

# SACC-E-M12FS-8CON-PG9/2,0 - Device connector front mounting



1401846

<https://www.phoenixcontact.com/us/products/1401846>

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, Socket, straight, M12-Standard, coding: A, on free cable end, Front mounting, Pg9, Individual wires, cable length: 2 m, 0.25 mm<sup>2</sup>, TPE litz wire

## 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

## Commercial data

Item number	1401846
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB24
Product key	ABQCFE
GTIN	4046356574259
Weight per piece (including packing)	65.3 g
Weight per piece (excluding packing)	65.3 g
Customs tariff number	85444290
Country of origin	DE

# SACC-E-M12FS-8CON-PG9/2,0 - Device connector front mounting



1401846

<https://www.phoenixcontact.com/us/products/1401846>

## 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 Pg9
---------------	--------------------

### 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

### Data management status

Article revision	07
------------------	----

### Insulation characteristics

Overvoltage category	II
Degree of pollution	3

### Material specifications

Flammability rating according to UL 94	V0
Seal material	NBR
Contact material	CuZn
Contact surface material	Ni/Au
Contact carrier material	PA 66
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
Nominal voltage U <sub>N</sub>	30 V (AC)

# SACC-E-M12FS-8CON-PG9/2,0 - Device connector front mounting



1401846

<https://www.phoenixcontact.com/us/products/1401846>

	30 V (DC)
Nominal current $I_N$	2 A
Max. conductor resistance	80 mΩ/m

## Connection data

### Conductor connection

Connection method	Individual wires
Contact connection type	Socket
Conductor cross section	0.25 mm²
Tightening torque	2 Nm ... 3 Nm (Installation-side)

## Mechanical properties

### Mechanical data

Insertion/withdrawal cycles	≥ 100
-----------------------------	-------

## Connector

### Connection 1

Head design	Socket
Head cable outlet	straight
Head thread type	M12
Head locking type	Standard
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

# SACC-E-M12FS-8CON-PG9/2,0 - Device connector front mounting



1401846

<https://www.phoenixcontact.com/us/products/1401846>

Ambient temperature (operation)	-40 °C ... 85 °C (cable, fixed installation)
	-25 °C ... 85 °C (Cable, flexible installation)

## 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-M12FS-8CON-PG9/2,0 - Device connector front mounting

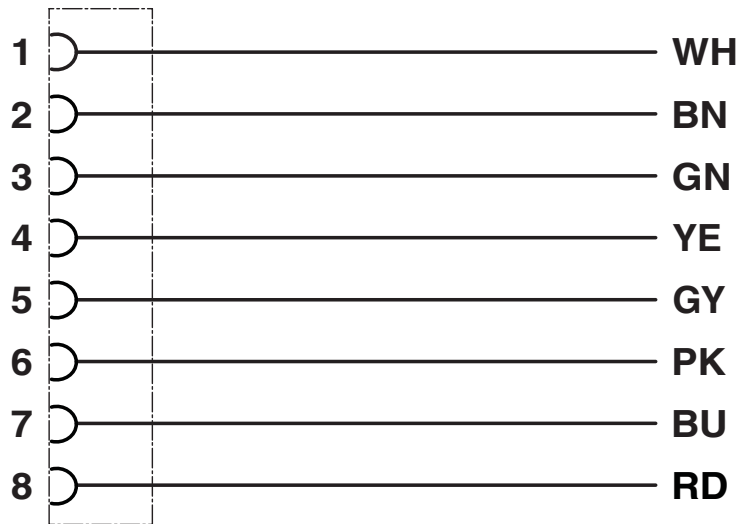


1401846

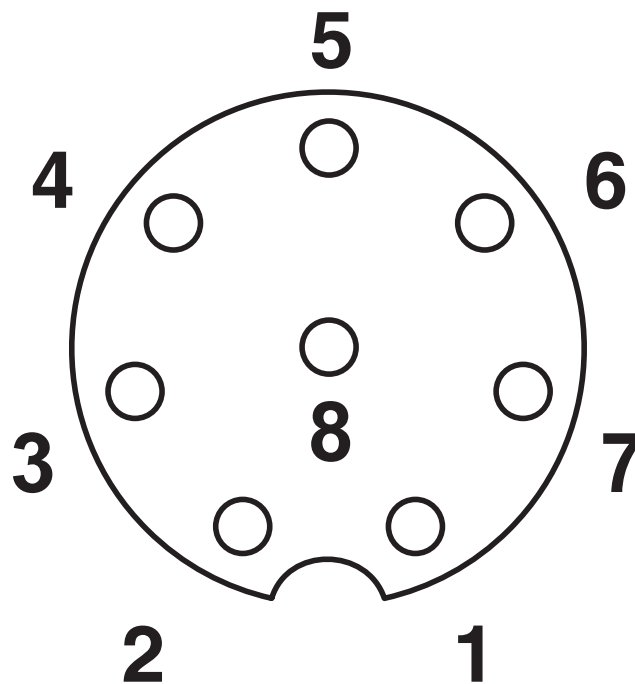
<https://www.phoenixcontact.com/us/products/1401846>

## Drawings

Circuit diagram



Schematic diagram



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


# SACC-E-M12FS-8CON-PG9/2,0 - Device connector front mounting




1401846  
<https://www.phoenixcontact.com/us/products/1401846>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1401846>

	<b>UL Recognized</b>			
	Approval ID: E118976-20100522			
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG
		30 V	2 A	24 - 24
				Cross section mm <sup>2</sup>
				-

	<b>cULus Recognized</b>			
	Approval ID: E221474-20140616			
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG
		30 V	2 A	24 - 22
				Cross section mm <sup>2</sup>
				-

# SACC-E-M12FS-8CON-PG9/2,0 - Device connector front mounting



1401846

<https://www.phoenixcontact.com/us/products/1401846>

## Classifications

### ECLASS

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

### ETIM

ETIM 9.0	EC002635
----------	----------

### UNSPSC

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

# SACC-E-M12FS-8CON-PG9/2,0 - Device connector front mounting



1401846

<https://www.phoenixcontact.com/us/products/1401846>

## 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	be5e7346-9752-4ac8-a6d6-c2b9d3002a27

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](mailto:info@phoenixcon.com)