

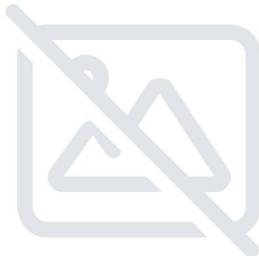
# SAC-4P-M12MSS/3,0-PUR/FSSPESH - Power cable



1423650

<https://www.phoenixcontact.com/us/products/1423650>

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Power cable, 4-position, PUR halogen-free, orange RAL 2003, shielded (Advanced Shielding Technology), Plug straight M12, coding: S, on Socket straight M12, coding: S, cable length: 3 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
- Shield power reliably – 360° shielding to reduce electromagnetic loads
- Our standard: robust halogen-free PUR cable

## Commercial data

Item number	1423650
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	BF05
Product key	BF1CCP
GTIN	4055626353029
Weight per piece (including packing)	480 g
Weight per piece (excluding packing)	478 g
Customs tariff number	85444290
Country of origin	PL

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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	yes
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

### Connector

Connection 1	
Type	Plug straight M12
Coding type	S (Power)

Connection 2	
Type	Socket straight M12
Coding type	S (Power)

### Cable/line

Cable length	3 m
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PUR halogen-free orange shielded [PUR]

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Dimensional drawing



UL AWM Style	20234 / 10492 (80°C/1000 V)
Number of positions	4
Shielded	yes
Cable type	PUR halogen-free orange shielded [PUR]
Conductor cross section	4x 1.5 mm <sup>2</sup>
Wire diameter incl. insulation	≤ 2.5 mm
External cable diameter	9.70 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, green/yellow
Thickness, insulation	0.40 mm
Thickness, outer sheath	1.20 mm
Overall twist	4 wires optimally twisted
Max. conductor resistance	≤ 13.3 Ω/km (at 20 °C)
Insulation resistance	≥ 10 MΩ*km (at 20 °C)
Nominal voltage, cable	1000 V AC
Test voltage	4260 V AC (5 min.)
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	7.5 x D
Smallest bending radius, fixed installation	49 mm
Smallest bending radius, movable installation	73 mm
Dynamic load capacity (bending)	Max. bending cycles: 4000000, Bending radius: 10 x D, Traversing path: 10 m, Traversing rate: 3 m/s, Acceleration: 10 m/s <sup>2</sup>
Dynamic load capacity (torsion)	Torsion: ±25 °/m
Halogen-free	according to VDE 0282-13 Appendix C
Flame resistance	in accordance with EN 60332-1-2 in acc. to UL 1581 VW1 According to CSA C 22.2 No. 210-05 FT1
Resistance to oil	in accordance with DIN EN 60811-2-1
	According to DIN EN 50363-10-2
Other resistance	UV resistant Low adhesion
Ambient temperature (operation)	-40 °C ... 90 °C (cable, fixed installation)

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-30 °C ... 90 °C (Cable, flexible installation)

## Environmental and real-life conditions

### Ambient conditions

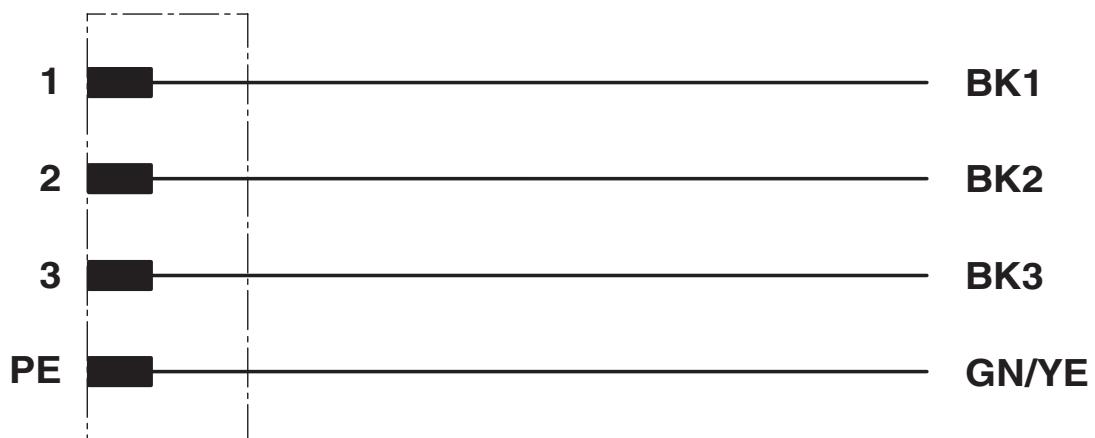
Degree of protection	IP65
	IP67 (without preloading, as additional test in accordance with IEC 60529)
Ambient temperature (operation)	-25 °C ... 85 °C (Plug / socket)

## Standards and regulations

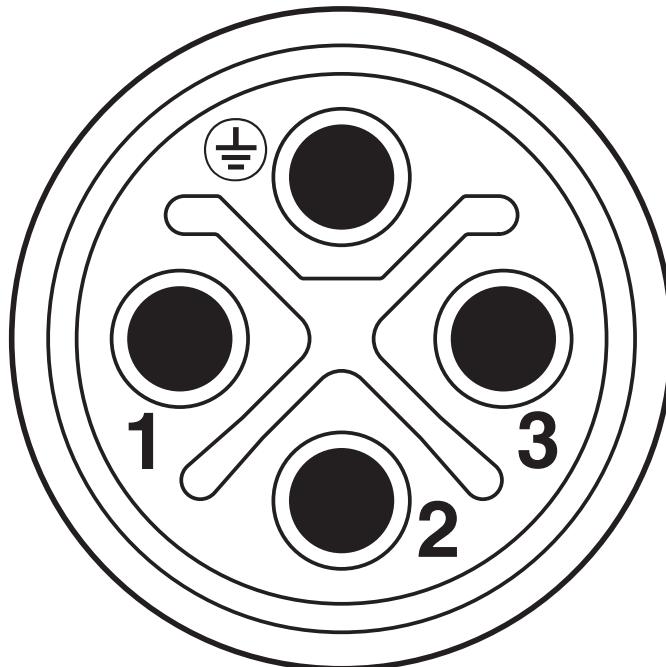
Standard designation	M12 connector
Standards/specifications	IEC 61076-2-111

## Drawings

Circuit diagram



Schematic diagram



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

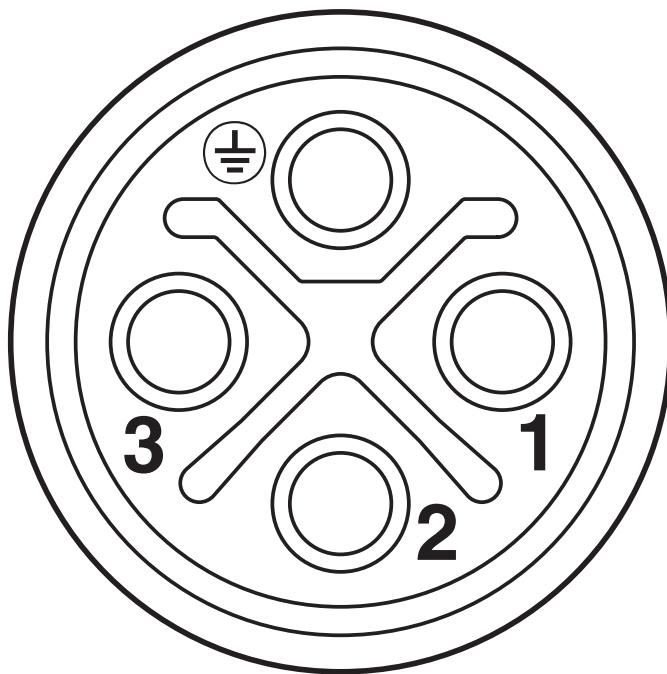
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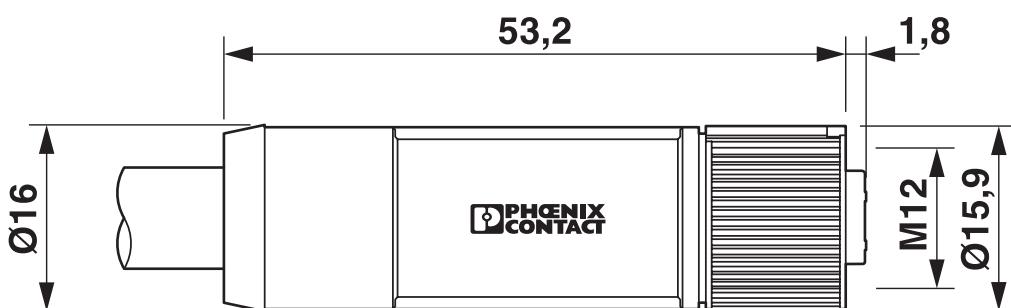
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Schematic diagram



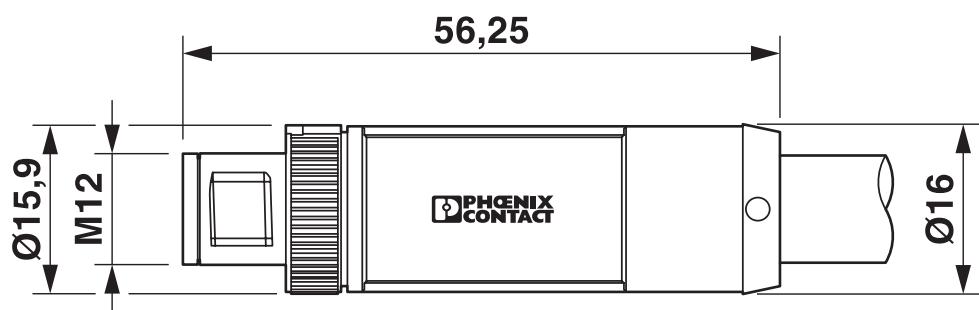
Pin assignment of M12 socket, 4-pos., S-coded, socket side view

Dimensional drawing



M12 x 1 socket, straight

Dimensional drawing



Plug, M12 x 1, straight, shielded

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## Approvals

ⓘ To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1423650>

<b>UL Listed</b> Approval ID: FILE E 468743				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
	600 V	12 A	-	- 16

<b>cUL Listed</b> Approval ID: FILE E 468743				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
	600 V	12 A	- 16	-

**cULus Listed**

## Classifications

### ECLASS

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

### ETIM

ETIM 9.0	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
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### 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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