

SACCBP-MS-8CON-M16/1,0-PUR SCO - Device connector rear mounting



1419425

<https://www.phoenixcontact.com/us/products/1419425>

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, Universal, 8-position, PUR halogen-free, black-gray RAL 7021, shielded, Pin, straight, M12-SPEEDCON, A-coding, on free cable end, Cable connection, cable length: 1 m, 0.25 mm², PUR halogen-free black, this item is expected to be lead-free from Q1 2027 in accordance with RoHS II without exception 6c (Pb < 0.1%), a lead-free alternative is possible on request in advance

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
- For high transmission safety: shield connection to the housing with optional EMC nut

Commercial data

Item number	1419425
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB25
Product key	ABQDGA
GTIN	4046356533324
Weight per piece (including packing)	78.4 g
Weight per piece (excluding packing)	72.717 g
Customs tariff number	85444290
Country of origin	DE

SACCBP-MS-8CON-M16/1,0-PUR SCO - Device connector rear mounting



1419425

<https://www.phoenixcontact.com/us/products/1419425>

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

Mounting

Mounting type	Rear mounting (M16 x 1.5, with flat nut)
Tightening torque	3 Nm ... 4 Nm (Installation-side)

Product properties

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

Insulation characteristics

Overvoltage category	II
Degree of pollution	3

Material specifications

Material Housing	GD-Zn
Material Housing surface	Ni
Flammability rating according to UL 94	V0
Seal material	FKM
Contact material	CuZn
Contact surface material	Au
Contact carrier material	PA 6.6
Outer sheath, material	PUR
Conductor material	Bare Cu litz wires

Electrical properties

Rated surge voltage	0.8 kV
Contact resistance	≤ 3 mΩ
Insulation resistance	≥ 100 MΩ
Nominal voltage U _N	30 V

SACCBP-MS-8CON-M16/1,0-PUR SCO - Device connector rear mounting



1419425

<https://www.phoenixcontact.com/us/products/1419425>

Nominal current I_N	2 A
Max. conductor resistance	78 Ω /km

Connection data

Conductor connection

Connection method	Cable connection
Contact connection type	Pin
Conductor cross-section	8x 0.25 mm ² (Signal line)
Tightening torque	3 Nm ... 4 Nm (Installation-side)

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	> 100
Max. bending cycles	2000000

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	1 m
--------------	-----

PUR halogen-free black [PUR]

Dimensional drawing	
Cable weight	53 kg/km
UL AWM Style	20549 / 10493 (80°C/300 V)
Number of positions	8
Shielded	yes

SACCBP-MS-8CON-M16/1,0-PUR SCO - Device connector rear mounting



1419425

<https://www.phoenixcontact.com/us/products/1419425>

Cable type	PUR halogen-free black [PUR]
Conductor structure signal line	32x 0.10 mm
AWG signal line	24
Conductor cross section	8x 0.25 mm ² (Signal line)
Wire diameter incl. insulation	1.17 mm ±0.02 mm
External cable diameter	5.90 mm ±0.2 mm
Outer sheath, material	PUR
External sheath, color	black-gray RAL 7021
Conductor material	Bare Cu litz wires
Material wire insulation	PP
Single wire, color	brown, white, green, yellow, gray, pink, blue, red
Thickness, insulation	approx. 0.20 mm
Thickness, outer sheath	approx. 0.50 mm
Overall twist	8 wires around filler to the core
Optical shield covering	85 %
Max. conductor resistance	≤ 78 Ω/km (at 20 °C)
Insulation resistance	≥ 1 GΩ*km (at 20 °C)
Nominal voltage, cable	≤ 300 V AC
Test voltage	≥ 3000 V AC (Spark test)
Test voltage Core/Shield	≥ 2000.00 V AC (for 60 s)
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Smallest bending radius, fixed installation	30 mm
Smallest bending radius, movable installation	59 mm
Dynamic load capacity (bending)	Max. bending cycles: 5000000, Bending radius: 10 x D, Traversing path: 10 m, Traversing rate: 3 m/s, Acceleration: 10 m/s ²
Dynamic load capacity (torsion)	Torsion: ±180 °/m, Torsion cycles: ≥1000000, Torsional frequency: 35 cycles/min.
Halogen-free	in accordance with DIN VDE 0472 part 815 according to IEC 60754-1
Flame resistance	in acc. with UL FT-2 according to UL 758/1581 (horizontal) in accordance with UL 758/1581 FT2 According to DIN EN 60332-2-2 (20 s)
Resistance to oil	in accordance with IEC 60811-404
Other resistance	hydrolysis and microbe resistant Resistant to salt water low-abrasion partly UV-resistant (in accordance with DIN EN ISO 4892-2-A)
Special properties	Flexible cable conduit capable
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation) -25 °C ... 80 °C (Cable, flexible installation)

SACCBP-MS-8CON-M16/1,0-PUR SCO - Device connector rear mounting



1419425

<https://www.phoenixcontact.com/us/products/1419425>

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP67 (When plugged in)
	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) (Cable, flexible installation)	-25 °C ... 85 °C (Cable, flexible installation)
Ambient temperature (operation) (Cable, fixed installation)	-40 °C ... 85 °C (cable, fixed installation)
UL Type Rating	Type 4 (indoor use only)

Standards and regulations

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

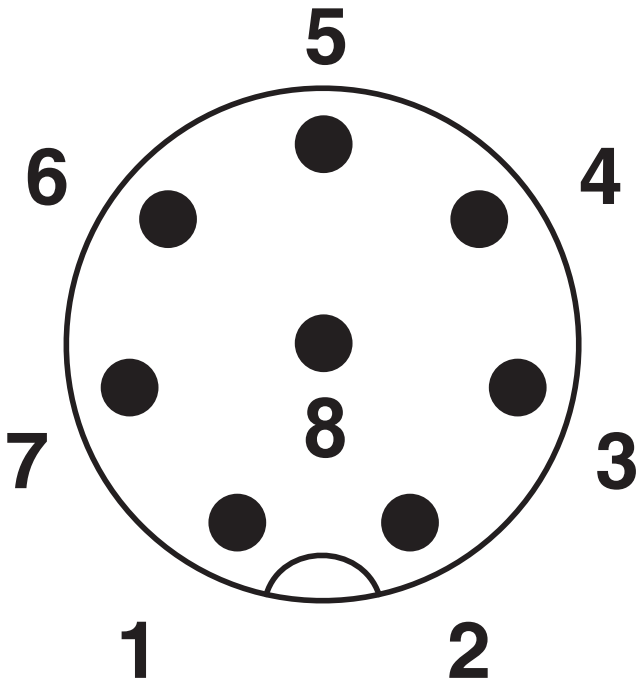
SACCBP-MS-8CON-M16/1,0-PUR SCO - Device
connector rear mounting



1419425
<https://www.phoenixcontact.com/us/products/1419425>

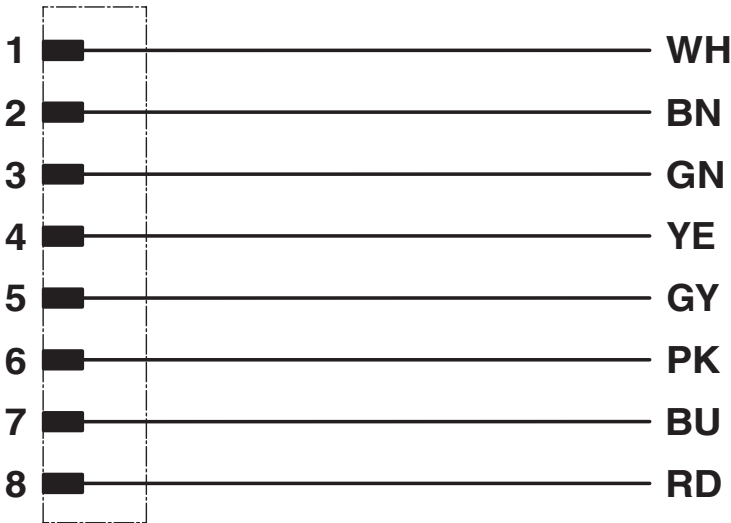
Drawings

Schematic diagram



Pin assignment of M12 male connector, 8-pos., A-coded, view of socket side

Circuit diagram



Contact assignment of the M12 plugs

SACCBP-MS-8CON-M16/1,0-PUR SCO - Device connector rear mounting





1419425

<https://www.phoenixcontact.com/us/products/1419425>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1419425>

 cUL Recognized Approval ID: E221474-20220907				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	30 V	1.5 A	-	-

 UL Recognized Approval ID: E221474-20220907				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	30 V	2 A	-	-

SACCBP-MS-8CON-M16/1,0-PUR SCO - Device connector rear mounting



1419425

<https://www.phoenixcontact.com/us/products/1419425>

Classifications

ECLASS

ECLASS-13.0	27440103
ECLASS-15.0	27440103

ETIM

ETIM 9.0	EC003570
----------	----------

UNSPSC

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

SACCBP-MS-8CON-M16/1,0-PUR SCO - Device connector rear mounting



1419425

<https://www.phoenixcontact.com/us/products/1419425>

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	de15cdad-9464-4865-9336-7cd58b003723

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