



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
- Explosion-proof variants

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 increase pressure resistance and leak-tightness. Various housing 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. The range is supplemented by variants conforming to DVGW EN 161 and explosion-proof variants. Push-in fittings can be selected for a flexible hose connection. In combination with a plug conforming to DIN EN 175301 - 803 shape B, the valves satisfy degree of protection IP65.

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1. General technical data

1.1. Standard version

Product properties	
Dimensions	Further information can be found in chapter “5. Dimensions” on page 10.
Material	
Seal	FKM, EPDM
Body	Brass, polyamide (PA), stainless steel 1.4305/303
Manual override	Optional
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)
Orifice	DN 1.2...DN 2.4
Circuit function	A and B Further information can be found in chapter “2. Circuit functions” on page 6.
Thermal insulation class of solenoid coil	Epoxy coil class H
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 time ^{1.)}	Opening 8...15 ms Closing 10...17 ms
Electrical data	
Operating voltage	24 V DC, 24 V/60 Hz, 110 V/50 Hz, 120 V/60 Hz, 230 V/50 Hz, 240 V/60 Hz
Power consumption	Further information can be found in chapter “7. Performance specifications” on page 17.
Voltage tolerance	± 10 %
Medium data	
Operating medium	Neutral gases and fluids (e.g. compressed air, water, hydraulic oil, technical vacuum)
Medium temperature	- 10 °C...+ 100 °C
Viscosity	Max. 21 mm ² /s
Process/Port connection & communication	
Electrical connection	- According to DIN EN 175301 - 803 form C for cable plug Type 2516 ▶ Further information can be found in chapter “Cable plug Type 2516, form C according to DIN EN 175301 - 803” on page 28. - According to industry standard form B for cable plug Type 2507 ▶ Further information can be found in chapter “Cable plug Type 2507, form B according to industry standard” on page 29. - Flat pin terminal as protection class III device - Flying leads connection on request for coil size 20 mm
Port connection	M5, G 1/8, NPT 1/8, flange
Approvals and conformities	
Degree of protection	IP65 with cable plug and ATEX/IECEx cable version
North America (USA/Canada)	Further information can be found in chapter “3.5. North America (USA/Canada)” on page 6.
Drinking water	Further information can be found in chapter “3.6. Drinking water” on page 7.
Foods and beverages/Hygiene	Further information can be found in chapter “3.7. Foods and beverages/Hygiene” on page 7.
Environment and installation	
Installation position	As required, preferably with actuator upright
Ambient temperature	Max. + 55 °C resp. 75 °C (depending on power level)

1.) Measurement at + 20 °C, 6 bar at the valve outlet acc. to DIN ISO 12238:2001, opening: pressure build-up 0...10 %, closing: pressure reduction 100...90 %

1.2. DVGW version

The solenoid valve Type 7011 DVGW is primarily intended as an automatic safety shut-off valve for fuel gases. A strainer is installed in the inlet of the valve.

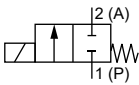
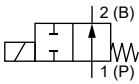
Product properties	
Material	
Seal	NBR
Body	Brass, stainless steel 1.4305/303
Circuit function	A
Performance data	
Operating pressure	Max. 42 bar (depending on orifice and coil power)
Medium data	
Operating medium	Fuel gases (e.g. town gas, district gas, liquid gas, hydrogen) Further information can be found in chapter “4.1. Bürkert resistApp” on page 7.
Medium temperature	- 20 °C...+ 80 °C
Approvals and conformities	
Fuel gases	Further information can be found in chapter “3.8. Others” on page 7.
Standards	DIN EN 161:2016, DIN EN 16678:2016
Environment and installation	
Ambient temperature	- 20 °C...+ 55 °C

1.3. ATEX/IECEx cable version

Product properties	
Material	
Seal	FKM, EPDM
Body	Brass, stainless steel 1.4305/303
Connection	
Thread	G 1/8, NPT 1/8, RC 1/8, M5, UNF 10 - 32
Flange	Flange “FK01”
Circuit function	A and B
Available coil size	SG3 (24.5 mm width)
Performance data	
Operating pressure	Max. 34 bar (depending on orifice and coil power)
Medium data	
Operating medium	Neutral gases and fluids (e.g. compressed air, water, hydraulic oil, technical vacuum)
Medium temperature^{1.)}	
FKM	- 10 °C...+ 100 °C
EPDM	- 30 °C...+ 100 °C
Process/Port connection & communication	
Electrical connection	ATEX/IECEx cable version with 3 m moulded-in cable
Approvals and conformities	
Explosion protection	Further information can be found in chapter “3.4. Explosion protection” on page 6.
Degree of protection	IP65 with cable plug and ATEX/IECEx cable version
Environment and installation	
Ambient temperature^{1.)}	
FKM	- 10 °C...+ 55 °C (max. + 60 °C on request)
EPDM	- 30 °C...+ 55 °C (max. + 60 °C on request)

1.) The minimum temperature depends on the seal material.

2. 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

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 versions 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.

3.4. Explosion protection

Approval	Description
	Optional: Explosion protection (valid for coils with fixed cable outlet) ATEX: EPS 21 ATEX 1 128 X II 2G Ex mb IIC T4 Gb II 2D Ex mb IIIC T130 °C Db IECEx: IECEx EPS 21.0045X Ex mb IIC T4 Gb Ex mb IIIC T130 °C Db Fixed cable is halogen-free according to IEC 60754 - 1

3.5. North America (USA/Canada)

Approval	Description
	Valid for coils: UL Recognized for the USA and Canada The coils are UL Recognized for the USA and Canada according to: - UL 429 (electrically operated valves) - CAN/CSA-C22.2 No. 139

3.6. Drinking water

Conformity	Description
	Suitable for use in drinking water applications The materials comply with the assessment principles (UBA) for materials in contact with drinking water (TrinkwasserV). PA body: PF36: Suitable for products with a maximum temperature of 60 °C (warm water) PPS/brass/stainless steel body: PF39: Suitable for products with a maximum temperature of 85 °C (hot water)

3.7. Foods and beverages/Hygiene

Conformity	Description
FDA	FDA – Code of Federal Regulations (valid for the variable code PL02, 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.
	EC Regulation 1935/2004 of the European Parliament and of the Council (valid for the variable code PL01, PL02) All wetted materials are compliant with EC Regulation 1935/2004/EC according to the manufacturer's declaration.

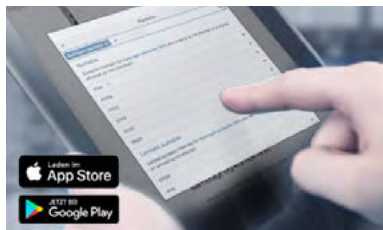
3.8. Others

Fuel gases

Conformity	Description
	Fuel gases (valid for the variable code PO19) The products comply with: - Regulation (EU) 2016/426 – Appliances burning gaseous fuels and - DVGW DIN EN 161 (Automatic shut-off valves for gas burners and gas appliances) and - DIN EN 16678, Class A or Class D (Safety and control devices for gas burners and gas burning appliances – Automatic shut-off valves for operating pressure of above 500 kPa up to and including 6300 kPa)
	Optional: DIN EN 549:2023-07 certification The wetted valve seals are compliant with DIN EN 549:2023-07 (Rubber materials for seals and diaphragms for gas appliances and gas equipment) for medium temperatures of - 20 °C...+ 80 °C.

4. Materials

4.1. Bürkert resistApp



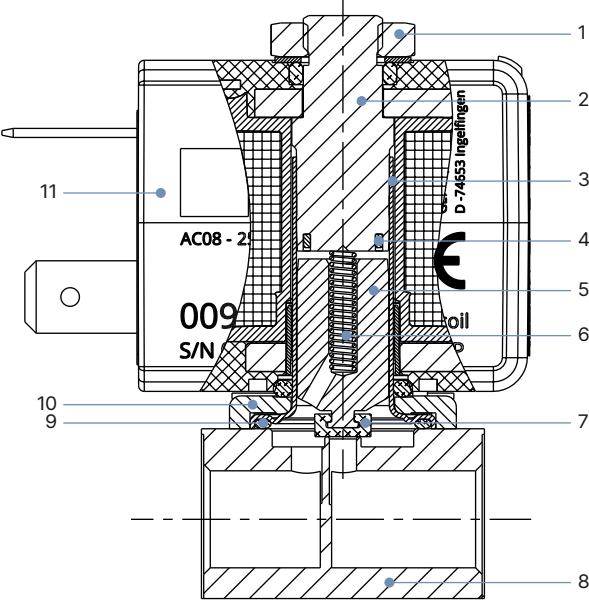
Bürkert resistApp – Chemical resistance chart

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](#)

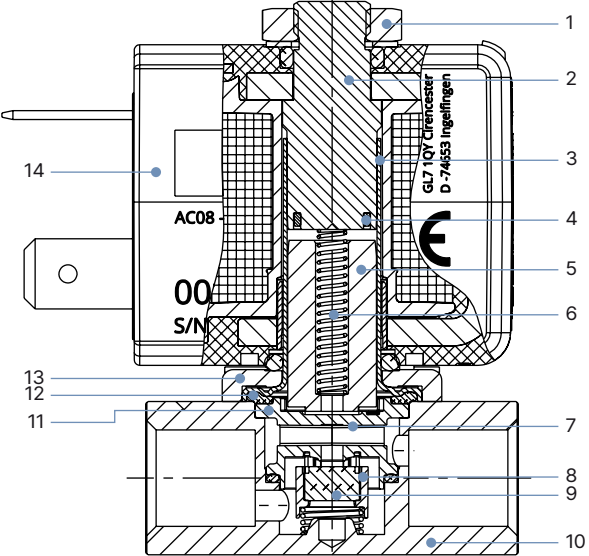
4.2. Material specifications

Standard version circuit function A



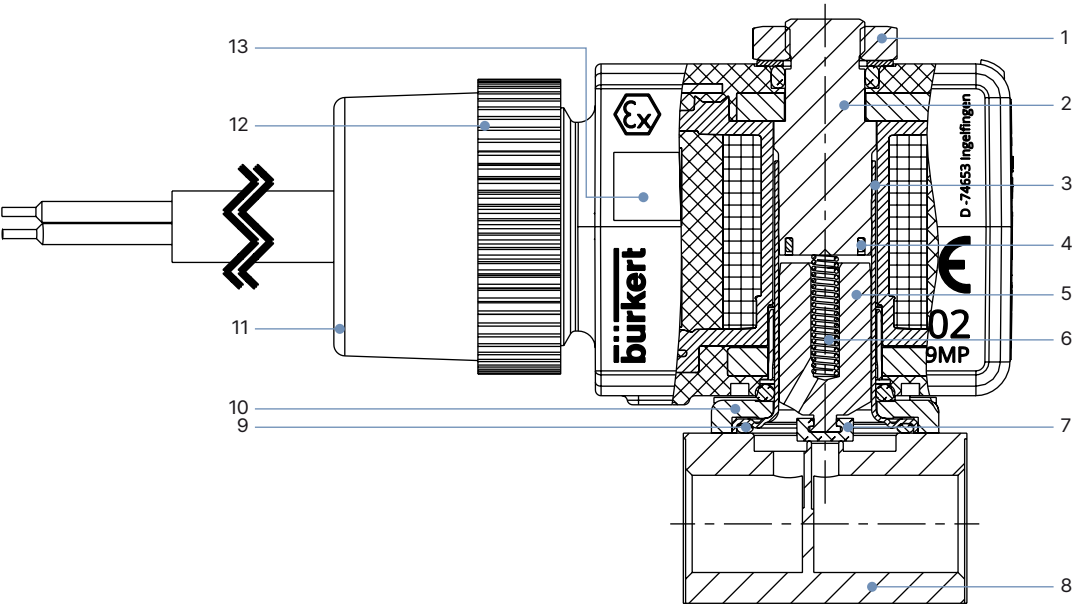
No.	Element	Material
1	Locknut	DIN 176 Surface finish thick film passivated KOSA0101
2	Stopper	Stainless steel 1.4113/434
3	Core guide tube	Stainless steel 1.4303 ST/305L
4	Shading ring	Copper (optional silver)
5	Core	Stainless steel 1.4113/434
6	Spring	Stainless steel 1.4310/301
7	Seal	FKM/EPDM
8	Valve body	Brass, stainless steel 1.4305/303, PA (polyamide)
9	O-Ring	FKM/EPDM
10	Flange	- Surface finish thick film passivated KOSA0101 (brass version) - Nickel-plated surface (stainless steel version)
11	Coil	Epoxy

Standard version circuit function B



No.	Element	Material
1	Locknut	DIN 176 Surface finish thick film passivated KOSA0101
2	Stopper	Stainless steel 1.4113/434
3	Core guide tube	Stainless steel 1.4303 ST/305L
4	Shading ring	Copper (optional silver)
5	Core	Stainless steel 1.4113/434
6	Spring	Stainless steel 1.4310/301
7	Insert	PEEK GF30
8	Seal holder	PEEK GF30
9	Seat seal	FKM
10	Valve body	Brass, stainless steel 1.4305/303, PA (polyamide)
11	Seal	FKM/EPDM
12	O-Ring	FKM/EPDM
13	Flange	- Surface finish thick film passivated KOSA0101 (brass version) - Nickel-plated surface (stainless steel version)
14	Coil	Epoxy

ATEX/IECEx cable version



No.	Element	Material
1	Locknut	DIN 176 Surface finish thick film passivated KOSA0101
2	Stopper	Stainless steel 1.4113/434
3	Core guide tube	Stainless steel 1.4303 ST/305L
4	Shading ring	Copper (optional silver)
5	Core	Stainless steel 1.4113/434
6	Spring	Stainless steel 1.4310/301
7	Seal	FKM/EPDM
8	Valve body	Brass, stainless steel 1.4305/303, PA (polyamide)
9	O-Ring	FKM/EPDM
10	Flange	• Surface finish thick film passivated KOSA0101 (brass version) • Nickel-plated surface (stainless steel version)
11	Sealing ring	Silicone
12	Union nut	PA (Polyamide)
13	Coil	Epoxy

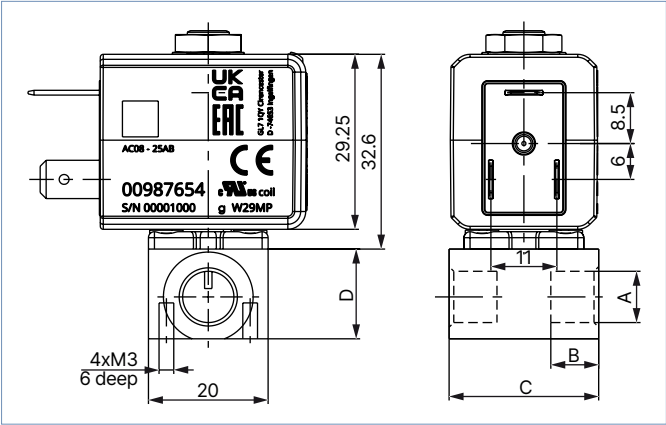
5. Dimensions

5.1. Standard version

Threaded version

Note:

- Dimensions in mm
- Versions according to industry standard form B

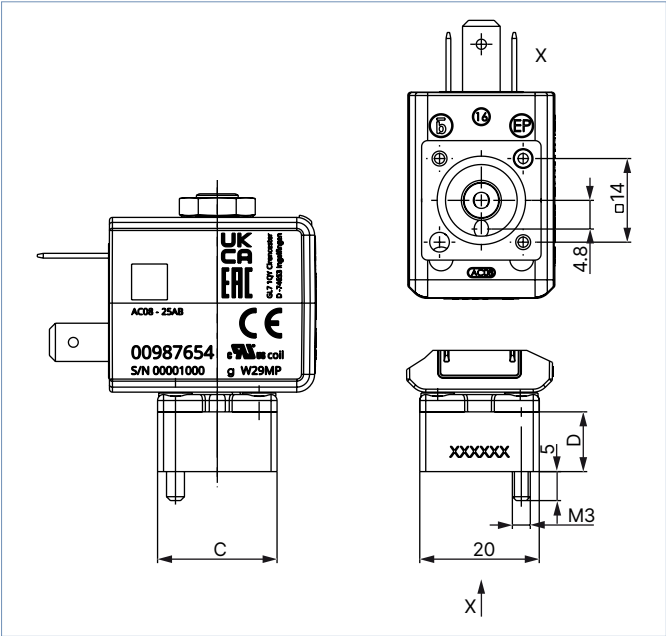


Port connection	A	B	C	D
		[mm]	[mm]	[mm]
Thread WW A	M5	5	20	10
	G 1/8	8	25	15
	NPT 1/8	7	25	15
Thread WW B	G 1/8	8	34	14
	NPT 1/8	7	34	14

Flange version

Note:

- Dimensions in mm
- Versions according to industry standard form B

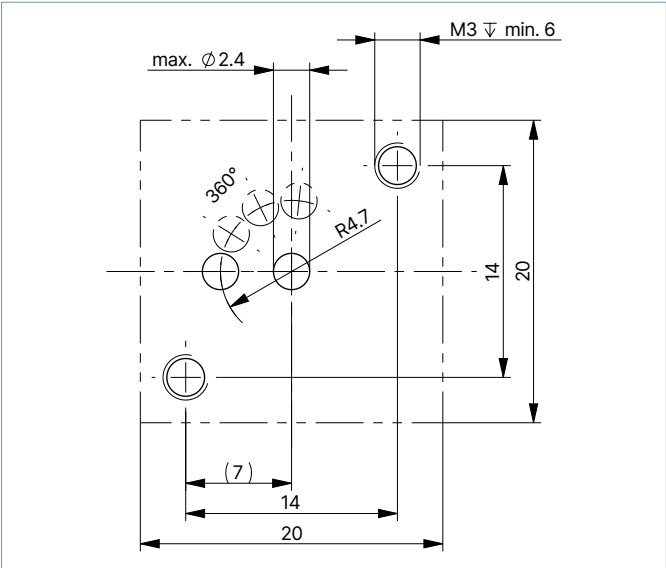


Port connection	A	B	C	D
		[mm]	[mm]	[mm]
Flange WW A	–	–	20	10
Flange WW B	–	–	25	15

Flange pattern

Note:

- Dimensions in mm
- On the connection side, the geometries are to be realised as shown in the following drawing.
- Flange version (FK01) according to FST 1000225877

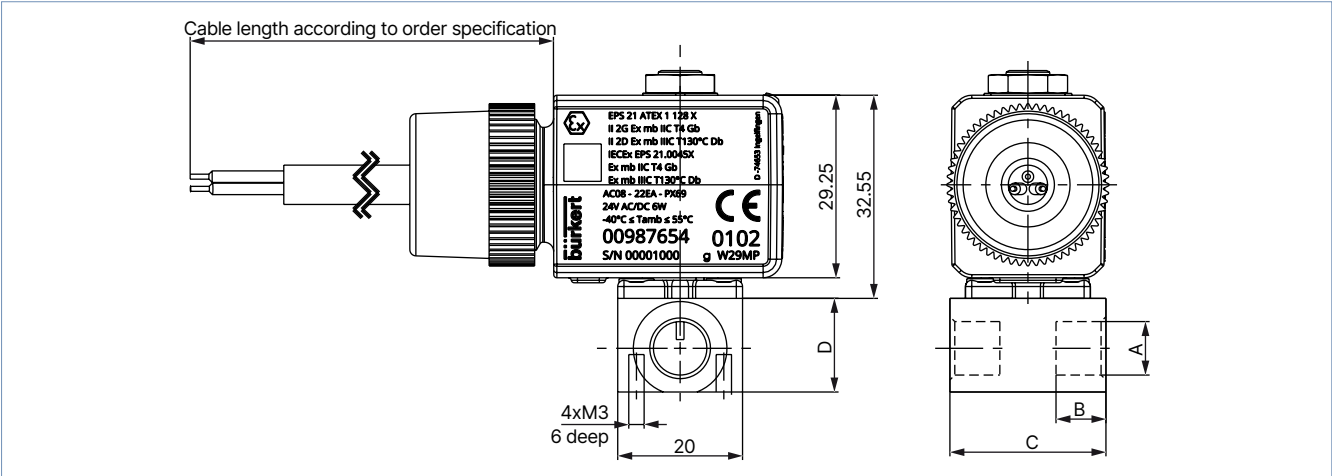


5.2. ATEX/IECEx cable version

Threaded version

Note:

Dimensions in mm

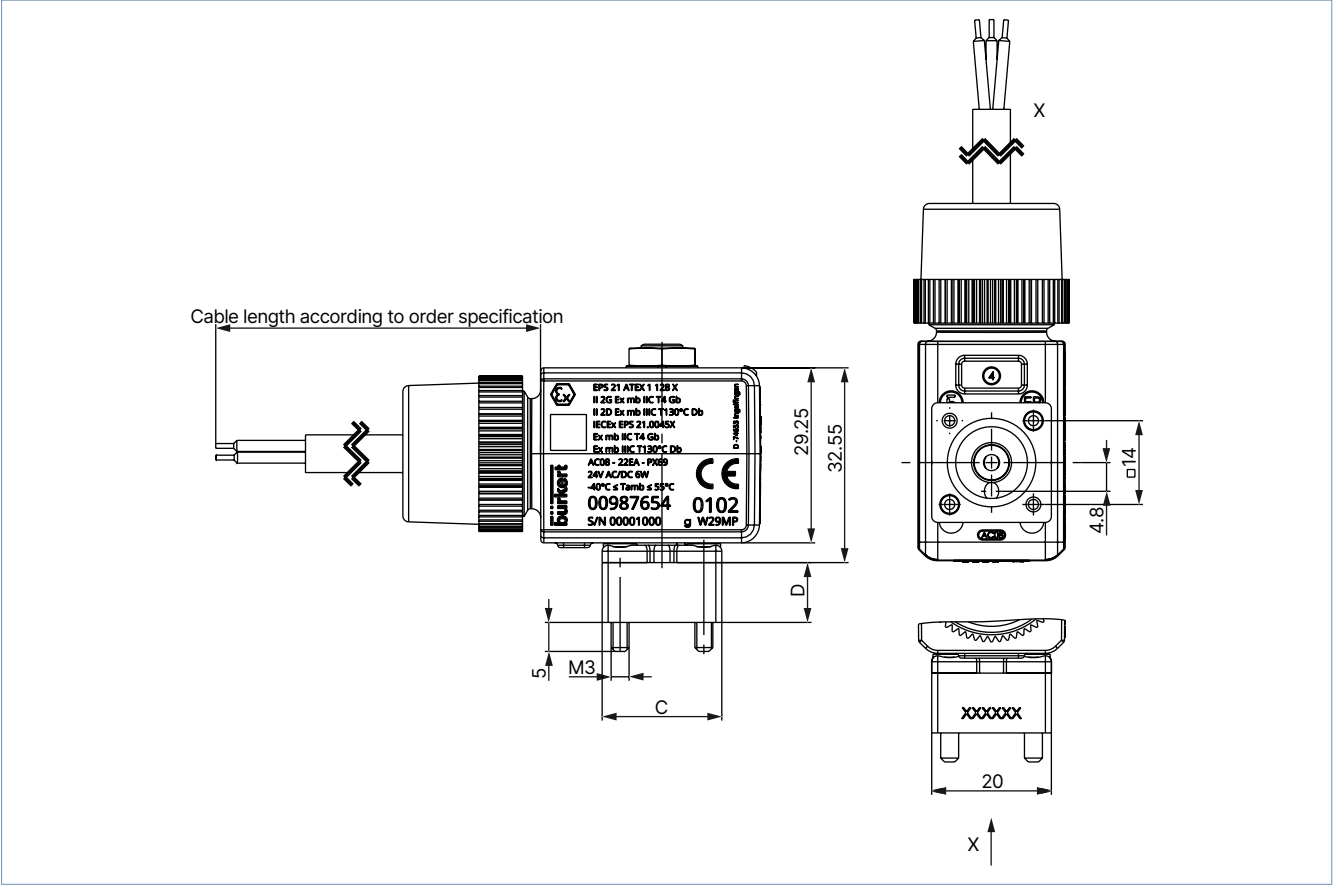


Port connection	A	B	C	D
		[mm]	[mm]	[mm]
Thread	M5	5	20	10
Thread	G 1/8	8	25	15

Type 7011

Flange version

Note:
Dimensions in mm

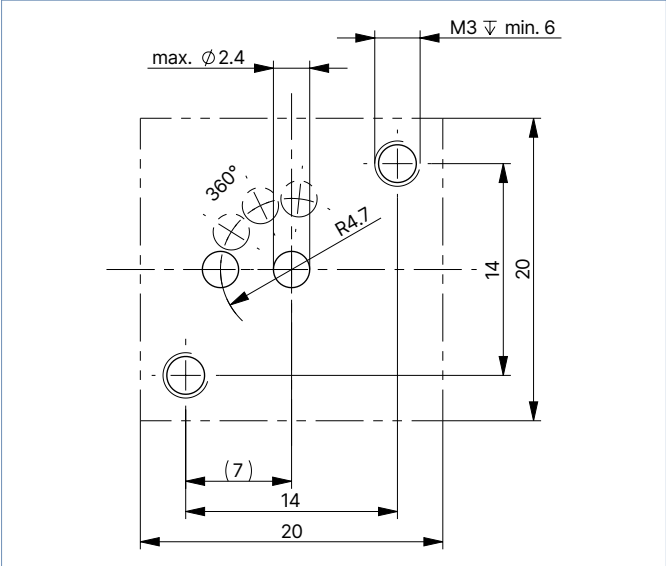


Port connection	A	B [mm]	C [mm]	D [mm]
Flange WW A	-	-	20	11
Flange WW B	-	-	25	15

Flange pattern

Note:

- Dimensions in mm
- On the connection side, the geometries are to be realised as shown in the following drawing.
- Flange version (FK01) according to FST 1000225877



5.3. Coil versions

Versions according to industry standard form B

Note:

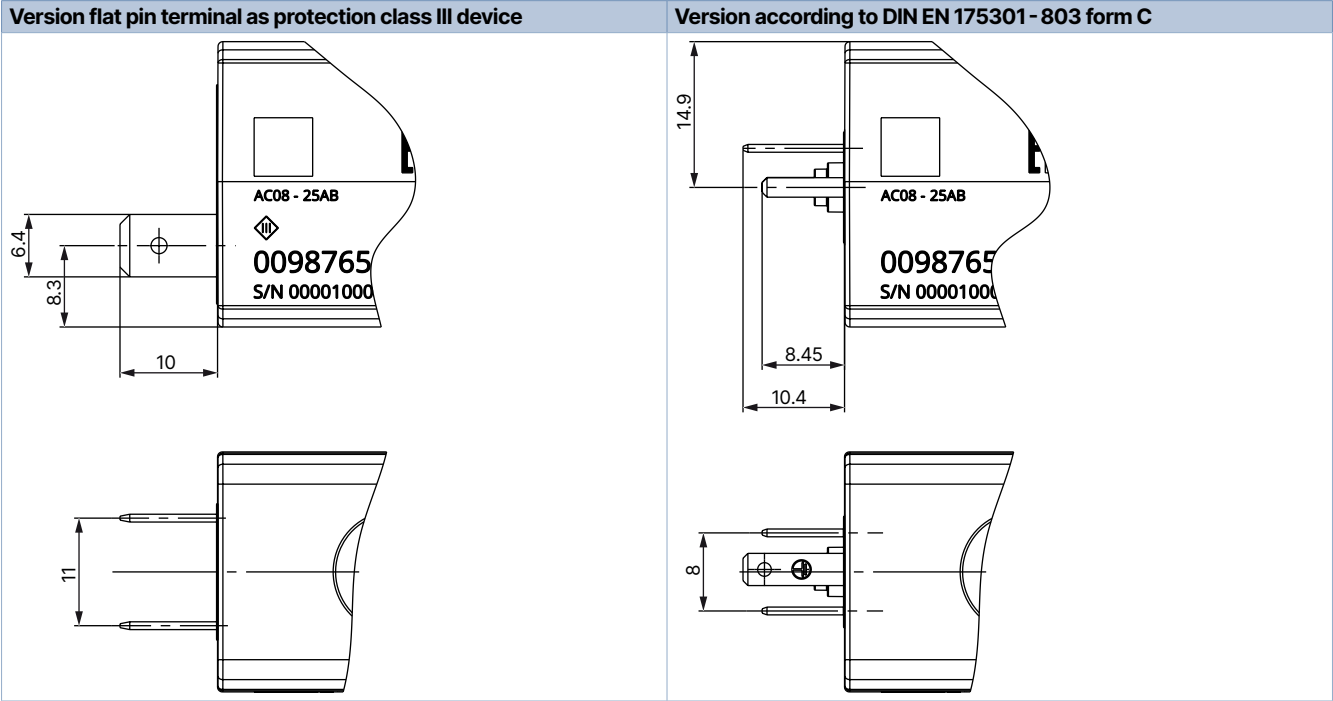
Dimensions in mm

Coil size 2 (20 mm)	Coil size 3 (24.5 mm)

Further electrical connections

Note:

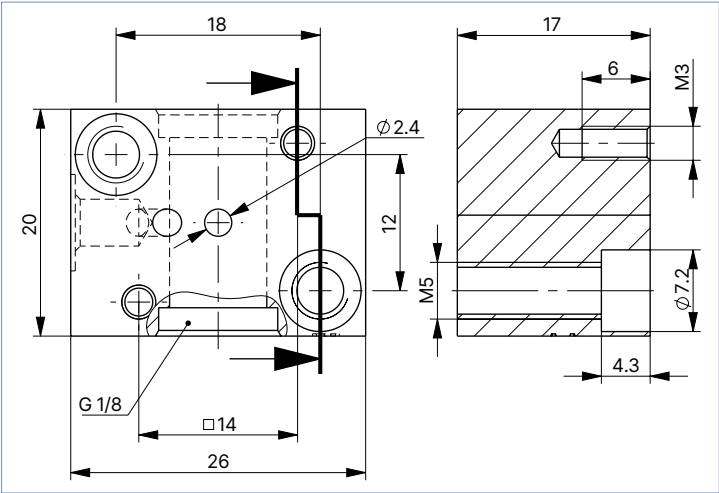
- Dimensions in mm
- Specifications apply to coil sizes 20 mm and 24.5 mm



5.4. Single manifold

Note:

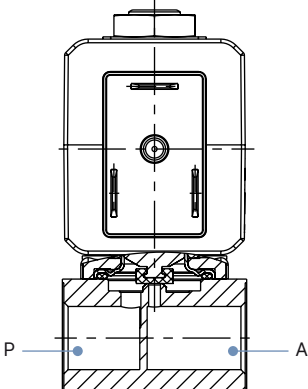
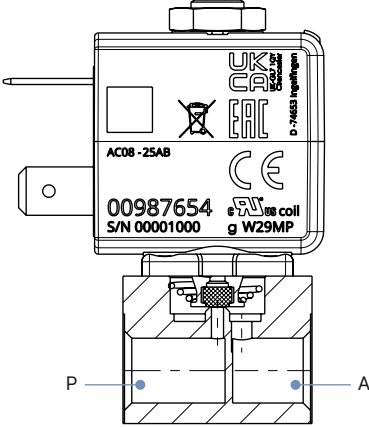
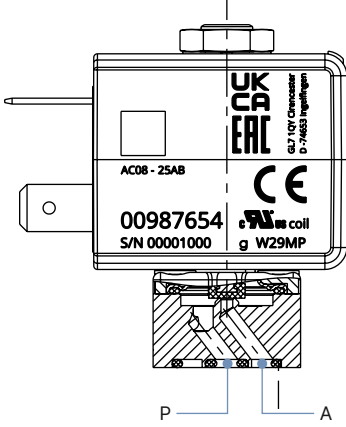
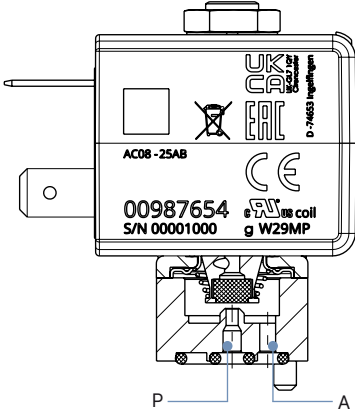
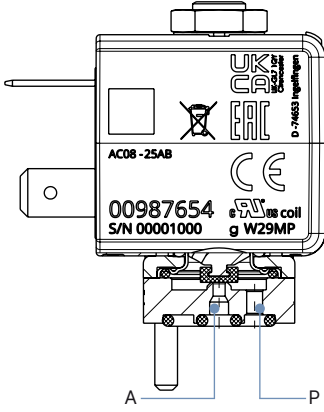
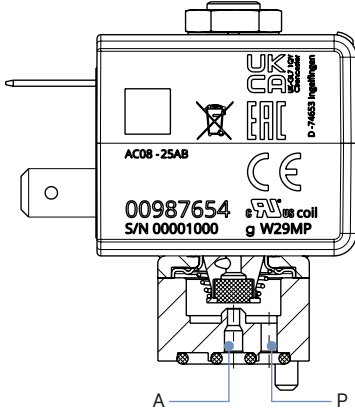
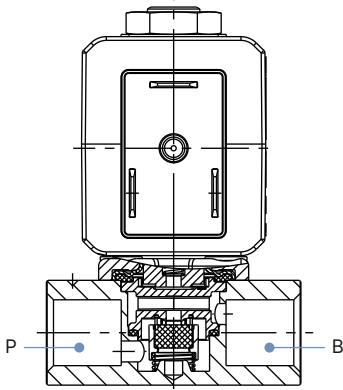
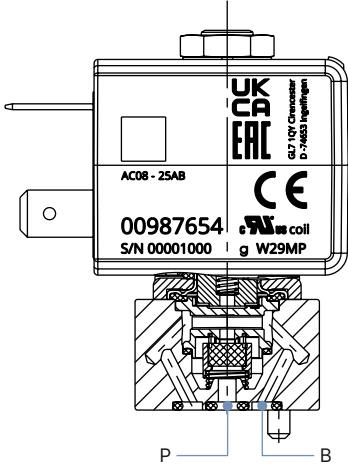
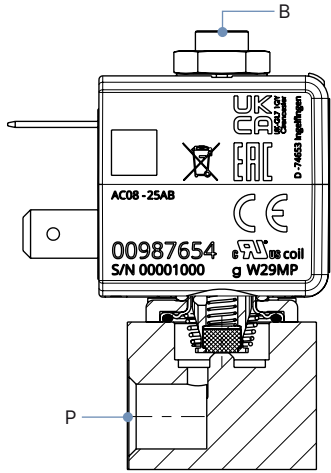
Dimensions in mm



Quantity of valve places	A [mm]	B [mm]	C [mm]	Article no.
1	20	12	–	005312 𐀀

6. Device/Process connections

6.1. Pin assignment

Threaded version WW A	Threaded version WW A (+MC14)	Flange version WW A
		
Flange version WW A (+MC14)	Flange version WW A (+AA05)	Flange version WW A (+AC45+AD33 / +AD33+NA02)
		
Threaded version WW B	Flange version WW B	Flange version WW B (+AD01)
		

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)

7. Performance specifications

7.1. Power consumption

Standard version, coil size 24.5 mm

Coil	Orifice	Electrical power					Switching times ¹⁾	
		Inrush AC	Hold AC		DC		Opening	Closing
	[mm]	[VA]	[VA]	[W]	Cold [W]	Hot [W]	[ms]	[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.) Measurement at +20 °C, 6 bar^{2.)} at the valve outlet acc. to DIN ISO 12238:2001, opening: pressure build-up 0...10 %, closing: pressure reduction 100...90 %

2.) Pressure data: Overpressure to atmospheric pressure and air as a medium

Standard version, coil size 20 mm

Coil	Orifice	Electrical power					Switching times ¹⁾	
		Inrush AC	Hold AC		DC		Opening	Closing
	[mm]	[VA]	[VA]	[W]	Cold [W]	Hot [W]	[ms]	[ms]
24 V/DC/6.5 W	1.2	–	–	–	6.5	5	8...15	10...17
	1.6							
	2.0							
	2.4							
24 V/50 Hz/6 W	1.2	11	7	6	–	–		
	1.6							
	2.0							
	2.4							
230 V/50 Hz/6 W	1.2	11	7	6	–	–		
	1.6							
	2.0							
	2.4							
24 V/DC/5 W	1.2	–	–	–	5	4		
	1.6							
	2.0							
	2.4							
24 V/50 Hz/4 W	1.2	9	5	4	–	–		
	1.6							
	2.0							
	2.4							
230 V/50 Hz/4 W	1.2	9	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	9		
	1.6							
	2.0							
	2.4							

1.) Measurement at +20 °C, 6 bar^{2.)} at the valve outlet acc. to DIN ISO 12238:2001, opening: pressure build-up 0...10 %, closing: pressure reduction 100...90 %

2.) Pressure data: Overpressure to atmospheric pressure and air as a medium

8. Ordering information

8.1. 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](#)

8.2. Bürkert product filter

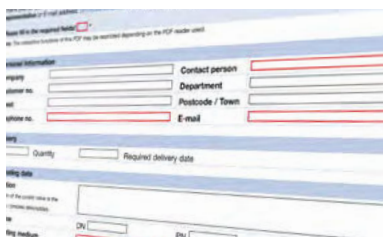


Bürkert product filter – Get quickly to the right product

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](#)

8.3. 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.

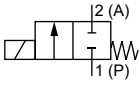
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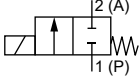
8.4. Ordering chart

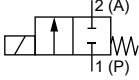
Standard version according to industry standard form B, coil size 24.5 mm

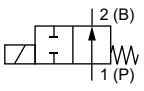
Note:

All valves are delivered without a cable plug.

Circuit function	Port connection	Orifice	K _v value water ¹⁾	Voltage/ Frequency/ Power	Maximum duty cycle	Pressure range ²⁾				Article no.	
						Ambient temperature 75 °C		Ambient temperature 55 °C		Brass body	Stainless steel body
		[mm]	[m³/h]	[V/Hz/W]		Water [bar]	Air [bar]	Water [bar]	Air [bar]		
CF A 2/2-way solenoid valve Direct-acting Normally closed 	M5	1.2	0.045	24/DC/7	100 % ED	–	–	0...23	0...23	380543 ☞	389721 ☞
				24/50/6		–	–	0...45	0...45	389723 ☞	389726 ☞
				230/50/6		–	–	0...45	0...45	389738 ☞	389739 ☞
				24/DC/5.5		0...16	0...16	–	–	389740 ☞	389742 ☞
				24/DC/5.5		–	–	0...19	0...19	o. r.	o. r.
				24/50/4		0...42	0...42	0...42	0...42	389744 ☞	389746 ☞
				230/50/4		0...42	0...42	0...42	0...42	389751 ☞	389750 ☞
				24/DC/14	50 % ED	–	–	0...45	0...45	o. r.	o. r.
				24/DC/11		0...35	0...35	–	–	o. r.	o. r.
				24/DC/11		–	–	0...37	0...37	o. r.	o. r.
		1.6	0.060	24/DC/7	100 % ED	–	–	0...12	0...13	385450 ☞	389753 ☞
				24/50/6		–	–	0...30	0...30	389757 ☞	389755 ☞
				230/50/6		–	–	0...30	0...30	389759 ☞	389761 ☞
				24/DC/5.5		0...9	0...9	–	–	389765 ☞	389762 ☞
				24/DC/5.5		–	–	0...10.5	0...10.5	o. r.	o. r.
				24/50/4		0...24	0...24	0...24	0...24	389781 ☞	389783 ☞
				230/50/4		0...24	0...24	0...24	0...24	389786 ☞	389785 ☞
				24/DC/14	50 % ED	–	–	0...25	0...25	o. r.	o. r.
				24/DC/11		0...20	0...20	–	–	o. r.	o. r.
				24/DC/11		–	–	0...22	0...22	o. r.	o. r.
		2.0	0.110	24/DC/7	100 % ED	–	–	0...9	0...9	385455 ☞	389787 ☞
				24/50/6		–	–	0...22	0...22	389791 ☞	389789 ☞
				230/50/6		–	–	0...22	0...22	389793 ☞	389794 ☞
				24/DC/5.5		0...6.5	0...6.5	–	–	389797 ☞	389795 ☞
				24/DC/5.5		–	–	0...7	0...7	o. r.	o. r.
				24/50/4		0...18	0...18	0...18	0...18	389799 ☞	393079 ☞
				230/50/4		0...18	0...18	0...18	0...18	389801 ☞	389802 ☞
				24/DC/14	50 % ED	–	–	0...19	0...19	o. r.	o. r.
				24/DC/11		0...14	0...14	–	–	o. r.	o. r.
				24/DC/11		–	–	0...16	0...16	o. r.	o. r.
		2.4	0.130	24/DC/7	100 % ED	–	–	0...3.5	0...5	385457 ☞	389805 ☞
				24/50/6		–	–	0...13	0...13	389807 ☞	389809 ☞
				230/50/6		–	–	0...13	0...13	389811 ☞	389812 ☞
				24/DC/5.5		0...3	0...3.5	–	–	389813 ☞	389815 ☞
				24/DC/5.5		–	–	0...3.5	0...4	o. r.	o. r.
				24/50/4		0...10	0...10	0...10	0...10	389817 ☞	389819 ☞
				230/50/4		0...10	0...10	0...10	0...10	389821 ☞	389822 ☞
				24/DC/14	50 % ED	–	–	0...9	0...10	o. r.	o. r.
				24/DC/11		0...6.5	0...7	–	–	o. r.	o. r.
				24/DC/11		–	–	0...7.5	0...8	o. r.	o. r.

Circuit function	Port connection	Orifice	K _v value water ¹⁾	Voltage/ Frequency/ Power	Maximum duty cycle	Pressure range ²⁾				Article no.	
						Ambient temperature 75 °C		Ambient temperature 55 °C		Brass body	Stainless steel body
		[mm]	[m³/h]	[V/Hz/W]		Water [bar]	Air [bar]	Water [bar]	Air [bar]		
CF A 2/2-way solenoid valve Direct-acting Normally closed 	G 1/8	1.2	0.045	24/DC/7	100 % ED	–	–	0...23	0...23	375821	375828
				24/50/6		–	–	0...45	0...45	389532	389540
				230/50/6		–	–	0...45	0...45	375968	375979
				24/DC/5.5		0...16	0...16	–	–	375852	375860
				24/DC/5.5		–	–	0...19	0...19	o. r.	o. r.
				24/50/4		0...42	0...42	0...42	0...42	389537	389544
				230/50/4		0...42	0...42	0...42	0...42	376005	376013
				24/DC/14	50 % ED	–	–	0...45	0...45	o. r.	o. r.
				24/DC/11		0...35	0...35	–	–	o. r.	o. r.
				24/DC/11		–	–	0...37	0...37	o. r.	o. r.
		1.6	0.060	24/DC/7	100 % ED	–	–	0...12	0...13	374309	375829
				24/50/6		–	–	0...30	0...30	389657	389658
				230/50/6		–	–	0...30	0...30	375969	375980
				24/DC/5.5		0...9	0...9	–	–	375853	375861
				24/DC/5.5		–	–	0...10.5	0...10.5	o. r.	o. r.
				24/50/4		0...24	0...24	0...24	0...24	389661	389662
				230/50/4		0...24	0...24	0...24	0...24	376006	376015
				24/DC/14	50 % ED	–	–	0...25	0...25	o. r.	o. r.
				24/DC/11		0...20	0...20	–	–	o. r.	o. r.
				24/DC/11		–	–	0...22	0...22	o. r.	o. r.
		2.0	0.110	24/DC/7	100 % ED	–	–	0...9	0...9	375822	375830
				24/50/6		–	–	0...22	0...22	389677	389680
				230/50/6		–	–	0...22	0...22	375970	375981
				24/DC/5.5		0...6.5	0...6.5	–	–	375854	375862
				24/DC/5.5		–	–	0...7	0...7	o. r.	o. r.
				24/50/4		0...18	0...18	0...18	0...18	389672	389669
				230/50/4		0...18	0...18	0...18	0...18	376007	376016
				24/DC/14	50 % ED	–	–	0...19	0...19	o. r.	o. r.
				24/DC/11		0...14	0...14	–	–	o. r.	o. r.
				24/DC/11		–	–	0...16	0...16	o. r.	o. r.
		2.4	0.130	24/DC/7	100 % ED	–	–	0...3.5	0...5	375823	375831
				24/50/6		–	–	0...13	0...13	393638	393689
				230/50/6		–	–	0...13	0...13	375971	375982
				24/DC/5.5		0...3	0...3.5	–	–	375855	375863
				24/DC/5.5		–	–	0...3.5	0...4	o. r.	o. r.
				24/50/4		0...10	0...10	0...10	0...10	389696	389697
				230/50/4		0...10	0...10	0...10	0...10	376008	376017
				24/DC/14	50 % ED	–	–	0...9	0...10	o. r.	o. r.
				24/DC/11		0...6.5	0...7	–	–	o. r.	o. r.
				24/DC/11		–	–	0...7.5	0...8	o. r.	o. r.

Circuit function	Port connection	Orifice	K _v value water ¹⁾	Voltage/ Frequency/ Power	Maximum duty cycle	Pressure range ²⁾				Article no.	
						Ambient temperature 75 °C		Ambient temperature 55 °C		Brass body	Stainless steel body
		[mm]	[m³/h]	[V/Hz/W]		Water [bar]	Air [bar]	Water [bar]	Air [bar]	FKM seal	
CF A 2/2-way solenoid valve Direct-acting Normally closed 	Flange (FK01)	1.2	0.045	24/DC/7	100 % ED	–	–	0...23	0...23	375836	375844
				24/50/6		–	–	0...45	0...45	389699	389700
				230/50/6		–	–	0...45	0...45	375987	375996
				24/DC/5.5		0...16	0...16	–	–	375868	375876
				24/DC/5.5		–	–	0...19	0...19	o. r.	o. r.
				24/50/4		0...42	0...42	0...42	0...42	389704	389703
				230/50/4		0...42	0...42	0...42	0...42	376023	376031
				24/DC/14	50 % ED	–	–	0...45	0...45	o. r.	o. r.
				24/DC/11		0...35	0...35	–	–	o. r.	o. r.
				24/DC/11		–	–	0...37	0...37	o. r.	o. r.
		1.6	0.060	24/DC/7	100 % ED	–	–	0...12	0...13	375837	375845
				24/50/6		–	–	0...30	0...30	389705	389706
				230/50/6		–	–	0...30	0...30	375988	375997
				24/DC/5.5		0...9	0...9	–	–	375869	375877
				24/DC/5.5		–	–	0...10.5	0...10.5	o. r.	o. r.
				24/50/4		0...24	0...24	0...24	0...24	389708	389709
				230/50/4		0...24	0...24	0...24	0...24	376024	376032
				24/DC/14	50 % ED	–	–	0...25	0...25	o. r.	o. r.
				24/DC/11		0...20	0...20	–	–	o. r.	o. r.
				24/DC/11		–	–	0...22	0...22	o. r.	o. r.
		2.0	0.110	24/DC/7	100 % ED	–	–	0...9	0...9	375838	375846
				24/50/6		–	–	0...22	0...22	389711	389712
				230/50/6		–	–	0...22	0...22	375989	375999
				24/DC/5.5		0...6.5	0...6.5	–	–	375870	375878
				24/DC/5.5		–	–	0...7	0...7	o. r.	o. r.
				24/50/4		0...18	0...18	0...18	0...18	389714	389715
				230/50/4		0...18	0...18	0...18	0...18	376025	376033
				24/DC/14	50 % ED	–	–	0...19	0...19	o. r.	o. r.
				24/DC/11		0...14	0...14	–	–	o. r.	o. r.
				24/DC/11		–	–	0...16	0...16	o. r.	o. r.
		2.4	0.130	24/DC/7	100 % ED	–	–	0...3.5	0...5	375839	375847
				24/50/6		–	–	0...13	0...13	389716	389717
				230/50/6		–	–	0...13	0...13	375990	376000
				24/DC/5.5		0...3	0...3.5	–	–	375871	375879
				24/DC/5.5		–	–	0...3.5	0...4	o. r.	o. r.
				24/50/4		0...10	0...10	0...10	0...10	389719	389718
				230/50/4		0...10	0...10	0...10	0...10	376026	376034
				24/DC/14	50 % ED	–	–	0...9	0...10	o. r.	o. r.
				24/DC/11		0...6.5	0...7	–	–	o. r.	o. r.
				24/DC/11		–	–	0...7.5	0...8	o. r.	o. r.

Circuit function	Port connection	Orifice	K _v value water ^{1.)}	Voltage/Frequency/Power	Maximum duty cycle	Pressure range ^{2.)}				Article no.	
						Ambient temperature 75 °C		Ambient temperature 55 °C		Brass body	Stainless steel body
		[mm]	[m³/h]	[V/Hz/W]		Water [bar]	Air [bar]	Water [bar]	Air [bar]		
CF B 2/2-way solenoid valve Direct-acting Normally open 	G 1/8	2.0	0.100	24 / DC / 7	100 % ED	–	–	–	0...12	20007424 ㉔	o. r.
				24 / 50 / 6		–	–	–	0...14.5	o. r.	o. r.
				230 / 50 / 6		–	–	–	0...14.5	20007106 ㉔	o. r.
				24 / DC / 5.5		–	0...10	–	–	20007425 ㉔	o. r.
				24 / 50 / 4		–	0...13	–	–	o. r.	o. r.
				230 / 50 / 4		–	0...13	–	–	20007423 ㉔	o. r.
	Flange (FK01)	2.0	0.100	24 / DC / 7	100 % ED	–	–	–	0...12	20009528 ㉔	o. r.
				24 / 50 / 6		–	–	–	0...14.5	o. r.	o. r.
				230 / 50 / 6		–	–	–	0...14.5	20009536 ㉔	o. r.
				24 / DC / 5.5		–	0...10	–	–	20009530 ㉔	o. r.
				24 / 50 / 4		–	0...13	–	–	o. r.	o. r.
				230 / 50 / 4		–	0...13	–	–	20009532 ㉔	o. r.

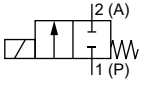
o. r. = on request

1.) Measurement at + 20 °C, 6 bar^{2.)} at the valve inlet and free outlet

2.) Pressure data: overpressure to atmospheric pressure and air as a medium

DVGW version**Note:**

- With NBR seal and brass body (class B)
- According to gas appliance directive: valve class A, valve group 2

Circuit function	Port connection	Orifice	K _v value water ^{1.)}	Voltage/Frequency/Power	Maximum duty cycle	Pressure range ^{2.)3.)}		Article no.	
						Ambient temperature 55 °C		Brass body	Stainless steel body
		[mm]	[m³/h]	[V/Hz/W]		Air [bar]			
CF A 2/2-way solenoid valve Direct-acting Normally closed 	G 1/8	1.2	0.040	24 / DC / 7	100 % ED	0...23		20010449 ㉔	o. r.
				24 / DC / 5.5		0...19		20010443 ㉔	o. r.
			0.045	24 / 50 / 4		0...42		–	o. r.
				230 / 50 / 4		0...42		20010456 ㉔	o. r.
		1.6	0.055	24 / DC / 7	100 % ED	0...13		20010450 ㉔	o. r.
				24 / DC / 5.5		0...10.5		20009374 ㉔	o. r.
			0.060	24 / 50 / 4		0...24		–	o. r.
				230 / 50 / 4		0...24		20010460 ㉔	o. r.
		2.0	0.070	24 / DC / 7	100 % ED	0...9		20010451 ㉔	o. r.
				24 / DC / 5.5		0...7		20010446 ㉔	o. r.
			0.110	24 / 50 / 4		0...18		–	o. r.
				230 / 50 / 4		0...18		20010461 ㉔	o. r.
		2.4	0.090	24 / DC / 7	100 % ED	0...5		20010454 ㉔	o. r.
				24 / DC / 5.5		0...4		20010447 ㉔	o. r.
			0.130	24 / 50 / 6		0...10		–	o. r.
				230 / 50 / 6		0...10		20010464 ㉔	o. r.

o. r. = on request

– = not available

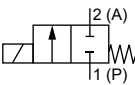
1.) Measurement at + 20 °C, 6 bar^{2.)} at the valve inlet and free outlet

2.) Pressure data: Overpressure to atmospheric pressure and air as a medium

ATEX/IECEx cable version

Note:

- The maximum medium temperature must never exceed the permitted temperature class (T4: + 135 °C) minus 5 K.
- Only single mounting permissible
- Standard with 3 m cable, other lengths are available on request.

Circuit function	Port connection	Orifice	K _v value water ^{1.)}	Voltage/Frequency/Power	Maximum duty cycle	Pressure range ^{2.) 3.)}		Article no.	
						Ambient temperature 55 °C		Brass body	Stainless steel body
		Water	Air	FKM seal					
		[mm]	[m³/h]	[V/Hz/W]		[bar]	[bar]		
CF A 2/2-way solenoid valve Direct-acting Normally closed 	G 1/8	1.2	0.045	24 / AC/DC / 6	100 % ED	0...16	0...16	20009727 ㉞	20053228 ㉞
				24 / 50 / 6		0...34	0...34	20012934 ㉞	20053229 ㉞
				230 / 50 / 6		0...34	0...34	20014398 ㉞	20053230 ㉞
		1.6	0.060	24 / AC/DC / 6	100 % ED	0...10	0...10	20009728 ㉞	20030686 ㉞
				24 / 50 / 6		0...18	0...18	20012935 ㉞	20053234 ㉞
				230 / 50 / 6		0...18	0...18	20014408 ㉞	20053235 ㉞
		2.0	0.110	24 / AC/DC / 6	100 % ED	0...7	0...7	20009725 ㉞	20053236 ㉞
				24 / 50 / 6		0...13	0...13	20012931 ㉞	20053237 ㉞
				230 / 50 / 6		0...13	0...13	20025748 ㉞	20053240 ㉞
		2.4	0.130	24 / AC/DC / 6	100 % ED	0...3.5	0...4	20009729 ㉞	20053243 ㉞
				24 / 50 / 6		0...6.5	0...7	20012938 ㉞	20053244 ㉞
				230 / 50 / 6		0...6.5	0...7	20014416 ㉞	20053245 ㉞

o. r. = on request

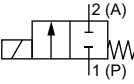
1.) Measurement at + 20 °C, 6 bar^{2.)} at the valve inlet and free outlet

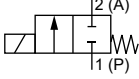
2.) Pressure data: overpressure to atmospheric pressure and air as a medium

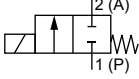
Standard version according to industry standard form B, coil size 20 mm

Note:

All valves are delivered without a cable plug.

Circuit function	Port connection	Orifice	K _v value water ^{1.)}	Voltage/Frequency/Power	Maximum duty cycle	Pressure range ^{2.)}		Article no.	
						Ambient temperature 75 °C	Ambient temperature 55 °C	Brass body	Stainless steel body
		[mm]	[m³/h]	[V/Hz/W]		Air [bar]	Air [bar]	FKM seal	
CF A 2/2-way solenoid valve Direct-acting Normally closed 	M5	1.2	0.045	24/DC/6.5	100 % ED	–	0...13	o. r.	o. r.
				24/50/6		–	0...35	o. r.	o. r.
				230/50/6		–	0...35	o. r.	o. r.
				24/DC/5		0...9	–	o. r.	o. r.
				24/DC/5		–	0...11	o. r.	o. r.
				24/50/4		0...27	0...27	o. r.	o. r.
				230/50/4		0...27	0...27	o. r.	o. r.
				24/DC/14	50 % ED	–	0...32	o. r.	o. r.
				24/DC/11		0...25	–	o. r.	o. r.
				24/DC/11		–	0...30	o. r.	o. r.
		1.6	0.060	24/DC/6.5	100 % ED	–	0...8.5	o. r.	o. r.
				24/50/6		–	0...24	o. r.	o. r.
				230/50/6		–	0...24	o. r.	o. r.
				24/DC/5		0...5.5	–	o. r.	o. r.
				24/DC/5		–	0...6.5	o. r.	o. r.
				24/50/4		0...17	0...17	o. r.	o. r.
				230/50/4		0...17	0...17	o. r.	o. r.
				24/DC/14	50 % ED	–	0...22	o. r.	o. r.
				24/DC/11		0...17	–	o. r.	o. r.
				24/DC/11		–	0...18	o. r.	o. r.

Circuit function	Port connection	Orifice	K _v value water ¹⁾	Voltage/Frequency/Power	Maximum duty cycle	Pressure range ²⁾		Article no.	
						Ambient temperature 75 °C	Ambient temperature 55 °C	Brass body	Stainless steel body
		[mm]	[m³/h]			Air [bar]	Air [bar]	FKM seal	
CF A 2/2-way solenoid valve Direct-acting Normally closed 	M5	2.0	0.110	24/DC/6.5	100 % ED	–	0...6	o. r.	o. r.
				24/50/6		–	0...14	o. r.	o. r.
				230/50/6		–	0...14	o. r.	o. r.
				24/DC/5		0...4	–	o. r.	o. r.
				24/DC/5		–	0...4.5	o. r.	o. r.
				24/50/4		0...10	0...10	o. r.	o. r.
				230/50/4		0...10	0...10	o. r.	o. r.
				24/DC/14	50 % ED	–	0...15	o. r.	o. r.
				24/DC/11		0...12	–	o. r.	o. r.
				24/DC/11		–	0...13	o. r.	o. r.
		2.4	0.130	24/DC/6.5	100 % ED	–	0...3	o. r.	o. r.
				24/50/6		–	0...9	o. r.	o. r.
				230/50/6		–	0...9	o. r.	o. r.
				24/DC/5		0...2	–	o. r.	o. r.
				24/DC/5		–	0...2.5	o. r.	o. r.
				24/50/4		0...6.5	0...6.5	o. r.	o. r.
				230/50/4		0...6.5	0...6.5	o. r.	o. r.
				24/DC/14	50 % ED	–	0...8	o. r.	o. r.
				24/DC/11		0...6	–	o. r.	o. r.
				24/DC/11		–	0...6.5	o. r.	o. r.
	G 1/8	1.2	0.045	24/DC/6.5	100 % ED	–	0...13	o. r.	o. r.
				24/50/6		–	0...35	o. r.	o. r.
				230/50/6		–	0...35	o. r.	o. r.
				24/DC/5		0...9	–	o. r.	o. r.
				24/DC/5		–	0...11	o. r.	o. r.
				24/50/4		0...27	0...27	o. r.	o. r.
				230/50/4		0...27	0...27	o. r.	o. r.
				24/DC/14	50 % ED	–	0...32	o. r.	o. r.
				24/DC/11		0...25	–	o. r.	o. r.
				24/DC/11		–	0...30	o. r.	o. r.
	G 1/8	1.6	0.060	24/DC/6.5	100 % ED	–	0...8.5	o. r.	o. r.
				24/50/6		–	0...24	o. r.	o. r.
				230/50/6		–	0...24	o. r.	o. r.
				24/DC/5		0...5.5	–	o. r.	o. r.
				24/DC/5		–	0...6.5	o. r.	o. r.
				24/50/4		0...17	0...17	o. r.	o. r.
				230/50/4		0...17	0...17	o. r.	o. r.
				24/DC/14	50 % ED	–	0...22	o. r.	o. r.
				24/DC/11		0...17	–	o. r.	o. r.
				24/DC/11		–	0...18	o. r.	o. r.
		2.0	0.110	24/DC/6.5	100 % ED	–	0...6	o. r.	o. r.
				24/50/6		–	0...14	o. r.	o. r.
				230/50/6		–	0...14	o. r.	o. r.
				24/DC/5		0...4	–	o. r.	o. r.
				24/DC/5		–	0...4.5	o. r.	o. r.
				24/50/4		0...10	0...10	o. r.	o. r.
				230/50/4		0...10	0...10	o. r.	o. r.
				24/DC/14	50 % ED	–	0...15	o. r.	o. r.
				24/DC/11		0...12	–	o. r.	o. r.
				24/DC/11		–	0...13	o. r.	o. r.

Circuit function	Port connection	Orifice	K _v value water ¹⁾	Voltage/Frequency/Power	Maximum duty cycle	Pressure range ²⁾		Article no.	
						Ambient temperature 75 °C	Ambient temperature 55 °C	Brass body	Stainless steel body
		[mm]	[m³/h]			Air [bar]	Air [bar]	FKM seal	
CF A 2/2-way solenoid valve Direct-acting Normally closed 	G 1/8	2.4	0.130	24/DC/6.5	100 % ED	–	0...3	o. r.	o. r.
				24/50/6		–	0...9	o. r.	o. r.
				230/50/6		–	0...9	o. r.	o. r.
				24/DC/5		0...2	–	o. r.	o. r.
				24/DC/5		–	0...2.5	o. r.	o. r.
				24/50/4		0...6.5	0...6.5	o. r.	o. r.
				230/50/4		0...6.5	0...6.5	o. r.	o. r.
				24/DC/14	50 % ED	–	0...8	o. r.	o. r.
				24/DC/11		0...6	–	o. r.	o. r.
				24/DC/11		–	0...6.5	o. r.	o. r.
	Flange (FK01)	1.2	0.045	24/DC/6.5	100 % ED	–	0...13	o. r.	o. r.
				24/50/6		–	0...35	o. r.	o. r.
				230/50/6		–	0...35	o. r.	o. r.
				24/DC/5		0...9	–	o. r.	o. r.
				24/DC/5		–	0...11	o. r.	o. r.
				24/50/4		0...27	0...27	o. r.	o. r.
				230/50/4		0...27	0...27	o. r.	o. r.
				24/DC/14	50 % ED	–	0...32	o. r.	o. r.
				24/DC/11		0...25	–	o. r.	o. r.
				24/DC/11		–	0...30	o. r.	o. r.
		1.6	0.060	24/DC/6.5	100 % ED	–	0...8.5	o. r.	o. r.
				24/50/6		–	0...24	o. r.	o. r.
				230/50/6		–	0...24	o. r.	o. r.
				24/DC/5		0...5.5	–	o. r.	o. r.
				24/DC/5		–	0...6.5	o. r.	o. r.
				24/50/4		0...17	0...17	o. r.	o. r.
				230/50/4		0...17	0...17	o. r.	o. r.
				24/DC/14	50 % ED	–	0...22	o. r.	o. r.
				24/DC/11		0...17	–	o. r.	o. r.
				24/DC/11		–	0...18	o. r.	o. r.
	Flange (FK01)	2.0	0.110	24/DC/6.5	100 % ED	–	0...6	o. r.	o. r.
				24/50/6		–	0...14	o. r.	o. r.
				230/50/6		–	0...14	o. r.	o. r.
				24/DC/5		0...4	–	o. r.	o. r.
				24/DC/5		–	0...4.5	o. r.	o. r.
				24/50/4		0...10	0...10	o. r.	o. r.
				230/50/4		0...10	0...10	o. r.	o. r.
				24/DC/14	50 % ED	–	0...15	o. r.	o. r.
				24/DC/11		0...12	–	o. r.	o. r.
				24/DC/11		–	0...13	o. r.	o. r.
		2.4	0.130	24/DC/6.5	100 % ED	–	0...3	o. r.	o. r.
				24/50/6		–	0...9	o. r.	o. r.
				230/50/6		–	0...9	o. r.	o. r.
				24/DC/5		0...2	–	o. r.	o. r.
				24/DC/5		–	0...2.5	o. r.	o. r.
				24/50/4		0...6.5	0...6.5	o. r.	o. r.
				230/50/4		0...6.5	0...6.5	o. r.	o. r.
				24/DC/14	50 % ED	–	0...8	o. r.	o. r.
				24/DC/11		0...6	–	o. r.	o. r.
				24/DC/11		–	0...6.5	o. r.	o. r.

o. r. = on request

1.) Measurement at + 20 °C, 6 bar²⁾ at the valve inlet and free outlet

2.) Pressure data: overpressure to atmospheric pressure and air as a medium

Additional options

Note:

Available on request

Option	Variable Code	Description
Oxygen versions	NL02	Suitable for applications with oxygen (non-metal materials that are in contact with the medium are tested and approved according to BAM)
Increased purity requirements e.g. oil, grease and silicone-free	NL50/NL05	Wetted parts are specially cleaned and packaged in accordance with the valves
Increased tightness requirements	PC05	Leakage rate *less than 10^{-4} mbar l/sec
	PC08	Leakage rate *less than 10^{-5} mbar l/sec
	PC06	Leakage rate *less than 10^{-6} mbar l/sec

8.5. Ordering chart accessories

Single manifold

Note:

Further ordering information can be found in chapter "5.4. Single manifold" on page 14.

Multiple manifold

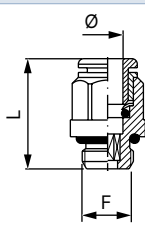
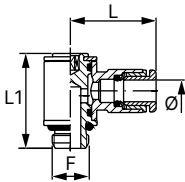
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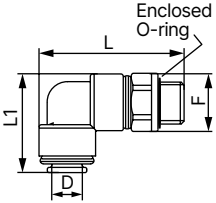
Further ordering information can be found in chapter "5.5. Multiple manifold" on page 15.

Accessories for manifolds

Accessory	Features	Article no.
Screw plug	With sealing ring, G 1/8	005041 
Cover plate	For unoccupied valve position	005100 

Accessories for G 1/8" threaded connections

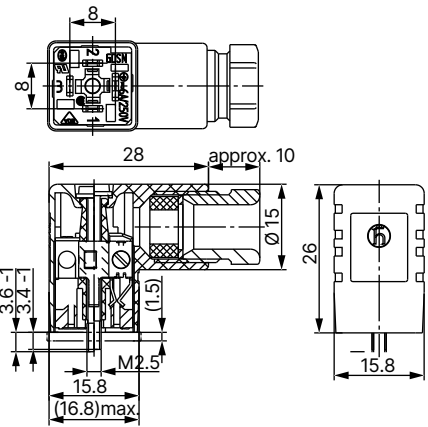
Accessories	Material	Connection diameter	F	L	L1	Article no.
		[mm]	[mm]	[mm]	[mm]	
Straight push-in connector with O-Ring						
	Brass, nickel-plated	4	G 1⁄8	18.0	–	780001 
		6	G 1⁄8	21.6	–	780003 
		8	G 1⁄8	25.4	–	780005 
Elbow screw fitting, rotatable with O-Ring						
	Brass, nickel-plated	4	G 1⁄8	21.3	24.9	780081 
		6	G 1⁄8	23.0	24.9	780082 
		8	G 1⁄8	24.8	24.9	780086 

Accessories	Material	Connection diameter	F	L	L1	Article no.
		[mm]	[mm]	[mm]	[mm]	
	POM	4	G 1/8	35.5	24.0	782344 
		6	G 1/8	39.5	27.0	782345 
		8	G 1/8	41.5	30.0	782346 

Cable plug Type 2516, form C according to DIN EN 175301 - 803

Note:

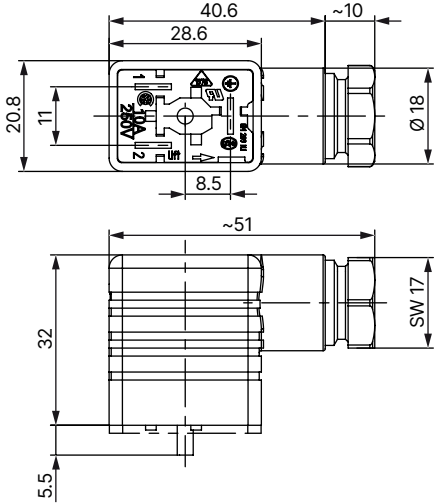
- Dimensions in mm
- Delivery of cable plug includes a flat seal and a fixing screw.
- For further versions see data sheet **Type 2516** 

Cable plug	Dimensions	Version	Voltage	Article no.
		Without circuitry	0...250 V AC/DC	303141 
		With LED	12...24 V AC/DC	303145 
		With LED and varistor	12...24 V AC/DC	303148 
		With rectifier, LED and varistor	12...24 V AC/DC	303142 

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	Version	Voltage	Article no.
		Without circuitry (standard)	2...250 V AC/DC	423845 
		With LED	24 V AC/DC	423849 
		With LED and free-wheeling diode	12...24 V AC/DC	423851 
		With rectifier, LED and varistor	12...24 V AC/DC	423853 
			2...250 V AC/DC	423854 