

https://www.phoenixcontact.com/us/products/1424245

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Power cable, 4-position, PUR halogen-free, orange RAL 2003, shielded (Tinned copper-braided shield, approx. 85% covering), Plug straight M12, coding: S, on free cable end, cable length: 5 m, for AC current up to 12 A/690 V

Your advantages

- · Easy and safe: 100 % electrically tested plug-in components
- Protection against incorrect connection using special S-coding
- Our standard: robust halogen-free PUR cable
- · Shield power reliably 360° shielding to reduce electromagnetic loads

Commercial data

| Item number | 1424245 |
|--------------------------------------|---------------------|
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Sales key | BF05 |
| Product key | BF1CCP |
| Catalog page | Page 289 (C-2-2019) |
| GTIN | 4046356709316 |
| Weight per piece (including packing) | 742.9 g |
| Weight per piece (excluding packing) | 740 g |
| Customs tariff number | 85444290 |
| Country of origin | DE |



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Technical data

Product properties

| | Product type | Power cable | |
|-----------------------|----------------------------------------|------------------------------|--|
| | Number of positions | 4 | |
| | Application | Power supply | |
| | No. of cable outlets | 1 | |
| | Shielded | yes | |
| | Coding | S | |
| l | nsulation characteristics | | |
| | Overvoltage category | 111 | |
| | Degree of pollution | 3 | |
| Ма | terial 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 | | | |
| | Contact resistance | ≤ 5 mΩ | |
| | Insulation resistance | ≥ 100 MΩ | |
| | Nominal voltage U _N | 690 V AC | |
| | Nominal current I _N | 12 A | |
| | Protective circuit | unwired | |
| | | | |

Mechanical properties

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

Connector

| Connection 1 | |
|--------------|-------------------|
| Туре | Plug straight M12 |
| Coding type | S (Power) |
| Connection 2 | |
| Туре | free cable end |
| Cable/line | |
| Cable length | 5 m |

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PUR halogen-free orange shielded [PUR]



| | 20224 / 10402 (80°C/1000 \/) |
|-----------------------------------------------|------------------------------------------|
| UL AWM Style | 20234 / 10492 (80°C/1000 V) |
| Number of positions | 4 |
| Shielded | yes |
| Cable type | PUR halogen-free orange shielded [PUR] |
| Conductor cross section | 4x 1.5 mm ² |
| Wire diameter incl. insulation | ≤ 2.5 mm |
| External cable diameter | 9.70 mm ±0.3 mm |
| Outer sheath, material | PUR |
| External sheath, color | orange RAL 2003 |
| Conductor material | Bare Cu litz wires |
| Material wire insulation | PP |
| Single wire, color | black 1, black 2, black 3, green/yellow |
| Thickness, insulation | 0.40 mm |
| Thickness, outer sheath | 1.20 mm |
| Overall twist | 4 wires optimally twisted |
| Max. conductor resistance | ≤ 13.3 Ω/km (at 20 °C) |
| Insulation resistance | ≥ 10 MΩ*km (at 20 °C) |
| Nominal voltage, cable | 1000 V AC |
| Test voltage | 4260 V AC (5 min.) |
| Minimum bending radius, fixed installation | 5 x D |
| Minimum bending radius, flexible installation | 7.5 x D |
| Smallest bending radius, fixed installation | 49 mm |
| Smallest bending radius, movable installation | 73 mm |
| Max. bending cycles | 4000000 |
| Torsion force | ± 25 °/m |
| Halogen-free | according to VDE 0282-13 Appendix C |
| Flame resistance | in accordance with EN 60332-1-2 |
| | in acc. to UL 1581 VW1 |
| | According to CSA C 22.2 No. 210-05 FT1 |
| 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) |



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| -30 °C | 90 °C | (Cable | flexible | installation |) |
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Environmental and real-life conditions

| Ambient conditions | |
|---------------------------------|----------------------------------------------------------------------------|
| Degree of protection | IP65 |
| | IP67 (without preloading, as additional test in accordance with IEC 60529) |
| Ambient temperature (operation) | -25 °C 85 °C (Plug / socket) |
| Standards and regulations | |
| Standard designation | M12 connector |
| Standards/specifications | IEC 61076-2-111 |

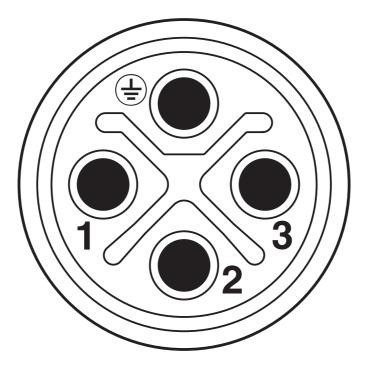


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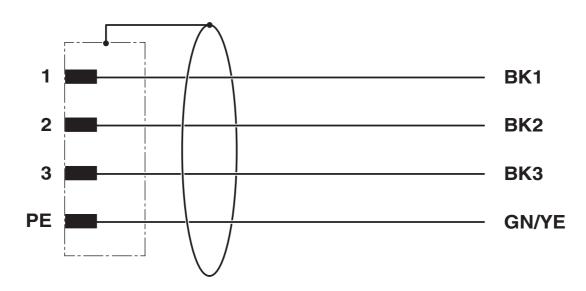
Drawings

Schematic diagram



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

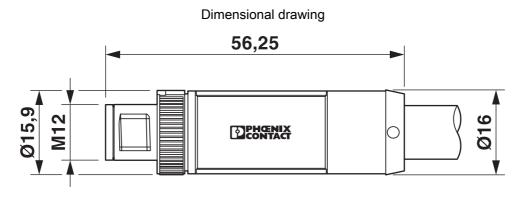
Circuit diagram





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Plug, M12 x 1, straight, shielded



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Approvals

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| | UL Listed Approval ID: FILE E 468743 | | | | |
|---|-------------------------------------------------|-----------------------------------------|----------------------------------------|------------------------|-------------------------------|
| | | Nominal voltage U _N | Nominal current I _N | Cross section AWG | Cross section mm ² |
| | | 600 V | 12 A | - | - 16 |
| | | | | | |
| B | CUL Listed Approval ID: FILE E 468743 | 3 | | | |
| | | | | | |
| | | Nominal voltage U _N | Nominal current I _N | Cross section AWG | Cross section mm ² |
| | | Nominal voltage U _N 600 V | Nominal current I _N 12 A | Cross section AWG - 16 | Cross section mm ² |
| | | | | | |

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Classifications

ECLASS

| ECLASS-11.0 | 27060311 |
|-------------|----------|
| ECLASS-12.0 | 27060311 |
| ECLASS-13.0 | 27060327 |

ETIM

| | ETIM 9.0 | EC001855 |
|----|-------------|----------|
| UN | UNSPSC | |
| | UNSPSC 21.0 | 26121600 |



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Environmental product compliance

| China RoHS | Environmentally friendly use period: unlimited = EFUP-e |
|------------|---------------------------------------------------------|
| | No hazardous substances above threshold values |

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