

1554717

https://www.phoenixcontact.com/in/products/1554717

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Device connector, rear mounting, Universal, 5-position, Flush-type female connector, straight, M12-Standard, coding: A, on free cable end, Rear mounting, Pg9, Individual wires, cable length: 0.5 m, 0.34 mm<sup>2</sup>, TPE litz wire

## Your advantages

- · Pre-assembled with litz wires for immediate use
- · Customer-specific assemblies and litz wire lengths available
- · Sealed on the litz wire side for optimum leak-tightness
- All standard pin assignments and codings for signal, data, and power transmission with a uniform design-in design
- · For high transmission safety: shield connection to the housing with optional EMC nut

## **Commercial Data**

Item number	1554717	
Packing unit	1 pc	
Minimum order quantity	1 pc	
Sales Key	ABQ	
Product Key	ABQCFD	
Catalog Page	Page 270 (C-2-2013)	
GTIN	4046356170369	
Weight per Piece (including packing)	36.5 g	
Weight per Piece (excluding packing)	26.1 g	
Customs tariff number	85366990	
Country of origin	DE	



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### **Technical Data**

#### Notes

The electrical and mechanical data specified assume that the connector pair is correctly locked and mounted. If the connector is unlocked and if there is a danger of contamination, the connector must be sealed using a protective cap > IP54. Influences arising from litz wires, cables or PCB assembly must also be taken into consideration.

#### Safety note

### Safety note

WARNING: The connectors may not be plugged in or disconnected under load. Ignoring the warning or improper use may damage persons and/or property.

- WARNING: Commission properly functioning products only.
   The products must be regularly inspected for damage.
   Decommission defective products immediately. Replace damaged products. Repairs are not possible.
- WARNING: Only electrically qualified personnel may install and operate the product. They must observe the following safety notes. The qualified personnel must be familiar with the basics of electrical engineering. They must be able to recognize and prevent danger. The relevant symbol on the packaging indicates that only personnel familiar with electrical engineering are allowed to install and operate the product.
- The products are suitable for applications in plant, controller, and electrical device engineering.
- When operating the connectors in outdoor applications, they must be separately protected against environmental influences.
- Assembled products may not be manipulated or improperly opened.
- Only use mating connectors that are specified in the technical data of the standards listed (e.g. the ones listed in the product accessories online at phoenixcontact.com/products).
- When using the product in direct connection with third-party manufacturers, the user is responsible.
- For operating voltages > 50 V AC, conductive connector housings must be grounded
- Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standards.
- Observe the corresponding technical data. You will find information:
- o On the product
- o On the packing label
- o In the supplied documentation
- o Online at phoenixcontact.com/products under the product
- · Only use tools recommended by Phoenix Contact
- Use a protective cap to protect connectors that are not in use.
   The suitable accessories are available online in the accessory section of the product at phoenixcontact.com/products



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	<ul> <li>Ensure that the protective or functional ground has been properly connected.</li> </ul>		
	<ul> <li>VDE 0100/1.97 § 411.1.3.2 and DIN EN 60 204/11.98 § 14.1.3 are applicable when combining several circuits in a cable and/or connector</li> </ul>		
	<ul> <li>The connector warms up in normal operation. Depending on the ambient conditions, the surface of the connector can continue to warm up. In this case, the user is responsible for posting warnings (e.g. DIN EN ISO 13732-1:2008-12).</li> </ul>		
unting			
Mounting type	Rear mounting Pg9 With locking nut		
Assembly instructions	With locking nut		
oduct properties			
Product type	Circular connectors (device side)		
Number of positions	5		
Shielded	no		
Coding	A		
Thread type	M12		
nsulation characteristics			
Overvoltage category	III		
Degree of pollution	3		
terial specifications			
Flammability rating according to UL 94	V0		
Seal material	FKM		
Contact material	CuZn		
Contact surface material	Au		
Contact carrier material	PA 6.6		
Material for screw connection	Stainless steel		
Conductor material	Tin-plated Cu litz wires		
ctrical properties			
Rated surge voltage	1.5 kV		
Contact resistance	≤ 3 mΩ		
Insulation resistance	≥ 100 MΩ		
Nominal voltage U <sub>N</sub>	60 V (AC)		
	60 V (DC)		
Nominal current I <sub>N</sub>	4 A		
Test voltage	1.5 kV		

## Connection data

Conductor connection



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Connection method	Individual wires	
Type of contact	Crimp contacts	
Conductor cross section	0.34 mm²	
Tightening torque	2 Nm	
	3 Nm	

## Connector

### Connection 1

Head design	Flush-type female connector
Head cable outlet	straight
Head thread type	M12
Head locking type	Standard
Coding	A

#### Connection 2

Head design	free cable end

### Cable/line

Cable length	0.5 m	
Cable type	TPE litz wire	
Signal type/category	Universal	
Wire diameter incl. insulation	1.2 mm ±0.07 mm	
Single wire, color	black, brown,blue, white, gray	
Conductor material	Tin-plated Cu litz wires	
Conductor structure signal line	7x 0.25 mm	
AWG signal line	22	
Material wire insulation	TPE	
Thickness, insulation	0.21 mm	
Nominal voltage, cable	300 V	
Test voltage, cable	2000 V AC	
Cable resistance	≤ 57.6 mΩ/m	
Cable insulation resistance	≥ 20 MΩ*km	
Ambient temperature (operation)	-40 °C 85 °C (cable, fixed installation)	
	-25 °C 85 °C (Cable, flexible installation)	

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP65/IP67/IP69/IP69K	
	IP69K	
	IP65/IP67/IP69K	
Ambient temperature (operation)	-25 °C 85 °C (Plug / socket)	
	-40 °C 85 °C (without mechanical actuation)	



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	-25 °C 85 °C (Cable, flexible installation)	
	-40 °C 85 °C (cable, fixed installation)	
Standards and regulations		
M12		

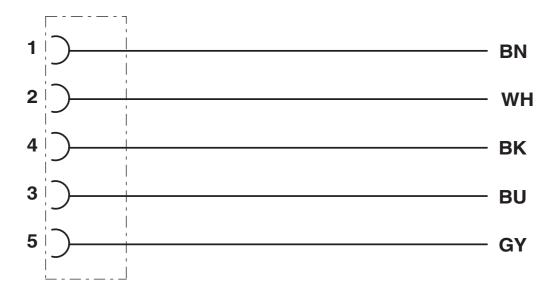


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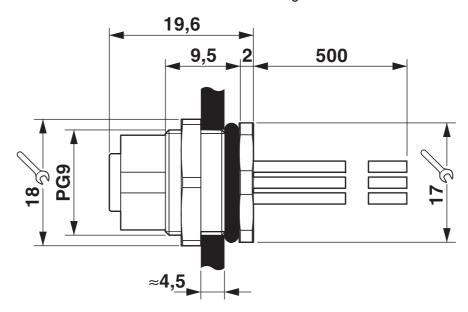
https://www.phoenixcontact.com/in/products/1554717

## Drawings

## Circuit diagram



## Dimensional drawing

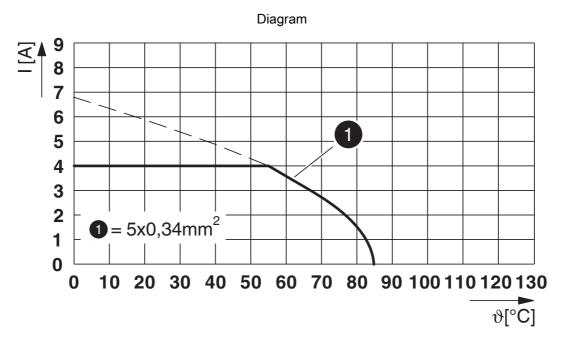


Dimensional drawing

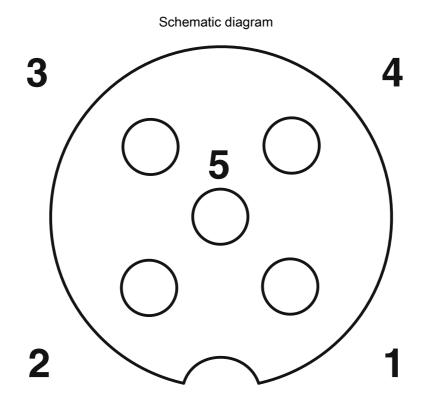


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I = current strength, T = ambient temperature



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



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## Approvals

. <b>7.1</b>	<b>cUL Recognized</b> Approval ID: E118976-20	0100522			
		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	- 22	-

<b>7.1</b>	UL Recognized Approval ID: E118976-20	0100522			
		Nominal Voltage $U_N$	Nominal Current I <sub>N</sub>	Cross Section AWG	Cross Section mm <sup>2</sup>
		60 V	4 A	- 22	-

ERC	EAC
LIIL	Approval ID: B.01687

c <b>911</b> us	cULus Recognized Approval ID: E221474-20140616					
		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	22 - 20	-	



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## Classifications

### **ECLASS**

201.00					
	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**

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values



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## Accessories

PROT-M12 - Screw plug

1680539

https://www.phoenixcontact.com/in/products/1680539



An M12 screw plug for the unoccupied M12 sockets of the sensor/actuator cable, boxes and flush-type connectors

## PROT-M12 SH - Screw plug

1503302

https://www.phoenixcontact.com/in/products/1503302



An M12 screw plug for the unoccupied M12 sockets of the shielded sensor/actuator cable, boxes and flush-type connectors



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## PROT-M12 FB - Screw plug

1555538

https://www.phoenixcontact.com/in/products/1555538



M12 high-grade steel screw plug, for unoccupied M12 sockets of the sensor/actuator cables, boxes and flush-type connectors for the food industry

## SACC-PG9-SEAL CLM - Flat gasket

1556320

https://www.phoenixcontact.com/in/products/1556320

Pg9 flat gasket, for M12 flush-type connectors with Pg9 fastening thread



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