

## Power cable - SAC-4P-M12MSS/ 1,5-PUR PE SH - 1424104

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Power cable, 4-position, PUR halogen-free, orange RAL 2003, shielded (Advanced Shielding Technology), Plug straight M12, coding: S, on free cable end, cable length: 1.5 m, for AC current up to 12 A/690 V

### Your advantages

- ✓ Easy and safe: 100% electrically tested plug-in components
- ✓ High-performance: AC connectors for up to 12 A and 690 V AC
- ✓ Protection against incorrect connection using special S-coding
- ✓ Our standard: robust halogen-free PUR cable
- ✓ Shield power reliably – 360° shielding to reduce electromagnetic loads

RoHS

### Key Commercial Data

|              |                                                                                                         |
|--------------|---------------------------------------------------------------------------------------------------------|
| Packing unit | 1 pc                                                                                                    |
| GTIN         | <br>4 046356 693097 |
| GTIN         | 4046356693097                                                                                           |

### Technical data

#### Dimensions

|                 |       |
|-----------------|-------|
| Length of cable | 1.5 m |
|-----------------|-------|

#### Ambient conditions

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

#### General

|                       |          |
|-----------------------|----------|
| Rated current at 40°C | 12 A     |
| Rated voltage         | 690 V AC |
| Number of positions   | 4        |
| Color handle area     | black    |

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## Technical data

### General

|                              |                               |
|------------------------------|-------------------------------|
| Insulation resistance        | ≥ 100 MΩ                      |
| Coding                       | S power                       |
| Standards/regulations        | M12 connector IEC 61076-2-111 |
| Status display               | No                            |
| Protective circuit/component | unwired                       |
| Overvoltage category         | III                           |
| Degree of pollution          | 3                             |
| Insertion/withdrawal cycles  | > 100                         |
| Torque                       | 0.4 Nm (M12 connector)        |

### Material

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

### Standards and Regulations

|                                        |                               |
|----------------------------------------|-------------------------------|
| Standards/specifications               | M12 connector IEC 61076-2-111 |
| Flammability rating according to UL 94 | V0                            |

### Cable

|                                                 |                                                    |
|-------------------------------------------------|----------------------------------------------------|
| Cable type                                      | PUR halogen-free orange shielded                   |
| Cable type (abbreviation)                       | PUR                                                |
| Cable abbreviation                              | 9YSLC11Y-JZ                                        |
| UL AWM style                                    | 20234 / 10492 (80°C/1000 V)                        |
| Conductor cross section                         | 4x 1.5 mm <sup>2</sup>                             |
| AWG power supply                                | 16                                                 |
| Conductor structure, voltage supply             | 78x 0.15 mm                                        |
| Core diameter including insulation              | ≤ 2.5 mm                                           |
| Thickness, insulation                           | 0.4 mm                                             |
| Wire colors                                     | Black 1, black 2, black 3, green/yellow            |
| Overall twist                                   | 4 wires optimally twisted                          |
| Shielding                                       | Tinned copper-braided shield, approx. 85% covering |
| External sheath, color                          | orange RAL 2003                                    |
| Outer sheath thickness                          | 1.2 mm                                             |
| External cable diameter D                       | 9.7 mm ±0.3 mm                                     |
| Minimum bending radius, fixed installation      | 5 x D                                              |
| Minimum bending radius, flexible installation   | 7.5 x D                                            |
| Number of bending cycles                        | 4000000                                            |
| Minimum bending radius, drag chain applications | 10 x D                                             |

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### Technical data

#### Cable

|                                 |                                                 |
|---------------------------------|-------------------------------------------------|
| Traversing path                 | 10 m                                            |
| Traversing rate                 | 3 m/s                                           |
| Acceleration                    | 10 m/s <sup>2</sup>                             |
| Torsion force                   | ± 25 °/m                                        |
| Outer sheath, material          | PUR                                             |
| Material conductor insulation   | PP                                              |
| Conductor material              | Bare Cu litz wires                              |
| Insulation resistance           | ≥ 10 MΩ*km (at 20 °C)                           |
| Conductor resistance            | ≤ 13.3 Ω/km (at 20 °C)                          |
| Nominal voltage, cable          | 1000 V AC                                       |
| Test voltage, cable             | 4260 V AC (5 min.)                              |
| Flame resistance                | according to EN 60332-1-2                       |
|                                 | in acc. to UL 1581 VW1                          |
|                                 | According to CSA C 22.2 No. 210-05 FT1          |
| 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                  |
| Other resistance                | UV resistant                                    |
|                                 | Low adhesion                                    |
| Ambient temperature (operation) | -40 °C ... 90 °C (cable, fixed installation)    |
|                                 | -30 °C ... 90 °C (cable, flexible installation) |

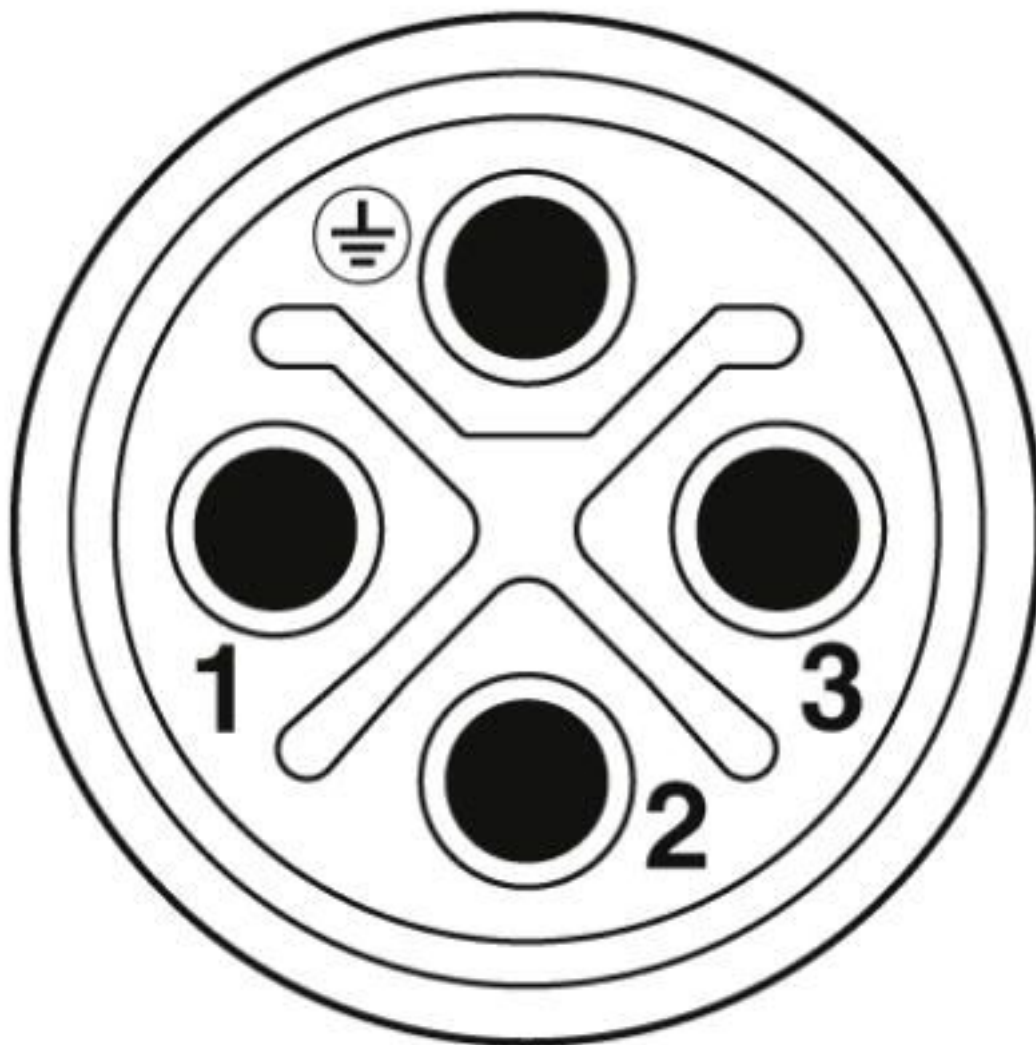
#### Environmental Product Compliance

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

### Drawings

## Power cable - SAC-4P-M12MSS/ 1,5-PUR PE SH - 1424104

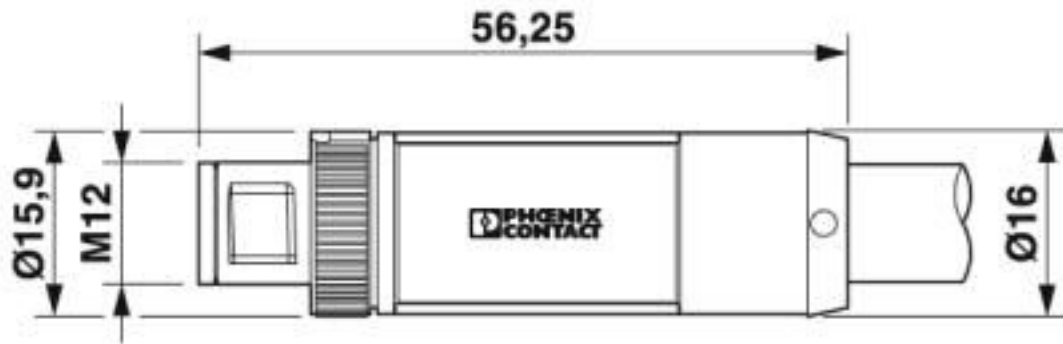
Schematic diagram



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

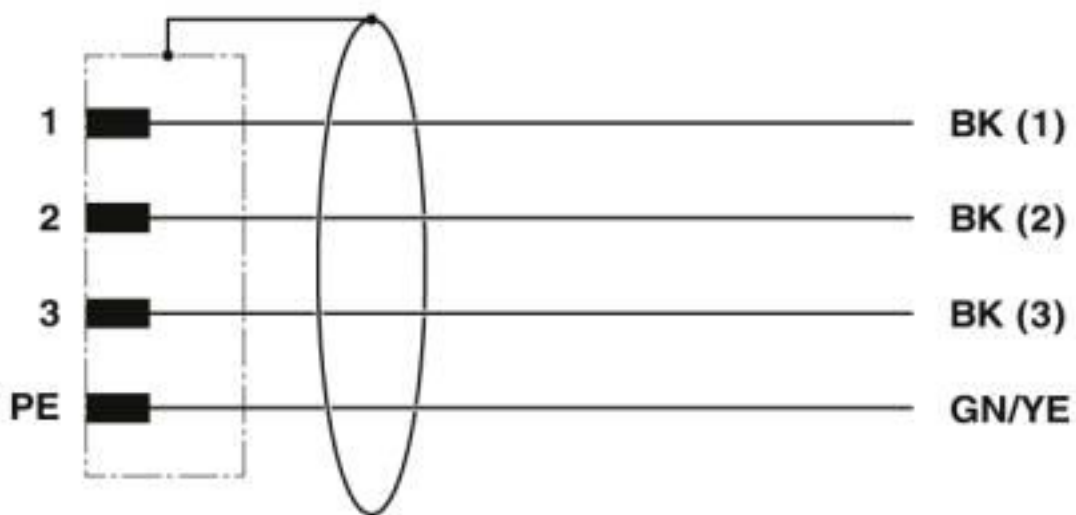
## Power cable - SAC-4P-M12MSS/ 1,5-PUR PE SH - 1424104

Dimensional drawing



Plug, M12 x 1, straight, shielded

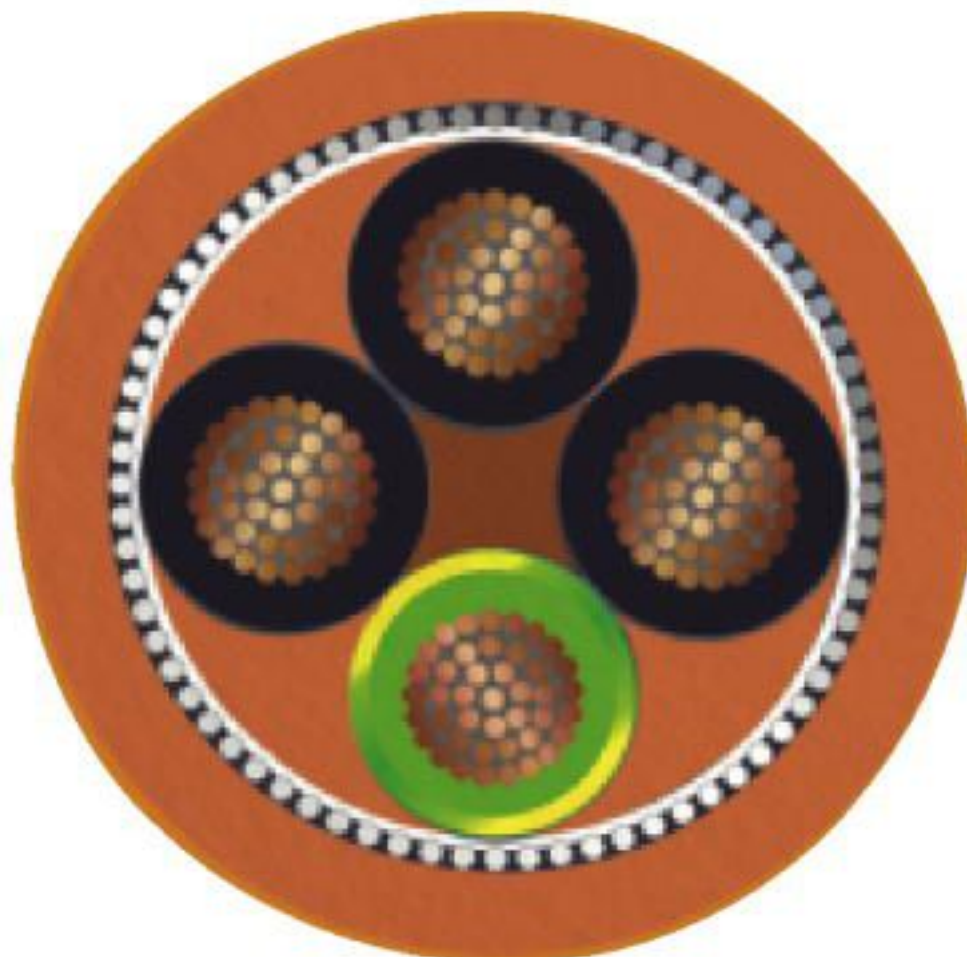
Circuit diagram



Contact assignment of the M12 plug

## Power cable - SAC-4P-M12MSS/ 1,5-PUR PE SH - 1424104

Cable cross section



PUR halogen-free orange shielded [PUR]

### Classifications

eCl@ss

|               |          |
|---------------|----------|
| eCl@ss 10.0.1 | 27060311 |
| eCl@ss 4.0    | 27140800 |
| eCl@ss 4.1    | 27140800 |
| eCl@ss 5.0    | 27143400 |
| eCl@ss 5.1    | 27143400 |
| eCl@ss 6.0    | 27279200 |
| eCl@ss 7.0    | 27279218 |
| eCl@ss 8.0    | 27279218 |
| eCl@ss 9.0    | 27060311 |

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### Classifications

#### ETIM

|          |          |
|----------|----------|
| ETIM 3.0 | EC002061 |
| ETIM 4.0 | EC001855 |
| ETIM 5.0 | EC001855 |
| ETIM 6.0 | EC001855 |
| ETIM 7.0 | EC001855 |

#### UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 6.01   | 31251501 |
| UNSPSC 7.0901 | 31251501 |
| UNSPSC 11     | 31251501 |
| UNSPSC 12.01  | 31251501 |
| UNSPSC 13.2   | 31251501 |
| UNSPSC 19.0   | 31251501 |
| UNSPSC 20.0   | 31251501 |
| UNSPSC 21.0   | 31251501 |

### Approvals

#### Approvals

#### Approvals

UL Listed / cUL Listed / EAC-RoHS / EAC / 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> | FILE E 468743 |
| Nominal voltage UN | 600 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> | FILE E 468743 |
| Nominal voltage UN | 600 V                                                                               |                                                                                                                                                       |               |

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### Approvals

|                                |      |
|--------------------------------|------|
|                                |      |
| Nominal current I <sub>N</sub> | 12 A |
| mm <sup>2</sup> /AWG/kcmil     | 16   |

|          |                                                                                   |                          |
|----------|-----------------------------------------------------------------------------------|--------------------------|
| EAC-RoHS |  | RU D-<br>DE.HB35.B.00387 |
|----------|-----------------------------------------------------------------------------------|--------------------------|

|     |                                                                                   |                          |
|-----|-----------------------------------------------------------------------------------|--------------------------|
| EAC |  | RU C-<br>DE.BL08.B.00286 |
|-----|-----------------------------------------------------------------------------------|--------------------------|

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

### Accessories

#### Accessories

##### Protective cap

Sealing cap - PROT-M12 FS - 1560251



M12 sealing cap for unoccupied M12 plugs of the sensor/actuator cable, flush-type plugs and I/O devices in the field

#### Screwdriver tools

Tool - SAC BIT M12-D16 - 1200305



Nut for assembling sensor/actuator cables with M12 connector and M12 connectors for assembly, knurl diameter: 16 mm, for 4 mm hexagonal drive

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