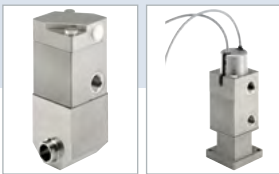




Pneumatically operated 2/2-way valve with bellows

- High media resistance
- Easy to clean for hygienic applications
- Long service life
- Compact



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

Can be combined with

- 

Type 2380 ▶
2/2-way Bellow Control Valve
- 

Type 8652 ▶
AirLINE – the valve island optimised for process automation
- 

Type 8036 ▶
Inline flowmeter with paddle wheel, ELEMENT design
- 

Type 8098 ▶
FLOWave SAW flowmeter

Type description

The valve consists of a pneumatically actuated piston actuator, a stainless steel housing and a bellows element. This bellows element serves primarily as a seat seal, but also to hermetically seal of the media chamber. Due to the comparatively short stroke, these valves achieve a very high number of stroke cycles and short stroke times at relatively high flow rates. These properties make this type of valve ideal for applications in the filling sector, for example. The materials and internal contours used are easy to clean using the CIP / SIP process and the valve body is self-draining when installed in the appropriate position.

The modular design allows it to be equipped with different valve fittings and customised line connections. The pneumatic actuator can be extended with various functions and is preferably controlled externally via a pilot valve or a valve terminal.

An explosion-proof ATEX/IECEx device variant is available.

Phase out

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1. General technical data

Product properties	
Dimensions	Further information can be found in chapter "4. Dimensions" on page 6.
Material	
Body	Stainless steel 316Ti (1.4571), for flange 316L (1.4404)
Actuator	Stainless steel 304L (1.4301)
Bellows	Advanced PTFE
Wetted material	Stainless steel 316Ti (1.4571), 316L (1.4404), advanced PTFE
Standard surface quality	$Ra \leq 0.8 \mu\text{m}$ (further surfaces on request)
Flow direction	Below seat (pressure on port connection 2)
Position detection ^{1.)}	Reed contact (2-wire, closer), cable length: 3 m
Actuator size	Piston diameter 28 mm
Performance data	
Switching time	Control function A (NC) at 6 bar PSt: open: approx. 25 ms, close: approx. 55 ms (Guide values! Actual values depend on surrounding peripherals)
Pilot air pressure	4.5...10 bar
Pilot air port	Threaded port G 1/8
Seat leakage	5 N _m /min, measured with air 8 bar, below seat
Back pressure	...8 bar
Pressure range	Vacuum...8 bar
Medium data	
Process medium	Neutral and aggressive gases and liquids (see resistance chart ▶)
Medium temperature	See "4.1. Valve with PTFE bellows" on page 6
Control medium	Neutral gases, air
Process/Port connection & communication	
Nominal diameter (port connection)	...DN 10 resp. DN 1/2
Port connection	Threaded port G 3/8, weld end, flange connection
Environment and installation	
Installation position	Upright assembly for self-draining (body downwards)
Ambient temperature	Max. +90 °C

1.) Optional actuator versions

Phase out

2. Approvals and conformities

2.1. 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.



2.2. Conformity

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


2.3. 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.

2.4. Explosion protection

Approval	Description																
 	<p>Optional: Explosion protection (valid for the variable code PX51) As a category 2 device suitable for zone 1/21 and zone 2/22.</p> <p>ATEX: EPS 18 ATEX 2 008 X II 2G Ex h IIC T4 Gb/II 2D Ex h IIIIC T135 °C Db II 2G Ex h IIC T4...T2 Gb II 2D Ex h IIIIC T135 °C...T300 °C Db</p> <p>IECEx: IECEx EPS 18.0007X Ex h IIC T4 Gb/Ex h IIIIC T135 °C Dbb Ex h IIC T4...T2 Gb Ex h IIIIC T135 °C...T300 °C Db</p> <table border="1"> <thead> <tr> <th>Temperature class</th> <th>T2</th> <th>T3</th> <th>T4</th> </tr> </thead> <tbody> <tr> <td>Permissible surface temperature</td> <td>+300 °C</td> <td>+200 °C</td> <td>+135 °C</td> </tr> <tr> <td>Ambient temperature</td> <td>-40...+130 °C</td> <td>-40...+130 °C</td> <td>-40...+100 °C</td> </tr> <tr> <td>Maximum medium temperature</td> <td>+285 °C</td> <td>+185 °C</td> <td>+125 °C</td> </tr> </tbody> </table>	Temperature class	T2	T3	T4	Permissible surface temperature	+300 °C	+200 °C	+135 °C	Ambient temperature	-40...+130 °C	-40...+130 °C	-40...+100 °C	Maximum medium temperature	+285 °C	+185 °C	+125 °C
Temperature class	T2	T3	T4														
Permissible surface temperature	+300 °C	+200 °C	+135 °C														
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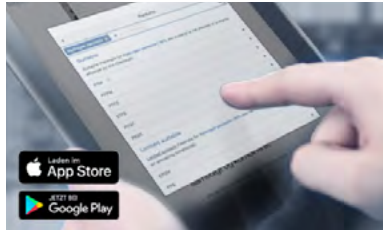
2.5. Foods and beverages/Hygiene

Conformity	Description
FDA	<p>FDA – Code of Federal Regulations The bellows of advanced PTFE comply with the Code of Federal Regulations published by the FDA (Food and Drug Administration, USA).</p>
USP	<p>United States Pharmacopeial Convention (USP) The bellows of advanced PTFE are tested according to USP Class VI.</p>
	<p>EC Regulation 1935/2004 of the European Parliament and of the Council The bellows of advanced PTFE are suitable for use with food and beverages (according to EC Regulation 1935/2004/EC).</p>

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3. Materials

3.1. Bürkert resistApp

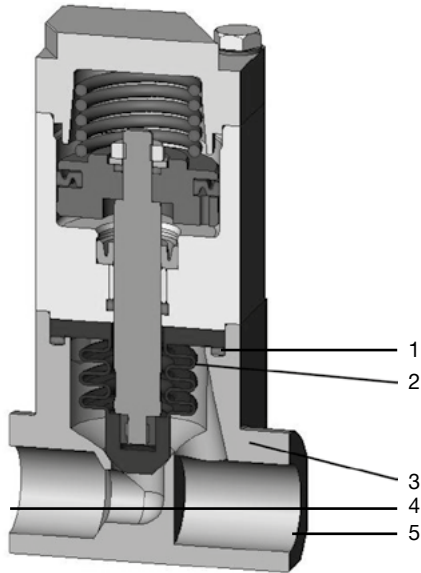


Bürkert resistApp – Chemical resistance chart

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](#)

3.2. Material specifications



No.	Element	Material
1	O-ring	FKM (non-wetted)
2	Bellows	Advanced PTFE
3	Body	Stainless steel 316L (1.4404)
4	Port connection 2	Stainless steel 316L (1.4404)
5	Port connection 1	Stainless steel 316L (1.4404)

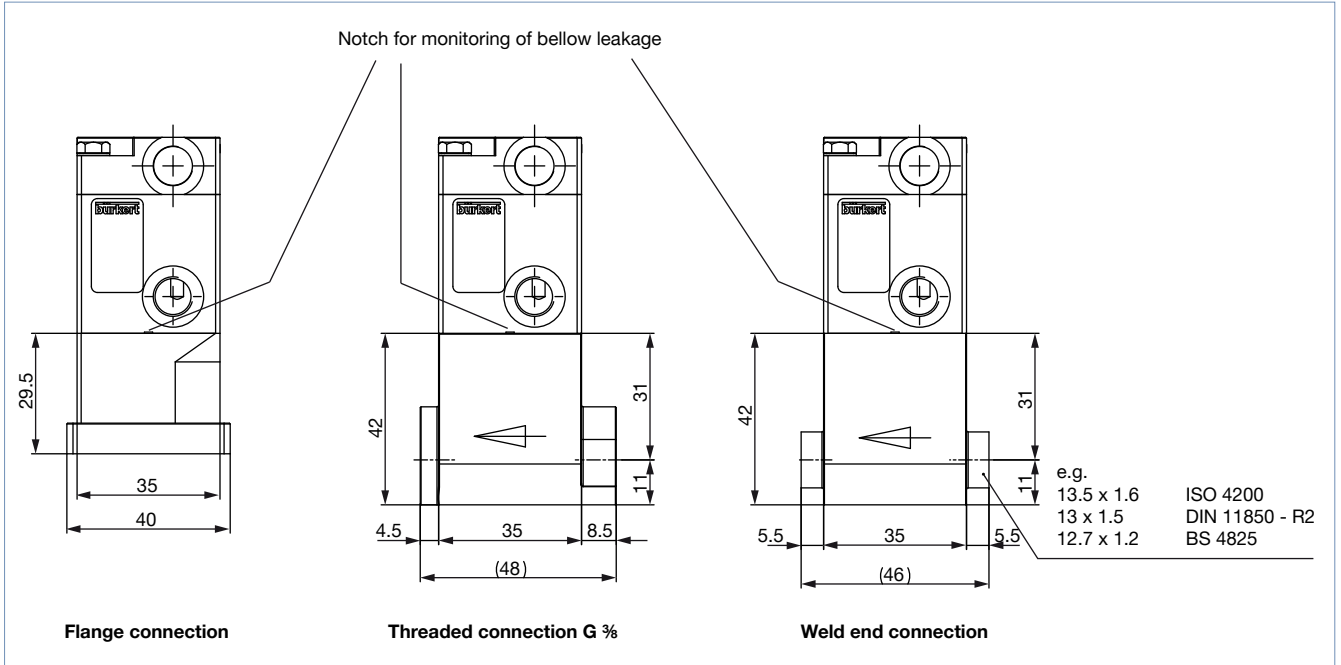
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4. Dimensions

4.1. Valve with PTFE bellows

Note:

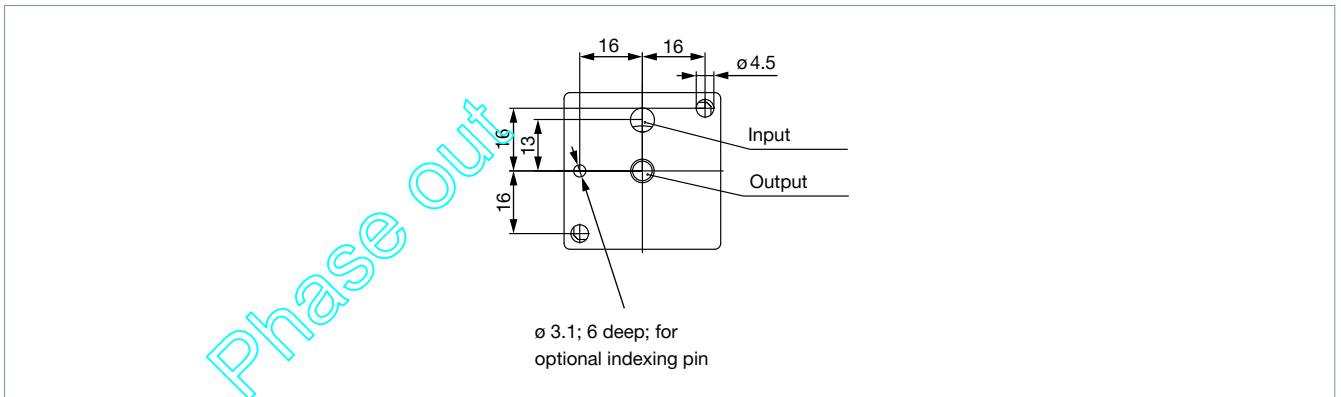
Dimensions in mm



4.2. Flange interface on valve

Note:

Dimensions in mm

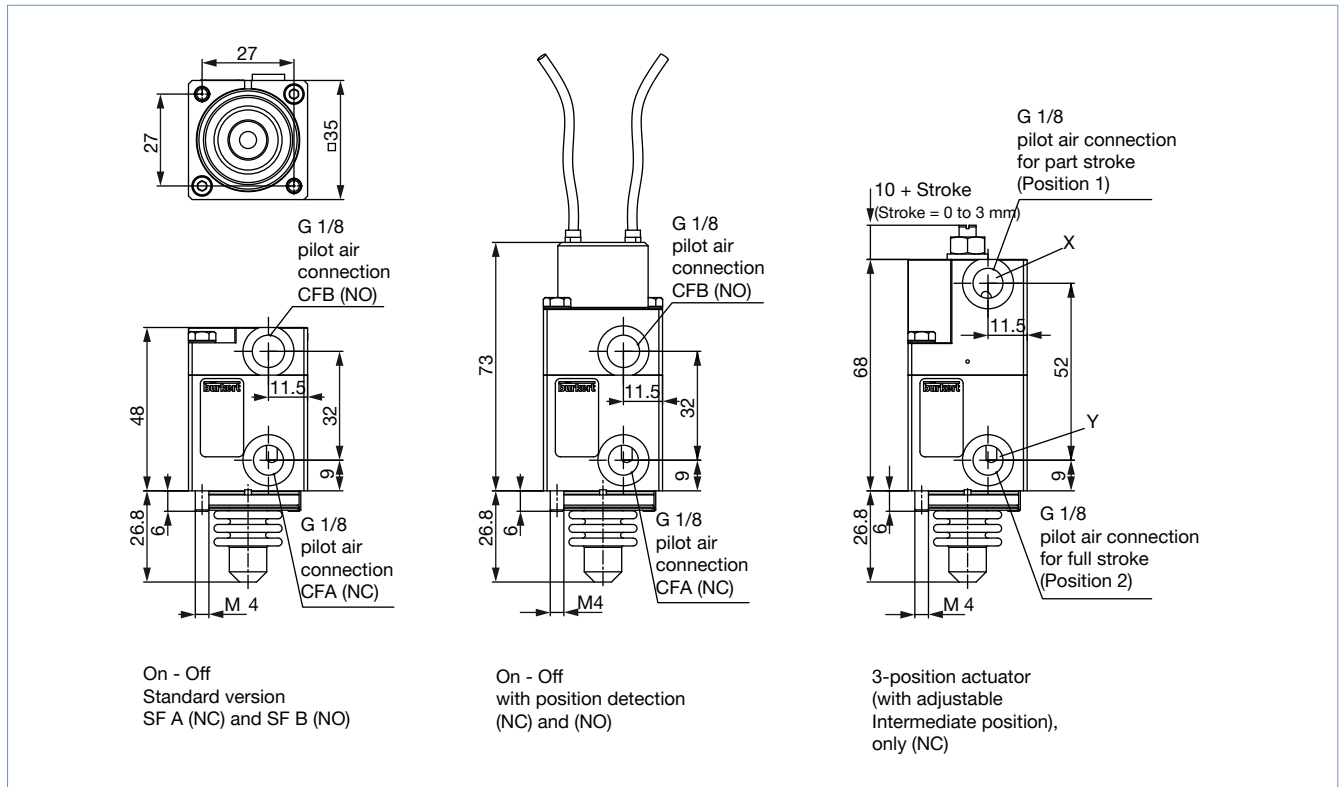


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4.3. Various drive variants

Note:

- Dimensions in mm
- Functions of the valve with intermediate position (=3-position actuator)
 - Closed, without control air, only by spring force
 - Partial stroke (position 1), control air at X + Y
 - Full stroke (position 2), pilot air at Y
- Valves with flow direction above seat can only be used for liquid media to a limited extent. **There is a risk of waterhammer!**



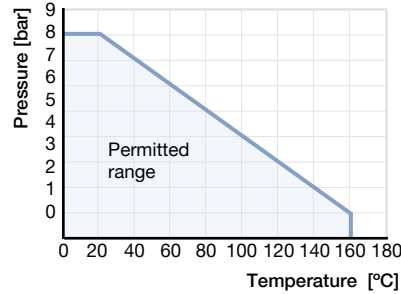
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5. Performance specifications

5.1. Medium pressure

Pressure temperature diagram



6. Ordering information

6.1. Bürkert eShop



Bürkert eShop – Easy ordering and quick delivery

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6.2. Bürkert product filter



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