

1417580

https://www.phoenixcontact.com/pc/products/1417580

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Device connector rear mounting, Universal, 4-position, Pin, straight, M12-SPEEDCON, coding: A, on free cable end, Rear mounting, M12 x 1, Individual wires, cable length: 1 m, 0.34 mm², TPE litz wire, Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1239167

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	1417580
Packing unit	1 pc
Minimum order quantity	25 pc
Product key	ABQCGA
GTIN	4055626117447
Weight per piece (including packing)	26.1 g
Weight per piece (excluding packing)	26.1 g
Customs tariff number	85444290
Country of origin	DE



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

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).
lounting	
Mounting type	Rear mounting M12 x 1 With flat nut
Assembly note	With flat nut
roduct properties	
Product type	Circular connectors (device side)
Sensor type	Universal
Number of positions	4
No. of cable outlets	1
Shielded	no
Coding	A
Thread type	M12
Data management status	
Article revision	08
Insulation characteristics	
Overvoltage category	II
Degree of pollution	3
laterial specifications	
ateriai specifications	
Flammability rating according to UL 94	V0
·	V0 NBR
Flammability rating according to UL 94	
Flammability rating according to UL 94 Seal material	NBR
Flammability rating according to UL 94 Seal material Contact material	NBR CuZn
Flammability rating according to UL 94 Seal material Contact material Contact surface material	NBR CuZn Au
Flammability rating according to UL 94 Seal material Contact material Contact surface material Contact carrier material	NBR CuZn Au PA 6.6
Flammability rating according to UL 94 Seal material Contact material Contact surface material Contact carrier material Material for screw connection	NBR CuZn Au PA 6.6 Zinc die-cast, nickel-plated
Flammability rating according to UL 94 Seal material Contact material Contact surface material Contact carrier material Material for screw connection Conductor material	NBR CuZn Au PA 6.6 Zinc die-cast, nickel-plated
Flammability rating according to UL 94 Seal material Contact material Contact surface material Contact carrier material Material for screw connection Conductor material lectrical properties	NBR CuZn Au PA 6.6 Zinc die-cast, nickel-plated Tin-plated Cu litz wires
Flammability rating according to UL 94 Seal material Contact material Contact surface material Contact carrier material Material for screw connection Conductor material lectrical properties Rated surge voltage	NBR CuZn Au PA 6.6 Zinc die-cast, nickel-plated Tin-plated Cu litz wires



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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	A

Connection 2

Head design	free cable end

Cable/line

Cable length	1 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		
Nominal voltage, cable	300 V		
Test voltage, cable	3000 V AC		
Cable resistance	≤ 57.6 mΩ/m		
Cable insulation resistance	≥ 20 MΩ*km		



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Standard designation

Standards/specifications

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 connector

according to IEC 61076-2-101



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Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/pc/products/1417580

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 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

27440102					
27440116					
27440116					
ETIM					
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	effc8e75-59fd-4a2b-ac3f-f3eb1dfcc6e6

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