

SACC-E-MS-8CON-M16/2,0 SCO - Device connector front mounting



1416283

<https://www.phoenixcontact.com/us/products/1416283>

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, 8-position, Pin, straight, M12-SPEEDCON, coding: A, on free cable end, Front mounting, M16 x 1.5, Individual wires, cable length: 2 m, 0.25 mm², TPE litz wire, Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1239112

Your advantages

- Preassembled with litz wires for immediate use
- Customer-specific assemblies and litz wire lengths available
- Sealed on the litz wire side for optimum leak-tightness
- All standard pin assignments and codings for signal, data, and power transmission with a uniform design-in design
- For high transmission safety: shield connection to the housing with optional EMC nut
- SPEEDCON fast locking system reduces cabling times

Commercial data

Item number	1416283
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB24
Product key	ABQCEB
GTIN	4055626069661
Weight per piece (including packing)	63.88 g
Weight per piece (excluding packing)	63.8 g
Customs tariff number	85444290
Country of origin	DE

SACC-E-MS-8CON-M16/2,0 SCO - Device connector front mounting



1416283

<https://www.phoenixcontact.com/us/products/1416283>

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.
General	Contact connection method: Crimp connection

Mounting

Mounting type	Front mounting M16 x 1.5
---------------	--------------------------

Product properties

Product type	Circular connectors (device side)
Application	Signal
Sensor type	Universal
Number of positions	8
No. of cable outlets	1
Shielded	no
Coding	A
Thread type	M12

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
Conductor material	Tin-plated Cu litz wires

Electrical properties

Rated surge voltage	0.8 kV
Contact resistance	$\leq 3 \text{ m}\Omega$
Insulation resistance	$\geq 100 \text{ M}\Omega$
Nominal voltage U_N	30 V (AC)
	30 V (DC)
Nominal current I_N	2 A

SACC-E-MS-8CON-M16/2,0 SCO - Device connector front mounting



1416283

<https://www.phoenixcontact.com/us/products/1416283>

Max. conductor resistance	80 mΩ/m
---------------------------	---------

Connection data

Conductor connection

Connection method	Individual wires
Contact connection type	Pin
Conductor cross section	0.25 mm²
Tightening torque	3 Nm ... 4 Nm (Installation-side)

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	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	1.15 mm ±0.07 mm
Single wire, color	brown, blue, white, gray, pink, green, yellow, red
Cable cross section	0.25 mm²
Conductor material	Tin-plated Cu litz wires
Conductor structure signal line	14x 0.15 mm
AWG signal line	24
Material wire insulation	TPE
Thickness, insulation	0.21 mm (Core insulation)
Nominal voltage, cable	300 V
Test voltage, cable	2000 V AC
Cable resistance	≤ 80 mΩ/m
Cable insulation resistance	≥ 20 MΩ*km
Ambient temperature (operation)	-40 °C ... 85 °C (cable, fixed installation) -25 °C ... 85 °C (Cable, flexible installation)

SACC-E-MS-8CON-M16/2,0 SCO - Device connector
front mounting

1416283
<https://www.phoenixcontact.com/us/products/1416283>

Environmental and real-life conditions

Ambient conditions	
Degree of protection	IP67
	IP67
Ambient temperature (operation)	-25 °C ... 85 °C (Plug / socket)
	-40 °C ... 85 °C (without mechanical actuation)
	-25 °C ... 85 °C (Cable, flexible installation)
	-40 °C ... 85 °C (cable, fixed installation)

Standards and regulations

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

SACC-E-MS-8CON-M16/2,0 SCO - Device connector front mounting

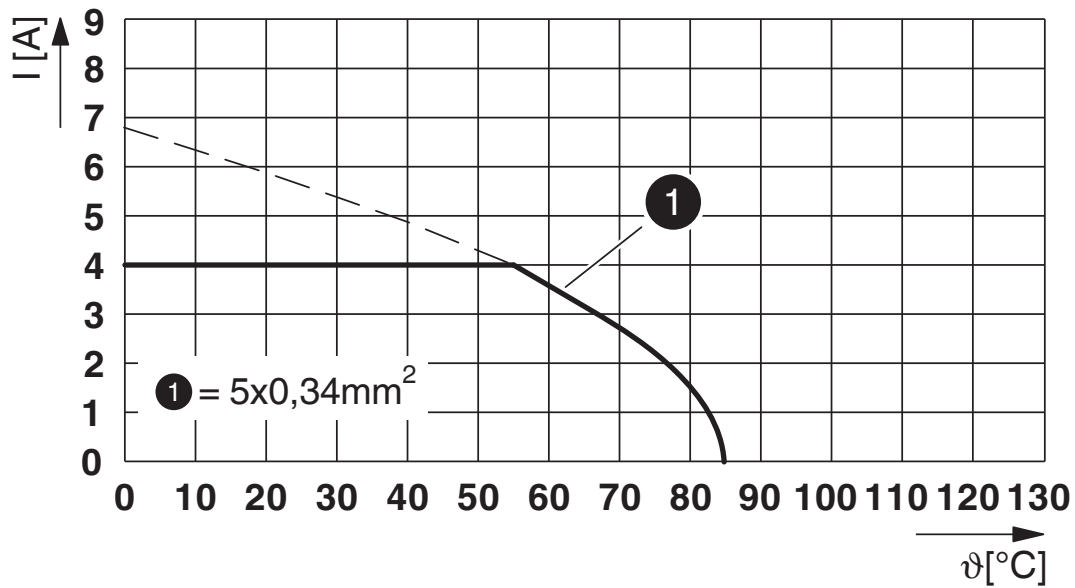


1416283

<https://www.phoenixcontact.com/us/products/1416283>

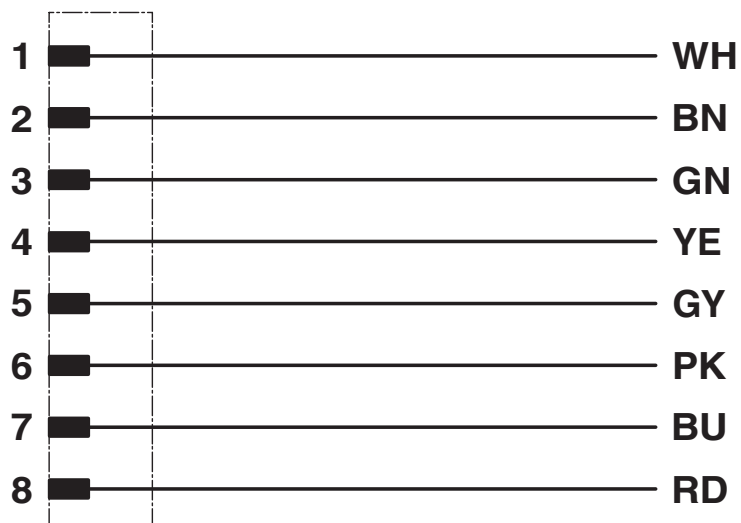
Drawings

Diagram



I = current strength, T = ambient temperature

Circuit diagram

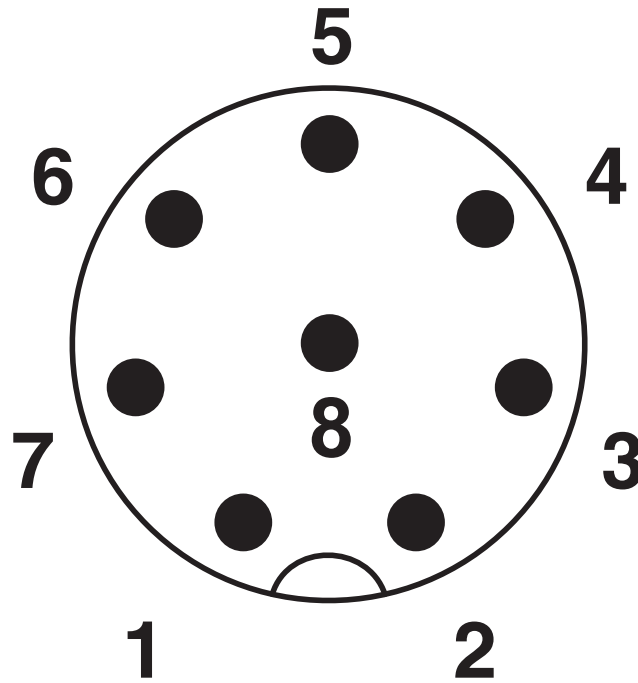


SACC-E-MS-8CON-M16/2,0 SCO - Device connector front mounting

1416283

<https://www.phoenixcontact.com/us/products/1416283>

Schematic diagram



Pin assignment M12 plug, 8-pos., view plug side

SACC-E-MS-8CON-M16/2,0 SCO - Device connector
front mounting

1416283
<https://www.phoenixcontact.com/us/products/1416283>

Approvals

 To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1416283>

	UL Recognized			
	Approval ID: E118976-20100522			
		Nominal voltage U _N	Nominal current I _N	Cross section AWG
		30 V	2 A	24 - 24
				Cross section mm ²
				-

	cULus Recognized			
	Approval ID: E221474-20140616			
		Nominal voltage U _N	Nominal current I _N	Cross section AWG
		30 V	2 A	24 - 22
				Cross section mm ²
				-

1416283
<https://www.phoenixcontact.com/us/products/1416283>

Classifications

ECLASS

ECLASS-11.0	27440103
ECLASS-12.0	27440103
ECLASS-13.0	27440103

ETIM

ETIM 8.0	EC003570
----------	----------

UNSPSC

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

1416283
<https://www.phoenixcontact.com/us/products/1416283>

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: 7439-92-1)
SCIP	c5011c1f-c106-4168-9af9-d3b417e1d52b

SACC-E-MS-8CON-M16/2,0 SCO - Device connector front mounting



1416283

<https://www.phoenixcontact.com/us/products/1416283>

Accessories

SACC-E-MU-M16 - Flat nut

1504097

<https://www.phoenixcontact.com/us/products/1504097>

Flat nut, Screw mounting, M16 x 1.5, Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1239863



SACC-M16-SEAL CLM - Flat gasket

1430394

<https://www.phoenixcontact.com/us/products/1430394>

M16 flat gasket for M12 flush-type connectors with M16 fastening thread



SACC-E-MS-8CON-M16/2,0 SCO - Device connector front mounting



1416283

<https://www.phoenixcontact.com/us/products/1416283>

PROT-M12 FS - Sealing cap

1560251

<https://www.phoenixcontact.com/us/products/1560251>



M12 sealing cap for unoccupied M12 plugs of the sensor/actuator cable, flush-type plugs and I/O devices in the field

PROT-M12 FS-M - Sealing cap

1430488

<https://www.phoenixcontact.com/us/products/1430488>



M12 metal sealing cap for unoccupied M12 plugs of the sensor/actuator cable, flush-type plugs and I/O devices in the field

Phoenix Contact 2024 © - 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