

## Data connector - SACC-FSB-2QO SH PB SCO - 1413932

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Data connector, PROFIBUS DP (12 Mbps), 2-position, halogen-free, shielded, Socket straight M12 SPEEDCON, Coding: B, Insulation displacement connection, knurl material: Zinc die-cast, nickel-plated, external cable diameter 5 mm ... 9.7 mm

### Your advantages

- ✓ Safe use in the field, thanks to a high degree of protection
- ✓ Flexible: connectors for on-site assembly
- ✓ Insulation displacement connection: innovative and time-saving assembly without stripping the single wire
- ✓ Reliable signal transmission - 360° shielding in environments with electromagnetic interference
- ✓ Save time, thanks to installation with SPEEDCON fast locking system



RoHS  
compliant

### Key Commercial Data

|              |                                                                                                         |
|--------------|---------------------------------------------------------------------------------------------------------|
| Packing unit | 1 pc                                                                                                    |
| GTIN         | <br>4 055626 013145 |
| GTIN         | 4055626013145                                                                                           |

### Technical data

#### Dimensions

|                                |                 |
|--------------------------------|-----------------|
| Wrench size, union nut         | 15 mm           |
| Diameter housing               | 19 mm           |
| Length                         | 57 mm           |
| External cable diameter        | 5 mm ... 9.7 mm |
| Stripping length of the sheath | ≥ 80 mm         |

#### Ambient conditions

|                                 |                                  |
|---------------------------------|----------------------------------|
| Ambient temperature (operation) | -40 °C ... 85 °C (Plug / socket) |
| Ambient temperature (assembly)  | -5 °C ... 50 °C                  |
| Degree of protection            | IP65                             |
|                                 | IP67                             |

#### General

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## Technical data

### General

|                                                                             |                                                                                                                                                                                                                                               |
|-----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Note                                                                        | 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                                                         | 2                                                                                                                                                                                                                                             |
| Insulation resistance                                                       | ≥ 100 MΩ                                                                                                                                                                                                                                      |
| Coding                                                                      | B - inverse                                                                                                                                                                                                                                   |
| Standards/regulations                                                       | M12 connector according to IEC 61076-2-101                                                                                                                                                                                                    |
| Signal type/category                                                        | PROFIBUS DP, 12 Mbps                                                                                                                                                                                                                          |
| Status display                                                              | No                                                                                                                                                                                                                                            |
| Overvoltage category                                                        | II                                                                                                                                                                                                                                            |
| Degree of pollution                                                         | 3                                                                                                                                                                                                                                             |
| Connection method                                                           | Insulation displacement connection                                                                                                                                                                                                            |
| Conductor cross section                                                     | 0.25 mm² ... 0.75 mm² (flexible)                                                                                                                                                                                                              |
|                                                                             | 0.14 mm² ... 0.5 mm² (solid)                                                                                                                                                                                                                  |
| Conductor cross section AWG                                                 | 24 ... 18 (flexible)                                                                                                                                                                                                                          |
|                                                                             | 26 ... 20 (solid)                                                                                                                                                                                                                             |
| Wire diameter including insulation                                          | 1 mm ... 2 mm (maximum of 2.6 mm when connecting PROFIBUS cables)                                                                                                                                                                             |
| Frequency of connections between conductors of the same cross section       | 10                                                                                                                                                                                                                                            |
| Wire insulation material                                                    | PVC / PE / PP / rubber                                                                                                                                                                                                                        |
| Structure of individual litz in acc. with VDE 0295 / smallest wire diameter | Class 2-6                                                                                                                                                                                                                                     |
| Insertion/withdrawal cycles                                                 | ≥ 100                                                                                                                                                                                                                                         |
| Torque                                                                      | 5 Nm (Pressure nut)                                                                                                                                                                                                                           |

### Material

|                                        |                                                                                                                                  |
|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Flammability rating according to UL 94 | V0                                                                                                                               |
| Contact material                       | CuSn                                                                                                                             |
| Contact surface material               | Ni/Au                                                                                                                            |
| Contact carrier material               | PA 6.6                                                                                                                           |
| Material of grip body                  | Zinc die-cast, nickel-plated                                                                                                     |
| Material, knurls                       | Zinc die-cast, nickel-plated                                                                                                     |
| Sealing material                       | NBR                                                                                                                              |
| 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

|                                        |                                            |
|----------------------------------------|--------------------------------------------|
| Standards/specifications               | M12 connector according to IEC 61076-2-101 |
| Flammability rating according to UL 94 | V0                                         |
| Standards/regulations                  | acc. to DIN EN 45545-2                     |

## Data connector - SACC-FSB-2QO SH PB SCO - 1413932

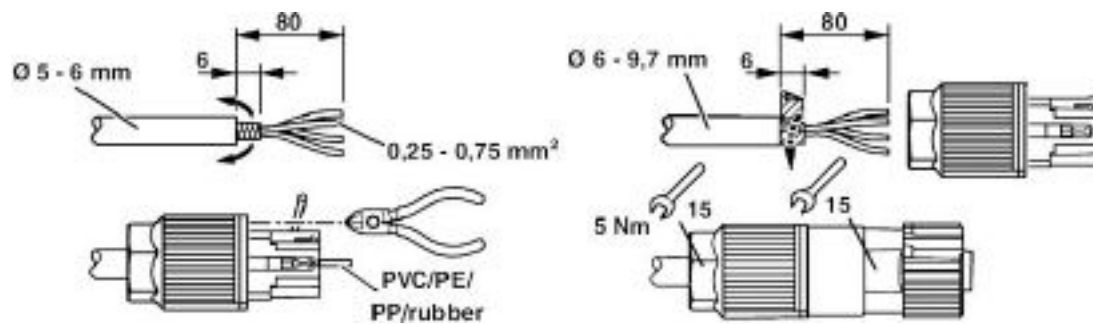
### Technical data

#### Environmental Product Compliance

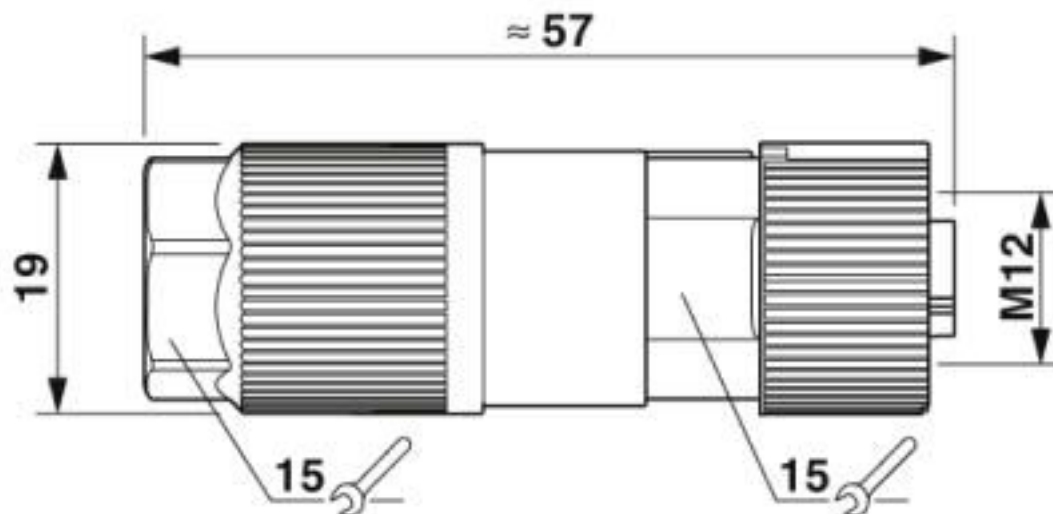
|            |                                                         |
|------------|---------------------------------------------------------|
| China RoHS | Environmentally friendly use period: unlimited = EFUP-e |
|            | No hazardous substances above threshold values          |

### Drawings

Functional drawing



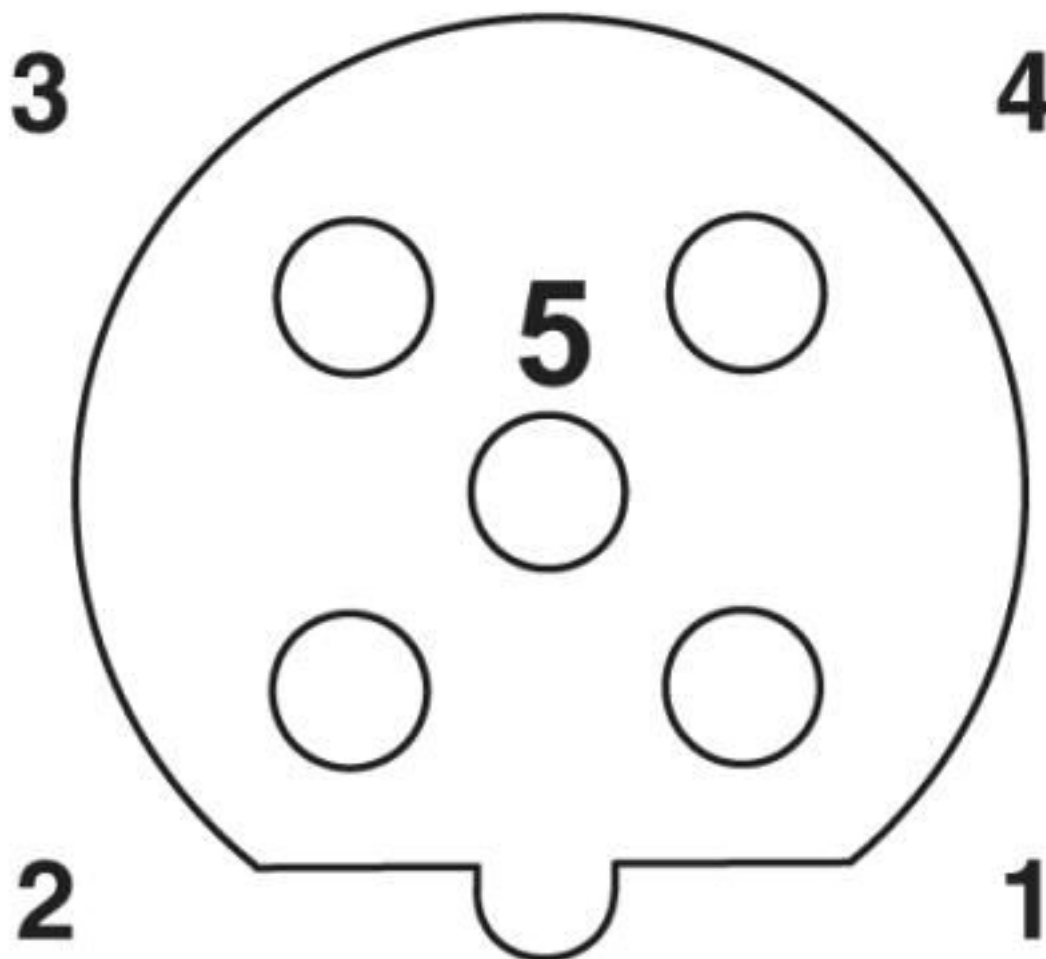
Dimensional drawing



M12 x 1 socket, straight, shielded

## Data connector - SACC-FSB-2QO SH PB SCO - 1413932

Schematic diagram



Pin assignment M12 socket, 5-pos., B-coded, female side

### Classifications

eCl@ss

|               |          |
|---------------|----------|
| eCl@ss 10.0.1 | 27440102 |
| eCl@ss 4.0    | 27140800 |
| eCl@ss 4.1    | 27140800 |
| eCl@ss 5.0    | 27143400 |
| eCl@ss 5.1    | 27143400 |
| eCl@ss 6.0    | 27279200 |
| eCl@ss 7.0    | 27440104 |
| eCl@ss 8.0    | 27440104 |
| eCl@ss 9.0    | 27440102 |

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### Classifications

#### ETIM

|          |          |
|----------|----------|
| ETIM 5.0 | EC002635 |
| ETIM 6.0 | EC002635 |
| ETIM 7.0 | EC002635 |

### Approvals

#### Approvals

#### Approvals

EAC / EAC

#### Ex Approvals

#### Approval details

|     |            |               |
|-----|------------|---------------|
| EAC | <b>EAC</b> | EAC-Zulassung |
|-----|------------|---------------|

|     |            |                          |
|-----|------------|--------------------------|
| EAC | <b>EAC</b> | RU C-<br>DE.BL08.B.00511 |
|-----|------------|--------------------------|

### Accessories

#### Accessories

#### Electronics pliers

#### Diagonal cutter - MICROFOX-SB - 1212489



Electronic diagonal cutter, round head, without chamfer, with opening spring, mirror-polished and oiled, 2-component grip, cutting capacity: soft 0.2 - 2.0 mm; medium hard 1.2 mm; hard 0.5 mm diameter

#### Plug for cable screw gland

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### Accessories

Screw plug - PROT-M12 MS-PA-CHAIN - 1430899

M12 sealing cap with fixing band, for sensor cables, for free M12 sockets



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### Screwdriver tools

Tool - SACC BIT M12-D20 - 1208445



Nut for assembling M12 connectors for assembly with a knurl diameter of 20 mm, for 4 mm hexagonal drive

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Adapter insert - TSD-M SAC-BIT ADAPTER - 1212600



Adapter bit for TSD-M...torque tools, E6.3-1/4" drive with 4 mm hexagon to accommodate SAC bits

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### Stripping tool

Stripping tool - WIREFOX-D 40 - 1212161



Stripping tool, for stripping cables of 4.5 mm - 40 mm-Ø, insulation thickness of up to 4.5 mm, pivoting blade for round, lengthwise, and spiral cuts

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### Torque tool

Torque screwdriver - TSD 04 SAC - 1208429



Torque screwdriver, with preset torque of 0.4 Nm and 4 mm hexagonal drive for M12 connectors

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### Accessories

Torque screwdriver - TSD-M 1,2NM - 1212224



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0.3 - 1.2 Nm

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Shielding foil - VS-08-RJ45-FOLIEN-SET - 1417184

Shielding foil set, 25 pieces, replacement for RJ45 and M12 Quickon connector



Stripping tool - VS-CABLE-STRIP-VARIO - 1657407



Stripping tool, for the multi-level stripping of shielded cables

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