

SACCBP-M12MSB-5CON-M16/0,5-920 - Device
connector rear mounting

1408205
<https://www.phoenixcontact.com/us/products/1408205>

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, 5-position, PUR, red lilac RAL 4001, Plug, straight, M12-SPEEDCON, B-coding, Bus line, cable length: 0.5 m

Commercial data

Item number	1408205
Packing unit	1 pc
Minimum order quantity	1 pc
Product key	ABQYAA
GTIN	4046356796934
Weight per piece (including packing)	53.1 g
Weight per piece (excluding packing)	53.1 g
Country of origin	DE

SACCBP-M12MSB-5CON-M16/0,5-920 - Device connector rear mounting



1408205

<https://www.phoenixcontact.com/us/products/1408205>

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.
--------------------	--

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: - 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 • 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-M12MSB-5CON-M16/0,5-920 - Device connector rear mounting



1408205

<https://www.phoenixcontact.com/us/products/1408205>

- 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 § 14.1.3 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 wall/screw mounting
Tightening torque	2 Nm ... 3 Nm (Installation-side)

Product properties

Product type	Circular connectors (device side)
Number of positions	5
Shielded	yes
Coding	B

Insulation characteristics

Overvoltage category	III
Degree of pollution	3

Material specifications

Flammability rating according to UL 94	V0
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 AC
Nominal voltage U_N	48 V AC
	60 V DC
Nominal current I_N	4 A
Transmission medium	Copper

Connection data

Conductor connection

Connection method	Bus line
Tightening torque	2 Nm ... 3 Nm (Installation-side)

SACCBP-M12MSB-5CON-M16/0,5-920 - Device connector rear mounting



1408205

<https://www.phoenixcontact.com/us/products/1408205>

Mechanical properties

Mechanical data

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

Connector

Connection 1

Head design	Plug
Head cable outlet	straight
Head thread type	M12
Head locking type	SPEEDCON
Coding	B

Cable/line

Cable length	0.5 m
--------------	-------

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

Dimensional drawing	
Shielded	yes
UL AWM Style	21198 (80°C/300 V)
Cable weight	90 kg/km
Cable type	CANopen®/DeviceNet™, PUR, violet
Cable type (abbreviation)	920
Signal type/category	CANopen® DeviceNet™
Cable structure	2xAWG24/19+2xAWG22/19
External cable diameter	6.70 mm ±0.3 mm
Outer sheath, material	PUR
External sheath, color	red lilac RAL 4001
Conductor material	Tin-plated Cu litz wires
Conductor structure signal line	19x 0.13 mm
AWG signal line	24
Conductor structure, voltage supply	19x 0.15 mm
Conductor cross section	2x 0.25 mm² (Data cable)
AWG power supply	22

SACCBP-M12MSB-5CON-M16/0,5-920 - Device connector rear mounting



1408205

<https://www.phoenixcontact.com/us/products/1408205>

Material wire insulation	Foamed PE (Data cable)
	PE (Power supply)
Wire diameter incl. insulation	1.95 mm $\pm$ 0.05 mm (Data cable)
	1.4 mm $\pm$ 0.05 mm (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
Shielding	Tinned copper braided shield
Optical shield covering	80 %
Nominal voltage, cable	$\leq$ 300 V (Peak value, not for high-power applications)
Test voltage Core/Core	2000 V (50 Hz, 1 min.)
Test voltage Core/Shield	2000.00 V (50 Hz, 1 min.)
Cable insulation resistance	$\geq$ 5 G Ω *km (Data cable)
	$\geq$ 5 G Ω *km (Power supply)
Wave impedance	120 Ω $\pm$ 10 % (with 1 MHz)
Loop resistance	$\leq$ 181.80 Ω /km (Data cable)
	$\leq$ 114.80 Ω /km (Power supply)
Cable capacity	nom. 40 nF/km (Data cable)
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Number of bending cycles	5000000
Minimum bending radius, drag chain applications	10 x D
Bending radius	70 mm
Traversing path	4.5 m
Traversing rate	3 m/s
Acceleration	3 m/s ²
Ambient temperature (operation)	-20 °C ... 60 °C (cable, drag chain applications)
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)	-30 °C ... 70 °C (Cable, flexible installation)
	-30 °C ... 70 °C (Cable, flexible installation)
	-40 °C ... 80 °C (cable, fixed installation)

Environmental and real-life conditions

Ambient conditions

IP67 (When plugged in)

SACCBP-M12MSB-5CON-M16/0,5-920 - Device connector rear mounting



1408205

<https://www.phoenixcontact.com/us/products/1408205>

Degree of protection	IP65 (When plugged in)
	IP65/IP67
Ambient temperature (operation) (male connector/female connector)	-25 °C ... 85 °C (Plug / socket)
	-40 °C ... 85 °C (without mechanical actuation)
Ambient temperature (operation) (flexible installation)	-20 °C ... 75 °C (Cable, flexible installation)
Ambient temperature (operation) (Cable, fixed installation)	-40 °C ... 80 °C (cable, fixed installation)

Standards and regulations

M12

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

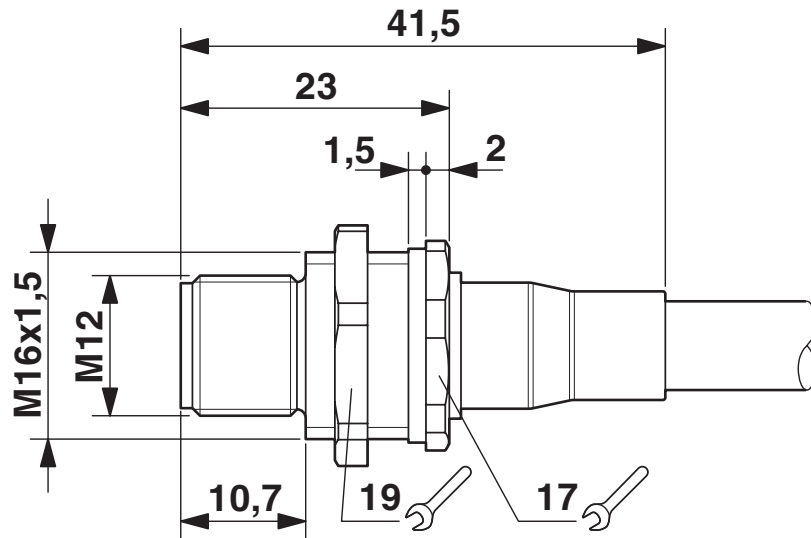
SACCBP-M12MSB-5CON-M16/0,5-920 - Device connector rear mounting

1408205

<https://www.phoenixcontact.com/us/products/1408205>

Drawings

Dimensional drawing



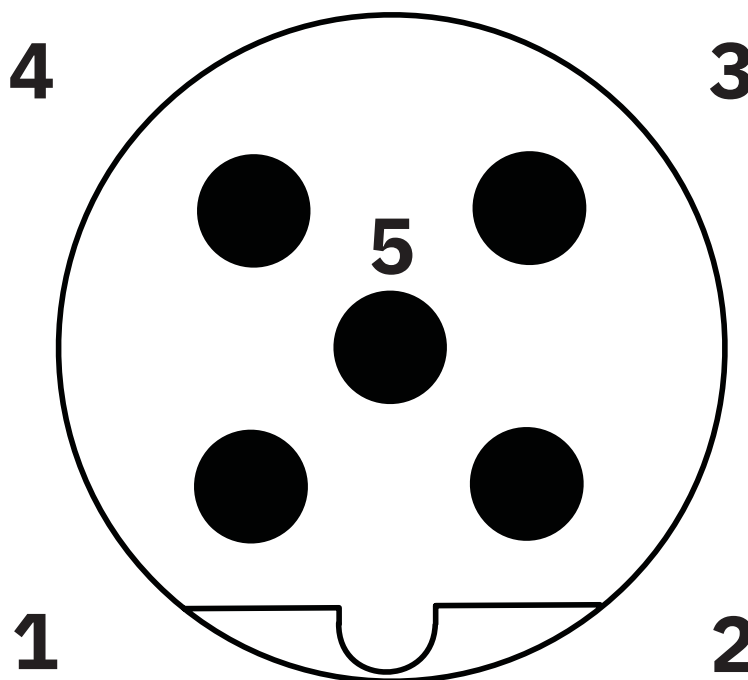
M12 flush-type connector

SACCBP-M12MSB-5CON-M16/0,5-920 - Device connector rear mounting

1408205

<https://www.phoenixcontact.com/us/products/1408205>

Schematic diagram



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

SACCBP-M12MSB-5CON-M16/0,5-920 - Device connector rear mounting



1408205
<https://www.phoenixcontact.com/us/products/1408205>

Classifications

ETIM

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

UNSPSC

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

SACCBP-M12MSB-5CON-M16/0,5-920 - Device connector rear mounting



1408205

<https://www.phoenixcontact.com/us/products/1408205>

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	6(c)

China RoHS

Environment 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 "Manufacturer 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: n/a)
-------------------------------------	----------------

Phoenix Contact 2025 © - 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