

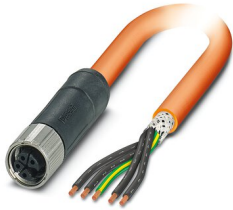
# SAC-5P- 3,0-PUR/M12FSK PE SH - Power cable



1414789

<https://www.phoenixcontact.com/us/products/1414789>

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Power cable, 5-position, PUR halogen-free, orange RAL 2003, shielded (Advanced Shielding Technology), Socket straight M12, coding: K, on free cable end, cable length: 3 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
- Our standard: robust halogen-free PUR cable

## Commercial Data

Item number	1414789
Packing unit	1 pc
Minimum order quantity	1 pc
Sales Key	BF05
Product Key	BF1CDQ
Catalog Page	Page 292 (C-2-2019)
GTIN	4055626034232
Weight per Piece (including packing)	655.7 g
Weight per Piece (excluding packing)	638.03 g
Customs tariff number	85444290
Country of origin	US

## Technical Data

### Product properties

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

### Insulation characteristics

Overvoltage category	III
Degree of pollution	3

### Material specifications

Color Handle area	black
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	$\leq 5 \text{ m}\Omega$
Insulation resistance	$\geq 100 \text{ M}\Omega$
Nominal voltage $U_N$	690 V AC
Nominal current $I_N$	16 A
Protective circuit	unwired

### Mechanical properties

#### Mechanical data

Insertion/withdrawal cycles	$\geq 100$
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### Connector

#### Connection 2

Coding type	K (Power)
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### Cable/line

Cable length	3 m
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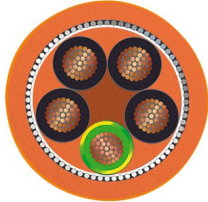
PUR halogen-free orange [PUR]

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Dimensional drawing	
Cable weight	209 kg/km
UL AWM Style	22078 / 11560 (90 °C / 1000 V)
Number of positions	5
Shielded	yes
Cable type	PUR halogen-free orange [PUR]
Conductor cross section	5x 2.5 mm <sup>2</sup>
Wire diameter incl. insulation	2.8 mm ±0.1 mm
External cable diameter	10.3 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, black 4, green/yellow
Thickness, insulation	≥ 0.36 mm
Thickness, outer sheath	approx. 1.15 mm
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
Max. bending cycles	2000000
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) 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 100 °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)

## Environmental and real-life conditions

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## 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

Standards/specifications	IEC 61076-2-111
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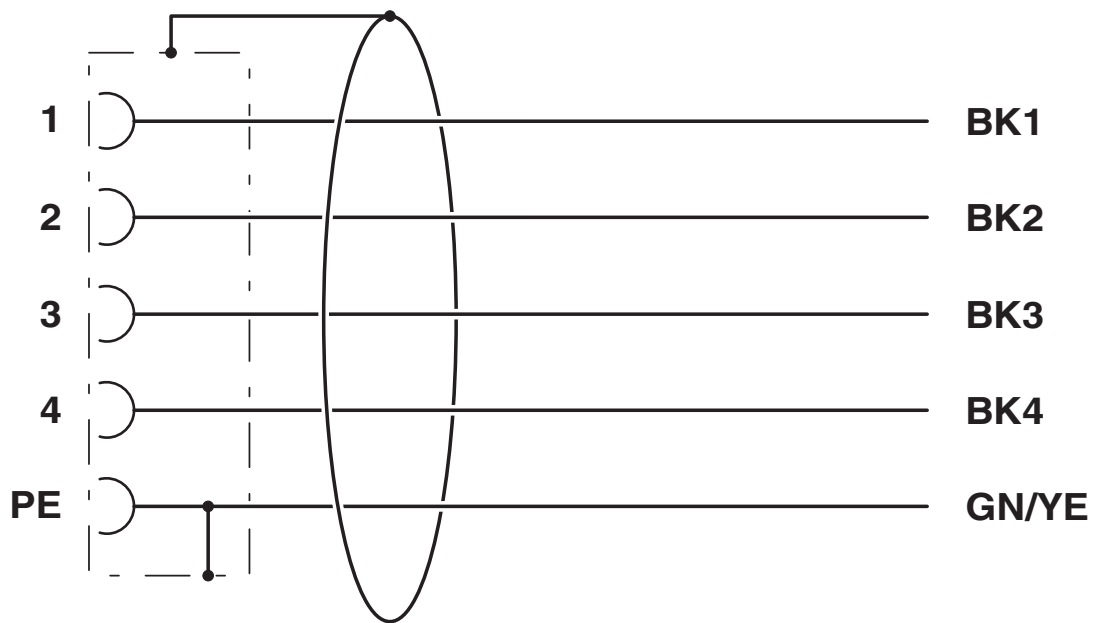


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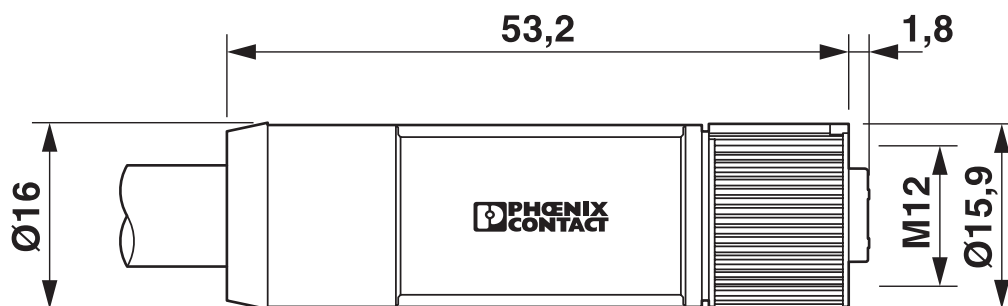
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## Drawings

Circuit diagram

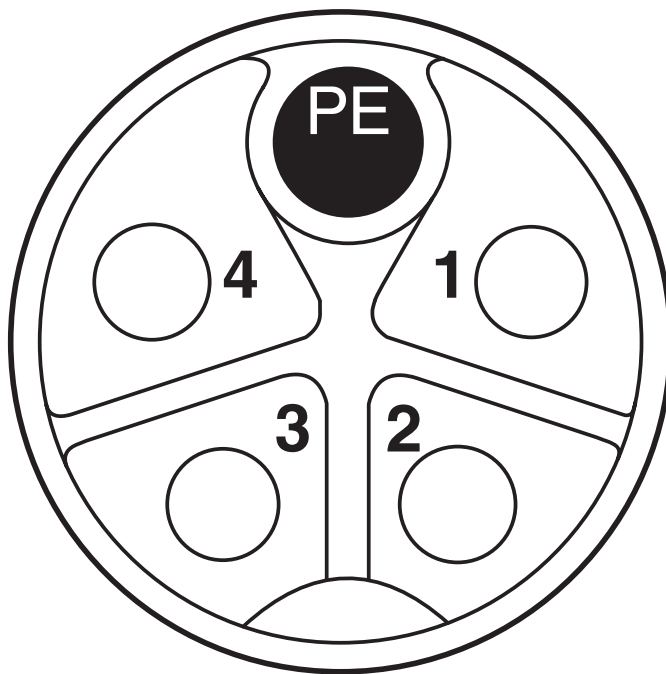


Dimensional drawing



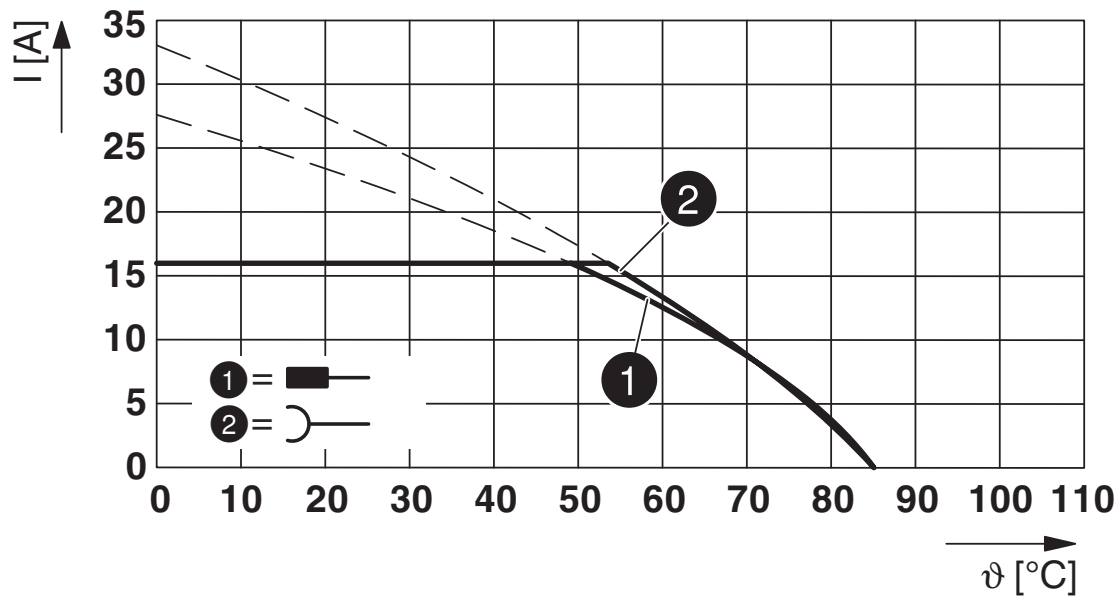
M12 x 1 socket, straight

Schematic diagram



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

Diagram



Base curve

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## Approvals



**EAC**

Approval ID: RU C-DE.BL08.B.00286



**UL Listed**

Approval ID: E468743

	Nominal Voltage $U_N$	Nominal Current $I_N$	Cross Section AWG	Cross Section $\text{mm}^2$
	600 V	16 A	-	- 14



**cUL Listed**

Approval ID: E468743

	Nominal Voltage $U_N$	Nominal Current $I_N$	Cross Section AWG	Cross Section $\text{mm}^2$
	600 V	16 A	- 14	-



**EAC**

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

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## Classifications

### ECLASS

ECLASS-11.0	27060311
ECLASS-12.0	27060311
ECLASS-13.0	27060311

### ETIM

ETIM 8.0	EC001855
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### 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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## Accessories

### SAC BIT M12-D16 - Tool

1200305

<https://www.phoenixcontact.com/us/products/1200305>

Nut for assembling sensor/actuator cables with M12 connector and M12 connectors for assembly, knurl diameter: 16 mm, for 4 mm hexagonal drive



### PROT M12 MS PWR - Screw plug

1092802

<https://www.phoenixcontact.com/us/products/1092802>

An M12 screw plug for the unoccupied M12 females of the M12 POWER connectors, boxes, and flush-type connectors



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