

1551529

https://www.phoenixcontact.com/us/products/1551529

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.



Device connector rear mounting, PROFINET CAT5 (IEC 11801:2002), 4-position, Socket, straight, M12-SPEEDCON, coding: D, on free cable end, Rear mounting, Pg9, Individual wires, cable length: 0.5 m, 0.34 mm^2 , TPE litz wire, Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1239987

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	1551529
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB24
Product key	ABQCHE
Catalog page	Page 46 (C-2-2019)
GTIN	4046356153614
Weight per piece (including packing)	32.5 g
Weight per piece (excluding packing)	22.3 g
Customs tariff number	85444290
Country of origin	DE



1551529

https://www.phoenixcontact.com/us/products/1551529

Technical data

Notes

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.
Notes on operation	This product corresponds to the PROFINET Cabling and Interconnection Technology Guideline for PROFINET regulations, version 2.00, order no: 2.252, Chapter 8.2 Connectors for Outside Environment (Balanced cabling)
Order information:	Lock nut is included in the scope of delivery
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.



1551529

https://www.phoenixcontact.com/us/products/1551529

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
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).
Rear mounting Pg9 With flat nut
With flat nut

Product properties

Product type	Circular connectors (device side)
Application	Data
	Signal
Sensor type	PROFINET
Number of positions	4
No. of cable outlets	1
Shielded	no
Coding	D
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 6.6
Material for screw connection	Zinc die-cast, nickel-plated
Conductor material	Tin-plated Cu litz wires



1551529

https://www.phoenixcontact.com/us/products/1551529

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
Transmission medium	Copper
Transmission characteristics (category)	CAT5 (IEC 11801:2002)
Max. conductor resistance	57.6 mΩ/m

Connection data

Conductor connection

Connection method	Individual wires
Contact connection type	Socket
Conductor cross section	0.34 mm²
Tightening torque	2 Nm 3 Nm (Installation-side)

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	≥ 100

Connector

Connection 1

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

Connection 2

Head design free cable end

Cable/line

Cable length	0.5 m
Cable type	TPE litz wire
Signal type/category	PROFINET CAT5 (IEC 11801:2002)
Wire diameter incl. insulation	1.2 mm ±0.07 mm
Single wire, color	yellow, orange, white, blue
Cable cross section	0.34 mm²
Conductor material	Tin-plated Cu litz wires



1551529

https://www.phoenixcontact.com/us/products/1551529

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

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)

Standards and regulations

M12

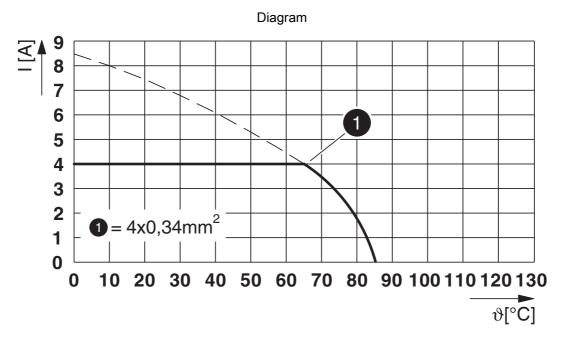
Standard designation	M12 connector	
Standards/specifications	according to IEC 61076-2-101	



1551529

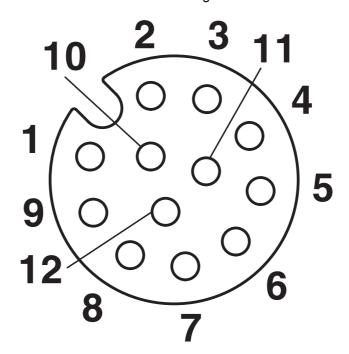
https://www.phoenixcontact.com/us/products/1551529

Drawings



I = current strength, T = ambient temperature

Schematic diagram



Pin assignment M12, 12-pos., female side view



1551529

https://www.phoenixcontact.com/us/products/1551529

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1551529

71	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	-

e 711 us	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	-



1551529

https://www.phoenixcontact.com/us/products/1551529

Classifications

ECLASS

	ECLASS-11.0	27440102		
	ECLASS-12.0	27440116		
	ECLASS-13.0	27440116		
ETIM				
	ETIM 9.0	EC002635		
UNSPSC				
	UNSPSC 21.0	39121400		



1551529

https://www.phoenixcontact.com/us/products/1551529

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	7e087463-5358-49bf-bc4b-8be971495d52



1551529

https://www.phoenixcontact.com/us/products/1551529

Accessories

PROT-M12 - Screw plug

1680539

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



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



1551529

https://www.phoenixcontact.com/us/products/1551529

PROT-M12 FB - Screw plug

1555538

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

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



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

Phoenix Contact USA 586 Fulling Mill Road Middletown, PA 17057, United States (+717) 944-1300 info@phoenixcon.com