DATA SHEET

Type 6624

2/2 and 3/2 way Bürkert TwinPower rocker solenoid valve with separating diaphragm

- For highest chemical resistance requirements
- Ultra compact design due to Bürkert Twinpower actuator with 10.3 mm width
- DN 0.8 (5 bar) and DN 1.6 (2 bar)
- Integrated hit and hold electronic
- High back pressure tightness with excellent cleanability

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 description

Type 6624 combines the reliable and successful Rocker principle with a highly innovative new actuator. The Bürkert TwinPower concept of this actuator reduces the size greatly without loss in performance. Hence the 10 mm wide medium isolated rocker valve, 6624, with a 1.6 mm orifice and a pressure resistance of 2 bar, provides the same performance as a traditional 16 mm valve. In addition, the integrated power reduction decreases the energy consumption by 75 %. In combination with other design features the heat transfer into the medium can be reduced to a minimum. In the design of the 6624, the main benefits lie in its excellent cleanability and a high reliability. By using high performance materials the 6624 suits the handling of aggressive medium perfectly. The valve is available in a 2-way and 3-way version.

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1. General technical data

Product properties	
Dimensions	Further information can be found in chapter "6. Dimensions" on page 6.
Material	
Seal	FFKM, FKM or EPDM
Fluidic housing	PEEK or PPS
Internal volume	Bürkert sub-base: from 110 µl Tube connector: from 285 µl UNF ¼"- 28: from 115 µl
Minimum bending radius for flying leads version	Single bending: 8 mm Multiple bending: 13 mm
Orifice	DN 0.8 (Vac [1.]...5 bar) DN 1.6 (Vac [1.]...2 bar)
Circuit function	A, B and T Further information can be found in chapter "3. Circuit functions" on page 4.
Performance data	
Switching time [3.]	Opening: approx. 10 ms (pressure build-up 0...10 %) Closing: approx. 13 ms (pressure reduction 100...90 %)
Electrical data	
Operating voltage [2.]	12/24 V DC
Duty cycle	100 % continuous operation
Nominal power	4 W inrush power 1 W nominal holding power (internal power reduction)
Switching frequency [4.]	Max. 5 Hz
Voltage tolerance [3.]	12 V DC + 10 % / - 5 % 24 V DC ± 10 %
Medium data	
Operating medium	Resistant to neutral and aggressive liquids and gases (see chapter "5.1. Bürkert resistApp" on page 5)
Medium temperature	FFKM: + 15 °C...+ 50 °C FKM: - 10 °C...+ 50 °C EPDM: - 10 °C...+ 50 °C (for orifice DN 0.8) + 5 °C...+ 50 °C (for orifice DN 1.6)
Viscosity	Max. 21 mm²/s
Process/Port connection & communication	
Electrical connection	PFA single leads, 0.5 mm² (AWG20), length 300 mm Rectangular cable plug **Type 2505** ▸
Port connection	Bürkert sub-base (10 × 30 mm) Tube connection UNF ¼"- 28
Approvals and conformities	
Degree of protection	IP40 with flying leads IP30 with rectangular cable plug **Type 2505** ▸
Environment and installation	
Installation	As required, preferably with actuator upright
Ambient temperature	FFKM: + 15 °C...+ 55 °C FKM: - 10 °C...+ 55 °C EPDM: - 10 °C...+ 55 °C (for orifice DN 0.8) + 5 °C...+ 55 °C (for orifice DN 1.6)

1.) Technical vacuum (- 0.8 bar) to normally closed or normally open, connection to valve outlet (COM/OUT) only following consultation
2.) Battery voltage, note polarity (Flying leads version: red = +, black = –)
3.) Maximum permitted residual ripple
4.) At ambient temperature + 20 °C
5.) Measurement at + 20 °C, 2 bar at the valve outlet according to DIN ISO 12238:2001

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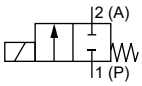
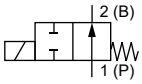
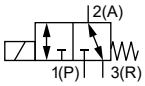
2. Product versions

Flying leads with Bürkert sub-base	Rectangular plug with 3-way hose connector	Rectangular plug with 3-way threaded body
		

3. Circuit functions

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 Normally closed

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 versions 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.

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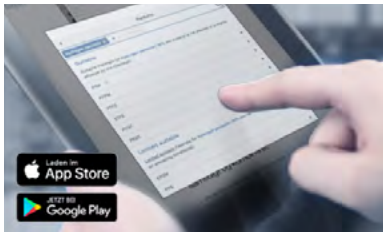
5. Materials

5.1. Bürkert resistApp

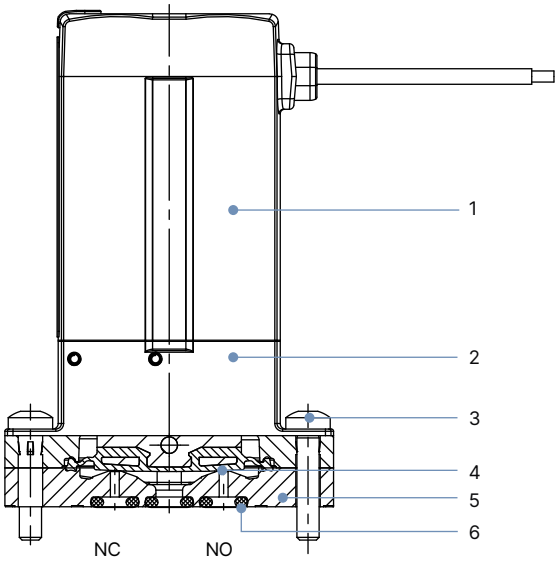


Bürkert resistApp – Chemical resistance chart

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	Coil	Epoxy
2	Valve body	PPS
3	Mounting screw M2	Stainless steel
4	Diaphragm 1.)	FFKM, FKM or EPDM
5	Fluidic housing 1.)	PEEK or PPS
6	Sub-base seal 1.)	FFKM, FKM or EPDM

1.) in contact with medium

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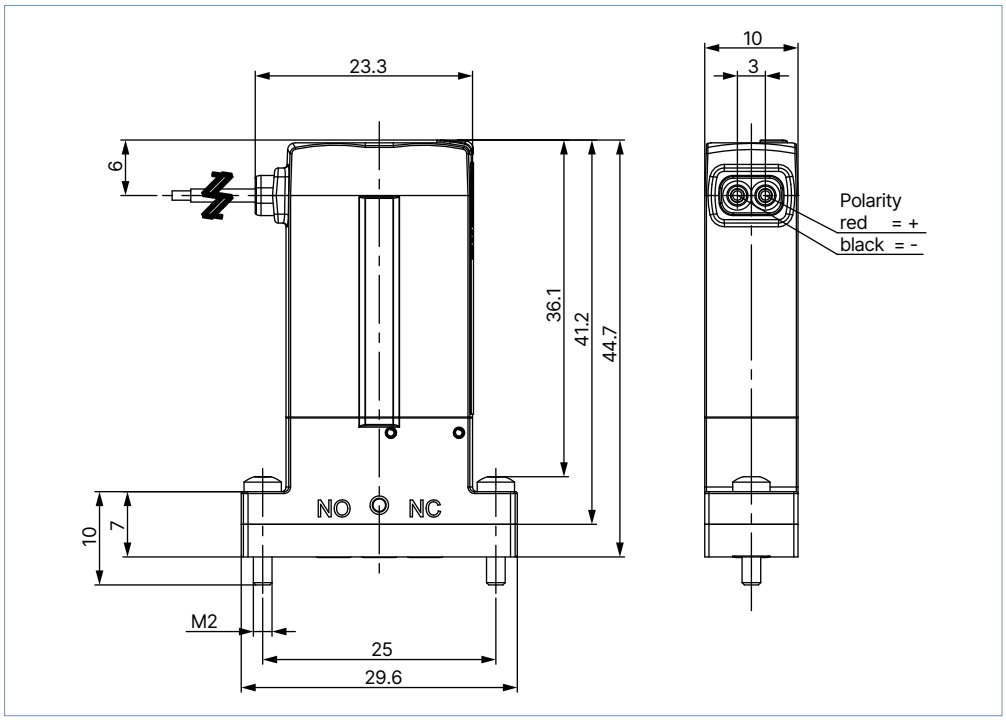
6. Dimensions

6.1. Sub-base version with flying leads

Note:

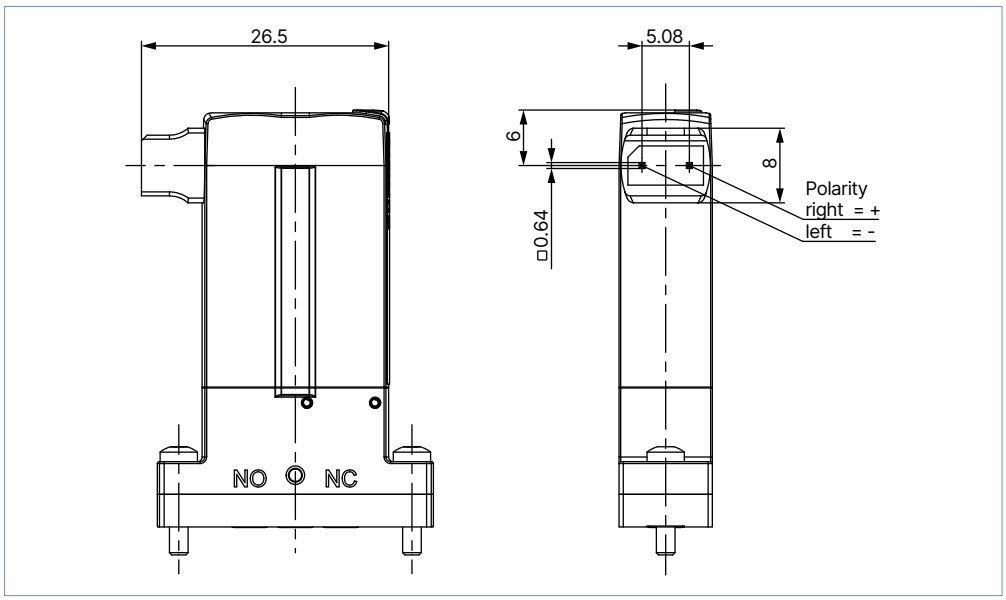
- Dimensions in mm
- Note polarity



6.2. Sub-base version with rectangular plug Type 2505

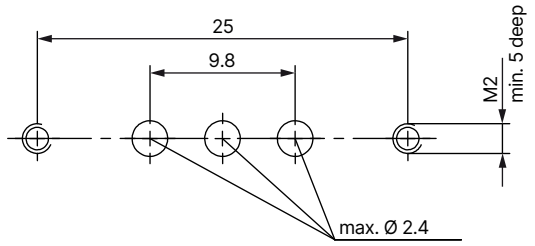
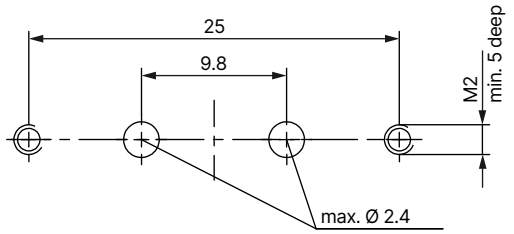
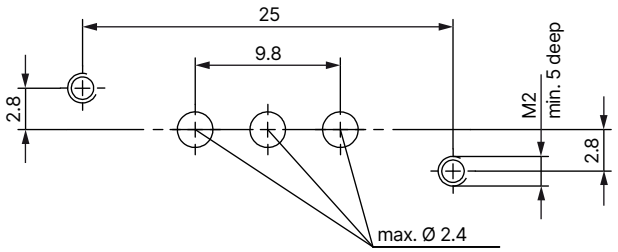
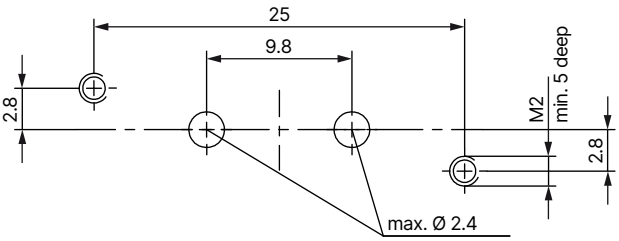
Note:

- Dimensions in mm
- Note polarity



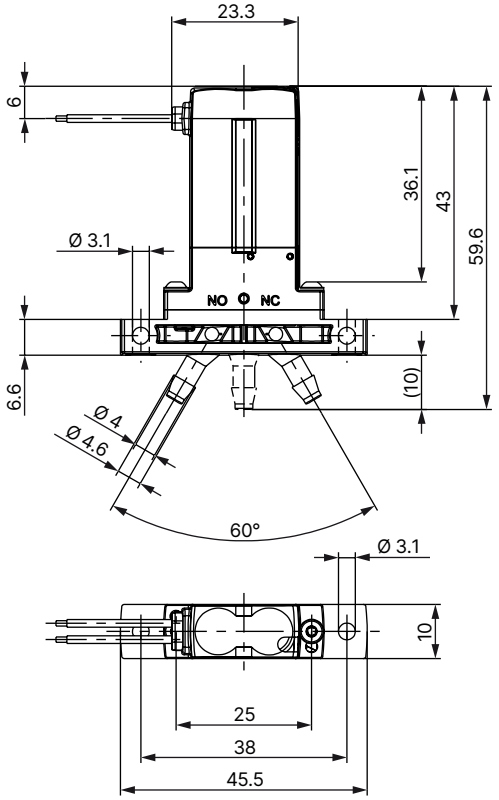
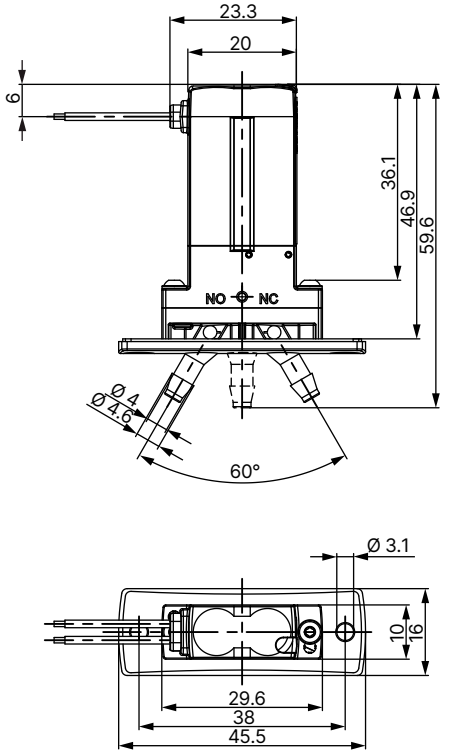
6.3. Bürkert sub-base interface (10 × 30 mm)

Note:
Dimensions in mm

3/2-way connection	2/2-way connection
Preferred fitting	
	
Further possible fitting	
	

6.4. Tube connector version with flying leads

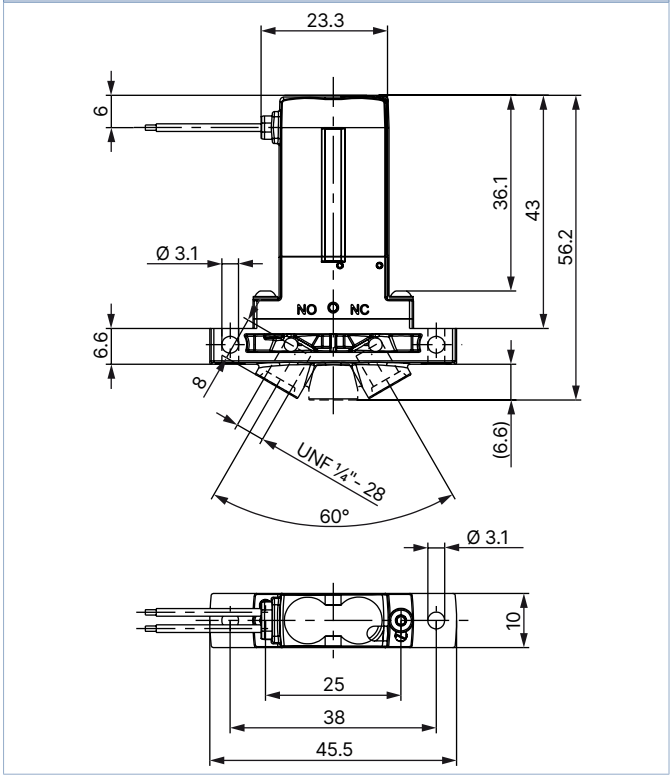
Note:
Dimensions in mm

Tube connection body	Tube connection body with aperture
	

6.5. UNF ¼"- 28 version with flying leads

Note:
Dimensions in mm

UNF ¼"- 28 Flat-Bottom body



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

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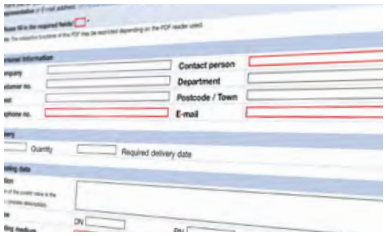
7.3. Bürkert Product Enquiry Form



Bürkert Product Enquiry Form – Your enquiry quickly and compactly

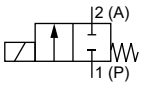
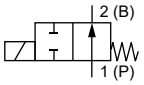
Would you like to make a specific product enquiry based on your technical requirements? Use our Product Enquiry Form for this purpose. There you will find all the relevant information for your Bürkert contact. This will enable us to provide you with the best possible advice.

Fill out the form now

7.4. Ordering chart

Note:

- Other versions are available on request.
- 2 x fixing screws M2 × 10 for sub-base versions are included in the scope of delivery.
- Connectors for rectangular plugs are not included in the scope of delivery and must be ordered separately, see "7.5. Ordering chart accessories" on page 10

Circuit functions	Port connection	Orifice	K_v value water [1)]	Voltage/ Frequency	Pressure range	Max. pressure difference	Body material	Seal material	Electrical connection	Article no.
		[mm]	[m³/h]	[V/Hz]	[bar]	[bar]				
CF A 2/2-way solenoid valve Direct-acting Normally closed 	Bürkert sub-base	0.8	0.01	12/DC	Vac...5	5	PPS	EPDM	Flying leads 0.3 m	241341
									Rectangular plug	241398
				24/DC					Flying leads 0.3 m	241342
									Rectangular plug	241399
				12/DC			PEEK	FFKM	Flying leads 0.3 m	241344
				24/DC						227015
				12/DC			PPS	FKM	Rectangular plug	241405
				24/DC					Flying leads 0.3 m	241351
	UNF ¼"-28						PEEK	FFKM		241346
								FKM		241349
									Rectangular plug	241404
	Bürkert sub-base	1.6	0.04	12/DC	Vac...2	2	PPS	EPDM	Rectangular plug	241412
				24/DC						241413
				12/DC			PEEK	FFKM	Flying leads 0.3 m	241359
				24/DC					Rectangular plug	229429
				12/DC			PPS	FKM	Flying leads 0.3 m	241367
									Rectangular plug	241424
				24/DC					Flying leads 0.3 m	241368
	UNF ¼"-28						PEEK	EPDM	Rectangular plug	241411
								FFKM	Flying leads 0.3 m	241361
								FKM		241366
									Rectangular plug	241423
	Tube connector							EPDM		241409
								FFKM	Flying leads 0.3 m	237705
								FKM		241363
									Rectangular plug	241421
CF B 2/2-way solenoid valve Direct-acting Normally open 	Bürkert sub-base	0.8	0.01	24/DC	Vac...5	5	PEEK	FFKM	Flying leads 0.3 m	o. r.
	Bürkert sub-base	1.6	0.04	24/DC	Vac...2	2	PEEK	FFKM	Flying leads 0.3 m	o. r.
									Rectangular plug	257036

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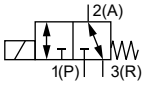
Circuit functions	Port connection	Orifice	K_v value water [1.]	Voltage/ Frequency	Pressure range	Max. pressure difference	Body material	Seal material	Electrical connection	Article no.
		[mm]	[m³/h]	[V/Hz]	[bar]	[bar]				
CF T [2.] 3/2-way solenoid valve Direct-acting Flow direction optional Normally closed 	Bürkert sub-base	0.8	0.01	12/DC	Vac...5	5	PPS	EPDM	Rectangular plug	241428
				24/DC						241429
				12/DC			PEEK	FFKM	Flying leads 0.3 m	241373
				24/DC						222936
							PPS	FKM		241379
				12/DC					Rectangular plug	241435
	UNF ¼"- 28			24/DC			PEEK	FFKM	Flying leads 0.3 m	241375
								FKM		241377
									Rectangular plug	241434
	Bürkert sub-base	1.6	0.04	12/DC	Vac...2	2	PPS	EPDM	Rectangular plug	241442
				24/DC						241443
				12/DC			PEEK	FFKM	Flying leads 0.3 m	239935
				24/DC						227815
									Rectangular plug	229430
				12/DC			PPS	FKM	Flying leads 0.3 m	241394
									Rectangular plug	241453
				24/DC					Flying leads 0.3 m	241395
	UNF ¼"- 28						PEEK	EPDM	Rectangular plug	241441
								FFKM	Flying leads 0.3 m	241389
								FKM	Rectangular plug	241452
									Flying leads 0.3 m	241393
	Tube connector							EPDM	Rectangular plug	241439
								FFKM	Flying leads 0.3 m	241387
	Tube connector [3.]									242320
	Tube connector								Rectangular plug	241445
								FKM	Flying leads 0.3 m	241391
									Rectangular plug	241450

o. r. = on request

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

2.) Technical vacuum (- 0.8 bar) to normally closed or normally open, connection to valve outlet (COM/OUT) only following consultation

3.) The housing has an aperture for easier separation of electronics and fluidics.

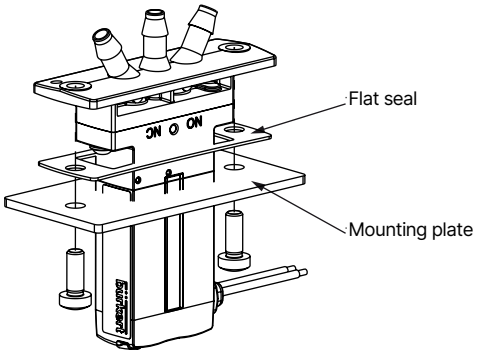
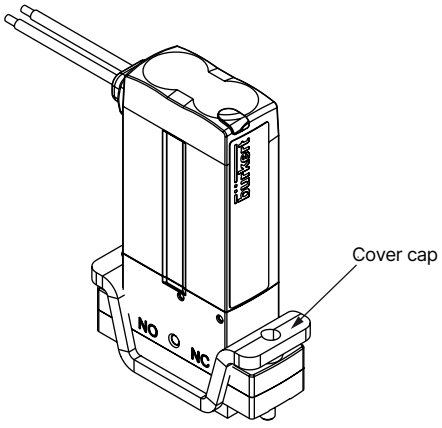
7.5. Ordering chart accessories

Rectangular cable plug Type 2505

Note:
For further versions 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), single contact for individual mounting	644067

Further accessories

Accessories	Description	Article no.
 	Foamed EPDM flat seal for tube connector body with aperture	685294
 	EPDM cover cap for sub-base body	o. r.

o. r. = on request

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