

Power cable - SAC-5P- 5,0-280/M12FRL FE SH



1414803

<https://www.phoenixcontact.com/pc/products/1414803>

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Power cable, 5-position, PUR halogen-free, gray RAL 7001, shielded (Advanced Shielding Technology), Socket angled M12, coding: L, on free cable end, cable length: 5 m, for direct current up to 16 A/63 V

Your advantages

- Easy and safe: 100% electrically tested plug-in components
- Protection against mismatching, thanks to special L-coding
- Shield power reliably – 360° shielding to reduce electromagnetic loads
- Our standard: robust halogen-free PUR cable

Commercial Data

Item number	1414803
Packing unit	1 pc
Minimum order quantity	1 pc
Product Key	BF1CDP
GTIN	4055626034379
Weight per Piece (including packing)	1,075.78 g
Weight per Piece (excluding packing)	1,075.78 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	L - 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	63 V DC
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	Socket
Head cable outlet	angled
Head thread type	M12
Coding	L

Connection 2

Head design	free cable end
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Cable / line

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Cable length	5 m
PUR halogen-free gray [280]	
Dimensional drawing	
Cable weight	202 kg/km
UL AWM Style	20233 / 10493 (80°C/300 V)
Number of positions	5
Shielded	yes
Cable type	PUR halogen-free gray [280]
Conductor cross section	5x 2.5 mm ²
Wire diameter incl. insulation	2.85 mm ±0.1 mm
External cable diameter	10.4 mm ±0.3 mm
Outer sheath, material	PUR
External sheath, color	gray RAL 7001
Conductor material	Bare Cu litz wires
Material wire insulation	PP
Single wire, color	brown, white, blue, black, pink
Thickness, insulation	≥ 0.31 mm
Thickness, outer sheath	approx. 0.76 mm
Max. conductor resistance	≤ 8 Ω/km (at 20 °C)
Insulation resistance	≥ 1 GΩ*km (at 20 °C)
Nominal voltage, cable	≤ 300 V AC
Test voltage	≥ 3000 V AC (Spark test)
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Max. bending cycles	5000000
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)

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	-30 °C ... 80 °C (Cable, flexible installation)
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Ambient conditions

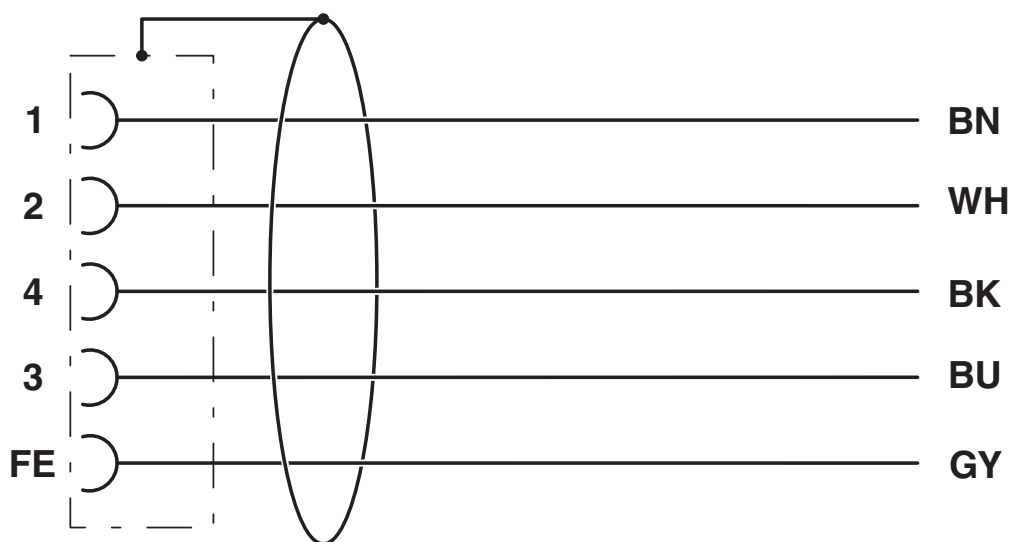
Degree of protection	IP65
	IP67
Ambient temperature (operation)	-25 °C ... 85 °C (Plug / socket)

Standards and regulations

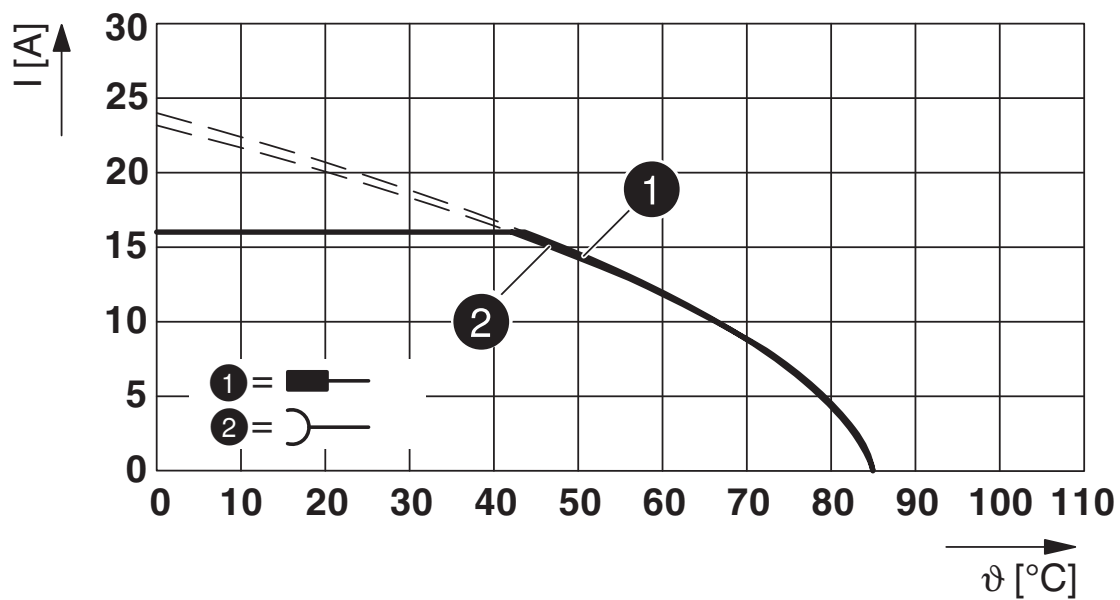
Standards/specifications	IEC 61076-2-111
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Drawings

Circuit diagram

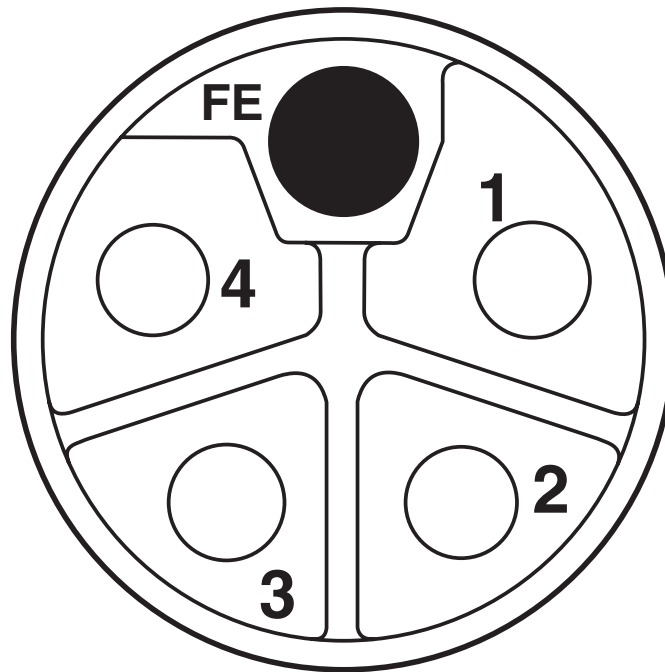


Diagram



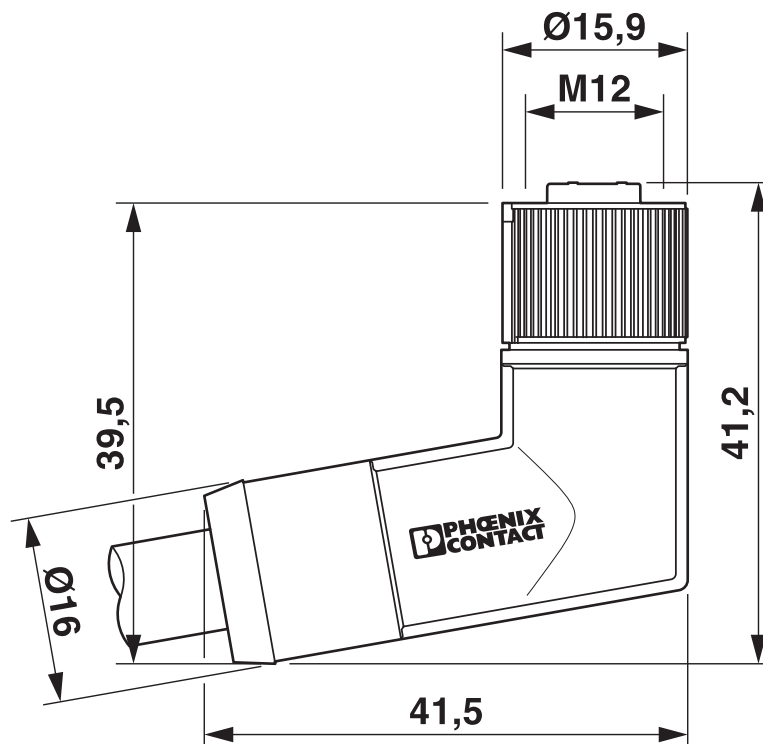
Base curve

Schematic diagram



Pin assignment of M12 socket, 5-pos., L-coded, socket side view

Dimensional drawing



M12 x 1 socket, angled

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Approvals



EAC

Approval ID: RU C-DE.BL08.B.00286



UL Listed

Approval ID: E468743



cUL Listed

Approval ID: E468743



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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