

1458826

https://www.phoenixcontact.com/us/products/1458826

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Device connector front mounting, Universal, 5-position, Pin, straight, M12-SPEEDCON, coding: A, on free cable end, Front mounting, M16 x 1.5, Individual wires, cable length: 0.7 m, 0.34 mm², TPE litz wire

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	1458826	
Packing unit	1 pc	
Minimum order quantity	100 pc	
Product key	ABQCEB	
GTIN	4046356650793	
Weight per piece (including packing)	25.22 g	
Weight per piece (excluding packing)	25.22 g	
Country of origin	DE	



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Technical data

Notes

Notes on operation	n
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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.

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.
 The suitable accessories are available online in the accessory section of the product at phoenixcontact.com/products



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	 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 M16 x 1.5
oaa.g type	
Product properties	
Product type	Circular connectors (device side)
Sensor type	Universal
Number of positions	5
No. of cable outlets	1
Shielded	no
Coding	A
Thread type	M12
Insulation characteristics	
Overvoltage category	III
Degree of pollution	3
Material specifications	
Flammability rating according to UL 94	V0
Seal material	FKM
Material wire insulation	TPE
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
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
Max. conductor resistance	57.6 mΩ/m

Connection data



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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

Industrian (with drawal avalog	> 100
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

nead design	Head design	free cable end
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Cable/line

Cable length	0.7 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	
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
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	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

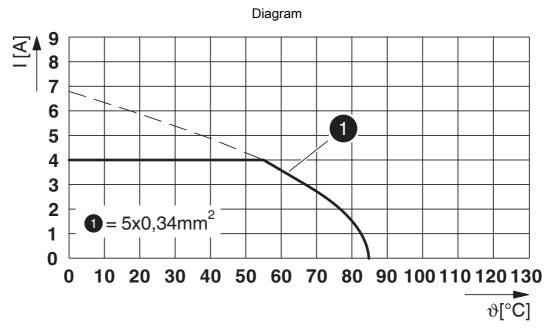
Standard designation	M12 connector
Standards/specifications	IEC 61076-2-101



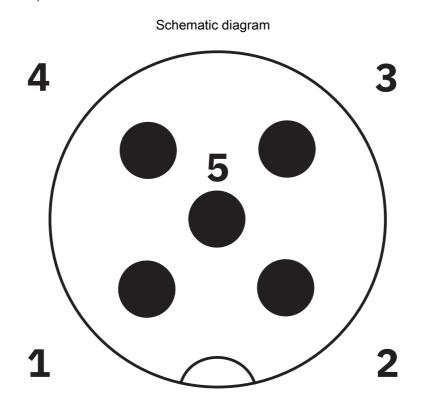
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Drawings



I = current strength, T = ambient temperature



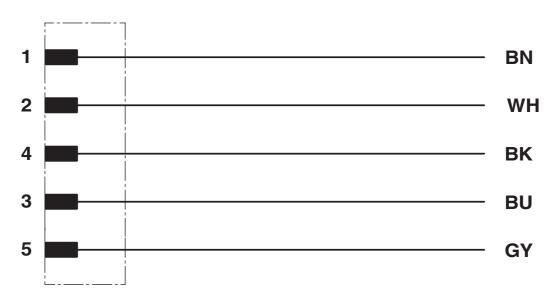
Pin assignment M12 male connector, 5-pos., A-coded, male side



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Circuit diagram





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Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1458826

71	UL Recognized Approval ID: E118976-2	0100522			
		Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
		60 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
		60 V	4 A	22 - 20	-



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Classifications

UNSPSC 21.0

ECLASS

202.00				
27440103				
27440103				
27440103				
ETIM				
EC003570				
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/us/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/us/products/1430394

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





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PROT-M12 FS - Sealing cap

1560251

https://www.phoenixcontact.com/us/products/1560251



M12 sealing cap for unoccupied M12 plugs of the sensor/actuator cable, flush-type plugs and I/O devices in the field

PROT-M12 FS-M - Sealing cap

1430488

https://www.phoenixcontact.com/us/products/1430488



M12 metal sealing cap for unoccupied M12 plugs of the sensor/actuator cable, flush-type plugs and I/O devices in the field

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