# Connector - SACC-M12MSB-5PL SH - 1424662

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Connector, Universal, 5-position, shielded, Plug straight M12, Coding: B, Push-in connection, knurl material: Zinc die-cast, nickel-plated, external cable diameter 4 mm ... 8 mm

## Your advantages

- Easy and tool-free connection by means of Push-in Technology
- Conveniently connect stranded conductors, thanks to lever
- Reliable and quick connection of electric cables
- Flexible signal and data cabling
- Quick and easy installation, thanks to Push-in connection technology

RoHS

## Key Commercial Data

| | |
|---|---|
| Packing unit | 1 pc |
| GTIN | 4 055626 375892 |
| GTIN | 4055626375892 |

## Technical data

### Dimensions

| | |
|---|---|
| Diameter housing | 19 mm |
| Length | 60 mm |
| External cable diameter | 4 mm ... 8 mm |
| Stripping length of the sheath | 29 mm |
| Stripping length of the individual wire | 7 mm |

### Ambient conditions

| | |
|---|---|
| Ambient temperature (operation) | -40 °C ... 85 °C (Plug / socket) |
| 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 (2 A when using 0.14 mm² conductors) |
| Rated voltage | 48 V AC |
| | 60 V DC |
| Number of positions | 5 |
| Insulation resistance | ≥ 100 MΩ |
| Coding | B - inverse |
| Standards/regulations | M12 connector IEC 61076-2-101 |
| | Shock, vibration EN 50155:2001 |
| Signal type/category | Universal |
| Status display | No |
| Overvoltage category | II |
| Degree of pollution | 3 |
| Connection method | Push-in connection |
| Conductor cross section | 0.14 mm² ... 0.75 mm² (without ferrule) |
| | 0.08 mm² ... 0.5 mm² (with ferrule) |
| | 0.14 mm² ... 0.75 mm² (solid) |
| Conductor cross section AWG | 26 ... 18 (without ferrule) |
| | 28 ... 20 (with ferrule) |
| Insertion/withdrawal cycles | ≥ 100 |
| Torque | 0.4 Nm (M12 knurl) |
| | 0.8 Nm (Connector with coupling sleeve) |
| | 3 Nm (Pressure nut with coupling sleeve) |
| Assembly instructions | The wires can be connected both with ferrules and without ferrules |

### 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 |
| Additional material specifications | TPE-U (Clamping cage, weight: 1.1 g) |
| | PA 6 (Actuation lever) |
| Standards/regulations | PA 6.6: Fire protection in rail vehicles - requirement sets R22, R23, R24, R25, and R26 acc. to DIN EN 45545-2 (Risk level HL1 - HL3) |
| | PA 6: Fire protection in rail vehicles - requirement sets R22, R23, and R24 acc. to DIN EN 45545-2 (Risk level HL1 - HL3) |

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## Technical data

### Standards and Regulations

| | |
|---|---|
| Standards/specifications | M12 connector IEC 61076-2-101 |
| | Shock, vibration EN 50155:2001 |
| Flammability rating according to UL 94 | V0 |

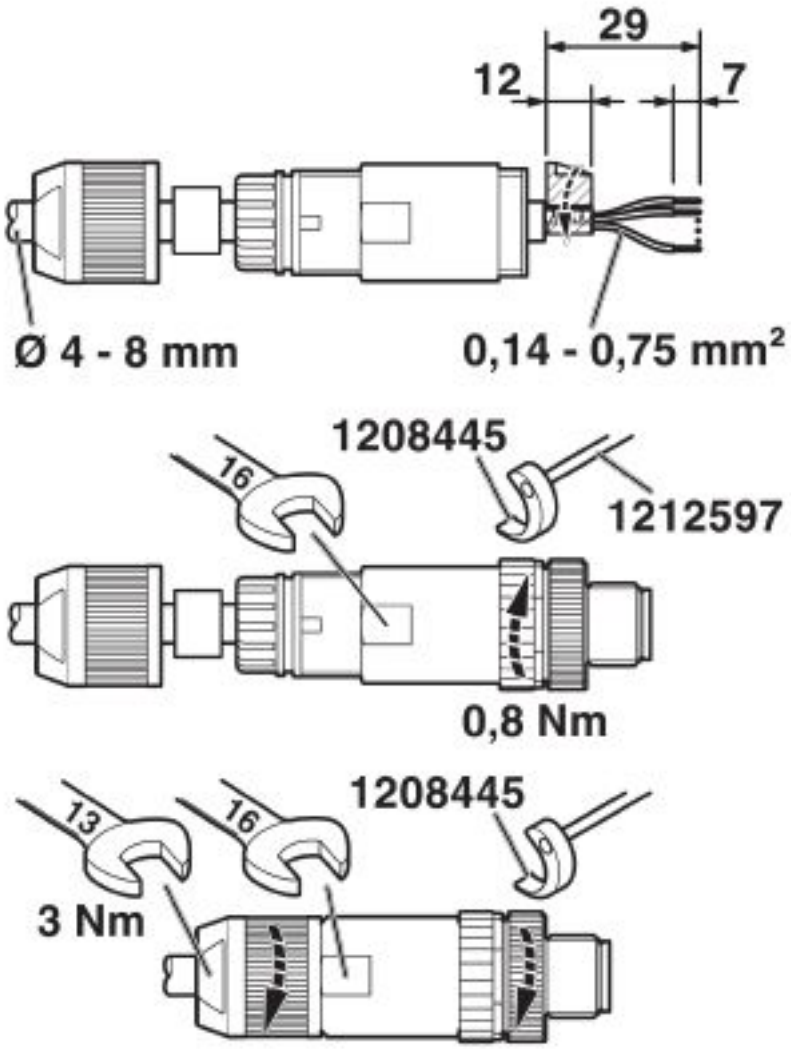
### Environmental Product Compliance

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

## Drawings

# Connector - SACC-M12MSB-5PL SH - 1424662

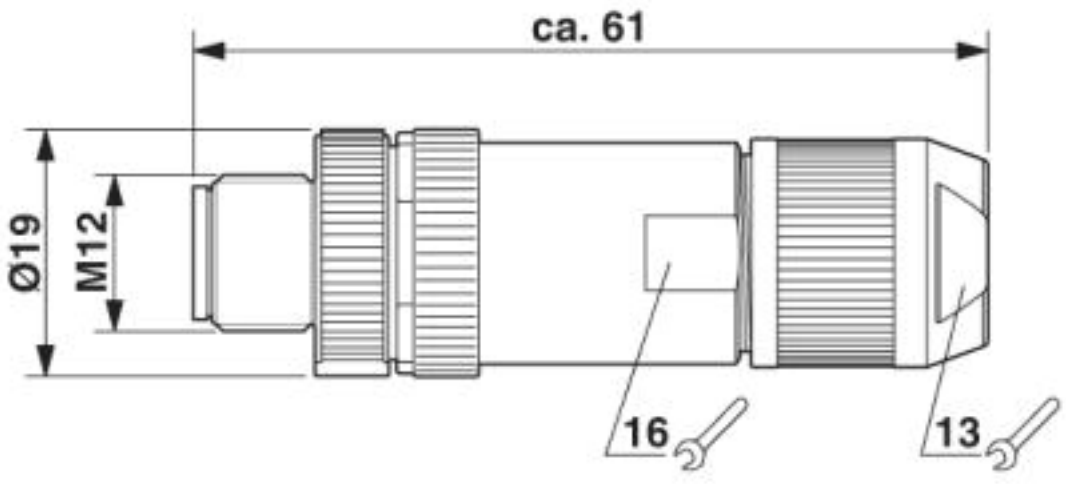
Functional drawing




Slide the pressure nut and sleeve housing along the cable, strip the cable, shorten the shield, strip the single wires, connect the wires, in the case of a straight sleeve housing gently twist the wires together, stick the shielding foil around the shortened shield, in the case of a cable outside diameter < 6 mm stick an additional shielding foil around the wire pack, screw the sleeve housing to the plug insert, screw the pressure nut tight.

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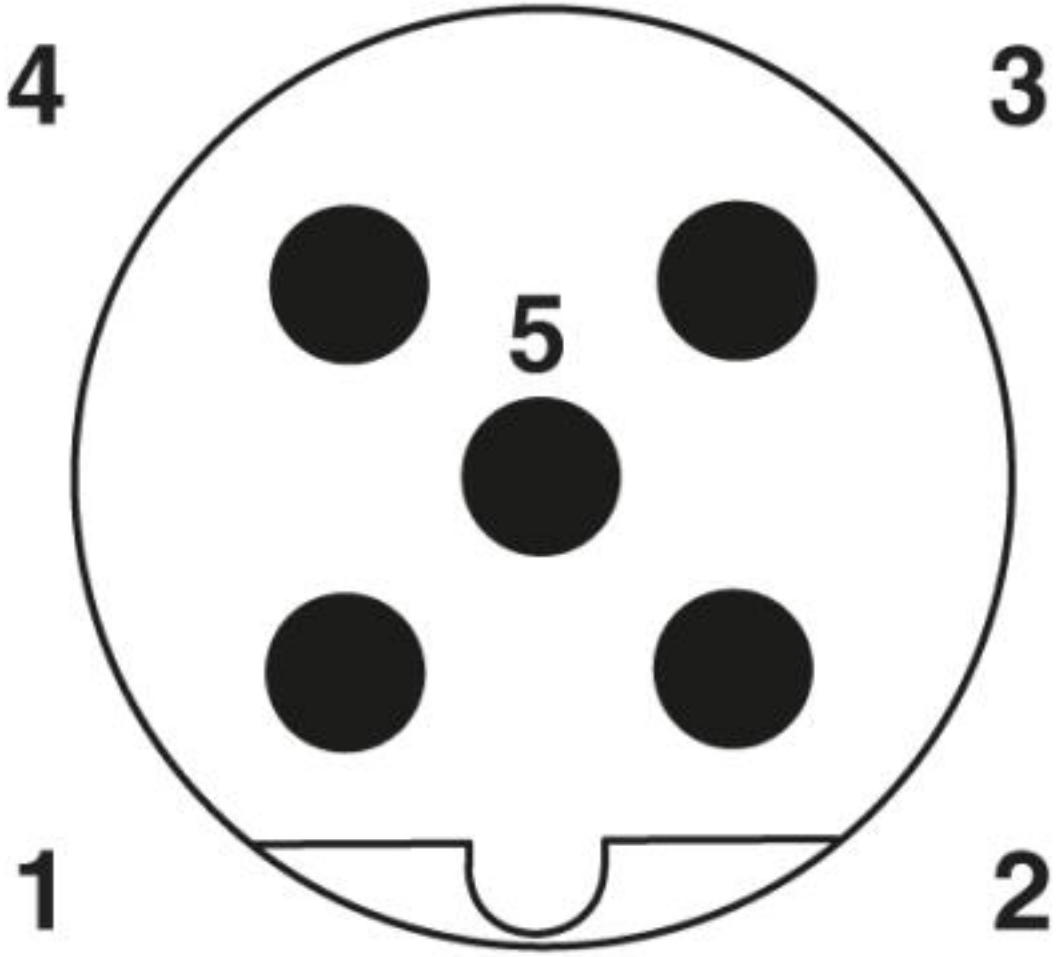
Dimensional drawing




M12 SPEEDCON plug, straight, shielded

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Schematic diagram




Pin assignment M12 male connector, 5-pos., B-coded, male side

## Classifications

### eCl@ss

| | |
|---|---|
| eCl@ss 10.0.1 | 27440102 |
| eCl@ss 5.1 | 27143423 |
| eCl@ss 6.0 | 27279200 |
| eCl@ss 7.0 | 27440104 |
| eCl@ss 8.0 | 27440104 |
| eCl@ss 9.0 | 27440102 |

### ETIM

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

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## Approvals

### Approvals

Approvals

EAC / UL Listed / cUL Listed / EAC / cULus Listed

Ex Approvals

## Approval details

| | | |
|---|---|---|
| EAC | | RU C-DE.AI30.B.01102 |

| | | | |
|---|---|---|---|
| UL Listed | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | E221474 |

| | |
|---|---|
| Nominal voltage UN | 60 V |
| Nominal current IN | 4 A |
| mm²/AWG/kcmil | 26-18 |

| | | | |
|---|---|---|---|
| cUL Listed | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | E221474 |

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|---|---|
| Nominal voltage UN | 60 V |
| Nominal current IN | 4 A |
| mm²/AWG/kcmil | 26-18 |

| | | |
|---|---|---|
| EAC | | RU C-DE.BL08.B.00511 |

| | |
|---|---|
| cULus Listed | |

## Accessories

### Accessories

Cable by the meter

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## Accessories

Cable reel - SAC-5P-100,0-PUR/SH-0,34 - 1501728



Cable ring, PUR halogen-free black, 5-pos., shielded, conductor colors: Brown/white/blue/black/gray, cable length: 100 m

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Cable end sleeve

Ferrule - AI 0,25- 6 YE - 3203024



Ferrule, sleeve length: 6 mm, length: 10.5 mm, color: yellow

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Ferrule - A 0,25- 7 - 3202478



Ferrule, length: 7 mm, color: silver

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Ferrule - A 0,34- 7 - 3009202



Ferrule, length: 7 mm, color: silver

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Ferrule - A 0,5 - 6 - 3200218



Ferrule, length: 6 mm, color: silver

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## Accessories

Ferrule - AI 0,5 - 6 WH - 3200687



Ferrule, sleeve length: 6 mm, length: 12 mm, color: white

### Crimping tool

Crimping pliers - CRIMPFOX 6H - 1212046



Crimping pliers, for ferrules without insulating collar according to DIN 46228 Part 1 and ferrules with insulating collar according to DIN 46228 Part 4, 0.14 mm² ... 6 mm², unlockable pressure lock, lateral entry

### Protective cap

Sealing cap - PROT-M12 FS-PA-CHAIN - 1430873

M12 sealing cap made of plastic with fixing band, for sensor cables, for free M12 plugs



### 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

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

### Shield connection

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## Accessories

Shielding foil - ALU-SB - 1404531



Shielding foil, for fixing the braided shield of shielded cables. Length: 4 cm, width: 1.2 cm

### Stripping tool

Stripping tool - WIREFOX 2,5 - 1212368



Stripping tool, for conductors and cables with a conductor cross section from 0.08 to 2.5 mm, self-adjusting, stripping length adjustable up to 15 mm, cutting capacity up to 6 mm² stranded/1.5 mm² solid

### 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

Torque screwdriver - TSD 08 SAC - 1212597



Torque screw driver with preset torque of 0.8 Nm, with 4 mm hexagon for accommodating SAC bits, two-component handle with non-slip grip

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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## Accessories

Torque screwdriver - TSD-M 3NM - 1212225



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 1.2 - 3 Nm

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



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

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