



2/2 way plunger solenoid valve with separating diaphragm

- Compact design
- Low electrical power consumption
- Short response times
- Hermetically sealing isolating diaphragm
- Non-metallic valve internals

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

Type description

Type 117 is a normally-closed direct-acting plunger-type solenoid valve with PTFE-coated diaphragm. The diaphragm isolates the fluid from the solenoid system. When deenergized (in circuit function A) the valve is closed by spring action. When energized, the solenoid armature is drawn in 2/2 way, G 1/8, UNF 1/4-28 Fluid Control Systems against a spring to open the valve. The solenoid epoxy encapsulation efficiently dissipates the heat generated by the coil.

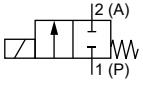
Table of contents

| | |
|--|----------|
| 1. General technical data | 3 |
| 2. Circuit functions | 3 |
| 3. Approvals and conformities | 4 |
| 3.1. General notes | 4 |
| 3.2. Conformity | 4 |
| 3.3. Standards..... | 4 |
| 4. Materials | 4 |
| 4.1. Burkert resistApp..... | 4 |
| 4.2. Material specifications..... | 4 |
| 5. Dimensions | 5 |
| 6. Ordering information | 6 |
| 6.1. Burkert eShop | 6 |
| 6.2. Burkert product filter..... | 6 |
| 6.3. Burkert Product Enquiry Form..... | 6 |
| 6.4. Ordering chart | 7 |
| 6.5. Ordering chart accessories..... | 7 |
| Cable plug Type 2507, form B according to industry standard..... | 7 |

1. General technical data

| Product properties | |
|---|---|
| Dimensions | Further information can be found in chapter " 5. Dimensions " on page 5. |
| Material | |
| Seal | PTFE/EPDM PTFE/FKM EPDM/FKM |
| Body | ETFE (TEFZEL) |
| Coil | Epoxy |
| Orifice | DN 1.2...DN 2.0 |
| Circuit function | A Further information can be found in chapter " 2. Circuit functions " on page 3. |
| Thermal insulation class of solenoid coil | Epoxy coil class H |
| Performance data | |
| Duty cycle | 100 % continuous operation |
| Switching frequency | Max. 300 c.p.m. |
| Switching time | Opening: approx. 20 ms Closing: approx. 20 ms |
| Electrical data | |
| Operating voltage | 12 V DC, 24 V DC, 24 V UC, 220/230 V UC |
| Electrical power consumption | 4 W |
| Voltage tolerance | ± 10 % |
| Medium data | |
| Operating medium | |
| With PTFE/EPDM | Alkalies, mineral acids and organic acids, washing and bleaching lyes |
| With PTFE/FKM | Oxidising acids and lyes, saline solutions, oils and waste gases |
| Medium temperature | - 10 °C...+ 70 °C |
| Viscosity | Max. 21 mm ² /s |
| Process/Port connection and communication | |
| Electrical connection | <ul style="list-style-type: none"> Plug contacts according to industry standard form A for cable plug Type 2507 ► Further information can be found in chapter "Cable plug Type 2507, form B according to industry standard" on page 7. Flying leads with 300 mm are available on request. |
| Approvals and conformities | |
| Degree of protection | IP65 with cable plug |
| Environment and installation | |
| Installation position | As required, preferably with actuator upright |
| Ambient temperature | Max. + 55 °C |

2. Circuit functions

| Symbol | Description |
|---|--|
|  | Circuit function A (CF A) 2/2-way solenoid valve Direct-acting Normally closed |

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 variants can be supplied with the below mentioned approvals or conformities.

3.2. Conformity

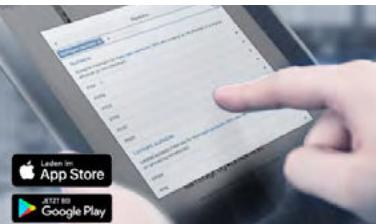
In accordance with the Declaration of Conformity, the product is compliant with the EU Directives.

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.

4. Materials

4.1. Bürkert resistApp

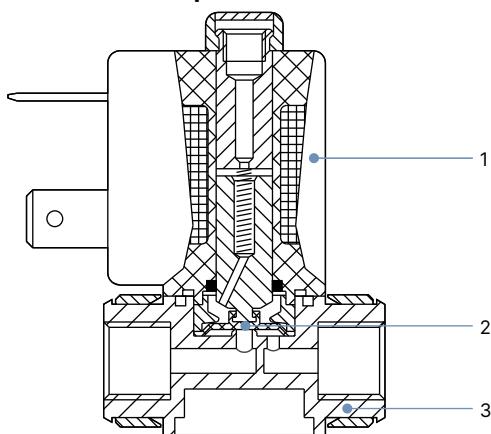


Bürkert resistApp – Chemical resistance chart

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

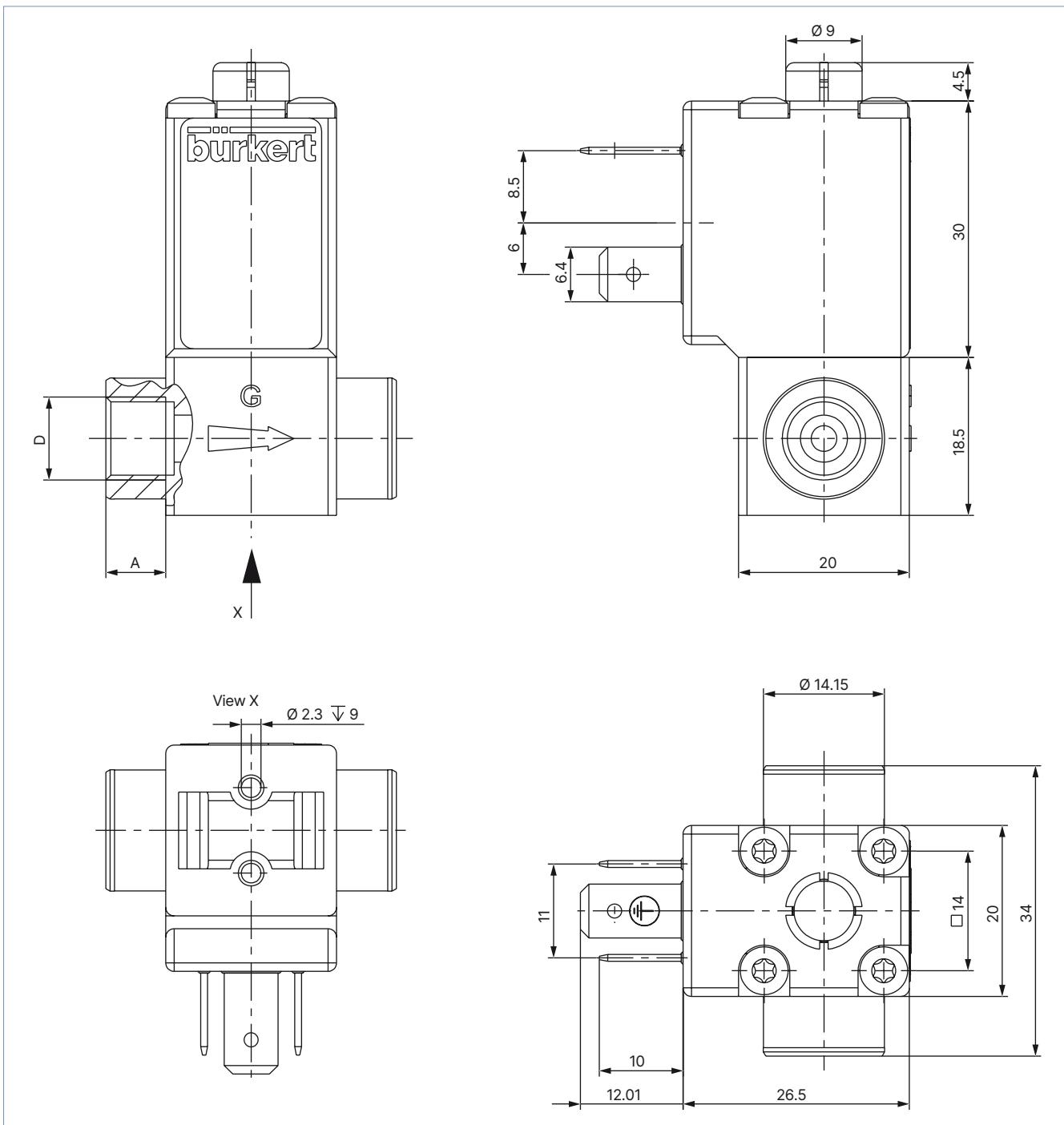


| No. | Element | Material |
|-----|-----------------------|-----------------------------------|
| 1 | Coil | Epoxy |
| 2 | Separating diaphragms | PTFE/EPDM PTFE/FKM EPDM/FKM |
| 3 | Valve body | ETFE (TEFZEL) |

5. Dimensions

Note:

Dimensions in mm



| D | A |
|--------------|---|
| G 1/8 | 8 |
| NPT 1/8 | 7 |
| UNF 1/4...28 | 8 |

6. Ordering information

6.1. Bürkert eShop



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6.2. Bürkert product filter

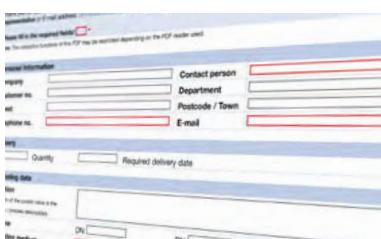


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6.3. Bürkert Product Enquiry Form



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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.

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6.4. Ordering chart

Note:

- All valves are delivered with a ETFE body (TEFZEL).
- Please note that the cable plug must be ordered separately, see "Cable plug Type 2507, form B according to industry standard" on page 7 or separate data sheet Type 2507 ►.

| Circuit function | Port connection | Orifice | K _v value water | Voltage/Frequency | Pressure range | Seal material | Article no. |
|---|-----------------|---------|----------------------------|-------------------|----------------|---------------|-------------|
| | | [mm] | [m ³ /h] | [V/Hz] | [bar] | | |
| CF A 2/2-way solenoid valve Direct-acting Normally closed | G 1/8 | 1.6 | 0.06 | 24/DC | 0...1.5 | PTFE/EPDM | 057606 ☰ |
| | | | | 24/UC | | PTFE/EPDM | 058206 ☰ |
| | | | | 24/DC | | PTFE/FKM | 056664 ☰ |
| | | | | 24/UC | | PTFE/FKM | 041763 ☰ |
| | | | | 220...230/UC | | PTFE/EPDM | 057839 ☰ |
| | G 1/8 | 2.0 | 0.09 | 24/DC | 0...1.0 | PTFE/EPDM | 043698 ☰ |
| | | | | 220...230/UC | | PTFE/EPDM | 021301 ☰ |
| | | | | 24/DC | | PTFE/FKM | 040947 ☰ |
| | | | | 24/UC | | PTFE/FKM | 058062 ☰ |
| | | | | 220...230/UC | | PTFE/EPDM | 021186 ☰ |

6.5. Ordering chart accessories

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 | Variant | Voltage | Article no. |
|-------------|------------|----------|------------------------------|-----------------|
| | | | Without circuitry (standard) | 2...250 V AC/DC |
| GML209-GB 1 | | With LED | 24 V AC/DC | 423849 ☰ |