



2/2 or 3/2-way Whisper Valve with media separation

- Very fast switching at a low noise level <45 dB(A)
- High pressure range up to 16 bar with nominal diameter DN 1.4 mm
- Highest chemical resistance
- Compact design with 18 mm installation width
- High back pressure tightness

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

Can be combined with



Type 2505 ▶
10 mm socket for
Bürkert small solenoid
valves

Type description

The combination of maximum flow and minimum valve size is becoming increasingly important in various medical and IVD related applications. Combined with high chemical resistance, this explains the broad range of applications for Type 6757. However, in addition to the flow, this valve is also able to switch pressures of up to 16 bar. This is a highlight of particular relevance for applications in the area of environmental analysis. The devices from the areas mentioned, including the valves, need to be flushed, cleaned, disinfected and sometimes even sterilised. Therefore, they need to withstand flushing cycles with high temperatures and/or high pressure, which is precisely what the Type 6757 was designed for. The product is thus ideally suitable for applications such as endoscope cleaning or dialysis, but also for use in environmental analysers. Fast switching times, as implemented here, guarantee high process safety because reliable switching behaviour is an important aspect for accurate dosing and reproducible processes.

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1. General technical data

1.1. General data

| Product properties | |
|---|--|
| Dimensions | Detailed information can be found in chapter "4. Dimensions" on page 6. |
| Material | |
| Seal | FFKM, (EPDM and FKM on request) |
| Fluid housing | PEEK, (PPS on request) |
| Orifice and pressure range^{1.)} | |
| DN 1.4 | |
| Circuit function A | Vacuum up to 16 bar |
| Circuit function T | Vacuum up to 10 bar |
| DN 4 | |
| Circuit function A | Vacuum up to 3 bar |
| Circuit function T | Vacuum up to 1.5 bar |
| Internal volume | Fluid chamber 467 µl / Total (incl. connections) 1255 µl |
| Typical product service life | 10 million switching cycles (according to laboratory endurance test ^{2.)} |
| Performance data | |
| Duty cycle^{4.)} | |
| Single assembly | 100 % continuous operation |
| Block assembly | 70 % continuous operation (max. 10 min. duty cycle) Detailed information can be found in the operating instructions Type 6757 ▶. |
| Switching noise | 45 dB (A) ^{3.)} |
| Switching time | Opening: ca. 7 ms (Pressure build-up 0...10%) Closing: ca. 7 ms (Pressure reduction 100...90%) (Measurement at the valve outlet at 20 °C acc. to DIN ISO 12238:2001) |
| Electrical data | |
| Operating voltage | 24 V DC (12 V on request) |
| Nominal power | 4.5 W ^{5.)} |
| Voltage tolerance | ± 5 % (incl. residual ripple) |
| Medium data | |
| Medium temperature | FFKM: + 15...+ 50 °C FKM: 0...+ 50 °C EPDM: 0...+ 50 °C 90 °C permissible for cleaning cycles (max. 30 minutes) ^{4.) 6.)} |
| Viscosity (max.) | 21 mm ² /s |
| Process/Port connection & communication | |
| Electrical connection | Rectangular plug Type 2505 Detailed information can be found in the data sheet Type 2505 ▶. |
| Port connection | Flange (other port connections on request) |
| Approvals and certificates | |
| Suitable for food industry | FDA – on request |
| Degree of protection | IP30 acc. to EN 60529 |
| Suitable for drinking water | KTW (W270) – on request |
| Environment and installation | |
| Installation position | Any, preferably actuator upwards |
| Ambient temperature | FFKM: + 15...+ 50 °C FKM: 0...+ 50 °C EPDM: 0...+ 50 °C |

1.) Orifices 2 and 3 mm will be available soon.

2.) The service life depends on the medium, temperature, pressure, sealing material and individual operating conditions.

3.) Measured in sound measurement chamber according to ISO3745 accuracy class 1. The value may differ under other conditions.

4.) Max. housing temperature must not exceed 110 °C. In continuous operation care must be taken to ensure sufficient heat dissipation (convection) at the metal surface of the valve. Overheating of the valve can lead to damage.

5.) No further power reduction possible.

6.) The valve must not be switched during the cleaning cycles.

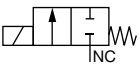
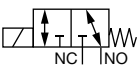
1.2. Flow characteristics

| Circuit function | DN | K_v value water | | | | |
|------------------|-----|---------------------|---------------------|---------------------|---------------------|---------------------|
| | | NC → Out | NC → COM | NO → COM | COM → NC | COM → NO |
| | | [m ³ /h] | [m ³ /h] | [m ³ /h] | [m ³ /h] | [m ³ /h] |
| A | 1.4 | 0.055 | – | – | – | – |
| | 4 | 0.37 | – | – | – | – |
| T | 1.4 | – | 0.055 | 0.055 | 0.06 | 0.06 |
| | 4 | – | 0.36 | 0.36 | 0.425 | 0.425 |

| Circuit function | DN | C_v value water | | | | |
|------------------|-----|-------------------|----------|----------|----------|----------|
| | | NC → Out | NC → COM | NO → COM | COM → NC | COM → NO |
| | | [gpm] | [gpm] | [gpm] | [gpm] | [gpm] |
| A | 1.4 | 0.064 | – | – | – | – |
| | 4 | 0.428 | – | – | – | – |
| T | 1.4 | – | 0.064 | 0.064 | 0.069 | 0.069 |
| | 4 | – | 0.416 | 0.416 | 0.491 | 0.491 |

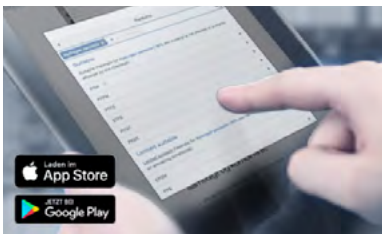
| Circuit function | DN | Q_{Nn} value air | | | | |
|------------------|-----|--------------------|----------|----------|----------|----------|
| | | NC → Out | NC → COM | NO → COM | COM → NC | COM → NO |
| | | [l/min] | [l/min] | [l/min] | [l/min] | [l/min] |
| A | 1.4 | 60 | – | – | – | – |
| | 4 | 400 | – | – | – | – |
| T | 1.4 | – | 60 | 60 | 65 | 65 |
| | 4 | – | 390 | 390 | 440 | 440 |

2. Circuit functions

| Circuit functions | Description |
|---|--|
|  | Type: A, solenoid valve 2/2 way Direct-acting Normally closed |
|  | Type: T, solenoid valve 3/2 way Direct-acting Flow direction optional Universal |

3. Materials

3.1. Chemical Resistance Chart – Bürkert resistApp

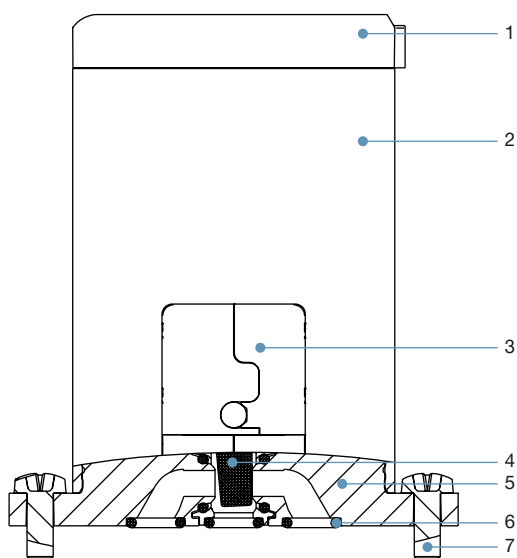


Bürkert resistApp – Chemical Resistance Chart

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 specifications



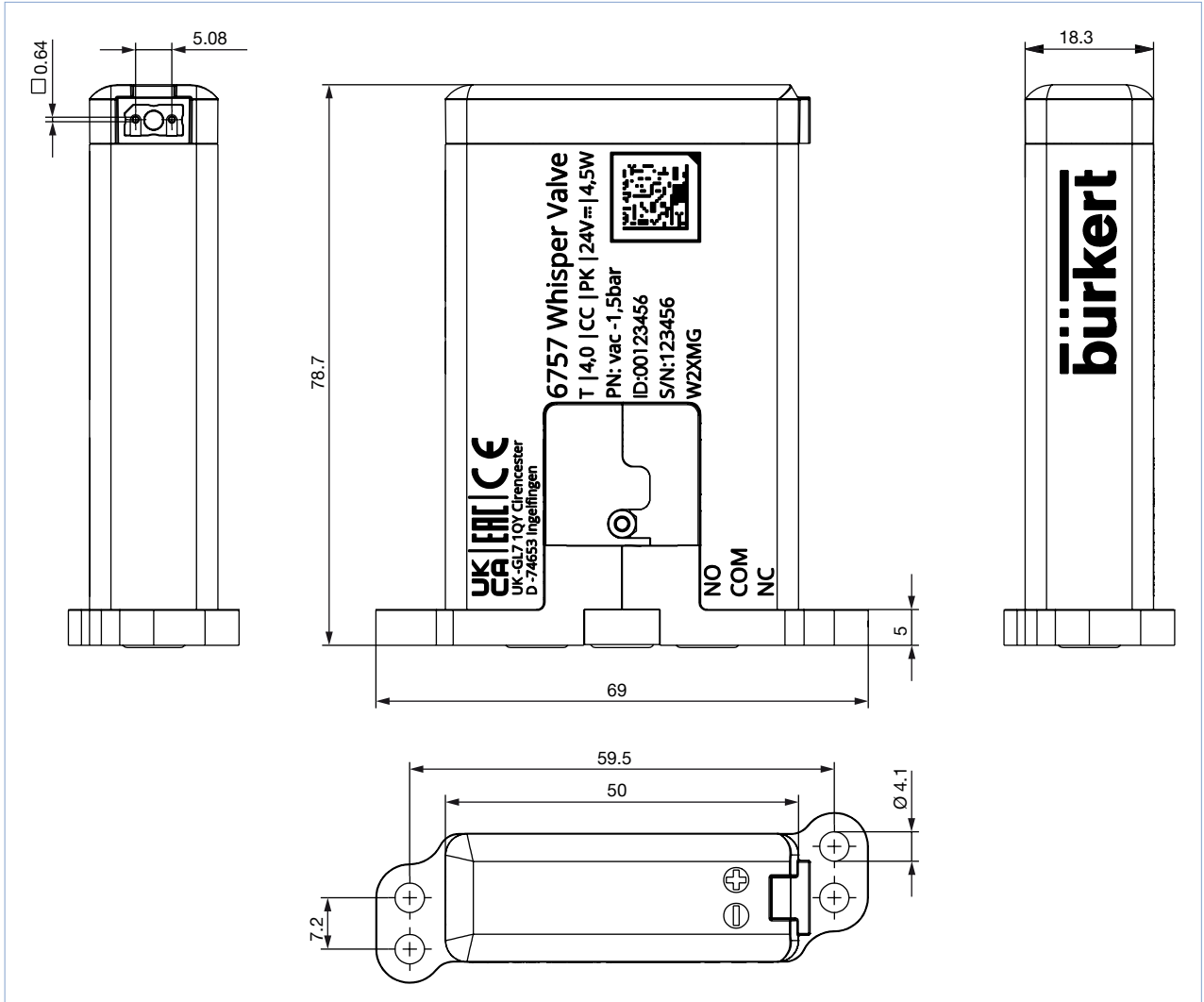
| No. | Element | Material |
|-----|-----------------|--------------------------------|
| 1 | Cover | PA |
| 2 | Coil housing | Nickel-plated |
| 3 | Valve housing | PPS |
| 4 | Diaphragm | FFKM (FKM and EPDM on request) |
| 5 | Fluid housing | PEEK (PPS on request) |
| 6 | Flange seal | FFKM (FKM and EPDM on request) |
| 7 | Oval head screw | Stainless steel |

4. Dimensions

4.1. Flange version

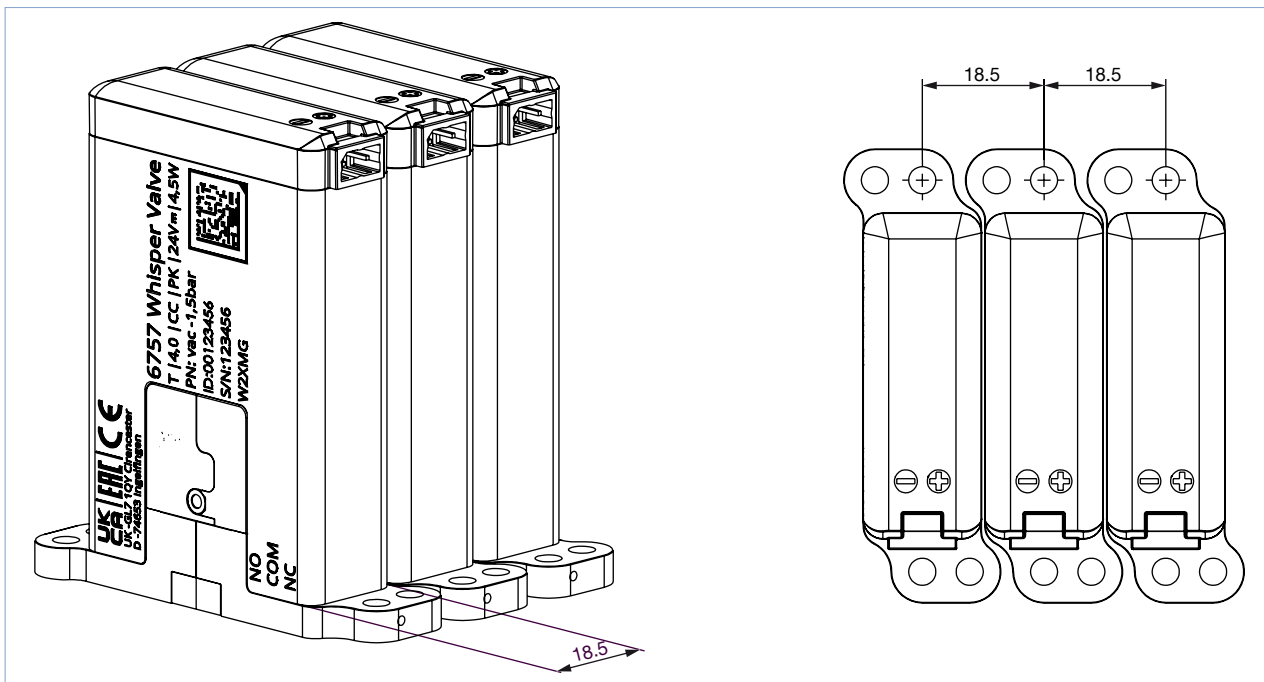
Note:

Dimensions in mm



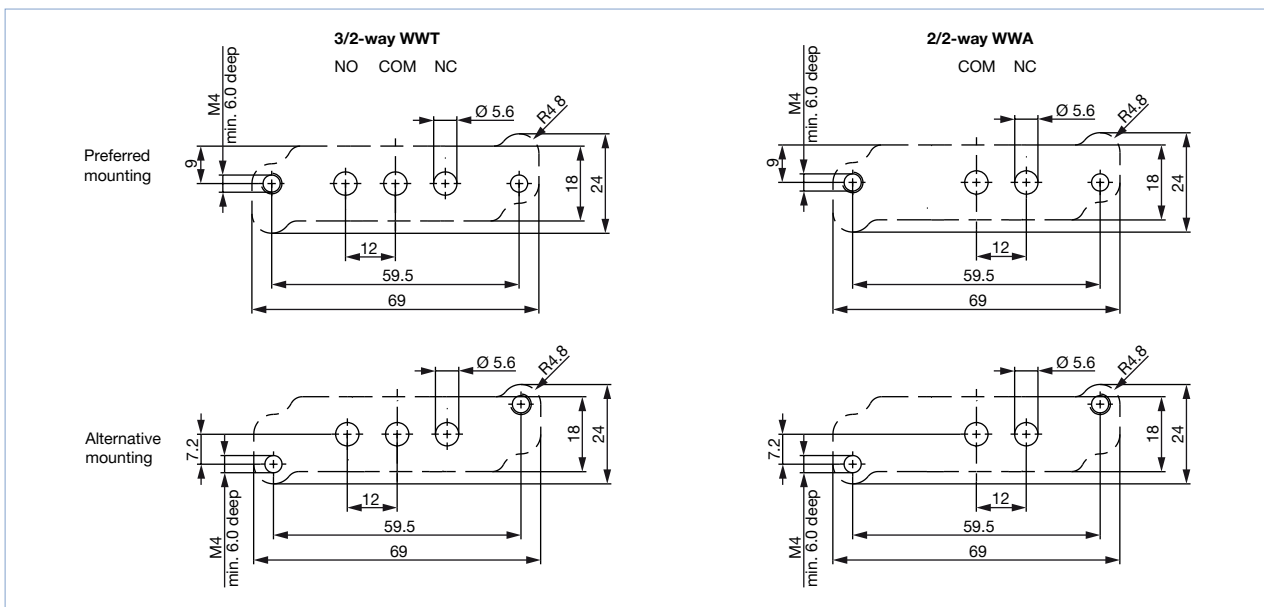
4.2. Width per station

Note:
Dimensions in mm



4.3. Flange pattern

Note:
Dimensions in mm



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5. Ordering information

5.1. Bürkert eShop – Easy ordering and quick delivery

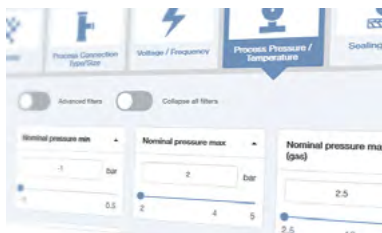


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5.2. Bürkert product filter



Bürkert product filter – Get quickly to the right product

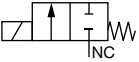
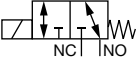
You want to select products comfortably based on your technical requirements? Use the Bürkert product filter and find suitable articles for your application quickly and easily.

[Try out our product filter](#)

5.3. Ordering chart

Note:

- Further versions on request
- 2x M4 x 10 fixing screws for sub-base versions are included in the delivery.
- Connectors for rectangular plug are not included in the delivery and must be ordered separately, see [“5.4. Ordering chart accessories” on page 9.](#)

| Circuit function | Port connection | Orifice | Q _{Nn} value | K _v value | Voltage/ Frequency | Pressure range | Max. pressure difference | Body material | Seal material | Article no. |
|---|-----------------|---------|-----------------------|-----------------------------------|-----------------------|------------------------|--------------------------|---------------|---------------|-------------|
| | | [mm] | [l/min] | [m ³ /h] ¹⁾ | [V/Hz] | [bar] ^{2) 3)} | [bar] | | | |
| A, solenoid valve 2/2 way Direct-acting Normally open  | Flange | 1.4 | 60 | 0.055 | 024/DC | Vac...16 | 16 | PEEK | FFKM | 324226 |
| | Flange | 4 | 400 | 0.37 | 024/DC | Vac...3 | 3 | PEEK | FFKM | 324233 |
| T, solenoid valve 3/2 way Direct-acting Flow direction optional Universal  | Flange | 1.4 | 60 | 0.055 | 024/DC | Vac...10 | 10 | PEEK | FFKM | 324232 |
| | Flange | 4 | 390 | 0.36 | 024/DC | Vac...1.5 | 1.5 | PEEK | FFKM | 324235 |

1.) Measurement at +20 °C , 1 bar pressure at the valve inlet and free outlet.

2.) Overpressure to atmospheric pressure







3.) The water hammer with incompressible media must not exceed the max. permissible differential pressure.

5.4. Ordering chart accessories

Rectangular cable plug Type 2505

Note:

For further versions see data sheet **Type 2505** ▶.

| Accessories | Description | Article no. |
|---|---|--|
|  | Rectangular cable plug Type 2505 with 3 m cable | 252572  |
| | Rectangular cable plug Type 2505 with 5 m cable | 255194  |
|  | Rectangular cable plug Type 2505 with 300 mm flying leads | 644068  |
| | Rectangular cable plug Type 2505 with 600 mm flying leads | 162144  |

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