

1091318
<https://www.phoenixcontact.com/us/products/1091318>

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Power cable, 4-position, PUR halogen-free, black-gray RAL 7021, Plug straight M12, coding: S, on free cable end, cable length: 20 m, for AC current up to 12 A/690 V

Your advantages

- Easy and safe: 100 % electrically tested plug-in components
- Protection against incorrect connection using special S-coding
- Our standard: robust halogen-free PUR cable

Commercial data

Item number	1091318
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	BF05
Product key	BF1CCP
GTIN	4055626903477
Weight per piece (including packing)	2,273.2 g
Weight per piece (excluding packing)	2,273.2 g
Customs tariff number	85444290
Country of origin	PL

SAC-4P-M12MSS/20,0-PUR PE - Power cable



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Technical data

Product properties

Product type	Power cable
Application	Power supply
Number of positions	4
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

Insulation resistance	$\geq 100 \text{ M}\Omega$
Nominal voltage U_N	690 V AC
Nominal current I_N	12 A

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	> 100
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Connector

Connection 1

Type	Plug straight M12
Coding type	S (Power)

Connection 2

Type	free cable end
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Cable/line

Cable length	20 m
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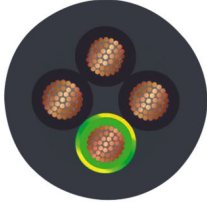
PUR halogen-free black [PUR]

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Dimensional drawing	
Cable weight	114 kg/km
UL AWM Style	20234 / 10492 (80°C/1000 V)
Number of positions	4
Shielded	no
Cable type	PUR halogen-free black [PUR]
Conductor cross section	4x 1.5 mm²
Wire diameter incl. insulation	2.45 mm ±0.05 mm
External cable diameter	8.80 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, green/yellow
Thickness, insulation	≥ 0.36 mm
Thickness, outer sheath	approx. 1.30 mm
Overall twist	4 wires, twisted
Length of twist, overall twist	93 mm
Max. conductor resistance	≤ 13 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
Smallest bending radius, fixed installation	44 mm
Smallest bending radius, movable installation	88 mm
Max. bending cycles	2000000
Minimum bending radius, drag chain applications	10 x D
Traversing path	10 m
Traversing rate	3 m/s
Acceleration	10 m/s²
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 60811-2-1, 168 h at 100°C

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	according to UL 758, 168 h at 60 °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)

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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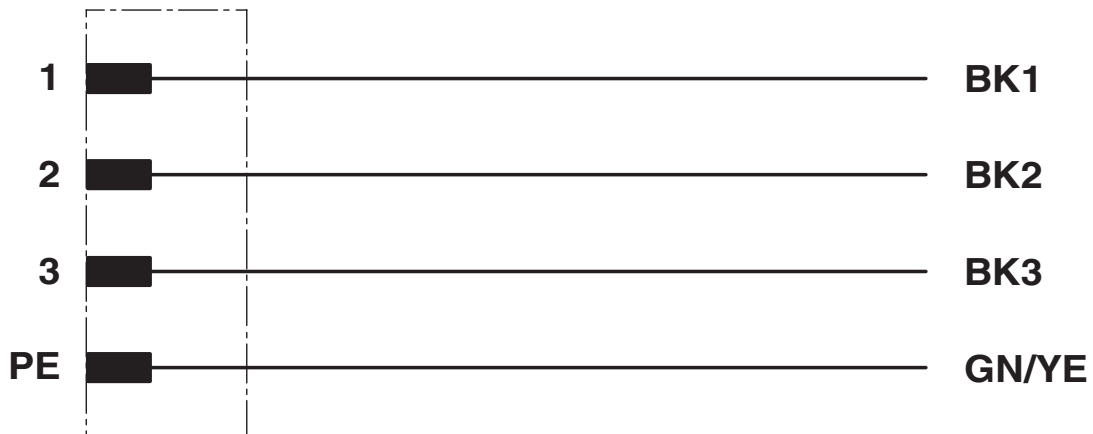
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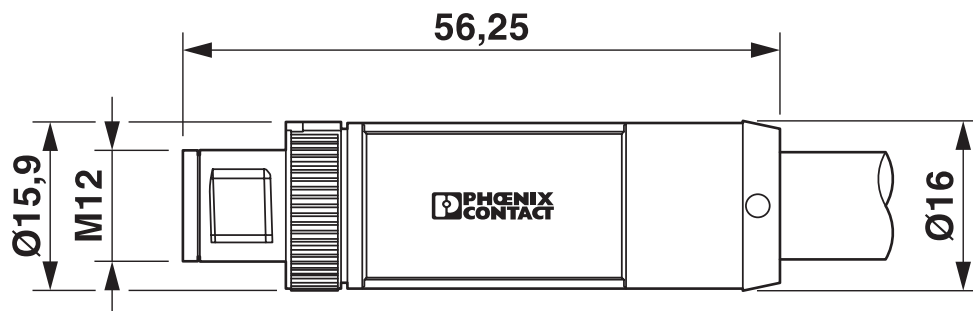


Drawings

Circuit diagram



Dimensional drawing



Plug, M12 x 1, straight

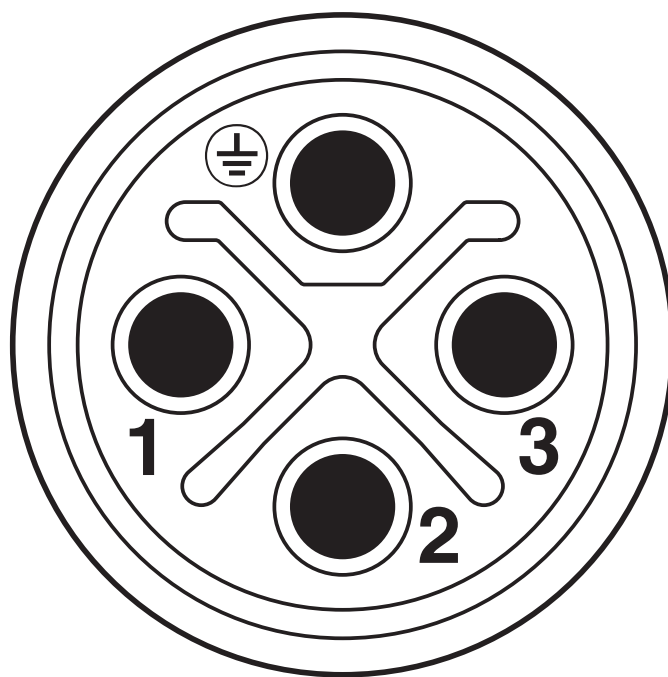
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Schematic diagram



M12 plug pin assignment, 4-pos., S-coded, plug 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

EU RoHS	
Fulfills EU RoHS substance requirements	Yes, No exemptions
China RoHS	
Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits
EU REACH SVHC	
REACH candidate substance (CAS No.)	No substance above 0.1 wt%

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Accessories

PROT-M12 FS - Sealing cap

1560251

<https://www.phoenixcontact.com/us/products/1560251>



M12 sealing cap for unoccupied M12 plugs of the sensor/actuator cable, flush-type plugs and I/O devices in the field

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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