

## Power cable - SAC-4P-M12MST/ 1,5-PUR/M12FST - 1413211

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Power cable, 4-position, PUR halogen-free, black-gray RAL 7021, Plug straight M12, T-coded, on Socket straight M12, T-coded, cable length: 1.5 m

### Your advantages

- ✓ Easy and safe: 100% electrically tested plug-in components
- ✓ High-performance: DC connectors for up to 12 A and 63 V DC
- ✓ Protection against incorrect connection using special T-coding
- ✓ Our standard: robust halogen-free PUR cable

### Key Commercial Data

Packing unit	1 pc
Minimum order quantity	50 pc
GTIN	 4 046356 994576
GTIN	4046356994576

### Technical data

#### Dimensions

Length of cable	1.5 m
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#### Ambient conditions

Ambient temperature (operation)	-25 °C ... 85 °C (Plug / socket)
Degree of protection	IP65
	IP67
	IP68

#### General

Rated current at 40°C	12 A
Rated voltage	63 V DC
Number of positions	4

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## Technical data

### General

Insulation resistance	≥ 100 MΩ
Coding	T power
Standards/regulations	M12 connector IEC 61076-2-111
Status display	No
Protective circuit/component	unwired
Overvoltage category	III
Degree of pollution	3
Insertion/withdrawal cycles	> 100

### Material

Flammability rating according to UL 94	V0
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	PA
Material of grip body	PA
Material, knurls	Zinc die-cast, nickel-plated

### Standards and Regulations

Standard designation	M12 connector
Standards/regulations	IEC 61076-2-111
Flammability rating according to UL 94	V0

### Cable

Cable type	PUR halogen-free black
Cable type (abbreviation)	PUR
Cable abbreviation	Li9YV1-11Y
UL AWM style	20233 / 10493 (80°C/300 V)
Conductor cross section	4x 1.5 mm <sup>2</sup>
AWG power supply	16
Conductor structure, voltage supply	78x 0.15 mm
Core diameter including insulation	2.35 mm ±0.05 mm
Thickness, insulation	≥ 0.25 mm
Wire colors	brown, white, blue, black
Overall twist	4 wires, twisted
Length of twist, overall twist	90 mm
External sheath, color	black-gray RAL 7021
Outer sheath thickness	approx. 1.3 mm
External cable diameter D	8.4 mm ±0.25 mm
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Number of bending cycles	4000000
Minimum bending radius, drag chain applications	10 x D

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## Technical data

### Cable

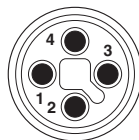
Traversing path	10 m
Traversing rate	3 m/s
Acceleration	10 m/s <sup>2</sup>
Cable weight	109 kg/km
Outer sheath, material	PUR
Material conductor insulation	PP
Conductor material	Bare Cu litz wires
Insulation resistance	≥ 1 GΩ*km (at 20 °C)
Conductor resistance	≤ 13 Ω/km (at 20 °C)
Nominal voltage, cable	≤ 300 V AC
Test voltage, cable	≥ 3000 V AC (Spark test)
Flame resistance	According to UL 758/1581 (Cable Flame)
	according to UL 758/1581 FT1
	According to DIN EN 60332-1-2
Halogen-free	in accordance with DIN VDE 0472 part 815
	in accordance with DIN EN 50267-2-1
Resistance to oil	According to DIN EN 60811-2-1, 168 h at 100°C
	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 Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

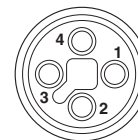
## Drawings

Schematic diagram



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

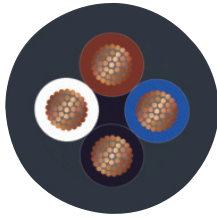
Schematic diagram



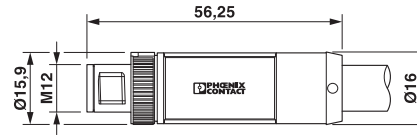
Pin assignment of M12 socket, 4-pos., T-coded, socket side view

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Cable cross section



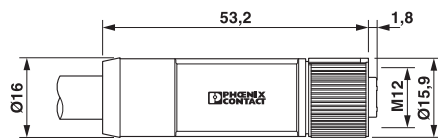
Dimensional drawing



Plug, M12 x 1, straight

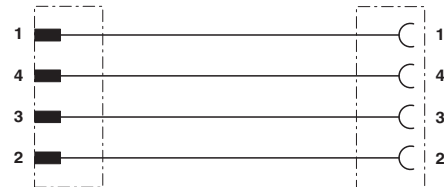
PUR halogen-free black [PUR]

Dimensional drawing



M12 x 1 socket, straight

Circuit diagram



Contact assignment of the M12 connector and the M12 socket

## Approvals

### Approvals

Approvals

UL Listed / cUL Listed / cULus Listed


Ex Approvals

### Approval details

UL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	E468743
Nominal voltage UN	63 V		
Nominal current IN	12 A		
mm <sup>2</sup> /AWG/kcmil	16		

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Nominal voltage UN	63 V
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cULus Listed	
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PHOENIX CONTACT GmbH & Co. KG  
Flachsmarktstr. 8  
32825 Blomberg  
Germany  
Tel. +49 5235 300  
Fax +49 5235 3 41200  
<http://www.phoenixcontact.com>

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