

1413530

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Power cable, 4-position, PUR halogen-free, black-gray RAL 7021, Plug straight M12, coding: T, on Socket straight M12, coding: T, cable length: 15 m, For direct current up to 12 A/63 V

Your advantages

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

Commercial data

| Item number | 1413530 |
|--------------------------------------|--------------------------------|
| Packing unit | 1 pc |
| Minimum order quantity | 25 pc |
| Note | Made to order (non-returnable) |
| Sales key | AF1CCQ |
| Product key | AF1CCQ |
| GTIN | 4055626004914 |
| Weight per piece (including packing) | 1,294 g |
| Weight per piece (excluding packing) | 1,294 g |
| Customs tariff number | 85444290 |
| Country of origin | PL |



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Technical data

Product properties

| Product type | Power cable |
|----------------------------|--------------|
| Application | Power supply |
| Number of positions | 4 |
| No. of cable outlets | 1 |
| Shielded | no |
| Coding | T |
| 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 | ≥ 100 MΩ |
|--------------------------------|----------|
| Nominal voltage U _N | 63 V DC |
| Nominal current I _N | 12 A |

Mechanical properties

| Insertion/withdrawal cycles > 100 | | |
|-----------------------------------|-----------------------------|-------|
| | Insertion/withdrawal cycles | > 100 |

Connector

Connection 1

| Туре | Plug straight M12 |
|-------------|-------------------|
| Coding type | T (Power) |
| | |

Connection 2

| Туре | Socket straight M12 |
|-------------|---------------------|
| Coding type | T (Power) |

Cable/line

| Cable length | 15 m |
|------------------------------|------|
| PUR halogen-free black [PUR] | |



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| Dimensional drawing | |
|---|--|
| Cable weight | 83 kg/km |
| UL AWM Style | 20549 / 10493 (80°C/300 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 | 2.2 mm ±0.05 mm |
| External cable diameter | 6.75 mm ±0.2 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 | brown, white, blue, black |
| Thickness, insulation | ≥ 0.26 mm |
| Thickness, outer sheath | approx. 0.70 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 | ≤ 300 V AC |
| Test voltage | ≥ 3000 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 | 34 mm |
| Smallest bending radius, movable installation | 68 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 |
| | in accordance with DIN EN 50267-2-1 |
| Flame resistance | According to UL 758/1581 (Cable Flame) |
| | in accordance with UL 758/1581 FT2 |
| | according to DIN EN 60332-2-2 |



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| Resistance to oil | according to DIN EN 60811-404, 168 h at 100 °C |
|---------------------------------|---|
| | according to UL 758, 168 h at 60 °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 and real-life conditions

Ambient conditions

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

Standards and regulations

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

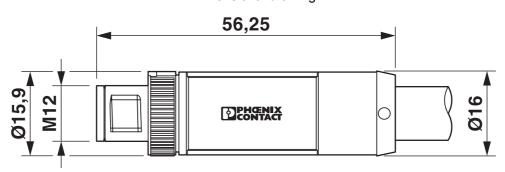


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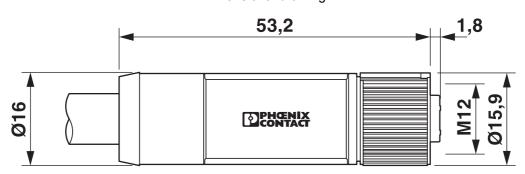
Drawings

Dimensional drawing



Plug, M12 x 1, straight

Dimensional drawing



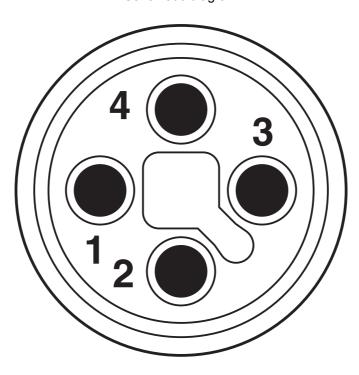
M12 x 1 socket, straight



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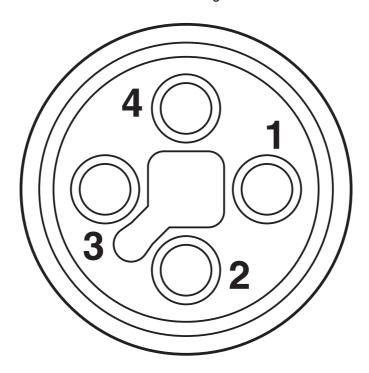
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Pin assignment for M12 plug, 4-pos., T-coded, view of plug side

Schematic diagram

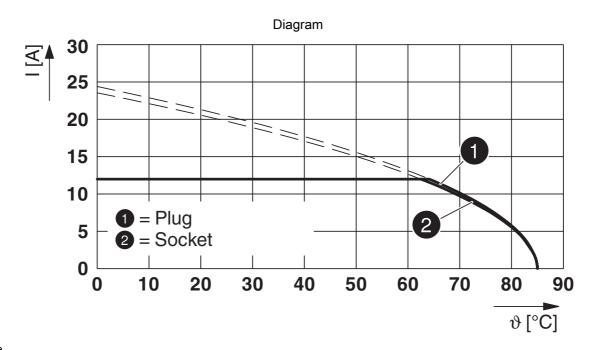


Pin assignment of M12 socket, 4-pos., T-coded, socket side view



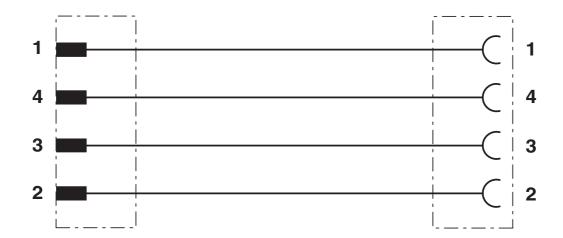
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Base curve

Circuit diagram



Contact assignment of the M12 connector and the M12 socket



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Approvals

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| <u> </u> | UL Listed Approval ID: E468743 | | | | |
|----------|--------------------------------|--------------------------------|--------------------------------|-------------------|-------------------------------|
| | | Nominal voltage U _N | Nominal current I _N | Cross section AWG | Cross section mm ² |
| | | 63 V | 12 A | - | - 16 |

| • | cUL Listed Approval ID: E468743 | | | | |
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Classifications

| | ECLASS-13.0 | 27060327 | |
|--------|-------------|----------|--|
| ETIM | | | |
| | ETIM 9.0 | EC001855 | |
| UNSPSC | | | |
| | UNSPSC 21.0 | 26121600 | |



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Environmental product compliance

EU RoHS

| 20 1.01.0 | |
|---|--|
| 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% |

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