

Power cable - SAC-6P- 1,5-PUR/M12FSM PE



1414901

<https://www.phoenixcontact.com/pc/products/1414901>

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Power cable, 6-position, PUR halogen-free, black-gray RAL 7021, Socket straight M12, coding: M, on free cable end, cable length: 1.5 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
- Our standard: robust halogen-free PUR cable

Commercial Data

Item number	1414901
Packing unit	1 pc
Minimum order quantity	1 pc
Product Key	BF1CGP
Catalog Page	Page 298 (C-2-2019)
GTIN	4055626035321
Weight per Piece (including packing)	253.67 g
Weight per Piece (excluding packing)	253.67 g
Customs tariff number	85444290
Country of origin	PL

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Technical Data

Product properties

Product type	Power cable
Number of positions	6
Application	Power supply
No. of cable outlets	1
Shielded	no
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
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Cable / line

Cable length	1.5 m
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PUR halogen-free black [PUR]

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Dimensional drawing	
Cable weight	144 kg/km
UL AWM Style	20234 / 10492 (80°C/1000 V)
Number of positions	6
Shielded	no
Cable type	PUR halogen-free black [PUR]
Conductor cross section	6x 1.5 mm ²
Wire diameter incl. insulation	2.35 mm ±0.05 mm
External cable diameter	9.75 mm ±0.25 mm
Outer sheath, material	PUR
External sheath, color	black-gray RAL 7021
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	4000000
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

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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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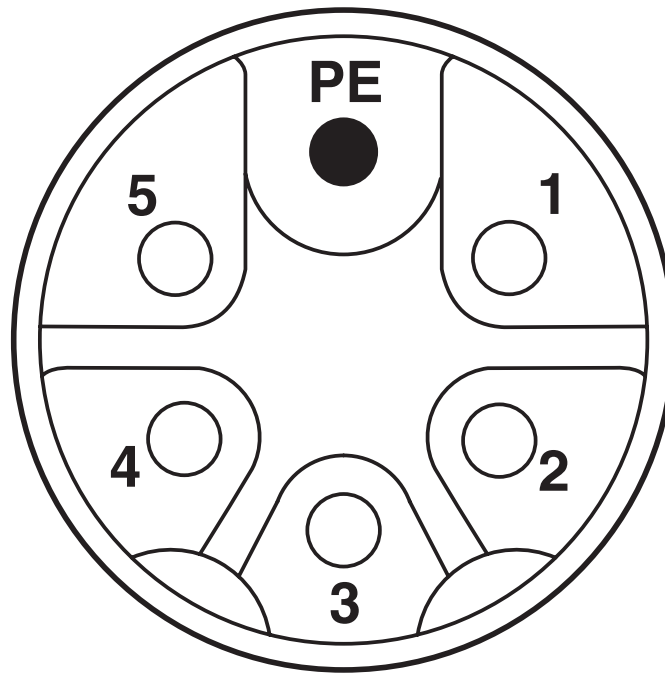
Power cable - SAC-6P- 1,5-PUR/M12FSM PE

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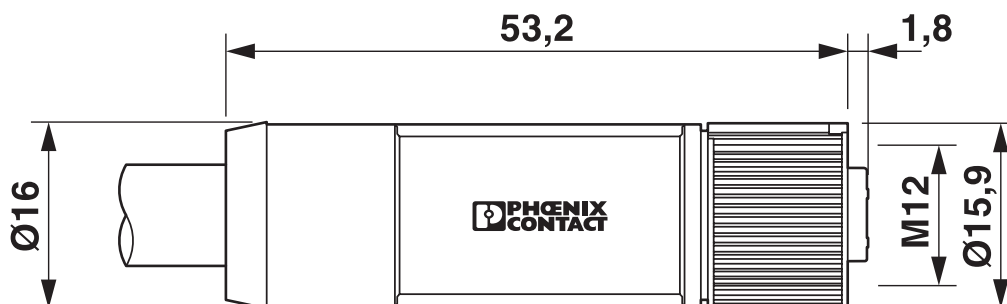
Drawings

Schematic diagram



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

Dimensional drawing

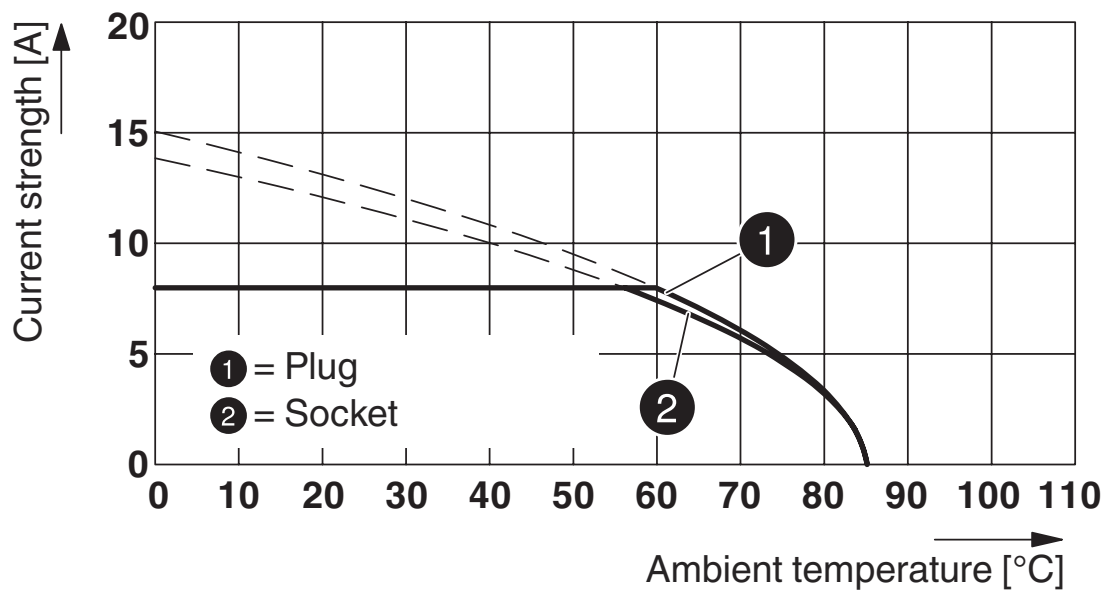


M12 x 1 socket, straight

Circuit diagram



Diagram



Current carrying capacity

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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 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

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Classifications

ECLASS

ECLASS-9.0	27060311
ECLASS-10.0.1	27060311
ECLASS-11.0	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

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



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