

# Power cable - SAC-6P- 5,0-PVC/M12FSM PE SH



1414923

<https://www.phoenixcontact.com/pc/products/1414923>

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, 6-position, PVC, orange RAL 2003, shielded (Advanced Shielding Technology), Socket straight M12, coding: M, on free cable end, cable length: 5 m, For AC current up to 8 A/690 V

## Your advantages

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

## Commercial Data

Item number	1414923
Packing unit	1 pc
Minimum order quantity	1 pc
Product Key	BF1CGP
Catalog Page	Page 299 (C-2-2019)
GTIN	4055626035512
Weight per Piece (including packing)	1,015 g
Weight per Piece (excluding packing)	1,015 g
Customs tariff number	85444290
Country of origin	PL

# Power cable - SAC-6P- 5,0-PVC/M12FSM PE SH



1414923

<https://www.phoenixcontact.com/pc/products/1414923>

## Technical Data

### Product properties

Product type	Power cable
Number of positions	6
Application	Power supply
No. of cable outlets	1
Shielded	yes
Coding	M - Power

### 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

Contact resistance	$\leq 5 \text{ m}\Omega$
Insulation resistance	$\geq 100 \text{ M}\Omega$
Nominal voltage $U_N$	690 V AC
Nominal current $I_N$	8 A
Protective circuit	unwired

### Connector

#### Connection 1

Head design	Socket
Head cable outlet	straight
Head thread type	M12
Coding	M

#### Connection 2

Head design	free cable end
-------------	----------------

### Cable / line

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


PVC orange [PVC]

# Power cable - SAC-6P- 5,0-PVC/M12FSM PE SH



1414923

<https://www.phoenixcontact.com/pc/products/1414923>

Dimensional drawing	
Cable weight	192 kg/km
UL AWM Style	2570 / 10914 (80°C/1000 V)
Number of positions	6
Shielded	yes
Cable type	PVC orange [PVC]
Conductor cross section	6x 1.5 mm <sup>2</sup>
Wire diameter incl. insulation	2.4 mm ±0.05 mm
External cable diameter	10.4 mm ±0.25 mm
Outer sheath, material	PVC
External sheath, color	orange RAL 2003
Conductor material	Bare Cu litz wires
Material wire insulation	PVC
Single wire, color	black 1, black 2, black 3, black 4, black 5, green/yellow
Thickness, insulation	≥ 0.36 mm
Thickness, outer sheath	approx. 0.76 mm
Max. conductor resistance	≤ 15 Ω/m (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
Max. bending cycles	1000000
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)

## 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

# Power cable - SAC-6P- 5,0-PVC/M12FSM PE SH



1414923

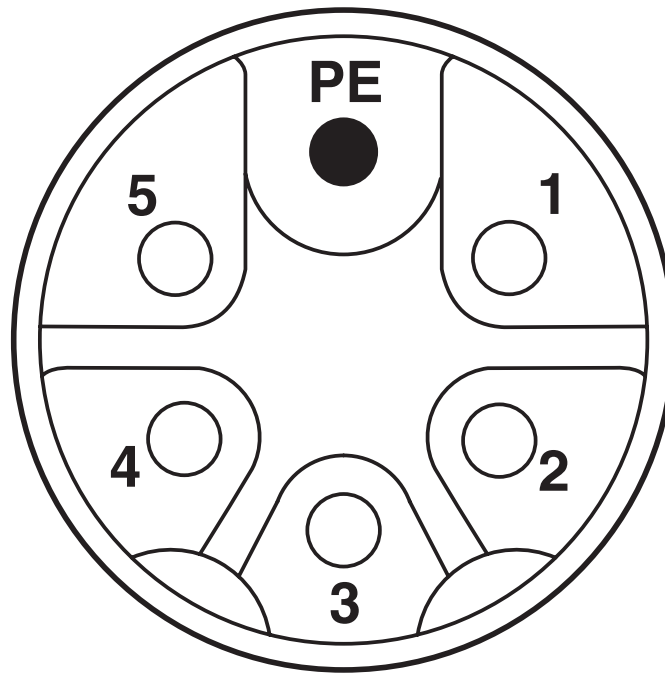
<https://www.phoenixcontact.com/pc/products/1414923>

Standards/specifications

IEC 61076-2-111

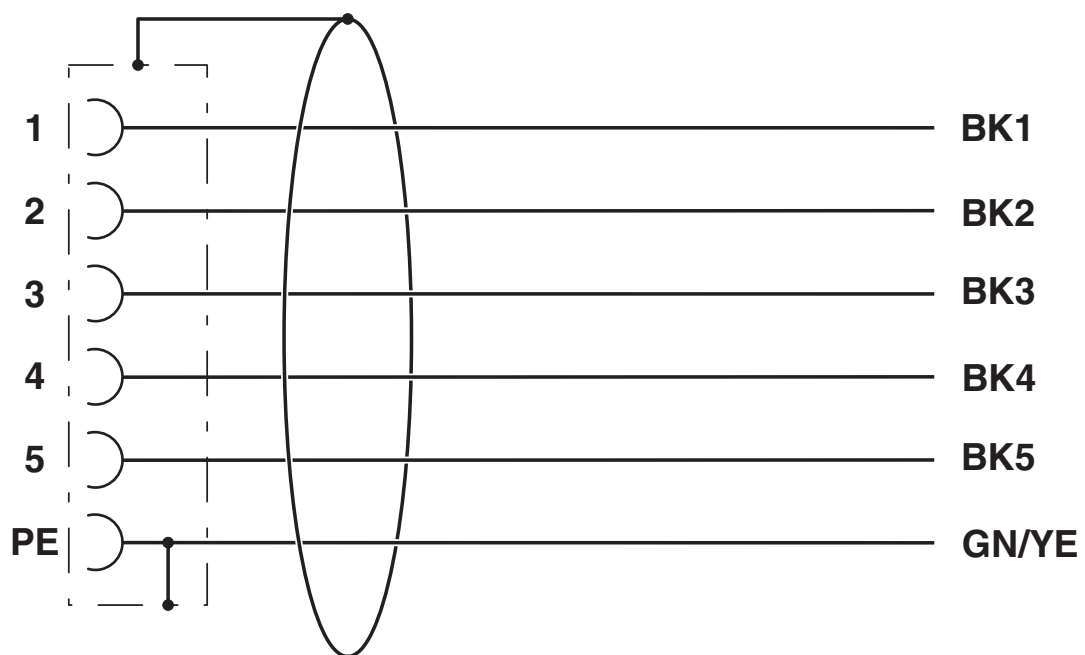
Drawings

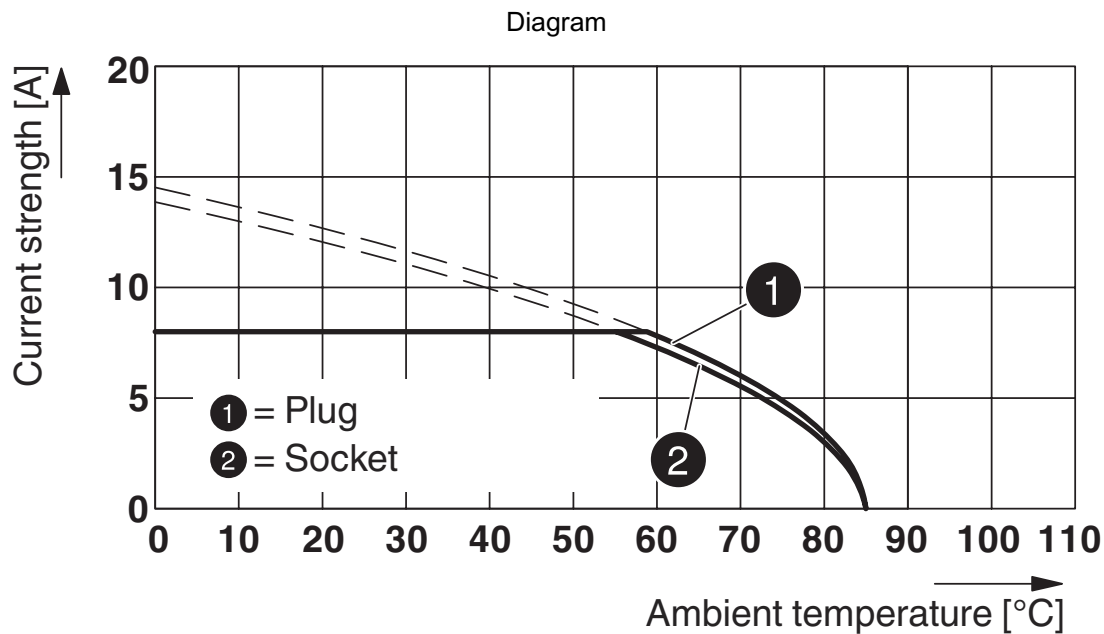
Schematic diagram



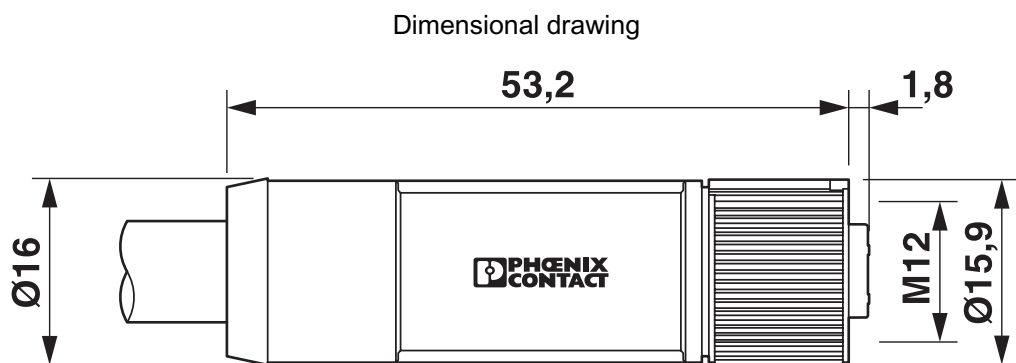
Pin assignment of M12 socket, 6-pos., M-coded, socket side view

Circuit diagram





Derating diagram



M12 x 1 socket, straight

# Power cable - SAC-6P- 5,0-PVC/M12FSM PE SH



1414923

<https://www.phoenixcontact.com/pc/products/1414923>

## 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	10 A	-	- 16



**cUL Listed**

Approval ID: E468743

	Nominal Voltage $U_N$	Nominal Current $I_N$	Cross Section AWG	Cross Section $\text{mm}^2$
	600 V	10 A	- 16	-



**EAC**

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

**cULus Listed**

# Power cable - SAC-6P- 5,0-PVC/M12FSM PE SH



1414923

<https://www.phoenixcontact.com/pc/products/1414923>

## Classifications

### ECLASS

ECLASS-9.0	27060311
ECLASS-10.0.1	27060311
ECLASS-11.0	27060311

### ETIM

ETIM 8.0	EC001855
----------	----------

### UNSPSC

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

# Power cable - SAC-6P- 5,0-PVC/M12FSM PE SH



1414923

<https://www.phoenixcontact.com/pc/products/1414923>

## Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

# Power cable - SAC-6P- 5,0-PVC/M12FSM PE SH



1414923

<https://www.phoenixcontact.com/pc/products/1414923>

## Accessories

### Tool

Tool - SAC BIT M12-D16 - 1200305

<https://www.phoenixcontact.com/pc/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



### Screw plug

Screw plug - PROT M12 MS PWR - 1092802

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

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



Phoenix Contact 2022 © - all rights reserved

<https://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG

Flachsmarktstraße 8

D-32825 Blomberg

+49 (0) 5235-3 00

[info@phoenixcontact.com](mailto:info@phoenixcontact.com)