

# SAC-5P-M12MRL/ 1,5-500 FE - Power cable



1414852

<https://www.phoenixcontact.com/nl/products/1414852>

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 angled M12, coding: L, on free cable end, cable length: 1.5 m, for direct current up to 16 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                          | 1414852       |
| Packing unit                         | 1 pc          |
| Minimum order quantity               | 1 pc          |
| Sales key                            | AF1CDP        |
| Product key                          | AF1CDP        |
| GTIN                                 | 4055626034843 |
| Weight per piece (including packing) | 348 g         |
| Weight per piece (excluding packing) | 348 g         |
| Customs tariff number                | 85444290      |
| Country of origin                    | PL            |

# SAC-5P-M12MRL/ 1,5-500 FE - Power cable



1414852

<https://www.phoenixcontact.com/nl/products/1414852>

## Technical data

### Product properties

|                      |               |
|----------------------|---------------|
| 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 $I_N$ | 16 A                       |

### Mechanical properties

#### Mechanical data

|                             |            |
|-----------------------------|------------|
| Insertion/withdrawal cycles | $\geq 100$ |
|-----------------------------|------------|

### Connector

#### Connection 1

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

#### Connection 2

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

### Cable/line

|              |       |
|--------------|-------|
| Cable length | 1.5 m |
|--------------|-------|

PVC gray [500]

# SAC-5P-M12MRL/ 1,5-500 FE - Power cable



1414852

<https://www.phoenixcontact.com/nl/products/1414852>

|                                               |                                                                                                                            |
|-----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| Dimensional drawing                           |                                          |
| Cable weight                                  | 205 kg/km                                                                                                                  |
| UL AWM Style                                  | 2464 (80°C/300 V)                                                                                                          |
| Number of positions                           | 5                                                                                                                          |
| Shielded                                      | no                                                                                                                         |
| Cable type                                    | PVC gray [500]                                                                                                             |
| Conductor structure, voltage supply           | 141x 0.15 mm                                                                                                               |
| AWG power supply                              | 14                                                                                                                         |
| Conductor cross-section                       | 5x 2.5 mm²                                                                                                                 |
| Wire diameter incl. insulation                | 3 mm ±0.1 mm                                                                                                               |
| External cable diameter                       | 10.10 mm ±0.3 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                         | ≥ 0.36 mm                                                                                                                  |
| Thickness, outer sheath                       | approx. 0.76 mm                                                                                                            |
| Max. conductor resistance                     | ≤ 8 Ω/km (at 20 °C)                                                                                                        |
| Insulation resistance                         | ≥ 100 MΩ*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   | 51 mm                                                                                                                      |
| Smallest bending radius, movable installation | 101 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/s² |
| Flame resistance                              | According to UL 758/1581 (Cable Flame)<br>according to UL 758/1581 FT1<br>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)<br>-20 °C ... 80 °C (Cable, flexible installation)                            |

## Environmental and real-life conditions

# SAC-5P-M12MRL/ 1,5-500 FE - Power cable



1414852

<https://www.phoenixcontact.com/nl/products/1414852>

## Ambient conditions

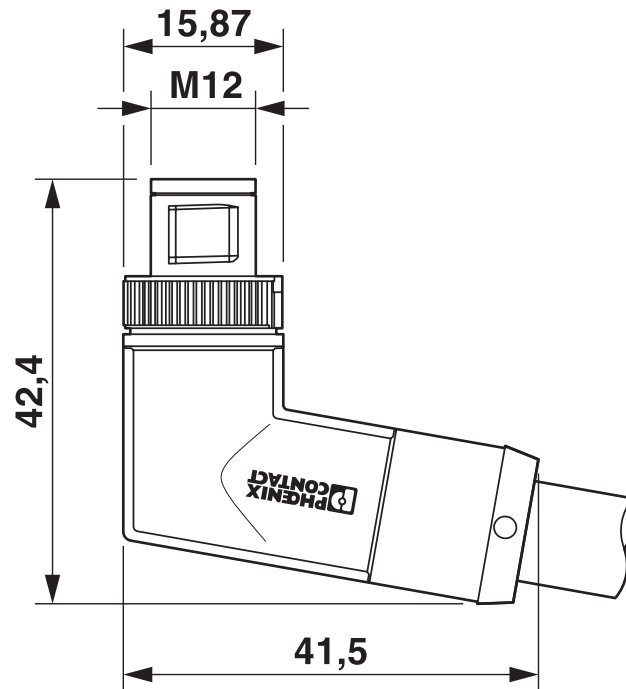
|                                                                   |                                  |
|-------------------------------------------------------------------|----------------------------------|
| Degree of protection                                              | IP65                             |
|                                                                   | 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 |

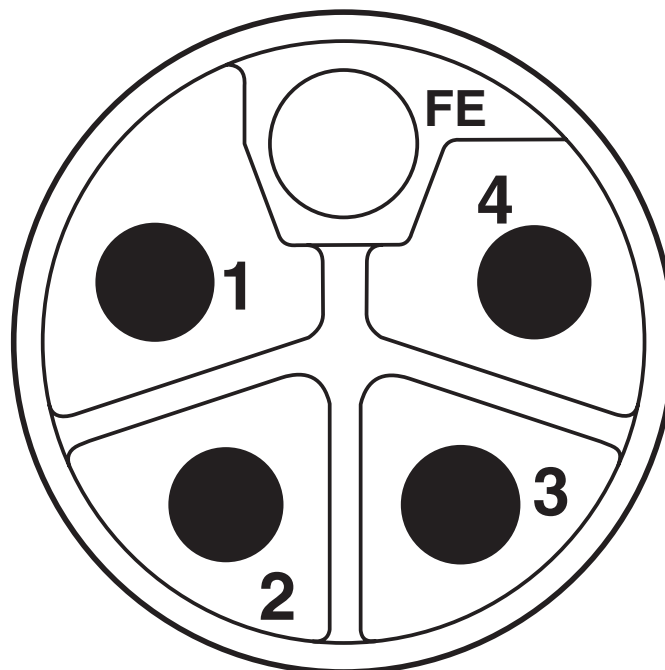
## Drawings

Dimensional drawing

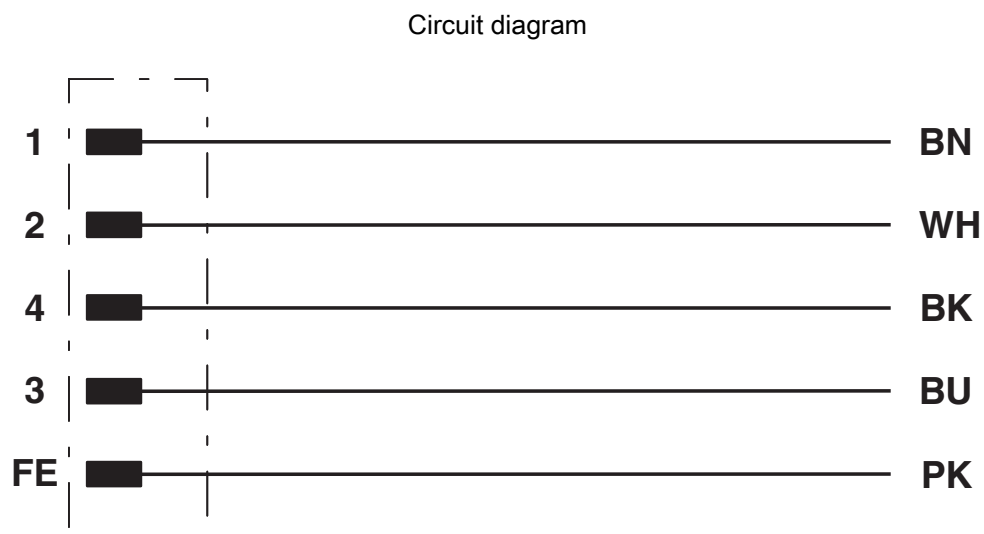
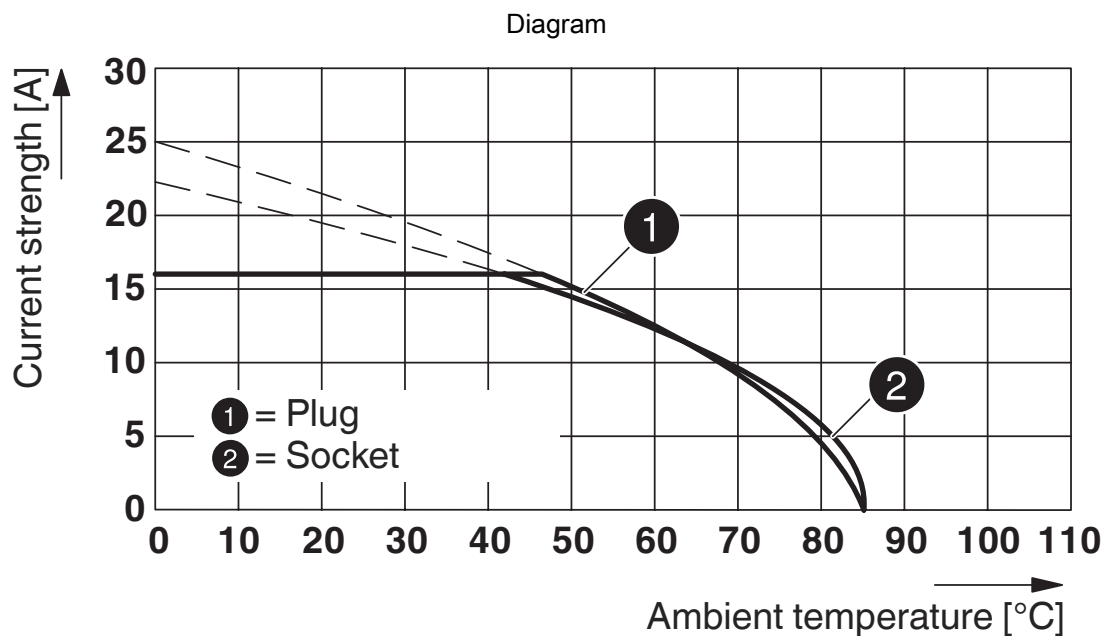


M12 x 1 male plug, angled

Schematic diagram



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



Contact assignment of the M12 plug

# SAC-5P-M12MRL/ 1,5-500 FE - Power cable



1414852

<https://www.phoenixcontact.com/nl/products/1414852>

## Approvals

 To download certificates, visit the product detail page: <https://www.phoenixcontact.com/nl/products/1414852>



**UL Listed**

Approval ID: E468743



**cUL Listed**

Approval ID: E468743



**EAC-RoHS**

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

# SAC-5P-M12MRL/ 1,5-500 FE - Power cable



1414852

<https://www.phoenixcontact.com/nl/products/1414852>

## Classifications

### ECLASS

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

### ETIM

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

### UNSPSC

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

# SAC-5P-M12MRL/ 1,5-500 FE - Power cable



1414852

<https://www.phoenixcontact.com/nl/products/1414852>

## 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 B.V.  
Hengelder 56 6902 PA Zevenaar  
Postbus 246 6900 AE Zevenaar  
(0316) 59 17 20  
[sales@phoenixcontact.nl](mailto:sales@phoenixcontact.nl)