

## Flush-type connector - SACC-E-M12FS-12CON-M16/0,5 VA - 1405242

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Sensor/actuator flush-type socket, 12-pos., stainless steel, front/screw mounting with M16 thread, with 0.5 m PVC litz wire, 12 x 0.14 mm<sup>2</sup>

### Why buy this product

- ✓ 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
- ✓ 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

RoHS

### Key Commercial Data

|                                      |                                                                                                         |
|--------------------------------------|---------------------------------------------------------------------------------------------------------|
| Packing unit                         | 1 STK                                                                                                   |
| GTIN                                 | <br>4 046356 748124 |
| GTIN                                 | 4046356748124                                                                                           |
| Weight per Piece (excluding packing) | 29.300 g                                                                                                |
| Custom tariff number                 | 85444290                                                                                                |
| Country of origin                    | Germany                                                                                                 |
| Note                                 | Made to Order (non-returnable)                                                                          |

### Technical data

#### Dimensions

|                 |       |
|-----------------|-------|
| Length of cable | 0.5 m |
|-----------------|-------|

#### Ambient conditions

|                                 |                                                 |
|---------------------------------|-------------------------------------------------|
| Ambient temperature (operation) | -25 °C ... 85 °C (Plug / socket)                |
|                                 | -40 °C ... 85 °C (without mechanical actuation) |
| Degree of protection            | IP67                                            |
|                                 | IP69K                                           |

#### General

# Flush-type connector - SACC-E-M12FS-12CON-M16/0,5 VA - 1405242

## Technical data

### 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       | 1.5 A                                                                                                                                                                                                                                                                                                                                              |
| Rated voltage               | 30 V                                                                                                                                                                                                                                                                                                                                               |
| Rated surge voltage         | 0.8 kV                                                                                                                                                                                                                                                                                                                                             |
| Number of positions         | 12                                                                                                                                                                                                                                                                                                                                                 |
| Insulation resistance       | ≥ 100 MΩ                                                                                                                                                                                                                                                                                                                                           |
| Coding                      | A - standard                                                                                                                                                                                                                                                                                                                                       |
| Standards/regulations       | M12 connector IEC 61076-2-101                                                                                                                                                                                                                                                                                                                      |
| Signal type/category        | Universal                                                                                                                                                                                                                                                                                                                                          |
| Status display              | No                                                                                                                                                                                                                                                                                                                                                 |
| Overvoltage category        | II                                                                                                                                                                                                                                                                                                                                                 |
| Degree of pollution         | 3                                                                                                                                                                                                                                                                                                                                                  |
| Connection method           | Individual wires                                                                                                                                                                                                                                                                                                                                   |
| Insertion/withdrawal cycles | > 100                                                                                                                                                                                                                                                                                                                                              |
| Torque                      | 3 Nm ... 4 Nm (Installation-side)                                                                                                                                                                                                                                                                                                                  |

### Material

|                                        |                 |
|----------------------------------------|-----------------|
| Flammability rating according to UL 94 | V0              |
| Contact material                       | CuZn            |
| Contact surface material               | Ni/Au           |
| Contact carrier material               | PA 66           |
| Material, knurls                       | Stainless steel |
| Sealing material                       | FKM             |

### Cable

|                                    |                                                                                        |
|------------------------------------|----------------------------------------------------------------------------------------|
| Cable type                         | TPE litz wire                                                                          |
| Conductor cross section            | 0.14 mm²                                                                               |
| AWG signal line                    | 26                                                                                     |
| Conductor structure signal line    | 7x 0.16 mm                                                                             |
| Core diameter including insulation | 1.1 mm ±0.05 mm                                                                        |
| Thickness, insulation              | 0.21 mm (Core insulation)                                                              |
| Wire colors                        | Brown, blue, white, green, pink, yellow, black, gray, red, violet, gray/pink, red/blue |
| Material conductor insulation      | TPE                                                                                    |
| Conductor material                 | Tin-plated Cu litz wires                                                               |
| Standards/specifications           | M12 connector IEC 61076-2-101                                                          |
| Insulation resistance              | ≥ 20 MΩ*km                                                                             |
| Conductor resistance               | ≤ 142 Ω/km                                                                             |
| Nominal voltage, cable             | 300 V                                                                                  |

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## Technical data

### Cable

|                                 |                                                 |
|---------------------------------|-------------------------------------------------|
| Test voltage, cable             | 2000 V AC                                       |
| Ambient temperature (operation) | -40 °C ... 85 °C (cable, fixed installation)    |
|                                 | -25 °C ... 85 °C (cable, flexible installation) |

### Standards and Regulations

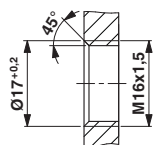
|                                        |                 |
|----------------------------------------|-----------------|
| Standard designation                   | M12 connector   |
| Standards/regulations                  | IEC 61076-2-101 |
| Flammability rating according to UL 94 | V0              |

### Environmental Product Compliance

|            |                                                                                                     |
|------------|-----------------------------------------------------------------------------------------------------|
| China RoHS | Environmentally Friendly Use Period = 50                                                            |
|            | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

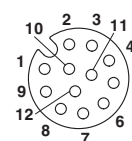
## Drawings

Dimensional drawing



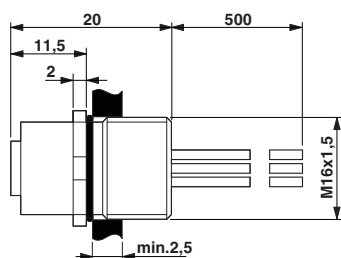
Housing cutout for M16 fastening thread, mounting panel with thread

Schematic diagram



Pin assignment M12, 12-pos., female side view

Dimensional drawing



M12 flush-type connector

Circuit diagram



Contact assignment of the M12 socket

## Classifications

eCl@ss

|            |          |
|------------|----------|
| eCl@ss 4.0 | 27140815 |
| eCl@ss 4.1 | 27140815 |
| eCl@ss 5.0 | 27143423 |
| eCl@ss 5.1 | 27143423 |
| eCl@ss 6.0 | 27143423 |
| eCl@ss 7.0 | 27449001 |

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### Classifications

#### eCl@ss

|            |          |
|------------|----------|
| eCl@ss 8.0 | 27440103 |
| eCl@ss 9.0 | 27440102 |

#### ETIM

|          |          |
|----------|----------|
| ETIM 3.0 | EC002061 |
| ETIM 4.0 | EC002635 |
| 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 |

### Approvals

#### Approvals

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cULus Recognized / EAC

#### Ex Approvals

#### Approval details

|                                |                                                                                     |                                                                                                                                                                        |
|--------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| cULus 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> E221474-20140616 |
| mm <sup>2</sup> /AWG/kcmil     | 26                                                                                  |                                                                                                                                                                        |
| Nominal current I <sub>N</sub> | 1.5 A                                                                               |                                                                                                                                                                        |
| Nominal voltage U <sub>N</sub> | 30 V                                                                                |                                                                                                                                                                        |

|     |                                                                                     |         |
|-----|-------------------------------------------------------------------------------------|---------|
| EAC |  | B.00767 |
|-----|-------------------------------------------------------------------------------------|---------|

## Flush-type connector - SACC-E-M12FS-12CON-M16/0,5 VA - 1405242

### Accessories

#### Accessories

##### Protective cap

Screw plug - PROT-M12 - 1680539



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

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Screw plug - PROT-M12 SH - 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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Screw plug - PROT-M12 FB - 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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##### Seal

Flat gasket - SACC-M16-SEAL CLM - 1430394



M16 flat gasket, for rear mounting of M12 flush-type connectors with M16 fastening thread

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