



2/2 or 3/2-way TwinPower rocker solenoid valve with separating diaphragm

- 22 mm compact design with DN 3.0
- Separating diaphragm for high chemical resistance
- USP Chapter 87/88 Class VI
- Back pressure tightness achieved by rocker principle
- Minimum internal volume with good rinsability



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

Can be combined with

	Type 2505 10 mm socket for Bürkert small solenoid valves
	Type 2507 Cable plug, form B according to industry standard

Type description

Direct-acting, media-separated 2/2 or 3/2-way rocker solenoid valve for the control of aggressive liquids and gases in medical analysis technology, the food industry and the chemical industry during dosing, filling, mixing and distribution. The medium is only in contact with the housing and seal material through the separating diaphragm. With its new TwinPower actuator, robust fitting and 22 mm width, this valve meets the most stringent requirements. The tried-and-tested rocker technology is characterised by full back pressure tightness, good flushability and a low internal volume. The Type 6628 is available in a wide variety of technical variants and provides perfect adaption in fluidics application with the aid of various fluidic body options.

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1. General technical data

Product properties	
Dimensions	Further information can be found in chapter "6. Dimensions" on page 7.
Material	
Seal	FFKM, FKM or EPDM
Valve body	PEEK, PPS or PVDF (PP on request)
Manual override	On request
Internal volume	Bürkert sub-base: from 280 µl Hose connector: from 500 µl Threaded body: from 500 µl
Minimum bending radius for flying leads variant	Single bending: 5 mm Multiple bending: 8 mm
Orifice	DN 2.0 (Vac...5 bar) DN 3.0 (Vac...3 bar)
Circuit function	A, B and T Further information can be found in chapter "3. Circuit functions" on page 4.
Performance data	
Switching time ¹⁾	Opening: approx. 25 ms (pressure build-up 0...10 %) Closing: approx. 25 ms (pressure reduction 100...90 %)
Electrical data	
Power supply	12 V DC, 24 V DC (other voltages on request)
Duty cycle	100 % continuous operation
Nominal power	5 W (other powers on request & variants with internal power reduction possible)
Voltage tolerance ²⁾	± 10 %
Medium data	
Operating medium	Resistant to neutral and aggressive gases and liquids (see chapter "5.1. Bürkert resistApp" on page 6)
Medium temperature	FKM: 0 °C...+ 55 °C FFKM: + 10 °C...+ 55 °C EPDM: - 10 °C...+ 55 °C
Viscosity	Max. 21 mm ² /s
Product connections	
Electrical connection	PFA single flying leads 0.5 mm ² (AWG20), length 500 mm Tag connectors according to DIN 43650 form B for cable plug Type 2507 ▶ Rectangular cable plug Type 2505 ▶
Port connection	Bürkert sub-base (22 × 35 mm) G 1/8 NPT 1/8 Hose connector 4 mm (5/32") Push-in connector (tube's external diameter 6 mm)
Approvals and conformities	
Degree of protection	IP54 with cable or cable plug Type 2507 ▶ IP30 with rectangular cable plug Type 2505 ▶
Foods and beverages/Hygiene	FDA on request only with seal material EPDM USP Chapter 87/88 Class VI on request only with body material PPS/PEEK and seal material EPDM Further information can be found in chapter "4.4. Foods and beverages/Hygiene" on page 5.
Environment and installation	
Installation	As required, preferably with actuator upright
Ambient temperature	FKM: 0 °C...+ 55 °C FFKM: + 10 °C...+ 55 °C EPDM: - 10 °C...+ 55 °C

1.) Measurement at + 20 °C, 2 bar at the valve outlet according to DIN ISO 12238:2001

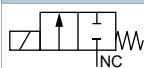
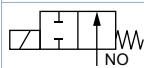
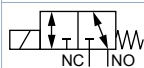
2.) Maximum permitted residual ripple

2. Product variants

Rectangular plug with manual override and Bürkert sub-base	Flying leads with threaded body
	
Rectangular plug with 2-way hose connector	Flying leads with push-in connector
	

3. Circuit functions

Note:
Other circuit functions on request.

Symbol	Description
	Circuit function A (CF A) 2/2-way solenoid valve Direct-acting Normally closed
	Circuit function B (CF B) 2/2-way solenoid valve Direct-acting Normally open
	Circuit function T (CF T) 3/2-way solenoid valve Direct-acting Flow direction optional Universal

4. Approvals and conformities

4.1. 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.

4.2. Conformity

In accordance with the Declaration of Conformity, the product is compliant with the EU Directives.

4.3. Standards

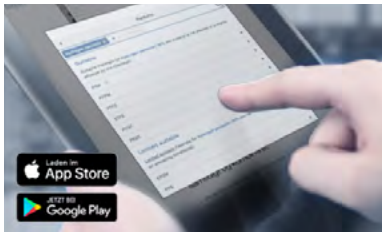
The applied standards which are used to demonstrate compliance with the EU Directives are listed in the EU-Type Examination Certificate and/or the EU Declaration of Conformity.

4.4. Foods and beverages/Hygiene

Conformity	Description
FDA	FDA – Code of Federal Regulations (valid for the variable code PL03) All wetted materials are compliant with the Code of Federal Regulations published by the FDA (Food and Drug Administration, USA) according to the manufacturer's declaration.
USP	United States Pharmacopeial Convention (USP) (valid for the variable code PL04) All wetted materials are biocompatible according to the manufacturer's declaration.

5. Materials

5.1. Bürkert resistApp

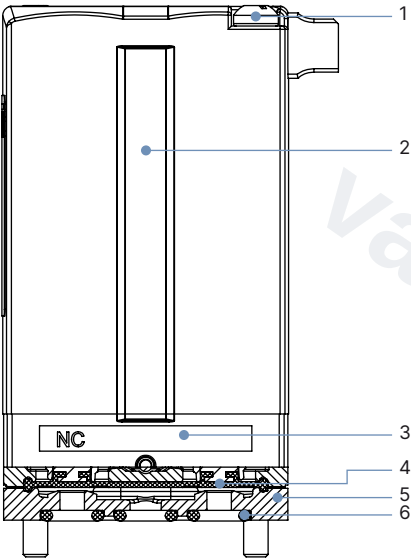


Bürkert resistApp – Chemical resistance chart

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](#)

5.2. Material specifications



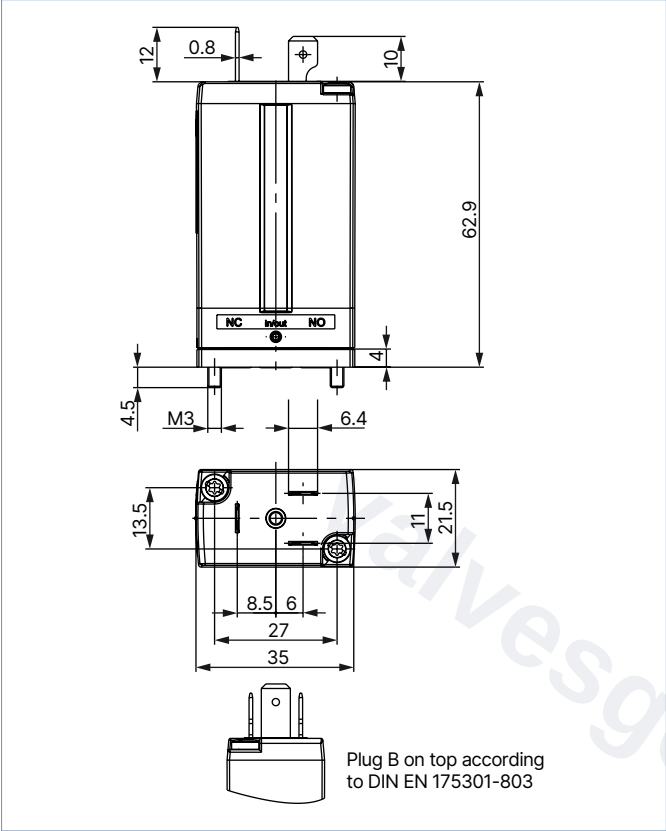
No.	Element	Material
1	Fastening screw M3 (from end to end)	Stainless steel
2	Coil	Epoxy
3	Valve body	PPS
4	Diaphragm ^{1.)}	FFKM, FKM or EPDM
5	Valve body ^{1.)}	PEEK, PPS or PVDF
6	Sub-base seal ^{1.)}	FFKM, FKM or EPDM

1.) Wetted

6. Dimensions

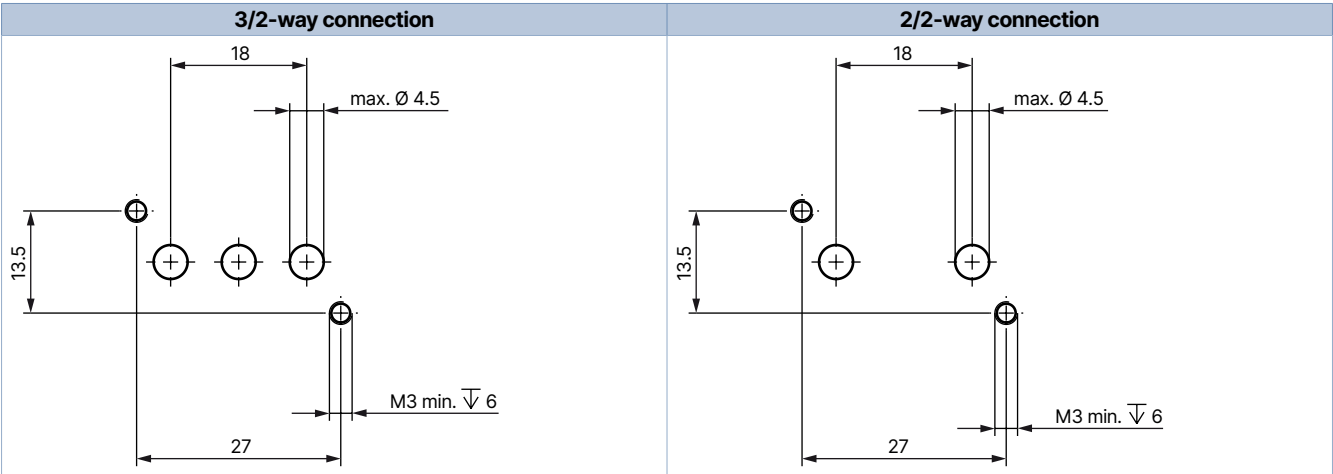
6.1. Sub-base variant with connector plug form B

Note:
Dimensions in mm



6.2. Bürkert sub-base interface (22 × 35 mm)

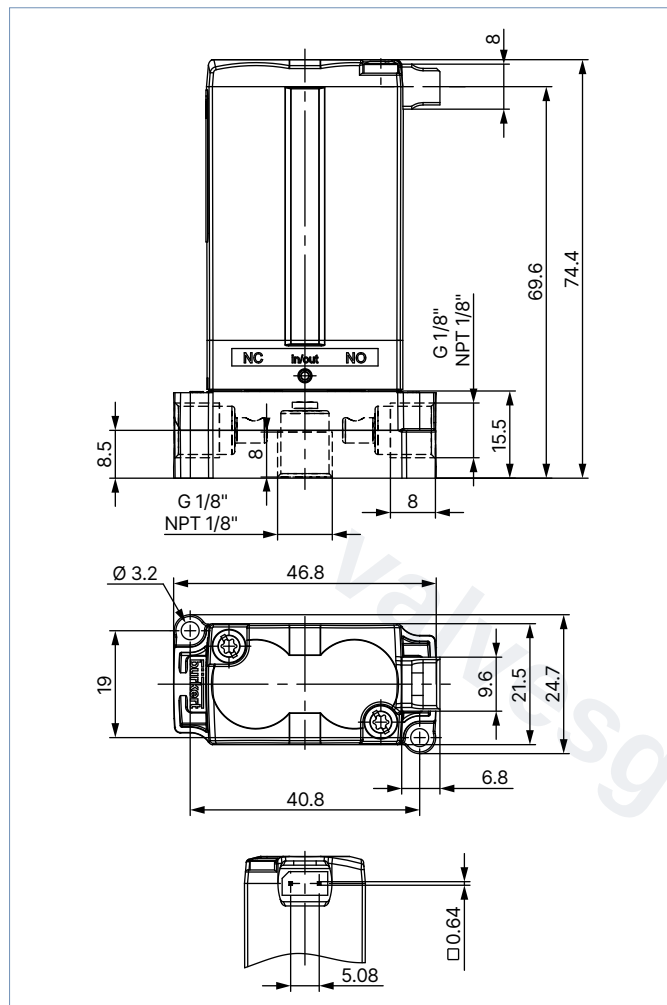
Note:
Dimensions in mm



6.3. Threaded variant with rectangular plug Type 2505

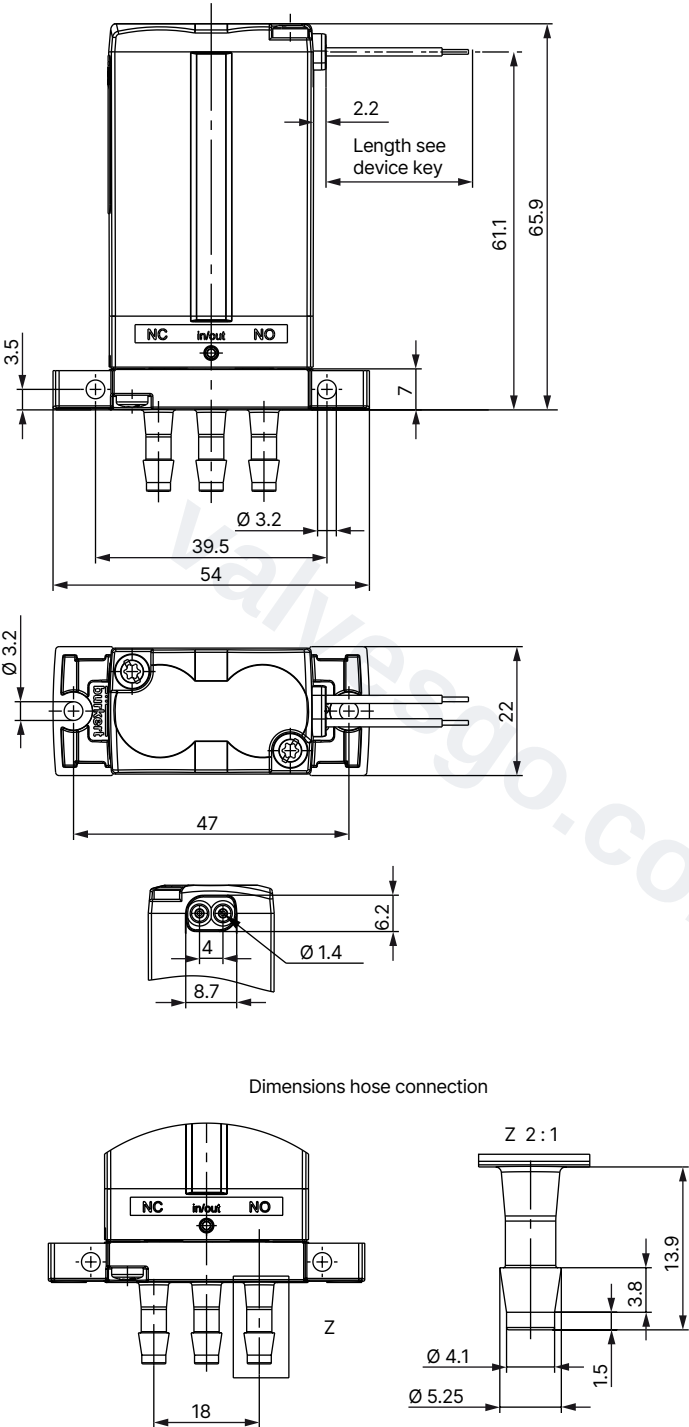
Note:

Dimensions in mm



6.4. Tube connector variant with flying leads

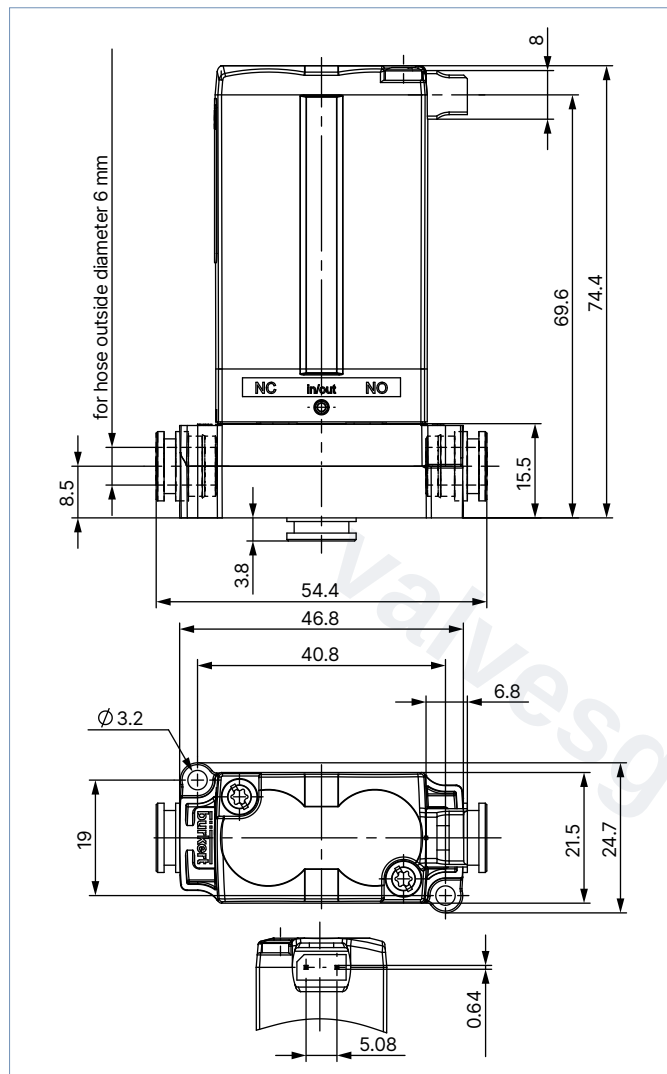
Note:
Dimensions in mm



6.5. Push-in hose connector with rectangular plug Type 2505

Note:

Dimensions in mm



7. Ordering information

7.1. Bürkert eShop



Bürkert eShop – Easy ordering and quick delivery

You want to find your desired Bürkert product or spare part quickly and order directly? Our online shop is available for you 24/7. Sign up and enjoy all the benefits.

[Order online now](#)

7.2. Bürkert product filter



Bürkert product filter – Get quickly to the right product

You want to select products comfortably based on your technical requirements? Use the Bürkert product filter and find suitable articles for your application quickly and easily.

[Try out our product filter](#)

7.3. Bürkert Product Enquiry Form

Bürkert Product Enquiry Form – Your enquiry quickly and compactly

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.

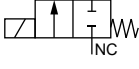
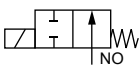
[Fill out the form now](#)

7.4. Ordering chart

Standard variant

Note:

- 2 x fastening screws M3 × 65 for sub-base variants are included in the delivery.
- Connectors for rectangular plug and tag connector form B are not included in the delivery and must be ordered separately, see ["7.5. Ordering chart accessories" on page 15.](#)
- Other variants are available on request.

Circuit function	Port connection	Orifice	Q_{Nn} value air ¹⁾	K_v value water ²⁾	Voltage/ Frequency	Pressure range	Max. pressure difference	Body material	Seal material	Electrical connection	Article no.
		[mm]	[l/min]	[m³/h]							
CF A 2/2-way solenoid valve Direct-acting Normally closed 	Bürkert sub-base	2	110	0.10	24/DC	Vac...5	5	PPS	EPDM	Flying leads, 0.5 m	251614 
										Rectangular plug	250857 
								PEEK	FFKM	Flying leads, 0.5 m	234350 
										Rectangular plug	235315 
	Bürkert sub-base	3	180	0.17	12/DC 24/DC	Vac...3	3	PPS	EPDM	Flying leads, 0.5 m	251620 
										Rectangular plug	251618 
										Flying leads, 0.5 m	241727 
										Rectangular plug	242030 
										Plug form B	246199 
										251643 	
								PEEK	FFKM	Flying leads, 0.5 m	235316 
										Rectangular plug	230304 
										235317 	
										20104014 	
								PVDF	PPS	Flying leads, 0.5 m	246382 
										Rectangular plug	251624 
										Plug form B	248017 
										238616 	
								PEEK	EPDM	Flying leads, 0.5 m	300356 
										Plug form B	251644 
										235319 	
										242340 	
								FFKM FKM	PPS	Plug form B	238615 
										Flying leads, 0.5 m	251650 
										251613 	
										235318 	
								PEEK	EPDM FFKM FKM		251628 
CF B 2/2-way solenoid valve Direct-acting Normally open 	Bürkert sub-base	3	180	0.17	24/DC	Vac...3	3	PEEK	FFKM	Flying leads, 0.5 m	251686 

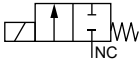
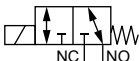
Circuit function	Port connection	Orifice	Q _{lin} value air ^{1.)}	K _v value water ^{2.)}	Voltage/ Frequency	Pressure range	Max. pressure difference	Body material	Seal material	Electrical connection	Article no.								
		[mm]	[l/min]	[m³/h]	[V/Hz]	[bar]	[bar]												
CF T 3/2-way solenoid valve Direct-acting Flow direction optional Universal 	Bürkert sub-base	2	110	0.10	24/DC	Vac...5	5	PPS	EPDM	Flying leads, 0.5 m	241889 								
										Rectangular plug	250859 								
								PEEK	FFKM	Flying leads, 0.5 m	234340 								
										Rectangular plug	235320 								
								PPS	FKM	Flying leads, 0.5 m	251630 								
										Rectangular plug	251629 								
	Bürkert sub-base	3	180	0.17	12/DC 24/DC	Vac...2	2	PPS	EPDM	Flying leads, 0.5 m	241726 								
										Rectangular plug	245256 								
										Plug form B	251616 								
										Plug form B	251645 								
					12/DC 24/DC			PEEK	FFKM	Flying leads, 0.5 m	235321 								
										Rectangular plug	230305 								
										Rectangular plug	235322 								
					12/DC 24/DC			PVDF	FKM		20104015 								
								PPS		Flying leads, 0.5 m	251633 								
										Rectangular plug	251635 								
										Plug form B	251634 								
								PEEK	EPDM	Flying leads, 0.5 m	251684 								
										Plug form B	251647 								
										Plug form B	251647 								
								FFKM FKM		Flying leads, 0.5 m	235325 								
										Plug form B	251638 								
								PPS		Plug form B	251649 								
										Flying leads, 0.5 m	251685 								
	Push-in connector							PEEK	EPDM		251617 								
											251617 								
											251617 								
	Hose connector							PEEK	FFKM		251617								
											251617								
											251617								

1.) Measurement at + 20 °C, 6 bar at the valve inlet, 1 bar differential pressure

2.) Measurement at + 20 °C, 1 bar at the valve inlet and free outlet

Variant with approvals and conformities
Note:

- All valves have EPDM as seal material.
- 2 x fastening screws M3 × 65 for sub-base variants are included in the delivery.
- Connectors for rectangular plug and tag connector form B are not included in the delivery and must be ordered separately, see **"7.5. Ordering chart accessories" on page 15.**
- Other variants are available on request.

Circuit function	Port connection	Orifice	Q _{Nn} value air ¹⁾	K _v value water ²⁾	Voltage/Frequency	Pressure range	Max. differential pressure	Body material	Electrical connection	Conformity	Article no.
		[mm]	[l/min]	[m³/h]	[V/Hz]	[bar]	[bar]				
CF A 2/2-way solenoid valve Direct-acting Normally closed 	Bürkert sub-base	3	180	0.17	24/DC	Vac...3	3	PPS	Flying leads, 0.5 m	USP	20113198 
										FDA	00324692 
	G 1/8	3	180	0.17	24/DC	Vac...3	3	PEEK	Flying leads, 0.5 m	USP	20113196 
										FDA	20113840 
CF T 3/2-way solenoid valve Direct-acting Flow direction optional Universal 	Bürkert sub-base	3	180	0.17	24/DC	Vac...2	2	PPS	Flying leads, 0.5 m	USP	20113199 
										FDA	20113842 
	G 1/8	3	180	0.17	24/DC	Vac...2	2	PEEK	Flying leads, 0.5 m	USP	20113197 
										FDA	20113841 
	G 1/8	3	180	0.17	24/DC	Vac...2	2	PEEK	Flying leads, 0.5 m	USP	20113201 
										FDA	00300357 

1.) Measurement at + 20 °C, 6 bar at the valve inlet, 1 bar differential pressure

2.) Measurement at + 20 °C, 1 bar at the valve inlet and free outlet

Further variants on request

 Electrical connection • Cable plug according to DIN 43650 form B (Industrial standard) • Flying leads	 Material Other body and seal materials on request
 Approval Further information can be found in chapter "4. Approvals and conformities" on page 5.	

7.5. Ordering chart accessories

Rectangular cable plug Type 2505

Note:

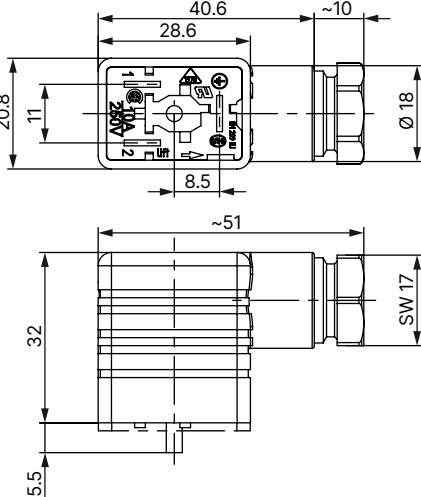
For further variants see data sheet **Type 2505** ▶.

Accessories	Description	Article no.
	Cable plug 10 mm with cable, 2-pin, rectangular plug, straight, cable length: 3 m (Type 2505)	252572 
	Cable plug 10 mm with cable, 2-pin, rectangular plug, straight, cable length: 5 m (Type 2505)	255194 
	Cable plug 10 mm with cable, 2-pin, rectangular plug, straight, cable length: 0,3 m (Type 2505)	644068 
	Cable plug 10 mm with cable, 2-pin, rectangular plug, straight, cable length: 0.6 m (Type 2505)	162144 
	Cable plug 10 mm, 2-pin, rectangular plug, straight (Type 2505)	644067 

Cable plug Type 2507, form B according to industry standard

Note:

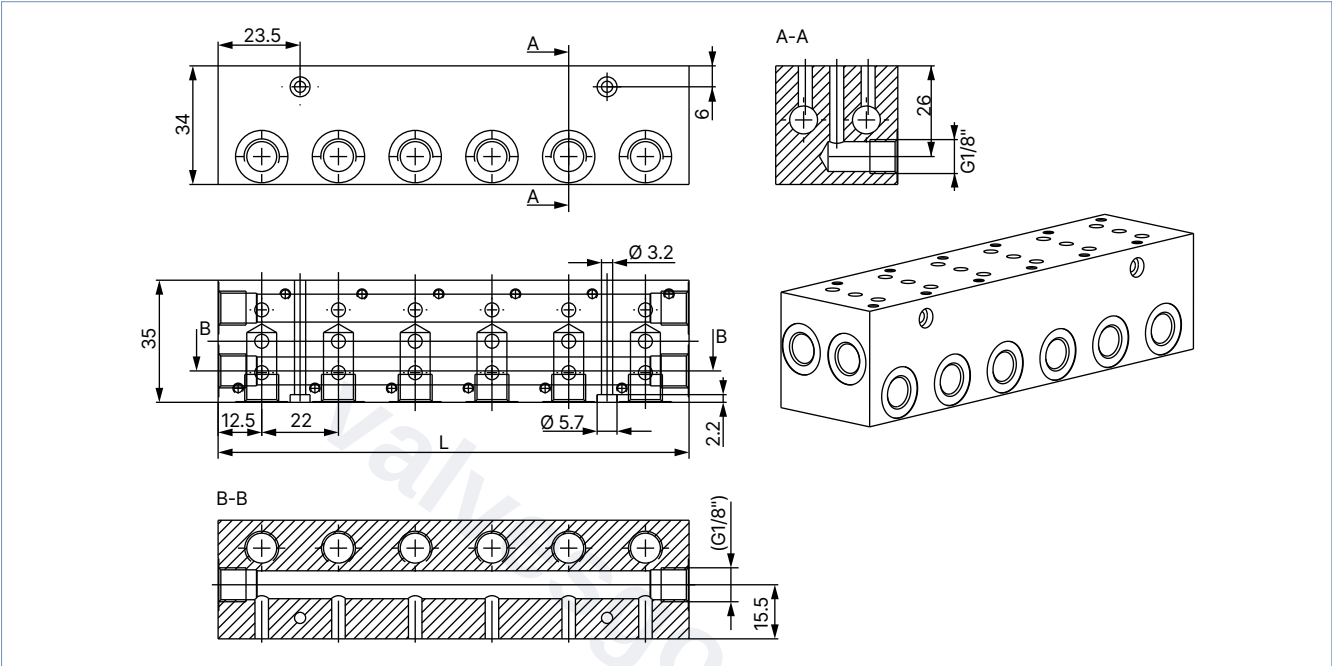
- Dimensions in mm
- Delivery of cable plug includes a flat seal and a fastening screw.
- Refer to data sheet **Type 2507** ▶ for more information about the cable plug.

Cable plug	Dimensions	Variant	Voltage	Article no.
		Without wiring (standard)	2...250 V AC/DC	423845 
		With LED	24 V AC/DC	423849 
		With LED and free-wheeling diode	24 V AC/DC	423851 
		With rectifier, LED and varistor	24 V AC/DC	423853 

Multiple manifolds for Bürkert sub-base interface, 3-way

Note:

- Dimensions in mm
- Port connection: G 1/8"
- Material: aluminium (black anodized)
- Pay attention to screw protrusion.
- Other variants are available on request.



Manifold	L [mm]	Article no.
2-fold	47	669571
3-fold	69	672633
4-fold	91	669572
5-fold	113	672661
6-fold	135	669570
10-fold	223	672660