

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

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)




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
-----------------	-------

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

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

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 ²
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

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

Technical data

Cable

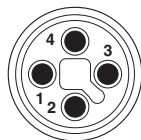
Traversing path	10 m
Traversing rate	3 m/s
Acceleration	10 m/s ²
Cable weight	109 kg/km
Outer sheath, material	PUR
Material conductor insulation	PP
Conductor material	Bare Cu litz wires
Insulation resistance	≥ 1 GΩ*km (at 20 °C)
Conductor resistance	≤ 13 Ω/km (at 20 °C)
Nominal voltage, cable	≤ 300 V 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"

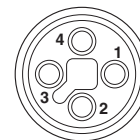
Drawings

Schematic diagram



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

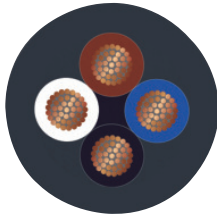
Schematic diagram



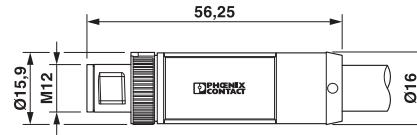
Pin assignment of M12 socket, 4-pos., T-coded, socket side view

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

Cable cross section



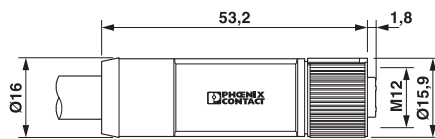
Dimensional drawing



Plug, M12 x 1, straight

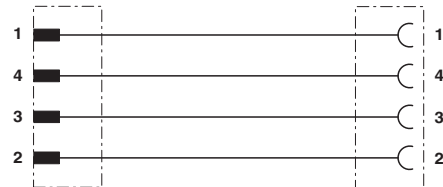
PUR halogen-free black [PUR]

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		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	E468743
Nominal voltage UN	63 V		
Nominal current IN	12 A		
mm ² /AWG/kcmil	16		

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

Approvals

cUL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	E468743
------------	---	---	---------

Nominal voltage UN	63 V
Nominal current IN	12 A
mm ² /AWG/kcmil	16

cULus Listed	
--------------	---

Phoenix Contact 2018 © - all rights reserved
<http://www.phoenixcontact.com>

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

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Phoenix Contact:](#)

[1413211](#)