

## Power cable - SAC-4P- 2,0-110/M12FRT - 1089981

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Power cable, 4-position, PVC, black-gray RAL 7021, free cable end, on Socket angled M12, coding: T, cable length: 2 m, For direct current up to 12 A/63 V

### Your advantages

- ✓ Easy and safe: 100% electrically tested plug-in components
- ✓ High-performance: DC connectors for up to 12 A and 63 V DC
- ✓ Protection against incorrect connection using special T-coding

RoHS

### Key Commercial Data

|              |                                                                                      |
|--------------|--------------------------------------------------------------------------------------|
| Packing unit | 1 pc                                                                                 |
| GTIN         |  |
| GTIN         | 4055626898612                                                                        |

### Technical data

#### Dimensions

|                 |     |
|-----------------|-----|
| Length of cable | 2 m |
|-----------------|-----|

#### Ambient conditions

|                                 |                                  |
|---------------------------------|----------------------------------|
| Ambient temperature (operation) | -25 °C ... 85 °C (Plug / socket) |
| Degree of protection            | IP65                             |
|                                 | IP67                             |

#### General

|                       |                               |
|-----------------------|-------------------------------|
| Rated current at 40°C | 12 A                          |
| Rated voltage         | 63 V DC                       |
| Number of positions   | 4                             |
| Insulation resistance | ≥ 100 MΩ                      |
| Coding                | T power                       |
| Standards/regulations | M12 connector IEC 61076-2-111 |

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## Technical data

### General

|                              |         |
|------------------------------|---------|
| 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               | 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                                      | PVC black                  |
| Cable type (abbreviation)                       | 110                        |
| UL AWM style                                    | 20233 / 10493 (80°C/300 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              | 2.35 mm ±0.05 mm           |
| Thickness, insulation                           | ≥ 0.25 mm                  |
| Wire colors                                     | brown, white, blue, black  |
| External sheath, color                          | black-gray RAL 7021        |
| Outer sheath thickness                          | approx. 1.3 mm             |
| External cable diameter D                       | 7.55 mm ±0.25 mm           |
| Minimum bending radius, fixed installation      | 5 x D                      |
| Minimum bending radius, flexible installation   | 10 x D                     |
| Number of bending cycles                        | 2000000                    |
| Minimum bending radius, drag chain applications | 10 x D                     |
| Traversing path                                 | 10 m                       |
| Traversing rate                                 | 3 m/s                      |
| Acceleration                                    | 10 m/s <sup>2</sup>        |
| Outer sheath, material                          | PVC                        |
| Material conductor insulation                   | PVC                        |
| Conductor material                              | Bare Cu litz wires         |
| Insulation resistance                           | ≥ 1 GΩ*km (at 20 °C)       |

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### Technical data

#### Cable

|                                 |                                                 |
|---------------------------------|-------------------------------------------------|
| Conductor resistance            | $\leq 13 \Omega/\text{km}$ (at 20 °C)           |
| Nominal voltage, cable          | $\leq 300 \text{ V AC}$                         |
| Test voltage, cable             | $\geq 3000 \text{ V AC}$ (Spark test)           |
| Flame resistance                | According to UL 758/1581 (Cable Flame)          |
|                                 | according to UL 758/1581 FT1                    |
|                                 | According to DIN EN 60332-1-2                   |
| Resistance to oil               | According to DIN EN 60811-404, 168 h at 60 °C   |
| Ambient temperature (operation) | -40 °C ... 80 °C (cable, fixed installation)    |
|                                 | -20 °C ... 80 °C (cable, flexible installation) |

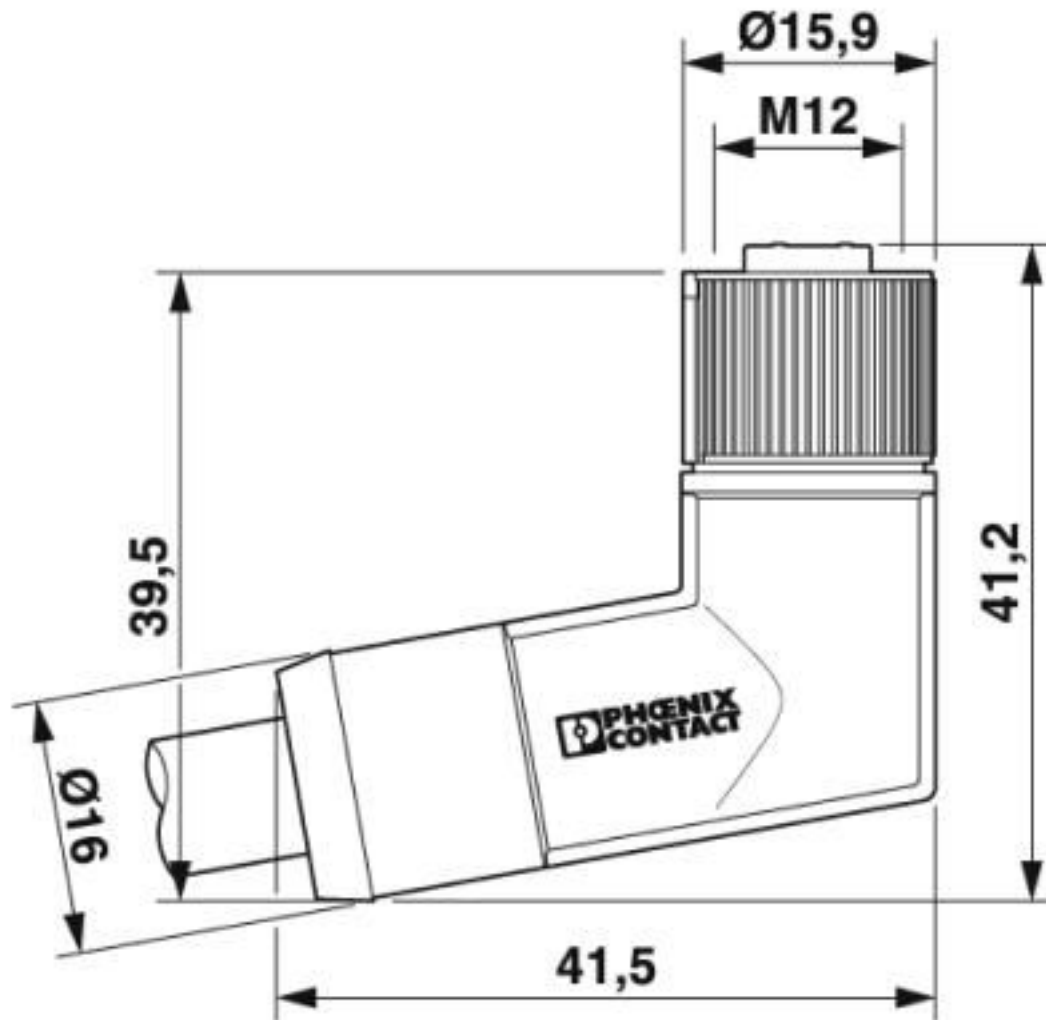
#### Environmental Product Compliance

|            |                                                                                                     |
|------------|-----------------------------------------------------------------------------------------------------|
| 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- 2,0-110/M12FRT - 1089981

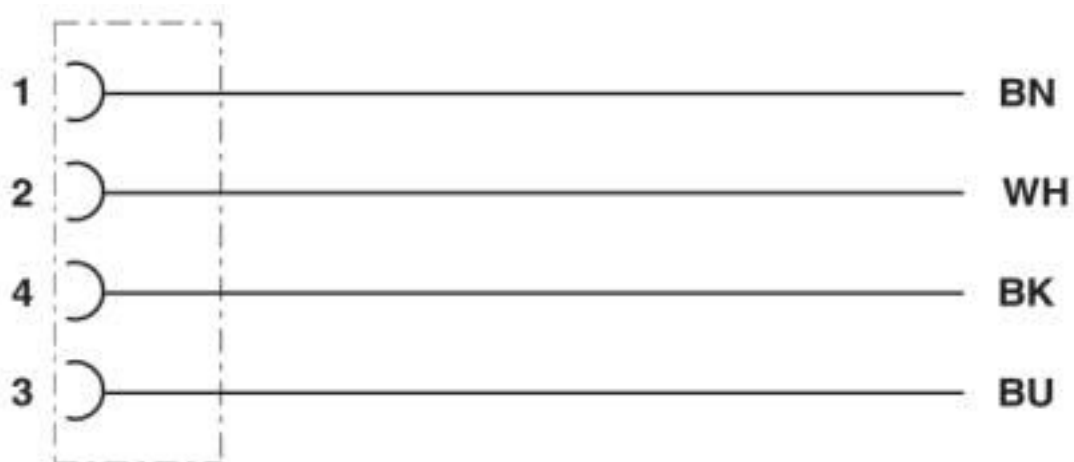
Dimensional drawing



M12 x 1 socket, angled

## Power cable - SAC-4P- 2,0-110/M12FRT - 1089981

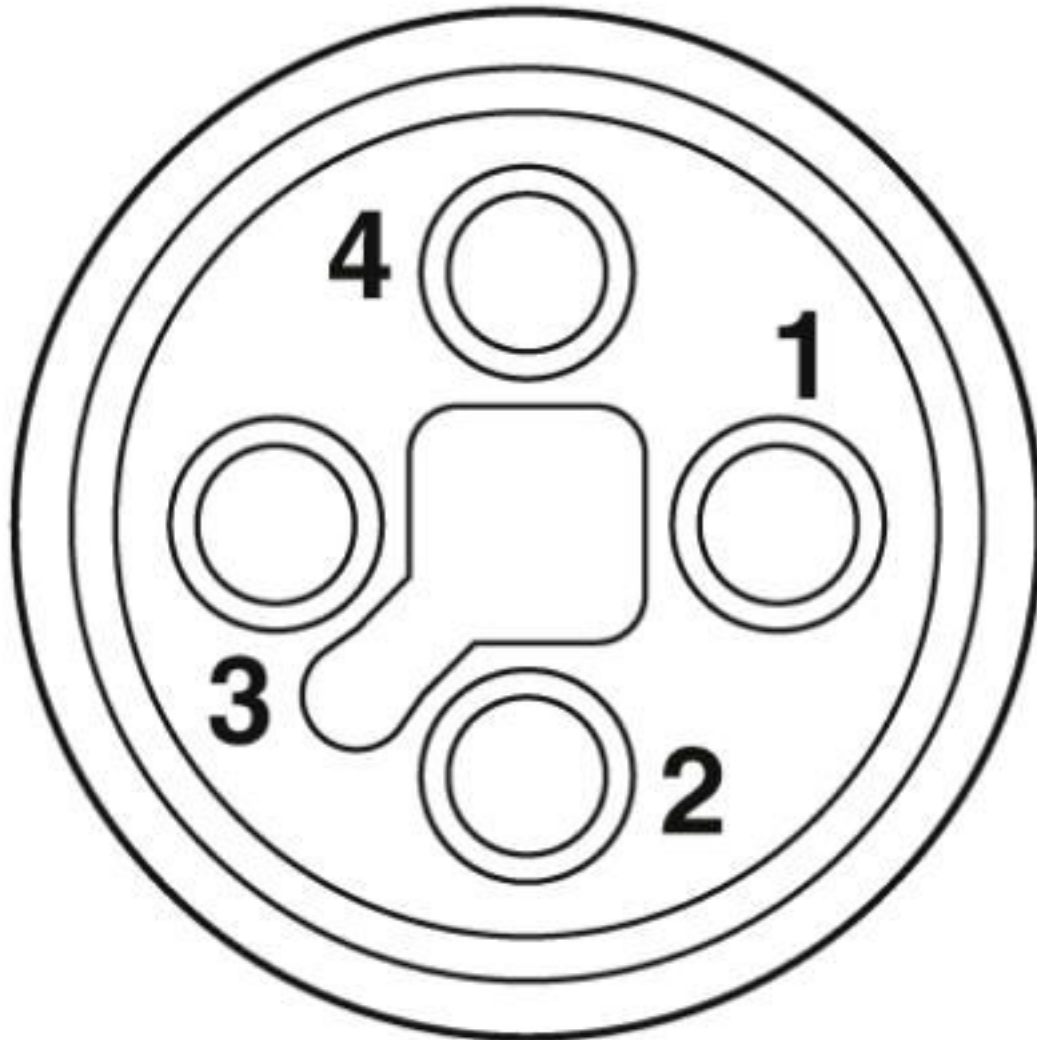
Circuit diagram



Contact assignment of the M12 socket

## Power cable - SAC-4P- 2,0-110/M12FRT - 1089981

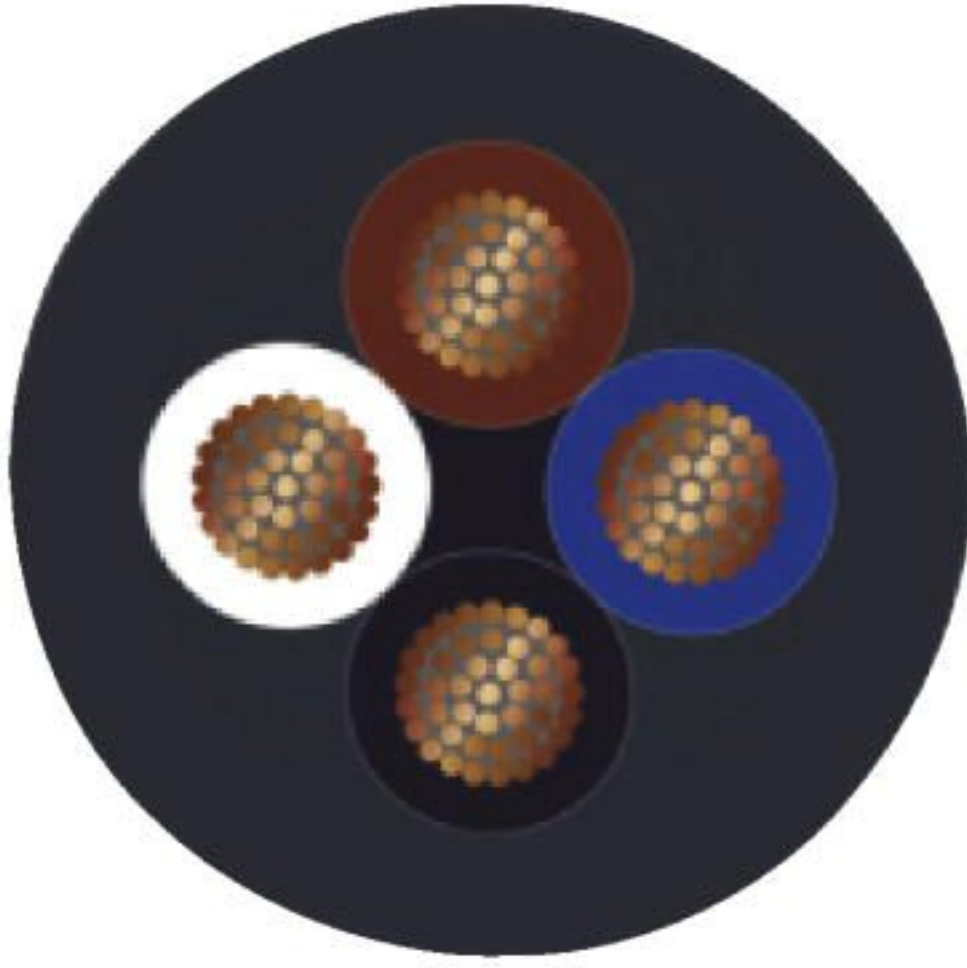
Schematic diagram



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

## Power cable - SAC-4P- 2,0-110/M12FRT - 1089981

Cable cross section



PVC black [110]

### Classifications

eCl@ss

|               |          |
|---------------|----------|
| eCl@ss 10.0.1 | 27060311 |
| eCl@ss 6.0    | 27279200 |
| eCl@ss 7.0    | 27279218 |
| eCl@ss 8.0    | 27279218 |
| eCl@ss 9.0    | 27060311 |

ETIM

|          |          |
|----------|----------|
| ETIM 5.0 | EC001855 |
| ETIM 6.0 | EC001855 |
| ETIM 7.0 | EC001855 |

## Power cable - SAC-4P- 2,0-110/M12FRT - 1089981

### Approvals

#### Approvals

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#### Approvals

EAC-RoHS / EAC

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#### Ex Approvals

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### Approval details

|          |                                                                                   |                          |
|----------|-----------------------------------------------------------------------------------|--------------------------|
| EAC-RoHS |  | RU D-<br>DE.HB35.B.00385 |
|----------|-----------------------------------------------------------------------------------|--------------------------|

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

### Accessories

#### Accessories

#### 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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