### 1694295

https://www.phoenixcontact.com/in/products/1694295

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Connector, Universal, 4-position, shielded, Socket straight M12, A, Screw connection, knurl material: Nickel-plated brass, cable gland Pg7, external cable diameter 4 mm ... 6 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	1694295	
Packing unit	1 pc	
Minimum order quantity	1 pc	
Sales Key	BF2	
Product Key	BF2CBA	
Catalog Page	Page 24 (C-2-2019)	
GTIN	4017918181291	
Weight per Piece (including packing)	59 g	
Weight per Piece (excluding packing)	59 g	
Customs tariff number	85366990	
Country of origin	CN	

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# Technical Data

# Notes

Assembly instruction:	<b>NOTE:</b> 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.
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### Product properties

Product type	Circular connector (cable-side)	
Number of positions	4	
No. of cable outlets	1	
Shielded	yes	
Coding	A	
Cable outlet	straight	
Pg screw connection	Pg7	
Insulation characteristics		
Overvoltage category	Ш	
Degree of pollution	3	

### Dimensions

Dimensional drawing	
Width	20 mm
Height	20 mm
Length	57 mm
External dimensions	
Outside diameter	4 mm 6 mm
Housing	
Diameter housing	20 mm
Material specifications	
Flammability rating according to UL 94	HB
Seal material	NBR
Material of grip body	Nickel-plated brass
Contact material	CuZn
Contact surface material	Au
Contact carrier material	PA
Material for screw connection	Nickel-plated brass

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### 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> 0.75 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

Insertion/withdrawal cycles	≥ 100
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### 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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Standards/specifications

IEC 61076-2-101

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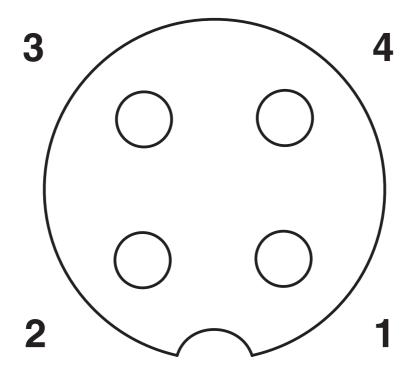
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Drawings

# $\approx 57$

M12 x 1 socket, straight, shielded

Schematic diagram



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



Dimensional drawing



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## Approvals

<b>.F</b> \	<b>CUL Recognized</b> 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	-	-
<b>F/</b>	<b>UL Recognized</b> Approval ID: FILE E 221	474			
					2 2 2

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	-	-

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### Classifications

### ECLASS

ECLASS-11.0	27440102
ECLASS-12.0	27440116
ECLASS-13.0	27440116

### ETIM

	ETIM 8.0	EC002635		
UNSPSC				
	UNSPSC 21.0	39121400		



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## **Environmental Product Compliance**

REACh SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

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Accessories

TSD 04 SAC - Torque screwdriver

1208429 https://www.phoenixcontact.com/in/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/in/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/in/products/1212224



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0. 3 - 1.2  $\mbox{Nm}$ 

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

1212600 https://www.phoenixcontact.com/in/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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### PROT-M12 MS-PA-CHAIN - Screw plug

### 1430899

https://www.phoenixcontact.com/in/products/1430899

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



### SAC-4P-100,0-PUR/SH-0,25 - Cable reel

1535794 https://www.phoenixcontact.com/in/products/1535794



By the meter, Cable reel, shielded, PUR halogen-free, black-gray RAL 7021, 4wire, color single wire: brown, white, blue, black, cable length: 100 m

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SAC-4P-100,0-PUR/SH-0,34 - Cable reel

### 1501715

https://www.phoenixcontact.com/in/products/1501715



By the meter, Cable reel, shielded, PUR halogen-free, black-gray RAL 7021, 4-wire, color single wire: brown, white, blue, black, cable length: 100 m

### A 0,25-5 - Ferrule

3202465 https://www.phoenixcontact.com/in/products/3202465



Ferrule, length: 5 mm, color: silver

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### **CRIMPFOX 6H - Crimping pliers**

### 1212046

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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 mm<sup>2</sup> ... 6 mm<sup>2</sup>, unlockable pressure lock, lateral entry

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

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



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

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