

SAC-5P-M12MSK-FRKPESH/.../... - Power cable



1276591

<https://www.phoenixcontact.com/us/products/1276591>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Power cable, 5-position, Variable cable type, shielded (Advanced Shielding Technology), Plug straight M12, coding: K, on Socket angled M12, coding: K, cable length: Free input (0.2 ... 40.0 m), for AC current up to 16 A/690 V

Your advantages

- Easy and safe: 100 % electrically tested plug-in components
- Protection against mismatching, thanks to special K-coding
- Shield power reliably – 360° shielding to reduce electromagnetic loads

Commercial data

| | |
|--------------------------------------|--------------------------------|
| Item number | 1276591 |
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Note | Made to order (non-returnable) |
| Sales key | BF17 |
| Product key | AF1CDQ |
| Weight per piece (including packing) | 104.8 g |
| Weight per piece (excluding packing) | 100 g |
| Customs tariff number | 85444290 |
| Country of origin | PL |

SAC-5P-M12MSK-FRKPESH/.../... - Power cable



1276591

<https://www.phoenixcontact.com/us/products/1276591>

Technical data

Product properties

| | |
|----------------------|---------------|
| Product type | Power cable |
| Application | Energy supply |
| Number of positions | 5 |
| No. of cable outlets | 1 |
| Shielded | yes |
| Coding | K |

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 | $\geq 100 \text{ M}\Omega$ |
| Nominal voltage U_N | 690 V AC |
| Nominal current I_N | 16 A |

Mechanical properties

Mechanical data

| | |
|-----------------------------|------------|
| Insertion/withdrawal cycles | ≥ 100 |
|-----------------------------|------------|

Connector

Connection 1

| | |
|-------------|-------------------|
| Type | Plug straight M12 |
| Coding type | K (Power) |

Connection 2

| | |
|-------------|-------------------|
| Type | Socket angled M12 |
| Coding type | K (Power) |

Cable/line

| | |
|--------------|-----------------------------|
| Cable length | Free input (0.2 ... 40.0 m) |
|--------------|-----------------------------|

PUR halogen-free orange [PUR]

SAC-5P-M12MSK-FRKPESH/.../... - Power cable



1276591

<https://www.phoenixcontact.com/us/products/1276591>

| | |
|---|--|
| Cable weight | 195 kg/km |
| UL AWM Style | 90 °C / 1000 V |
| Number of positions | 5 |
| Shielded | yes |
| Cable type | PUR halogen-free orange [PUR] PUR halogen-free orange PUR |
| Conductor structure, voltage supply | 80x 0.20 mm |
| AWG power supply | 16 |
| Conductor cross-section | 5x 2.5 mm ² |
| Wire diameter incl. insulation | 2.8 mm ±0.1 mm |
| External cable diameter | 9.90 mm ±0.3 Nm |
| 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, black 4, green/yellow |
| Thickness, insulation | ≥ 0.26 mm |
| Thickness, outer sheath | approx. 0.75 mm |
| Overall twist | 5 cores, twisted |
| Max. conductor resistance | ≤ 8 Ω/km (at 20 °C) |
| Insulation resistance | ≥ 1 GΩ*km (at 20 °C) |
| Nominal voltage, cable | ≤ 1000 V AC |
| Test voltage | ≥ 10000 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 | 49 mm |
| Smallest bending radius, movable installation | 99 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/s ² |
| 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 |
| 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 ... 90 °C (cable, fixed installation) -30 °C ... 90 °C (Cable, flexible installation) |

SAC-5P-M12MSK-FRKPESH/.../... - Power cable



1276591

<https://www.phoenixcontact.com/us/products/1276591>

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) (male connector/female connector) | -25 °C ... 85 °C (Plug / socket) |

Standards and regulations

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

SAC-5P-M12MSK-FRKPESH/.../... - Power cable



1276591

<https://www.phoenixcontact.com/us/products/1276591>

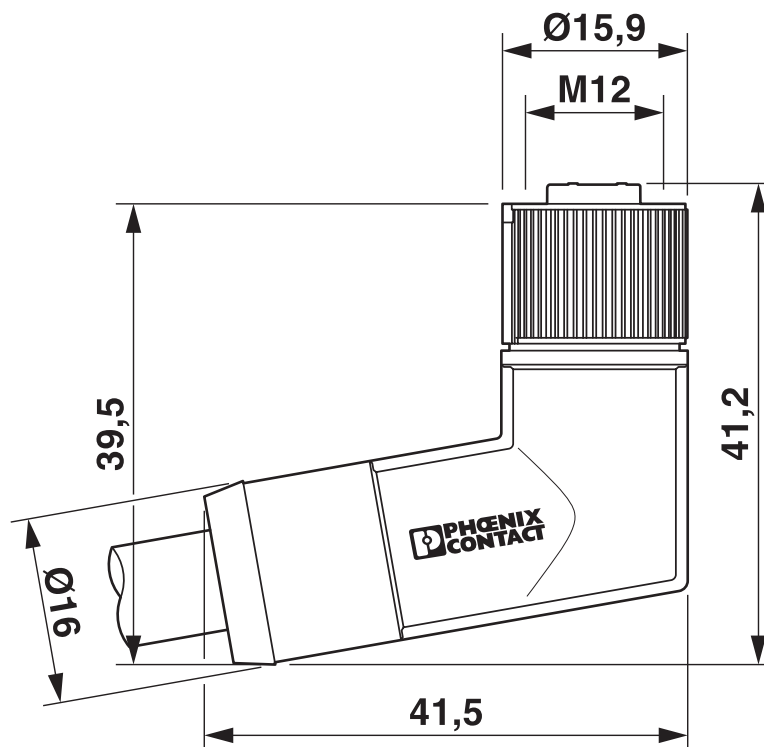
Drawings

Dimensional drawing



Plug, M12 x 1, straight, shielded

Dimensional drawing

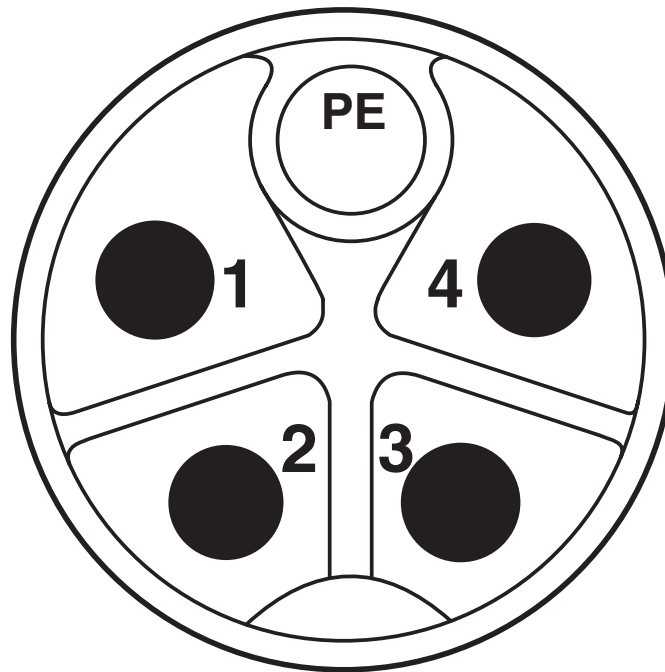


M12 x 1 socket, angled

1276591

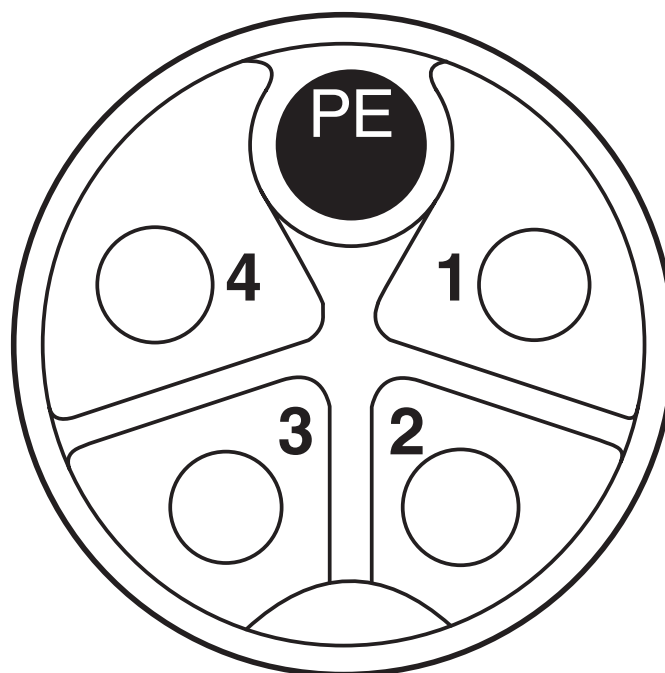
<https://www.phoenixcontact.com/us/products/1276591>

Schematic diagram

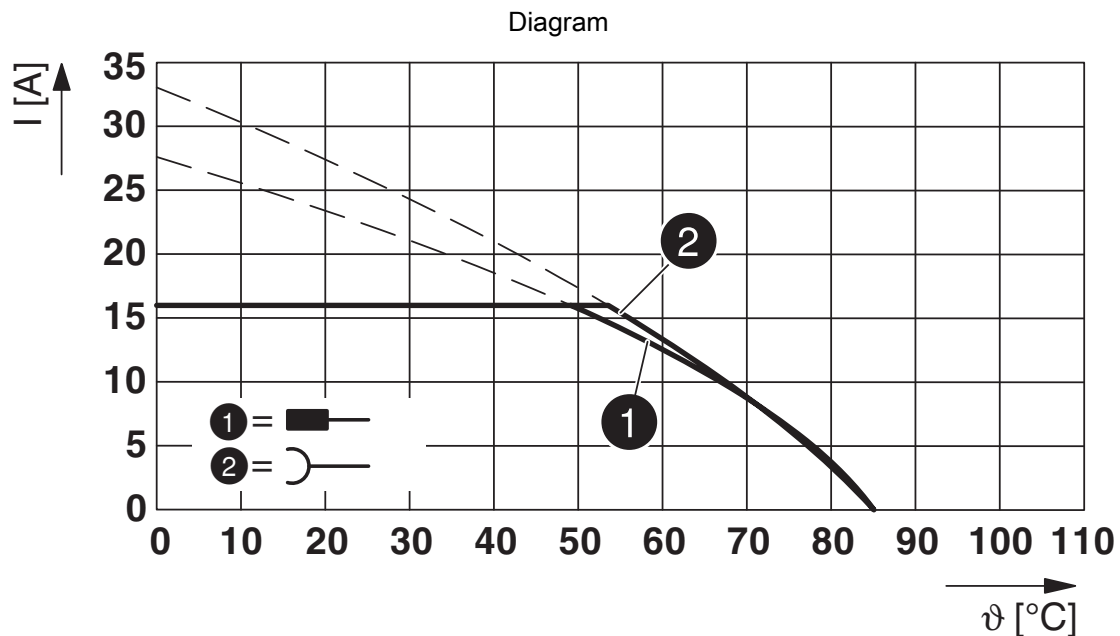


Connector pin assignment of M12 plug, 5-pos., K-coded, pin side view

Schematic diagram

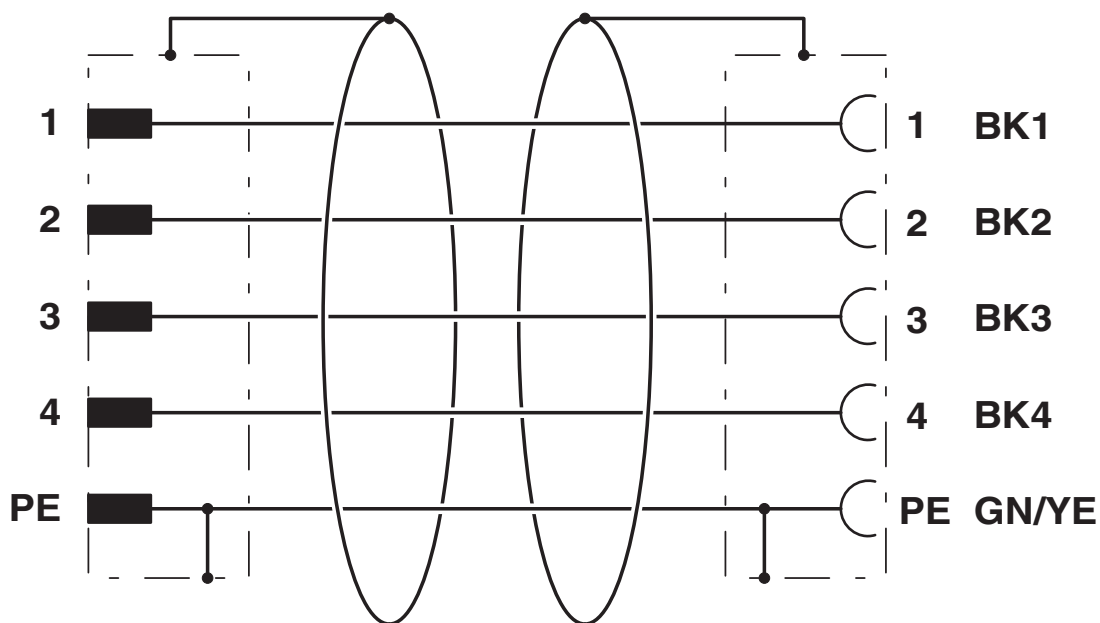


Pin assignment of M12 socket, 5-pos., K-coded, socket side view



Base curve

Circuit diagram



Contact assignment of the M12 connector and the M12 socket

SAC-5P-M12MSK-FRKPESH/.../... - Power cable




1276591

<https://www.phoenixcontact.com/us/products/1276591>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1276591>

|  UL Listed Approval ID: E468743 | | | | |
|--|-----------------------|-----------------------|-------------------|-----------------------------|
| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
| keine | | | | |
| | 600 V | 16 A | - 14 | - 14 |

|  cUL Listed Approval ID: E468743 | | | | |
|---|-----------------------|-----------------------|-------------------|-----------------------------|
| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
| keine | | | | |
| | 600 V | 16 A | - 14 | - |

SAC-5P-M12MSK-FRKPESH/.../... - Power cable



1276591

<https://www.phoenixcontact.com/us/products/1276591>

Classifications

ECLASS

| | |
|-------------|----------|
| ECLASS-13.0 | 27060327 |
| ECLASS-15.0 | 27060327 |

ETIM

| | |
|-----------|----------|
| ETIM 10.0 | EC001855 |
|-----------|----------|

UNSPSC

| | |
|-------------|----------|
| UNSPSC 21.0 | 26121600 |
|-------------|----------|

SAC-5P-M12MSK-FRKPESH/.../... - Power cable



1276591

<https://www.phoenixcontact.com/us/products/1276591>

Environmental product compliance

EU RoHS

| | |
|---|--------------------|
| 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% |
|-------------------------------------|----------------------------|

Phoenix Contact 2026 © - all rights reserved
<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com