





2/2-way Whisper Valve with media separation

- Highest chemical resistance combined with minimum internal volume
- Compact design with 7 mm installation width
- DN 0.8 mm (3 bar) and 0.4 mm (5 bar)
- Switching noise < 36 dB
- For dosing applications with excellent cleanability

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

Can be combined with

| | |
|---|--|
|  | Type 8763 ▶ Pressure controller for precise time-pressure dosing |
|  | Type 2503 ▶ Cable plug for whisper valve Types 6712 and 6724 |

Type description

Fluidic “point-of-care” applications, such as dialysis or artificial respiration, and “point-of-use” applications, such as at pipetting arms in biological analysis, present special requirements. The new, media-separated Whisper Valve Type 6712 was developed for precisely these applications. It sets new benchmarks particularly with low switching noise and excellent cleanability. However, the Type 6712 is also the first choice in industrial applications, such as inkjet printers, thanks to its long service life and excellent switching dynamics. The valve’s modular design and available material variants means that it can be used with practically all liquids and gases in the fields of life sciences and industrial applications. This is a valve that combines dosing accuracy and cleanability.

Table of contents

| | |
|--|----------|
| 1. General technical data | 3 |
| 2. Circuit functions | 4 |
| 3. Materials | 4 |
| 3.1. Chemical Resistance Chart – Bürkert resistApp..... | 4 |
| 3.2. Material data..... | 4 |
| 4. Dimensions | 5 |
| 4.1. Valve | 5 |
| 5. Ordering information | 6 |
| 5.1. Bürkert eShop – Easy ordering and quick delivery..... | 6 |
| 5.2. Bürkert product filter | 6 |
| 5.3. Ordering chart..... | 6 |
| 5.4. Ordering chart accessories..... | 7 |
| Manifolds | 7 |
| Cable plug Type 2503..... | 8 |
| Fittings and hoses..... | 8 |

1. General technical data

| Product properties | |
|---|---|
| Dimensions | Detailed information can be found in chapter „4. Dimensions“ on page 5. |
| Material | |
| Seal | EPDM or FFKM |
| Body | PEEK or PPS |
| Internal volume | Fluid chamber: approx. 2 µl Total (incl. connections): approx. 5 µl |
| Orifice | DN 0.4 or DN 0.8 |
| Circuit function | Detailed information can be found in chapter „2. Circuit functions“ on page 4. |
| Typical product service life | 30,000,000 circuits (according to laboratory endurance tests) ¹⁾ |
| Performance data | |
| Pressure ranges | |
| DN 0.4 | 0...5 bar ²⁾ |
| DN 0.8 | 0...3 bar ²⁾ |
| Pressure at the outlet (back pressure) | |
| DN 0.4 | Max. 1.8 bar ³⁾ |
| DN 0.8 | Max. 1.2 bar ³⁾ |
| Switching noise | 36 dB(A) ⁴⁾ |
| Switching time ⁵⁾ | Opening: approx. 0.9 ms (pressure build-up 0...10%) Closing: approx. 1.8 ms (pressure release 100...90%) |
| Electrical data | |
| Operating voltage | 12 V DC, 24 V DC |
| Duty cycle | 100 % continuous operation |
| Nominal power | 0.9 W (no further power reduction possible) |
| Switching frequency | 50 Hz |
| Voltage tolerance | ± 10 % (incl. residual ripple) |
| Medium data | |
| Operating medium | Resistant to neutral and aggressive gases and liquids (see „3.1. Chemical Resistance Chart – Bürkert resistApp“ on page 4) |
| Medium temperature | |
| EPDM | 0 °C...+55 °C |
| FFKM | +10 °C...+55 °C |
| Viscosity (max.) | 21 mm ² /s |
| Process/Port connection & communication | |
| Electrical connection | Single flying leads, AWG 26, 500 mm Cable plug Type 2503 with grid dimension 2 mm ⁶⁾ (see chapter „5.4. Ordering chart accessories“ on page 7) (Solder pin on request) |
| Port connection | Bürkert flange (7 × 18.2 mm) |
| Approvals and certificates | |
| Degree of protection | IP40 with flying leads IP10 with cable plug Type 2503 |
| Suitability for foodstuffs | FDA (on request) |
| Environment and installation | |
| Installation position | Any, preferably actuator face up |
| Ambient temperature | |
| EPDM | 0 °C...+55 °C |
| FFKM | +10 °C...+55 °C |

1.) Service life depends on the type of medium, the temperature, the pressure, the seal material and the specific operational conditions. The use of BoostClose electronics is only recommended with EPDM material. This reduces the service life compared to the standard control.

2.) Maximum relative pressure maintaining seal on the valve seat; no vacuum possible. With optional boost electronics (see „5.4. Ordering chart accessories“ on page 7) pressure ranges increase.

3.) Relative pressure; no vacuum possible. With optional boost electronics (see „5.4. Ordering chart accessories“ on page 7) pressure ranges increase.

4.) Tested under Bürkert test conditions. The value may deviate under different conditions.

- 5.) Typical switching time measured between valve outlet and a flow resistance according to DIN ISO 12238:2001 at 25 °C; switching time depends on temperature, pressure and sealing material.
- 6.) Please order cable plug with flying leads separately (see „5.4. Ordering chart accessories“ on page 7). For other suitable push-in connectors see data sheet Type 2503 ▶.

2. Circuit functions

| Circuit function | Description |
|------------------|---|
| | Type: A, solenoid valve 2/2 way Direct-acting Normally closed |

3. Materials

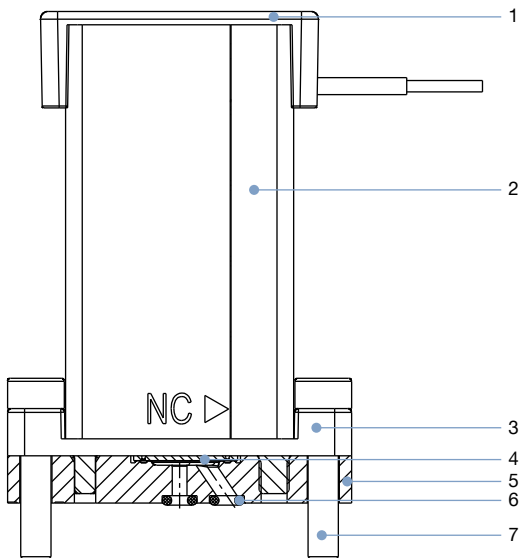
3.1. Chemical Resistance Chart – Bürkert resistApp

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

3.2. Material data



| No. | Element | Material |
|-----|--|-----------------|
| 1 | Cover | PPS |
| 2 | Coil housing | Nickel-plated |
| 3 | Valve body | PPS |
| 4 | Diaphragm (in contact with medium) | EPDM or FFKM |
| 5 | Fluid housing (in contact with medium) | PEEK or PPS |
| 6 | Flange seal (in contact with medium) | EPDM or FFKM |
| 7 | Fixing screw | Stainless steel |

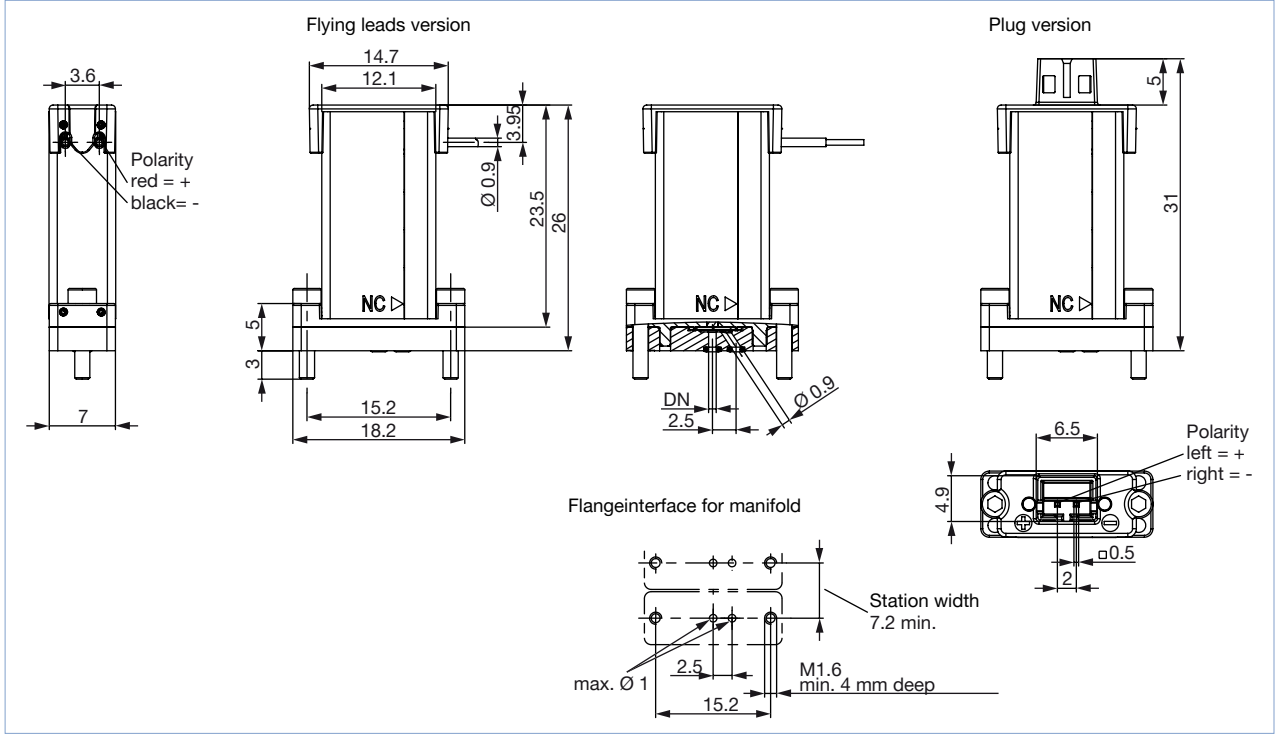
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4. Dimensions

4.1. Valve


Note:

Dimensions in mm



5. Ordering information

5.1. Bürkert eShop – Easy ordering and quick delivery




Bürkert eShop – Easy ordering and fast delivery

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5.2. Bürkert product filter



Bürkert product filter – Get quickly to the right product

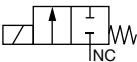
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5.3. Ordering chart

Note:

- Please order cable plug with lead or electronic Type 2503 separately (see „5.4. Ordering chart accessories“ on page 7).
- Attachment for flange connection: 2 stainless steel cylinder screws ISO 4762 M1.6 x 8 (included)

| Circuit function | Orifice | Port connection | K _v value water ^{1.)} | C _v value water | Q _{Nn} value air ^{2.)} | Pressure range | Max. back pressure at the outlet | Seal material | Body material | Electrical connection | Voltage/Frequency | Article no. |
|--|---------|-----------------|---|----------------------------|--|----------------|----------------------------------|---------------|---------------|-----------------------|-------------------|-------------|
| | [mm] | | [m³/h] | [gpm] | [l/min] | [bar] | [bar] | | | | [V/Hz] | |
| A, solenoid valve 2/2 way Direct-acting Normally closed  | 0.4 | Bürkert flange | 0.005 | 0.006 | 5.8 | 0...5 | 1.8 | EPDM | PPS | Plug | 12 V DC | 273226 |
| | | | | | | | | FFKM | PEEK | Flying leads | 24 V DC | 273206 |
| | 0.8 | | 0.012 | 0.014 | 13.1 | 0...3 | 1.2 | EPDM | PPS | Flying leads | 12 V DC | 273232 |
| | | | | | | | | FFKM | PEEK | | | 273231 |
| | | | EPDM | PPS | Flying leads | 24 V DC | 273188 | | | | | |
| | | | | | | | FFKM | PEEK | 273187 | | | |
| | | | EPDM | PPS | Plug | 24 V DC | 273236 | | | | | |
| | | | | | | | FFKM | PEEK | 273235 | | | |
| | | | EPDM | PPS | Flying leads | 24 V DC | 273190 | | | | | |
| | | | | | | | FFKM | PEEK | 267651 | | | |

1.) Flow rate value for water measurement at +20 °C, and 1 bar pressure at the valve inlet and free outlet
 2.) Measurement at +20 °C, 1 bar pressure at the valve inlet and 1 bar pressure difference

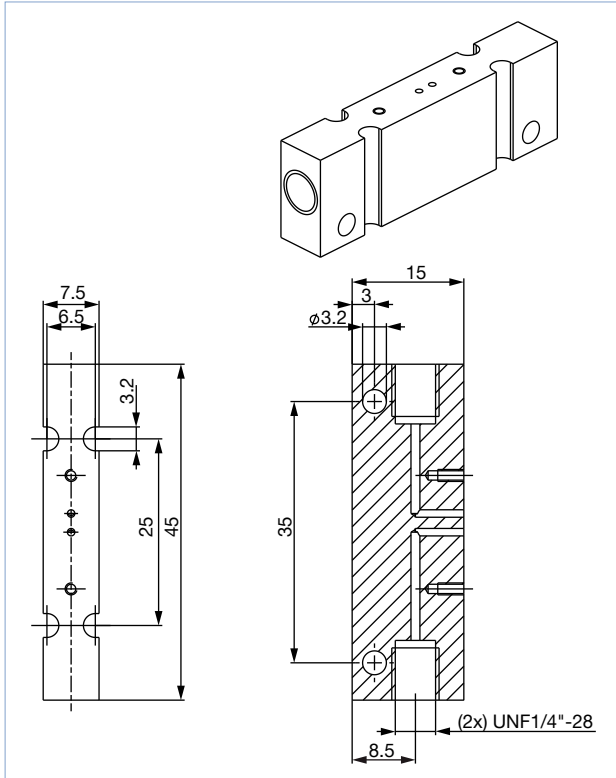
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5.4. Ordering chart accessories

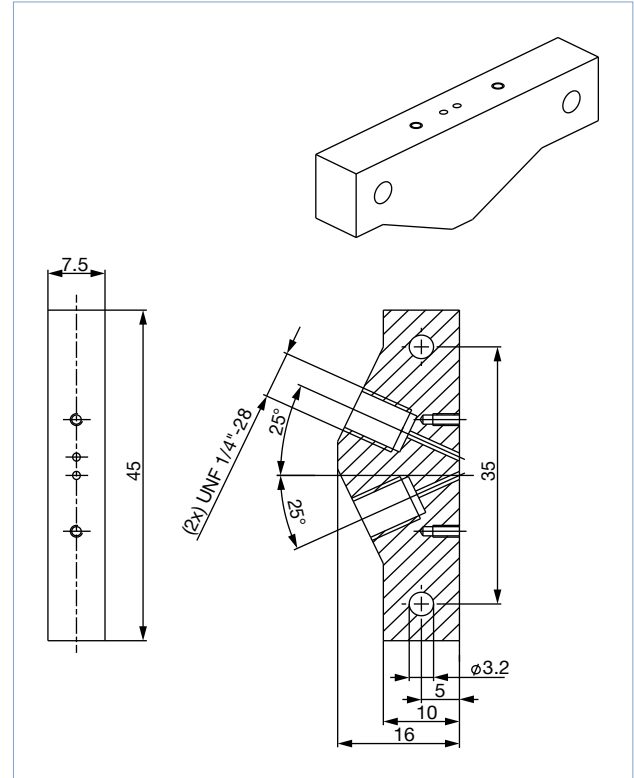
Manifolds

Note:

- Dimensions in mm
- 1x manifold with UNF 1/4"-28 working ports
- Delivery without valve
- Customised manifolds on request







| Description | Article no. |
|---------------------------|-------------|
| Manifold UNF 1/4"-28 PEEK | 694895 |




| Description | Article no. |
|---|-------------|
| Manifold UNF 1/4"-28 PEEK (low internal volume) | 695956 |

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Cable plug Type 2503

| Accessories | Description | Article no. |
|---|--|--|
|  | Cable plug with 500 mm flying leads AWG 24 For further information please refer to data sheet Type 2503 ▶. | 689974  |
|  | Cable plug with 500 mm flying leads and boost-close electronics to increase the permissible pressure under NC and the permissible back pressure. For further information refer to the operating instructions for Type 2503 ▶ BoostClose or see data sheet Type 2503 ▶. | 689998  |

Fittings and hoses

| Accessories | Description | Article no. |
|--|---|--------------------------------------|
|  | Fittings and hoses for UNF connections and hoses see type Type TVU003 ▶. | see data sheet TVU003 ▶ |

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