

1458855

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Device connector front mounting, Universal, 4-position, Socket, straight, M12-Standard, coding: A , on free cable end, Front mounting, M16 x 1.5, Individual wires, cable length: 0.5 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

Commercial data

Item number	1458855
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB26
Product key	ABQCVB
Catalog page	Page 268 (C-2-2013)
GTIN	4046356655507
Weight per piece (including packing)	32 g
Weight per piece (excluding packing)	18 g
Customs tariff number	85366990
Country of origin	DE



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Technical data

Notes

Genera	al

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		
Connection method	Individual wires		
Product properties			
Product type	Circular connectors (device side)		
Sensor type	Universal		
Number of positions	4		
Application	Signal		
No. of cable outlets	1		
Shielded	no		
Coding	A		
Thread type	M12		
Insulation characteristics			
Overvoltage category	II		
Degree of pollution	3		
Material specifications			
Flammability rating according to UL 94	V0		
Seal material	FKM		
Contact material	CuZn		
Contact surface material	Ni/Au		
Contact carrier material	PA 6.6		
Material for screw connection	Stainless steel		
Conductor material	Tin-plated Cu litz wires		
Electrical properties			
Rated surge voltage	2.5 kV		
Contact resistance	≤ 3 mΩ		
Insulation resistance	≥ 100 MΩ		
Nominal voltage U _N	250 V (AC)		
	250 V (DC)		
Nominal current I _N	4 A		
Max. conductor resistance	57.6 mΩ/m		



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Connection data

Conductor connection

Connection method	Individual wires	
Contact connection type	Socket	
Conductor cross section	0.34 mm²	
Tightening torque	3 Nm	
	4 Nm	

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	> 100

Connector

Connection 1

Head design	Socket
Head cable outlet	straight
Head thread type	M12
Head locking type	Standard
Coding	A

Connection 2

Cable/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	brown, white, blue, black	
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)	



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Environmental and real-life conditions

Ambient conditions

Degree of protection	IP65/IP67/IP69/IP69K			
	IP65/IP67/IP69K			
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

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



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Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1458855

CUL Recognized Approval ID: E118976-20100522					
		Nominal voltage $\mathbf{U}_{\mathbf{N}}$	Nominal current I _N	Cross section AWG	Cross section mm ²
		250 V	4 A	- 22	-

7.1	UL Recognized Approval ID: E118976-20100522				
		Nominal voltage \mathbf{U}_{N}	Nominal current I _N	Cross section AWG	Cross section mm ²
		250 V	4 A	- 22	-

EAC	EAC
LIIL	Approval ID: B.01687

c 711 vs	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	-

cULus Recognized



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Classifications

UNSPSC 21.0

ECLASS

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	ECLASS-11.0	27440102		
	ECLASS-12.0	27440116		
	ECLASS-13.0	27440116		
ETIM				
	ETIM 8.0	EC002635		
UNS	SPSC			

39121400



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Environmental product compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e	
	No hazardous substances above threshold values	

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