

# SAC-4P-20,0-PUR/M12FSS PE - Power cable



1100838

<https://www.phoenixcontact.com/us/products/1100838>

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 documentation. Our general terms of use for downloads are valid.



Power cable, 4-position, PUR halogen-free, black-gray RAL 7021, free cable end, on Socket straight M12, coding: S, cable length: 20 m, for AC current up to 12 A/690 V

## Your advantages

- Easy and safe: 100 % electrically tested plug-in components
- Protection against incorrect connection using special S-coding
- Our standard: robust halogen-free PUR cable

## Commercial data

|                                      |                                |
|--------------------------------------|--------------------------------|
| Item number                          | 1100838                        |
| Packing unit                         | 1 pc                           |
| Minimum order quantity               | 1 pc                           |
| Note                                 | Made to order (non-returnable) |
| Sales key                            | BF05                           |
| Product key                          | AF1CCP                         |
| GTIN                                 | 4055626956176                  |
| Weight per piece (including packing) | 2,169.209 g                    |
| Weight per piece (excluding packing) | 22.22 g                        |
| Customs tariff number                | 85444290                       |
| Country of origin                    | PL                             |

# SAC-4P-20,0-PUR/M12FSS PE - Power cable



1100838

<https://www.phoenixcontact.com/us/products/1100838>

## Technical data

### Product properties

|                      |               |
|----------------------|---------------|
| Product type         | Power cable   |
| Application          | Energy supply |
| Number of positions  | 4             |
| 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 | $\geq 100 \text{ M}\Omega$ |
| Nominal voltage $U_N$ | 690 V AC                   |
| Nominal current $I_N$ | 12 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 | 20 m |
|--------------|------|

#### PUR halogen-free black [PUR]

|              |          |
|--------------|----------|
| Cable weight | 92 kg/km |
|--------------|----------|

# SAC-4P-20,0-PUR/M12FSS PE - Power cable



1100838

<https://www.phoenixcontact.com/us/products/1100838>

|                                               |                                                                                                                              |
|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| UL AWM Style                                  | 80°C/1000 V                                                                                                                  |
| Number of positions                           | 4                                                                                                                            |
| Shielded                                      | no                                                                                                                           |
| Cable type                                    | PUR halogen-free black [PUR]                                                                                                 |
| Conductor structure, voltage supply           | 44x 0.20 mm                                                                                                                  |
| AWG power supply                              | 16                                                                                                                           |
| Conductor cross section                       | 4x 1.5 mm²                                                                                                                   |
| Wire diameter incl. insulation                | 2.35 mm ±0.05 mm                                                                                                             |
| External cable diameter                       | 7.40 mm ±0.25 mm                                                                                                             |
| Outer sheath, material                        | PUR                                                                                                                          |
| External sheath, color                        | black-gray RAL 7021                                                                                                          |
| Conductor material                            | Bare Cu litz wires                                                                                                           |
| Material wire insulation                      | PP                                                                                                                           |
| Single wire, color                            | black 1, black 2, black 3, green/yellow                                                                                      |
| Thickness, insulation                         | ≥ 0.31 mm                                                                                                                    |
| Thickness, outer sheath                       | approx. 0.85 mm                                                                                                              |
| Overall twist                                 | 4 wires, twisted                                                                                                             |
| Max. conductor resistance                     | ≤ 14.1 Ω/km (at 20 °C)                                                                                                       |
| Insulation resistance                         | ≥ 1 GΩ*km (at 20 °C)                                                                                                         |
| Nominal voltage, cable                        | ≤ 1000 V AC                                                                                                                  |
| Test voltage                                  | ≥ 10000 V AC (Spark test)                                                                                                    |
| Minimum bending radius, fixed installation    | 5 x D                                                                                                                        |
| Minimum bending radius, flexible installation | 10 x D                                                                                                                       |
| Smallest bending radius, fixed installation   | 37 mm                                                                                                                        |
| Smallest bending radius, movable installation | 74 mm                                                                                                                        |
| Dynamic load capacity (bending)               | Max. bending cycles: 5000000, Bending radius: 10 x D, Traversing path: 10 m, Traversing rate: 3 m/s, Acceleration: 10 m/s²   |
| Dynamic load capacity (torsion)               | Torsion: ±180 °/m, Torsion cycles: 500000, Torsional frequency: 35 cycles/min.                                               |
| Halogen-free                                  | in accordance with DIN VDE 0472 part 815<br>in accordance with DIN EN 50267-2-1                                              |
| Flame resistance                              | According to UL 758/1581 (Cable Flame)<br>in accordance with UL 758/1581 FT2<br>according to DIN EN 60332-2-2                |
| Resistance to oil                             | according to DIN EN 60811-404, 168 h at 100 °C<br>according to UL 758, 168 h at 60 °C                                        |
| Other resistance                              | Hydrolysis and microbe resistant as per VDE 0282 section 10<br>Low adhesion<br>abrasion-resistant<br>Resistant to salt water |
| Ambient temperature (operation)               | -50 °C ... 85 °C (cable, fixed installation)<br>-30 °C ... 85 °C (Cable, flexible installation)                              |

Environmental and real-life conditions

# SAC-4P-20,0-PUR/M12FSS PE - Power cable



1100838

<https://www.phoenixcontact.com/us/products/1100838>

## Ambient conditions

|                                 |                                                                            |
|---------------------------------|----------------------------------------------------------------------------|
| Degree of protection            | IP65                                                                       |
|                                 | IP67 (without preloading, as additional test in accordance with IEC 60529) |
| Ambient temperature (operation) | -25 °C ... 85 °C (Plug / socket)                                           |

## Standards and regulations

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

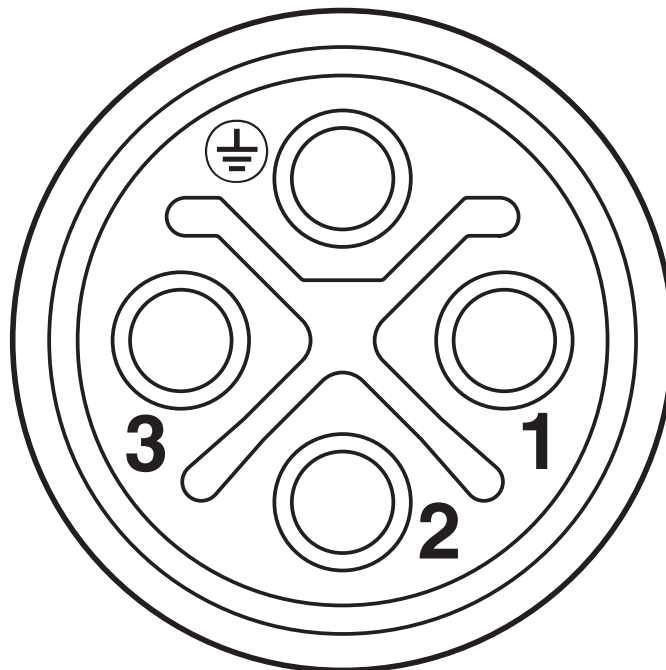
## Drawings

Dimensional drawing

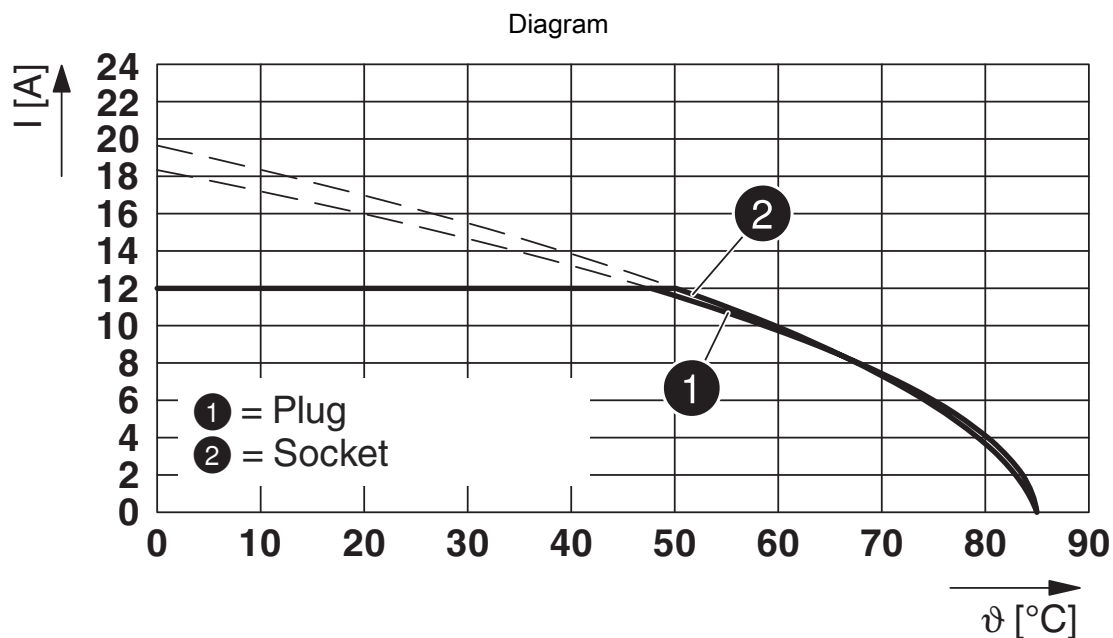


M12 x 1 socket, straight

Schematic diagram

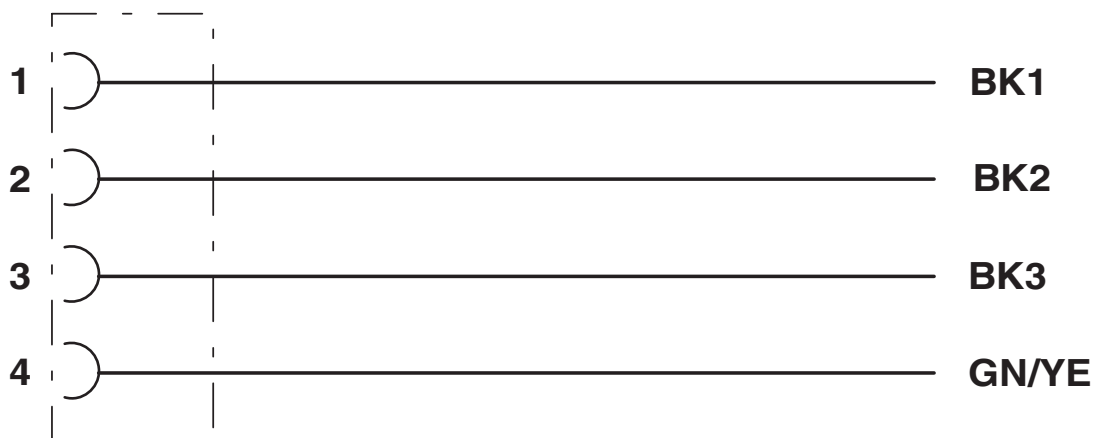


Pin assignment of M12 socket, 4-pos., S-coded, socket side view



Base curve

Circuit diagram



Contact assignment of the M12 socket

# SAC-4P-20,0-PUR/M12FSS PE - Power cable



1100838

<https://www.phoenixcontact.com/us/products/1100838>

## Classifications

### ECLASS

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

### ETIM

|          |          |
|----------|----------|
| ETIM 9.0 | EC001855 |
|----------|----------|

### UNSPSC

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

# SAC-4P-20,0-PUR/M12FSS PE - Power cable



1100838

<https://www.phoenixcontact.com/us/products/1100838>

## 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% |
|-------------------------------------|----------------------------|

Phoenix Contact 2025 © - all rights reserved  
<https://www.phoenixcontact.com>

Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)