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Device connector front mounting, Universal, 4-position, Flush-type female connector, straight, M12-Standard, coding: A, on free cable end, Front mounting, Pg9, Individual wires, cable length: 0.5 m, 0.34 mm², 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	1693788
Packing unit	1 pc
Minimum order quantity	1 pc
Sales Key	ABQCDB
Product Key	ABQCDB
Catalog Page	Page 35 (C-2-2019)
GTIN	4017918174330
Weight per Piece (including packing)	30,5 g
Weight per Piece (excluding packing)	20 g
Customs tariff number	85444290
Country of origin	DE

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Technical Data

Notes

Notes on operation	Notes	on	operation	n
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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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	Ensure that the protective or functional ground has been properly connected.
	 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
	 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).
Mounting	
Mounting type	Front mounting Pg9
Product properties	
Product type	Circular connectors (device side)
Number of positions	4
No. of cable outlets	1
Shielded	no
Coding	A
Thread type	M12
Insulation characteristics	
Overvoltage category	II
Degree of pollution	3
Material specifications	
Flammability rating according to UL 94	V0
Seal material	FKM
Contact material	CuZn
Contact surface material	Ni/Au
Contact carrier material	PA 66
Material for screw connection	Zinc die-cast, nickel-plated
Electrical properties	
Rated surge voltage	2.5 kV
Contact resistance	≤ 3 mΩ
Insulation resistance	≥ 100 MΩ
Nominal voltage U _N	250 V (AC)
	250 V (DC)
Nominal current I _N	4 A
Connection data	
Conductor connection	
Connection method	Individual wires
Type of contact	Crimp contacts

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Conductor cross section	0.34 mm²
Tightening torque	3 Nm
	4 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
Shielded	no
Cable type	TPE litz wire
Signal type/category	Universal
Conductor material	Tin-plated Cu litz wires
Conductor structure signal line	7x 0.25 mm
AWG signal line	22
Conductor cross section	0.34 mm ²
Material wire insulation	TPE
Thickness, insulation	0.21 mm
Wire diameter incl. insulation	1.2 mm ±0.07 mm
Single wire, color	brown, white, blue, black
Nominal voltage, cable	300 V
Test voltage, cable	2000 V AC
Cable resistance	≤ 57.6 Ω/km
Cable insulation resistance	≥ 20 MΩ*km
Ambient temperature (operation)	-25 °C 85 °C
	-40 °C 85 °C (cable, fixed installation)

Environmental and real-life conditions

Ambient conditions

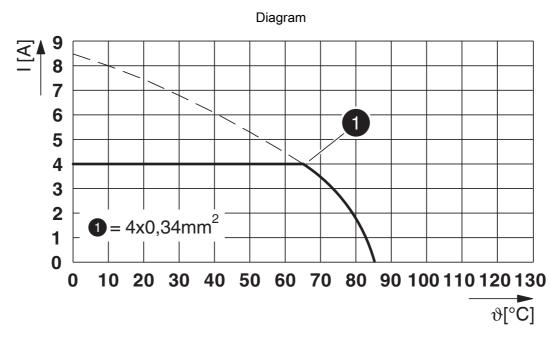
Degree of protection	IP67
	IP67
Ambient temperature (operation)	-25 °C 85 °C (Plug / socket)
	-40 °C 85 °C (without mechanical actuation)
	-25 °C 85 °C

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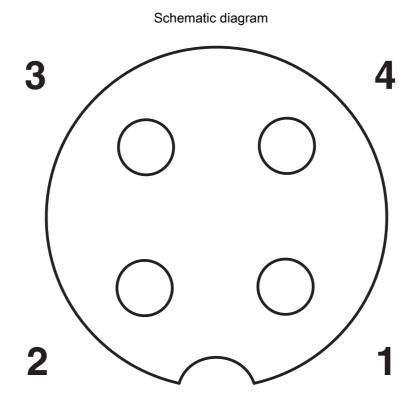
	-40 °C 85 °C (cable, fixed installation)
Standards and regulations	
M12	
Standards/specifications	IEC 61076-2-101

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Drawings



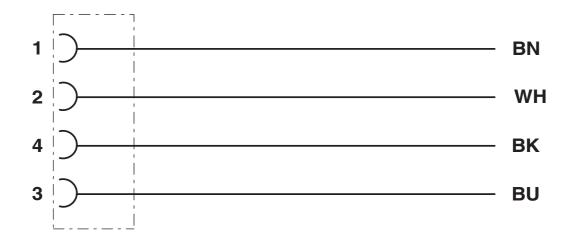
I = current strength, T = ambient temperature



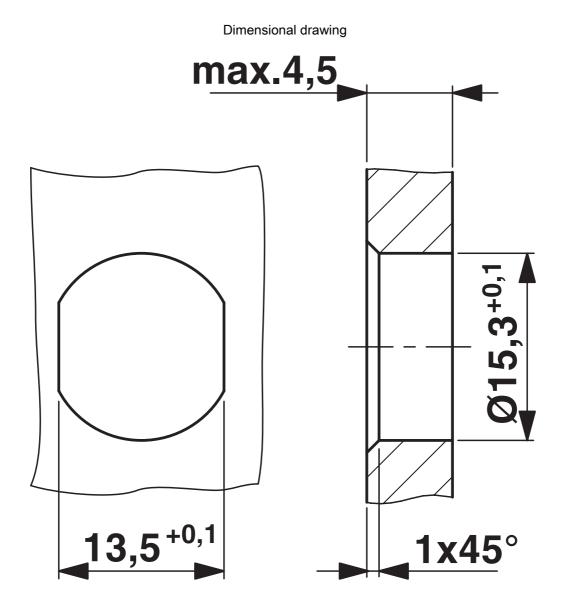
Pin assignment M12 socket, 4-pos., A-coded, view female side

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Circuit diagram

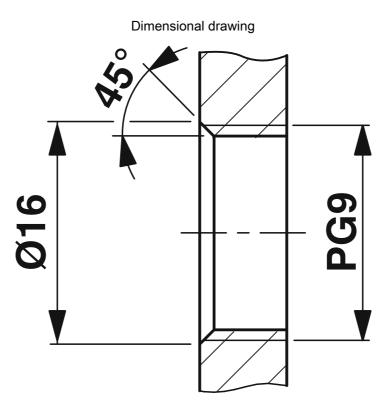


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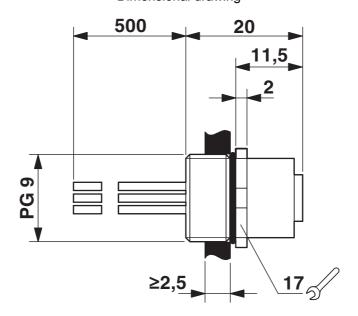
Housing cutout for Pg9 fastening thread, mounting panel with feed-through hole (alternatively with surface as protection against rotation)

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Housing cutout for Pg9 fastening thread, mounting panel with thread

Dimensional drawing



Dimensional drawing

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Approvals

. 7.1	cUL Recognized Approval ID: FILE E 118	976			
		Nominal Voltage U_N	Nominal Current I _N	Cross Section AWG	Cross Section mm ²
		250 V	4 A	- 22	-

7/	UL Recognized Approval ID: FILE E 1189	976			
		Nominal Voltage U_N	Nominal Current I _N	Cross Section AWG	Cross Section mm ²
		250 V	4 A	- 22	-

ERE	EAC Approval ID: B.01687	
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1711 us A	cULus Recognized Approval ID: E221474-20140616			
	Nominal Voltage U_N	Nominal Current I _N	Cross Section AWG	Cross Section mm ²
	250 V	4 A	22 - 20	-

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Classifications

ECLASS

	ECLASS-11.0	27440102		
	ECLASS-12.0	27440116		
	ECLASS-13.0	27440116		
ETIM				
	ETIM 8.0	EC002635		

UNSPSC

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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

SACC-E-MU-PG9 - Flat nut

1504084

ID:1504084

Flat nut, Screw mounting, Pg9, cable gland Pg9, Alternative product in accordance with RoHS II without Exemption 6c (Pb <0.1%) item no.: 1239862



SACC-PG9-SEAL CLM - Flat gasket

1556320 ID:1556320

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



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PROT-M12 - Screw plug

1680539 ID: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 ID: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 ID: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