

1441587

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Device connector front mounting, 12-position, Pin, straight, M12, coding: A, on free cable end, Front mounting, Square flange, Individual wires, cable length: 0.5 m, 0.14 mm², TPE litz wire, Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1239723

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	1441587
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB24
Product key	ABQCED
Catalog page	Page 43 (C-2-2019)
GTIN	4046356533898
Weight per piece (including packing)	29.9 g
Weight per piece (excluding packing)	29.9 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	Contact connection method: Crimp connection

Mounting

Mounting type	Front mounting Square flange
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Product properties

Product type	Circular connectors (device side)
Number of positions	12
Application	Signal
No. of cable outlets	1
Shielded	no
Coding	A
Thread type	M12
I nread type	M12

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
Nominal voltage U _N	30 V
Nominal current I _N	1.5 A
Max. conductor resistance	142 mΩ/m



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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

languation to the discount over a	- 400
Insertion/withdrawal cycles	> 100

Connector

Connection 1

Head design	Pin
Head cable outlet	straight
Head thread type	M12
Coding	A

Connection 2

Head design free cable end

Cable/line

Cable length	0.5 m
Cable type	TPE litz wire
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	3000 V AC (Spark test)
Cable resistance	≤ 142 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



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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

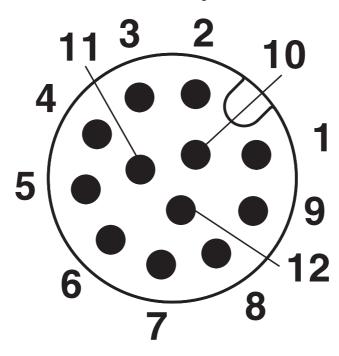


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Drawings

Schematic diagram



Pin assignment M12 male connector, 12-pos., male side view

Circuit diagram





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Approvals

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c F11 us	cULus Recognized Approval ID: E221474-20140616				
		Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
		30 V	1.5 A	26 - 26	-

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	1.5 A	26 - 26	-



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Classifications

UNSPSC 21.0

ECLASS

202.00		
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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