

1401205

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Device connector front mounting, Universal, 8-position, Socket, straight, M12-Standard, coding: A, on free cable end, Front mounting, Pg9, Individual wires, cable length: 1 m, 0.25 mm<sup>2</sup>, TPE litz wire, Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1238663

### 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	1401205
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB24
Product key	ABQCUE
GTIN	4046356538237
Weight per piece (including packing)	40.4 g
Weight per piece (excluding packing)	40.4 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	Contact connection method: Crimp connection

### Mounting

Mounting type	Front mounting Pg9
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### Product properties

Product type	Circular connectors (device side)
Sensor type	Universal
Number of positions	8
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	NBR
Contact material	CuZn
Contact surface material	Ni/Au
Contact carrier material	PA 66
Material for screw connection	Stainless steel
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)
Nominal current I <sub>N</sub>	2 A



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Max. conductor resistance	80 Ω/km
Connection data	
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Conductor connection	
Connection method	Individual wires
Contact connection type	Socket
Conductor cross section	0.25 mm <sup>2</sup>
Tightening torque	2 Nm 3 Nm (Installation-side)
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
3 71	
Coding	A
Coding	A
Connection 2	
	A free cable end
Connection 2	
Connection 2 Head design	
Connection 2 Head design Cable/line	free cable end
Connection 2 Head design Cable/line Cable length	free cable end 1 m
Connection 2 Head design Cable/line Cable length Cable type	free cable end  1 m  TPE litz wire
Connection 2 Head design  Cable/line  Cable length Cable type Signal type/category	free cable end  1 m  TPE litz wire  Universal
Connection 2 Head design  Cable/line Cable length Cable type Signal type/category Wire diameter incl. insulation	free cable end  1 m  TPE litz wire  Universal  1.15 mm ±0.07 mm
Connection 2 Head design  Cable/line Cable length Cable type Signal type/category Wire diameter incl. insulation Single wire, color	free cable end  1 m  TPE litz wire  Universal  1.15 mm ±0.07 mm  brown, blue, white, gray, pink, green, yellow, red
Connection 2 Head design  Cable/line  Cable length Cable type Signal type/category Wire diameter incl. insulation Single wire, color Cable cross section	free cable end  1 m  TPE litz wire  Universal  1.15 mm ±0.07 mm  brown, blue, white, gray, pink, green, yellow, red  0.25 mm²
Connection 2 Head design  Cable/line  Cable length Cable type Signal type/category Wire diameter incl. insulation Single wire, color Cable cross section Conductor material	free cable end  1 m  TPE litz wire  Universal  1.15 mm ±0.07 mm  brown, blue, white, gray, pink, green, yellow, red  0.25 mm²  Tin-plated Cu litz wires
Connection 2 Head design  Cable/line Cable length Cable type Signal type/category Wire diameter incl. insulation Single wire, color Cable cross section Conductor material Conductor structure signal line	free cable end  1 m  TPE litz wire  Universal  1.15 mm ±0.07 mm  brown, blue, white, gray, pink, green, yellow, red  0.25 mm²  Tin-plated Cu litz wires  14x 0.15 mm
Connection 2 Head design  Cable/line  Cable length Cable type Signal type/category Wire diameter incl. insulation Single wire, color Cable cross section Conductor material Conductor structure signal line AWG signal line	free cable end  1 m  TPE litz wire  Universal  1.15 mm ±0.07 mm  brown, blue, white, gray, pink, green, yellow, red  0.25 mm²  Tin-plated Cu litz wires  14x 0.15 mm  24
Connection 2 Head design  Cable/line  Cable length Cable type Signal type/category Wire diameter incl. insulation Single wire, color Cable cross section Conductor material Conductor structure signal line AWG signal line Material wire insulation	free cable end  1 m  TPE litz wire  Universal  1.15 mm ±0.07 mm  brown, blue, white, gray, pink, green, yellow, red  0.25 mm²  Tin-plated Cu litz wires  14x 0.15 mm  24  TPE
Connection 2 Head design  Cable/line  Cable length Cable type Signal type/category Wire diameter incl. insulation Single wire, color Cable cross section Conductor material Conductor structure signal line AWG signal line Material wire insulation Thickness, insulation	free cable end  1 m  TPE litz wire  Universal  1.15 mm ±0.07 mm  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)
Connection 2 Head design  Cable/line  Cable length Cable type Signal type/category Wire diameter incl. insulation Single wire, color Cable cross section Conductor material Conductor structure signal line AWG signal line Material wire insulation Thickness, insulation Nominal voltage, cable	free cable end  1 m  TPE litz wire  Universal  1.15 mm ±0.07 mm  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
Connection 2 Head design  Cable/line  Cable length Cable type Signal type/category Wire diameter incl. insulation Single wire, color Cable cross section Conductor material Conductor structure signal line AWG signal line Material wire insulation Thickness, insulation Nominal voltage, cable Test voltage, cable	free cable end  1 m  TPE litz wire  Universal  1.15 mm ±0.07 mm  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
Connection 2 Head design  Cable/line  Cable length Cable type Signal type/category Wire diameter incl. insulation Single wire, color 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	free cable end  1 m  TPE litz wire  Universal  1.15 mm ±0.07 mm  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 Ω/km



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#### Environmental and real-life conditions

#### 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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### 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

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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