

SAC-5P-M12MSL/ 5,0-510 FE - Power cable



1424611

<https://www.phoenixcontact.com/us/products/1424611>

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, PVC, gray RAL 7001, Plug straight M12, coding: L, on free cable end, cable length: 5 m, For direct current up to 12 A/63 V

Your advantages

- Easy and safe: 100 % electrically tested plug-in components
- Protection against mismatching, thanks to special L-coding

Commercial data

| | |
|--------------------------------------|---------------|
| Item number | 1424611 |
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Sales key | BF05 |
| Product key | AF1CDP |
| GTIN | 4055626375366 |
| Weight per piece (including packing) | 727.3 g |
| Weight per piece (excluding packing) | 727.3 g |
| Customs tariff number | 85444290 |
| Country of origin | PL |

1424611

<https://www.phoenixcontact.com/us/products/1424611>

Technical data

Product properties

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

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 | 63 V DC |
| Nominal current I_N | 12 A |

Mechanical properties

Mechanical data

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

Connector

Connection 1

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

Connection 2

| | |
|------|----------------|
| Type | free cable end |
|------|----------------|

Cable/line

| | |
|--------------|-----|
| Cable length | 5 m |
|--------------|-----|

PVC gray [510]

SAC-5P-M12MSL/ 5,0-510 FE - Power cable



1424611

<https://www.phoenixcontact.com/us/products/1424611>

| | |
|---|--|
| Dimensional drawing |  |
| Cable weight | 146 kg/km |
| UL AWM Style | 2464 (80°C/300 V) |
| Number of positions | 5 |
| Shielded | no |
| Cable type | PVC gray [510] |
| Conductor structure, voltage supply | 78x 0.15 mm |
| AWG power supply | 16 |
| Conductor cross-section | 5x 1.5 mm ² |
| Wire diameter incl. insulation | 2.35 mm ±0.05 mm |
| External cable diameter | 9.10 mm ±0.25 mm |
| Outer sheath, material | PVC |
| External sheath, color | gray RAL 7001 |
| Conductor material | Bare Cu litz wires |
| Material wire insulation | PVC |
| Single wire, color | brown, white, blue, black, pink |
| Thickness, insulation | ≥ 0.25 mm |
| Thickness, outer sheath | approx. 1.30 mm |
| Max. conductor resistance | ≤ 13 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 | 46 mm |
| Smallest bending radius, movable installation | 91 mm |
| Dynamic load capacity (bending) | Max. bending cycles: 2000000, Bending radius: 10 x D, Traversing path: 10 m, Traversing rate: 3 m/s, Acceleration: 10 m/s ² |
| 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 and real-life conditions

SAC-5P-M12MSL/ 5,0-510 FE - Power cable



1424611

<https://www.phoenixcontact.com/us/products/1424611>

Ambient conditions

| | |
|---|----------------------------------|
| Degree of protection | IP65 |
| | IP67 |
| 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-M12MSL/ 5,0-510 FE - Power cable



1424611

<https://www.phoenixcontact.com/us/products/1424611>

Drawings



Plug, M12 x 1, straight, shielded

Schematic diagram



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



Base curve

Circuit diagram



Contact assignment of the M12 plug

SAC-5P-M12MSL/ 5,0-510 FE - Power cable



1424611

<https://www.phoenixcontact.com/us/products/1424611>

Approvals

🔗 To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1424611>



UL Listed

Approval ID: E468743



cUL Listed

Approval ID: E468743



EAC-RoHS

Approval ID: RU D-DE.HB35.B.00387

SAC-5P-M12MSL/ 5,0-510 FE - Power cable



1424611

<https://www.phoenixcontact.com/us/products/1424611>

Classifications

ECLASS

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

ETIM

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

UNSPSC

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

SAC-5P-M12MSL/ 5,0-510 FE - Power cable



1424611

<https://www.phoenixcontact.com/us/products/1424611>

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

EF3.1 Climate Change

| | |
|---------|---------------|
| CO2e kg | 6.031 kg CO2e |
|---------|---------------|

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