

1419713

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Device connector, rear mounting, Universal, 12-position, Socket, straight, M12-Standard, coding: A, on free cable end, Rear 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.: 1239282

#### 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	1419713
Packing unit	1 pc
Minimum order quantity	1 pc
Product key	ABQCHB
Catalog page	Page 49 (C-2-2019)
GTIN	4046356533560
Weight per piece (including packing)	29.9 g
Weight per piece (excluding packing)	29.4 g
Customs tariff number	85444290
Country of origin	DE



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#### Technical data

#### Notes

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	Lock nut is included in the scope of delivery
General	Contact connection method: Crimp connection

#### Mounting

Mounting type	Rear mounting M16 x 1.5 With flat nut
Assembly instructions	With flat nut

#### Product properties

Product type	Circular connectors (device side)
Sensor type	Universal
Number of positions	12
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	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
Nominal voltage U <sub>N</sub>	30 V (AC)
	30 V (DC)



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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	Socket
Conductor cross section	0.14 mm²
Tightening torque	3 Nm 4 Nm (Installation-side)

#### Mechanical properties

#### Mechanical data

#### Connector

#### Connection 1

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

#### Connection 2

Head design	free cable end

#### 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
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
Cable resistance	≤ 57.6 mΩ/m
Cable insulation resistance	≥ 20 MΩ*km



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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 (When plugged in)
	IP65 (When plugged in)
	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

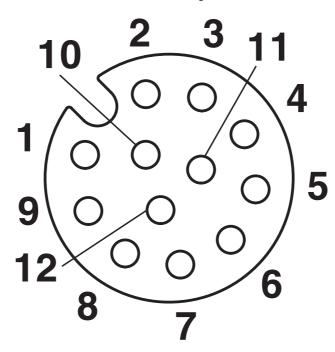


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#### **Drawings**

Schematic diagram



Pin assignment M12, 12-pos., female side view

#### Circuit diagram





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#### Approvals

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**UL Recognized**Approval ID: E118976-20100522



cULus Recognized

Approval ID: E221474-20140616



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#### Classifications

UNSPSC 21.0

#### **ECLASS**

27440102		
27440116		
27440116		
ETIM		
EC002635		
UNSPSC		

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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