

SACCBP-MS-5CON-PG9/2,0-920SCO - Device connector, rear mounting



1437588

<https://www.phoenixcontact.com/us/products/1437588>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Device connector, rear mounting, CANopen[®], DeviceNet[™], 5-position, PUR halogen-free, red lilac RAL 4001, shielded, Flush-type male connector, straight, M12-SPEEDCON, coding: A , on free cable end, Rear mounting, CAN Bus / DeviceNet, cable length: 2 m, CANopen[®]/DeviceNet[™], PUR, violet, Alternative product in accordance with RoHS II without Exemption 6c (Pb <0.1%) item no.: 1239664

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	1437588
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB25
Product key	ABQDGB
Catalog page	Page 427 (C-2-2019)
GTIN	4046356457712
Weight per piece (including packing)	135.9 g
Weight per piece (excluding packing)	135.9 g
Customs tariff number	85444290
Country of origin	DE

SACCBP-MS-5CON-PG9/2,0-920SCO - Device connector, rear mounting



1437588

<https://www.phoenixcontact.com/us/products/1437588>

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.
Safety note	<p data-bbox="849 819 1452 902">WARNING: The connectors may not be plugged in or disconnected under load. Ignoring the warning or improper use may damage persons and/or property.</p> <ul data-bbox="849 916 1469 2087" style="list-style-type: none"><li data-bbox="849 916 1430 1025">• 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.<li data-bbox="849 1041 1469 1234">• 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.<li data-bbox="849 1249 1437 1305">• The products are suitable for applications in plant, controller, and electrical device engineering.<li data-bbox="849 1321 1449 1377">• When operating the connectors in outdoor applications, they must be separately protected against environmental influences.<li data-bbox="849 1393 1425 1449">• Assembled products may not be manipulated or improperly opened.<li data-bbox="849 1464 1449 1543">• 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 data-bbox="849 1559 1430 1615">• When using the product in direct connection with third-party manufacturers, the user is responsible.<li data-bbox="849 1630 1398 1686">• For operating voltages > 50 V AC, conductive connector housings must be grounded<li data-bbox="849 1702 1409 1780">• Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standards.<li data-bbox="849 1796 1417 1960">• Observe the corresponding technical data. You will find information:<ul data-bbox="849 1848 1417 1960" style="list-style-type: none"><li data-bbox="849 1848 1011 1877">o On the product<li data-bbox="849 1877 1062 1906">o On the packing label<li data-bbox="849 1906 1155 1935">o In the supplied documentation<li data-bbox="849 1935 1417 1960">o Online at phoenixcontact.com/products under the product<li data-bbox="849 1975 1337 2004">• Only use tools recommended by Phoenix Contact<li data-bbox="849 2020 1449 2087">• Use a protective cap to protect connectors that are not in use. The suitable accessories are available online in the accessory section of the product at phoenixcontact.com/products

SACCBP-MS-5CON-PG9/2,0-920SCO - Device connector, rear mounting



1437588

<https://www.phoenixcontact.com/us/products/1437588>

	<ul style="list-style-type: none">• Ensure that the protective or functional ground has been properly connected.
	<ul style="list-style-type: none">• 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
	<ul style="list-style-type: none">• 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
Connection method	CAN Bus / DeviceNet

Product properties

Product type	Circular connectors (device side)
Sensor type	CANopen [®]
Number of positions	5
No. of cable outlets	1
Shielded	yes
Coding	A

Insulation characteristics

Overvoltage category	II
Degree of pollution	3

Material specifications

Flammability rating according to UL 94	V0
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

Electrical properties

Rated surge voltage	1.5 kV
Insulation resistance	100 MΩ
Nominal voltage U _N	48 V AC 60 V DC
Nominal current I _N	4 A
Transmission medium	Copper

Connection data

Conductor connection

SACCBP-MS-5CON-PG9/2,0-920SCO - Device connector, rear mounting



1437588

<https://www.phoenixcontact.com/us/products/1437588>

Connection method	CAN Bus / DeviceNet
Contact connection type	Crimp contacts
Tightening torque	2 Nm
	3 Nm

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	> 100
-----------------------------	-------

Connector

Connection 1

Head design	Flush-type male connector
Head cable outlet	straight
Head thread type	M12
Head locking type	SPEEDCON
Coding	A


Connection 2

Head design	free cable end
-------------	----------------

Cable/line

Cable length	2 m
--------------	-----

CANopen[®]/DeviceNet[™], PUR, violet [920]

Dimensional drawing	
Cable weight	90 kg/km
UL AWM Style	21198 (80°C/300 V)
Number of positions	4
Shielded	yes
Cable type	CANopen [®] /DeviceNet [™] , PUR, violet [920]
Conductor structure	2xAWG24/19+2xAWG22/19
Conductor structure signal line	19x 0.13 mm
AWG signal line	24
Conductor cross section	2x 0.25 mm ² (Data cable)
	2x 0.34 mm ² (Power supply)
	1x 0.34 mm ² (Drain wire)

SACCBP-MS-5CON-PG9/2,0-920SCO - Device connector, rear mounting



1437588

<https://www.phoenixcontact.com/us/products/1437588>

Wire diameter incl. insulation	1.95 mm ±0.05 mm (Data cable)
	1.4 mm ±0.05 mm (Power supply)
External cable diameter	6.7 mm ±0.3 mm
Outer sheath, material	PUR
External sheath, color	red lilac RAL 4001
Conductor material	Tin-plated Cu litz wires
Material wire insulation	Foamed PE (Data cable)
	PE (Power supply)
Single wire, color	red-black, blue-white
Twisted pairs	2 cores to the pair
Type of pair shielding	Plastic-coated aluminum foil, aluminum side outside
Overall twist	2 pairs around a drain wire in the center to the core
Optical shield covering	80 %
Insulation resistance	≥ 5 GΩ*km (Data cable)
	≥ 5 GΩ*km (Power supply)
Loop resistance	≤ 181.80 Ω/km (Data cable)
	≤ 114.80 Ω/km (Power supply)
Wave impedance	120 Ω ±10 % (with 1 MHz)
Cable capacity	nom. 40 nF/km (Data cable)
Nominal voltage, cable	≤ 300 V (Peak value, not for high-power applications)
Test voltage Core/Core	2000 V (50 Hz, 1 min.)
Test voltage Core/Shield	2000 V (50 Hz, 1 min.)
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Max. bending cycles	5000000
Shield attenuation	≤ 22.9 dB/km (with 1 MHz)
	≤ 16.4 dB/km (At 500 kHz)
	≤ 9.5 dB/km (At 125 kHz)
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
	in accordance with ISO 6722-1 5.22 (UN ECE-R 118.01)
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

SACCBP-MS-5CON-PG9/2,0-920SCO - Device connector, rear mounting



1437588

<https://www.phoenixcontact.com/us/products/1437588>

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

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

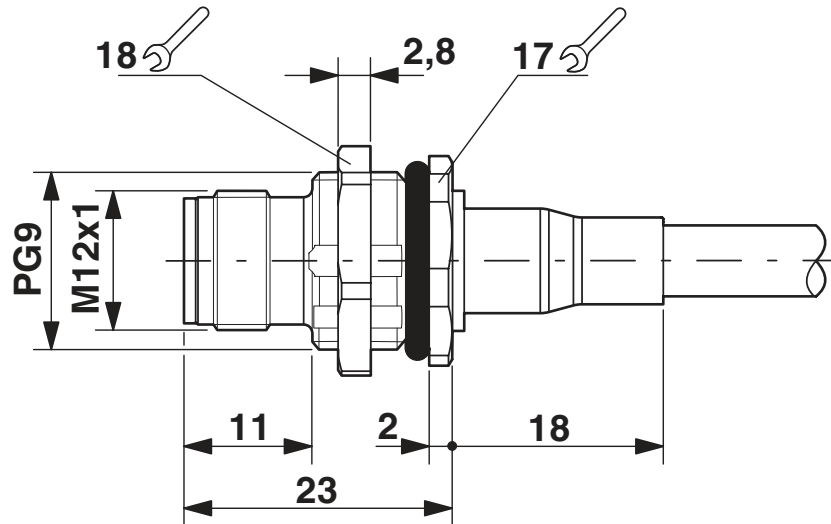
SACCBP-MS-5CON-PG9/2,0-920SCO - Device connector, rear mounting

1437588

<https://www.phoenixcontact.com/us/products/1437588>

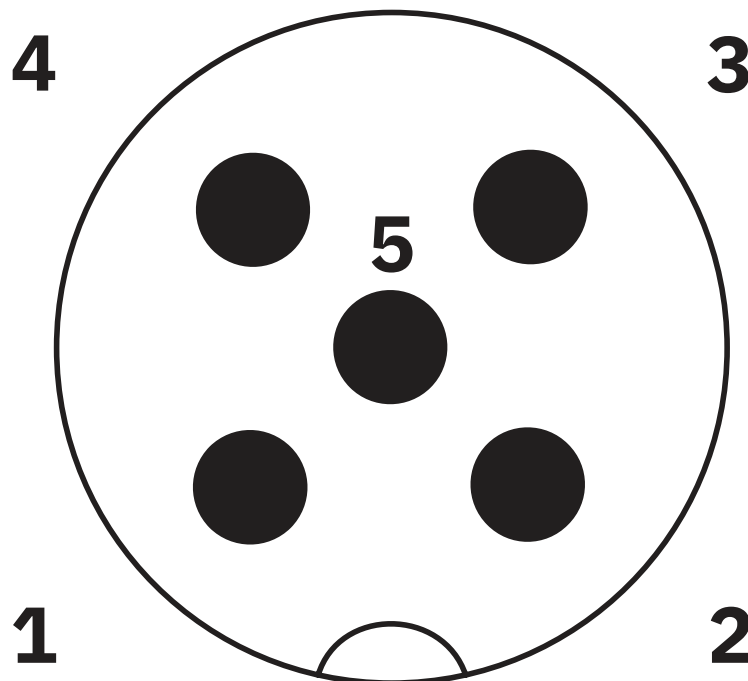
Drawings

Dimensional drawing



Dimensional drawing

Schematic diagram



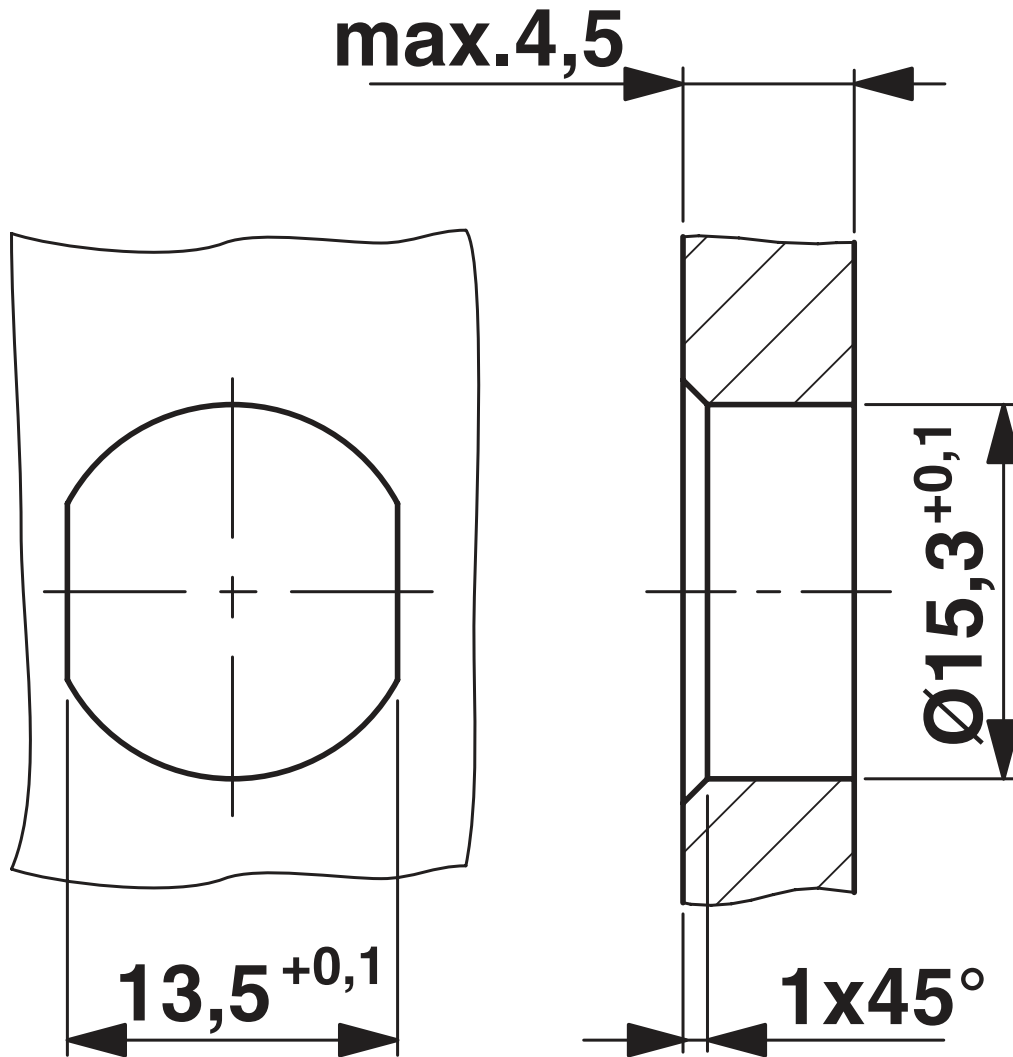
Pin assignment M12 male connector, 5-pos., A-coded, male side

SACCBP-MS-5CON-PG9/2,0-920SCO - Device
connector, rear mounting

1437588

<https://www.phoenixcontact.com/us/products/1437588>

Dimensional drawing



Housing cutout for Pg9 fastening thread, mounting panel with feed-through hole (alternatively with surface as protection against rotation)

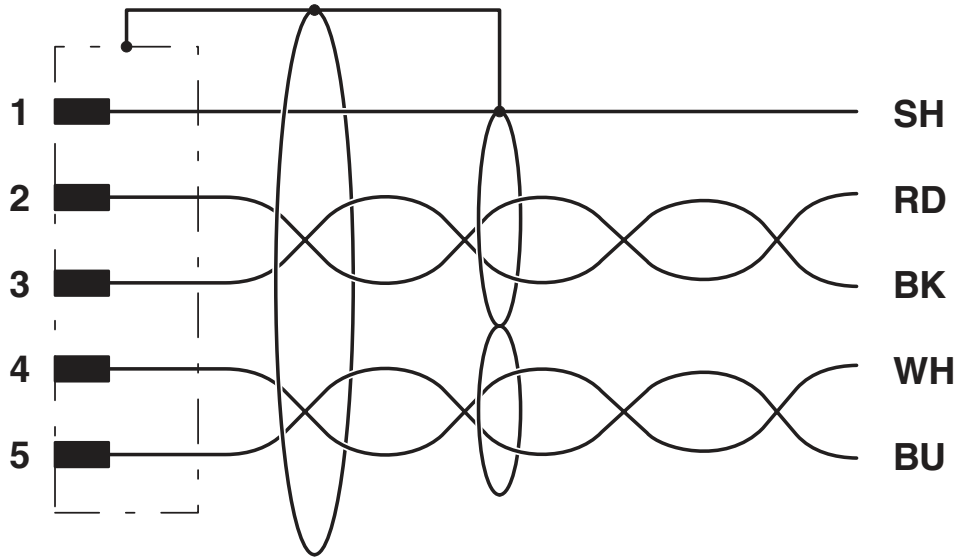
SACCBP-MS-5CON-PG9/2,0-920SCO - Device connector, rear mounting



1437588

<https://www.phoenixcontact.com/us/products/1437588>

Circuit diagram



SACCBP-MS-5CON-PG9/2,0-920SCO - Device connector, rear mounting




1437588

<https://www.phoenixcontact.com/us/products/1437588>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1437588>

 UL Recognized Approval ID: E118976-20100522	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	60 V	4 A	- 22	-

 EAC Approval ID: B.01687
--

SACCBP-MS-5CON-PG9/2,0-920SCO - Device connector, rear mounting



1437588

<https://www.phoenixcontact.com/us/products/1437588>

Classifications

ECLASS

ECLASS-11.0	27440102
ECLASS-12.0	27440116
ECLASS-13.0	27440116

ETIM

ETIM 8.0	EC002635
----------	----------

UNSPSC

UNSPSC 21.0	39121400
-------------	----------

SACCBP-MS-5CON-PG9/2,0-920SCO - Device connector, rear mounting



1437588

<https://www.phoenixcontact.com/us/products/1437588>

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"

SACCBP-MS-5CON-PG9/2,0-920SCO - Device connector, rear mounting



1437588

<https://www.phoenixcontact.com/us/products/1437588>

Accessories

SACC-PG9-KD-NUT-SH - EMC nut

1440177

<https://www.phoenixcontact.com/us/products/1440177>

EMC nut, Threads, Pg9, Alternative product in accordance with RoHS II without Exemption 6c (Pb <0.1%) item no.: 1239704



Phoenix Contact 2023 © - all rights reserved
<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com