

Power cable - SAC-5P-M12MSL/3,0-290/FSL FE - 1425020

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Power cable, 5-position, PUR halogen-free, gray RAL 7001, Plug straight M12, coding: L, on Socket straight M12, coding: L, cable length: 3 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 mismatching, thanks to special L-coding
- ✓ Our standard: robust halogen-free PUR cable

Key Commercial Data

| | |
|--------------|---|
| Packing unit | 1 pc |
| GTIN |  4 055626 383576 |
| GTIN | 4055626383576 |

Technical data

Dimensions

| | |
|-----------------|-----|
| Length of cable | 3 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 | 5 |
| Color handle area | black |
| Insulation resistance | ≥ 100 MΩ |

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Technical data

General

| | |
|------------------------------|-------------------------------|
| Coding | L - 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 gray |
| Cable type (abbreviation) | 290 |
| UL AWM style | 20233 / 10493 (80°C/300 V) |
| Conductor cross section | 5x 1.5 mm ² |
| 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, gray |
| External sheath, color | gray RAL 7001 |
| Outer sheath thickness | approx. 1.3 mm |
| External cable diameter D | 9.1 mm ±0.25 mm |
| Minimum bending radius, fixed installation | 5 x D |
| Minimum bending radius, flexible installation | 10 x D |
| Number of bending cycles | 4000000 |
| Minimum bending radius, drag chain applications | 10 x D |
| Traversing path | 10 m |
| Traversing rate | 3 m/s |
| Acceleration | 10 m/s ² |
| Outer sheath, material | PUR |

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Technical data

Cable

| | |
|---------------------------------|---|
| Material conductor insulation | PP |
| Conductor material | Bare Cu litz wires |
| Insulation resistance | $\geq 1 \text{ G}\Omega \cdot \text{km}$ (at 20 °C) |
| Conductor resistance | $\leq 13 \text{ }\Omega/\text{km}$ (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 |
| Halogen-free | in accordance with DIN VDE 0472 part 815 |
| | in accordance with DIN EN 50267-2-1 |
| Resistance to oil | according to DIN EN 60811-404, 168 h at 100 °C |
| Other resistance | Hydrolysis and microbe resistant as per VDE 0282 section 10 |
| | Low adhesion |
| | abrasion-resistant |
| | Resistant to salt water |
| Ambient temperature (operation) | -50 °C ... 80 °C (cable, fixed installation) |
| | -30 °C ... 80 °C (cable, flexible installation) |

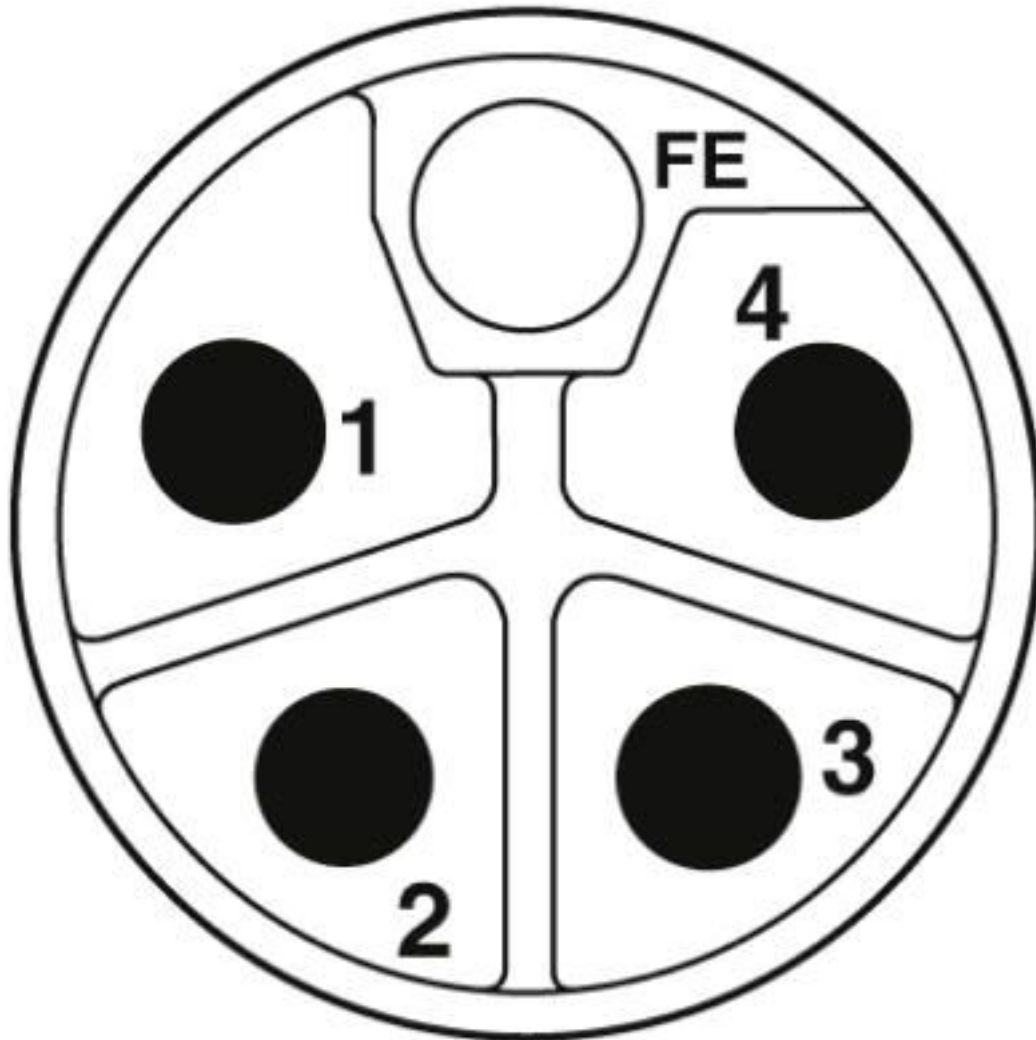
Environmental Product Compliance

| | |
|------------|---|
| 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-5P-M12MSL/3,0-290/FSL FE - 1425020

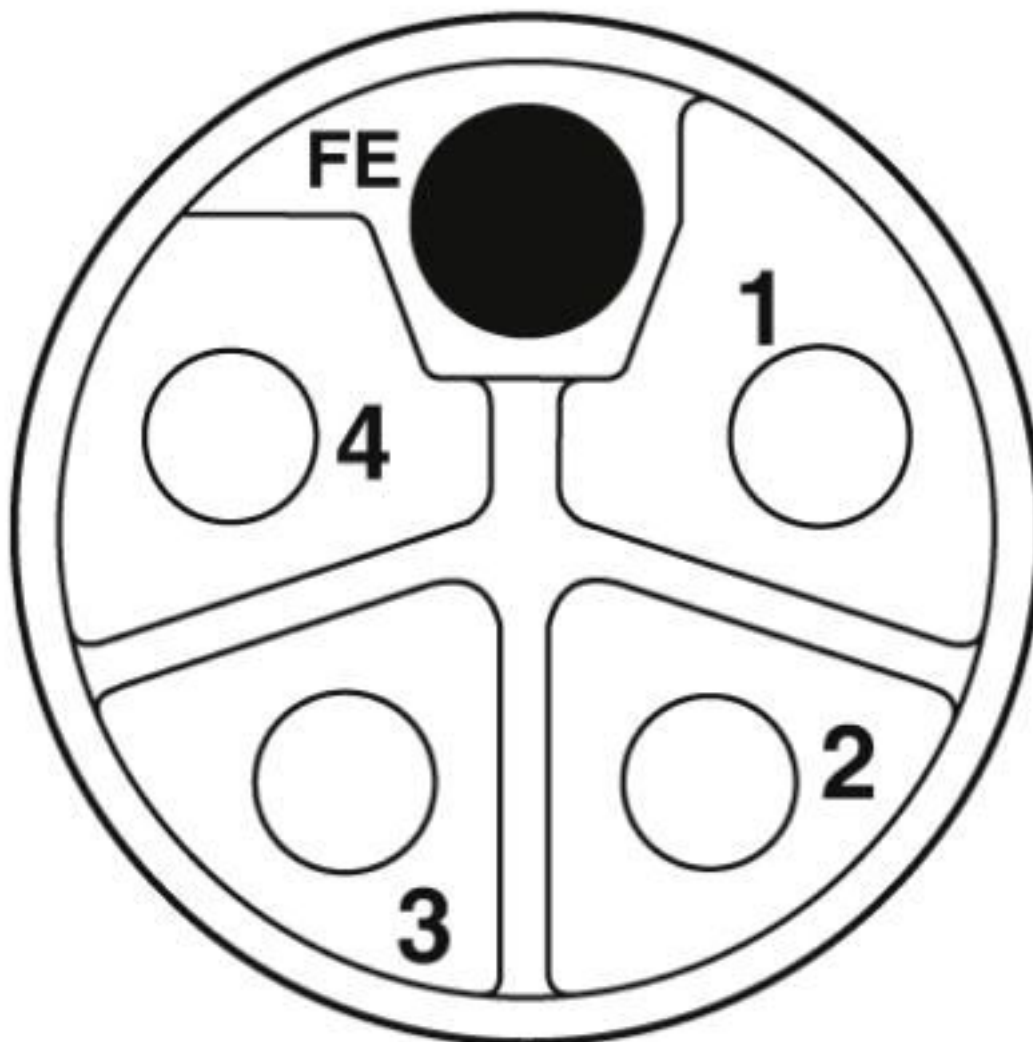
Schematic diagram



Pin assignment of M12 connector, 5-pos., L-coded, pin side view

Power cable - SAC-5P-M12MSL/3,0-290/FSL FE - 1425020

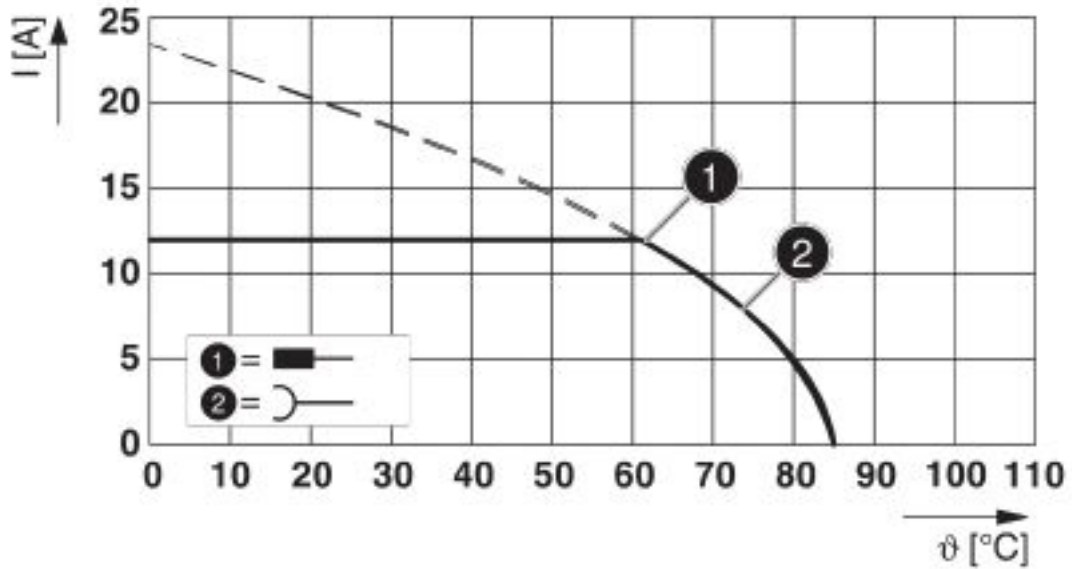
Schematic diagram



Pin assignment of M12 socket, 5-pos., L-coded, socket side view

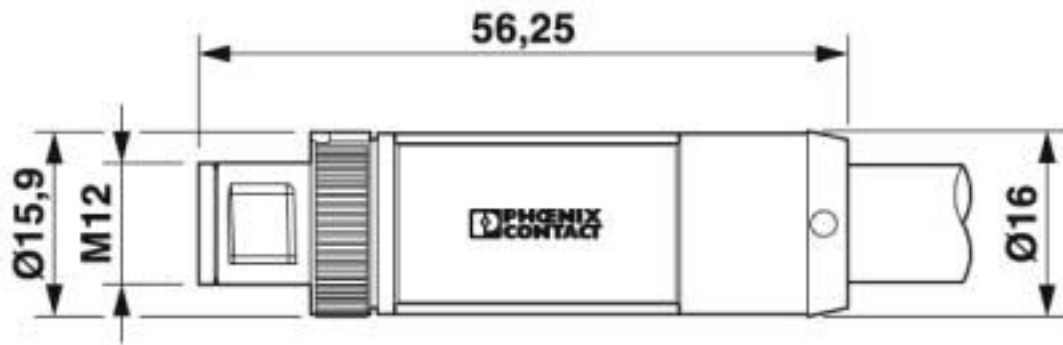
Power cable - SAC-5P-M12MSL/3,0-290/FSL FE - 1425020

Diagram



Current carrying capacity

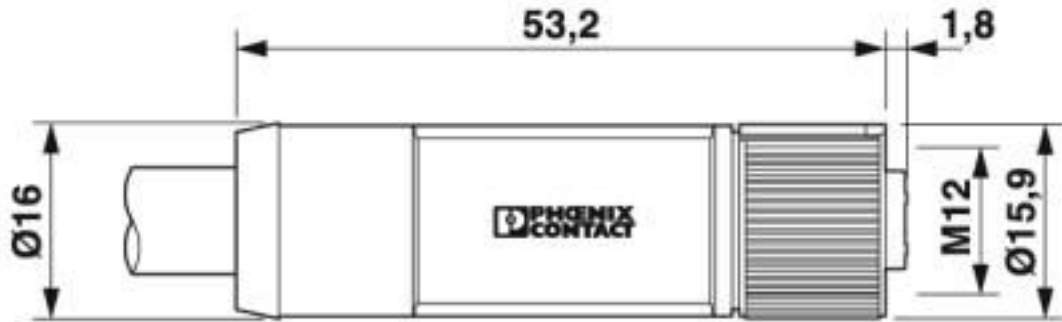
Dimensional drawing



Plug, M12 x 1, straight, shielded

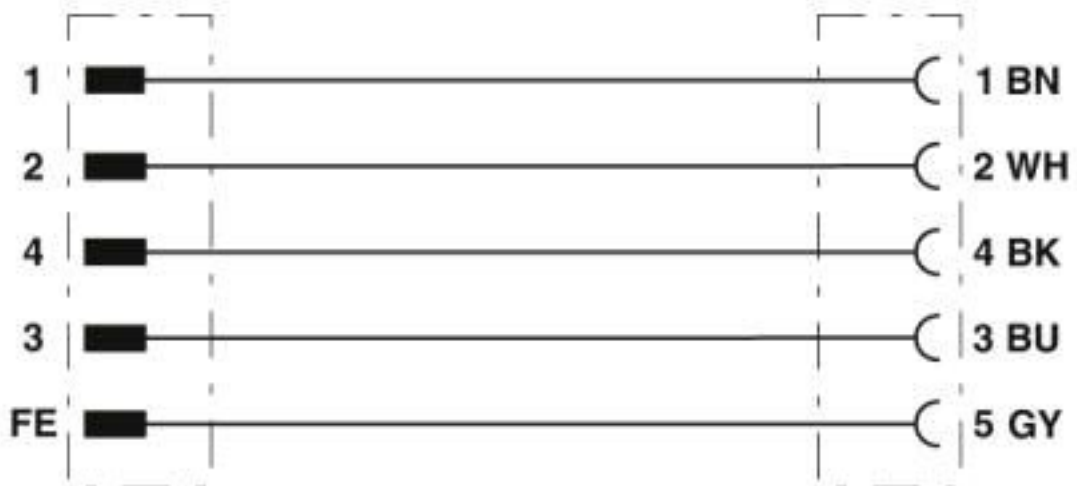
Power cable - SAC-5P-M12MSL/3,0-290/FSL FE - 1425020

Dimensional drawing



M12 x 1 socket, straight

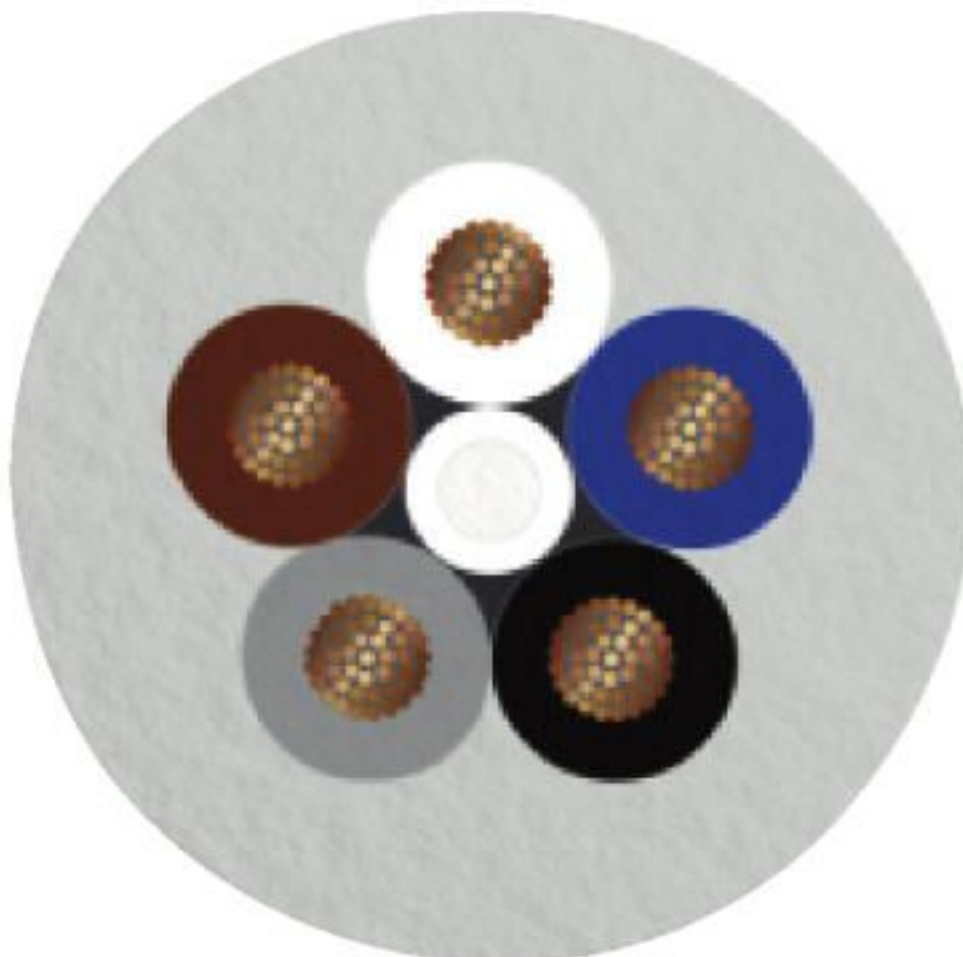
Circuit diagram



Contact assignment of M12 connector/socket

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Cable cross section



PUR halogen-free gray [290]

Classifications

eCl@ss

| | |
|---------------|----------|
| eCl@ss 10.0.1 | 27060311 |
| eCl@ss 5.1 | 27061801 |
| eCl@ss 6.0 | 27279200 |
| eCl@ss 7.0 | 27279218 |
| eCl@ss 9.0 | 27060311 |

ETIM

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

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Approvals

Approvals

Approvals

UL Listed / cUL Listed / EAC-RoHS / EAC / cULus Listed

Ex Approvals

Approval details

| | | | |
|----------------------------|--|---|---------|
| UL Listed | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | E468743 |
| | | | |
| Nominal voltage UN | | 63 V | |
| Nominal current IN | | 16 A | |
| mm ² /AWG/kcmil | | 14 | |

| | | | |
|----------------------------|--|---|---------|
| cUL Listed | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | E468743 |
| | | | |
| Nominal voltage UN | | 63 V | |
| Nominal current IN | | 16 A | |
| mm ² /AWG/kcmil | | 14 | |

| | | |
|----------|--|--------------------------|
| EAC-RoHS | | RU D- DE.HB35.B.00387 |
|----------|--|--------------------------|

| | | |
|-----|--|--------------------------|
| EAC | | RU C- DE.BL08.B.00286 |
|-----|--|--------------------------|

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

Accessories

Accessories

Protective cap

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Accessories

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

Screw plug - PROT M12 MS PWR - 1092802



An M12 screw plug for the unoccupied M12 females of the M12 POWER connectors, boxes, and flush-type connectors

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