

1419629

https://www.phoenixcontact.com/us/products/1419629

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Device connector rear mounting, Universal, 4-position, Pin, straight, M12-Standard, coding: A, on free cable end, Rear mounting, M16 x 1.5, Individual wires, cable length: 0.5 m,  $0.34 \text{ mm}^2$ , TPE litz wire, Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1239274

### Your advantages

- · Preassembled 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
- · SPEEDCON fast locking system reduces cabling times

#### Commercial data

Item number	1419629
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB24
Product key	ABQCGB
Catalog page	Page 49 (C-2-2019)
GTIN	4046356533478
Weight per piece (including packing)	33.2 g
Weight per piece (excluding packing)	23.3 g
Customs tariff number	85444290
Country of origin	DE



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#### Technical data

#### **Notes**

Order information:  Lock nut is included in the scope of delivery  Contact connection method: Crimp connection	Notes on operation	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.
Contact connection method: Crimp connection	Order information:	Lock nut is included in the scope of delivery
General Connection method: Crimp connection	General	Contact connection method: Crimp connection

#### Safety note

Sa	tety	no no	te

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.



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		The suitable accessories are available online in the accessory section of the product at phoenixcontact.com/products
		<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>
Mo	unting	
	Mounting type	Rear mounting M16 x 1.5 With flat nut
	Assembly instructions	With flat nut
Pro	duct properties	
1 10	· ·	Circular accordance (davice side)
	Product type Sensor type	Circular connectors (device side) Universal
		4
	Number of positions  No. of cable outlets	1
	Shielded	no
	Coding	A
	Thread type	M12
	Thread type	W12
Ir	sulation characteristics	
	Overvoltage category	II
	Degree of pollution	3
Mat	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	Zinc die-cast, nickel-plated
	Conductor material	Tin-plated Cu litz wires
Ele	ctrical properties	
	Rated surge voltage	2.5 kV
	Contact resistance	≤ 3 mΩ
	Insulation resistance	≥ 100 MΩ
	Nominal voltage U <sub>N</sub>	250 V (AC)
		250 V (DC)
	Nominal current I <sub>N</sub>	4 A
	Transmission medium	Copper



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Max. conductor resistance	57.6 mΩ/m
onnection data	
Conductor connection	
Connection method	Individual wires
Contact connection type	Pin
Conductor cross section	0.34 mm²
Tightening torque	3 Nm 4 Nm (Installation-side)
echanical properties	
Mechanical data	
Insertion/withdrawal cycles	> 100
onnector	
Connection 1	
Head design	Pin
Head cable outlet	straight
Head thread type	M12
Head locking type	Standard
Coding	A
Connection 2	
Head design	free cable end
11000 000.gi	noo oasio ona
able/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	brown, white, blue, black
Cable cross section	0.34 mm²
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 (Core insulation)
Nominal voltage, cable	300 V
Nominal voltage, cable Test voltage, cable	300 V 3000 V AC
Test voltage, cable	3000 V AC
Test voltage, cable  Cable resistance	3000 V AC ≤ 57.6 mΩ/m



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#### Environmental and real-life conditions

#### Ambient conditions

Degree of protection	IP67 (When plugged in)
	IP65 (When plugged in)
	IP65/IP67
Ambient temperature (operation)	-25 °C 85 °C (Plug / socket)
	-40 °C 85 °C (without mechanical actuation)
	-25 °C 85 °C (Cable, flexible installation)
	-40 °C 85 °C (cable, fixed installation)

### Standards and regulations

#### M12

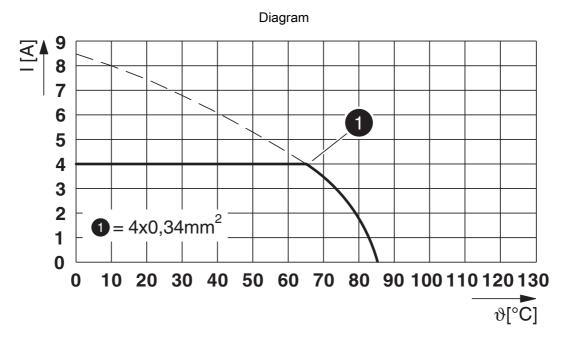
Standard designation	M12 connector
Standards/specifications	IEC 61076-2-101



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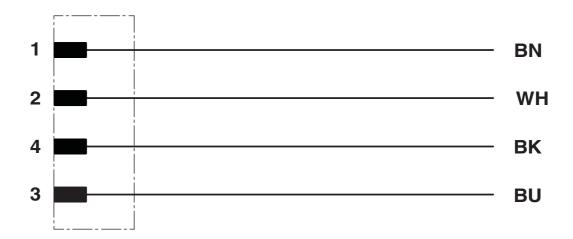
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## Drawings



I = current strength, T = ambient temperature

Circuit diagram

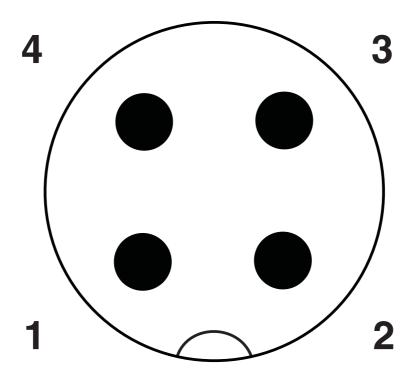




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### Schematic diagram



Pin assignment of M12 male connector, 4-pos., A-coded, view of connector side



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### Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1419629

.91	<b>cUL Recognized</b> Approval ID: E118976-20100522			
	Nominal	voltage U <sub>N</sub> Nominal cur	rent I <sub>N</sub> Cross section AV	VG Cross section mm <sup>2</sup>
	250 V	4 A	22 - 22	-

<b>71</b>	UL Recognized Approval ID: E118976-20	1100522			
		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	22 - 22	-

c <b>911</b> vs	cULus Recogniz Approval ID: E221474	<b>zed</b> 4-20140616			
		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	22 - 20	-

al II	December
COLUS	Recognized



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### Classifications

UNSPSC 21.0

### **ECLASS**

27440102
27440116
27440116
EC002635

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	f4c4c2d7-57c7-4524-b205-2ff863d6ae09



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### Accessories

PROT-M12 FS - Sealing cap

1560251

https://www.phoenixcontact.com/us/products/1560251



M12 sealing cap for unoccupied M12 plugs of the sensor/actuator cable, flush-type plugs and I/O devices in the field

### PROT-M12 FS-M - Sealing cap

1430488

https://www.phoenixcontact.com/us/products/1430488



M12 metal sealing cap for unoccupied M12 plugs of the sensor/actuator cable, flush-type plugs and I/O devices in the field



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### SACC-M16-SEAL CLM - Flat gasket

1430394

https://www.phoenixcontact.com/us/products/1430394

M16 flat gasket for M12 flush-type connectors with M16 fastening thread



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