

1416277

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Device connector front mounting, Universal, 8-position, Socket, straight, M12-SPEEDCON, coding: A, on free cable end, Front mounting, M16 x 1.5, Individual wires, cable length: 2 m, 0.25 mm², TPE litz wire, Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1239111

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	1416277	
Packing unit	1 pc	
Minimum order quantity	1 pc	
Sales key	AB24	
Product key	ABQCFB	
GTIN	4055626069647	
Weight per piece (including packing)	65.4 g	
Weight per piece (excluding packing)	65.4 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)	
Sensor type	Universal	
Number of positions	8	
No. of cable outlets	1	
Shielded	no	
Coding	A	
Thread type	M12	

Data management status

Article revision	ne ne
ALLICIE LEVISION	00

Insulation characteristics

Degree of pollution	3
Degree or polition	•

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
Nominal voltage U _N	30 V
Nominal current I _N	2 A



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Max. conductor resistance	80 mΩ/m
IVIAA. CONQUETO TESISTANCE	00 His2/III
onnection data	
Conductor connection	
Connection method	Individual wires
Contact connection type	Socket
Conductor cross section	0.25 mm²
Tightening torque	3 Nm 4 Nm (Installation-side)
lechanical properties	
Mechanical data	
Insertion/withdrawal cycles	> 100
onnector	
omectoi	
Connection 1	
Head design	Socket
Head cable outlet	straight
Head thread type	M12
Head locking type	SPEEDCON
Coding	A
Connection 2	
Head design	free cable end
able/line	
Cable length	2 m
Cable type	TPE litz wire
Signal type/category	Universal
Wire diameter incl. insulation	4.45 10.07
	1.15 mm ±0.07 mm
Single wire, color	brown, blue, white, gray, pink, green, yellow, red
Single wire, color Cable cross section	
•	brown, blue, white, gray, pink, green, yellow, red
Cable cross section	brown, blue, white, gray, pink, green, yellow, red 0.25 mm²
Cable cross section Conductor material	brown, blue, white, gray, pink, green, yellow, red 0.25 mm² Tin-plated Cu litz wires
Cable cross section Conductor material Conductor structure signal line	brown, blue, white, gray, pink, green, yellow, red 0.25 mm² Tin-plated Cu litz wires 14x 0.15 mm
Cable cross section Conductor material Conductor structure signal line AWG signal line	brown, blue, white, gray, pink, green, yellow, red 0.25 mm² Tin-plated Cu litz wires 14x 0.15 mm 24
Cable cross section Conductor material Conductor structure signal line AWG signal line Material wire insulation	brown, blue, white, gray, pink, green, yellow, red 0.25 mm² Tin-plated Cu litz wires 14x 0.15 mm 24 TPE
Cable cross section Conductor material Conductor structure signal line AWG signal line Material wire insulation Thickness, insulation	brown, blue, white, gray, pink, green, yellow, red 0.25 mm² Tin-plated Cu litz wires 14x 0.15 mm 24 TPE 0.21 mm (Core insulation)
Cable cross section Conductor material Conductor structure signal line AWG signal line Material wire insulation Thickness, insulation Nominal voltage, cable	brown, blue, white, gray, pink, green, yellow, red 0.25 mm² Tin-plated Cu litz wires 14x 0.15 mm 24 TPE 0.21 mm (Core insulation) 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	brown, blue, white, gray, pink, green, yellow, red 0.25 mm² Tin-plated Cu litz wires 14x 0.15 mm 24 TPE 0.21 mm (Core insulation) 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	brown, blue, white, gray, pink, green, yellow, red 0.25 mm² Tin-plated Cu litz wires 14x 0.15 mm 24 TPE 0.21 mm (Core insulation) 300 V 2000 V AC ≤ 80 mΩ/m



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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

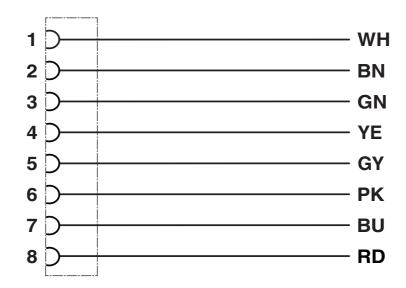


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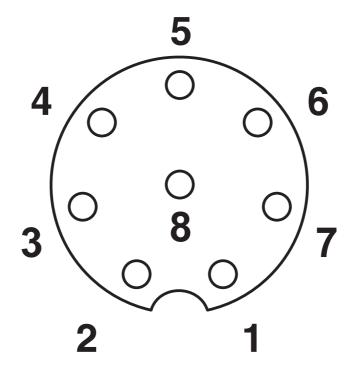
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Drawings

Circuit diagram



Schematic diagram



Pin assignment M12 socket, 8-pos., A-coded, view female side



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Approvals

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71	UL Recognized Approval ID: E118976-2	0100522			
		Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
		30 V	2 A	24 - 24	-

c 911 us	cULus Recognized Approval ID: E221474-20140616				
		Nominal voltage U_N	Nominal current I _N	Cross section AWG	Cross section mm ²
		30 V	2 A	24 - 22	-



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Classifications

UNSPSC 21.0

ECLASS

202.00					
27440103					
27440103					
27440103					
ETIM					
EC003570					

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	dab11753-3e2b-41ff-8ffd-ede3ae170d40

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