

1437494

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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: 1 m, PROFIBUS, Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1239655

### 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	1437494
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	****
Product key	ABQDGB
Catalog page	Page 426 (C-2-2019)
GTIN	4046356457620
Weight per piece (including packing)	84.1 g
Weight per piece (excluding packing)	82.7 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.
Order information:	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.
	<ul> <li>WARNING: Commission properly functioning products only.</li> <li>The products must be regularly inspected for damage.</li> <li>Decommission defective products immediately. Replace</li> <li>damaged products. Repairs are not possible.</li> </ul>
	• 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.
	<ul> <li>The products are suitable for applications in plant, controller, and electrical device engineering.</li> </ul>
	<ul> <li>When operating the connectors in outdoor applications, they must be separately protected against environmental influences.</li> </ul>
	<ul> <li>Assembled products may not be manipulated or improperly opened.</li> </ul>
	<ul> <li>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).</li> </ul>
	<ul> <li>When using the product in direct connection with third-party manufacturers, the user is responsible.</li> </ul>
	<ul> <li>For operating voltages &gt; 50 V AC, conductive connector housings must be grounded</li> </ul>
	<ul> <li>Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standards.</li> </ul>
	Observe the corresponding technical data. You will find information: o On the product o On the packing label o In the supplied documentation o Online at phoenixcontact.com/products under the product
	Only use tools recommended by Phoenix Contact
	<ul> <li>Use a protective cap to protect connectors that are not in use.</li> <li>The suitable accessories are available online in the accessory</li> </ul>

### SACCBP-MSB-2CON-PG9/1,0-910SCO - Device

### connector rear mounting



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section of the product at phoenixcontact.com/products

• Ensure that the protective or functional ground has been properly connected.

 $\bullet$  VDE 0100/1.97 § 411.1.3.2 and DIN EN 60 204/11.98 § 14.1.3 are applicable when combining several circuits in a cable and/or connector

• The connector warms up in normal operation. Depending on the ambient conditions, the surface of the connector can continue to warm up. In this case, the user is responsible for posting warnings (e.g. DIN EN ISO 13732-1:2008-12).

#### Mounting

Mounting type Rear mounting
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### **Product 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				
Data management status					
Article revision	08				
Insulation characteristics					
Overvoltage category	II				
Degree of pollution	3				

#### Material 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
Conductor material	Tin-plated Cu litz wires

### **Electrical properties**

Rated surge voltage	1.5 kV
Contact resistance	≤ 3 mΩ
Insulation resistance	≥ 100 MΩ
Nominal voltage U <sub>N</sub>	48 V AC
	60 V DC

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Nominal current I <sub>N</sub>	4 A (Plug/socket in accordance with IEC 61076-2-101, cable			
Transmission medium	technical data is to be observed)       Copper			
Connection data				
Conductor connection				
Connection method	Cable connection			
Contact connection type	Pin			
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				
Head design	free cable end			
Cable/line				
Cable length	1 m			
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			



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AWG signal line	24			
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 ∨			
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			
Bending radius	65 mm			
Traversing path	4.5 m			
Traversing rate	3 m/s			
Acceleration	3 m/s²			
Max. bending cycles	5000000			
Bending radius	80 mm			
Traversing path	4.5 m			
Traversing rate	3 m/s			
Acceleration	3 m/s <sup>2</sup>			
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)			



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### 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)

### Standards and regulations

M12	
Standard designation	M12 connector
Standards/specifications	IEC 61076-2-101

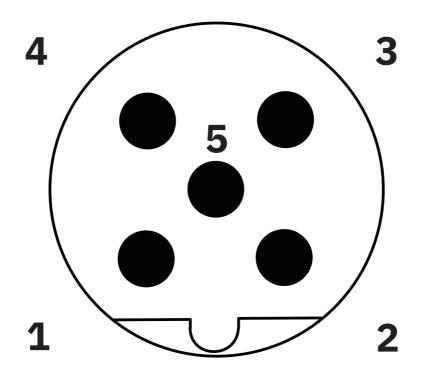


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Drawings

Schematic diagram

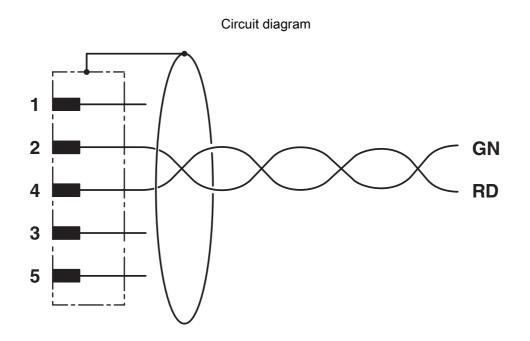


Pin assignment M12 male connector, 5-pos., B-coded, male side



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### Approvals

🌣 To download certificates, visit the product detail page: https://www.phoenixcontact.com/sg/products/1437494

<b>91</b>	UL Recognized Approval ID: E221474-20	0220907			
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		60 V	2 A	- 24	-
<b>.</b>	<b>cUL Recognized</b> Approval ID: E221474-2	0220907			
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		60 V	1.5 A	-	-
<b>71</b>	UL Recognized Approval ID: E118976-20	0100522			
		Nominal voltage LL	Nominal current I	Cross section AWG	Cross section mm <sup>2</sup>

Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
60 V	4 A	-	-

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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

#### EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	6(c)
China RoHS	
nvironment 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 "Manufacture 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	3fabb373-a42f-4095-b49d-c0a300cf475e

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