

https://www.phoenixcontact.com/us/products/1424245

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Power cable, 4-position, PUR halogen-free, orange RAL 2003, shielded (Tinned copper-braided shield, approx. 85% covering), Plug straight M12, coding: S, on free cable end, cable length: 5 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
- · Shield power reliably 360° shielding to reduce electromagnetic loads

## Commercial data

Item number	1424245
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF05
Product key	BF1CCP
Catalog page	Page 289 (C-2-2019)
GTIN	4046356709316
Weight per piece (including packing)	742.9 g
Weight per piece (excluding packing)	740 g
Customs tariff number	85444290
Country of origin	DE



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## Technical data

## **Product properties**

	Product type	Power cable	
	Number of positions	4	
	Application	Power supply	
	No. of cable outlets	1	
	Shielded	yes	
	Coding	S	
l	nsulation characteristics		
	Overvoltage category	111	
	Degree of pollution	3	
Ма	terial 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	≤ 5 mΩ	
	Insulation resistance	≥ 100 MΩ	
	Nominal voltage U <sub>N</sub>	690 V AC	
	Nominal current I <sub>N</sub>	12 A	
	Protective circuit	unwired	

#### Mechanical properties

Mechanical data	
Insertion/withdrawal cycles	> 100

### Connector

Connection 1	
Туре	Plug straight M12
Coding type	S (Power)
Connection 2	
Туре	free cable end
Cable/line	
Cable length	5 m

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## PUR halogen-free orange shielded [PUR]



	20224 / 10402 (80°C/1000 \/)
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
Max. bending cycles	4000000
Torsion force	± 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	)
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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

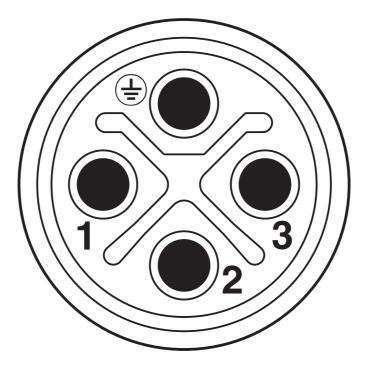


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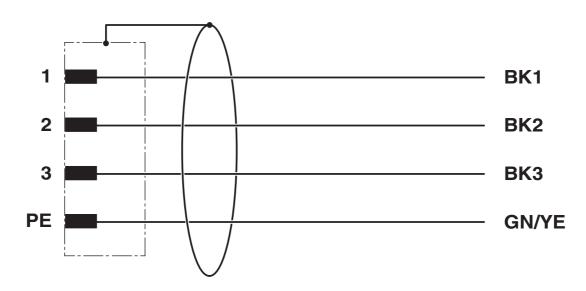
# Drawings

Schematic diagram



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

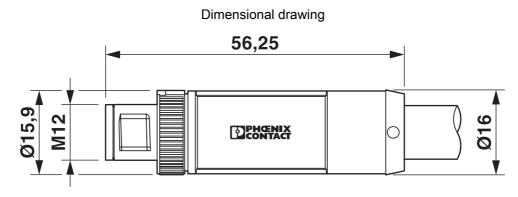
Circuit diagram





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Plug, M12 x 1, straight, shielded



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## Approvals

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	<b>UL Listed</b> Approval ID: FILE E 468743				
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		600 V	12 A	-	- 16
B	<b>CUL Listed</b> Approval ID: FILE E 468743	3			
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		Nominal voltage U <sub>N</sub> 600 V	Nominal current I <sub>N</sub> 12 A	Cross section AWG - 16	Cross section mm <sup>2</sup>

#### cULus Listed



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## Classifications

#### ECLASS

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

### ETIM

	ETIM 9.0	EC001855
UN	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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