

1556304

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Device connector front mounting, Universal, 17-position, Pin, straight, M12-SPEEDCON, coding: A, on free cable end, Front mounting, M16 x 1.5, Individual wires, cable length: 0.5 m, 0.14 mm<sup>2</sup>, TPE litz wire, Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1240048

### 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	1556304
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB24
Product key	ABQCEB
Catalog page	Page 37 (C-2-2019)
GTIN	4046356176767
Weight per piece (including packing)	31.5 g
Weight per piece (excluding packing)	31 g
Customs tariff number	85444290
Country of origin	DE



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### Technical data

#### Notes

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

#### Mounting

Mounting type	Front mounting M16 x 1.5
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### Product properties

Product type	Circular connectors (device side)
Application	Signal
Sensor type	Universal
Number of positions	17
No. of cable outlets	1
Shielded	no
Coding	A
Thread type	M12

#### Data management status

Article revision	08

#### Insulation characteristics

Overvoltage category	II
Degree of pollution	3

### Material 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	0.8 kV
Contact resistance	≤ 3 mΩ
Insulation resistance	≥ 100 MΩ



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Nominal voltage U <sub>N</sub>	30 V (AC)
	30 V (DC)
Nominal current I <sub>N</sub>	1.5 A
Max. conductor resistance	57.6 mΩ/m

#### Connection data

#### Conductor connection

Connection method	Individual wires
Contact connection type	Pin
Conductor cross section	0.14 mm²
Tightening torque	3 Nm 4 Nm (Installation-side)

#### Mechanical properties

#### Mechanical data

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

Head design tree capie end	Head design	free cable end
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#### Cable/line

Cable length	0.5 m
Cable type	TPE litz wire
Signal type/category	Universal
Wire diameter incl. insulation	1.1 mm ±0.05 mm
Single wire, color	brown, blue, white, green, pink, yellow, black, gray, red, violet, gray/pink, red/blue, white/green, brown/green, white/yellow, yellow/brown, white/gray
Cable cross section	0.14 mm²
Conductor material	Tin-plated Cu litz wires
Conductor structure signal line	7x 0.16 mm
AWG signal line	26
Material wire insulation	TPE
Thickness, insulation	0.21 mm (Core insulation)
Nominal voltage, cable	300 V
Test voltage, cable	2000 V AC



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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

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)

### Standards and regulations

#### M12

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



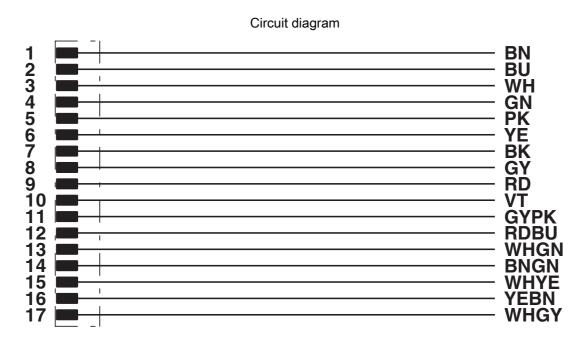
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## Drawings

13 3 2 12 4 17 5 14 6 10 15 7 8 16

Pin assignment M12 male connector, 17-pos., male side view





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## Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1556304

c <b>911</b> us	cULus Recogniz Approval ID: E221474	<b>zed</b> 4-20140616			
		Nominal voltage $U_N$	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		30 V	1.5 A	26 - 26	-

71	<b>UL Recognized</b> Approval ID: E118976-2	0100522			
		Nominal voltage $U_N$	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		30 V	1.5 A	26 - 26	-



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### Classifications

#### **ECLASS**

	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

#### EU RoHS

Fulfills EU RoHS substance requirements	Yes		
Exemption	6(c)		
China RoHS			
Environment friendly use period (EFUP)	EFUP-50		
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.		
EU REACH SVHC			
REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)		
SCIP	5f970fac-7d51-4674-af50-6acd45552b02		

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