

## Connector - SACC-M12FRD-4CT-CM SH PN - 1422849

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's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



Connector, PROFINET CAT5 (100 Mbps), 4-position, shielded, Socket angled M12, D-coded, Crimp connection, knurl material: Zinc die-cast, nickel-plated, external cable diameter 4.5 mm ... 7.5 mm, without crimp contacts

### Your advantages

- ✓ Extremely compact, thanks to the small wiring space and high contact density
- ✓ Safe use in the field, thanks to a high degree of protection
- ✓ Safely shielded: reliable shield connection even under extreme mechanical strain
- ✓ Robust connection: suitable for railway applications with high shock and vibration loads
- ✓ Automated processing possible
- ✓ Protected seal in the M12 socket



### Key Commercial Data

|              |               |
|--------------|---------------|
| Packing unit | 1 pc          |
| GTIN         |               |
| GTIN         | 4055626357768 |

### Technical data

#### Dimensions

|   |                   |
|---|-------------------|
| Wrench size, union nut                  | 15 mm             |
| Diameter housing                        | 16 mm             |
| Length                                  | 51 mm             |
| External cable diameter                 | 4.5 mm ... 7.5 mm |
| Stripping length of the sheath          | 18 mm             |
| Stripping length of the individual wire | 4 mm +0,5 mm      |

#### Ambient conditions

|                                 |                                  |
|---------------------------------|----------------------------------|
| Ambient temperature (operation) | -40 °C ... 85 °C (Plug / socket) |
|---------------------------------|----------------------------------|

#### General

# Connector - SACC-M12FRD-4CT-CM SH PN - 1422849

## Technical data

### General

|                                |   |
|--------------------------------|---|
| Note                           | This product corresponds to the PROFINET Cabling and Interconnection Technology Guideline for PROFINET regulations, version 2.00, order no: 2.252, Chapter 8.2 Connectors for Outside Environment (Balanced cabling)                          |
|                                | NOTE: Observe the permissible bending radii when laying conductors, since the degree of protection may be put in jeopardy if the bending forces are too high. Alleviate mechanical loads upstream of the connector, e.g. by using cable ties. |
| Rated current at 40°C          | 4 A   |
| Rated voltage                  | 48 V AC   |
|                                | 60 V DC   |
| Number of positions            | 4   |
| Insulation resistance          | ≥ 100 MΩ  |
| Coding                         | D - data  |
| Standards/regulations          | M12 connector IEC 61076-2-101   |
|                                | Shock, vibration EN 50155:2001  |
| Signal type/category           | PROFINET CAT5 (IEC 11801), 100 Mbps   |
| Status display                 | No  |
| Overvoltage category           | II  |
| Degree of pollution            | 3   |
| Connection method              | Crimp connection  |
| Conductor cross section        | 0.14 mm <sup>2</sup> ... 1 mm <sup>2</sup> (flexible)   |
| Conductor cross section AWG    | 26 ... 18 (flexible)  |
| Wire diameter incl. insulation | ≤ 2.55 mm   |
| Insertion/withdrawal cycles    | ≥ 100   |
| Torque                         | 0.4 Nm (M12 knurl)  |
|                                | 1.5 Nm (Screw plug insert with sleeve housing as far it will go)  |
|                                | 4 Nm (Pressure nut with coupling sleeve)  |
| Assembly instructions          | The pin assignment can be rotated in a 30° pitch to the cable outlet  |

### Material

|  |  |
|--|--|
| Flammability rating according to UL 94 | V0   |
| Contact carrier material               | PA 6.6   |
| Material of grip body                  | Zinc die-cast, nickel-plated   |
| Material, knurls                       | Zinc die-cast, nickel-plated   |
| Sealing material                       | FKM  |
| Standards/regulations                  | PA 6.6: Fire protection in rail vehicles - requirement sets R22, R23, R24, and R26 acc. to DIN EN 45545-2 (Risk level HL1 - HL3) |

### Standards and Regulations

|                       |                  |
|-----------------------|------------------|
| Standard designation  | M12 connector    |
| Standards/regulations | IEC 61076-2-101  |
| Standard designation  | Shock, vibration |
| Standards/regulations | EN 50155:2001    |

# Connector - SACC-M12FRD-4CT-CM SH PN - 1422849

## Technical data

### Standards and Regulations

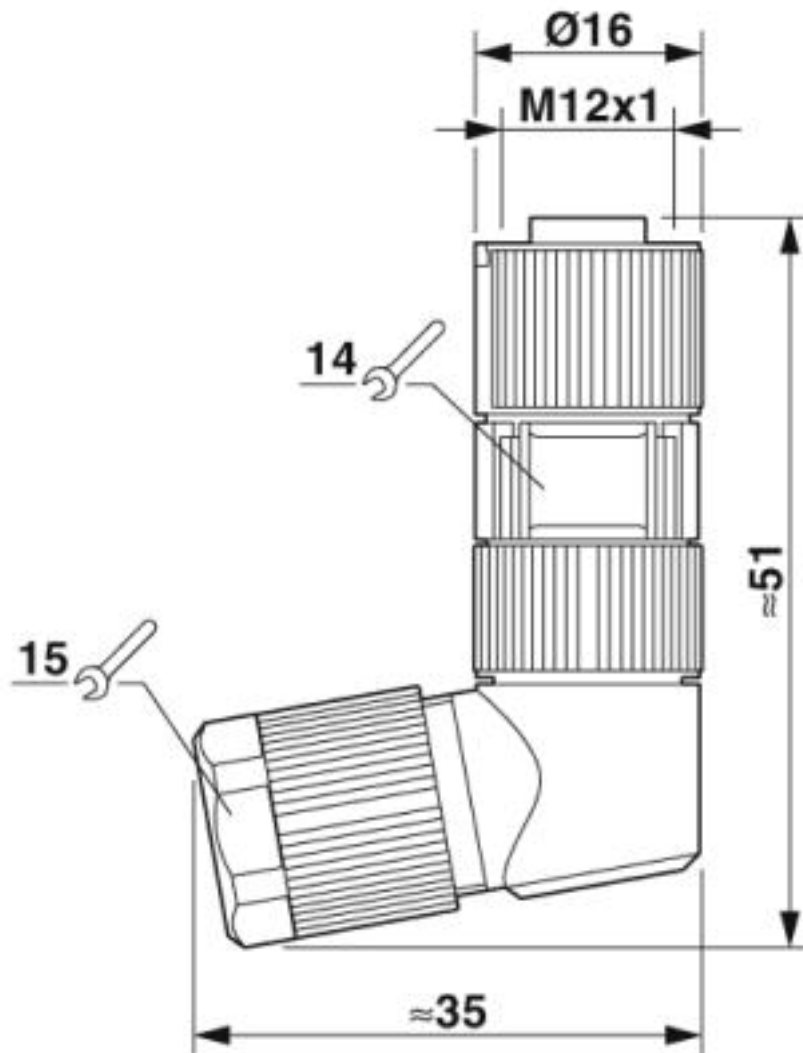
|  |    |
|--|----|
| Flammability rating according to UL 94 | V0 |
|--|----|

### Environmental Product Compliance

|            |   |
|------------|---|
| China RoHS | Environmentally friendly use period: unlimited = EFUP-e |
|            | No hazardous substances above threshold values          |

## Drawings

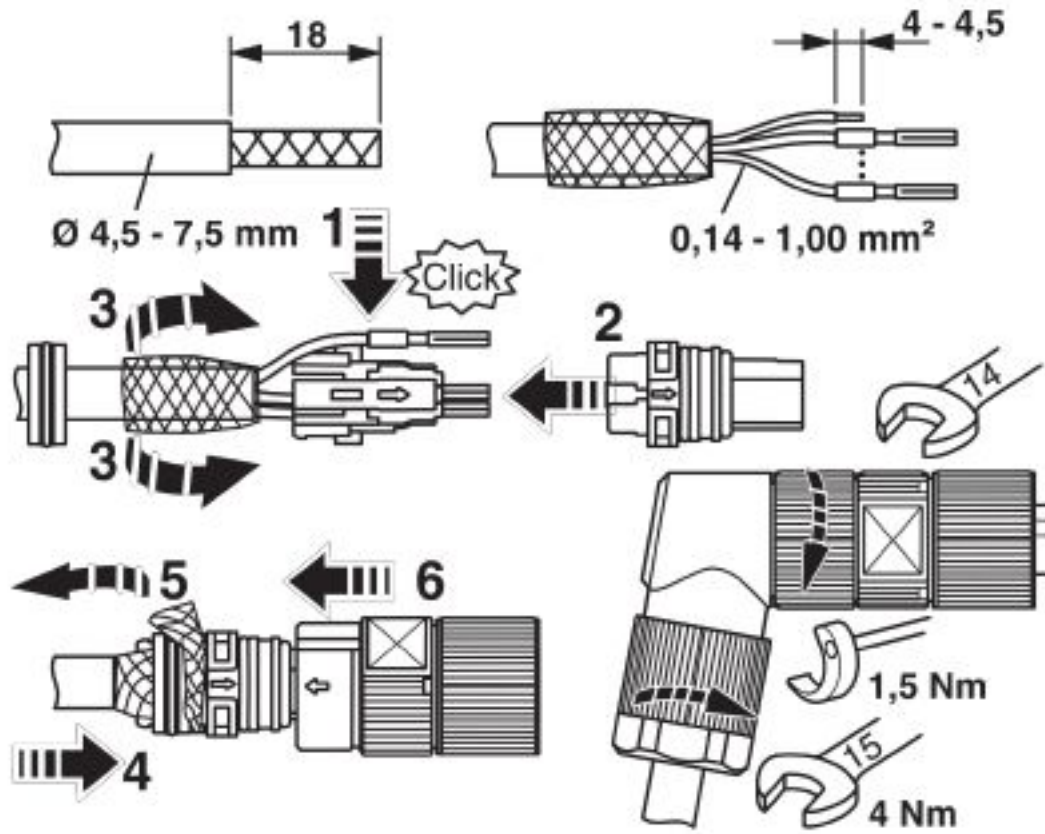
Dimensional drawing



M12 x 1 socket, angled, shielded

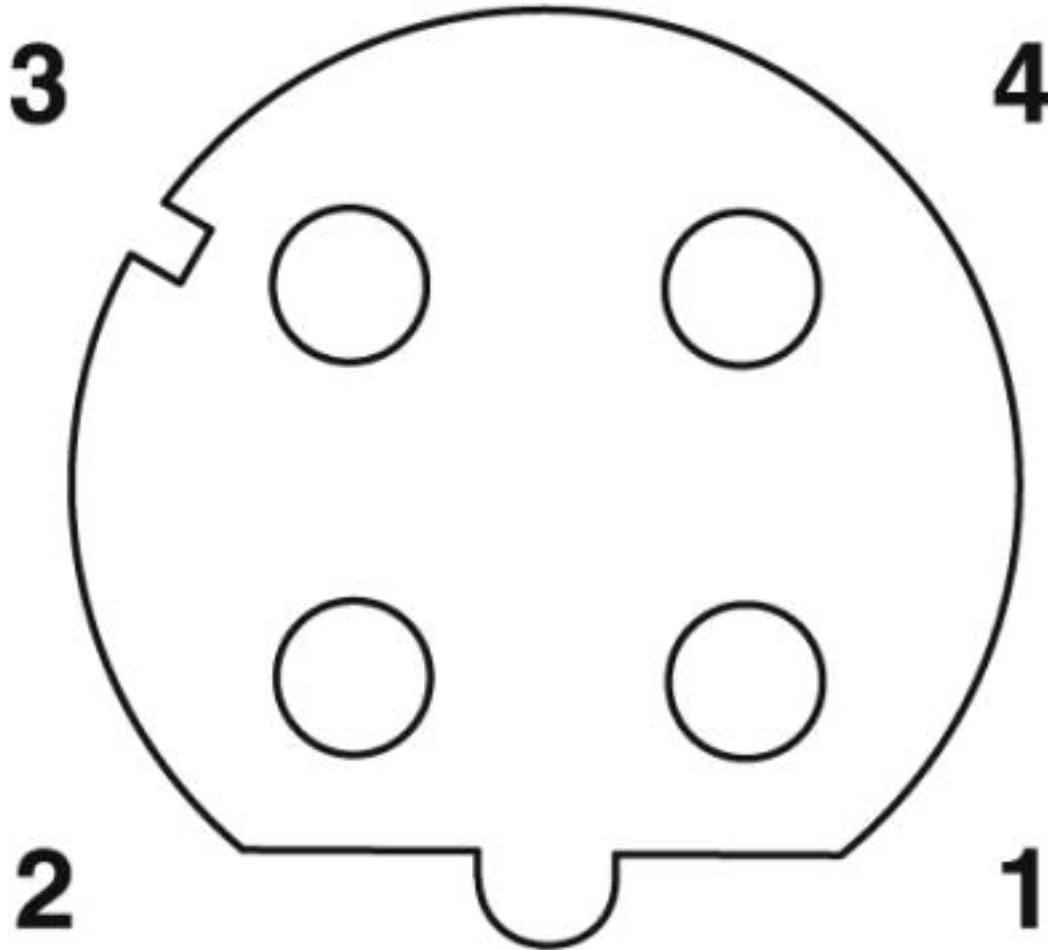
# Connector - SACC-M12FRD-4CT-CM SH PN - 1422849

Functional drawing



# Connector - SACC-M12FRD-4CT-CM SH PN - 1422849

Schematic diagram



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

## Approvals

Approvals

---

Approvals

EAC

---

Ex Approvals

---

## Approval details

## Connector - SACC-M12FRD-4CT-CM SH PN - 1422849

### Approvals

EAC



EAC-Zulassung

Phoenix Contact 2019 © - all rights reserved  
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG  
Flachsmarktstr. 8  
32825 Blomberg  
Germany  
Tel. +49 5235 300  
Fax +49 5235 3 41200  
<http://www.phoenixcontact.com>