

## Power cable - SAC-4P-20,0-PUR/M12FST SH - 1415343

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's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



Power cable, 4-position, PUR halogen-free, black RAL 9005, shielded, free cable end, on Socket straight M12 SPEEDCON, T-coded, cable length: 20 m, for direct current up to 12 A/60 V

### Your advantages

- ✓ Easy and safe: 100% electrically tested plug-in components
- ✓ High-performance: DC connectors for up to 12 A and 60 V DC
- ✓ Protection against incorrect connection using special T-coding
- ✓ Shield power reliably – 360° shielding to reduce electromagnetic loads
- ✓ Save time, thanks to installation with SPEEDCON fast locking system
- ✓ Our standard: robust halogen-free PUR cable



### Key Commercial Data

|                        |                                                                                                         |
|------------------------|---------------------------------------------------------------------------------------------------------|
| Packing unit           | 1 pc                                                                                                    |
| Minimum order quantity | 10 pc                                                                                                   |
| GTIN                   | <br>4 055626 046907 |
| GTIN                   | 4055626046907                                                                                           |

### Technical data

#### Dimensions

|                 |      |
|-----------------|------|
| Length of cable | 20 m |
|-----------------|------|

#### Ambient conditions

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

#### General

|                       |         |
|-----------------------|---------|
| Rated current at 40°C | 12 A    |
| Rated voltage         | 60 V    |
|                       | 63 V DC |
| Number of positions   | 4       |
| Insulation resistance | ≤ 10 GΩ |

# Power cable - SAC-4P-20,0-PUR/M12FST SH - 1415343

## Technical data

### General

|                              |               |
|------------------------------|---------------|
| Coding                       | T power       |
| Standards/regulations        | M12 connector |
| Status display               | No            |
| Protective circuit/component | unwired       |
| Overvoltage category         | III           |
| Degree of pollution          | 3             |
| Insertion/withdrawal cycles  | > 100         |

### Material

|                                        |                                             |
|----------------------------------------|---------------------------------------------|
| Flammability rating according to UL 94 | V0                                          |
| Contact material                       | CuZn                                        |
| Contact surface material               | Au                                          |
| Contact carrier material               | PA                                          |
| Material of grip body                  | TPU, hardly inflammable, self-extinguishing |
| Material, knurls                       | Zinc die-cast, nickel-plated                |

### Standards and Regulations

|                                        |               |
|----------------------------------------|---------------|
| Standard designation                   | M12 connector |
| Flammability rating according to UL 94 | V0            |

### Cable

|                                               |                                                    |
|-----------------------------------------------|----------------------------------------------------|
| Cable type                                    | PUR halogen-free black                             |
| Cable type (abbreviation)                     | PUR                                                |
| Cable abbreviation                            | LS9YC11Y-OB                                        |
| Conductor cross section                       | 4x 1.5 mm <sup>2</sup>                             |
| AWG power supply                              | 16                                                 |
| Core diameter including insulation            | 2.4 mm                                             |
| Thickness, insulation                         | 1.2 mm (Outer cable sheath)                        |
| Wire colors                                   | brown, white, blue, black                          |
| Overall twist                                 | 4 wires optimally twisted                          |
| Shielding                                     | Tinned copper-braided shield, approx. 85% covering |
| External sheath, color                        | black RAL 9005                                     |
| External cable diameter D                     | 9.7 mm ±0,3 mm                                     |
| Smallest bending radius, fixed installation   | 49 mm                                              |
| Smallest bending radius, movable installation | 73 mm                                              |
| Number of bending cycles                      | 4000000                                            |
| Bending radius                                | 97 mm                                              |
| Traversing path                               | 10 m                                               |
| Traversing rate                               | 3 m/s                                              |
| Acceleration                                  | 10 m/s <sup>2</sup>                                |
| Torsion force                                 | ± 25 °/m                                           |
| Outer sheath, material                        | PUR                                                |

# Power cable - SAC-4P-20,0-PUR/M12FST SH - 1415343

## Technical data

### Cable

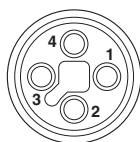
|                                 |                                                      |
|---------------------------------|------------------------------------------------------|
| Material conductor insulation   | PP                                                   |
| Conductor material              | Bare Cu litz wires                                   |
| Insulation resistance           | $\geq 10 \text{ M}\Omega \cdot \text{km}$ (at 20 °C) |
| Conductor resistance            | $\leq 13.3 \text{ }\Omega/\text{km}$ (at 20 °C)      |
| Nominal voltage, cable          | 300 V AC                                             |
| Test voltage, cable             | 1500 V AC (5 min.)                                   |
| Flame resistance                | according to EN 60332-1-2                            |
|                                 | in acc. to UL 1581 VW1                               |
| Halogen-free                    | according to VDE 0282-13 Appendix C                  |
| Resistance to oil               | in accordance with DIN EN 60811-2-1                  |
|                                 | According to DIN EN 50363-10-2                       |
| Ambient temperature (operation) | -40 °C ... 90 °C (cable, fixed installation)         |
|                                 | -30 °C ... 90 °C (cable, flexible installation)      |

### Environmental Product Compliance

|            |                                                                                                     |
|------------|-----------------------------------------------------------------------------------------------------|
| REACH SVHC | Lead 7439-92-1                                                                                      |
| China RoHS | Environmentally Friendly Use Period = 50                                                            |
|            | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

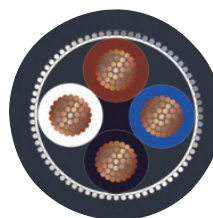
## Drawings

Schematic diagram



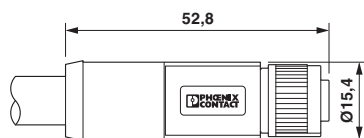
Pin assignment of M12 socket, 4-pos., T-coded, socket side view

Cable cross section



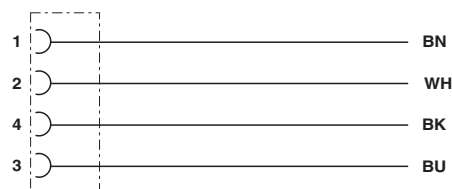
PUR halogen-free black [PUR]

Dimensional drawing



M12 x 1 socket, straight

Circuit diagram



Contact assignment of the M12 socket

## Power cable - SAC-4P-20,0-PUR/M12FST SH - 1415343

### Approvals

#### Approvals

---

#### Approvals

UL Listed / cUL Listed / cULus Listed

---

#### Ex Approvals

---

#### Approval details

|                    |                                                                                   |                                                                                                                                                       |         |
|--------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| UL Listed          |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | E468743 |
|                    |                                                                                   |                                                                                                                                                       |         |
| Nominal voltage UN |                                                                                   | 63 V                                                                                                                                                  |         |
| Nominal current IN |                                                                                   | 12 A                                                                                                                                                  |         |
| mm²/AWG/kcmil      |                                                                                   | 16                                                                                                                                                    |         |

|                    |                                                                                     |                                                                                                                                                       |         |
|--------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| cUL Listed         |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | E468743 |
|                    |                                                                                     |                                                                                                                                                       |         |
| Nominal voltage UN |                                                                                     | 63 V                                                                                                                                                  |         |
| Nominal current IN |                                                                                     | 12 A                                                                                                                                                  |         |
| mm²/AWG/kcmil      |                                                                                     | 16                                                                                                                                                    |         |

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

Phoenix Contact 2018 © - all rights reserved  
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG  
Flachsmarktstr. 8  
32825 Blomberg  
Germany  
Tel. +49 5235 300  
Fax +49 5235 3 41200  
<http://www.phoenixcontact.com>

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Phoenix Contact:](#)

[1415343](#)