bürkert
FLUID CONTROL SYSTEMS

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

- Highest chemical resistance
- Compact design with 8.9 mm installation width
- DN 0.8 mm (vacuum up to 5 bar) and 1.2 mm (vacuum up to 3 bar)
- Very fast, almost silent switching with <20 dB (A) and very low power consumption
- High back-pressure tightness, excellent cleanability and 100 % duty cycle

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

Can be combined with

Type 2503 ▸
Cable plug for whisper valve Types 6712 and 6724

Type 8763 ▸
Pressure controller for precise time-pressure dosing

Type description

Many fluidic processes moving closer to where they are actually required. In the field of medical devices, for example, treatments such as dialysis can be provided to patients in convenient surroundings at home. Washing units in analytical equipment are positioned on the pipetting arm or directly on the print head in printing applications. This imposes different requirements on the components used. Solenoid valves must be able to switch without being heard. They need to be smaller and lighter to be used in mobile devices. However, their ability to achieve a long service life and excellent switching characteristics is every bit as important. The Whisper Valve Type 6724 combines all of these traits and, thanks to its modular structure and range of available material variants, this valve is universally applicable.

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Visit product website ▸

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1. General technical data

Product properties	
Dimensions	Detailed information can be found in chapter "5. Dimensions" on page 5.
Materials	
Body	PEEK or PPS
Seal	FFKM, EPDM or FKM
Typical product service life	10 million switching cycles (acc. to laboratory duration tests)[1.)]
Internal volume	Bürkert flange (9 x 26): approx. 38 µl Bürkert flange (26 x 57) horizontal: approx. 79 µl Threaded version UNF ¼"-28: approx. 59 µl Tube connector: approx. 68 µl
Nominal diameter	DN 0.8 or DN 1.2
Circuit functions	Detailed information can be found in chapter "3. Circuit functions" on page 4.
Performance data	
Pressure range	Detailed information can be found in chapter "6.1. Medium pressure" on page 10.
Switching noise	30 dB (A) (<20 dB (A) on request[2.)])
Switching times[3.)]	Opening: approx. 3 ms (Pressure build-up 0…10 %) Closing: approx. 3 ms (Pressure reduction 100…90 %)
Duty cycle	100 % continuous operation
Electrical data	
Power supply	12 V DC, 24 V DC (other voltages on request)
Voltage tolerance	±10 % (incl. residual ripple)
Power consumption	1 W[4.)]
Medium data	
Operating medium	Resistant to neutral and aggressive gases and liquids. For more detailed information, see the chapter "4.1. Chemical Resistance Chart – Bürkert resistApp" on page 4.
Viscosity (max.)	21 mm^2/s
Medium temperature	FFKM: +15 °C…+50 °C (59 °F…122 °F) FKM: 0 °C…+50 °C (32 °F…122 °F) EPDM: 0 °C…+50 °C (32 °F…122 °F)
Approvals and Certificates	
Suitable for food industry	FDA – on request, only with sealing material EPDM
Suitable for drinking water	KTW (W270) – on request, only with sealing material EPDM
Oxygen application	Oxygen suitability of materials in contact with fluid (BAM) – on request, only with sealing material FKM
Protection class	IP40 acc. to IEC 60144
Process/Port connection & communication	
Port connection	Bürkert flange (9 x 26) Bürkert flange (26 x 57) horizontal Threaded version UNF ¼"-28 Tube connector version
Electrical connection[5.)]	Plug with detent, pin spacing 2 mm, see data sheet **Type 2503** ▸
Environment and installation	
Installation	As required, preferably with actuator upright
Ambient temperature	FFKM: +15 °C…+50 °C (59 °F…122 °F) FKM: 0 °C…+50 °C (32 °F…122 °F) EPDM: 0 °C…+50 °C (32 °F…122 °F)

1.) Service life depends on the type of medium, the temperature, the pressure, the seal material and the specific operational conditions.

2.) <20 dB(A) with the optional possibility of soft close electronics

3.) Measurement at valve output at 2 bar and 20 °C acc. to DIN ISO 12238:2001

4.) No further power reduction possible

5.) Please order socket with flying leads separately (see "7.4. Ordering chart accessories" on page 12).

Other suitable connectors are, for example W+P: Series 521 (socket 521S-02-1; contact 521S-01-2-00) or JST (socket PHR-2; contact SPH-002GW-P0.5S), version 04/2015). As a PCB connector we recommend a pin size of 0.5 x 0.5 mm, grid size 2 mm and a maximum size of the connector of 4.9 x 2.5 mm. E.g. Samtec SQT-102-01-x-S (x=L or F) or W+P Series 257 Part No. 257-002-1-50-00-6.

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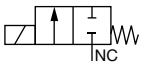
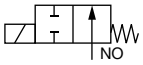
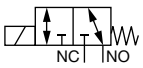
2. Product versions

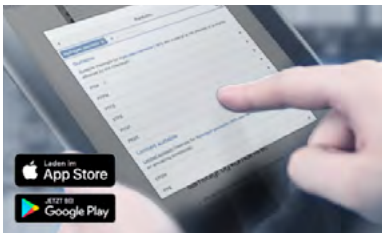
Bürkert flange (9 x 26)	Bürkert flange (26 x 57) horizontal	Threaded version (UNF ¼"-28)	Tube connector version
			

3. Circuit functions

Circuit functions	Description
	**Type: A, Solenoid valve** 2/2 way Direct acting Normally closed
	**Type: B, Solenoid valve** 2/2 way Direct acting Normally open
	**Type: T, Solenoid valve** 3/2 way Direct acting Flow direction optional

4. Materials

4.1. 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

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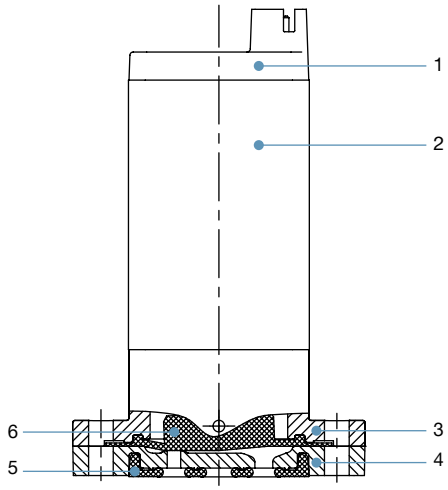
4.2. Material specifications



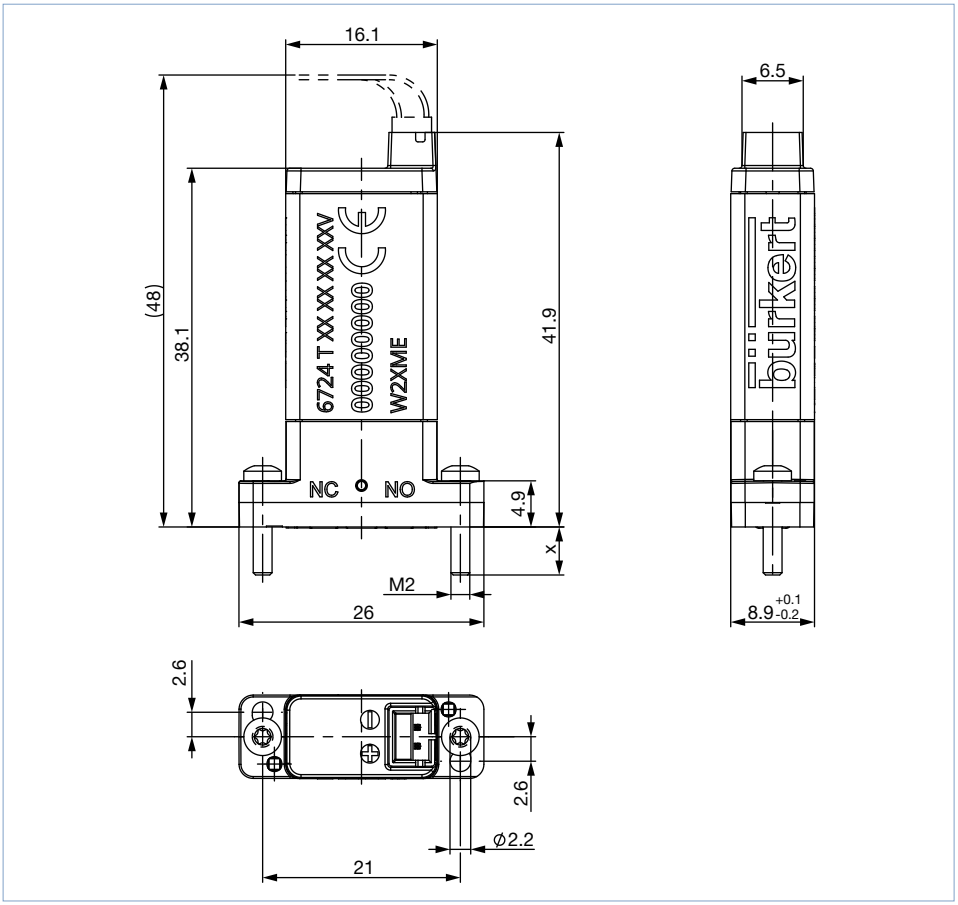
No.	Element	Material
1	Cap	LCP
2	Coil housing	nickel-plated
3	Valve body	LCP or PPS
4	Fluid housing (medium contact)	PEEK or PPS
5	Flange seal (medium contact)	FFKM, FKM or EPDM
6	Diaphragm (medium contact)	FFKM, FKM or EPDM

5. Dimensions

5.1. Bürkert flange (9 x 26)

Note:

- Dimensions in mm
- Including fastening screws M2 x 10



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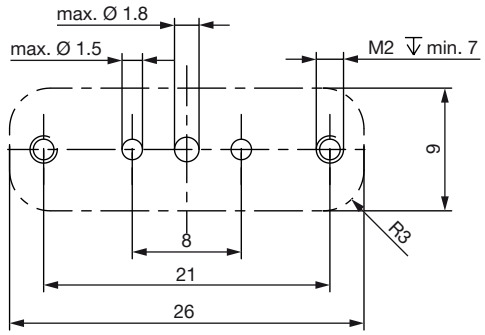
5.2. Bürkert flange (9 x 26) interface

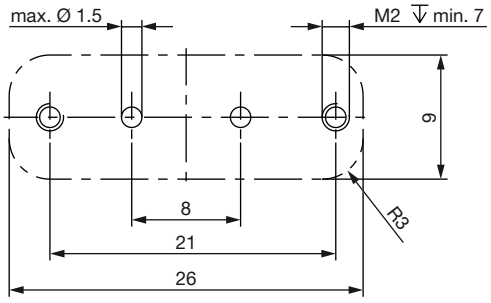
Note:
Dimensions in mm

Preferred threaded connection

3/2 way connection

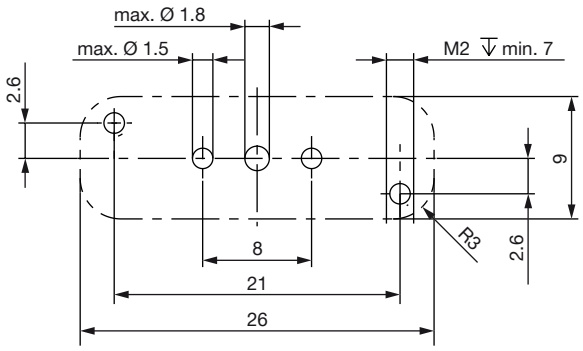


2/2 way connection

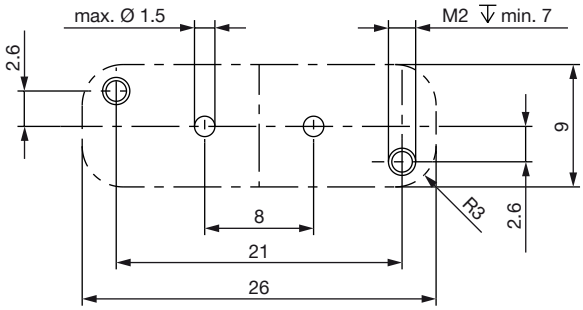


Further possible connection (diagonal)

3/2 way connection



2/2 way connection



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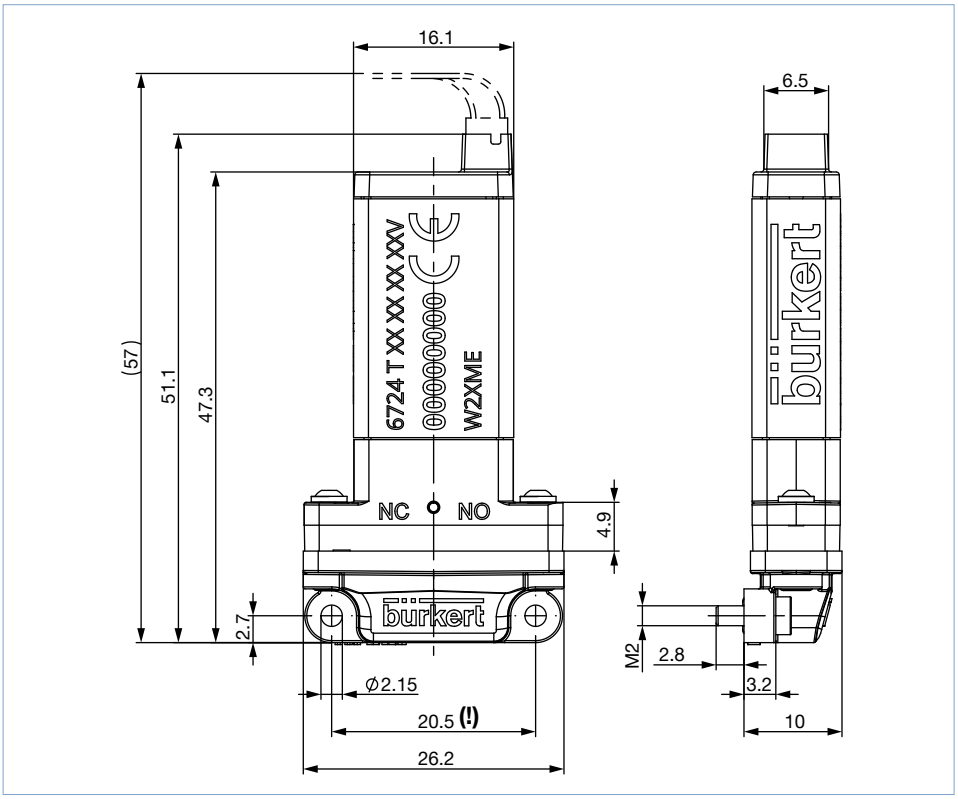
5.3. Bürkert flange (26 x 57) horizontal

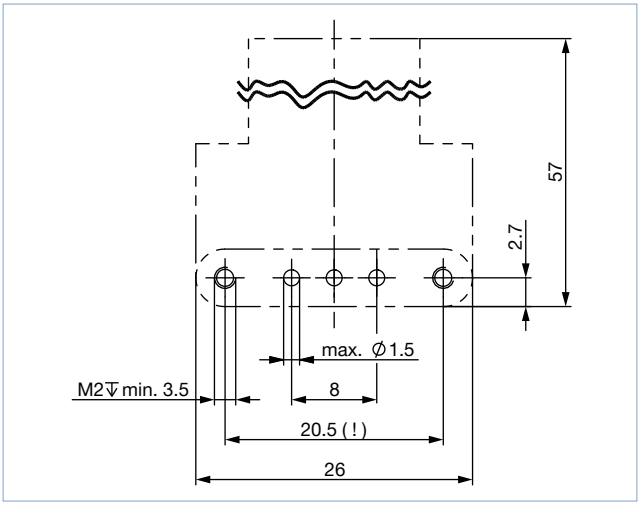
Note:

- Dimensions in mm
- Optional: Flange can be turned by 180°
- Including fastening screws M2 x 6



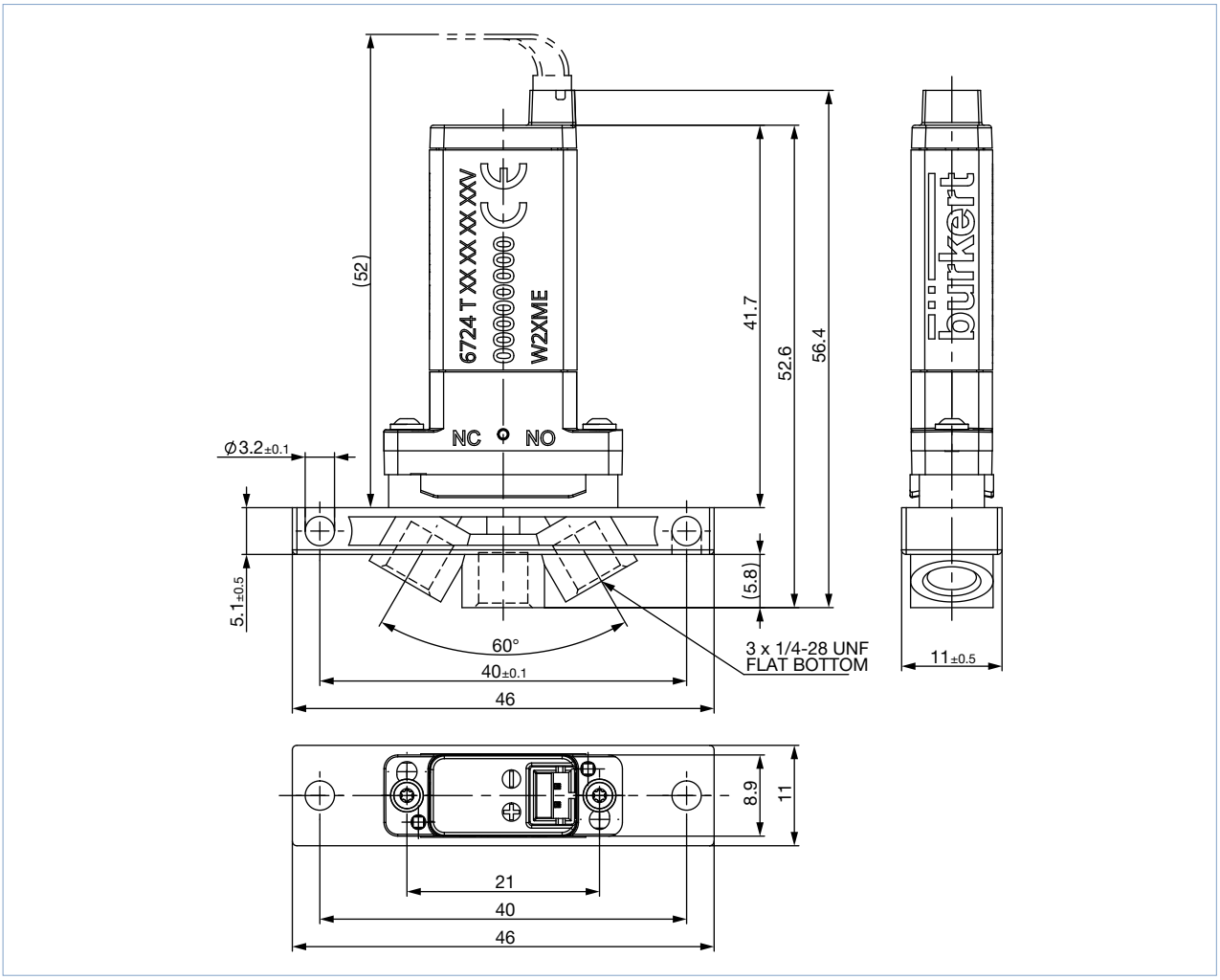
5.4. Bürkert flange (26 x 57) interface

Note:
Dimensions in mm



5.5. Threaded port version (UNF ¼"- 28)

Note:
Dimensions in mm



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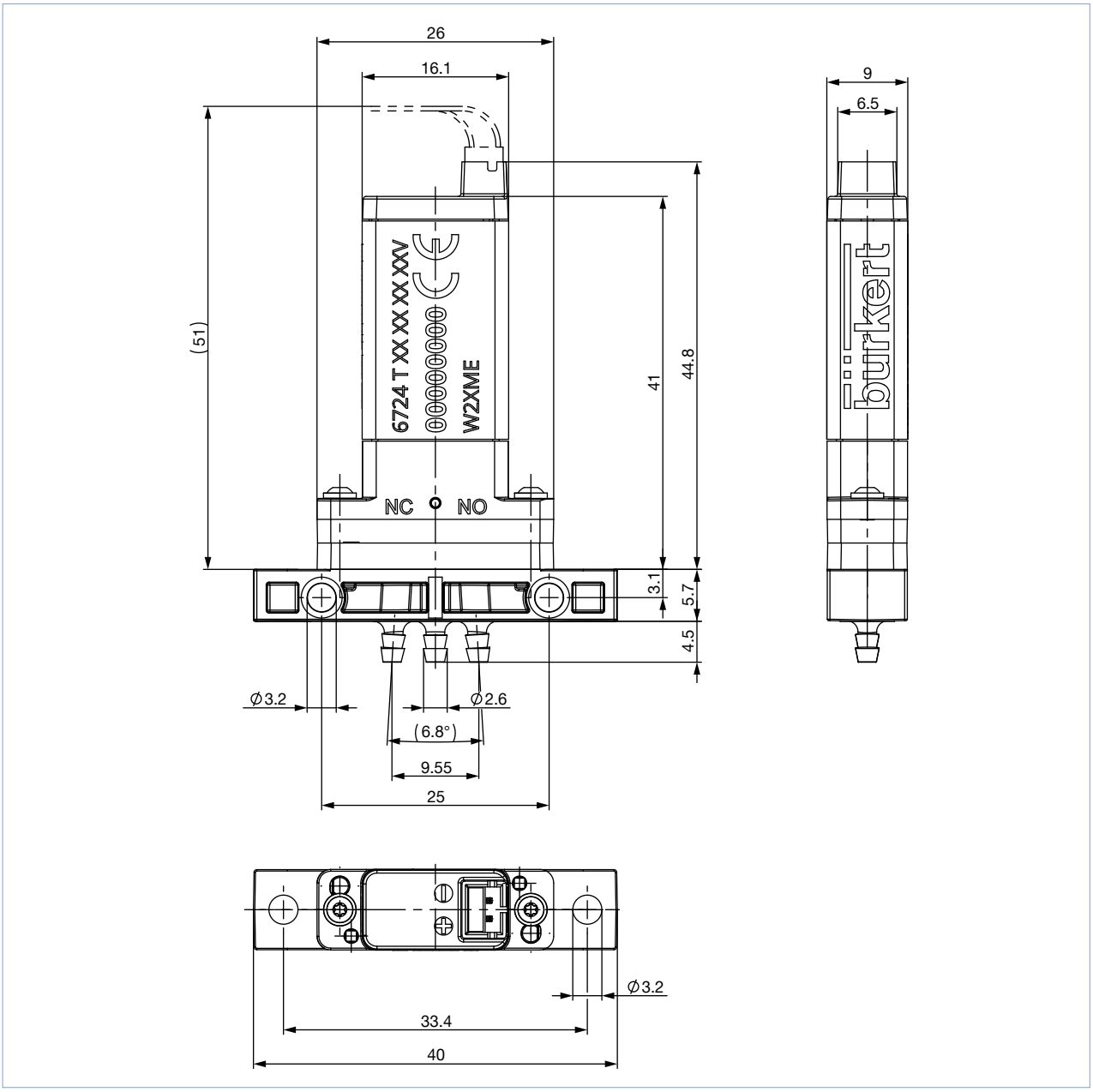
5.6. Tube connector version

Note:
Dimensions in mm



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