

1440973

https://www.phoenixcontact.com/pc/products/1440973

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Device connector front mounting, 5-position, Pin, straight, M12, coding: A, on free cable end, Front mounting, Square flange, 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.: 1239716

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	1440973	
Packing unit	1 pc	
Minimum order quantity	1 pc	
Product key	ABQCED	
Catalog page	Page 43 (C-2-2019)	
GTIN	4046356533836	
Weight per piece (including packing)	35.38 g	
Weight per piece (excluding packing)	26.2 g	
Customs tariff number	85444290	
Country of origin	DE	



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Technical data

Notes

ites	
General	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.
General	Contact connection method: Crimp connection
afety 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 published adjusting in the accessory.

The suitable accessories are available online in the accessory



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	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).
Mounting	
Mounting type	Front mounting Square flange
Product properties	
Product type	Circular connectors (device side)
Number of positions	5
Application	Signal
Shielded	no
Coding	A
Thread type	M12
Insulation characteristics	
	II
Overvoltage category Degree of pollution	3
Degree of political	3
Naterial specifications	
Flammability rating according to UL 94	V0
Seal material	FKM
Material of grip body	Zinc die-cast, nickel-plated
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
Electrical properties	
Rated surge voltage	1.5 kV
Contact resistance	≤ 3 mΩ
Insulation resistance	≥ 100 MΩ
Nominal voltage U _N	60 V
Nominal current I _N	4 A
Test voltage	1.5 kV
	2000 V AC



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Connection 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)	

Mechanical properties

Mechanical data

Insertion/withdrawal cycles > 100	
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Connector

Connection 1

Head design	Pin
Head cable outlet	straight
Head thread type	M12
Coding	A

Connection 2

Cable/line

Cable length	0.5 m
Cable type	TPE litz wire
Wire diameter incl. insulation	1.2 mm ±0.07 mm
Single wire, color	brown, white, blue, black, gray
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	
Test voltage, cable 2000 V AC	
Cable resistance ≤ 57.6 mΩ/m	
Cable insulation resistance	≥ 20 MΩ*km
Ambient temperature (operation)	-40 °C 85 °C (cable, fixed installation)
	-25 °C 85 °C (Cable, flexible installation)

Environmental and real-life conditions

Ambient conditions



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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 (Cable, flexible installation)
	-40 °C 85 °C (cable, fixed installation)

Standards and regulations

M12

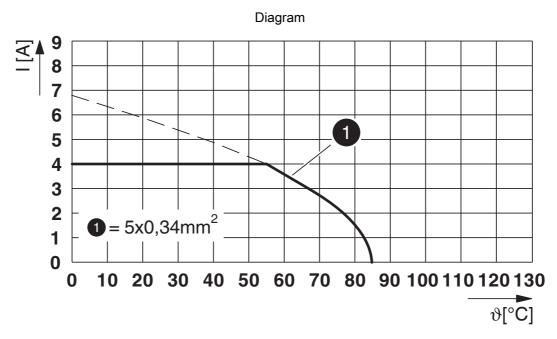
Standard designation	M12 connector	
Standards/specifications	IEC 61076-2-101	



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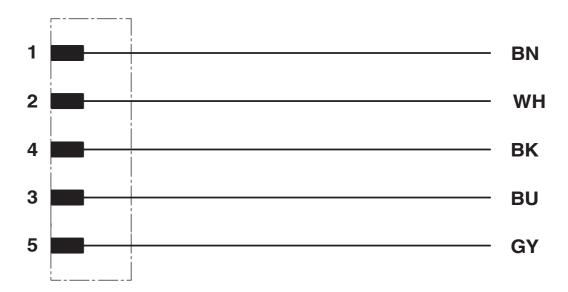
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Drawings



I = current strength, T = ambient temperature

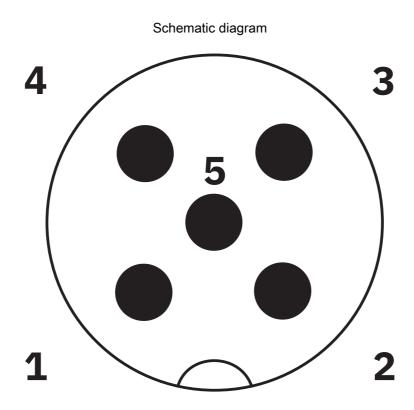
Circuit diagram





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Pin assignment M12 male connector, 5-pos., A-coded, male side



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Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/pc/products/1440973

. 91	cUL Recognized Approval ID: E118976-20100522				
		Nominal voltage U_N	Nominal current I _N	Cross section AWG	Cross section mm ²
		60 V	4 A	22 - 22	-

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

e Flus cULu	cULus Recognized Approval ID: E221474-20140616				
	Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²	
	60 V	4 A	22 - 20	-	

cULus Recognized



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Classifications

UNSPSC 21.0

ECLASS

202.00				
27440102				
27440116				
27440116				
ETIM				
EC002635				

39121400



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Environmental product compliance

REACh SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

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