        | 0...17                    | o. r.       | o. r.                |
|                                                                                                                                                                  |                 |         |                                           | 230 / 50 / 4            |                    | 0...17                        | 0...17                    | o. r.       | o. r.                |
|                                                                                                                                                                  |                 |         |                                           | 24 / DC / 14            | 50 % ED            | –                             | 0...22                    | o. r.       | o. r.                |
|                                                                                                                                                                  |                 |         |                                           | 24 / DC / 11            |                    | 0...17                        | –                         | o. r.       | o. r.                |
|                                                                                                                                                                  |                 |         |                                           | 24 / DC / 11            |                    | –                             | 0...18                    | o. r.       | o. r.                |

| Circuit function                                                                                                                                               | Port connection | Orifice | K <sub>v</sub> value water <sup>1)</sup> | Voltage/Frequency/Power | Maximum duty cycle | Pressure range <sup>2)</sup> |                           | Article no. |                      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|---------|------------------------------------------|-------------------------|--------------------|------------------------------|---------------------------|-------------|----------------------|
|                                                                                                                                                                |                 |         |                                          |                         |                    | Ambient temperature 75 °C    | Ambient temperature 55 °C | Brass body  | Stainless steel body |
|                                                                                                                                                                |                 | [mm]    | [m³/h]                                   |                         |                    | Air [bar]                    | Air [bar]                 | FKM seal    |                      |
| <b>CF A</b><br>2/2-way solenoid valve<br>Direct-acting<br>Normally closed<br> | M5              | 2.0     | 0.110                                    | 24/DC/6.5               | 100 % ED           | –                            | 0...6                     | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/50/6                 |                    | –                            | 0...14                    | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 230/50/6                |                    | –                            | 0...14                    | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/5                 |                    | 0...4                        | –                         | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/5                 |                    | –                            | 0...4.5                   | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/50/4                 |                    | 0...10                       | 0...10                    | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 230/50/4                |                    | 0...10                       | 0...10                    | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/14                | 50 % ED            | –                            | 0...15                    | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/11                |                    | 0...12                       | –                         | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/11                |                    | –                            | 0...13                    | o. r.       | o. r.                |
|                                                                                                                                                                |                 | 2.4     | 0.130                                    | 24/DC/6.5               | 100 % ED           | –                            | 0...3                     | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/50/6                 |                    | –                            | 0...9                     | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 230/50/6                |                    | –                            | 0...9                     | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/5                 |                    | 0...2                        | –                         | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/5                 |                    | –                            | 0...2.5                   | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/50/4                 |                    | 0...6.5                      | 0...6.5                   | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 230/50/4                |                    | 0...6.5                      | 0...6.5                   | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/14                | 50 % ED            | –                            | 0...8                     | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/11                |                    | 0...6                        | –                         | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/11                |                    | –                            | 0...6.5                   | o. r.       | o. r.                |
|                                                                                                                                                                | G 1/8           | 1.2     | 0.045                                    | 24/DC/6.5               | 100 % ED           | –                            | 0...13                    | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/50/6                 |                    | –                            | 0...35                    | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 230/50/6                |                    | –                            | 0...35                    | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/5                 |                    | 0...9                        | –                         | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/5                 |                    | –                            | 0...11                    | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/50/4                 |                    | 0...27                       | 0...27                    | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 230/50/4                |                    | 0...27                       | 0...27                    | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/14                | 50 % ED            | –                            | 0...32                    | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/11                |                    | 0...25                       | –                         | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/11                |                    | –                            | 0...30                    | o. r.       | o. r.                |
|                                                                                                                                                                | G 1/8           | 1.6     | 0.060                                    | 24/DC/6.5               | 100 % ED           | –                            | 0...8.5                   | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/50/6                 |                    | –                            | 0...24                    | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 230/50/6                |                    | –                            | 0...24                    | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/5                 |                    | 0...5.5                      | –                         | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/5                 |                    | –                            | 0...6.5                   | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/50/4                 |                    | 0...17                       | 0...17                    | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 230/50/4                |                    | 0...17                       | 0...17                    | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/14                | 50 % ED            | –                            | 0...22                    | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/11                |                    | 0...17                       | –                         | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/11                |                    | –                            | 0...18                    | o. r.       | o. r.                |
|                                                                                                                                                                |                 | 2.0     | 0.110                                    | 24/DC/6.5               | 100 % ED           | –                            | 0...6                     | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/50/6                 |                    | –                            | 0...14                    | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 230/50/6                |                    | –                            | 0...14                    | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/5                 |                    | 0...4                        | –                         | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/5                 |                    | –                            | 0...4.5                   | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/50/4                 |                    | 0...10                       | 0...10                    | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 230/50/4                |                    | 0...10                       | 0...10                    | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/14                | 50 % ED            | –                            | 0...15                    | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/11                |                    | 0...12                       | –                         | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/11                |                    | –                            | 0...13                    | o. r.       | o. r.                |

| Circuit function                                                                                                                                               | Port connection | Orifice | K <sub>v</sub> value water <sup>1)</sup> | Voltage/Frequency/Power | Maximum duty cycle | Pressure range <sup>2)</sup> |                           | Article no. |                      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|---------|------------------------------------------|-------------------------|--------------------|------------------------------|---------------------------|-------------|----------------------|
|                                                                                                                                                                |                 |         |                                          |                         |                    | Ambient temperature 75 °C    | Ambient temperature 55 °C | Brass body  | Stainless steel body |
|                                                                                                                                                                |                 | [mm]    | [m³/h]                                   |                         |                    | Air [bar]                    | Air [bar]                 | FKM seal    |                      |
| <b>CF A</b><br>2/2-way solenoid valve<br>Direct-acting<br>Normally closed<br> | G 1/8           | 2.4     | 0.130                                    | 24/DC/6.5               | 100 % ED           | –                            | 0...3                     | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/50/6                 |                    | –                            | 0...9                     | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 230/50/6                |                    | –                            | 0...9                     | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/5                 |                    | 0...2                        | –                         | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/5                 |                    | –                            | 0...2.5                   | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/50/4                 |                    | 0...6.5                      | 0...6.5                   | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 230/50/4                |                    | 0...6.5                      | 0...6.5                   | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/14                | 50 % ED            | –                            | 0...8                     | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/11                |                    | 0...6                        | –                         | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/11                |                    | –                            | 0...6.5                   | o. r.       | o. r.                |
|                                                                                                                                                                | Flange (FK01)   | 1.2     | 0.045                                    | 24/DC/6.5               | 100 % ED           | –                            | 0...13                    | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/50/6                 |                    | –                            | 0...35                    | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 230/50/6                |                    | –                            | 0...35                    | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/5                 |                    | 0...9                        | –                         | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/5                 |                    | –                            | 0...11                    | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/50/4                 |                    | 0...27                       | 0...27                    | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 230/50/4                |                    | 0...27                       | 0...27                    | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/14                | 50 % ED            | –                            | 0...32                    | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/11                |                    | 0...25                       | –                         | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/11                |                    | –                            | 0...30                    | o. r.       | o. r.                |
|                                                                                                                                                                |                 | 1.6     | 0.060                                    | 24/DC/6.5               | 100 % ED           | –                            | 0...8.5                   | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/50/6                 |                    | –                            | 0...24                    | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 230/50/6                |                    | –                            | 0...24                    | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/5                 |                    | 0...5.5                      | –                         | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/5                 |                    | –                            | 0...6.5                   | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/50/4                 |                    | 0...17                       | 0...17                    | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 230/50/4                |                    | 0...17                       | 0...17                    | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/14                | 50 % ED            | –                            | 0...22                    | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/11                |                    | 0...17                       | –                         | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/11                |                    | –                            | 0...18                    | o. r.       | o. r.                |
|                                                                                                                                                                | Flange (FK01)   | 2.0     | 0.110                                    | 24/DC/6.5               | 100 % ED           | –                            | 0...6                     | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/50/6                 |                    | –                            | 0...14                    | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 230/50/6                |                    | –                            | 0...14                    | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/5                 |                    | 0...4                        | –                         | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/5                 |                    | –                            | 0...4.5                   | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/50/4                 |                    | 0...10                       | 0...10                    | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 230/50/4                |                    | 0...10                       | 0...10                    | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/14                | 50 % ED            | –                            | 0...15                    | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/11                |                    | 0...12                       | –                         | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/11                |                    | –                            | 0...13                    | o. r.       | o. r.                |
|                                                                                                                                                                |                 | 2.4     | 0.130                                    | 24/DC/6.5               | 100 % ED           | –                            | 0...3                     | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/50/6                 |                    | –                            | 0...9                     | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 230/50/6                |                    | –                            | 0...9                     | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/5                 |                    | 0...2                        | –                         | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/5                 |                    | –                            | 0...2.5                   | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/50/4                 |                    | 0...6.5                      | 0...6.5                   | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 230/50/4                |                    | 0...6.5                      | 0...6.5                   | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/14                | 50 % ED            | –                            | 0...8                     | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/11                |                    | 0...6                        | –                         | o. r.       | o. r.                |
|                                                                                                                                                                |                 |         |                                          | 24/DC/11                |                    | –                            | 0...6.5                   | o. r.       | o. r.                |

o. r. = on request

1.) Measurement at + 20 °C, 6 bar<sup>2)</sup> at the valve inlet and free outlet

2.) Pressure data: overpressure to atmospheric pressure and air as a medium

### Additional options

**Note:**

Available on request

| Option                                                           | Variable Code | Description                                                                                                                              |
|------------------------------------------------------------------|---------------|------------------------------------------------------------------------------------------------------------------------------------------|
| Oxygen versions                                                  | NL02          | Suitable for applications with oxygen (non-metal materials that are in contact with the medium are tested and approved according to BAM) |
| Increased purity requirements e.g. oil, grease and silicone-free | NL50/NL05     | Wetted parts are specially cleaned and packaged in accordance with the valves                                                            |
| Increased tightness requirements                                 | PC05          | Leakage rate *less than $10^{-4}$ mbar l/sec                                                                                             |
|                                                                  | PC08          | Leakage rate *less than $10^{-5}$ mbar l/sec                                                                                             |
|                                                                  | PC06          | Leakage rate *less than $10^{-6}$ mbar l/sec                                                                                             |

## 8.5. Ordering chart accessories

### Single manifold

**Note:**

 Further ordering information can be found in chapter [“5.4. Single manifold” on page 14.](#)

### Multiple manifold

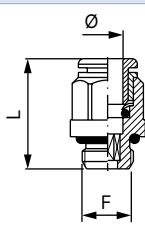
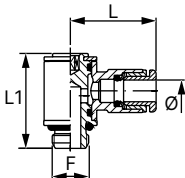
**Note:**

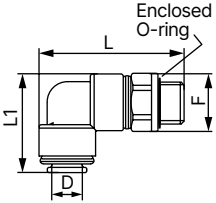
 Further ordering information can be found in chapter [“5.5. Multiple manifold” on page 15.](#)

### Accessories for manifolds

| Accessory   | Features                      | Article no.                                                                                  |
|-------------|-------------------------------|----------------------------------------------------------------------------------------------|
| Screw plug  | With sealing ring, G 1/8      | 005041  |
| Cover plate | For unoccupied valve position | 005100  |

### Accessories for G 1/8" threaded connections

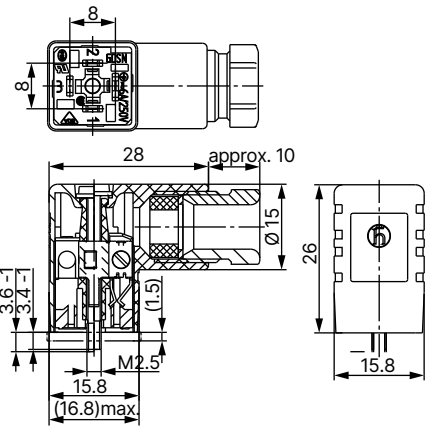
| Accessories                                                                         | Material             | Connection diameter | F     | L    | L1   | Article no.                                                                                  |
|-------------------------------------------------------------------------------------|----------------------|---------------------|-------|------|------|----------------------------------------------------------------------------------------------|
|                                                                                     |                      | [mm]                | [mm]  | [mm] | [mm] |                                                                                              |
| Straight push-in connector with O-Ring                                              |                      |                     |       |      |      |                                                                                              |
|  | Brass, nickel-plated | 4                   | G 1⁄8 | 18.0 | –    | 780001  |
|                                                                                     |                      | 6                   | G 1⁄8 | 21.6 | –    | 780003  |
|                                                                                     |                      | 8                   | G 1⁄8 | 25.4 | –    | 780005  |
| Elbow screw fitting, rotatable with O-Ring                                          |                      |                     |       |      |      |                                                                                              |
|  | Brass, nickel-plated | 4                   | G 1⁄8 | 21.3 | 24.9 | 780081  |
|                                                                                     |                      | 6                   | G 1⁄8 | 23.0 | 24.9 | 780082  |
|                                                                                     |                      | 8                   | G 1⁄8 | 24.8 | 24.9 | 780086  |

| Accessories                                                                       | Material | Connection diameter | F     | L    | L1   | Article no.                                                                                |
|-----------------------------------------------------------------------------------|----------|---------------------|-------|------|------|--------------------------------------------------------------------------------------------|
|                                                                                   |          | [mm]                | [mm]  | [mm] | [mm] |                                                                                            |
|  | POM      | 4                   | G 1/8 | 35.5 | 24.0 | 782344  |
|                                                                                   |          | 6                   | G 1/8 | 39.5 | 27.0 | 782345  |
|                                                                                   |          | 8                   | G 1/8 | 41.5 | 30.0 | 782346  |

Cable plug Type 2516, form C according to DIN EN 175301 - 803

Note:

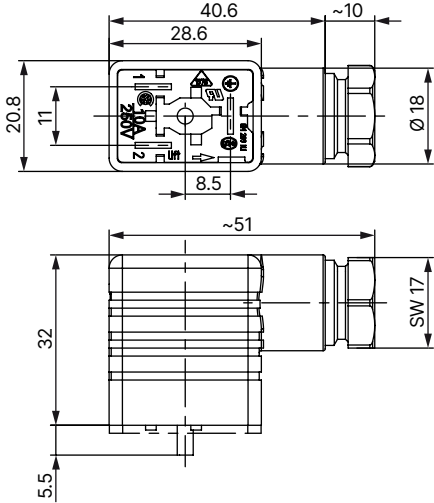
- Dimensions in mm
- Delivery of cable plug includes a flat seal and a fixing screw.
- For further versions see data sheet **Type 2516** 

| Cable plug                                                                         | Dimensions                                                                         | Version                          | Voltage         | Article no.                                                                                |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|----------------------------------|-----------------|--------------------------------------------------------------------------------------------|
|  |  | Without circuitry                | 0...250 V AC/DC | 303141  |
|                                                                                    |                                                                                    | With LED                         | 12...24 V AC/DC | 303145  |
|                                                                                    |                                                                                    | With LED and varistor            | 12...24 V AC/DC | 303148  |
|                                                                                    |                                                                                    | With rectifier, LED and varistor | 12...24 V AC/DC | 303142  |

Cable plug Type 2507, form B according to industry standard

Note:

- Dimensions in mm
- Delivery of cable plug includes a flat seal and a fixing screw.
- Refer to data sheet **Type 2507** ▶ for more information about the cable plug.

| Cable plug                                                                        | Dimensions                                                                        | Version                          | Voltage         | Article no.                                                                                |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------|-----------------|--------------------------------------------------------------------------------------------|
|  |  | Without circuitry (standard)     | 2...250 V AC/DC | 423845  |
|                                                                                   |                                                                                   | With LED                         | 24 V AC/DC      | 423849  |
|                                                                                   |                                                                                   | With LED and free-wheeling diode | 12...24 V AC/DC | 423851  |
|                                                                                   |                                                                                   | With rectifier, LED and varistor | 12...24 V AC/DC | 423853  |
|                                                                                   |                                                                                   |                                  | 2...250 V AC/DC | 423854  |