# SACC-M12MRS-3PECON-PG11-M - Power connector

1408985

https://www.phoenixcontact.com/us/products/1408985

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Power connector, 4-position, Plug angled M12, coding: S, Screw connection, knurl material: Zinc die-cast, nickel-plated, cable gland Pg11, external cable diameter 8 mm ... 10 mm, for AC current up to 12 A/630 V, Contact 4 leading

## Your advantages

- Safe use in the field, thanks to a high degree of protection
- Screw connection: proven connection technology for a large selection of different conductors
- High-performance: AC connectors for up to 12 A and 630 V AC
- Protection against incorrect connection using special S-coding

## Commercial data

| | |
|---|---|
| Item number | 1408985 |
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Sales key | BF30 |
| Product key | BF2CAB |
| Catalog page | Page 279 (C-2-2019) |
| GTIN | 4046356861564 |
| Weight per piece (including packing) | 26.85 g |
| Weight per piece (excluding packing) | 26.5 g |
| Customs tariff number | 85366990 |
| Country of origin | DE |

## Technical data

### Notes

| | |
|---|---|
| General | Strip 21 mm off the cable sheath, strip 6 mm off the conductor insulation, crimp the ferrule, then shorten this to 5 mm. Conductor length with shortened ferrule: 20 mm. Connect conductors and tighten the mounting screws with 0.2 Nm. |
| Assembly 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. |

### Mounting

| | |
|---|---|
| Assembly note | The connector pin assignment can be rotated 90° to the cable outlet |

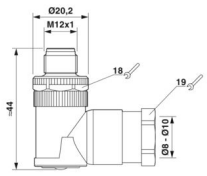
### Product properties

| | |
|---|---|
| Product type | Circular connector (cable-side) |
| Application | Power supply |
| Number of positions | 4 |
| No. of cable outlets | 1 |
| Shielded | no |
| Coding | S |
| Cable outlet | angled |
| Pg screw connection | Pg11 |

Insulation characteristics

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

### Dimensions

| | |
|---|---|
| Dimensional drawing |   |
| Length | 44 mm |
| Wrench size, union nut | 19 mm |

External dimensions

| | |
|---|---|
| Outside diameter | 8 mm ... 10 mm |

Housing

| | |
|---|---|
| Diameter housing | 20.2 mm |

### Material specifications

| | |
|---|---|
| Flammability rating according to UL 94 | V0 |
| Seal material | NBR |
| Material of grip body | PA |
| Contact material | CuZn |
| Contact surface material | Au |
| Contact carrier material | PA |
| Material for screw connection | Zinc die-cast, nickel-plated |

## Connection data

Conductor connection

| | |
|---|---|
| Connection method | Screw connection |
| Connection cross section | 0.75 mm² ... 1.5 mm² (with ferrule) |
| | 0.75 mm² ... 2.5 mm² (solid) |
| Connection cross section AWG | 18 ... 16 (with ferrule) |
| Stripping length of the individual wire | 5 mm |
| Tightening torque | 0.4 Nm (M12 knurl) |
| | 1.5 Nm ... 2 Nm (Pressure screw with sleeve housing) |
| | 0.4 Nm (Screw plug insert with sleeve housing as far it will go) |
| | 0.2 Nm (Screw terminal blocks) |

## Electrical properties

| | |
|---|---|
| Rated surge voltage | 6 kV |
| Contact resistance | ≤ 3 mΩ |
| Insulation resistance | > 10 GΩ |
| Nominal voltage $U_N$ | 630 V AC |
| Nominal current $I_N$ | 12 A (when using 1.5 mm² conductors) |
| | 12 A (at 40 °C) |

## Mechanical properties

Mechanical data

| | |
|---|---|
| Insertion/withdrawal cycles | > 100 |

## Connector

Connection 1

| | |
|---|---|
| Head design | Plug |
| Head cable outlet | angled |
| Head thread type | M12 |
| Coding | S |

## Cable/line

| | |
|---|---|
| Stripping length of the individual wire | 5 mm |

## Environmental and real-life conditions

Ambient conditions

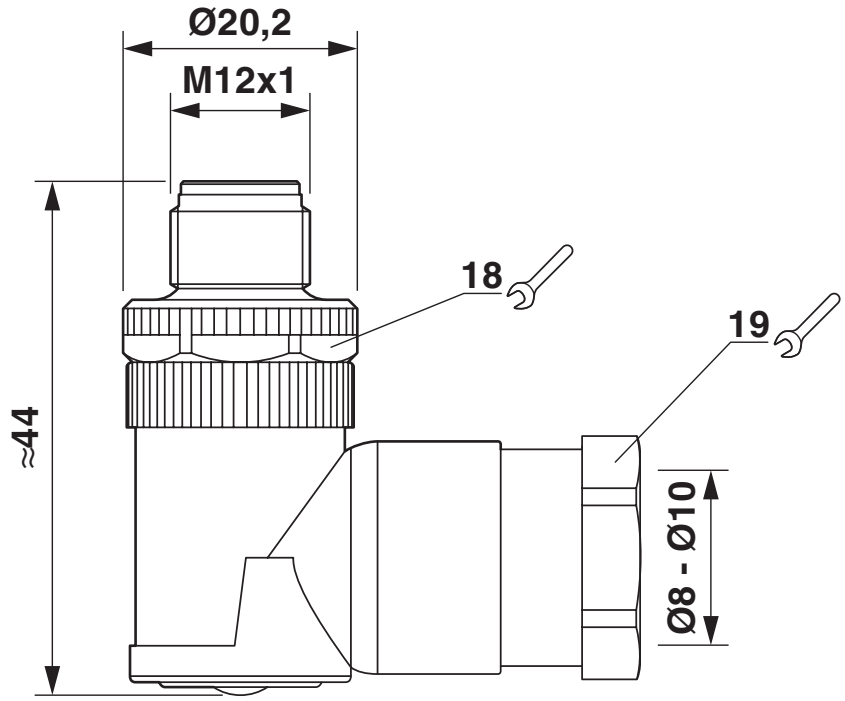
| | |
|---|---|
| Degree of protection | IP67 |
| Ambient temperature (operation) | -40 °C ... 85 °C (Plug / socket) |

## Standards and regulations

| | |
|---|---|
| Standard designation | M12 connector |
| Standards/specifications | IEC 61076-2-111 |

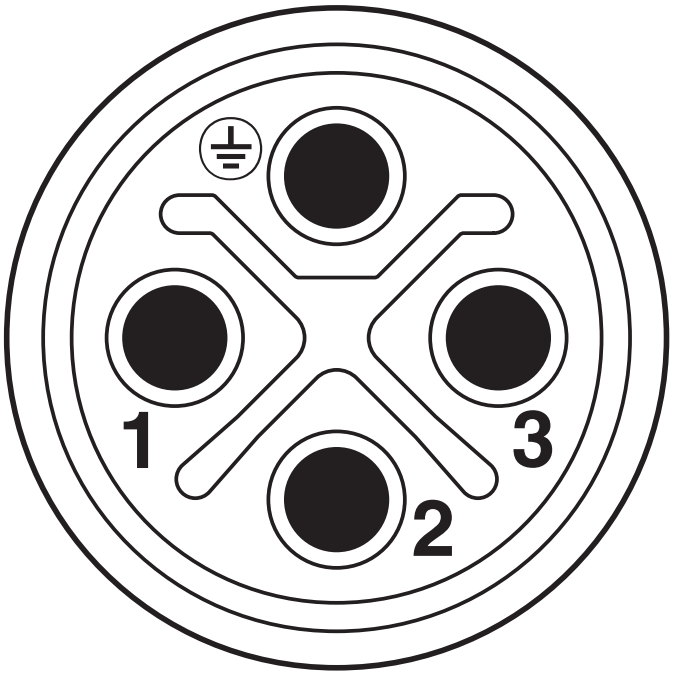
## Drawings

Dimensional drawing




M12 x 1 male plug, angled

Schematic diagram




M12 plug pin assignment, 4-pos., S-coded, plug side view

## Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1408985

**cUL Recognized**
Approval ID: FILE E 221474

| | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $mm^2$ |
|---|---|---|---|---|
| | 600 V | 12 A | - 16 | - |

**UL Recognized**
Approval ID: FILE E 221474

| | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $mm^2$ |
|---|---|---|---|---|
| | 600 V | 12 A | - 16 | - |

**EAC**
Approval ID: RU C-DE.BL08.B.00511

**cULus Recognized**

## Classifications

### ECLASS

| | |
|---|---|
| ECLASS-11.0 | 27440102 |
| ECLASS-12.0 | 27440116 |
| ECLASS-13.0 | 27440116 |

### ETIM

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

### UNSPSC

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

## 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: 7439-92-1) |
| SCIP | 4477e389-3e06-4b52-b958-34a736d9edb6 |

## Accessories

### A 1,5 - 7 - Ferrule

3200263

https://www.phoenixcontact.com/us/products/3200263



Ferrule, color: silver

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

1430873

https://www.phoenixcontact.com/us/products/1430873



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

## TSD 04 SAC - Torque screwdriver

1208429

https://www.phoenixcontact.com/us/products/1208429



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

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

1212224

https://www.phoenixcontact.com/us/products/1212224



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0. 3 - 1.2 Nm

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

1212600

https://www.phoenixcontact.com/us/products/1212600



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

## SACC BIT M12-D20 - Tool

1208445

https://www.phoenixcontact.com/us/products/1208445




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

## WIREFOX 6SC - Stripping tool

1212158

https://www.phoenixcontact.com/us/products/1212158



Stripping tool, for cables and conductors (especially for cables protected against short circuits and ground leakages) 1.5 - 6 $mm^2$, self-adjusting, stripping length of up to 18 mm, cutting capacity of up to 10 $mm^2$ stranded/1.5 $mm^2$ solid, replaceable stripping blade

## CRIMPFOX 6H - Crimping pliers

1212046

https://www.phoenixcontact.com/us/products/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 $mm^2$ ... 6 $mm^2$, unlockable pressure lock, lateral entry


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