

# SACC-SQ-M12FS-8CON-20/0,5 - Device connector front mounting



1441697

<https://www.phoenixcontact.com/in/products/1441697>

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Device connector front mounting, 8-position, Socket, straight, M12, coding: A, on free cable end, Front mounting, Square flange, Individual wires, cable length: 0.5 m, 0.25 mm<sup>2</sup>, TPE litz wire, Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1239728

## 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	1441697
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	ABQ
Product key	ABQCFD
Catalog page	Page 42 (C-2-2019)
GTIN	4046356533034
Weight per piece (including packing)	25.12 g
Weight per piece (excluding packing)	25.12 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
Number of positions	8
No. of cable outlets	1
Shielded	no
Coding	A
Thread type	M12

### Data management status

Article revision	07
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### 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	≤ 3 mΩ
Insulation resistance	≥ 100 MΩ

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Nominal voltage $U_N$	30 V
Nominal current $I_N$	2 A
Max. conductor resistance	57.6 m $\Omega$ /m

## Connection data

### Conductor connection

Connection method	Individual wires
Contact connection type	Socket
Conductor cross section	0.25 mm <sup>2</sup>
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	Socket
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
Wire diameter incl. insulation	1.15 mm $\pm$ 0.07 mm
Single wire, color	brown, blue, white, gray, pink, green, yellow, red
Cable cross section	0.25 mm <sup>2</sup>
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	$\leq$ 57.6 m $\Omega$ /m
Cable insulation resistance	$\geq$ 20 M $\Omega$ *km
Ambient temperature (operation)	-40 °C ... 85 °C (cable, fixed installation) -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

### M12

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

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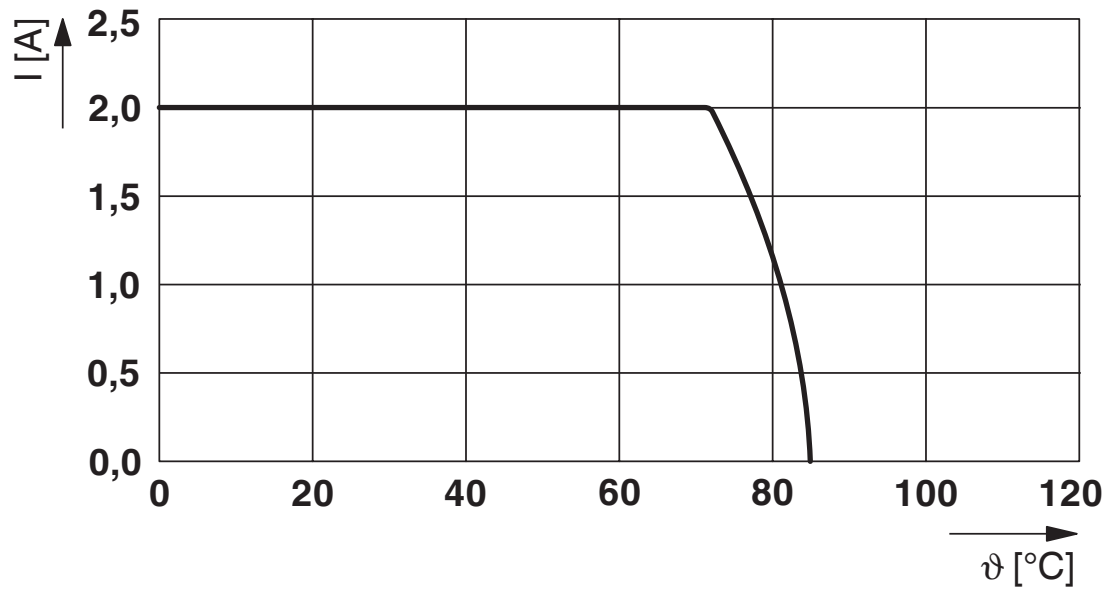


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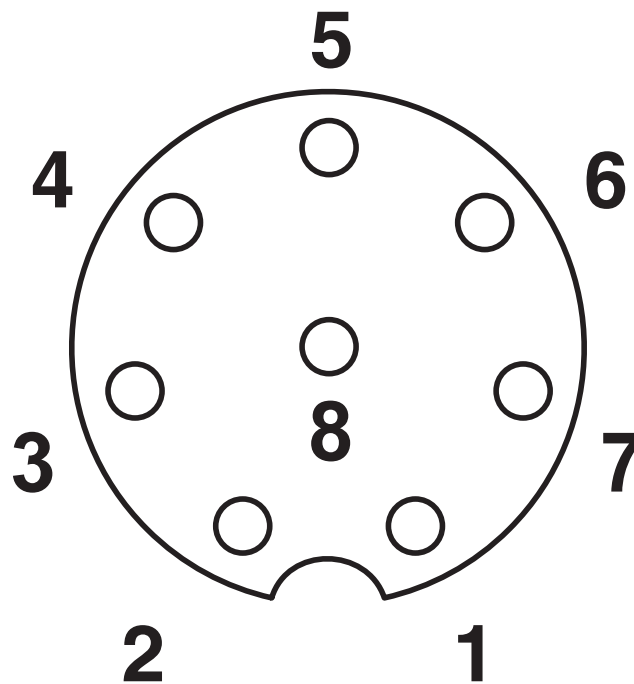
## Drawings

Diagram



I = current strength, T = ambient temperature

Schematic diagram



Pin assignment M12 socket, 8-pos., A-coded, view female side

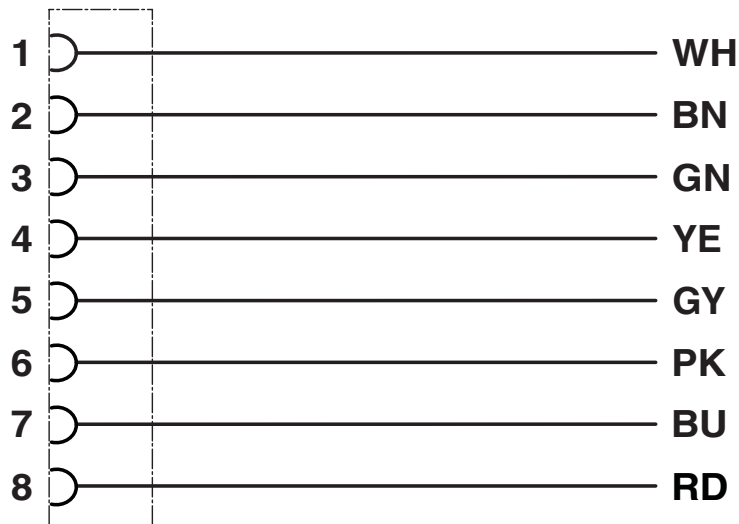
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Circuit diagram



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## Approvals

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 <b>UL Recognized</b> Approval ID: E118976-20100522				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
	30 V	2 A	24 - 24	-

 <b>cULus Recognized</b> Approval ID: E221474-20140616				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
	30 V	2 A	24 - 22	-

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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	6facf5d8-a7e5-463b-a196-f89730e72c90

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## Accessories

### PROT-M12 - Screw plug

1680539

<https://www.phoenixcontact.com/in/products/1680539>



An M12 screw plug for the unoccupied M12 sockets of the sensor/actuator cable, boxes and flush-type connectors

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### PROT-M12 SH - Screw plug

1503302

<https://www.phoenixcontact.com/in/products/1503302>



An M12 screw plug for the unoccupied M12 sockets of the shielded sensor/actuator cable, boxes and flush-type connectors

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## PROT-M12 FB - Screw plug

1555538

<https://www.phoenixcontact.com/in/products/1555538>



M12 high-grade steel screw plug, for unoccupied M12 sockets of the sensor/actuator cables, boxes and flush-type connectors for the food industry

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