



Pneumatically operated 2/2-way Valve

- Stainless steel or brass body with threaded connection
- High service life
- Compact design
- Variant for steam applications available



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

Can be combined with

	Type 6014 Plunger valve 3/2-way direct-acting	▶
	Type 8640 Modular valve island for pneumatics	▶
	Type 8644 AirLINE SP electropneumatic automation system	▶

Type description

The externally piloted 2-way valve is operated by a diaphragm actuator. A double spindle seal guarantees high tightness and a high service life.

The compact actuator housing is made out of chemical resistant plastic and 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	Further information can be found in chapter “5. Dimensions” on page 6.
Material	
Body	Brass, stainless steel
Inner part of valve	Stainless steel
Actuator	Epoxy resin
Seal	NBR, FKM, PTFE/FKM, EPDM, PTFE/EPDM
Nominal diameter	DN 10...DN 25
Performance data	
Pilot pressure	Further information can be found in chapter “6. Performance specifications” on page 7.
Medium data	
Operating medium	
With NBR	Neutral mediums, e.g. compressed air, natural gas, water, hydraulic oil
With FKM	Per-solution, oxygen, hot air
With EPDM	Oil and fat-free mediums, e.g. hot water, alkaline washing and bleaching lyes
With PTFE/EPDM (PTFE seal with EPDM O-ring)	Oil and fat-free mediums, e.g. hot water and steam
With PTFE/FKM (PTFE seal with FKM O-ring)	Hot oils, hydrocarbons, aromatics and steam
Medium temperature	
With NBR	- 10 °C...+ 90 °C
With FKM	- 10 °C...+ 100 °C
With EPDM	- 10 °C...+ 100 °C
With PTFE/EPDM	- 10 °C...+ 140 °C
With PTFE/FKM	- 10 °C...+ 140 °C
Viscosity	Max. 100 mm ² /s
Control medium	Neutral gases and liquids, in particular air, water, hydraulic liquids up to max. + 90 °C
Approvals and conformities	
Explosion protection	Further information can be found in chapter “3. Approvals and conformities” on page 4.
Environment and installation	
Ambient temperature	- 10 °C...+ 90 °C
Installation position	As required, preferably with actuator upright

2. Control functions

Symbol	Description
	Control function A (CF A) Pneumatically operated 2/2-way on/off valve Flow direction below seat Normally closed by spring force
	Control function B (CF B) Pneumatically operated 2/2-way on/off valve Flow direction above seat Normally opened by spring force
	Control function I (CF I) Pneumatically operated 2/2-way on/off valve on either side Flow direction below seat Switching position dependent on external control

3. Approvals and conformities

3.1. 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.

3.2. Conformity

In accordance with the Declaration of Conformity, the product is compliant with the EU Directives. This includes the following directives:

- Pressure Equipment Directive 2014/68/EU
- Machinery Directive 2006/42/EG

3.3. Standards

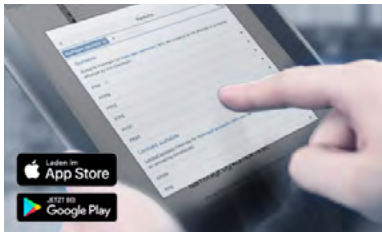
The applied standards which are used to demonstrate compliance with the EU Directives are listed in the EU-Type Examination Certificate and/or the EU Declaration of Conformity.

3.4. Explosion protection

Approval	Description																			
 	Optional: Explosion protection As a category 2 device suitable for zone 1/21 and zone 2/22 (optional).																			
	ATEX: EPS 18 ATEX 2 008 X II 2G Ex h IIC T4...T2 Gb II 2D Ex h IIIC T135 °C...T300 °C Db																			
	IECEx: IECEx EPS 18.0007 X Ex h IIC T4...T2 Gb Ex h IIIC T135 °C...T300 °C Db																			
	<table><tr><td>Temperature class</td><td>T2</td><td>T3</td><td>T4</td></tr><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></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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Maximum medium temperature	+ 285 °C	+ 185 °C	+ 125 °C																	

4. Materials

4.1. Bürkert resistApp

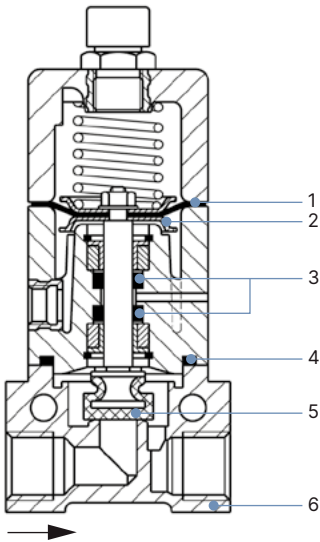


Bürkert resistApp – Chemical resistance chart

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](#)

4.2. Material specifications

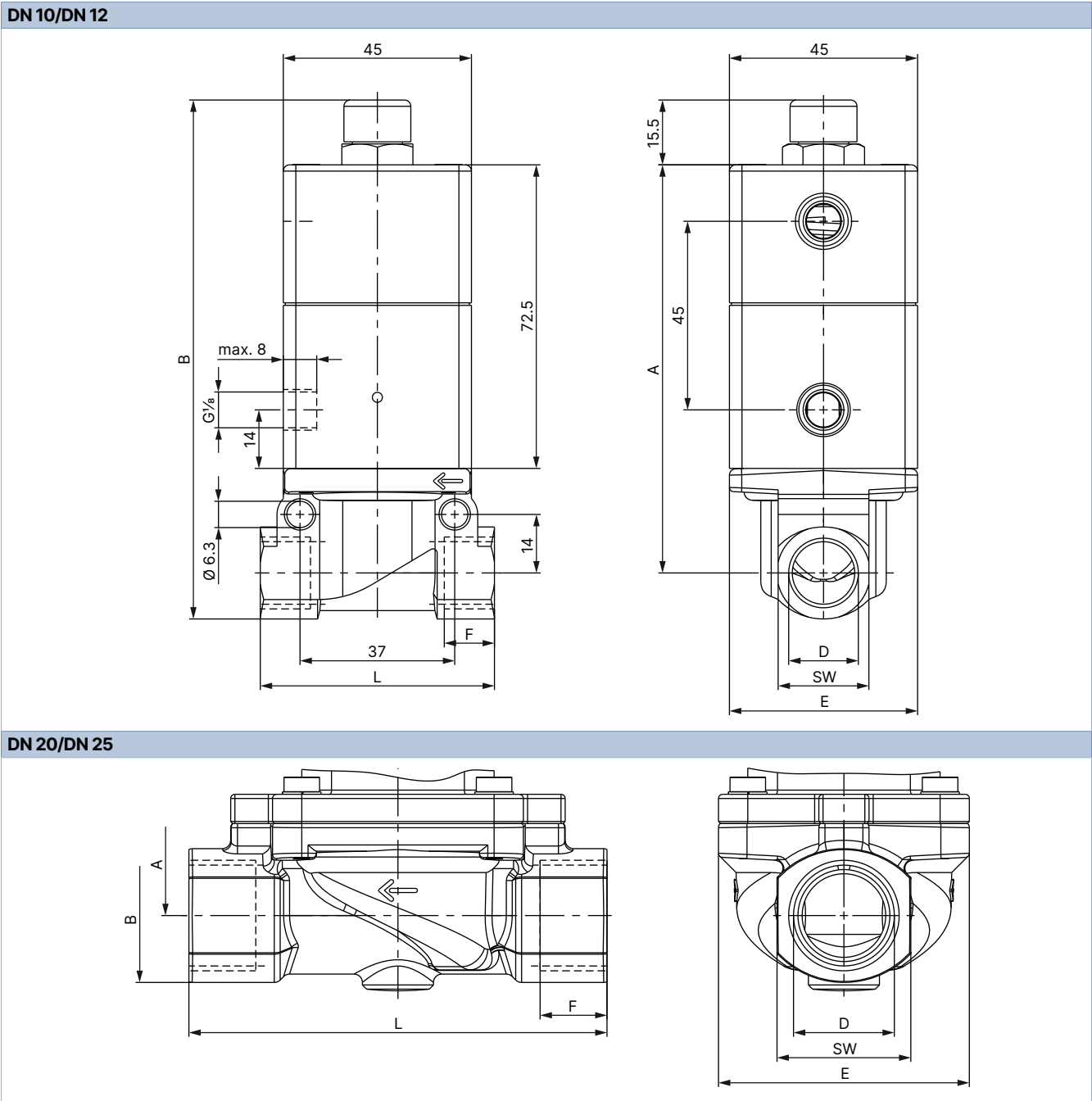


No.	Element	Material
1	Control diaphragm	FKM, PTFE
2	Spring plate	Stainless steel 1.4301
3	Lip seal	NBR, EPDM, FKM, PTFE
4	O-ring	NBR, EPDM, FKM
5	Seal	NBR, EPDM, FKM, PTFE
6	Body	Brass, stainless steel 1.4581

5. Dimensions

Note:

- Upper pilot air port only for CF B and CF I
- Dimensions in mm



Nominal diameter	D	A	B	E	F	L	AF
10	G 3/8	97.5	124.0	45	12	56.0	22
12	G 1/2	96.5	127.5	40	14	74.5	27
20	G 3/4	109.5	141.0	60	16	100	32
25	G 1	114.0	150.0	70	18	115	41

6. Performance specifications

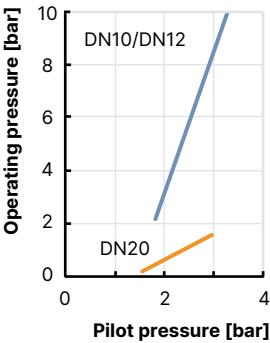
6.1. Pressure range

Nominal diameter	K _v value water	Port connection	Operating pressure max.			Control pressure max.	Weight
			CF A, normal spring	CF A, reinforced spring	CF B and CF I, normal spring		
[mm]	[m ³ /h] ^{1.)}		[bar] ^{2.)}	[bar] ^{2.)}	[bar] ^{2.)}	[bar] ^{2.)}	[kg]
10	1.0	G 3/8	5.0	10	10	6	0.5
12	2.1	G 1/2	3.5	6	10	6	0.6
20	6.5	G 3/4	–	1.5	1.5	6	1.0
25	10.0	G 1	–	1	1	6	1.4

1.) Measurement at + 20 °C, 1 bar at valve inlet and free discharge
2.) Pressure information: overpressure with respect to ambient pressure

6.2. Operating pressure/pilot pressure diagram

Control function B



7. Ordering information

7.1. Bürkert eShop



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7.2. Bürkert product filter



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7.3. Ordering chart

Note:

Valves with threaded connection

Control function	Port connection	Nominal diameter	K _v value water	Operating pressure max.	Pressure spring actuator	Seal material	Article no.	
		[mm]	[m³/h] ^{1.)}	[bar] ^{2.)}				
Brass body								
CF A	G ¾	10	1.0	5	Normal	EPDM	026059 	
				10		Reinforced	FKM	026257 
							NBR	026287 
					EPDM		027400 	
					FKM		026459 	
				NBR	027643 			
				PTFE/FKM	026457 			
	G ½	12	2.1	3.5	Normal	EPDM	027545 	
				6		Reinforced	FKM	026088 
							NBR	027734 
					EPDM		026079 	
					FKM		027926 	
					NBR		027991 	
				PTFE/EPDM	026200 			
				PTFE/FKM	028004 			
	G ¾	20	6.5	1.5	Reinforced	EPDM	028211 	
						FKM	028046 	
						NBR	028072 	
	G 1	25	10.0	1	Reinforced	EPDM	029106 	
						FKM	028410 	
						NBR	028071 	
CF B	G ¾	10	1.0	10	Normal	EPDM	026812 	
						FKM	027891 	
						NBR	026290 	
	G ½	12	2.1	10	Normal	EPDM	027988 	
						FKM	026715 	
						NBR	026298 	
	G ¾	20	6.5	1.5	Normal	EPDM	028557 	
						FKM	027773 	
						NBR	027639 	
Stainless steel body								
CF A	G ½	10	1.0	10	Reinforced	EPDM	167814 	
						NBR	228680 	
	G ½	12	2.1	3.5	Normal	FKM	028011 	
	G ½	12	2.1	6	Reinforced	EPDM	028080 	
						PTFE/FKM	027557 	
CF B	G ½	12	2.1	10	Normal	FKM	028762 	
						PTFE/FKM	029007 	
						PTFE/EPDM	027558 	

1.) Measurement at + 20 °C, 1 bar at valve inlet and free discharge

2.) Pressure information: overpressure with respect to ambient pressure