

# SAC-5P- 1,5-PVC/M12FRK PE - Power cable



1414774

<https://www.phoenixcontact.com/us/products/1414774>

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, black-gray RAL 7021, free cable end, on Socket angled M12, coding: K, cable length: 1.5 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

## Commercial data

|                                      |               |
|--------------------------------------|---------------|
| Item number                          | 1414774       |
| Packing unit                         | 1 pc          |
| Minimum order quantity               | 1 pc          |
| Sales key                            | BF05          |
| Product key                          | AF1CDQ        |
| GTIN                                 | 4055626034102 |
| Weight per piece (including packing) | 369.6 g       |
| Weight per piece (excluding packing) | 368.85 g      |
| Customs tariff number                | 85444290      |
| Country of origin                    | PL            |

# SAC-5P- 1,5-PVC/M12FRK PE - Power cable



1414774

<https://www.phoenixcontact.com/us/products/1414774>

## Technical data

### Product properties

|                      |               |
|----------------------|---------------|
| Product type         | Power cable   |
| Application          | Energy supply |
| Number of positions  | 5             |
| No. of cable outlets | 1             |
| Shielded             | no            |
| 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 | $\geq 100$ |
|-----------------------------|------------|

### Connector

#### Connection 1

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

#### Connection 2

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

### Cable/line

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

PVC black [PVC]

# SAC-5P- 1,5-PVC/M12FRK PE - Power cable



1414774

<https://www.phoenixcontact.com/us/products/1414774>

|                                               |                                                                                                                            |
|-----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| Dimensional drawing                           |                                          |
| Cable weight                                  | 220 kg/km                                                                                                                  |
| UL AWM Style                                  | 2570 / 10914 (80°C/1000 V)                                                                                                 |
| Number of positions                           | 5                                                                                                                          |
| Shielded                                      | no                                                                                                                         |
| Cable type                                    | PVC black [PVC]                                                                                                            |
| 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                       | 10.75 mm ±0.3 mm                                                                                                           |
| Outer sheath, material                        | PVC                                                                                                                        |
| External sheath, color                        | black-gray RAL 7021                                                                                                        |
| Conductor material                            | Bare Cu litz wires                                                                                                         |
| Material wire insulation                      | PVC                                                                                                                        |
| Single wire, color                            | black 1, black 2, black 3, black 4, green/yellow                                                                           |
| 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                        | ≤ 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   | 54 mm                                                                                                                      |
| Smallest bending radius, movable installation | 108 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- 1,5-PVC/M12FRK PE - Power cable



1414774

<https://www.phoenixcontact.com/us/products/1414774>

## 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- 1,5-PVC/M12FRK PE - Power cable



1414774

<https://www.phoenixcontact.com/us/products/1414774>

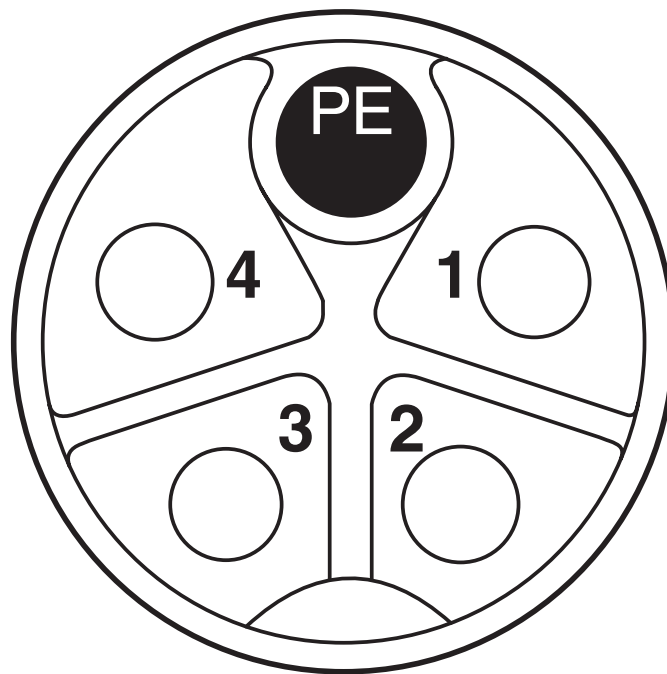
## Drawings

Dimensional drawing



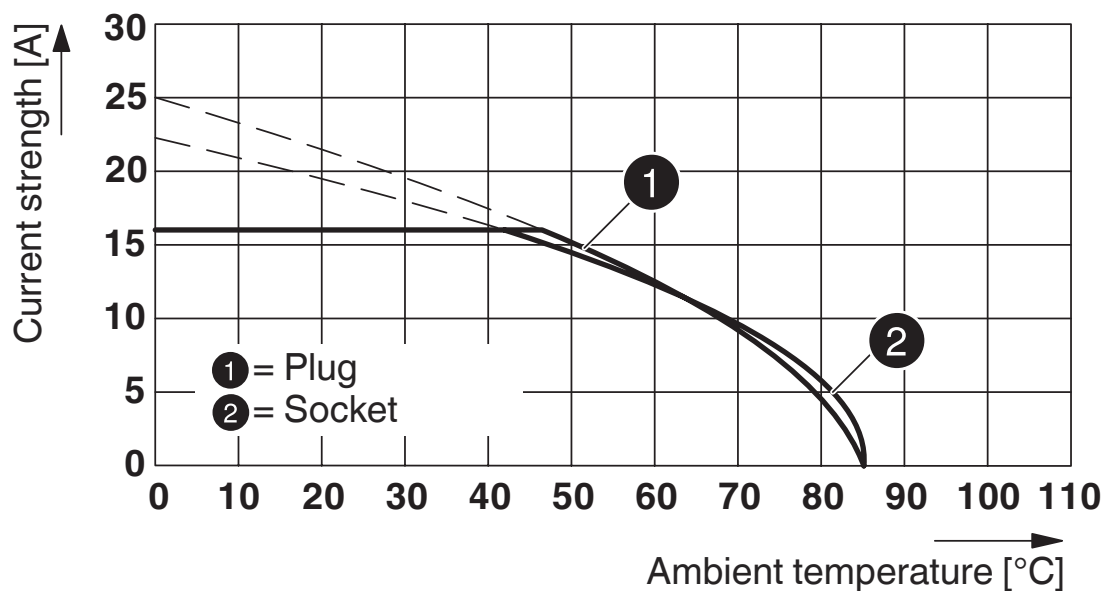
M12 x 1 socket, angled

Schematic diagram



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

Diagram



# SAC-5P- 1,5-PVC/M12FRK PE - Power cable



1414774

<https://www.phoenixcontact.com/us/products/1414774>

Circuit diagram



Contact assignment of the M12 socket

# SAC-5P- 1,5-PVC/M12FRK PE - Power cable



1414774

<https://www.phoenixcontact.com/us/products/1414774>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1414774>

|  <b>UL Listed</b><br>Approval ID: E468743 |                       |                       |                   |                             |
|----------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|-------------------|-----------------------------|
|                                                                                                                            | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
| keine                                                                                                                      |                       |                       |                   |                             |
|                                                                                                                            | 600 V                 | 16 A                  | - 14              | - 14                        |

|  <b>cUL Listed</b><br>Approval ID: E468743 |                       |                       |                   |                             |
|-----------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|-------------------|-----------------------------|
|                                                                                                                             | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
| keine                                                                                                                       |                       |                       |                   |                             |
|                                                                                                                             | 600 V                 | 16 A                  | - 14              | -                           |

|  <b>EAC-RoHS</b><br>Approval ID: RU D-DE.HB35.B.00387 |  |  |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|
|------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|

# SAC-5P- 1,5-PVC/M12FRK PE - Power cable



1414774

<https://www.phoenixcontact.com/us/products/1414774>

## Classifications

### ECLASS

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

### ETIM

|          |          |
|----------|----------|
| ETIM 9.0 | EC001855 |
|----------|----------|

### UNSPSC

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

# SAC-5P- 1,5-PVC/M12FRK PE - Power cable



1414774

<https://www.phoenixcontact.com/us/products/1414774>

## 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% |
|-------------------------------------|----------------------------|

### EF3.0 Climate Change

|         |               |
|---------|---------------|
| CO2e kg | 4.012 kg CO2e |
|---------|---------------|

Phoenix Contact 2025 © - 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](mailto:info@phoenixcon.com)