

1423664

https://www.phoenixcontact.com/us/products/1423664

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Power cable, 4-position halogen-free, shielded (Advanced Shielding Technology), Plug straight M12, coding: S, on Socket straight M12, coding: S, cable length: 10 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	1423664	
Packing unit	1 pc	
Minimum order quantity	25 pc	
Note	Made to order (non-returnable)	
Sales key	BF05	
Product key	BF1CCP	
GTIN	4055626353166	
Weight per piece (including packing)	1,476.9 g	
Weight per piece (excluding packing)	2.898 g	
Customs tariff number	85444290	
Country of origin	PL	



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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
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	≤ 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

Coding type

Туре	Plug straight M12	
Coding type	S (Power)	
Connection 2		

S (Power)

### Cable/line

Cable length	10 m



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PUR halogen-free orange shielded [PUR]			
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 mm²		
Wire diameter incl. insulation	≤ 2.5 mm		
External cable diameter	9.7 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	0.4 mm		
Thickness, outer sheath	1.2 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		
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)		
	-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	

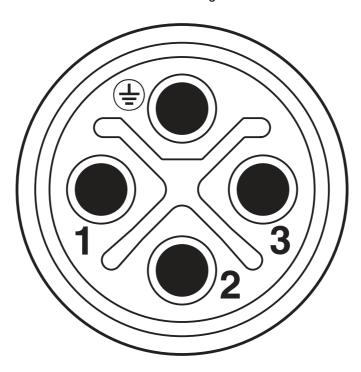


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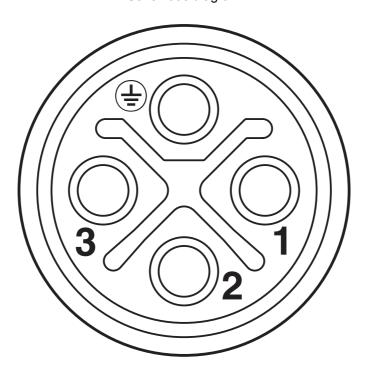
### Drawings

Schematic diagram



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

Schematic diagram



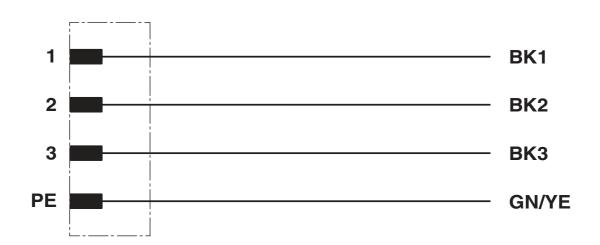
Pin assignment of M12 socket, 4-pos., S-coded, socket side view



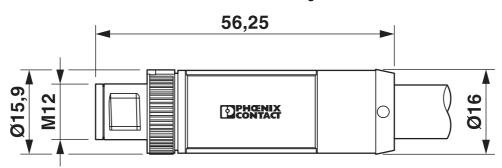
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### Circuit diagram

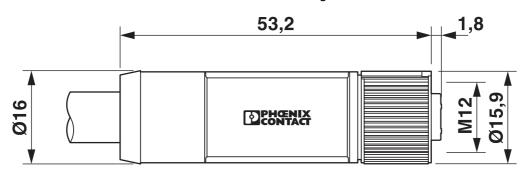


### Dimensional drawing



Plug, M12 x 1, straight, shielded

### Dimensional drawing



M12 x 1 socket, straight



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### **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1423664

UL Listed 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

cUL Listed 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	-

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### Classifications

### **ECLASS**

UNSPSC 21.0

	ECLASS-11.0	27060311		
	ECLASS-12.0	27060311		
	ECLASS-13.0	27060311		
ETIM				
	ETIM 8.0	EC001855		
UN	SPSC			

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 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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