

1408814

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Power cable, 4-position, PUR halogen-free, black-gray RAL 7021, Plug straight M12, coding: T, on free cable end, cable length: 5 m, For direct current up to 12 A/63 V

### Your advantages

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

#### Commercial data

Item number	1408814
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF05
Product key	BF1CCP
Catalog page	Page 185 (C-6-2019)
GTIN	4046356838986
Weight per piece (including packing)	439 g
Weight per piece (excluding packing)	439 g
Customs tariff number	85444290
Country of origin	PL



1408814

https://www.phoenixcontact.com/us/products/1408814

### Technical data

### Product properties

Product type	Power cable
Application	Power supply
Number of positions	4
No. of cable outlets	1
Shielded	no
Coding	Т
Data management status	
Article revision	08
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	≥ 100 MΩ
Nominal voltage U <sub>N</sub>	63 V DC
Nominal current I <sub>N</sub>	12 A

### Mechanical properties

Mec	hanica	l data

Insertion/withdrawal cycles	> 100

#### Connector

#### Connection 1

Туре	Plug straight M12
Coding type	T (Power)

#### Connection 2

<b>-</b>	
Type	free cable end

#### Cable/line

Cable length	5 m



1408814

https://www.phoenixcontact.com/us/products/1408814

#### PUR halogen-free black [PUR]

Dimensional drawing	
Cable weight	83 kg/km
UL AWM Style	20549 / 10493 (80°C/300 V)
Number of positions	4
Shielded	no
Cable type	PUR halogen-free black [PUR]
Conductor cross section	4x 1.5 mm <sup>2</sup>
Wire diameter incl. insulation	2.2 mm ±0.05 mm
External cable diameter	6.75 mm ±0.2 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	brown, white, blue, black
Thickness, insulation	≥ 0.26 mm
Thickness, outer sheath	approx. 0.70 mm
Overall twist	4 wires, twisted
Max. conductor resistance	≤ 14.1 Ω/km (at 20 °C)
Insulation resistance	≥ 1 GΩ*km (at 20 °C)
Nominal voltage, cable	≤ 300 V AC
Test voltage	≥ 3000 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	34 mm
Smallest bending radius, movable installation	68 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/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)
	in accordance with UL 758/1581 FT2
	according to DIN EN 60332-2-2
Resistance to oil	according to DIN EN 60811-404, 168 h at 100 °C
	according to UL 758, 168 h at 60 °C
	Hydrolysis and microbe resistant as per VDE 0282 section 10



1408814

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Other resistance	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
Ambient temperature (operation)	-25 °C 85 °C (Plug / socket)

### Standards and regulations

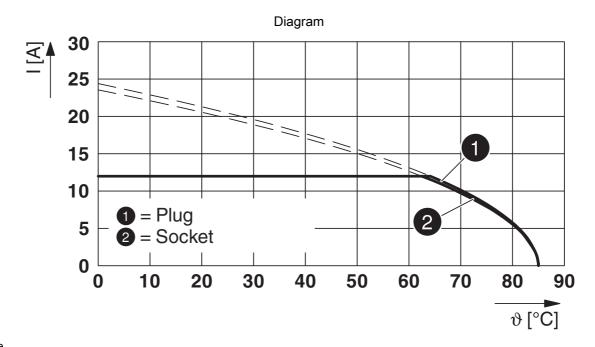
Standard designation	M12 connector
Standards/specifications	IEC 61076-2-111



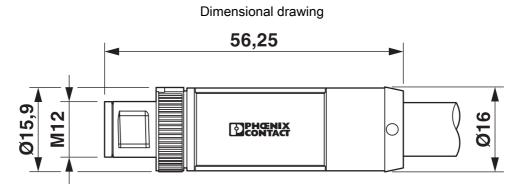
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## Drawings



Base curve

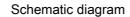


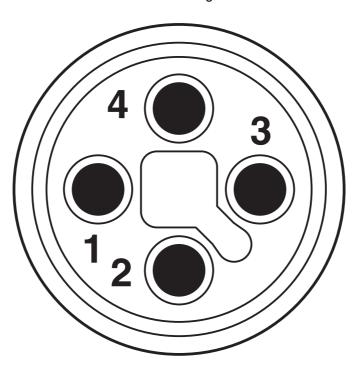
Plug, M12 x 1, straight



1408814

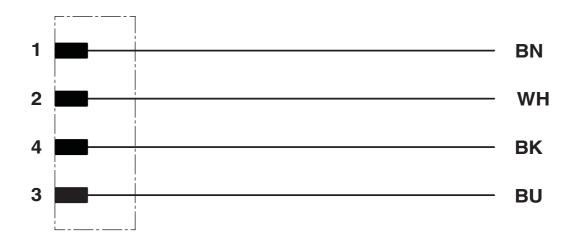
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Pin assignment for M12 plug, 4-pos., T-coded, view of plug side

Circuit diagram



Contact assignment of the M12 plug



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### **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1408814

<b>D</b>	<b>UL Listed</b> Approval ID: E468743				
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		63 V	12 A	-	- 16

• <u>®</u>	<b>cUL Listed</b> Approval ID: E468743				
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		63 V	12 A	- 16	-

EAC	EAC-RoHS Approval ID: RU D-DE.HB35.B.00387		

cULus Listed



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## Classifications

UNSPSC 21.0

#### **ECLASS**

ECLASS-11.0	27060311	
ECLASS-12.0	27060311	
ECLASS-13.0	27060327	
ETIM		
ETIM 9.0	EC001855	
UNSPSC		

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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