

SACC-SQ-M12MS-12CON-20/0,5 - Device connector front mounting



1441707

<https://www.phoenixcontact.com/us/products/1441707>

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Device connector front mounting, Universal, 12-position, Pin, straight, M12, coding: A, on free cable end, Front mounting, Square flange, Individual wires, cable length: 0.5 m, 0.14 mm², TPE litz wire, Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1239729

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	1441707
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB24
Product key	ABQCED
Catalog page	Page 42 (C-2-2019)
GTIN	4046356533041
Weight per piece (including packing)	25.9 g
Weight per piece (excluding packing)	24.93 g
Customs tariff number	85444290
Country of origin	DE

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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 Square flange 20 mm side length
Assembly note	20 mm side length

Product properties

Product type	Circular connectors (device side)
Application	Signal
Sensor type	Universal
Number of positions	12
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
Material of grip body	Zinc die-cast, nickel-plated
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

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Nominal current I_N	1.5 A
Max. conductor resistance	57.6 mΩ/m

Connection data

Conductor connection

Connection method	Individual wires
Contact connection type	Pin
Conductor cross section	0.14 mm²
Tightening torque	3 Nm ... 4 Nm (Installation-side)

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	> 100
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Connector

Connection 1

Head design	Pin
Head cable outlet	straight
Head thread type	M12
Coding	A

Connection 2

Head design	free cable end
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Cable/line

Cable length	0.5 m
Cable type	TPE litz wire
Signal type/category	Universal
Wire diameter incl. insulation	1.1 mm ±0.05 mm
Single wire, color	brown, blue, white, green, pink, yellow, black, gray, red, violet, gray/pink, red/blue
Cable cross section	0.14 mm²
Conductor material	Tin-plated Cu litz wires
Conductor structure signal line	7x 0.16 mm
AWG signal line	26
Material wire insulation	TPE
Thickness, insulation	0.21 mm
Nominal voltage, cable	300 V
Test voltage, cable	2000 V AC
Cable resistance	≤ 57.6 mΩ/m
Cable insulation resistance	≥ 20 MΩ*km
Ambient temperature (operation)	-40 °C ... 85 °C (cable, fixed installation)

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

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

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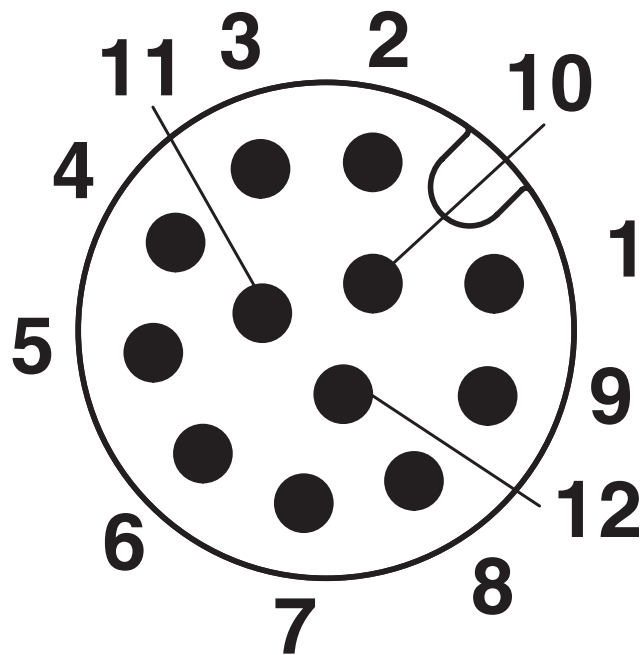


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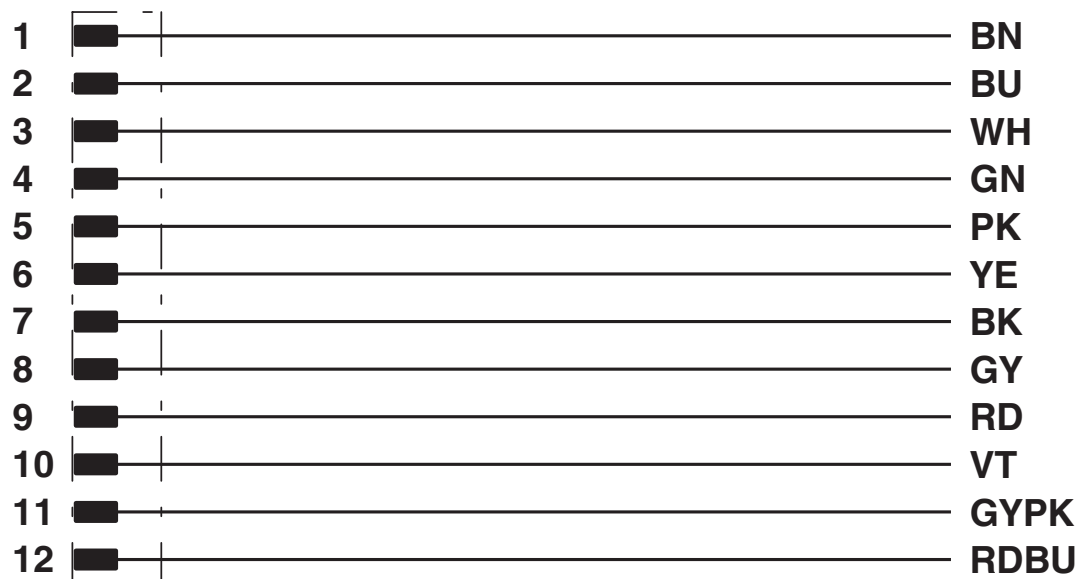
Drawings

Schematic diagram



Pin assignment M12 male connector, 12-pos., male side view


Circuit diagram




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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1441707>

<div> cULus Recognized Approval ID: E221474-20140616</div>				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	30 V	1.5 A	26 - 26	-

<div> UL Recognized Approval ID: E118976-20100522</div>				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	30 V	1.5 A	26 - 26	-

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Classifications

ECLASS

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

ETIM

ETIM 9.0	EC002635
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UNSPSC

UNSPSC 21.0	39121400
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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	606af6d0-8ef3-46fe-a188-4ca0a2ccca01

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Accessories

PROT-M12 FS - Sealing cap

1560251

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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

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

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