

1515170

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Connector, Universal, 4-position, shielded, Socket 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	1515170
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF30
Product key	BF2CBA
Catalog page	Page 24 (C-2-2019)
GTIN	4017918924737
Weight per piece (including packing)	58.8 g
Weight per piece (excluding packing)	58.8 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 laying
	conductors, since the degree of protection may be put in jeopardy if the bending forces are too high. Alleviate mechanical loads upstream of the connector, e.g. by using cable ties.

### Product properties

Product type	Circular connector (cable-side)
Sensor type	Universal
Number of positions	4
No. of cable outlets	1
Shielded	yes
Coding	A
Cable outlet	straight
Pg screw connection	Pg9
Insulation characteristics	
Overvoltage category	II

3

### Dimensions

Degree of pollution

Dimensional drawing	18 d) 17 d) 18 d)
Width	20 mm
Height	20 mm
Length	57 mm
External dimensions Outside diameter	6 mm 8 mm
Outside diarneter	6 mm 8 mm
Housing	
Diameter housing	20 mm

### Material specifications

Flammability rating according to UL 94	НВ
Seal material	NBR
Material of grip body	Brass, nickel-plated
Contact material	CuZn
Contact surface material	Au
Contact carrier material	PA
Material for screw connection	Brass, nickel-plated



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### Connection data

#### Conductor connection

Connection method	Screw connection
Connection cross section	0.25 mm² 0.75 mm² (without ferrule)
	0.14 mm <sup>2</sup> 0.5 mm <sup>2</sup> (with ferrule)
	0.25 mm² 0.75 mm² (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

### Connector

### Connection 1

Head design	Socket
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
Ambient temperature (operation)	-40 °C 85 °C (Plug / socket)

### Standards and regulations



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Standard designation	M12 connector
Standards/specifications	IEC 61076-2-101

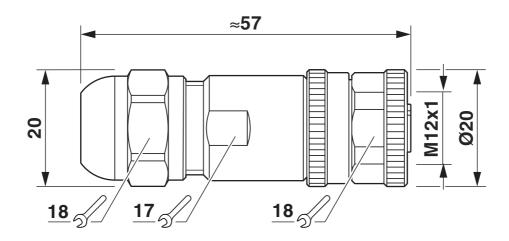


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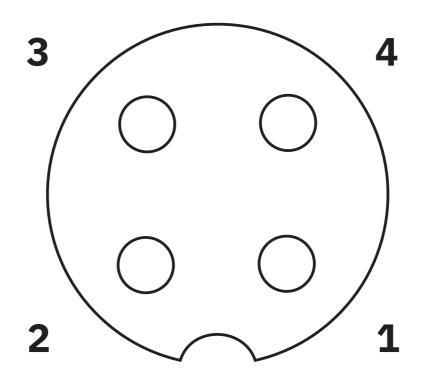
## Drawings

### Dimensional drawing



M12 x 1 socket, straight, shielded

Schematic diagram



Pin assignment M12 socket, A-coded



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### **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1515170

. <b>91</b>	<b>cUL Recognized</b> Approval ID: FILE E 221474					
		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	-	-	

<i>9</i> 1	UL Recognized Approval ID: FILE E 221474					
		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

### **ECLASS**

	ECLASS-11.0	27440102	
	ECLASS-12.0	27440116	
	ECLASS-13.0	27440116	
ETIM			
	ETIM 9.0	EC002635	
U	UNSPSC		
	UNSPSC 21.0	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	f87d3dcf-db9f-49aa-a496-d97952046386



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### Accessories

### PROT-M12 MS-PA-CHAIN - Screw plug

1430899

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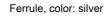
M12 sealing cap with fixing band, for sensor cables, for free M12 sockets



### A 0,25-5-Ferrule

3202465

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### TSD 04 SAC - Torque screwdriver

1208429

https://www.phoenixcontact.com/us/products/1208429



Torque screwdriver, with preset torque of 0.4 Nm and 4 mm hexagonal drive for M12 connectors

### SACC BIT M12-D20 - Tool

1208445

https://www.phoenixcontact.com/us/products/1208445

Nut for assembling M12 connectors for assembly with a knurl diameter of 20 mm, for 4 mm hexagonal drive





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### TSD-M 1,2NM - Torque screwdriver

1212224

https://www.phoenixcontact.com/us/products/1212224



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0. 3 - 1.2 Nm

### TSD-M SAC-BIT ADAPTER - Adapter insert

1212600

https://www.phoenixcontact.com/us/products/1212600



Adapter bit for TSD-M...torque tools, E6.3-1/4" drive with 4 mm hexagon to accommodate SAC bits



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### CRIMPFOX 6H - Crimping pliers

1212046

https://www.phoenixcontact.com/us/products/1212046



Crimping pliers, for ferrules without insulating collar according to DIN 46228 Part 1 and ferrules with insulating collar according to DIN 46228 Part 4, 0.14  $\text{mm}^2$  ... 6  $\text{mm}^2$ , unlockable pressure lock, lateral entry

#### SZF 1-0,6X3,5 - Screwdriver

1204517

https://www.phoenixcontact.com/us/products/1204517



Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size:  $0.6 \times 3.5 \times 100$  mm, 2-component grip, with non-slip grip

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