

SAC-3P- 1,0-PUR/M12FRS PE - Power cable



1176857

<https://www.phoenixcontact.com/us/products/1176857>

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Power cable, 3-position, free cable end, on Socket angled M12, coding: S, cable length: 1 m, For alternating current up to 16 A/250 V

Your advantages

- Easy and safe: 100% electrically tested plug-in components
- Protection against incorrect connection using special S-coding

Commercial data

Item number	1176857
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	BF05
Product key	BF1CCP
GTIN	4063151209414
Weight per piece (including packing)	98.87 g
Weight per piece (excluding packing)	98.87 g
Customs tariff number	85444290
Country of origin	PL

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Technical data

Product properties

Product type	Power cable
Number of positions	3
Application	Power supply
No. of cable outlets	1
Shielded	no
Coding	S

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	250 V AC
	250 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

Type	free cable end
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Connection 2

Type	Socket angled M12
Coding type	S (Power)

Cable/line

Cable length	1 m
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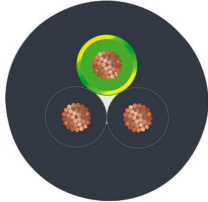
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PUR black [PUR]

Dimensional drawing	
Cable weight	74 kg/km
UL AWM Style	20233 / 10493 (80°C/300 V)
Number of positions	3
Shielded	no
Cable type	PUR black [PUR]
Conductor cross section	3x 1.5 mm ²
Wire diameter incl. insulation	2.25 mm ±0.05 mm
External cable diameter	6.8 mm ±0.2 mm
Outer sheath, material	PUR
External sheath, color	black
Conductor material	Bare Cu litz wires
Material wire insulation	PP
Single wire, color	black 1, black 2, green/yellow
Overall twist	3 wires, twisted
Max. conductor resistance	≤ 14.1 Ω/m (at 20 °C)
Insulation resistance	≥ 1 GΩ*km (at 20 °C)
Nominal voltage, cable	300 V AC
Test voltage	3000 V
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)	-40 °C ... 80 °C (cable, fixed installation) -25 °C ... 80 °C (Cable, flexible installation)

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Environmental and real-life conditions

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

Standard designation	M12 connector
Standards/specifications	IEC 61076-2-111

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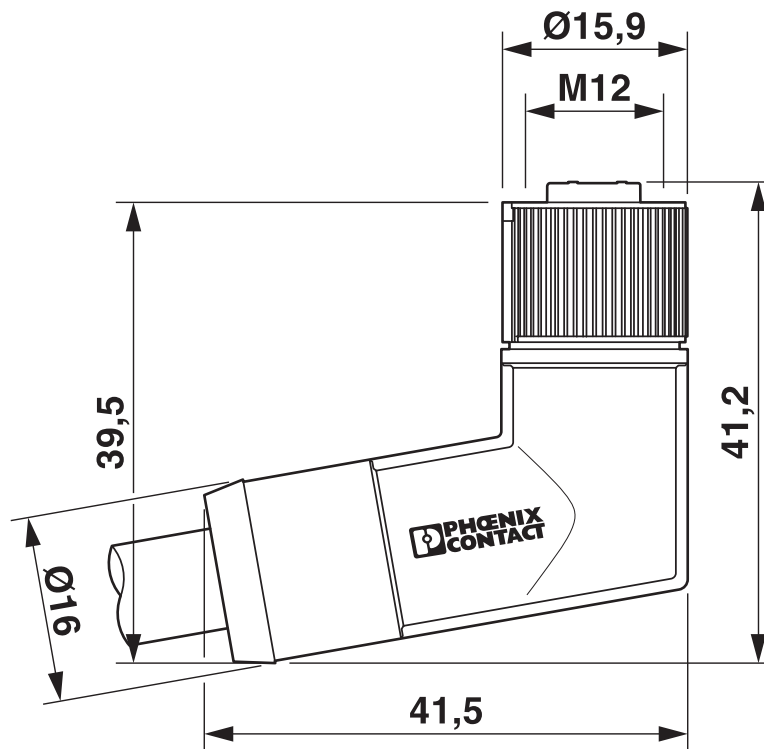
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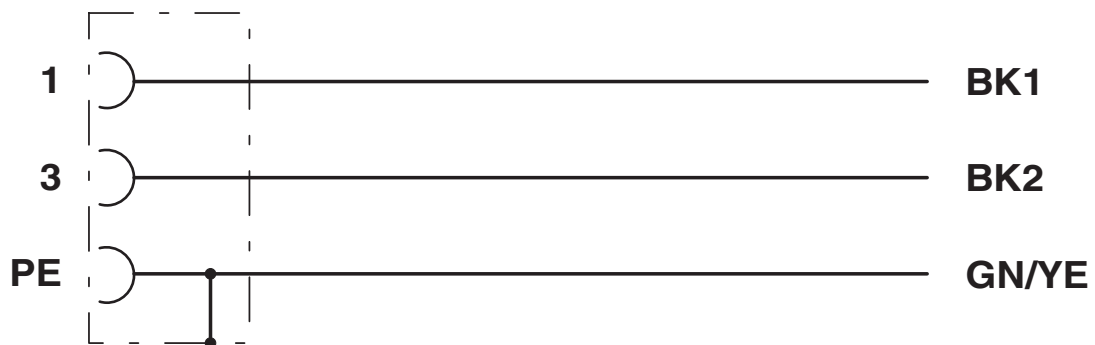
Drawings

Dimensional drawing



M12 x 1 socket, angled

Circuit diagram



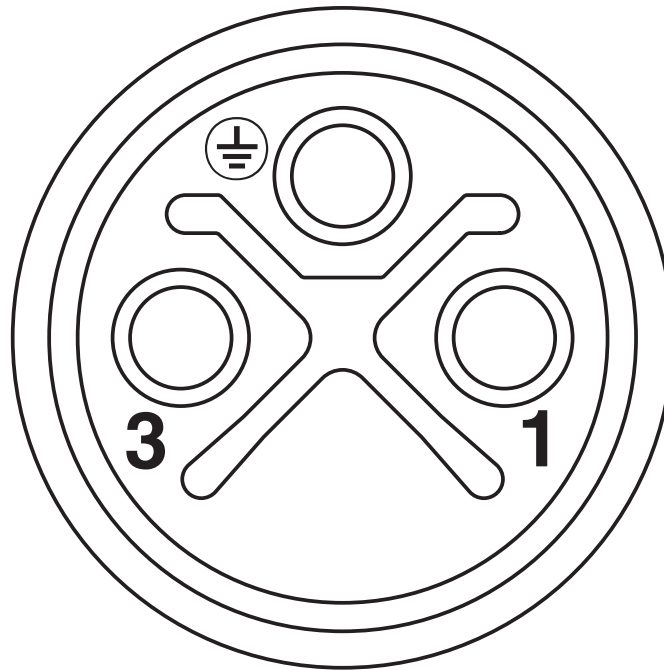
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Schematic diagram



Pin assignment of M12 socket, 3-pos., S-coded, socket side view

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Classifications

ECLASS

ECLASS-11.0	27060311
ECLASS-12.0	27060311
ECLASS-13.0	27060327

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

PROT M12 MS PWR - Screw plug

1092802

<https://www.phoenixcontact.com/us/products/1092802>



An M12 screw plug for the unoccupied M12 females of the M12 POWER connectors, boxes, and flush-type connectors

SAC BIT M12-D16 - Tool

1200305

<https://www.phoenixcontact.com/us/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

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Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com