

## DATA SHEET

## Type 6011



### Plunger valve 2/2 way direct-acting

- Direct-acting and compact small-format valve with diameter of up to DN 2.4
- Screwed coil system
- Simple and quick flange or manifold installation
- Quick coupling (push-in fitting) for plug-in hose connections



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

#### Can be combined with



##### Type 2507

Cable plug - industry standard - connector form B



##### Type 2516

Cable plug DIN EN 175301-803 - form C

#### Type description

Valve 6011 is a direct-acting plunger valve. The stopper and plunger guide tube are welded together to enhance pressure resistance and leak-tightness. Various seal material combinations are available depending on the application. A Bürkert-specific flange design (SFB) enables space-saving arrangement of valves on a manifold. Push-in fittings can be selected for flexible hose connection. In combination with a cable plug in accordance with industry standard Form B or DIN EN 175301-803 Form C, the valves satisfy protection class IP65.

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## 1. General Technical Data

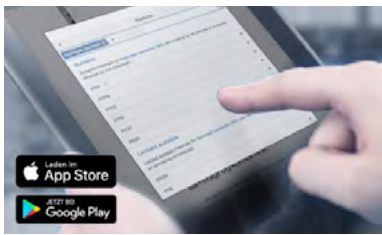
Product properties	
Dimensions	Detailed information can be found in chapter "4. Dimensions" on page 5.
Material	
Seal	FKM
Body	Standard version: Brass, polyamide (PA), stainless steel 1.4305 Analytical version: Brass, stainless steel 1.4305
Weight	Ca. 125 g
Performance data	
Duty cycle/single valve when mounted as a block on a manifold	100 % continuous rating Intermittent operation 60 % (30 min) or with 2 W coil (on request)
Circuit function	A
Electrical data	
Operating voltage	
Standard version	24 V DC, 24 V/50 Hz, 110/230 V/50 Hz
Analytical version	24 V DC, 230 V/50 Hz
Voltage tolerance	± 10 %
Medium data	
Medium	
Standard version	Technical vacuum, neutral gases and fluids (e.g. compressed air, water, hydraulic oil)
Analytical version	Neutral/aggressive medium that do not attack the body and seal materials
Viscosity	Max. 21 mm <sup>2</sup> /s
Medium temperature	-10... +100 °C
Approvals and certificates	
Degree of protection	IP65 with cable plug
Product connection	
Port connection	
Standard version	M5, G 1/8, sub-base
Analytical version	G 1/8, sub-base
Electrical connection	To DIN EN 175 301 - 803 Form C for cable plug Type 2516 (see "5.4. Ordering chart accessories" on page 11) To industry standard connector Form B for cable plug Type 2507 (see "5.4. Ordering chart accessories" on page 11)
Environment and installation	
Installation position	As required, preferably with actuator upright
Ambient temperature (max.)	+ 55 °C
Installation instructions	No oil, grease or silicones to be used as installation aids

## 2. Circuit functions

Circuit functions	Description
	<b>Type: A, solenoid valve</b> 2/2 way Direct-acting Normally closed

### 3. Materials

#### 3.1. Chemical Resistance Chart – Bürkert resistApp



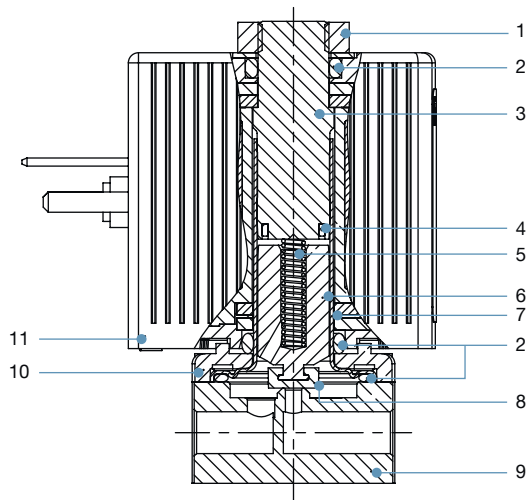
**Bürkert resistApp – Chemical Resistance Chart**

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

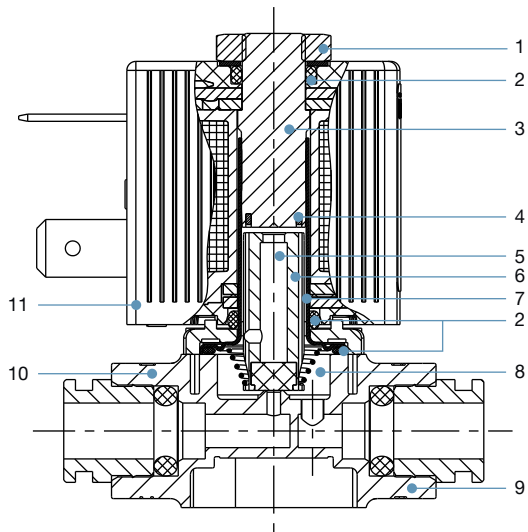
##### Standard version



No.	Element	Material
1	Locknut	9SMnPb28K Thick-film passivated
2	O-ring	FKM
3	Stopper	Stainless steel 1.4105
4	Shading ring	Copper, Silver
5	Spring	Stainless steel 1.4310
6	Core	Stainless steel 1.4105
7	Guide tube	Stainless steel 1.4303
8	Armature seal	FKM
9	Body	Brass, stainless steel 1.4305, PA (polyamide)
10	Sub-base	Thick-film passivated (brass version) Nickel-plated surface (stainless steel version)
11	Coil	DIN EN 175301 - 803 <sup>1)</sup> Form C: PA Industry standard connector Form B: Epoxy

1.) previously DIN 43650

##### Plastic version with plug-in coupling



No.	Element	Material
1	Locknut	9SMnPb28K Thick-film passivated
2	O-ring	FKM, EPDM
3	Stopper	Stainless steel 1.4105
4	Shading ring	Copper, Silver
5	Spring	Stainless steel 1.4310
6	Core	Stainless steel 1.4105
7	Guide tube	Stainless steel 1.4303
8	Armature seal	FKM, EPDM
9	Body	PA (polyamide)
10	Sub-base	Thick-film passivated (brass version) Nickel-plated surface (stainless steel version)
11	Coil	DIN EN 175301 - 803 <sup>1)</sup> Form C: PA Industry standard connector Form B: Epoxy

1.) previously DIN 43650

DTS 1000011026 EN Version: R Status: RL (released | freigegeben | validé) printed: 26.05.2020

Type 6011

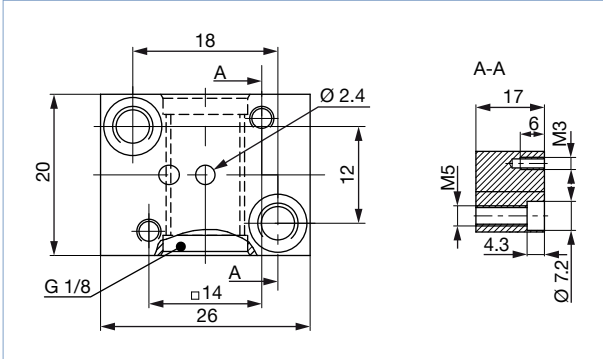


4. Dimensions

4.1. Single manifold

Note:

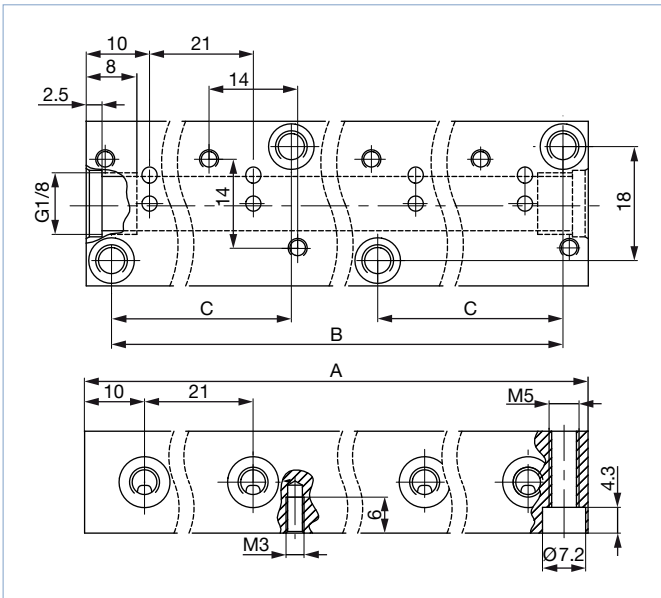
Dimensions in mm



4.2. Multiple manifold

Note:

Dimensions in mm



No. of valves	A [mm]	B [mm]	C [mm]
1	20	12	-
2	41	33	-
3	62	54	-
4	83	75	-
5	104	96	-
6	125	117	-
7	146	138	-
8	167	159	54
9	188	180	54
10	209	201	75
11	230	222	75
12	251	243	96

DTS 1000011026 EN Version: R Status: RL (released | freigegeben | validé) printed: 26.05.2020

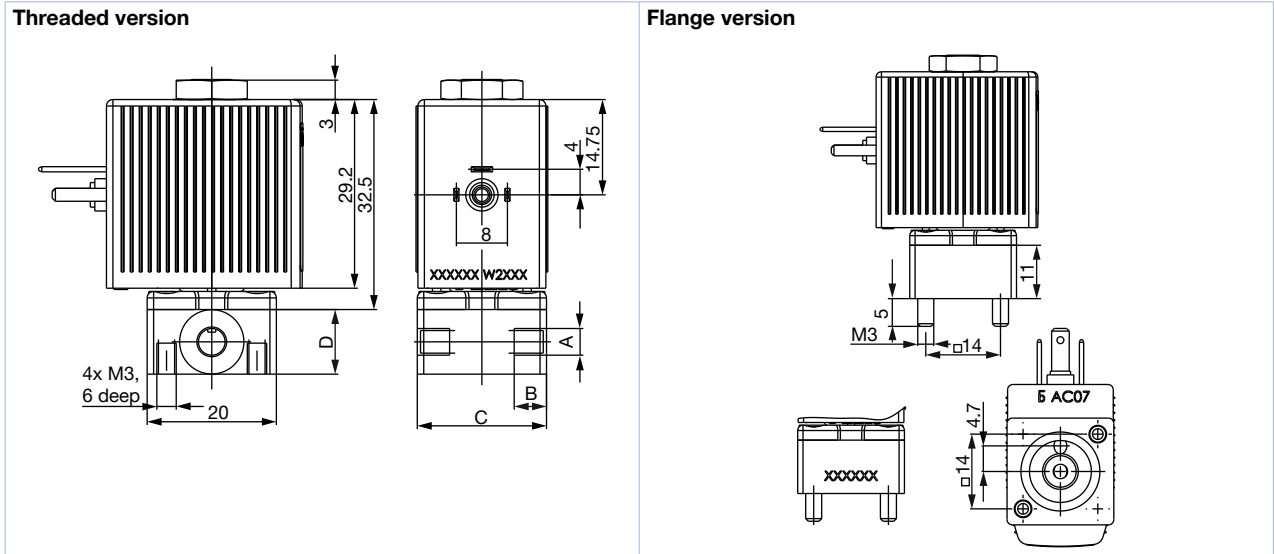
Type 6011



4.3. Version with coil acc. to DIN EN 175301 -803 Form C for cable plug Type 2516

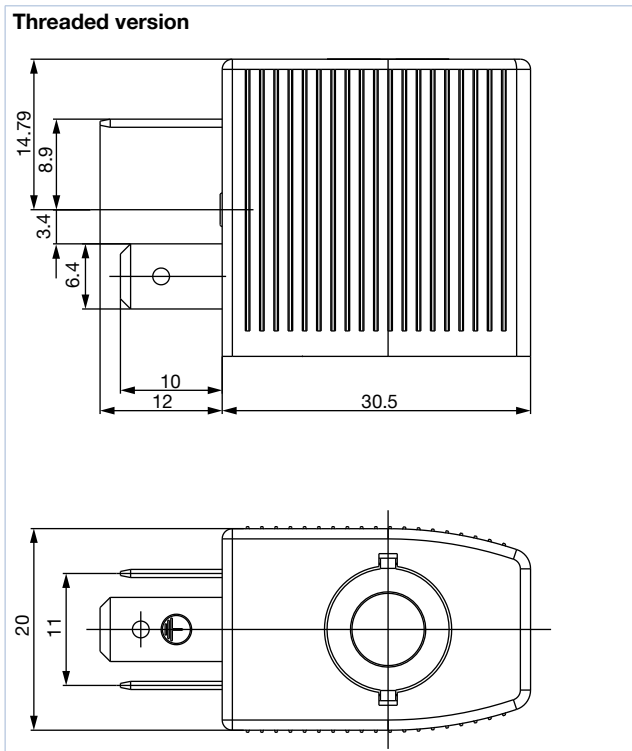
Note:

The previous standard DIN 43650 has been replaced by DIN EN 175301 -803 Form C.



Port connection	A	B	C	D
Thread	M5	5	20	10
Thread	G $\frac{1}{8}$	8	25	15
Sub-base	-	-	20	11

4.4. Version with coil acc. to industry standard connector Form B for cable plug Type 2507

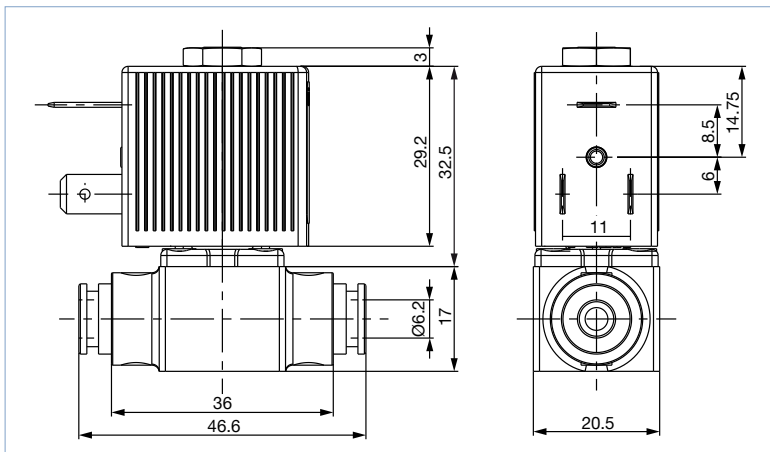


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Type 6011

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#### 4.5. Plastic version with plug-in coupling



### 5. Ordering information

#### 5.1. Bürkert eShop – Easy ordering and quick delivery



##### Bürkert eShop – Easy ordering and fast 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](#)

#### 5.2. 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.

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## Type 6011

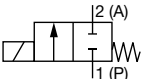
























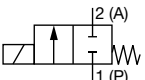
































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## 5.3. Ordering chart

## Standard version

## Note:

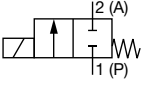
























































- All valves complete with coil and FKM seal material; without cable plug
- Other versions on request
- The previous standard DIN 43650 has been replaced by DIN EN 175301 - 803 Form C.

Circuit function	Orifice	Port connection	K <sub>v</sub> value water [m <sup>3</sup> /h]	Pressure range [bar] <sup>1)</sup>	Voltage/ Frequency [V/Hz]	Article no. Brass body	Article no. Stainless steel body
	[mm]						
<b>Solenoid valve complete in ported or flanged version with electrical coil connection to DIN EN 175 301 - 803 Form C for cable plug Type 2516</b>							
<b>A, solenoid valve</b> 2/2 way Direct-acting Normally closed 	1.2	M5	0.045	0...12	24/DC	134084 	-
				0...21	24/50	134085 	-
				0...21	110/50	134086 	-
				0...21	230/50	134087 	-
	1.6	M5	0.06	0...6	24/DC	134088 	-
				0...12	24/50	134089 	-
				0...12	110/50	134090 	-
				0...12	230/50	134091 	-
		G 1/8	0.06	0...6	24/DC	134071 	134103 
				0...12	24/50	134092 	134104 
				0...12	110/50	134093 	134105 
				0...12	230/50	134094 	134106 
	2.0	G 1/8	0.11	0...4.5	24/DC	134095 	134107 
				0...8	24/50	134096 	134108 
				0...8	110/50	134097 	134109 
				0...8	230/50	134098 	134110 
<b>A, solenoid valve</b> 2/2 way Direct-acting Normally closed 	2.4	G 1/8	0.13	0...3	24/DC	134099 	134111 
				0...6	24/50	134100 	134112 
				0...6	110/50	134101 	134113 
				0...6	230/50	134102 	134114 
	1.2	Sub-base	0.045	0...12	24/DC	134115 	-
				0...21	24/50	134116 	-
				0...21	110/50	134117 	-
				0...21	230/50	134118 	-
	1.6	Sub-base	0.06	0...6	24/DC	134119 	134131 
				0...12	24/50	134120 	134132 
				0...12	110/50	134121 	134133 
				0...12	230/50	134122 	134134 
	2.0	Sub-base	0.11	0...4.5	24/DC	134123 	134135 
				0...8	24/50	134124 	134136 
				0...8	110/50	134125 	134137 
				0...8	230/50	134126 	134138 
2.4	Sub-base	0.13	0...3	24/DC	134127 	-	
			0...6	24/50	134128 	-	
			0...6	110/50	134129 	-	
			0...6	230/50	134130 	-	

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Circuit function	Orifice	Port connection	K <sub>v</sub> value water [m <sup>3</sup> /h]	Pressure range [bar] <sup>1.)</sup>	Voltage/ Frequency [V/Hz]	Article no. Brass body	Article no. Stainless steel body
	[mm]						
<b>Solenoid valve complete in ported or flanged version with electrical coil acc. to industry standard connector Form B for cable plug Type 2507</b>							
<b>A, solenoid valve</b> 2/2 way Direct-acting Normally closed  	1.2	M5	0.045	0...12	24/DC	163491 	-
				0...21	24/50	163492 	-
				0...21	110/50	163493 	-
				0...21	230/50	163494 	-
	1.6	M5	0.06	0...6	24/DC	163495 	-
				0...12	24/50	163496 	-
				0...12	110/50	163497 	-
				0...12	230/50	163498 	-
		G 1/8	0.06	0...6	24/DC	163499 	163509 
				0...12	24/50	163500 	163510 
				0...12	110/50	163501 	163511 
				0...12	230/50	163502 	163512 
	2.0	G 1/8	0.11	0...4.5	24/DC	163503 	163513 
				0...8	24/50	163504 	163514 
				0...8	110/50	163505 	163515 
				0...8	230/50	163506 	163516 
	2.4	G 1/8	0.13	0...3	24/DC	161193 	163517 
				0...6	24/50	163507 	163518 
				0...6	110/50	163508 	163519 
				0...6	230/50	161194 	163520 
1.2	Sub-base	0.045	0...12	24/DC	163521 	-	
			0...21	24/50	163522 	-	
			0...21	110/50	163523 	-	
			0...21	230/50	163524 	-	
1.6	Sub-base	0.06	0...6	24/DC	163525 	163537 	
			0...12	24/50	163526 	163538 	
			0...12	110/50	163527 	163539 	
			0...12	230/50	163528 	163540 	
2.0	Sub-base	0.11	0...4.5	24/DC	163529 	163541 	
			0...8	24/50	163530 	163542 	
			0...8	110/50	163531 	163543 	
			0...8	230/50	163532 	163544 	
2.4	Sub-base	0.13	0...3	24/DC	163533 	-	
			0...6	24/50	163534 	-	
			0...6	110/50	163535 	-	
			0...6	230/50	163536 	-	

1.) Pressure data: Overpressure with respect to atmospheric pressure

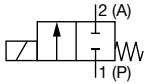
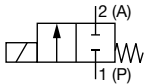
Type 6011



Analytical version

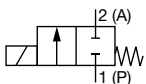
Note:

- All valves complete with coil (4 W) and FKM seal material; without cable plug
- Other versions on request
- The previous standard DIN 43650 has been replaced by DIN EN 175301 - 803 Form C.

Circuit function	Orifice	Port connection	K <sub>v</sub> value water [m <sup>3</sup> /h]	Pressure range [bar] <sup>1.)</sup>	Voltage/ Frequency [V/Hz]	Article no. Brass body	Article no. Stainless steel body
	[mm]						
<b>Solenoid valve complete in threaded or flanged version with electrical coil connection to DIN EN 175 301 - 803 Form C for cable plug Type 2516</b>							
<b>A, solenoid valve</b> 2/2 way Direct-acting Normally closed  	1.6	G 1/8	0.06	0...6	24/DC	137794	137800
				0...12	230/50	137795	137801
	2.0	G 1/8	0.11	0...4.5	24/DC	137796	137802
				0...8	230/50	137797	137803
	2.4	G 1/8	0.13	0...3	24/DC	137798	137804
				0...6	230/50	137799	137805
	1.2	Sub-base	0.045	0...12	24/DC	137806	137812
				0...21	230/50	137807	137813
	1.6	Sub-base	0.06	0...6	24/DC	137808	137814
				0...12	230/50	137809	137815
	2.0	Sub-base	0.11	0...4.5	24/DC	137810	137816
				0...8	230/50	137811	137817
<b>Solenoid valve complete in threaded or flanged version with electrical coil acc. to industry standard connector Form B for cable plug Type 2507</b>							
<b>A, solenoid valve</b> 2/2 way Direct-acting Normally closed  	1.6	G 1/8	0.06	0...6	24/DC	163545	163551
				0...12	230/50	163546	163552
	2.0	G 1/8	0.11	0...4.5	24/DC	163547	163553
				0...8	230/50	163548	163554
	2.4	G 1/8	0.13	0...3	24/DC	163549	163555
				0...6	230/50	163550	163556
	1.2	Sub-base	0.045	0...12	24/DC	163557	163563
				0...21	230/50	163558	163564
	1.6	Sub-base	0.06	0...6	24/DC	163559	163565
				0...12	230/50	163560	163566
	2.0	Sub-base	0.11	0...4.5	24/DC	163561	163567
				0...8	230/50	163562	163568

1.) Pressure data: Overpressure with respect to atmospheric pressure

Plastic version with plug-in coupling

Circuit function	Orifice	Seal material	K <sub>v</sub> value water [m <sup>3</sup> /h]	Pressure range [bar] <sup>1.)</sup>	Voltage/ requency [V/Hz]	Article no.
	[mm]					
<b>Solenoid valve complete with seal material FKM and plastic housing with hose plug connection for external hose with diameter 6 mm and coil acc. to industry standard connector Form B for cable plug Type 2507</b>						
<b>A, solenoid valve</b> 2/2 way Direct-acting Normally closed  	1.5	FKM	0.06	6	230/50	319647
	2.7					0.15

1.) Pressure data: Overpressure with respect to atmospheric pressure

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## Type 6011



## 5.4. Ordering chart accessories

## Manifolds

Material	No. of valves	Article no.
Aluminium, anodized	1	005312
	2	005355
	3	005313
	4	005314
	5	005315
	6	005316
	7	005893
	8	005166
	9	005241
	10	005819
	11	005242
	12	005222


## Accessories for manifolds

Accessory	Features	Article no.
Blanking plug	with seal ring, G 1/8	005041
Cover plate	for unused valves	005100

## Cable plug Type 2516 acc. to DIN EN 175301 - 803 Form C

## Note:

- Delivery of cable plug includes a flat seal and a fixing screw.
- Further versions of cable plug with circuitry acc. to DIN EN 175 301 - 803 Form C as well as detailed technical data, see datasheet **Type 2516**

Cable plug	Version	Voltage	Current	Article no.
	Without circuitry	0...250 V AC/DC	Max. 6 A	303141
	With LED	12...24 V AC/DC	Max. 3 A	303145
	With LED and varistor	12...24 V AC/DC	Max. 3 A	303148
	With rectifier, LED and varistor	12...24 V AC/DC	Max. 1 A	303142






## Type 6011



## Cable plug Type 2507 acc. to industry standard connector Form B

## Note:

- Delivery of cable plug includes a flat seal and a fixing screw.
- Further versions of cable plug with circuitry acc. to industry standard connector Form B as well as detailed technical data, see datasheet **Type 2507** ►.

Cable plug	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 

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