

1436411

https://www.phoenixcontact.com/us/products/1436411

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Device connector front mounting, Universal, 5-position, Pin, straight, M12-Standard, coding: A, on free cable end, Front mounting, M16 x 1.5, Individual wires, cable length: 0.5 m, 0.34 mm<sup>2</sup>, TPE litz wire

### Your advantages

- · Preassembled with litz wires for immediate use
- · Customer-specific assemblies and litz wire lengths available
- Standard pin assignments and codings for signal transmission with a uniform design-in design

### Commercial data

Item number	1436411
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB24
Product key	ABQCMB
Catalog page	Page 241 (C-2-2013)
GTIN	4046356438360
Weight per piece (including packing)	26.4 g
Weight per piece (excluding packing)	16.2 g
Customs tariff number	85444290
Country of origin	DE



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### Technical data

#### Notes

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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.
	<ul> <li>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.     </li> </ul>
	<ul> <li>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.</li> </ul>
	<ul> <li>The products are suitable for applications in plant, controller, and electrical device engineering.</li> </ul>
	<ul> <li>When operating the connectors in outdoor applications, they must be separately protected against environmental influences.</li> </ul>
	<ul> <li>Assembled products may not be manipulated or improperly opened.</li> </ul>
	<ul> <li>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).</li> </ul>
	<ul> <li>When using the product in direct connection with third-party manufacturers, the user is responsible.</li> </ul>
	<ul> <li>For operating voltages &gt; 50 V AC, conductive connector housings must be grounded</li> </ul>
	<ul> <li>Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standards.</li> </ul>
	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
	Here a marked the same to marked assess that the same of the

Use a protective cap to protect connectors that are not in use.
 The suitable accessories are available online in the accessory



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	section of the product at phoenixcontact.com/products
	<ul> <li>Ensure that the protective or functional ground has been properly connected.</li> </ul>
	<ul> <li>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</li> </ul>
	<ul> <li>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).</li> </ul>
ounting	
Mounting type	Front mounting M16 x 1.5
oduct properties	
Product type	Circular connectors (device side)
Sensor type	Universal
Number of positions	5
Application	Signal
No. of cable outlets	1
Shielded	no
Coding	A
Thread type	M12
Insulation characteristics	
Overvoltage category	II .
Degree of pollution	3
aterial specifications	
Color	black
Flammability rating according to UL 94	НВ
Seal material	Viton
Contact material	CuZn
Contact surface material	Au
Contact carrier material	PA 6.6
Material for screw connection	PA 6.6
Conductor material	Tin-plated Cu litz wires
ectrical properties	
Rated surge voltage	1.5 kV
Contact resistance	≤ 3 mΩ
Insulation resistance	≥ 100 MΩ
Nominal voltage U <sub>N</sub>	60 V (AC)
- "	60 V (DC)
Nominal current I <sub>N</sub>	4 A



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Max. conductor resistance	80 Ω/km
onnection data	
Conductor connection	
Connection method	Individual wires
Contact connection type	Pin
Conductor cross section	0.34 mm²
Tightening torque	1.25 Nm 1.5 Nm (Installation-side)
echanical properties	
Mechanical data	
Insertion/withdrawal cycles	> 100
onnector	
Connection 1	
Head design	Pin
Head cable outlet	straight
Head thread type	M12
Head locking type	Standard
Coding	A
Connection 2	
Head design	free cable end
able/line	
Cable length	0.5 m
Cable type	TPE litz wire
Signal type/category	Universal
Wire diameter incl. insulation	1.2 mm ±0.07 mm
Single wire color	
Oligie Wile, Coloi	black, brown,blue, white, gray
Single wire, color  Cable cross section	black, brown,blue, white, gray  0.34 mm <sup>2</sup>
	0.34 mm <sup>2</sup>
Cable cross section	
Cable cross section  Conductor material	0.34 mm² Tin-plated Cu litz wires
Cable cross section Conductor material Conductor structure signal line	0.34 mm² Tin-plated Cu litz wires 7x 0.25 mm
Cable cross section  Conductor material  Conductor structure signal line  AWG signal line	0.34 mm² Tin-plated Cu litz wires 7x 0.25 mm 24
Cable cross section Conductor material Conductor structure signal line AWG signal line Material wire insulation	0.34 mm² Tin-plated Cu litz wires 7x 0.25 mm 24 TPE
Cable cross section  Conductor material  Conductor structure signal line  AWG signal line  Material wire insulation  Thickness, insulation	0.34 mm² Tin-plated Cu litz wires 7x 0.25 mm 24 TPE 0.21 mm
Cable cross section Conductor material Conductor structure signal line AWG signal line Material wire insulation Thickness, insulation Nominal voltage, cable	0.34 mm²  Tin-plated Cu litz wires  7x 0.25 mm  24  TPE  0.21 mm  300 V
Cable cross section Conductor material Conductor structure signal line AWG signal line Material wire insulation Thickness, insulation Nominal voltage, cable Test voltage, cable	0.34 mm² Tin-plated Cu litz wires 7x 0.25 mm 24 TPE 0.21 mm 300 V 2000 V AC
Cable cross section Conductor material Conductor structure signal line AWG signal line Material wire insulation Thickness, insulation Nominal voltage, cable Test voltage, cable Cable resistance	0.34 mm²  Tin-plated Cu litz wires  7x 0.25 mm  24  TPE  0.21 mm  300 V  2000 V AC  ≤ 80 Ω/km



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#### Environmental and real-life conditions

#### Ambient conditions

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

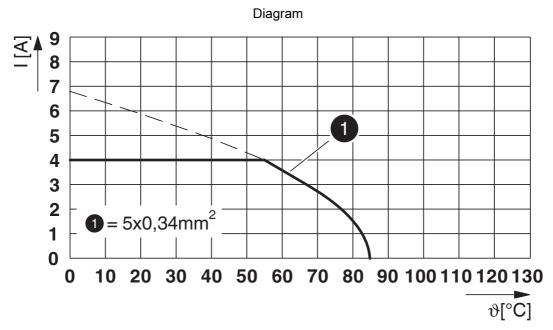
Standard designation	M12 connector
Standards/specifications	IEC 61076-2-101



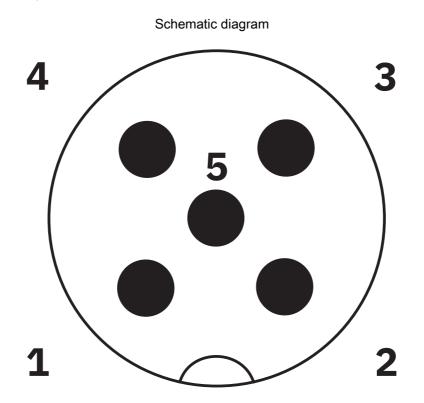
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### Drawings



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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### Classifications

#### **ECLASS**

201.00		
	ECLASS-11.0	27440102
	ECLASS-12.0	27440116
	ECLASS-13.0	27440116
ETIM		
	ETIM 9.0	EC002635
UNSPSC		
	UNSPSC 21.0	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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