

Power cable - SAC-5P-M12MRK/ 5,0-PVC PE



1414843

<https://www.phoenixcontact.com/pc/products/1414843>

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, Plug angled M12, coding: K, on free cable end, cable length: 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	1414843
Packing unit	1 pc
Minimum order quantity	1 pc
Product Key	BF1CDQ
Catalog Page	Page 293 (C-2-2019)
GTIN	4055626034768
Weight per Piece (including packing)	1,096.84 g
Weight per Piece (excluding packing)	1,096.84 g
Customs tariff number	85444290
Country of origin	PL

Power cable - SAC-5P-M12MRK/ 5,0-PVC PE



1414843

<https://www.phoenixcontact.com/pc/products/1414843>

Technical Data

Product properties

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

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	≥ 100
-----------------------------	------------

Connector

Connection 1

Head design	Plug
Head cable outlet	angled
Head thread type	M12
Coding	K

Connection 2

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

Power cable - SAC-5P-M12MRK/ 5,0-PVC PE




1414843

<https://www.phoenixcontact.com/pc/products/1414843>

Cable / line

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

PVC black [PVC]

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 cross section	5x 2.5 mm ²
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
Max. bending cycles	2000000
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
----------------------	------

Power cable - SAC-5P-M12MRK/ 5,0-PVC PE



1414843

<https://www.phoenixcontact.com/pc/products/1414843>

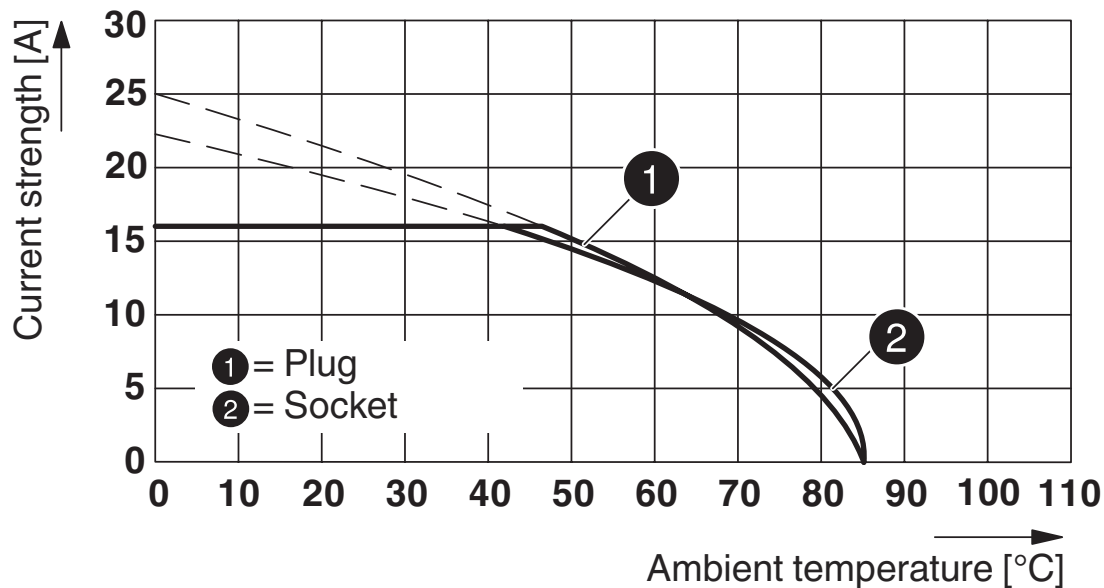
	IP67 (without preloading, as additional test in accordance with IEC 60529)
Ambient temperature (operation)	-25 °C ... 85 °C (Plug / socket)

Standards and regulations

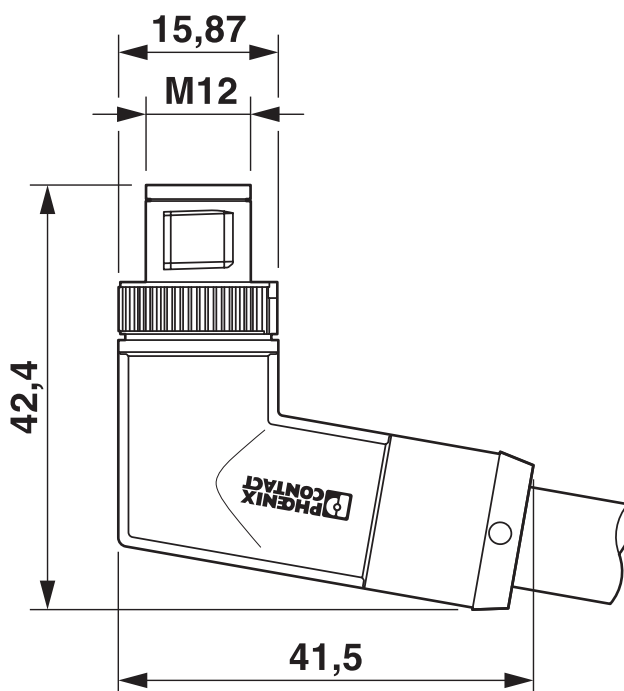
Standards/specifications	IEC 61076-2-111
--------------------------	-----------------

Drawings

Diagram



Dimensional drawing



M12 x 1 male plug, angled

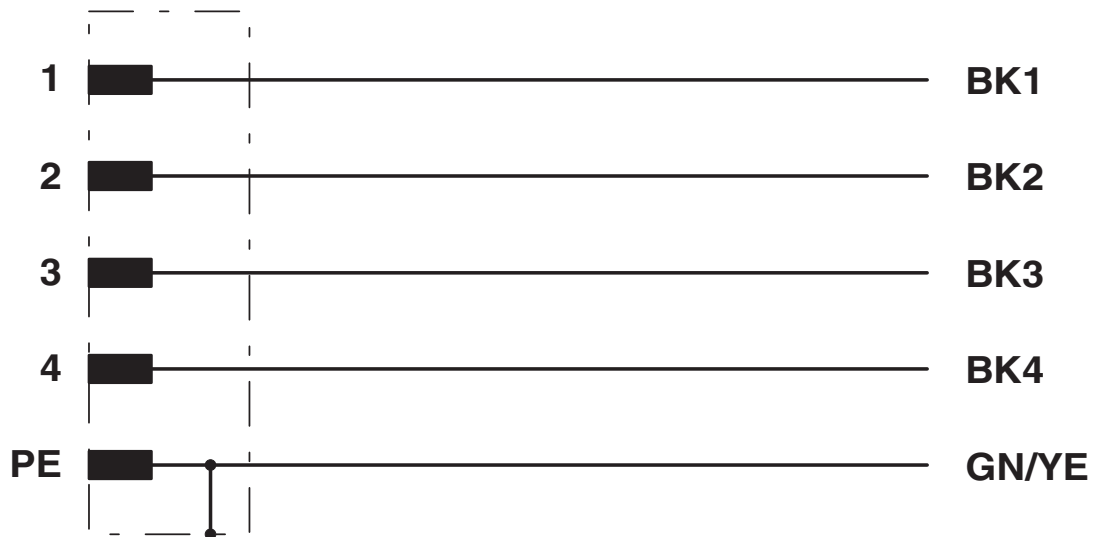
Power cable - SAC-5P-M12MRK/ 5,0-PVC PE

1414843

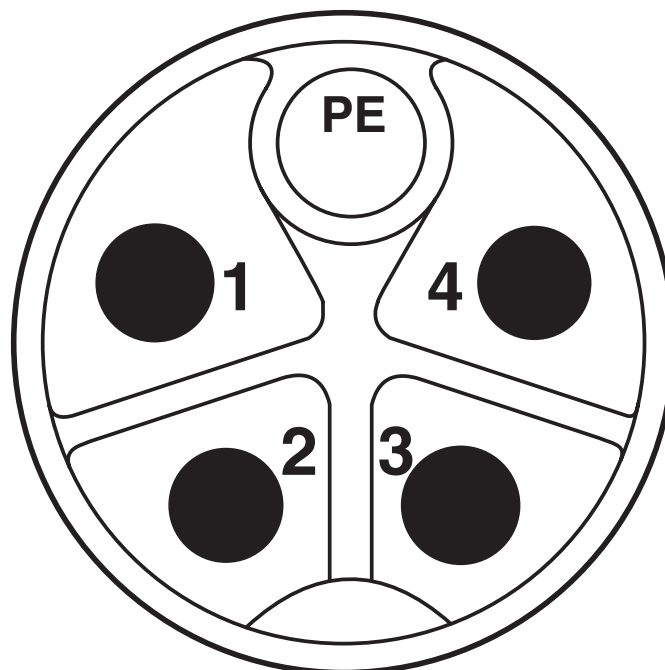
<https://www.phoenixcontact.com/pc/products/1414843>



Circuit diagram



Schematic diagram



Connector pin assignment of M12 plug, 5-pos., K-coded, pin side view

Power cable - SAC-5P-M12MRK/ 5,0-PVC PE



1414843

<https://www.phoenixcontact.com/pc/products/1414843>

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 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 mm^2
	600 V	16 A	- 14	-



EAC

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

cULus Listed

Power cable - SAC-5P-M12MRK/ 5,0-PVC PE



1414843

<https://www.phoenixcontact.com/pc/products/1414843>

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-5P-M12MRK/ 5,0-PVC PE



1414843

<https://www.phoenixcontact.com/pc/products/1414843>

Environmental Product Compliance

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

Power cable - SAC-5P-M12MRK/ 5,0-PVC PE



1414843

<https://www.phoenixcontact.com/pc/products/1414843>

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



Sealing cap

Sealing cap - PROT-M12 FS - 1560251

<https://www.phoenixcontact.com/pc/products/1560251>

M12 sealing cap for unoccupied M12 plugs of the sensor/actuator cable, flush-type plugs and I/O devices in the field



Phoenix Contact 2023 © - 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