

1501540

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Connector, Universal, 4-position, shielded, Plug straight M12, coding: A, Screw connection, knurl material: Brass, nickel-plated, cable gland Pg9, external cable diameter 6 mm ... 8 mm

## Your advantages

- · Safe use in the field, thanks to a high degree of protection
- · Screw connection: proven connection technology for a large selection of different conductors
- Reliable signal transmission 360° shielding in environments with electromagnetic interference

#### Commercial data

Item number	1501540
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF30
Product key	BF2CBA
Catalog page	Page 24 (C-2-2019)
GTIN	4017918614393
Weight per piece (including packing)	56 g
Weight per piece (excluding packing)	55.6 g
Customs tariff number	85366990
Country of origin	CN



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## Technical data

#### Notes

Assembly note	NOTE: Observe the permissible bending radii when routing cables, since the degree of protection may be at risk if the bending forces are too high. Reduce mechanical loads upstream of the connector, e.g., by using cable ties.
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## Product properties

Universal
4
1
yes
4
straight
Pg9
ye A st

### Data management status

Article revision 04
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#### Insulation characteristics

Overvoltage category	II
Degree of pollution	3

### **Dimensions**

Dimensional drawing	18 d) 17 d) 18 d)
Width	20 mm
Height	20 mm
Length	62 mm
External dimensions	

Outside diameter	6 mm 8 mm

## Housing

Diameter housing	20 mm
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## Material specifications

Flammability rating according to UL 94	НВ
Seal material	NBR
Material of grip body	Brass, nickel-plated
Contact material	CuZn



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Contact surface material	Au
Contact carrier material	PA
Material for screw connection	Brass, nickel-plated

#### Connection data

#### Conductor connection

Connection method	Screw connection
Connection cross section	0.25 mm <sup>2</sup> 0.75 mm <sup>2</sup> (without ferrule)
	0.14 mm <sup>2</sup> 0.5 mm <sup>2</sup> (with ferrule)
	0.25 mm <sup>2</sup> 0.75 mm <sup>2</sup> (solid)
Connection cross section AWG	24 18 (without ferrule)
	26 20 (with ferrule)
Stripping length of the individual wire	5 mm
Tightening torque	0.4 Nm (M12 knurl)
	0.2 Nm (Screw terminal blocks)
	0.8 Nm 1 Nm (Pressure nut with coupling sleeve)

## Electrical properties

Rated surge voltage	2.5 kV
Contact resistance	≤ 3 mΩ
Insulation resistance	≥ 100 MΩ
Nominal voltage U <sub>N</sub>	48 V AC
	60 V DC
Nominal current I <sub>N</sub>	4 A

## Mechanical properties

#### Mechanical data

Insertion/withdrawal cycles ≥ 100	
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#### Connector

#### Connection 1

Head design	Plug
Head cable outlet	straight
Head thread type	M12
Coding	A

### Cable/line

Signal type/category	Universal
Stripping length of the individual wire	5 mm

## Environmental and real-life conditions

#### Ambient conditions

Degree of protection	IP67



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Ambient temperature (operation)	-40 °C 85 °C (Plug / socket)
Standards and regulations	
Standard designation	M12 connector
Standards/specifications	IEC 61076-2-101

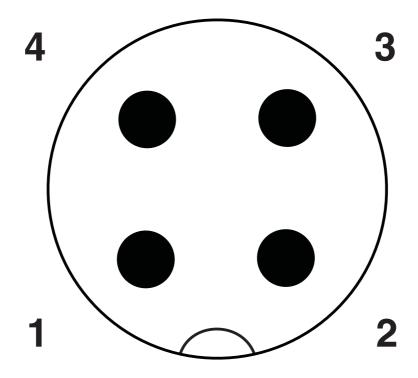


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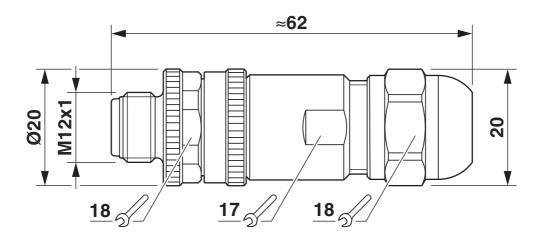
## Drawings

Schematic diagram



Pin assignment M12 plug, 4-pos., A-coded, view plug side

## Dimensional drawing



Plug, M12 x 1, straight, shielded



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## **Approvals**

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. <b>91</b>	<b>cUL Recognized</b> Approval ID: FILE E 2214	174			
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		250 V	4 A	-	-

<b>71</b>	UL Recognized Approval ID: FILE E 221	474			
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		250 V	4 A	-	-

cULus Recognized



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## Classifications

UNSPSC 21.0

### **ECLASS**

ECLASS-11.0	27440102
ECLASS-12.0	27440116
ECLASS-13.0	27440116
ETIM	
ETIM 9.0	EC002635
UNSPSC	

39121400



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## Environmental product compliance

#### EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	6(c)
China RoHS	
Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.
EU REACH SVHC	
REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
SCIP	72a6ea3a-8ade-4469-a59c-5a6db0c23232

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