

SACC-DSI-MS-5CON-M16/0,5 PP - Device connector rear mounting



1027697

<https://www.phoenixcontact.com/us/products/1027697>

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, 5-position, Pin, straight, M12-Push-pull external locking, coding: A, on free cable end, Rear mounting, M16 x 1.5, Individual wires, cable length: 0.5 m, 0.34 mm², TPE litz wire, potted, Item is lead-free in accordance with RoHS II without Exemption 6c (Pb < 0.1 %)

Your advantages

- Established M12 standard for secure transmission of signals, data, and power
- Easy and quick cabling of devices and systems in hard-to-reach areas
- Manufacturer-independent M12 push-pull locking system for maximum availability
- Reliable shield connection even under extreme mechanical strain

Commercial data

Item number	1027697
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB24
Product key	ABQCCB
GTIN	4055626534022
Weight per piece (including packing)	38 g
Weight per piece (excluding packing)	26.12 g
Customs tariff number	85444290
Country of origin	DE

SACC-DSI-MS-5CON-M16/0,5 PP - Device connector rear mounting



1027697

<https://www.phoenixcontact.com/us/products/1027697>

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
General	Contact connection method: Crimp connection

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 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 • Only use tools recommended by Phoenix Contact • The installation notes/Design In documents online on the download page at phoenixcontact.com/products must be observed for this product. • Operate the connector only when it is fully plugged in and interlocked.
-------------	---

SACC-DSI-MS-5CON-M16/0,5 PP - Device connector rear mounting



1027697

<https://www.phoenixcontact.com/us/products/1027697>

- Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standards.
- Observe the minimum bending radius of the cable. Lay the cable without twisting it.
- 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 M16 x 1.5 With flat nut
Assembly note	With flat nut

Product properties

Product type	Circular connectors (device side)
Application	Signal
Sensor type	Universal
Number of positions	5
No. of cable outlets	1
Shielded	no
Coding	A
Thread type	M12

Insulation characteristics

Overvoltage category	II
Degree of pollution	3

Material specifications

Material (Housing)	CuZn/Ni
Material Molding compound	PUR (potted)
Flammability rating according to UL 94	V0
Seal material	FKM
Contact material	CuZn
Contact surface material	Ni/Au
Contact carrier material	PA 6.6
Conductor material	Tin-plated Cu litz wires

Electrical properties

Rated surge voltage	1.5 kV
Contact resistance	$\leq 3 \text{ m}\Omega$
Insulation resistance	$\geq 100 \text{ M}\Omega$
Nominal voltage U_N	60 V (AC)
	60 V (DC)
Nominal current I_N	4 A

SACC-DSI-MS-5CON-M16/0,5 PP - Device connector rear mounting



1027697

<https://www.phoenixcontact.com/us/products/1027697>

Transmission medium	Copper
Max. conductor resistance	57.6 mΩ/m

Connection data

Conductor connection

Connection method	Individual wires
Contact connection type	Pin
Conductor cross section	0.34 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	Push-pull external locking
Coding	A

Connection 2

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

Cable/line

Cable length	0.5 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, gray
Cable cross section	0.34 mm²
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	3000 V AC
Cable resistance	≤ 57.6 mΩ/m
Cable insulation resistance	≥ 20 MΩ*km
Ambient temperature (operation)	-40 °C ... 85 °C (cable, fixed installation)

SACC-DSI-MS-5CON-M16/0,5 PP - Device connector rear mounting



1027697

<https://www.phoenixcontact.com/us/products/1027697>

	-25 °C ... 85 °C (Cable, flexible installation)
--	---

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)

Standards and regulations

Standard designation	M12 circular connector
Standards/specifications	based on IEC 61076-2-010
Note	Push-pull
Standard designation	M12 circular connector
Standards/specifications	according to IEC 61076-2-101
Standard designation	Shock, vibration
Standards/specifications	according to EN 50155
Standard designation	Shock, vibration
Standards/specifications	according to EN 61373:2011

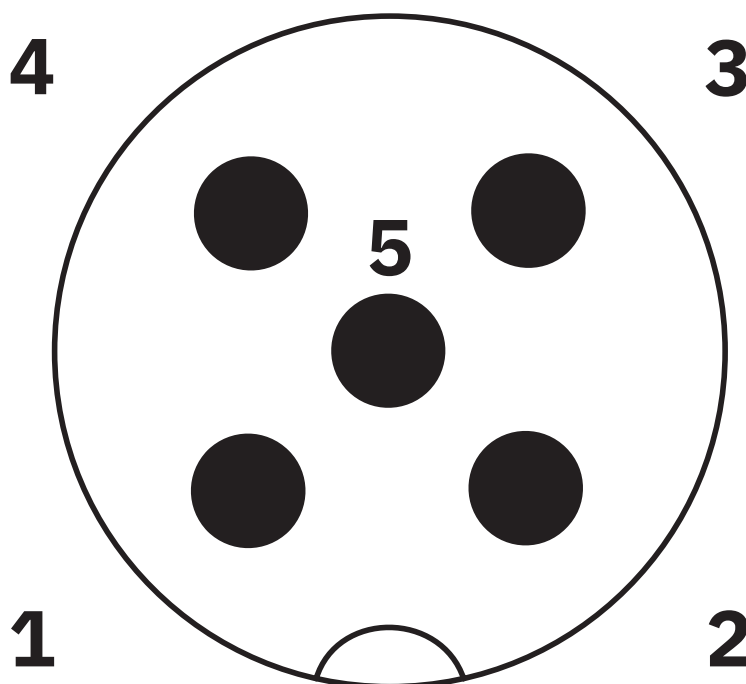
SACC-DSI-MS-5CON-M16/0,5 PP - Device connector rear mounting

1027697

<https://www.phoenixcontact.com/us/products/1027697>

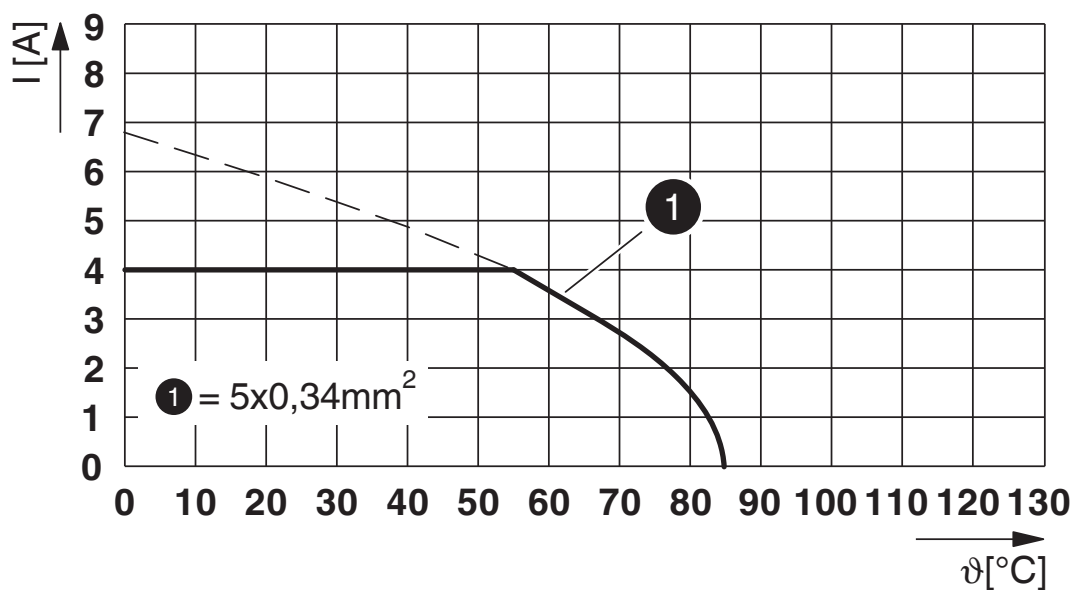
Drawings

Schematic diagram



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

Diagram



I = current strength, T = ambient temperature

SACC-DSI-MS-5CON-M16/0,5 PP - Device connector rear mounting



1027697

<https://www.phoenixcontact.com/us/products/1027697>

Circuit diagram



Contact assignment of the M12 plug

SACC-DSI-MS-5CON-M16/0,5 PP - Device connector rear mounting



1027697
<https://www.phoenixcontact.com/us/products/1027697>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1027697>

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

SACC-DSI-MS-5CON-M16/0,5 PP - Device connector rear mounting



1027697
<https://www.phoenixcontact.com/us/products/1027697>

Classifications

ECLASS

ECLASS-13.0	27440103
-------------	----------

ETIM

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

UNSPSC

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

SACC-DSI-MS-5CON-M16/0,5 PP - Device connector rear mounting



1027697

<https://www.phoenixcontact.com/us/products/1027697>

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
---	--------------------

China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
-------------------------------------	----------------------------

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