

Power cable - SAC-5P-M12MRK/ 5,0-PUR PE SH



1414842

<https://www.phoenixcontact.com/pc/products/1414842>

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Power cable, 5-position, PUR halogen-free, orange RAL 2003, shielded (Advanced Shielding Technology), 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
- Shield power reliably – 360° shielding to reduce electromagnetic loads
- Our standard: robust halogen-free PUR cable

Commercial Data

Item number	1414842
Packing unit	1 pc
Minimum order quantity	1 pc
Product Key	BF1CDQ
Catalog Page	Page 292 (C-2-2019)
GTIN	4055626034751
Weight per Piece (including packing)	1,023.06 g
Weight per Piece (excluding packing)	1,023.06 g
Customs tariff number	85444290
Country of origin	PL

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Technical Data

Product properties

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

Connection 1

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

Connection 2

Head design	free cable end
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Cable / line

Cable length	5 m
PUR halogen-free orange [PUR]	
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 ²
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

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	Resistant to salt water
Ambient temperature (operation)	-50 °C ... 90 °C (cable, fixed installation)
	-30 °C ... 90 °C (Cable, flexible installation)

Ambient conditions

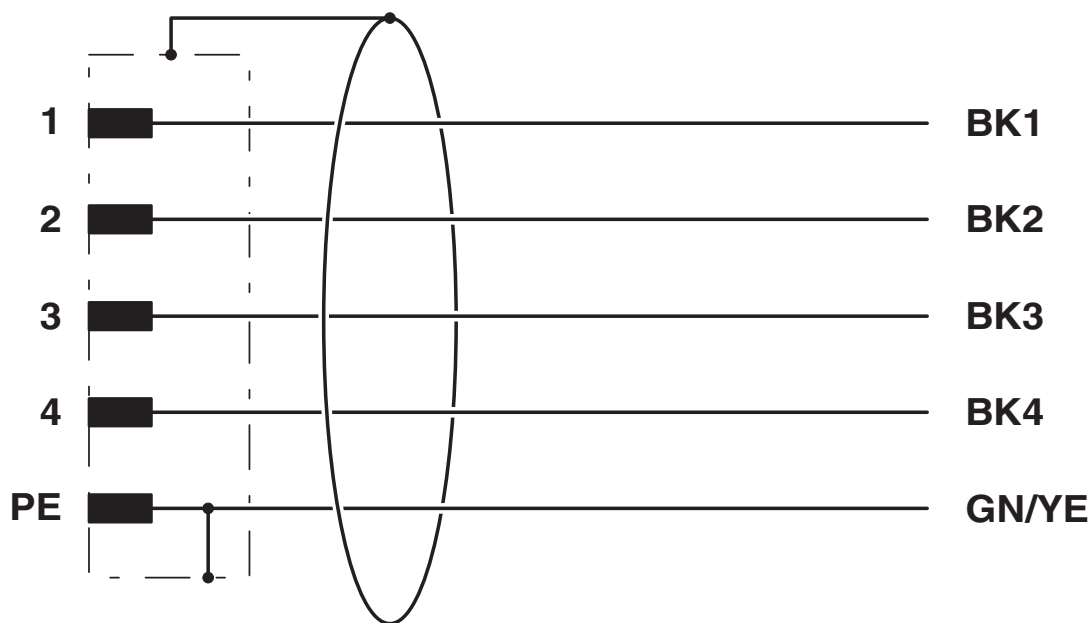
Degree of protection	IP65
	IP67 (without preloading, as additional test in accordance with IEC 60529)
Ambient temperature (operation)	-25 °C ... 85 °C (Plug / socket)

Standards and regulations

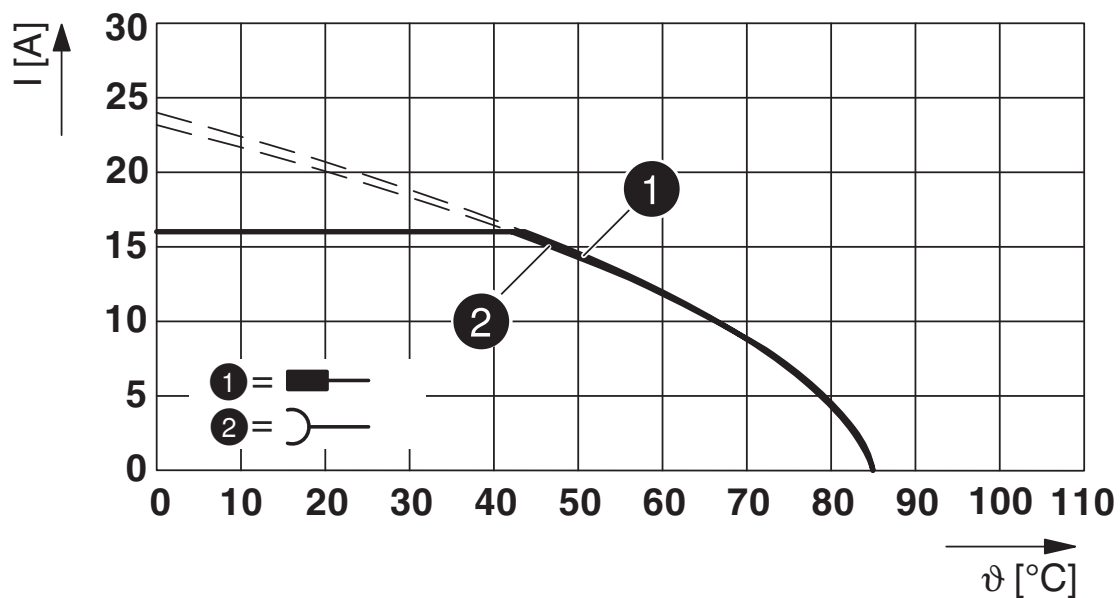
Standards/specifications	IEC 61076-2-111
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Drawings

Circuit diagram



Diagram



Base curve

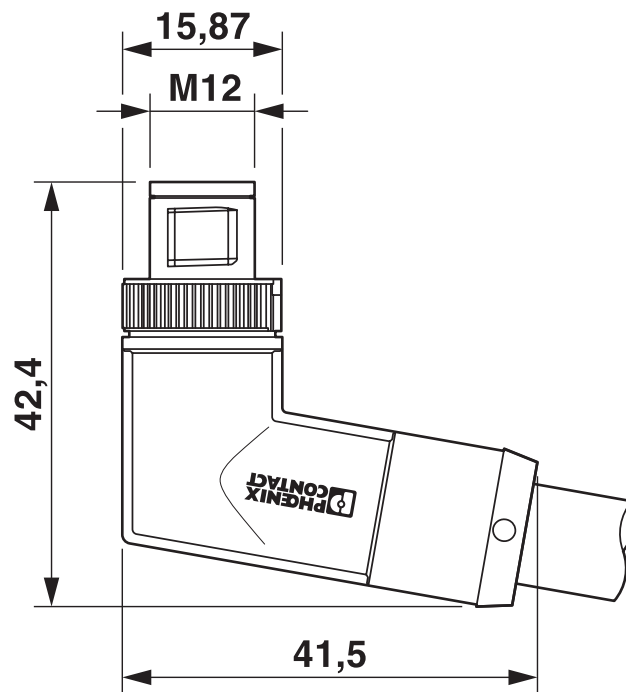
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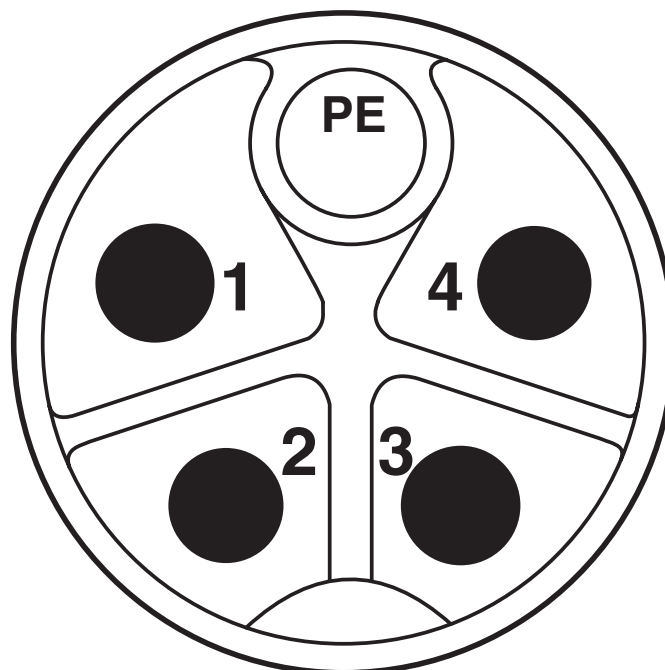


Dimensional drawing



M12 x 1 male plug, angled

Schematic diagram



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

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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	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

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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



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



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