

2/2 way plunger solenoid valve with separating diaphragm

- Compact design
- Low electrical power consumption
- Short response times
- Hermetically sealing isolating diaphragm
- Non-metallic valve internals

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

Type description

Type 117 is a normally-closed direct-acting plunger-type solenoid valve with PTFE-coated diaphragm. The diaphragm isolates the fluid from the solenoid system. When deenergized (in circuit function A) the valve is closed by spring action. When energized, the solenoid armature is drawn in 2/2 way, G 1/8, UNF 1/4-28 Fluid Control Systems against a spring to open the valve. The solenoid epoxy encapsulation efficiently dissipates the heat generated by the coil.

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1. General technical data

Product properties	
Dimensions	Further information can be found in chapter "5. Dimensions" on page 5.
Material	
Seal	PTFE/EPDM PTFE/FKM EPDM/FKM
Body	ETFE (TEFZEL)
Coil	Epoxy
Orifice	DN 1.2...DN 2.0
Circuit function	A Further information can be found in chapter "2. Circuit functions" on page 3.
Thermal insulation class of solenoid coil	Epoxy coil class H
Performance data	
Duty cycle	100 % continuous operation
Switching frequency	Max. 300 c.p.m.
Switching time	Opening: approx. 20 ms Closing: approx. 20 ms
Electrical data	
Operating voltage	12 V DC, 24 V DC, 24 V UC, 220/230 V UC
Electrical power consumption	4 W
Voltage tolerance	± 10 %
Medium data	
Operating medium	
With PTFE/EPDM	Alkalis, mineral acids and organic acids, washing and bleaching lyes
With PTFE/FKM	Oxidising acids and lyes, saline solutions, oils and waste gases
Medium temperature	- 10 °C...+ 70 °C
Viscosity	Max. 21 mm²/s
Process/Port connection and communication	
Electrical connection	<ul style="list-style-type: none"> Plug contacts according to industry standard form A for cable plug Type 2507 ▶ Further information can be found in chapter "Cable plug Type 2507, form B according to industry standard" on page 7. Flying leads with 300 mm are available on request.
Approvals and conformities	
Degree of protection	IP65 with cable plug
Environment and installation	
Installation position	As required, preferably with actuator upright
Ambient temperature	Max. + 55 °C

2. Circuit functions

Symbol	Description
	Circuit function A (CF A) 2/2-way solenoid valve Direct-acting Normally closed

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 variants 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.

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.

4. Materials

4.1. Bürkert resistApp

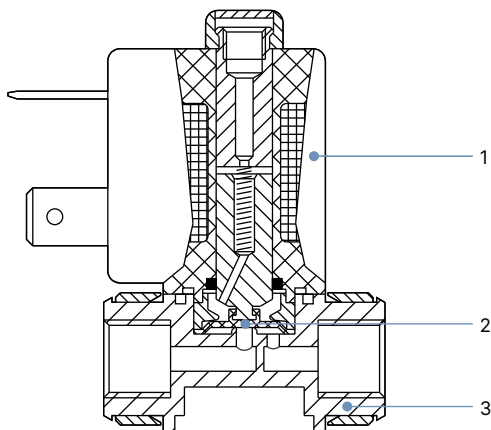


Bürkert resistApp – Chemical resistance chart

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[Start chemical resistance check](#)

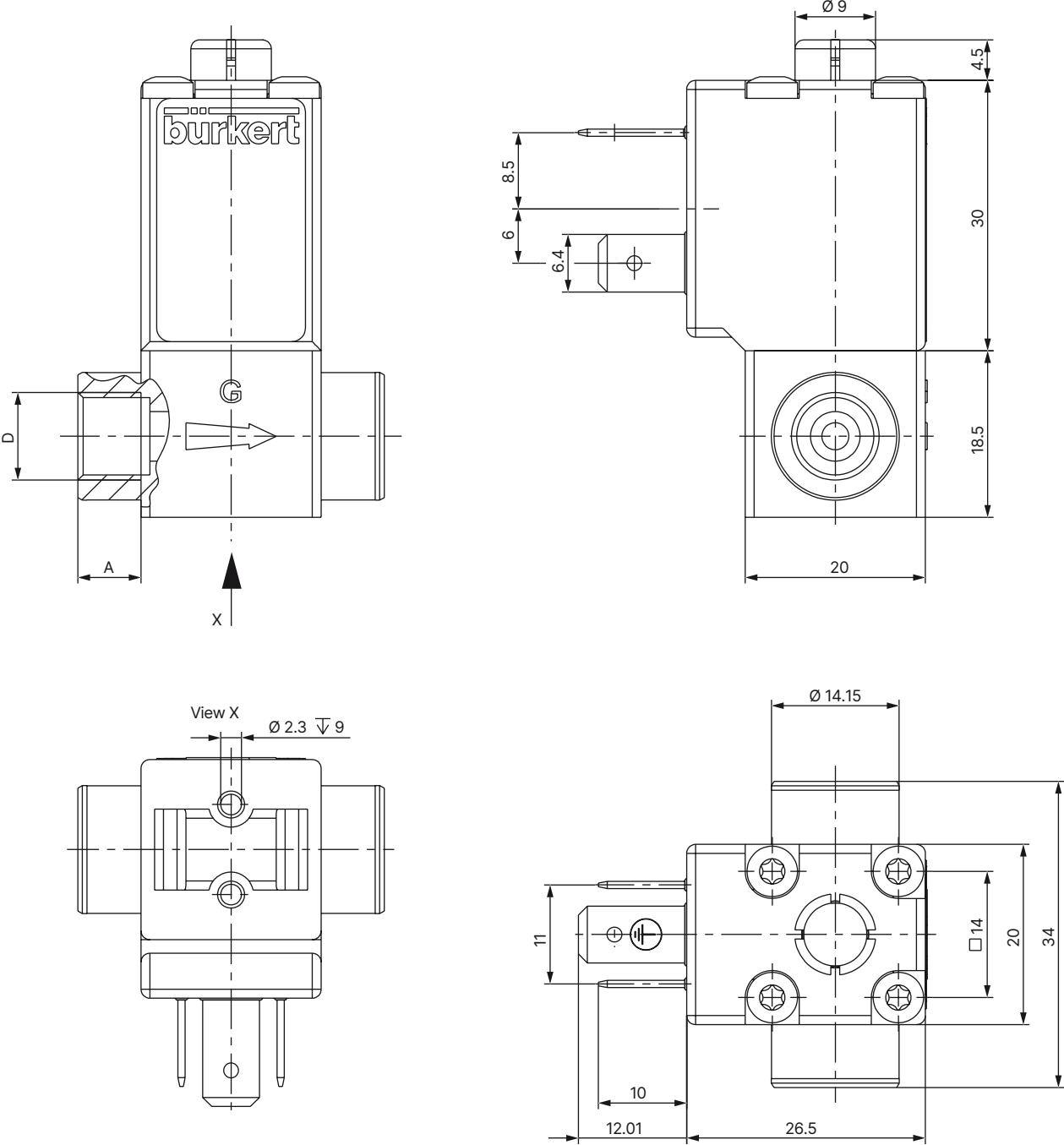
4.2. Material specifications



No.	Element	Material
1	Coil	Epoxy
2	Separating diaphragms	PTFE/EPDM PTFE/FKM EPDM/FKM
3	Valve body	ETFE (TEFZEL)

5. Dimensions

Note:
Dimensions in mm



D	A
G 1/8	8
NPT 1/8	7
UNF 1/4...28	8

6. Ordering information

6.1. Bürkert eShop



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6.2. Bürkert product filter

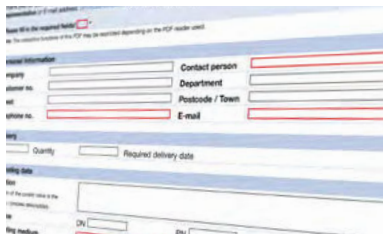


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6.3. Bürkert Product Enquiry Form



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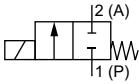












Would you like to make a specific product enquiry based on your technical requirements? Use our Product Enquiry Form for this purpose. There you will find all the relevant information for your Bürkert contact. This will enable us to provide you with the best possible advice.

[Fill out the form now](#)

6.4. Ordering chart

Note:

- All valves are delivered with a ETFE body (TEFZEL).
- Please note that the cable plug must be ordered separately, see ["Cable plug Type 2507, form B according to industry standard"](#) on page 7 or separate data sheet **Type 2507** ▶.


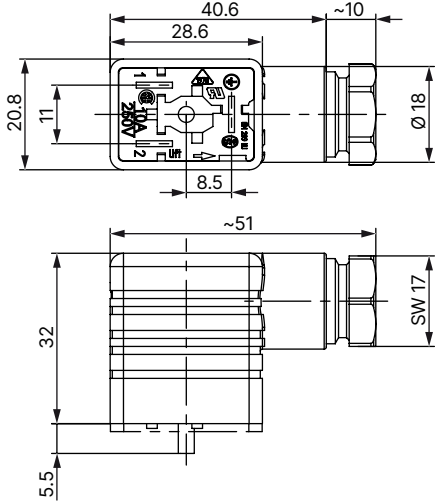

Circuit function	Port connection	Orifice	K _v value water	Voltage/Frequency	Pressure range	Seal material	Article no.
		[mm]	[m ³ /h]	[V/Hz]	[bar]		
CF A 2/2-way solenoid valve Direct-acting Normally closed 	G 1/8	1.6	0.06	24/DC	0...1.5	PTFE/EPDM	057606 
				24/UC			058206 
				24/DC		PTFE/FKM	056664 
				24/UC			041763 
				220...230/UC			057839 
				220...230/UC			057839 
	G 1/8	2.0	0.09	24/DC	0...1.0	PTFE/EPDM	043698 
				220...230/UC			021301 
				24/DC		PTFE/FKM	040947 
				24/UC			058062 
				220...230/UC			021186 
				220...230/UC			021186 

6.5. Ordering chart accessories

Cable plug Type 2507, form B according to industry standard

Note:

- Dimensions in mm
- Delivery of cable plug includes a flat seal and a fixing screw.
- Refer to data sheet **Type 2507** ▶ for more information about the cable plug.

Cable plug	Dimensions	Variant	Voltage	Article no.
		Without circuitry (standard)	2...250 V AC/DC	423845 
		With LED	24 V AC/DC	423849 