

# SACC-E-M12MS-8CON-M16/0,5 VA - Device connector front mounting



1405221

<https://www.phoenixcontact.com/us/products/1405221>

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Device connector front mounting, Universal, 8-position, Pin, straight, M12-Standard, coding: A, on free cable end, Front mounting, M16 x 1.5, 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.: 1238711

## 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                          | 1405221             |
| Packing unit                         | 1 pc                |
| Minimum order quantity               | 1 pc                |
| Sales key                            | AB24                |
| Product key                          | ABQCUB              |
| Catalog page                         | Page 268 (C-2-2013) |
| GTIN                                 | 4046356748117       |
| Weight per piece (including packing) | 25.9 g              |
| Weight per piece (excluding packing) | 26.16 g             |
| Customs tariff number                | 85444290            |
| Country of origin                    | DE                  |

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## Technical data

### Notes

|         |  |
|---------|--|
| General | 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 M16 x 1.5 |
|---------------|--------------------------|

### Product properties

|                      |                                   |
|----------------------|-----------------------------------|
| Product type         | Circular connectors (device side) |
| Sensor type          | Universal                         |
| Number of positions  | 8                                 |
| Application          | Signal                            |
| 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                      |
| Contact material                       | CuZn                     |
| Contact surface material               | Au                       |
| Contact carrier material               | PA 66 GF                 |
| Material for screw connection          | Stainless steel          |
| 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)<br>30 V (DC) |
| Nominal current I <sub>N</sub> | 2 A                    |

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|                           |         |
|---------------------------|---------|
| Max. conductor resistance | 80 Ω/km |
|---------------------------|---------|

## Connection data

### Conductor connection

|                         |                                   |
|-------------------------|-----------------------------------|
| Connection method       | Individual wires                  |
| Contact connection type | Pin                               |
| 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 |
|-----------------------------|-------|

## Connector

### Connection 1

|                   |          |
|-------------------|----------|
| Head design       | Pin      |
| 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                    | 0.5 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 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                | ≤ 80 Ω/km   |
| Cable insulation resistance     | ≥ 20 MΩ*km  |
| Ambient temperature (operation) | -40 °C ... 85 °C (cable, fixed installation)<br>-25 °C ... 85 °C (Cable, flexible installation) |

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## Environmental and real-life conditions

### Ambient conditions

|                                 |   |
|---------------------------------|---|
| Degree of protection            | IP65/IP67/IP69/IP69K                            |
|                                 | IP65/IP67/IP69K                                 |
| 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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## Classifications

### ECLASS

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

### ETIM

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

### UNSPSC

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

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## Environmental product compliance

|            |  |
|------------|--|
| REACH SVHC | Lead 7439-92-1   |
| China RoHS | Environmentally Friendly Use Period = 50 years   |
|            | For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads" |

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