








## Pneumatically operated 2/2 way valve with separating diaphragm

- Media separated by diaphragm
- Stainless steel or brass body with threaded connection
- High service life
- Compact design

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

### Can be combined with

	<b>Type 6012</b> Plunger valve 3/2 way direct-acting	▶
	<b>Type 6014</b> Plunger valve 3/2 way direct-acting	▶
	<b>Type 831</b> Pressure measuring device / Switch	▶
	<b>Type 8640</b> Customized Pneumatic Systems Solutions for the Processing Industries	▶
	<b>Type 8644</b> Remote Process Actuation Control System AirLINE	▶

### Type description

The externally piloted 2-way valve is operated by a diaphragm actuator. A diaphragm between valve body and actuator separates the media. A double spindle seal guarantees high tightness and a high service life. The compact actuator housing is made out of chemical resistant plastic and is ideal for customer specific multifunction block solutions.

This low maintenance and robust valve can be supplemented by a large accessory program.

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## 1. General technical data

Product properties	
Dimensions	Detailed information can be found in chapter "5. Dimensions" on page 5.
Material	
Body	Brass, stainless steel
Inner part valve	Stainless steel
Actuator	Epoxy resin
Seal	NBR, FKM, EPDM
Orifice	DN 10, DN 12
Performance data	
Pilot pressure	Detailed information can be found in chapter "6. Performance specifications" on page 6.
Medium data	
Medium	
With NBR	Neutral medium, e.g. compressed air, town gas, water, hydraulic oil
With FKM	Per-solution, oxygen, hot air
With EPDM	Oil and fat-free medium, e.g. hot water, alkaline washing and bleaching lyes
Medium temperature	
With NBR	-10 °C...+90 °C
With FKM	-10 °C...+100 °C
With EPDM	-10 °C...+100 °C
Viscosity	Max. 100 mm <sup>2</sup> /s
Control medium	Neutral gases and liquids, in particular air, water, hydraulic liquids up to max. +90 °C
Environment and installation	
Ambient temperature	-10 °C...+90 °C
Installation position	As required, preferably with actuator upright

## 2. Circuit functions

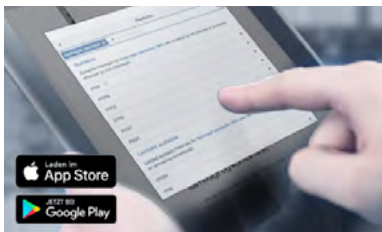
Control function	Description
	<b>CF: A, pneumatically operated on/off valve</b> 2/2 way Flow direction below seat Normally closed by spring force
	<b>CF: B, pneumatically operated on/off valve</b> 2/2 way Flow direction above seat Normally opened by spring force
	<b>CF: I, pneumatically operated on/off valve on either side</b> 2/2 way Flow direction below seat Normally closed (without spring)

## 3. Approvals

Approvals	Description
	<b>Explosion protection</b> As category 2 device suitable for zone 1/21 and zone 2/22 (option)
	ATEX: II 2G Ex h IIC T4 Gb II 2D Ex h IIIC T135 °C Db  IECEX: Ex h IIC T4 Gb Ex h IIIC T135 °C Db

## 4. Materials

### 4.1. Chemical Resistance Chart – Bürkert resistApp

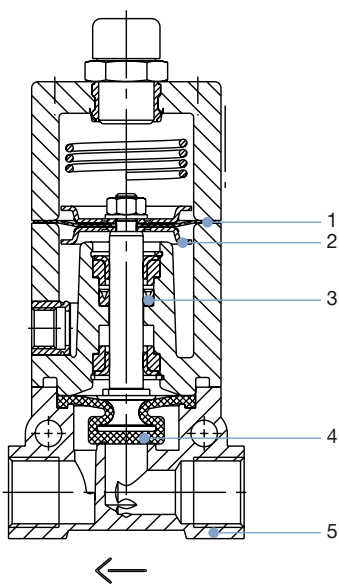


**Bürkert resistApp – Chemical Resistance Chart**

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### 4.2. Material specifications



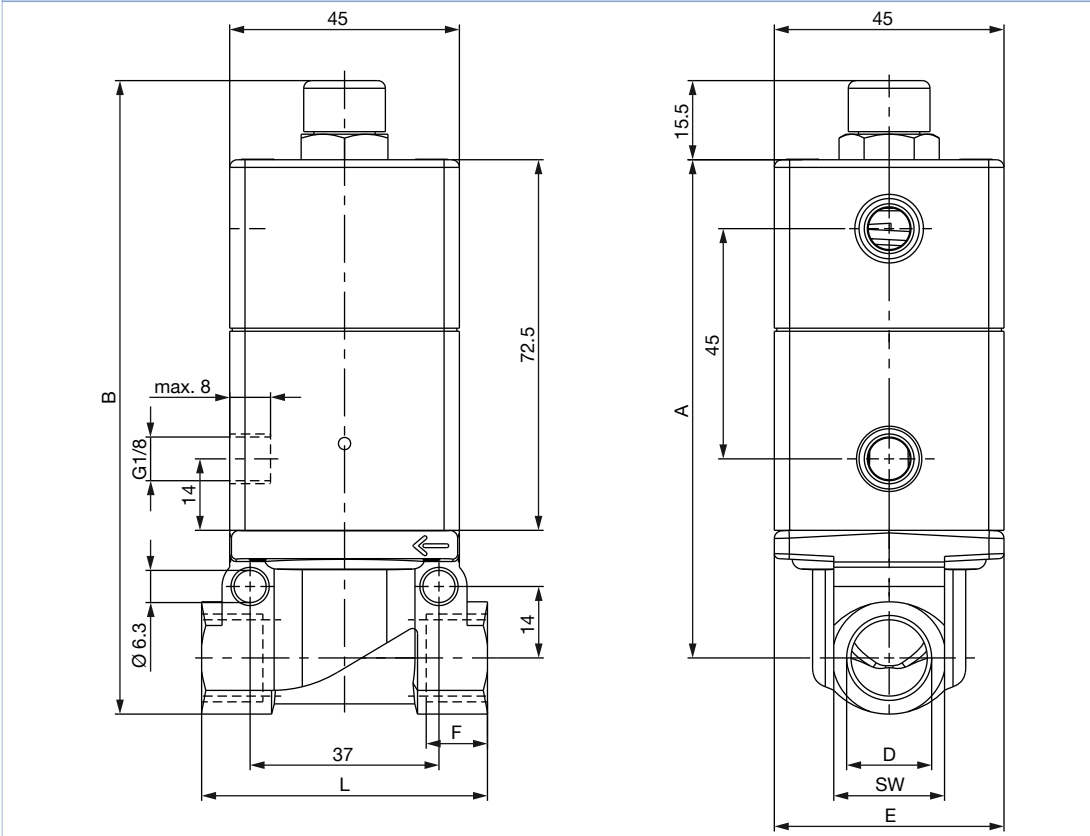
No.	Element	Material
1	Control diaphragm	FKM
2	Spring plate	Stainless steel 1.4301
3	Lip seal	NBR, EPDM, FKM
4	Diaphragm	NBR, EPDM, FKM
5	Body	Brass, stainless steel 1.4581

## 5. Dimensions

**Note:**

- Upper pilot air port only for CFB and CFI
- Dimensions in mm

**DN 10/DN 12**



Orifice	D	A	B	E	F	L	SW
10	G 3/8	97.5	124	45	12	56	22
12	G 1/2	96.5	127.5	40	14	74.5	27

## 6. Performance specifications

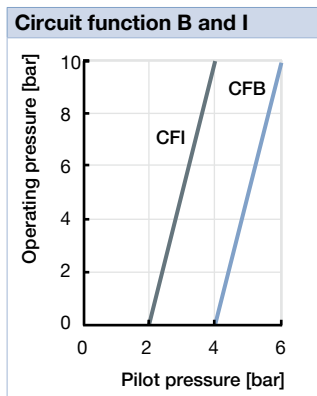
### 6.1. Pressure range

Orifice	K <sub>v</sub> value water	Port connection	Operating pressure max.			Weight
			CF: A normal spring	CF: A reinforced spring	CF: B and I normal spring	
[mm]	[m <sup>3</sup> /h] <sup>1.)</sup>		[bar] <sup>2.)</sup>	[bar] <sup>2.)</sup>	[bar] <sup>2.)</sup>	[kg]
10	1.0	G 3/8	2.5	5	10	0.5
12	2.1	G 1/2	2	4.5	10	0.6

1.) Flow rate K<sub>v</sub> value water: measured at +20 °C, 1 bar pressure at valve inlet and free outlet

2.) Pressure data: Measured as overpressure to the atmospheric pressure

### 6.2. Operating pressure/pilot pressure diagram



## 7. Ordering information

### 7.1. Bürkert eShop – Easy ordering and quick delivery



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### 7.2. Bürkert product filter



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













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### 7.3. Ordering chart

**Note:**

Valves with threaded connection

Circuit function	Orifice	Port connection	K <sub>v</sub> value water [m <sup>3</sup> /h] <sup>1.)</sup>	Pressure spring actuator	Operating pressure max. [bar] <sup>2.)</sup>	Seal material	Article no.
	[mm]						
<b>Brass body</b>							
A	10	G 3/8	1.0	normal	2.5	FKM	027963 
				NBR		027342 	
				reinforced	5	EPDM	027929 
				FKM		026903 	
	12	G 1/2	2.1	normal	2	EPDM	026094 
				FKM		026246 	
				NBR		026207 	
				reinforced	4.5	EPDM	028023 
				FKM		027695 	
				NBR		027881 	
B	10	G 3/8	1.0	normal	10	EPDM	028980 
						FKM	028037 
						NBR	026455 
	12	G 1/2	2.1	normal	10	EPDM	027987 
						FKM	028827 
						NBR	027962 
<b>Stainless steel body</b>							
A	12	G 1/2	2.1	reinforced	4.5	EPDM	027428 
						FKM	026944 
						NBR	027328 
B	12	G 1/2	2.1	normal	10	EPDM	289834 
						FKM	029259 

 1.) Flow rate K<sub>v</sub> value water: measured at +20 °C, 1 bar pressure at valve inlet and free outlet

2.) Pressure data: Measured as overpressure to the atmospheric pressure

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