

Power cable - SAC-6P-M12MSM/ 5,0-PUR PE SH



1414958

<https://www.phoenixcontact.com/pc/products/1414958>

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, PUR halogen-free, orange RAL 2003, shielded (Advanced Shielding Technology), Plug 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
- Our standard: robust halogen-free PUR cable

Commercial Data

Item number	1414958
Packing unit	1 pc
Minimum order quantity	1 pc
Product Key	BF1CGP
Catalog Page	Page 298 (C-2-2019)
GTIN	4055626035857
Weight per Piece (including packing)	2,577.38 g
Weight per Piece (excluding packing)	2,577.38 g
Customs tariff number	85444290
Country of origin	PL

1414958

<https://www.phoenixcontact.com/pc/products/1414958>

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	Plug
Head cable outlet	straight
Head thread type	M12
Coding	M

Connection 2

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

Cable / line

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


PUR halogen-free orange shielded [PUR]

Power cable - SAC-6P-M12MSM/ 5,0-PUR PE SH



1414958

<https://www.phoenixcontact.com/pc/products/1414958>

Dimensional drawing	
Cable weight	144 kg/km
UL AWM Style	20234 / 10492 (80°C/1000 V)
Number of positions	6
Shielded	yes
Cable type	PUR halogen-free orange shielded [PUR]
Conductor cross section	6x 1.5 mm ²
Wire diameter incl. insulation	2.35 mm ±0.05 mm
External cable diameter	10.4 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, black 5, green/yellow
Thickness, insulation	≥ 0.36 mm
Thickness, outer sheath	approx. 1.15 mm
Max. conductor resistance	≤ 15 Ω/m (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 ... 80 °C (cable, fixed installation) -30 °C ... 80 °C (Cable, flexible installation)

Ambient conditions

Power cable - SAC-6P-M12MSM/ 5,0-PUR PE SH



1414958

<https://www.phoenixcontact.com/pc/products/1414958>

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
--------------------------	-----------------

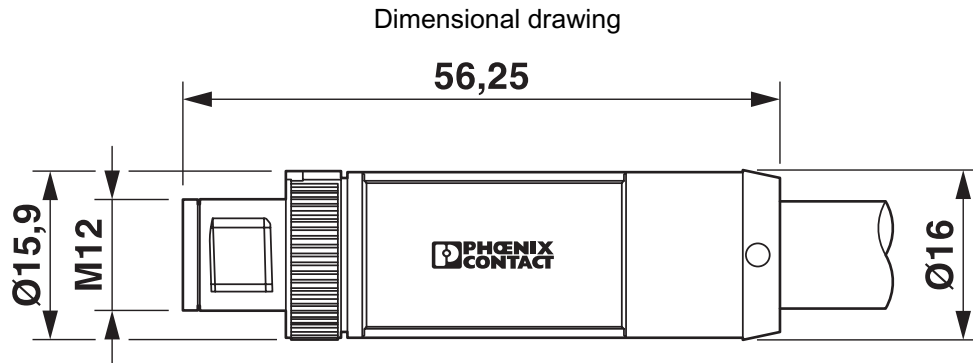
Power cable - SAC-6P-M12MSM/ 5,0-PUR PE SH



1414958

<https://www.phoenixcontact.com/pc/products/1414958>

Drawings



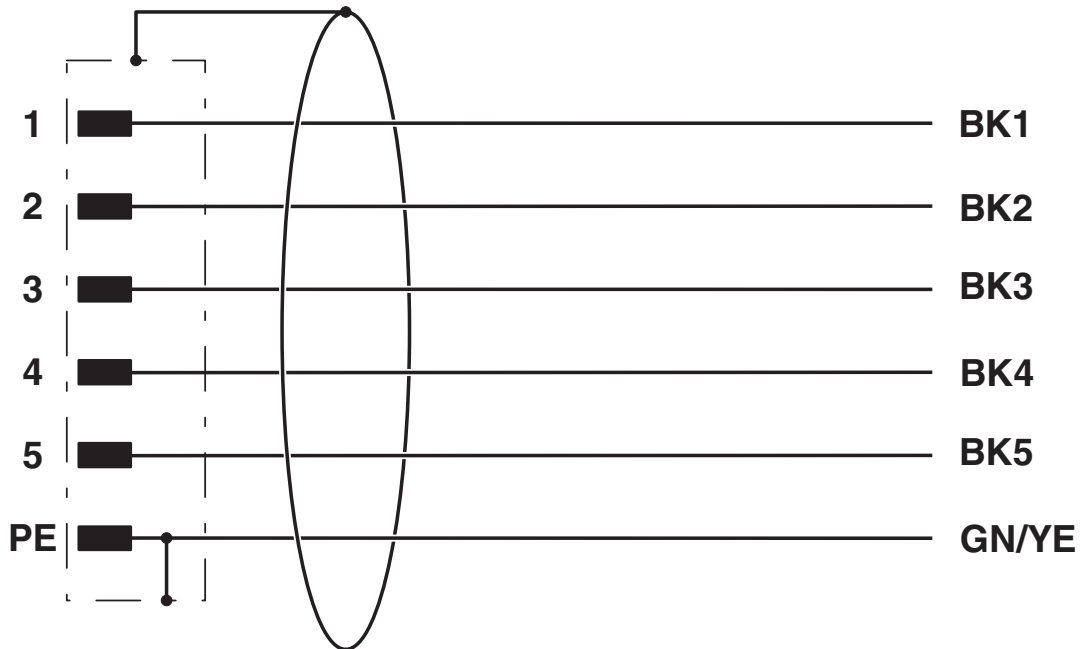
Plug, M12 x 1, straight, shielded

Schematic diagram

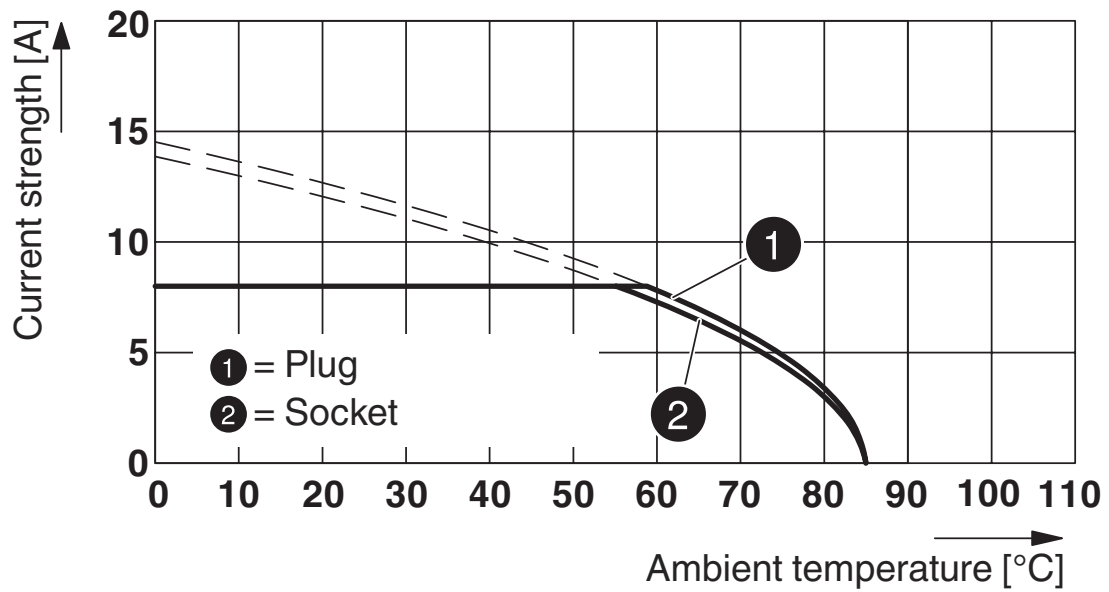


Pin assignment of M12 connector, 6-pos., M-coded, pin side view

Circuit diagram



Diagram



Derating diagram

Power cable - SAC-6P-M12MSM/ 5,0-PUR PE SH



1414958

<https://www.phoenixcontact.com/pc/products/1414958>

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	10 A	-	- 16



cUL Listed

Approval ID: E468743

	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
	600 V	10 A	- 16	-



EAC

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

cULus Listed

Power cable - SAC-6P-M12MSM/ 5,0-PUR PE SH



1414958

<https://www.phoenixcontact.com/pc/products/1414958>

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-M12MSM/ 5,0-PUR PE SH



1414958

<https://www.phoenixcontact.com/pc/products/1414958>

Environmental Product Compliance

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

Power cable - SAC-6P-M12MSM/ 5,0-PUR PE SH



1414958

<https://www.phoenixcontact.com/pc/products/1414958>

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 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