

1681486

https://www.phoenixcontact.com/in/products/1681486

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Connector, Universal, 5-position, Socket straight M12, coding: A, Screw connection, knurl material: Zinc die-cast, 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

#### Commercial data

Item number	1681486	
Packing unit	1 pc	
Minimum order quantity	1 pc	
Sales key	BF2	
Product key	BF2CAA	
Catalog page	Page 22 (C-2-2019)	
GTIN	4017918157449	
Weight per piece (including packing)	26.4 g	
Weight per piece (excluding packing)	26 g	
Customs tariff number	85366990	
Country of origin	DE	



1681486

https://www.phoenixcontact.com/in/products/1681486

### Technical data

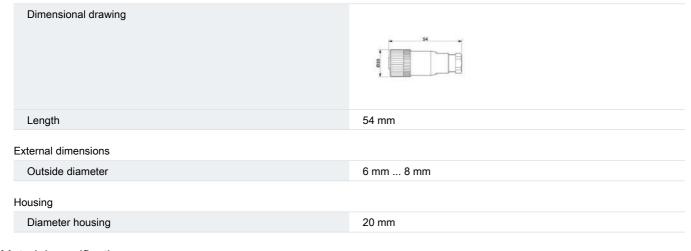
#### Notes

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	5		
No. of cable outlets	1		
Shielded	no		
Coding	A		
Cable outlet	straight		
Pg screw connection	Pg9		
Insulation characteristics			
Overvoltage category	II		
Degree of pollution	3		

### Dimensions



### Material specifications

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



1681486

https://www.phoenixcontact.com/in/products/1681486

### 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 screw with sleeve housing)	

### Electrical properties

Rated surge voltage	1.5 kV
Contact resistance	≤ 8 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	≥ 50		

### 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



1681486

https://www.phoenixcontact.com/in/products/1681486

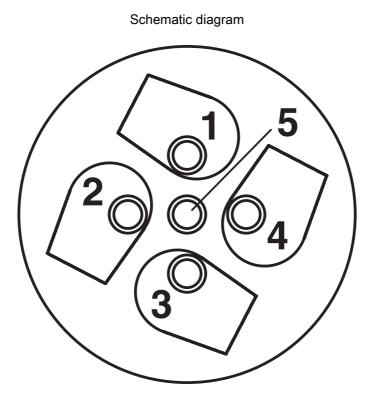
Standard designation	M12 connector
Standards/specifications	IEC 61076-2-101



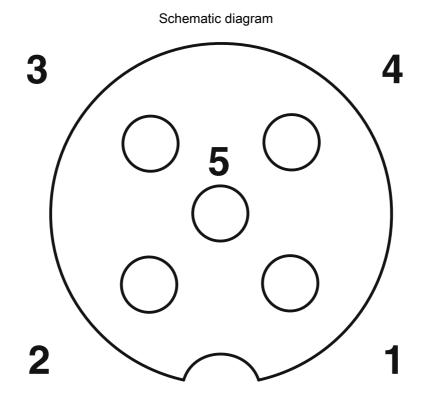
https://www.phoenixcontact.com/in/products/1681486



### Drawings



Cable connection side M12 (screw connection)

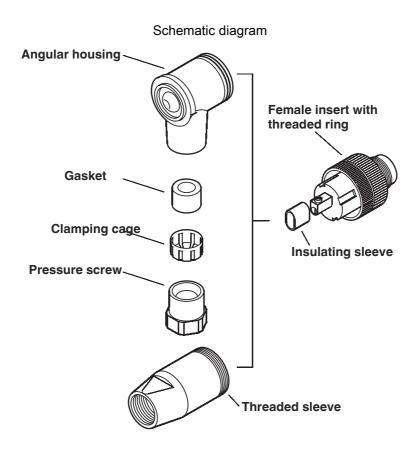


Pin assignment M12 socket, 5-pos., A-coded, socket side view



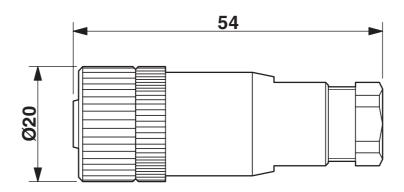
https://www.phoenixcontact.com/in/products/1681486





Male/Female M12

Dimensional drawing



M12 x 1 socket, straight



1681486

https://www.phoenixcontact.com/in/products/1681486

### **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/in/products/1681486

CUL Recognized Approval ID: FILE E 221474					
	I	Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		60 V	4 A	-	-

<b>71</b>	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>	
		60 V	4 A	-	-	

cULus Recognized



1681486

https://www.phoenixcontact.com/in/products/1681486

### Classifications

UNSPSC 21.0

### **ECLASS**

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

39121400



1681486

https://www.phoenixcontact.com/in/products/1681486

### 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	ea1d2ae3-a11c-4084-b1ef-f2098df25052



1681486

https://www.phoenixcontact.com/in/products/1681486

#### Accessories

### 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-5P-100,0-186/0,75 - Cable reel

1535590

https://www.phoenixcontact.com/in/products/1535590



By the meter, Cable reel, PUR, black-gray RAL 7021, 5-wire, color single wire: brown, white, blue, black, gray, cable length:  $100\ m$ 



1681486

https://www.phoenixcontact.com/in/products/1681486

### 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

### 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 Nm



1681486

https://www.phoenixcontact.com/in/products/1681486

### 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

### 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





1681486

https://www.phoenixcontact.com/in/products/1681486

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:  $0.6 \times 3.5 \times 100$  mm, 2-component grip, with non-slip grip

Phoenix Contact 2024 © - all rights reserved https://www.phoenixcontact.com

PHOENIX CONTACT (I) Pvt. Ltd. A-58/2, Okhla Industrial Area, Phase - II, New Delhi-110 020

+91.1275.71420 info@phoenixcontact.co.in