

1401110

https://www.phoenixcontact.com/in/products/1401110

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Device connector front mounting, Universal, 5-position, Socket, straight, M12-SPEEDCON, coding: A, on free cable end, Front mounting, M16 x 1.5, Individual wires, cable length: 1 m, 0.34 mm², TPE litz wire, potted

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	1401110	
Packing unit	1 pc	
Minimum order quantity	50 pc	
Sales key	****	
Product key	ABQCFB	
GTIN	4046356523813	
Weight per piece (including packing)	42.5 g	
Weight per piece (excluding packing)	32.7 g	
Customs tariff number	85444290	
Country of origin	DE	



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Technical data

Notes

otes	
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.
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: On the product On the packing label In the supplied documentation 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 state of

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).
lounting	
Mounting type	Front mounting M16 x 1.5
roduct properties	
Product type	Circular connectors (device side)
Application	Signal
Sensor type	Universal
Number of positions	5
No. of cable outlets	1
Shielded	no
Coding	A
Thread type	M12
Insulation characteristics	
Overvoltage category	II
Degree of pollution	3
laterial specifications	
Material Molding compound	PUR (potted)
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
lectrical properties	
Rated surge voltage	1.5 kV AC
Contact resistance	≤ 3 mΩ
Insulation resistance	≥ 100 MΩ
Nominal voltage U _N	60 V (AC)
	60 V (DC)



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Nominal current I _N	4 A	
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	3 Nm 4 Nm (Installation-side)	

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	> 100
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Connector

Connection 1

Head design	Socket
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	black, brown,blue, white, 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)



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Standards/specifications

	-25 °C 85 °C (Cable, flexible installation)
Environmental and real-life conditions	
Ambient conditions	
Degree of protection	IP67
	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)
UL Type Rating	Type 4 (indoor use only)
Standards and regulations	
M12	
Standard designation	M12 connector
Standards/specifications	IEC 61076-2-101
Standard designation	Shock, vibration

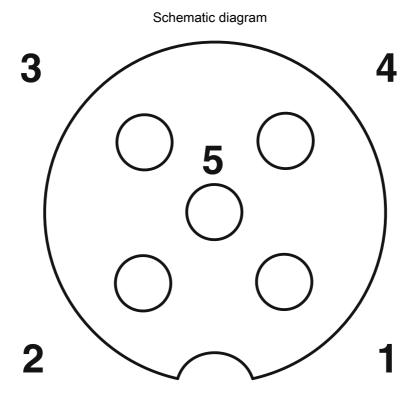
EN 50155



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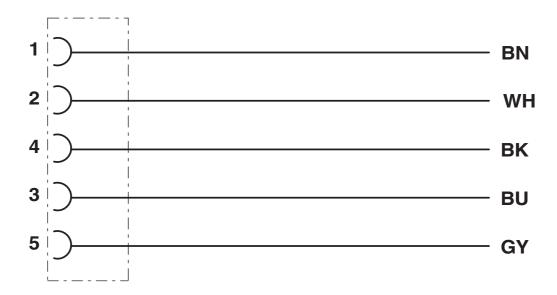
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Drawings



Pin assignment M12 socket, 5-pos., A-coded, socket side view

Circuit diagram



Contact assignment of the M12 plug and the M12 socket



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Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/in/products/1401110

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	-

c 911 us	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	-	



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Classifications

UNSPSC 21.0

ECLASS	
ECLASS-13.0	27440103
ETIM	
ETIM 9.0	EC002635
UNSPSC	

39121400



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Environmental product compliance

EU RoHS	
Fulfills EU RoHS substance requirements	Yes, No exemptions
China RoHS	
Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits
EU REACH SVHC	
REACH candidate substance (CAS No.)	No substance above 0.1 wt%



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Accessories

SACC-E-MU-M16 - Flat nut

1504097

https://www.phoenixcontact.com/in/products/1504097

Flat nut, Screw mounting, M16 x 1.5, Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1239863



SACC-M16-SEAL CLM - Flat gasket

1430394

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

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





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PROT-M12 - Screw plug

1680539

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



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



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PROT-M12 FB - Screw plug

1555538

https://www.phoenixcontact.com/in/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

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