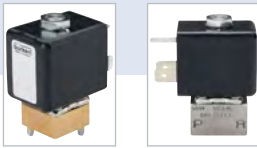




Direct-acting 2/2-way plunger valve

- Direct-acting and compact small valve up to DN 2.4
- Slipped over coil system
- Simple and fast flange or manifold mounting
- Quick coupling (push-in fitting) for push-in connectors



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

Type description

The 7011 valve is a direct-acting plunger valve. The stopper and the core guide tube are welded together to enhance pressure resistance and leak-tightness. Various body and seal material combinations are available depending on the actual application. A Bürkert-specific flange variant (SFB) enables the space-saving arrangement of valves on a multiple manifold. Push-in fittings can be selected for a flexible hose connection. In combination with a plug to DIN EN 175301-803 Form B, the valves satisfy degree of protection 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	
Body	Brass, polyamide (PA), stainless steel 1.4305
Seal	FKM, EPDM
Weight	
Standard version 24.5 mm solenoid coil	146 g (with G 1/8)
Standard version 20 mm solenoid coil	120 g (with G 1/8)
Circuit function	Detailed information can be found in chapter "2. Circuit functions" on page 4.
Thermal insulation class of solenoid	Epoxy: class H
Manual override	Optional
Performance data	
Nominal operating mode	
Single valve	Continuous operation 100 % ED resp. 50 % ED
For block mounting on multiple manifold	With 4 W/5 W solenoid coil 100 % ED (at max. 55 °C)
Switching times ^{1.)} standard version	Orifice 1.2...2.4 mm: opening 8...15 ms, closing 10...17 ms
Circuit function	A
Electrical data	
Operating voltage	24 V DC, 24 V / 50 Hz, 230 V / 50 Hz
Voltage tolerance	± 10 %
Medium data	
Viscosity (max.)	21 mm ² /s
Operating medium	Neutral gases and fluids (e.g. compressed air, water, hydraulic oil, technical vacuum)
Medium temperature standard version	- 10 °C...+ 100 °C
Process/Port connection & communication	
Port connection standard version	M5, G 1/8, flange
Electrical connection	<ul style="list-style-type: none"> • Acc. to DIN EN 175301 - 803 Form C for cable plug Type 2516 • Acc. to industry standard Form B for cable plug Type 2507 • Flat pin terminal as protection class III device • Flying leads connection on request for coil size 20 mm
Approvals and certificates	
Degree of protection	IP65 with cable plug
Environment and installation	
Installation position	As required, preferably with actuator upright
Ambient temperature standard version	Max. +55 °C resp. 75 °C depending on power level

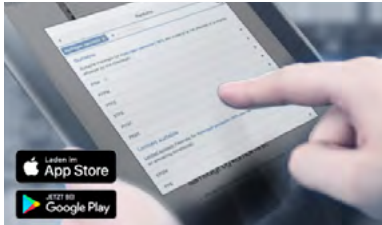
1.) Measured at valve outlet at 6 bar and +20 °C according to ISO 12238, opening: pressure rise 0...10 %, closing: pressure drop 100...90 %

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



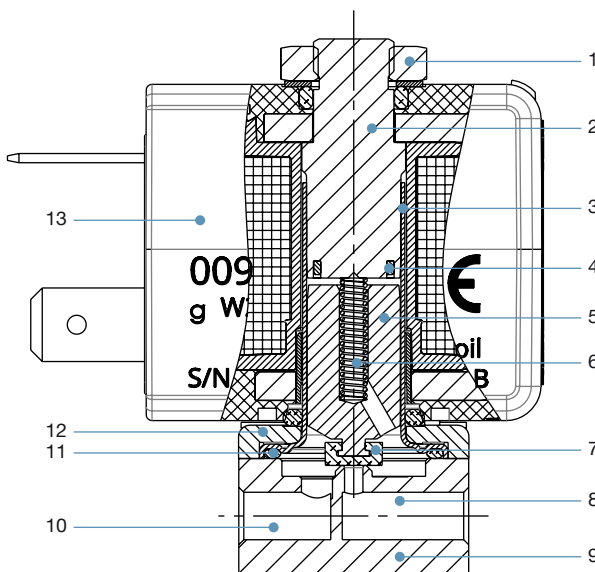
Bürkert resistApp – Chemical Resistance Chart

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	DIN 176 Surface finish thick film passivated KOSA0101
2	Stopper	Stainless steel 1.4113
3	Guide tube	Stainless steel 1.4303 ST
4	Shading ring	Copper, (optional silver)
5	Core	Stainless steel 1.4113
6	Spring	Stainless steel 1.4310
7	Seal	FKM/EPDM
8	Pressure port A	–
9	Valve body	Brass, stainless steel 1.4305 PA (polyamide)
10	Pressure port P	–
11	O-Ring	FKM/EPDM
12	Flange	<ul style="list-style-type: none"> Surface finish thick film passivated KOSA0101 (brass version) Nickel-plated surface (stainless steel version)
13	Coil	Epoxy

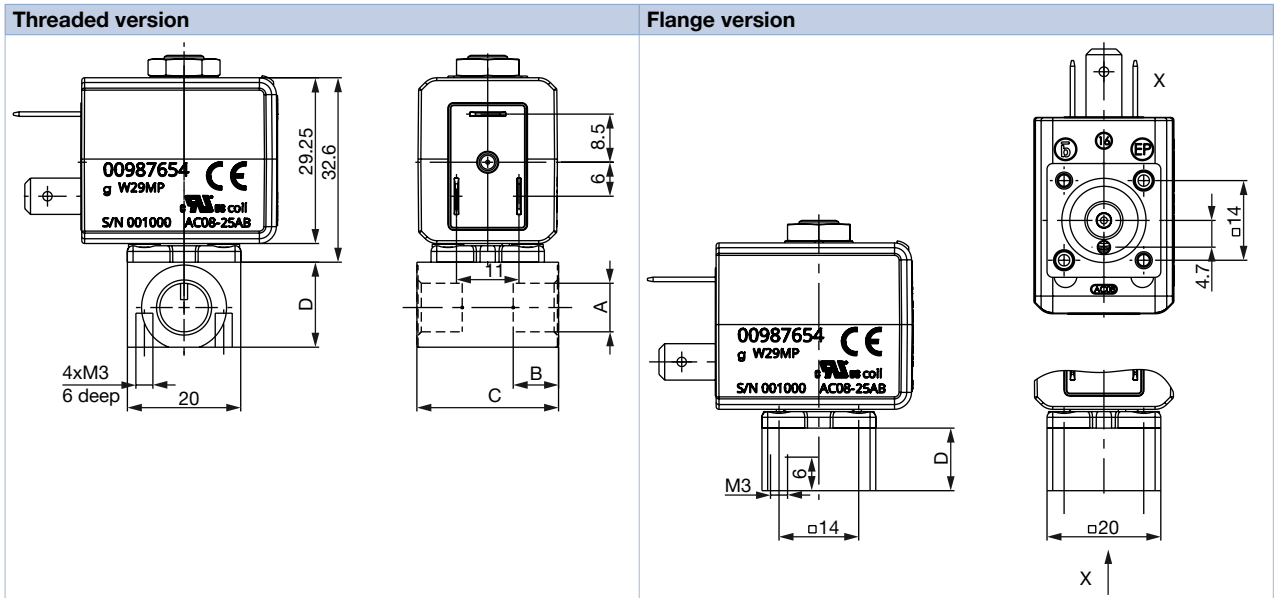
4. Dimensions

4.1. Standard version

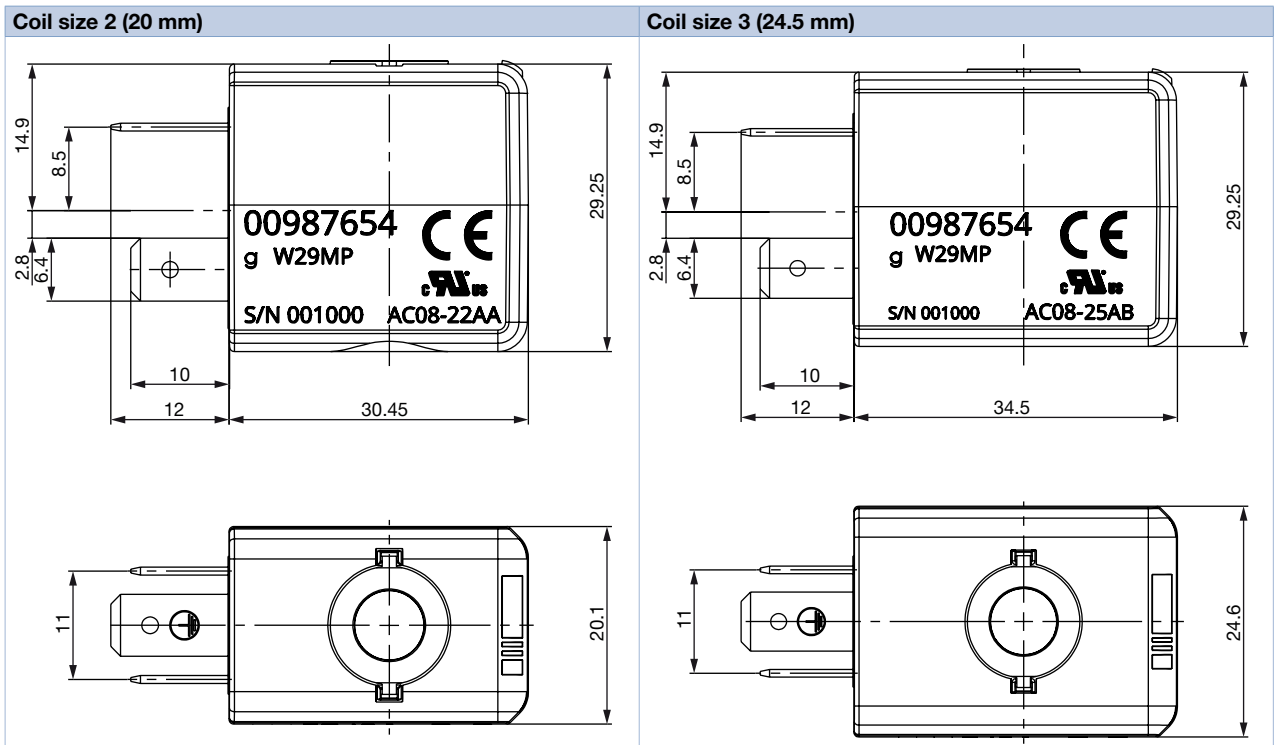
Versions according to industry standard Form B

Note:

Dimensions in mm



Port connection	A	B	C	D
Thread	M5	5	20	10
Thread	G 1/8	8	25	15
Flange	-	-	20	11

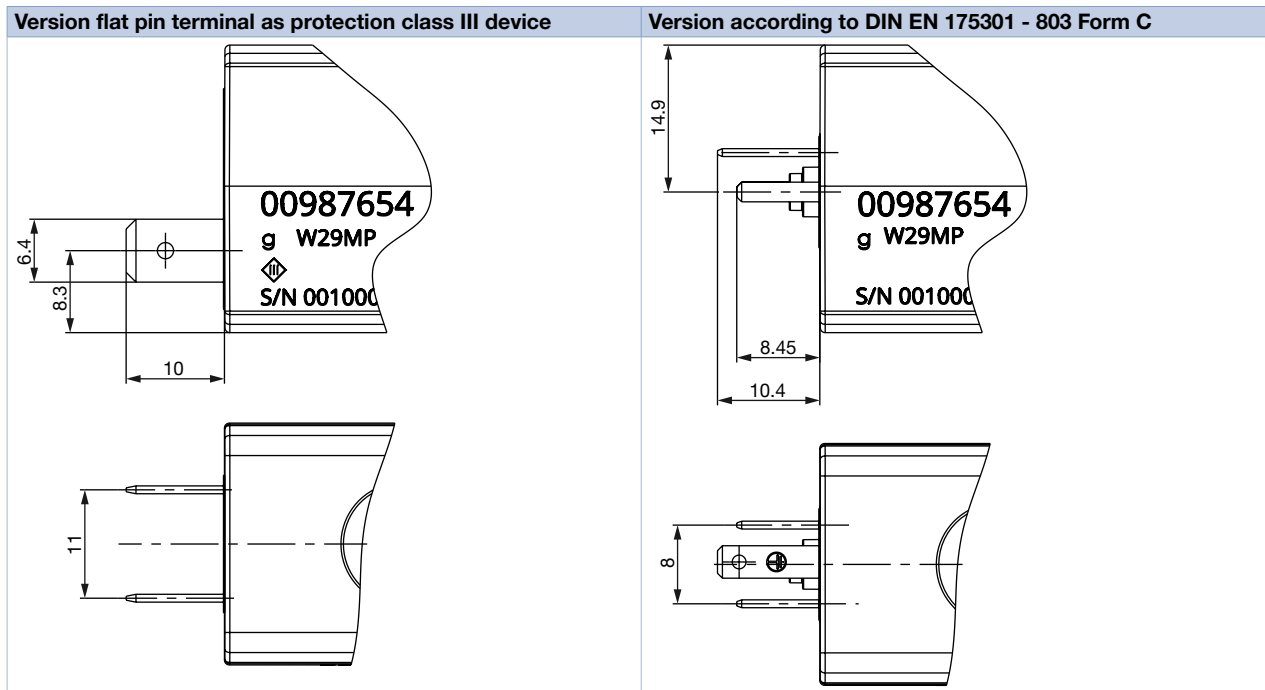


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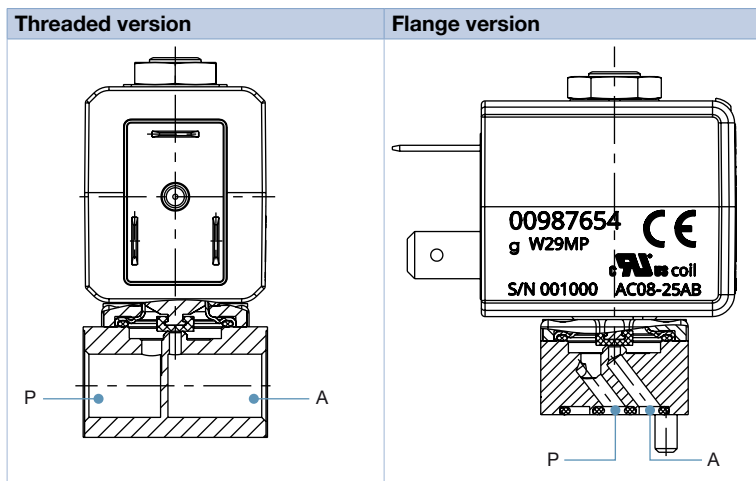
Further electrical connections

Note:

- Specifications apply to coil sizes 20 mm and 24.5 mm
- Dimensions in mm



PIN Assignments



Pin assignment vacuum applications

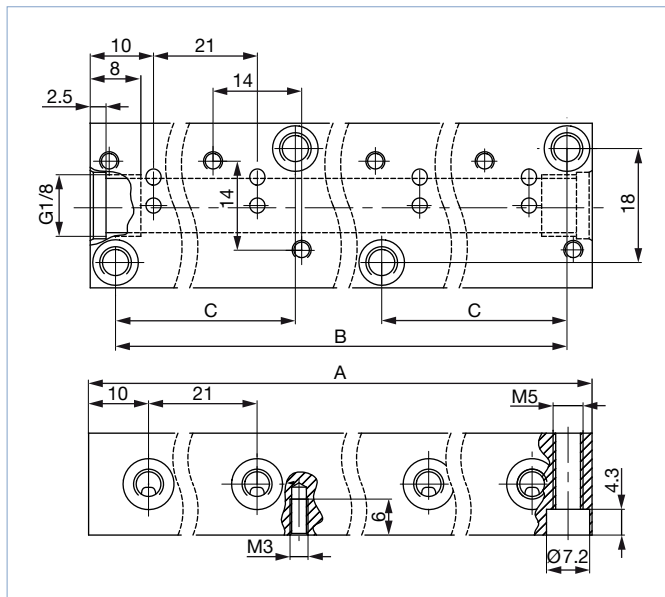
In vacuum applications the existing flow direction must be maintained. Vacuum must therefore always be applied to A. (Other terminal assignment on request)

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4.2. Multiple manifold

Note:

- Dimensions in mm
- Can only be combined with valves with coil size 20 mm
- Manifolds with valves of coil size 24.5 mm on request



Quantity of valve places	A	B	C	Article no.
	[mm]	[mm]	[mm]	
1	20	12	–	005312
2	41	33	–	005355
3	62	54	–	005313
4	83	75	–	005314
5	104	96	–	005315
6	125	117	–	005316
7	146	138	–	005893
8	167	159	54	005166
9	188	180	54	005241
10	209	201	75	005819
11	230	222	75	005242
12	251	243	96	005222

5. Performance specifications

5.1. Power consumption of standard coil version 24.5 mm

Coil	Orifice [mm]	Electrical power					Switching times ^{1.)}	
		Inrush AC [VA]	Hold AC [VA]	[W]	DC Cold [W]	Hot [W]	Opening [ms]	Closing [ms]
24 V / DC / 7 W	1.2	–	–	–	7	5.5	8...15	10...17
	1.6							
	2.0							
	2.4							
24 V / 50 Hz / 6 W	1.2	14	8	6	–	–		
	1.6							
	2.0							
	2.4							
230 V / 50 Hz / 6 W	1.2	14	8	6	–	–		
	1.6							
	2.0							
	2.4							
24 V / DC / 5.5 W	1.2	–	–	–	5.5	4.5		
	1.6							
	2.0							
	2.4							
24 V / 50 Hz / 4 W	1.2	12	6.5	4	–	–		
	1.6							
	2.0							
	2.4							
230 V / 50 Hz / 4 W	1.2	12	6.5	4	–	–		
	1.6							
	2.0							
	2.4							
24 V / DC / 14 W	1.2	–	–	–	14	11		
	1.6							
	2.0							
	2.4							
24 V / DC / 11 W	1.2	–	–	–	11	8.5		
	1.6							
	2.0							
	2.4							

1.) Measured at valve outlet at 6 bar^{2.)} and +20 °C according to ISO 12238, opening: pressure rise 0...10%, closing: pressure drop 100...90%

2.) Measured as overpressure to the atmospheric pressure and air as a medium