

1551901

https://www.phoenixcontact.com/us/products/1551901

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Device connector rear mounting, PROFINET, 4-position, Pin, straight, M12-SPEEDCON, coding: D, on free cable end, Rear mounting, M12 x 1, Individual wires, cable length: 0.5 m, 0.34 mm², TPE litz wire, Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1240002

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
- Standard pin assignments for signal 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	1551901
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB24
Product key	ABQCGA
Catalog page	Page 47 (C-2-2019)
GTIN	4046356161961
Weight per piece (including packing)	27.6 g
Weight per piece (excluding packing)	17.4 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

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.



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	The suitable accessories are available online in the accessory section of the product at phoenixcontact.com/products
	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).
punting	
Mounting type	Rear mounting M12 x 1 With locking nut
Assembly note	With locking nut
oduct properties	
Product type	Circular connectors (device side)
Sensor type	PROFINET
Number of positions	4
No. of cable outlets	1
Shielded	no
Coding	D
Thread type	M12
Data management status	
Article revision	12
nsulation characteristics	
Overvoltage category	II
Degree of pollution	3
terial specifications	
Flammability rating according to UL 94	V0
Seal material	NBR
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
ectrical properties	
	2.5 kV
Rated surge voltage	· ·
Rated surge voltage Contact resistance	≤ 3 mΩ
	≤ 3 mΩ ≥ 100 MΩ



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	250 V (DC)
Nominal current I _N	4 A
Max. conductor resistance	57.6 mΩ/m

Connection data

Conductor connection

Connection method	Individual wires
Contact connection type	Pin
Conductor cross section	0.34 mm²
Tightening torque	1.5 Nm 2 Nm (Installation-side)

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	> 100

Connector

Connection 1

Head design	Pin
Head cable outlet	straight
Head thread type	M12
Head locking type	SPEEDCON
Coding	D

Connection 2

Head design	free cable end
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Cable/line

Cable length	0.5 m
Cable type	TPE litz wire
Signal type/category	PROFINET
Wire diameter incl. insulation	1.2 mm ±0.07 mm
Single wire, color	yellow, orange, white, blue
Cable cross section	0.34 mm ²
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
Test voltage, cable	2000 V AC
Cable resistance	≤ 57.6 mΩ/m
Cable insulation resistance	≥ 20 MΩ*km



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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	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

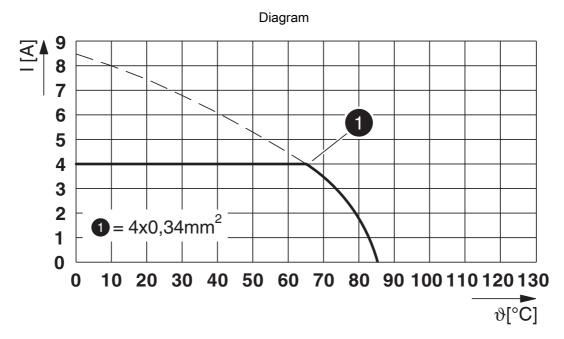
Standard designation	M12 connector
Standards/specifications	IEC 61076-2-101



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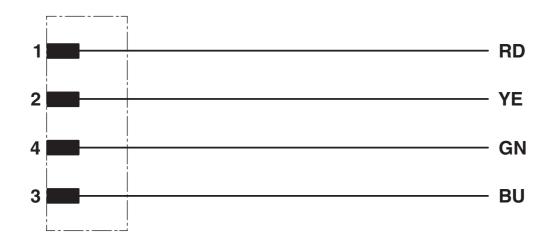
https://www.phoenixcontact.com/us/products/1551901

Drawings



I = current strength, T = ambient temperature

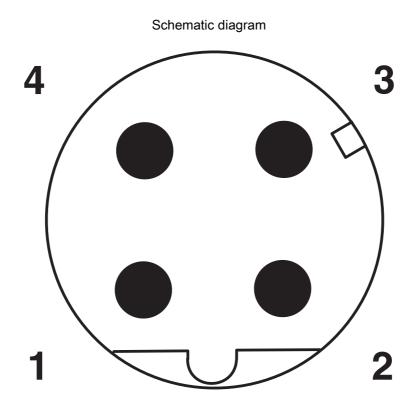
Circuit diagram





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Pin assignment M12 male connector, 4-pos., D-coded, male side



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Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1551901

UL Recognized Approval ID: E118976-20100522					
		Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
		250 V	4 A	22 - 22	-

c 911 us	CULus Recognized Approval ID: E221474-20140616				
		Nominal voltage \mathbf{U}_{N}	Nominal current I _N	Cross section AWG	Cross section mm ²
		250 V	4 A	22 - 20	-



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Classifications

UNSPSC 21.0

ECLASS

202.00		
27440102		
27440116		
27440116		
ETIM		
EC002635		
UNSPSC		

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	d7101b8d-26ed-4829-9183-3c015313f6f5

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