

SACC-EC-MS-4CON-M16/2,0 SCO - Device connector front mounting



1446346

<https://www.phoenixcontact.com/us/products/1446346>

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 front mounting, Universal, 4-position, straight, M12-SPEEDCON, coding: A, on free cable end, Front mounting, Individual wires, cable length: 2 m, 0.34 mm², TPE litz wire, Alternative product in accordance with RoHS II without Exemption 6c (Pb <0.1%) item no.: 1239788

Commercial data

Item number	1446346
Packing unit	1 pc
Minimum order quantity	50 pc
Sales key	AB24
Product key	ABQCEB
GTIN	4046356628402
Weight per piece (including packing)	60.2 g
Weight per piece (excluding packing)	22.22 g
Customs tariff number	85444290
Country of origin	DE

SACC-EC-MS-4CON-M16/2,0 SCO - Device connector front mounting



1446346

<https://www.phoenixcontact.com/us/products/1446346>

Technical data

Notes

General	Lock nut is included in the scope of delivery
Safety note	<p>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 style="list-style-type: none">• 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:<ul style="list-style-type: none">o On the producto On the packing labelo In the supplied documentationo 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• 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
Safety note	<p>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 style="list-style-type: none">• 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:<ul style="list-style-type: none">o On the producto On the packing labelo In the supplied documentationo 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• 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

SACC-EC-MS-4CON-M16/2,0 SCO - Device connector front mounting



1446346

<https://www.phoenixcontact.com/us/products/1446346>

- 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	Front mounting
Connection method	Individual wires

Product properties

Product type	Circular connectors (device side)
Sensor type	Universal
Number of positions	4
No. of cable outlets	1
Shielded	no
Coding	A

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	Au
Contact carrier material	PA 6.6
Material for screw connection	Zinc die-cast, nickel-plated
Conductor material	Tin-plated Cu litz wires

Electrical properties

Contact resistance	$\leq 3 \text{ m}\Omega$
Insulation resistance	$\geq 100 \text{ M}\Omega$
Nominal voltage U_N	250 V
Nominal current I_N	4 A
Max. conductor resistance	57.6 m Ω /m

Connection data

Conductor connection	
Connection method	Individual wires
Contact connection type	Pin
Conductor cross section	0.34 mm 2

Connector

SACC-EC-MS-4CON-M16/2,0 SCO - Device connector front mounting



1446346

<https://www.phoenixcontact.com/us/products/1446346>

Connection 1

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
Cable type	TPE litz wire
Signal type/category	Universal
Wire diameter incl. insulation	1.2 mm ± 0.07 mm
Single wire, color	brown, white, blue, black
Conductor material	Tin-plated Cu litz wires
Conductor structure signal line	7x 0.25 mm
AWG signal line	22
Material wire insulation	TPE
Thickness, insulation	0.21 mm (Core insulation)
Nominal voltage, cable	300 V
Test voltage, cable	2000 V AC
Cable resistance	≤ 57.6 m Ω /m
Cable insulation resistance	≥ 20 M Ω *km

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP67
Ambient temperature (operation)	IP67
	-25 °C ... 85 °C (Plug / socket)
	-25 °C ... 90 °C (cable, fixed installation)

SACC-EC-MS-4CON-M16/2,0 SCO - Device connector front mounting

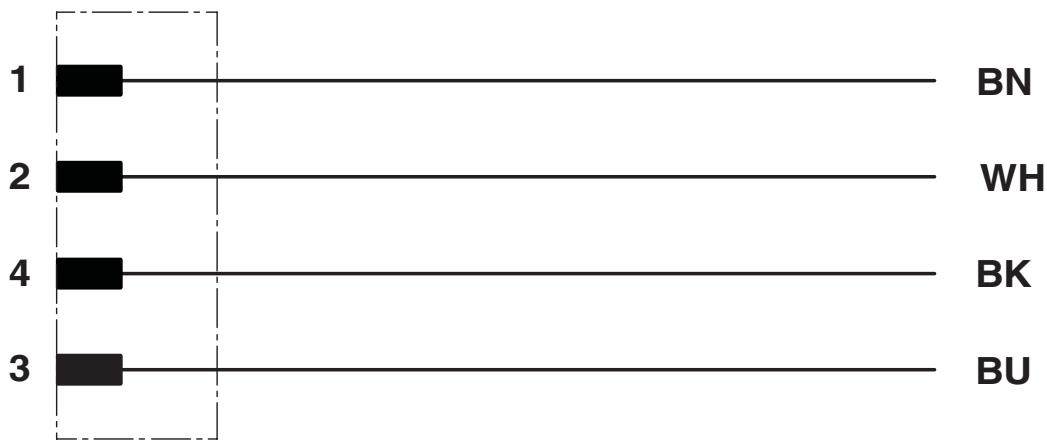


1446346

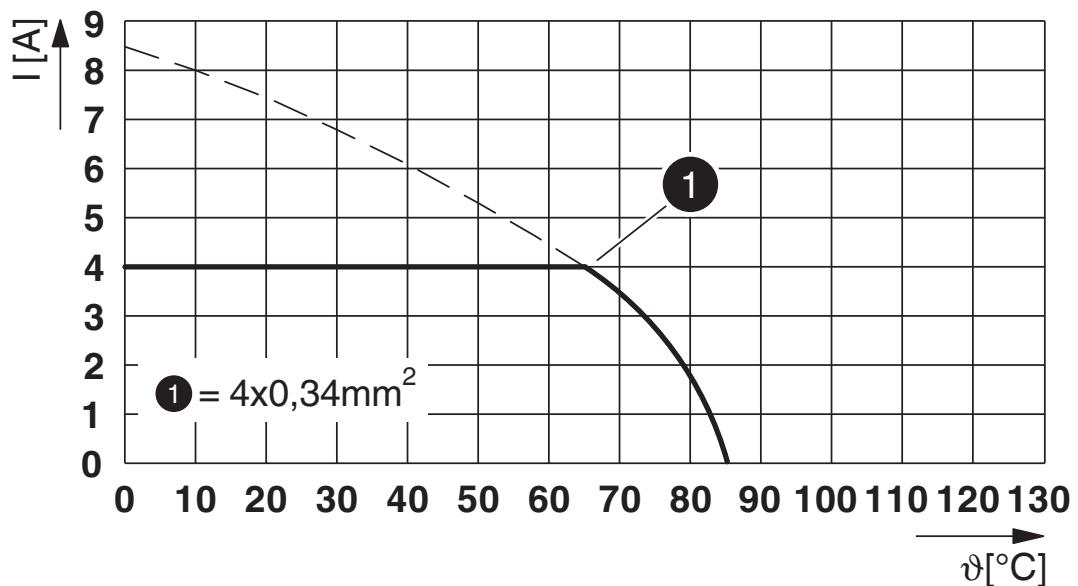
<https://www.phoenixcontact.com/us/products/1446346>

Drawings

Circuit diagram



Diagram



I = current strength, T = ambient temperature

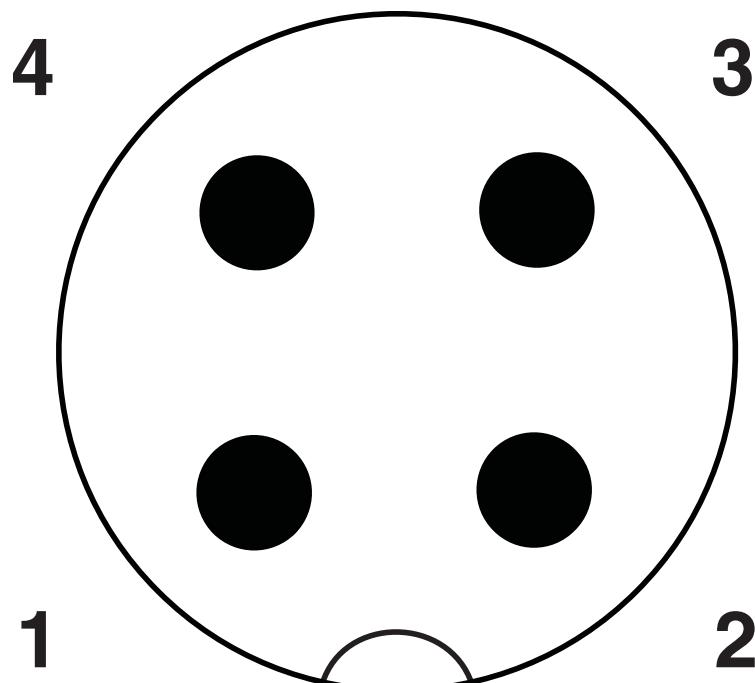
SACC-EC-MS-4CON-M16/2,0 SCO - Device connector front mounting



1446346

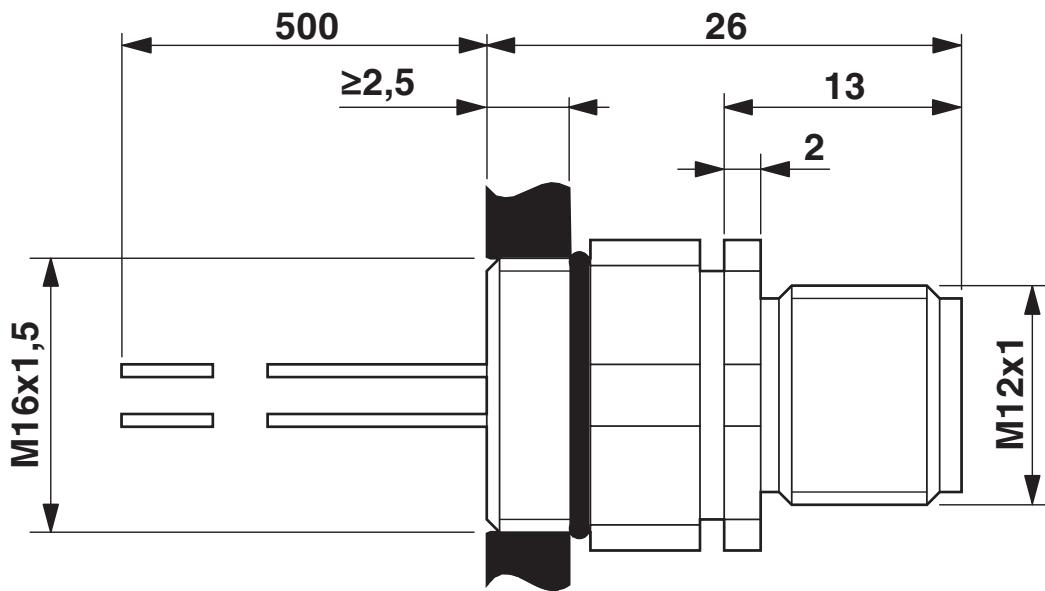
<https://www.phoenixcontact.com/us/products/1446346>

Schematic diagram



Pin assignment M12 plug, 4-pos., A-coded, view plug side

Dimensional drawing



Dimensional drawing

SACC-EC-MS-4CON-M16/2,0 SCO - Device connector front mounting



1446346

<https://www.phoenixcontact.com/us/products/1446346>

Approvals

ⓘ To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1446346>

 UL Recognized Approval ID: E118976-20100522	Nominal voltage U_N 250 V	Nominal current I_N 4 A	Cross section AWG - 22	Cross section mm^2 -

 EAC Approval ID: B.01687
--

 cULus Recognized Approval ID: E221474-20140616	Nominal voltage U_N 250 V	Nominal current I_N 4 A	Cross section AWG 22 - 20	Cross section mm^2 -

SACC-EC-MS-4CON-M16/2,0 SCO - Device connector front mounting



1446346

<https://www.phoenixcontact.com/us/products/1446346>

Classifications

ECLASS

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

ETIM

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

UNSPSC

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

SACC-EC-MS-4CON-M16/2,0 SCO - Device connector front mounting



1446346

<https://www.phoenixcontact.com/us/products/1446346>

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"

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