

# SACC-M12FS-4QO-0,75 - Connector



1641756

<https://www.phoenixcontact.com/us/products/1641756>

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.



Connector, Universal, 4-position, Socket straight M12, coding: A, Insulation displacement connection, knurl material: Plastic, external cable diameter 4 mm ... 8 mm

## Your advantages

- Safe use in the field, thanks to a high degree of protection
- Insulation displacement connection: innovative and time-saving assembly without stripping the single wire

## Commercial data

|                                      |               |
|--------------------------------------|---------------|
| Item number                          | 1641756       |
| Packing unit                         | 1 pc          |
| Minimum order quantity               | 1 pc          |
| Sales key                            | BF31          |
| Product key                          | AF2CCA        |
| GTIN                                 | 4017918921873 |
| Weight per piece (including packing) | 13.4 g        |
| Weight per piece (excluding packing) | 12.8 g        |
| Customs tariff number                | 85366990      |
| Country of origin                    | DE            |

# SACC-M12FS-4QO-0,75 - Connector



1641756

<https://www.phoenixcontact.com/us/products/1641756>

## 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.

### Mounting

Assembly note

AWG 18 wire cross section upon request

### Product properties

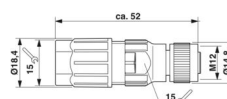
|                      |                                 |
|----------------------|---------------------------------|
| Product type         | Circular connector (cable-side) |
| Sensor type          | Universal                       |
| Number of positions  | 4                               |
| No.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

### Insulation characteristics

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

### Dimensions

Dimensional drawing



|                          |       |
|--------------------------|-------|
| Length                   | 52 mm |
| Wrench size, union nut   | 15 mm |
| Wrench size, counter nut | 15 mm |

### External dimensions

|                  |               |
|------------------|---------------|
| Outside diameter | 4 mm ... 8 mm |
|------------------|---------------|

### Housing

|                  |         |
|------------------|---------|
| Diameter housing | 18.4 mm |
|------------------|---------|

### Material specifications

|                                        |      |
|----------------------------------------|------|
| Flammability rating according to UL 94 | V0   |
| Seal material                          | NBR  |
| Material of grip body                  | PA 6 |
| Contact material                       | CuSn |

# SACC-M12FS-4QO-0,75 - Connector



1641756

<https://www.phoenixcontact.com/us/products/1641756>

|                               |                        |
|-------------------------------|------------------------|
| Contact surface material      | Ni/Au                  |
| Contact carrier material      | TPU                    |
| Material for screw connection | Plastic                |
| Wire insulation material      | PVC / PE / PP / rubber |

## Connection data

### Conductor connection

|                              |                                             |
|------------------------------|---------------------------------------------|
| Connection method            | Insulation displacement connection          |
| Connection cross section     | 0.34 mm² ... 0.75 mm²                       |
| Connection cross section AWG | 22 ... 18                                   |
| Tightening torque            | 0.4 Nm (M12 knurl)<br>1.5 Nm (Pressure nut) |

### Connection assignment

|                                                           |                                      |
|-----------------------------------------------------------|--------------------------------------|
| Contact   Color (signal designation)   Contact (optional) | 1 = BN<br>2 = WH<br>3 = BU<br>4 = BK |
|-----------------------------------------------------------|--------------------------------------|

## Electrical properties

|                                |                      |
|--------------------------------|----------------------|
| Rated surge voltage            | 4 kV                 |
| Contact resistance             | ≤ 5 mΩ               |
| Insulation resistance          | ≥ 100 MΩ             |
| Nominal voltage U <sub>N</sub> | 250 V AC<br>250 V DC |
| Nominal current I <sub>N</sub> | 4 A                  |

## Mechanical properties

### Mechanical data

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

## Connector

### Connection 1

|                   |          |
|-------------------|----------|
| Head design       | Socket   |
| Head cable outlet | straight |
| Head thread type  | M12      |
| Coding            | A        |

## Cable/line

|                         |               |
|-------------------------|---------------|
| Signal type/category    | Universal     |
| External cable diameter | 4 mm ... 8 mm |

## Environmental and real-life conditions

# SACC-M12FS-4QO-0,75 - Connector



1641756

<https://www.phoenixcontact.com/us/products/1641756>

## Ambient conditions

|                                                                   |                                   |
|-------------------------------------------------------------------|-----------------------------------|
| Degree of protection                                              | IP65                              |
|                                                                   | IP67                              |
| Ambient temperature (operation) (male connector/female connector) | -25 °C ... 80 °C (Plug / socket)  |
| Ambient temperature (assembly)                                    | -5 °C ... 50 °C (During assembly) |

## Standards and regulations

### M12

|                          |                              |
|--------------------------|------------------------------|
| Standard designation     | M12 connector                |
| Standards/specifications | according to IEC 61076-2-101 |

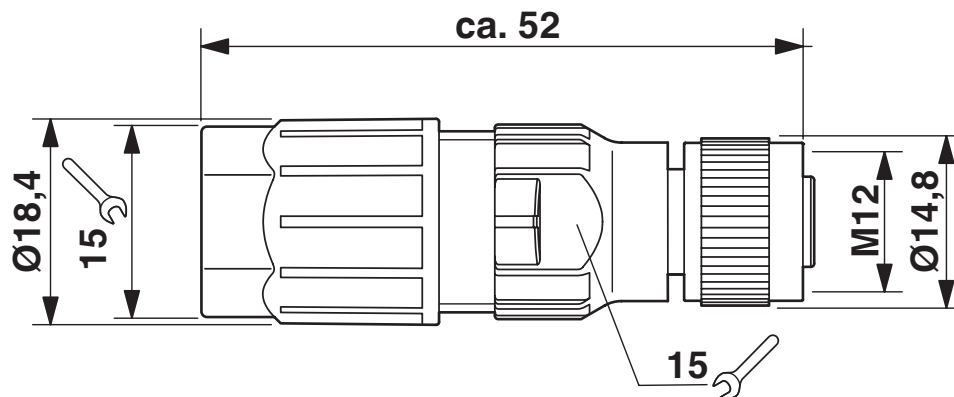
# SACC-M12FS-4QO-0,75 - Connector

1641756

<https://www.phoenixcontact.com/us/products/1641756>

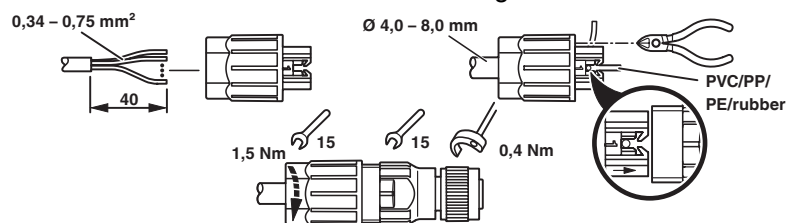
## Drawings

Dimensional drawing



M12 x 1 socket, straight

Functional drawing



Schematic diagram



Pin assignment M12 socket, 4-pos., A-coded, view female side

# SACC-M12FS-4QO-0,75 - Connector



1641756

<https://www.phoenixcontact.com/us/products/1641756>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1641756>

|  <b>cUL Recognized</b><br>Approval ID: E118976 |                                |                                |                   |                               |
|---------------------------------------------------------------------------------------------------------------------------------|--------------------------------|--------------------------------|-------------------|-------------------------------|
|                                                                                                                                 | Nominal voltage U <sub>N</sub> | Nominal current I <sub>N</sub> | Cross section AWG | Cross section mm <sup>2</sup> |
| keine                                                                                                                           |                                |                                |                   |                               |
|                                                                                                                                 | 300 V                          | 4 A                            | -                 | -                             |

|  <b>UL Recognized</b><br>Approval ID: E118976 |                                |                                |                   |                               |
|--------------------------------------------------------------------------------------------------------------------------------|--------------------------------|--------------------------------|-------------------|-------------------------------|
|                                                                                                                                | Nominal voltage U <sub>N</sub> | Nominal current I <sub>N</sub> | Cross section AWG | Cross section mm <sup>2</sup> |
| keine                                                                                                                          |                                |                                |                   |                               |
|                                                                                                                                | 300 V                          | 4 A                            | -                 | -                             |

# SACC-M12FS-4QO-0,75 - Connector



1641756

<https://www.phoenixcontact.com/us/products/1641756>

## Classifications

### ECLASS

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

### ETIM

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

### UNSPSC

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

# SACC-M12FS-4QO-0,75 - Connector



1641756

<https://www.phoenixcontact.com/us/products/1641756>

## Environmental product compliance

### EU RoHS

|                                         |                    |
|-----------------------------------------|--------------------|
| Fulfills EU RoHS substance requirements | Yes, No exemptions |
|-----------------------------------------|--------------------|

### China RoHS

|                                        |                                          |
|----------------------------------------|------------------------------------------|
| Environment friendly use period (EFUP) | EFUP-E                                   |
|                                        | No hazardous substances above the limits |

### EU REACH SVHC

|                                     |                            |
|-------------------------------------|----------------------------|
| REACH candidate substance (CAS No.) | No substance above 0.1 wt% |
|-------------------------------------|----------------------------|

### EF3.0 Climate Change

|         |              |
|---------|--------------|
| CO2e kg | 0.19 kg CO2e |
|---------|--------------|

Phoenix Contact 2025 © - 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)