

1437481

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Device connector rear mounting, PROFIBUS, 2-position, PUR halogen-free, red lilac RAL 4001, shielded, Pin, straight, M12-SPEEDCON, coding: B, on free cable end, Rear mounting, Cable connection, cable length: 0.5 m, PROFIBUS, Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1239654

Your advantages

- · Preassembled with cables in various standard lengths for immediate use
- · Customer-specific assemblies and cable lengths can be supplied
- · Sealed on the cable side for optimum tightness of seal
- · Cable designs for all common networks and fieldbuses
- · For high transmission safety: shield connection to the housing with optional EMC nut

Commercial data

Item number	1437481
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB25
Product key	ABQDGB
Catalog page	Page 426 (C-2-2019)
GTIN	4046356457613
Weight per piece (including packing)	54.1 g
Weight per piece (excluding packing)	50 g
Customs tariff number	85444290
Country of origin	DE



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Technical data

Notes

otes	
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
Safety note	
Safety note	WARNING: The connectors may not be plugged in or disconnected under load. Ignoring the warning or improper use may damage persons and/or property.
	 WARNING: Commission properly functioning products only. The products must be regularly inspected for damage. Decommission defective products immediately. Replace damaged products. Repairs are not possible.
	 WARNING: Only electrically qualified personnel may install and operate the product. They must observe the following safety notes. The qualified personnel must be familiar with the basics of electrical engineering. They must be able to recognize and prevent danger. The relevant symbol on the packaging indicates that only personnel familiar with electrical engineering are allowed to install and operate the product.
	 The products are suitable for applications in plant, controller, and electrical device engineering.
	 When operating the connectors in outdoor applications, they must be separately protected against environmental influences.
	 Assembled products may not be manipulated or improperly opened.
	 Only use mating connectors that are specified in the technical data of the standards listed (e.g. the ones listed in the product accessories online at phoenixcontact.com/products).
	 When using the product in direct connection with third-party manufacturers, the user is responsible.
	 For operating voltages > 50 V AC, conductive connector housings must be grounded
	 Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standards.
	 Observe the corresponding technical data. You will find information: On the product On the packing label In the supplied documentation Online at phoenixcontact.com/products under the product
	Only use tools recommended by Phoenix Contact
	 Use a protective cap to protect connectors that are not in use.

The suitable accessories are available online in the accessory



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	section of the product at phoenixcontact.com/products
	Ensure that the protective or functional ground has been
	properly connected.
	 VDE 0100/1.97 § 411.1.3.2 and DIN EN 60 204/11.98 § 14.1 are applicable when combining several circuits in a cable and/connector
	 The connector warms up in normal operation. Depending on ambient conditions, the surface of the connector can continue warm up. In this case, the user is responsible for posting warnings (e.g. DIN EN ISO 13732-1:2008-12).
punting	
Mounting type	Rear mounting
oduct properties	
Product type	Circular connectors (device side)
Sensor type	PROFIBUS
Number of positions	2
No. of cable outlets	1
Shielded	yes
Coding	В
Thread type	M12
insulation characteristics	
Overvoltage category	II
Degree of pollution	3
aterial specifications	
Flammability rating according to UL 94	VO
Seal material	FKM
Contact material	CuZn
Contact surface material	Ni/Au
Contact carrier material	PA 6.6
Material for screw connection	Zinc die-cast, nickel-plated
Outer sheath, material	PUR
ectrical properties	
Rated surge voltage	1.5 kV
Contact resistance	≤ 3 mΩ
Insulation resistance	≥ 100 MΩ
Nominal voltage U _N	48 V AC
	60 V DC
Nominal current I _N	4 A (Plug/socket in accordance with IEC 61076-2-101, cable technical data is to be observed)
Transmission medium	Copper



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Connection data

Conductor connection

Connection method	Cable connection
Contact connection type	Pin
Tightening torque	2 Nm 3 Nm

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	В

Connection 2

Cable/line

PROFIBUS [910]

Dimensional drawing



Cable weight	90 kg/km
UL AWM Style	21198 (80°C/300 V)
Number of positions	2
Shielded	yes
Cable type	PROFIBUS [910]
Conductor structure	1x2xAWG24/19
Conductor structure signal line	19x 0.13 mm
AWG signal line	24



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Conductor cross section	2x 0.25 mm² (Signal line)
Wire diameter incl. insulation	2.55 mm ±0.07 mm
External cable diameter	7.80 mm ±0.2 mm
Outer sheath, material	PUR
External sheath, color	red lilac RAL 4001
Conductor material	Tin-plated Cu litz wires
Material, filler	PP
Material wire insulation	Foam-Skin PP
Single wire, color	red, green
Overall twist	2 cores with 2 fillers to the core
Optical shield covering	85 %
Max. conductor resistance	≤ 78.6 Ω/km
Insulation resistance	≥ 5 GΩ*km
Wave impedance	150 Ω ±10 % (3 MHz 20 MHz)
Cable capacity	nom. 30 pF/m
Nominal voltage, cable	300 V
Test voltage Core/Core	1500 V (50 Hz, 1 min.)
Test voltage Core/Shield	1500.00 V (50 Hz, 1 min.)
Smallest bending radius, fixed installation	40 mm
Smallest bending radius, movable installation	65 mm
Max. bending cycles	4000000
	5000000
Shield attenuation	≤ 0.049 dB/m (at 16 MHz)
Halogen-free	in accordance with DIN VDE 0472 part 815
	according to IEC 60754-1
Flame resistance	UL 1581, Section 1060 and UL 2556, Section 9.3 (FT1)
	UL 1581, Section 1100 and UL 2556, Section 9.1 (HFT/FT2)
	IEC 60332-1-2
Other resistance	Low adhesion
Ambient temperature (operation)	-40 °C 80 °C (cable, fixed installation)
	-30 °C 70 °C (Cable, flexible installation)
	-20 °C 60 °C (for installation)
	-20 °C 60 °C (cable, drag chain applications)

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)



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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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