# SAC-3P- 2,0-PVC/M12FSS PE - Power cable

1411645

https://www.phoenixcontact.com/us/products/1411645

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Power cable, 3-position, PVC, black, free cable end, on Socket straight M12, coding: S, cable length: 2 m, For alternating current up to 16 A/690 V

## Your advantages

- Easy and safe: 100 % electrically tested plug-in components
- Protection against incorrect connection using special S-coding

## Commercial data

| | |
|---|---|
| Item number | 1411645 |
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Sales key | BF05 |
| Product key | AF1CBB |
| GTIN | 4046356936712 |
| Weight per piece (including packing) | 191.8 g |
| Weight per piece (excluding packing) | 190 g |
| Customs tariff number | 85444290 |
| Country of origin | PL |

# Technical data

## Product properties

| | |
|---|---|
| Product type | Power cable |
| Application | Energy supply |
| Number of positions | 3 |
| No. of cable outlets | 1 |
| Shielded | no |
| Coding | S |

Insulation characteristics

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

## Material specifications

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

## Electrical properties

| | |
|---|---|
| Insulation resistance | ≥ 100 MΩ |
| Nominal voltage $U_N$ | 690 V AC |
| Nominal current $I_N$ | 16 A |

## Mechanical properties

Mechanical data

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

## Connector

Connection 1

| | |
|---|---|
| Type | free cable end |

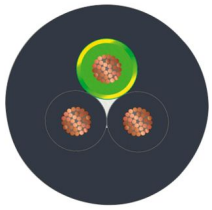
Connection 2

| | |
|---|---|
| Type | Socket straight M12 |
| Coding type | S (Power) |

## Cable/line

| | |
|---|---|
| Cable length | 2 m |

PVC black [PVC]

| | |
|---|---|
| Dimensional drawing |  |
| Cable weight | 80 kg/km |
| UL AWM Style | 2517 (105 °C / 300 V) |
| Number of positions | 3 |
| Shielded | no |
| Cable type | PVC black [PVC] |
| Conductor structure, voltage supply | 30x 0.25 mm |
| AWG power supply | 16 |
| Conductor cross-section | 3x 1.5 mm² |
| Wire diameter incl. insulation | 2.4 mm ±0.1 mm |
| External cable diameter | 6.80 mm ±0.2 mm |
| Outer sheath, material | PVC |
| External sheath, color | black |
| Conductor material | Bare Cu litz wires |
| Material wire insulation | PVC |
| Single wire, color | black 1, black 2, green/yellow |
| Overall twist | 3 wires, twisted |
| Max. conductor resistance | ≤ 13.3 Ω/km (at 20 °C) |
| Insulation resistance | ≥ 10 MΩ*km (at 20 °C) |
| Nominal voltage, cable | 300 V AC |
| Test voltage | 2000 V AC |
| Minimum bending radius, fixed installation | 5 x D |
| Minimum bending radius, flexible installation | 12 x D |
| Smallest bending radius, fixed installation | 34 mm |
| Smallest bending radius, movable installation | 82 mm |
| Flame resistance | according to IEC 60332-1 |
| | According to DIN EN 60332-1-2 |
| | According to VW-1 |
| | According to FT1 |
| Ambient temperature (operation) | -40 °C ... 90 °C (cable, fixed installation) |
| | -5 °C ... 90 °C (Cable, flexible installation) |

## Environmental and real-life conditions

### Ambient conditions

| | |
|---|---|
| Degree of protection | IP65 |
| | IP67 (without preloading, as additional test in accordance with IEC 60529) |

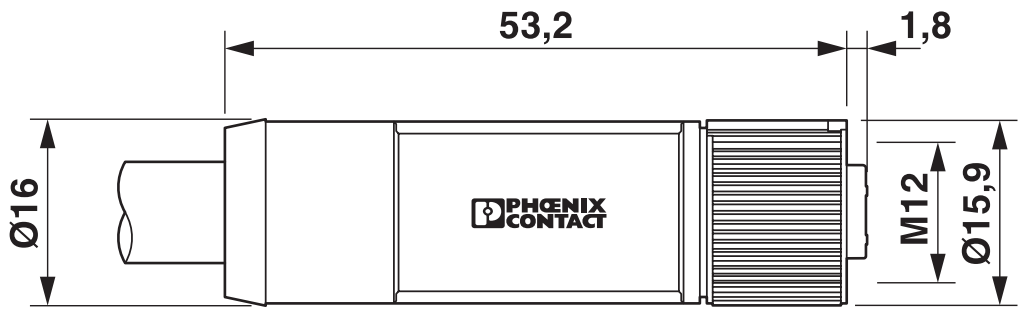
| | |
|---|---|
| Ambient temperature (operation) (male connector/female connector) | -25 °C ... 85 °C (Plug / socket) |

## Standards and regulations

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

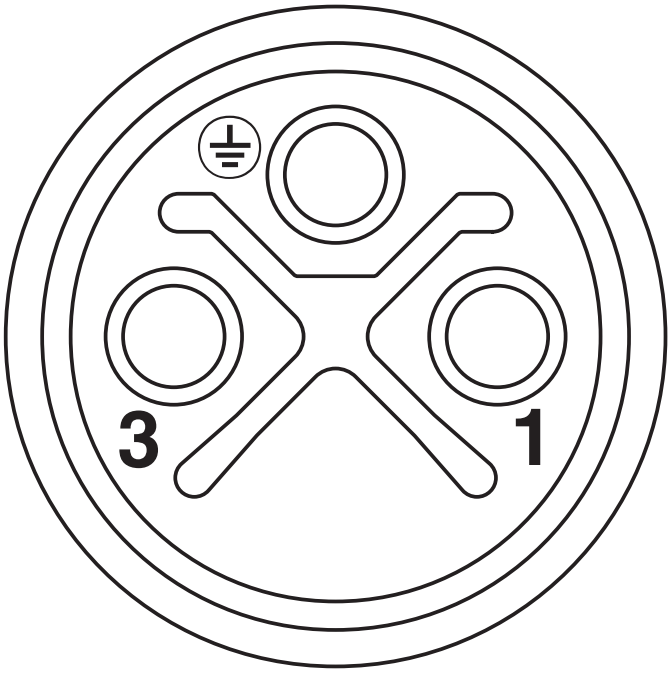
## Drawings

Dimensional drawing



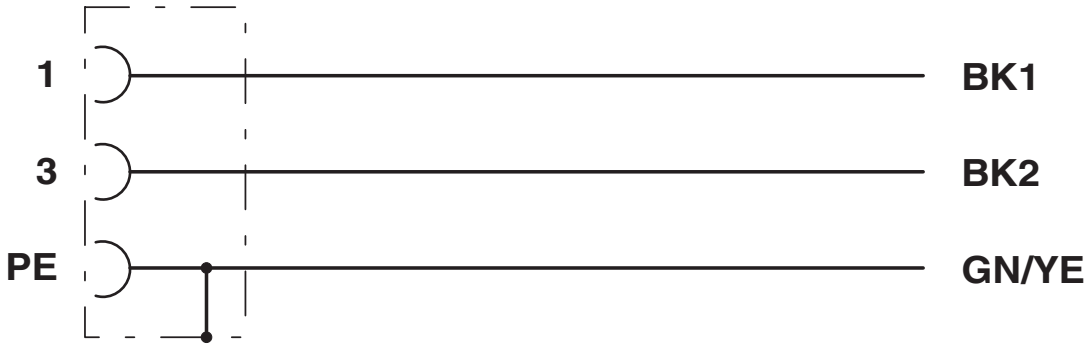

M12 x 1 socket, straight

Schematic diagram




Pin assignment of M12 socket, 3-pos., S-coded, socket side view

Circuit diagram




Contact assignment of the M12 socket

## Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1411645

**UL Listed**
Approval ID: FILE E 468743

| | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $mm^2$ |
|---|---|---|---|---|
| keine | | | | |
| | 300 V | 12 A | - 16 | - 16 |

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|---|---|---|---|---|
| keine | | | | |
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**EAC-RoHS**
Approval ID: RU D-DE.HB35.B.00387

## Classifications

### ECLASS

| | |
|---|---|
| ECLASS-13.0 | 27060327 |
| ECLASS-15.0 | 27060327 |

### ETIM

| | |
|---|---|
| ETIM 10.0 | EC001855 |

### UNSPSC

| | |
|---|---|
| UNSPSC 21.0 | 26121600 |

## 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% |


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