



Plunger valve 2/2 way direct-acting

- Direct-acting and compact small-format valve with diameter of up to DN 2.4
- Screwed coil system
- Simple and quick flange or manifold installation
- Quick coupling (push-in fitting) for plug-in hose connections

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

Can be combined with



Type 2507

Cable plug - industry standard plug Form B



Type 2516

Cable plug DIN EN 175301 - 803 - form C

Type description

Valve 6011 is a direct-acting plunger valve. The stopper and plunger guide tube are welded together to enhance pressure resistance and leak-tightness. Various seal material combinations are available depending on the application. A Bürkert-specific flange design (SFB) enables space-saving arrangement of valves on a manifold. Push-in fittings can be selected for flexible hose connection. In combination with a cable plug in accordance with industry standard Form B or DIN EN 175301 - 803 Form C, the valves satisfy protection class IP65.

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1. General Technical Data

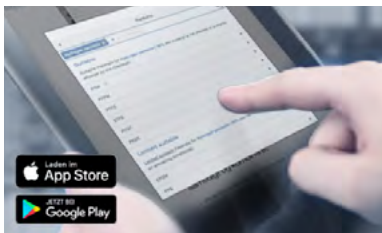
Product properties	
Dimensions	Detailed information can be found in chapter "4. Dimensions" on page 5.
Material	
Seal	FKM
Body	Standard version: Brass, polyamide (PA), stainless steel 1.4305 Analytical version: Brass, stainless steel 1.4305
Weight	Ca. 125 g
Performance data	
Duty cycle/single valve when mounted as a block on a manifold	100 % continuous rating Intermittent operation 60 % (30 min) or with 2 W coil (on request)
Circuit function	A
Electrical data	
Operating voltage	
Standard version	24 V DC, 24 V/50 Hz, 110/230 V/50 Hz
Analytical version	24 V DC, 230 V/50 Hz
Voltage tolerance	± 10 %
Medium data	
Medium	
Standard version	Technical vacuum, neutral gases and fluids (e.g. compressed air, water, hydraulic oil)
Analytical version	Neutral/aggressive medium that do not attack the body and seal materials
Viscosity	Max. 21 mm ² /s
Medium temperature	-10...+100 °C
Approvals and certificates	
Degree of protection	IP65 with cable plug
Process/Port connection & communication	
Port connection	
Standard version	M5, G 1/8, sub-base
Analytical version	G 1/8, sub-base
Electrical connection	To DIN EN 175 301 - 803 Form C for cable plug Type 2516 (see "5.4. Ordering chart accessories" on page 11) To industry standard connector Form B for cable plug Type 2507 (see "5.4. Ordering chart accessories" on page 11)
Environment and installation	
Installation position	As required, preferably with actuator upright
Ambient temperature (max.)	+ 55 °C
Installation instructions	No oil, grease or silicones to be used as installation aids

2. Circuit functions

Circuit functions	Description
	Type: A, solenoid valve 2/2 way Direct-acting Normally closed

3. Materials

3.1. Chemical Resistance Chart – Bürkert resistApp



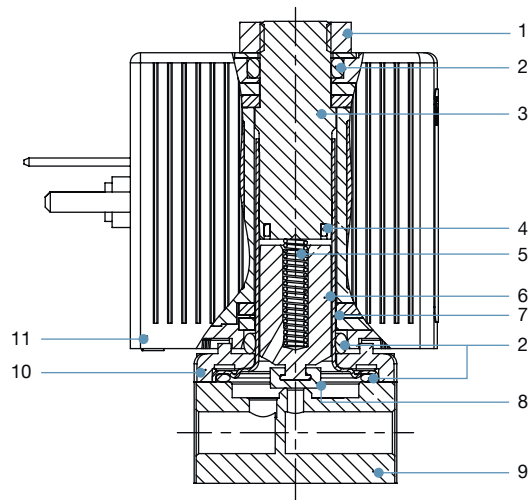
Bürkert resistApp – Chemical Resistance Chart

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

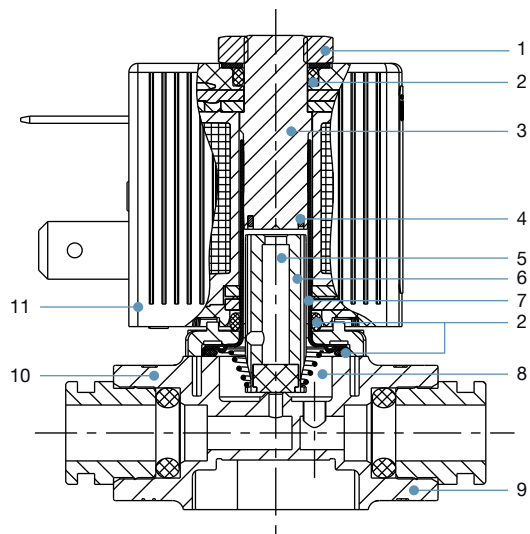
Standard version



No.	Element	Material
1	Locknut	9SMnPb28K Thick-film passivated
2	O-ring	FKM
3	Stopper	Stainless steel 1.4105
4	Shading ring	Copper, Silver
5	Spring	Stainless steel 1.4310
6	Core	Stainless steel 1.4105
7	Guide tube	Stainless steel 1.4303
8	Armature seal	FKM
9	Body	Brass, stainless steel 1.4305, PA (polyamide)
10	Sub-base	Thick-film passivated (brass version) Nickel-plated surface (stainless steel version)
11	Coil	DIN EN 175301 - 803 ¹⁾ Form C: PA Industry standard connector Form B: Epoxy

1.) previously DIN 43650

Plastic version with plug-in coupling



No.	Element	Material
1	Locknut	9SMnPb28K Thick-film passivated
2	O-ring	FKM, EPDM
3	Stopper	Stainless steel 1.4105
4	Shading ring	Copper, Silver
5	Spring	Stainless steel 1.4310
6	Core	Stainless steel 1.4105
7	Guide tube	Stainless steel 1.4303
8	Armature seal	FKM, EPDM
9	Body	PA (polyamide)
10	Sub-base	Thick-film passivated (brass version) Nickel-plated surface (stainless steel version)
11	Coil	DIN EN 175301 - 803 ¹⁾ Form C: PA Industry standard connector Form B: Epoxy

1.) previously DIN 43650

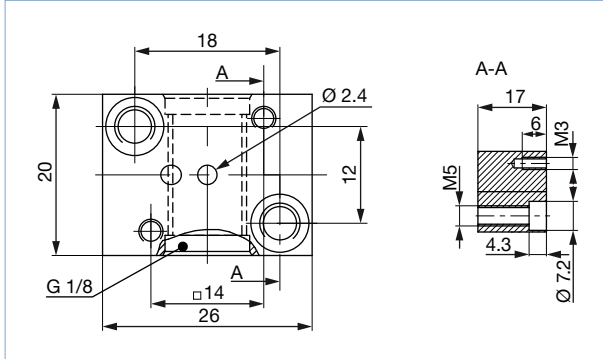
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4. Dimensions

4.1. Single manifold

Note:

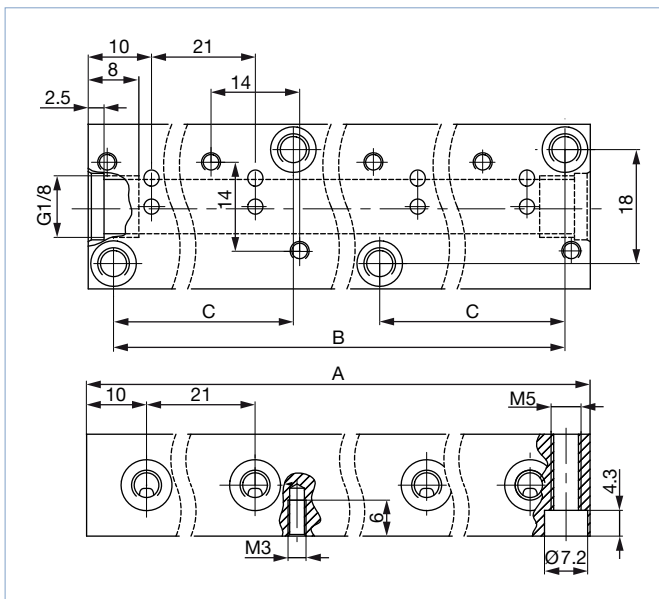
Dimensions in mm



4.2. Multiple manifold

Note:

Dimensions in mm

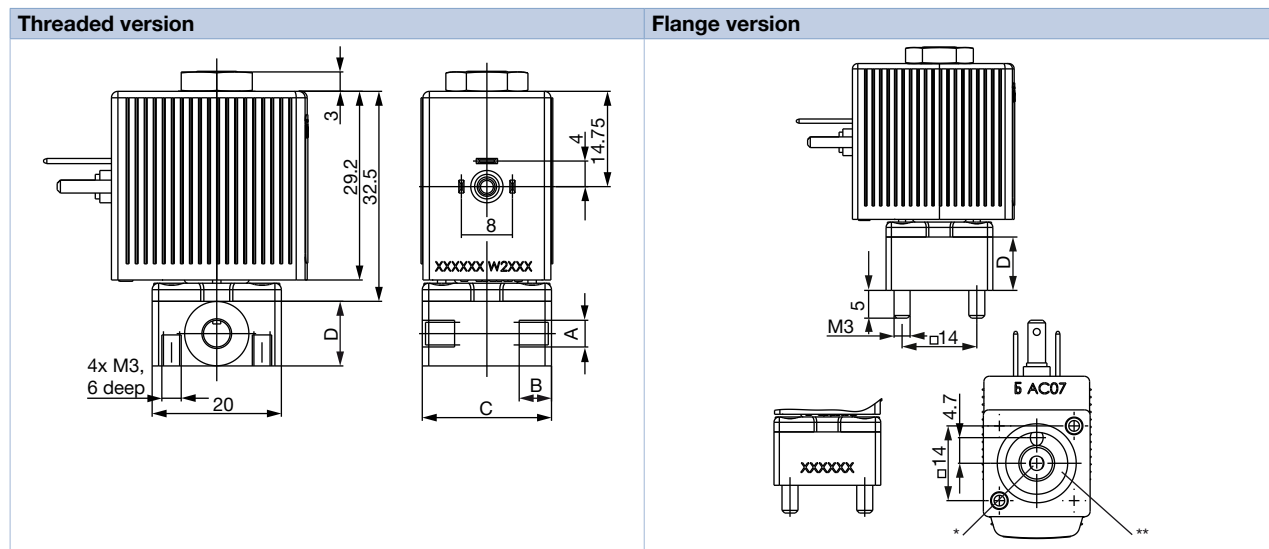


No. of valves	A [mm]	B [mm]	C [mm]
1	20	12	–
2	41	33	–
3	62	54	–
4	83	75	–
5	104	96	–
6	125	117	–
7	146	138	–
8	167	159	54
9	188	180	54
10	209	201	75
11	230	222	75
12	251	243	96

4.3. Version with coil acc. to DIN EN 175301 -803 Form C for cable plug Type 2516

Note:

- The previous standard DIN 43650 has been replaced by DIN EN 175301 -803 Form C.
- Dimensions in mm



Port connection	A	B	C	D
Thread	M5	5	20	10
Thread	G $\frac{1}{8}$	8	25	15
Sub-base	-	-	20	11

PIN Assignments

For the positions marked with * or ** in the drawing, the connections are marked with the letters shown in the table above, depending on the circuit function.

Circuit function	Connection Type	
	*	**
A	P	A

Pin assignment vacuum applications

In vacuum applications the existing flow direction must be maintained. Vacuum must therefore always be applied to A. (Other terminal assignment on request)

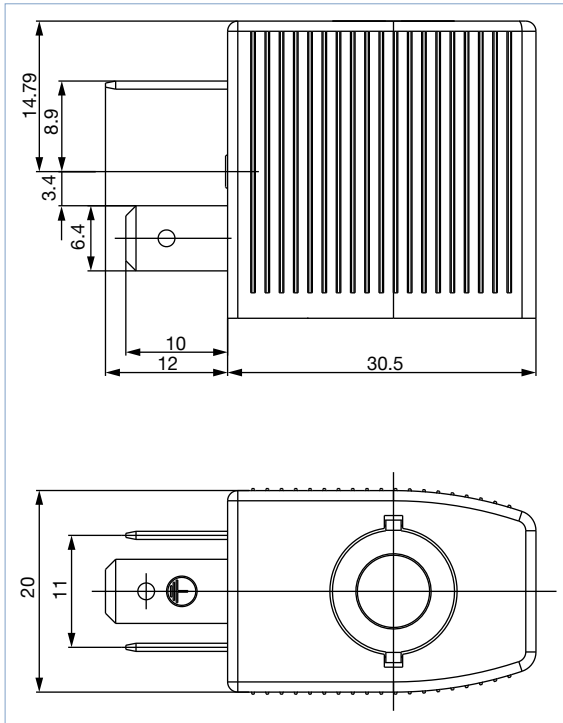
DTS 1000011026 EN Version: U Status: RL (released | freigegeben | valide) printed: 26.01.2021

4.4. Version with coil acc. to industry standard connector Form B for cable plug Type 2507

Threaded version

Note:

Dimensions in mm



4.5. Plastic version with plug-in coupling

Note:

Dimensions in mm

