

# SACC-M 8MS-4CON-M - Connector



1681169

<https://www.phoenixcontact.com/us/products/1681169>

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Connector, Universal, 4-position, Plug straight M8, coding: A, Solder connection, knurl material: Brass, nickel-plated, external cable diameter 3.5 mm ... 5 mm

## Your advantages

- Safe use in the field, thanks to a high degree of protection

## Commercial data

|                                      |               |
|--------------------------------------|---------------|
| Item number                          | 1681169       |
| Packing unit                         | 1 pc          |
| Minimum order quantity               | 1 pc          |
| Sales key                            | BF35          |
| Product key                          | AF2BIA        |
| GTIN                                 | 4017918157517 |
| Weight per piece (including packing) | 10.51 g       |
| Weight per piece (excluding packing) | 8.63 g        |
| Customs tariff number                | 85366990      |
| Country of origin                    | DE            |

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## Technical data

### Notes

Assembly note

**NOTE:** Observe the permissible bending radii when routing cables, since the degree of protection may be at risk if the bending forces are too high. Reduce mechanical loads upstream of the connector, e.g., by using cable ties.

### Product properties

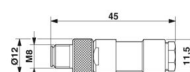
|                      |                                 |
|----------------------|---------------------------------|
| Product type         | Circular connector (cable-side) |
| Sensor type          | Universal                       |
| Number of positions  | 4                               |
| No. of cable outlets | 1                               |
| Shielded             | no                              |
| Coding               | A                               |
| Cable outlet         | straight                        |

### Insulation characteristics

|                      |    |
|----------------------|----|
| Overvoltage category | II |
| Degree of pollution  | 3  |

### Dimensions

Dimensional drawing



Length

45 mm

### External dimensions

|                  |                 |
|------------------|-----------------|
| Outside diameter | 3.5 mm ... 5 mm |
|------------------|-----------------|

### Housing

|                  |       |
|------------------|-------|
| Diameter housing | 12 mm |
|------------------|-------|

### Material specifications

|  |                      |
|--|----------------------|
| Flammability rating according to UL 94 | HB                   |
| Seal material                          | NBR                  |
| Material of grip body                  | PBT                  |
| Contact material                       | CuZn                 |
| Contact surface material               | Au                   |
| Contact carrier material               | PA                   |
| Material for screw connection          | Brass, nickel-plated |

### Connection data

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## Conductor connection

|   |  |
|---|--|
| Connection method                       | Solder connection  |
| Connection cross section                | 0.08 mm <sup>2</sup> ... 0.25 mm <sup>2</sup> (flexible) |
|   | 0.08 mm <sup>2</sup> ... 0.25 mm <sup>2</sup> (solid)    |
| Connection cross section AWG            | 28 ... 24 (flexible)                                     |
|   | 28 ... 24 (solid)  |
| Stripping length of the individual wire | 3 mm   |
| Tightening torque                       | 0.2 Nm (M8 knurl)  |

## 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  |
|                                | 30 V DC  |
| Nominal current I <sub>N</sub> | 4 A      |

## Mechanical properties

### Mechanical data

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

## Connector

### Connection 1

|                   |          |
|-------------------|----------|
| Head design       | Plug     |
| Head cable outlet | straight |
| Head thread type  | M8       |
| Coding            | A        |

## Cable/line

|   |           |
|---|-----------|
| Signal type/category                    | Universal |
| Stripping length of the individual wire | 3 mm      |

## Environmental and real-life conditions

### Ambient conditions

|   |                  |
|---|------------------|
| Degree of protection  | IP67             |
| Ambient temperature (operation) (male connector/female connector) | -40 °C ... 85 °C |

## Standards and regulations

|                          |                 |
|--------------------------|-----------------|
| Standard designation     | M8 connector    |
| Standards/specifications | IEC 61076-2-104 |

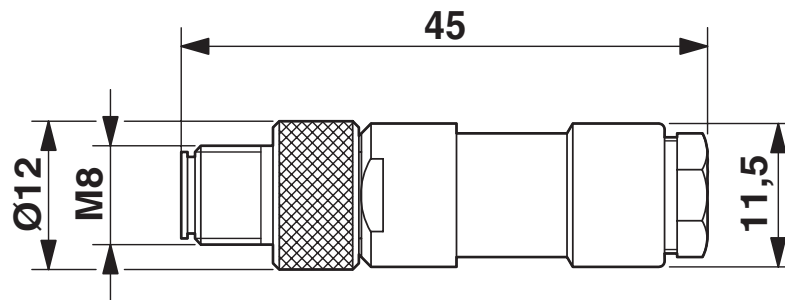
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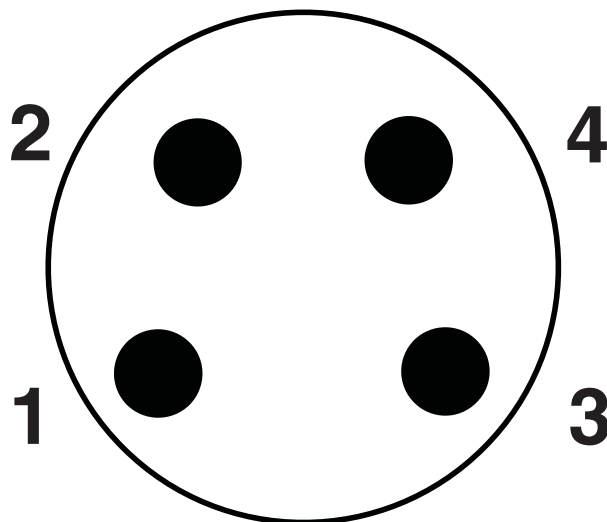
## Drawings

Dimensional drawing



M8 x 1 male plug, straight version

Schematic diagram



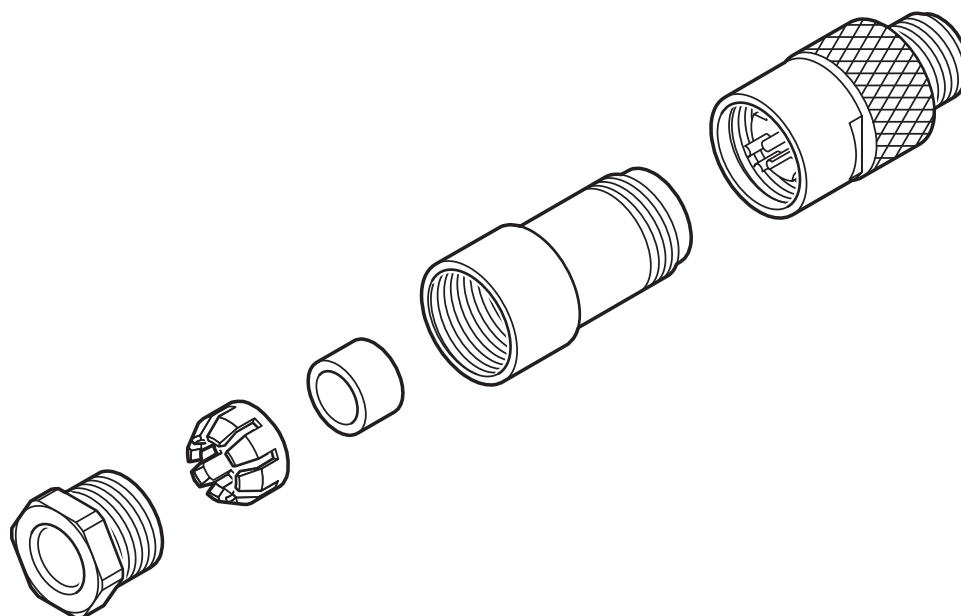
Pin assignment M8 plug, 4-pos., view male side

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Schematic diagram



- 1 = pressure screw
- 2 = clamp-type cage
- 3 = gasket
- 4 = housing
- 5 = male or female insert

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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1681169>

|   |                       |                       |                   |                             |
|---|-----------------------|-----------------------|-------------------|-----------------------------|
| <div><b>UL Listed</b><br/>Approval ID: FILE E 221474</div> |                       |                       |                   |                             |
|   | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
| keine   |                       |                       |                   |                             |
|   | 30 V                  | 4 A                   | -                 | -                           |

|  |                       |                       |                   |                             |
|--|-----------------------|-----------------------|-------------------|-----------------------------|
| <div><b>cUL Listed</b><br/>Approval ID: FILE E 221474</div> |                       |                       |                   |                             |
|  | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
| keine  |                       |                       |                   |                             |
|  | 30 V                  | 4 A                   | -                 | -                           |

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## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-13.0 | 27440116 |
| ECLASS-15.0 | 27440116 |

### ETIM

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

### 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: n/a)                       |
| SCIP                                | d3aad419-cb92-4b7a-b89f-c99232e2883d |

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