

# Flush-type connector - SACC-E-M12MSS-4CON-M16/0,5 PE - 1424139

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Sensor/actuator flush-type plug, 4-pos., front/screw mounting with M16 thread, with 0.5 m PP litz wire, 4 x 1.5 mm<sup>2</sup>

## Your advantages

- ✓ For compact devices: transmit high power in a confined space
- ✓ Protection against mismatching thanks to S-coding
- ✓ Pre-assembled with litz wires for immediate use
- ✓ Customer-specific assemblies and litz wire lengths available
- ✓ Sealed on the litz wire side for optimum leak-tightness
- ✓ For high transmission safety: shield connection to the housing with optional EMC nut



## Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 693417
GTIN	4046356693417

## Technical data

### Dimensions

Length of cable	0.5 m
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### Ambient conditions

Ambient temperature (operation)	-25 °C ... 85 °C (Plug / socket)
Degree of protection	IP67

### General

Note	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.
Rated current at 40°C	12 A

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## Technical data

### General

Rated voltage	630 V
Rated surge voltage	6 kV
Number of positions	4
Insulation resistance	≥ 100 MΩ
Coding	S power
Standards/regulations	M12 connector IEC 61076-2-111 In line with
Status display	No
Overvoltage category	III
Degree of pollution	3
Test voltage	6 kV
Connection method	Individual wires
Insertion/withdrawal cycles	> 100
Torque	3 Nm ... 4 Nm (Installation-side)
Mounting type	Front mounting M16 x 1.5

### Material

Flammability rating according to UL 94	V0
Contact material	CuZn
Contact surface material	Ni/Au
Contact carrier material	PA
Material, knurls	CuZn alloy, nickel-plated
Sealing material	FKM

### Cable

Cable type	UL/cUL stranded hook-up wire
Conductor cross section	1.31 mm <sup>2</sup>
AWG signal line	16
Core diameter including insulation	2.2 mm
Wire colors	Black 1, black 2, black 3, green/yellow
Material conductor insulation	mPPE
Conductor material	Bare Cu litz wires
Standards/specifications	M12 connector IEC 61076-2-111 In line with
Flame resistance	in acc. to UL 1581 VW1
Halogen-free	yes
Ambient temperature (operation)	-40 °C ... 105 °C (cable, fixed installation)
	-20 °C ... 105 °C (cable, flexible installation)

### Standards and Regulations

Standards/specifications	M12 connector IEC 61076-2-111 In line with
Flame resistance	in acc. to UL 1581 VW1
Halogen-free	yes
Flammability rating according to UL 94	V0

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## Technical data

### Standards and Regulations

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.
	<ul style="list-style-type: none"> <li>• 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.</li> </ul>
	<ul style="list-style-type: none"> <li>• 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.</li> </ul>
	<ul style="list-style-type: none"> <li>• The products are suitable for applications in plant, controller, and electrical device engineering.</li> </ul>
	<ul style="list-style-type: none"> <li>• When operating the connectors in outdoor applications, they must be separately protected against environmental influences.</li> </ul>
	<ul style="list-style-type: none"> <li>• Assembled products may not be manipulated or improperly opened.</li> </ul>
	<ul style="list-style-type: none"> <li>• 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).</li> </ul>
	<ul style="list-style-type: none"> <li>• When using the product in direct connection with third-party manufacturers, the user is responsible.</li> </ul>
	<ul style="list-style-type: none"> <li>• For operating voltages &gt; 50 V AC, conductive connector housings must be grounded</li> </ul>
	<ul style="list-style-type: none"> <li>• Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standards.</li> </ul>
	<ul style="list-style-type: none"> <li>• Observe the corresponding technical data. You will find information:                             <ul style="list-style-type: none"> <li>o On the product</li> <li>o On the packing label</li> <li>o In the supplied documentation</li> <li>o Online at phoenixcontact.com/products under the product</li> </ul> </li> </ul>
	<ul style="list-style-type: none"> <li>• Only use tools recommended by Phoenix Contact</li> </ul>
	<ul style="list-style-type: none"> <li>• Use a protective cap to protect connectors that are not in use. The suitable accessories are available online in the accessory section of the product at phoenixcontact.com/products</li> </ul>
	<ul style="list-style-type: none"> <li>• Ensure that the protective or functional ground has been properly connected.</li> </ul>
	<ul style="list-style-type: none"> <li>• 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</li> </ul>
	<ul style="list-style-type: none"> <li>• 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).</li> </ul>

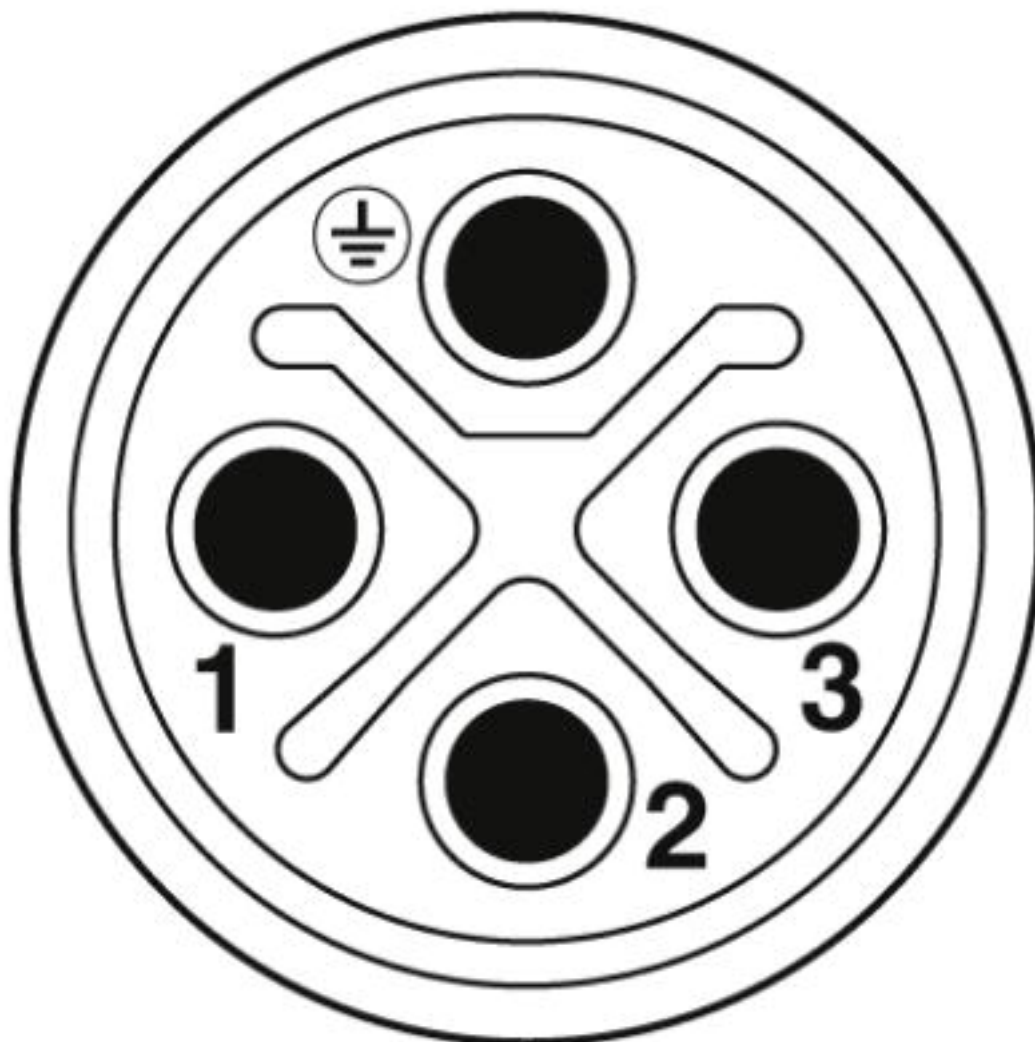
### Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

# Flush-type connector - SACC-E-M12MSS-4CON-M16/0,5 PE - 1424139

## Drawings

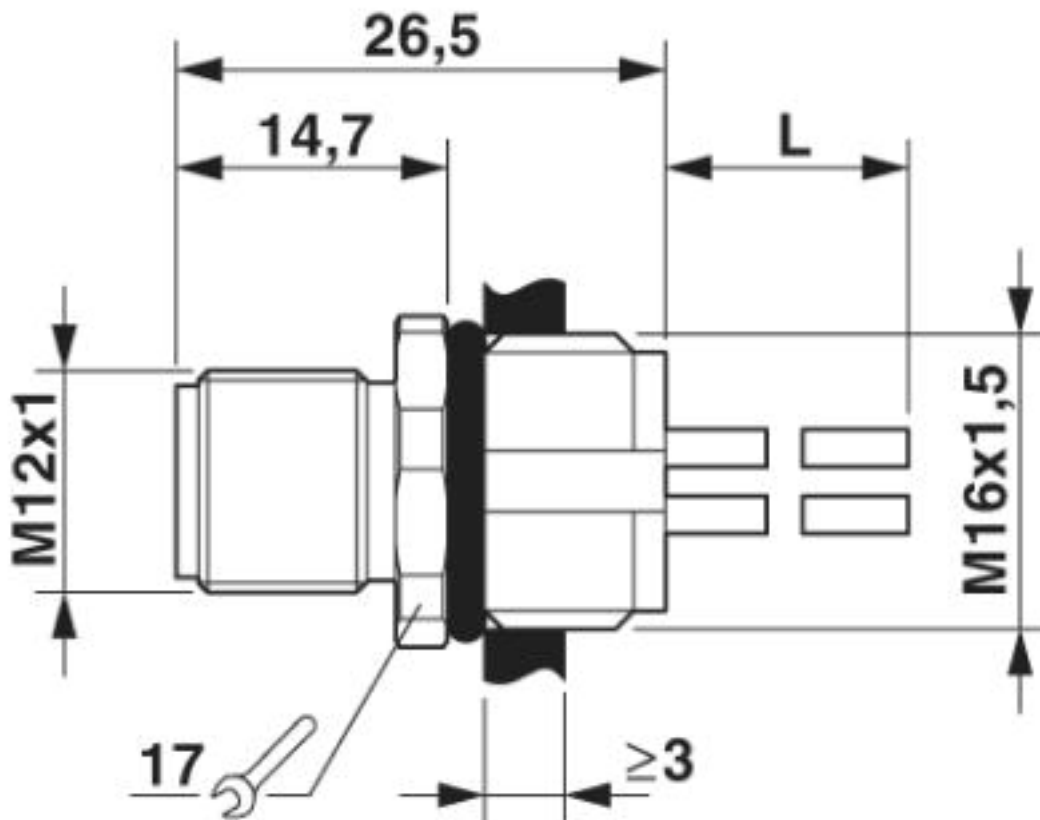
Schematic diagram



Connector pin assignment of M12 plug, 4-pos., S-coded, view of pin side

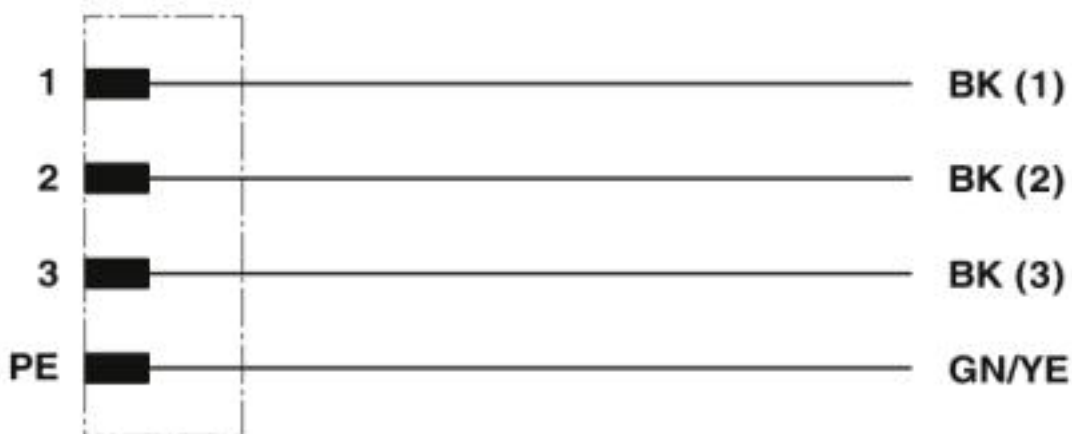
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Dimensional drawing



M12 flush-type plug

Circuit diagram



Contact assignment of the M12 connector

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## Classifications

### eCl@ss

eCl@ss 10.0.1	27440102
eCl@ss 4.0	27140800
eCl@ss 4.1	27140800
eCl@ss 5.0	27143400
eCl@ss 5.1	27143400
eCl@ss 6.0	27279200
eCl@ss 7.0	27440103
eCl@ss 8.0	27440103
eCl@ss 9.0	27440102

### ETIM

ETIM 3.0	EC002061
ETIM 4.0	EC002062
ETIM 5.0	EC002061
ETIM 6.0	EC002061

### UNSPSC

UNSPSC 6.01	31251501
UNSPSC 7.0901	31251501
UNSPSC 11	31251501
UNSPSC 12.01	31251501
UNSPSC 13.2	39121413
UNSPSC 18.0	39121413
UNSPSC 19.0	39121413
UNSPSC 20.0	39121413
UNSPSC 21.0	39121413

## Approvals

### Approvals

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#### Approvals

EAC / UL Recognized / cUL Recognized / cULus Recognized

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#### Ex Approvals

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### Approval details

# Flush-type connector - SACC-E-M12MSS-4CON-M16/0,5 PE - 1424139

## Approvals

EAC		B.01687
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UL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> E468743-20190917
Nominal voltage UN	600 V	
Nominal current IN	12 A	
mm <sup>2</sup> /AWG/kcmil	16	

cUL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> E468743-20190917
Nominal voltage UN	600 V	
Nominal current IN	12 A	
mm <sup>2</sup> /AWG/kcmil	16	

cULus Recognized	
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## Accessories

### Accessories

Flat nut - SACC-E-MU-M16 - 1504097



Flat nut with M16 thread

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