



**Automatización Eléctrica**  
Especialistas en Automatización

At the end of this document you will find links to products related to this catalog. You can go directly to our shop by clicking [HERE](#). [HERE](#)

## Power cable - SAC-4P-MRT/ 5,0-PUR/FRT SCO - 1415198

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, Plug angled M12 SPEEDCON, T-coded, on Socket angled M12 SPEEDCON, T-coded, Cable length: 5 m, for direct current up to 12 A/60 V

### Why buy this product

- Easy and safe: 100% electrically tested plug-in components
- High-performance: DC connectors for up to 12 A and 60 V DC
- Protection against incorrect connection using special T-coding
- Save time, thanks to installation with SPEEDCON fast locking system
- Our standard: robust halogen-free PUR cable



### Key Commercial Data

Packing unit	1 STK
GTIN	 4 055626 041230

### Technical data

#### Dimensions

Length of cable	5 m
-----------------	-----

#### Ambient conditions

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

#### General

Rated current at 40°C	12 A
Rated voltage	60 V
Number of positions	4
Insulation resistance	≥ 10 GΩ
Coding	T power
Status display	No

## Power cable - SAC-4P-MRT/ 5,0-PUR/FRT SCO - 1415198

### Technical data

#### General

Protective circuit/component	Unwired
Overvoltage category	III
Degree of pollution	3
Insertion/withdrawal cycles	> 100
Torque	0.4 Nm (M12 connector)

#### Material

Flammability rating according to UL 94	V0
Contact material	CuZn
Contact surface material	Au
Contact carrier material	PA
Material of grip body	TPU, hardly inflammable, self-extinguishing
Material, knurls	Zinc die-cast, nickel-plated

#### Standards and Regulations

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
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

# Power cable - SAC-4P-MRT/ 5,0-PUR/FRT SCO - 1415198

## Technical data

### Cable

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)

## Classifications

### eCl@ss

eCl@ss 5.1	27143423
eCl@ss 6.0	27143423
eCl@ss 8.0	27279218

### ETIM

ETIM 5.0	EC001855
----------	----------

## Approvals

### Approvals

#### Approvals

UL Listed / cUL Listed / cULus Listed

#### Ex Approvals

# Power cable - SAC-4P-MRT/ 5,0-PUR/FRT SCO - 1415198

## Approvals

Approvals submitted

### Approval details

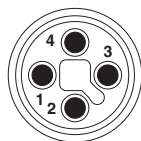
UL Listed	
mm <sup>2</sup> /AWG/kcmil	16
Nominal current I <sub>N</sub>	12 A
Nominal voltage U <sub>N</sub>	63 V

cUL Listed	
mm <sup>2</sup> /AWG/kcmil	16
Nominal current I <sub>N</sub>	12 A
Nominal voltage U <sub>N</sub>	63 V

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

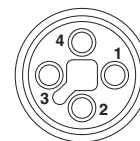
## Drawings

Schematic diagram



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

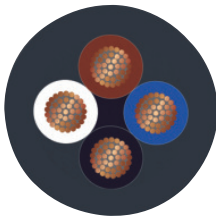
Schematic diagram



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

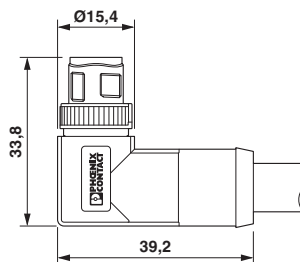
# Power cable - SAC-4P-MRT/ 5,0-PUR/FRT SCO - 1415198

Cable cross section



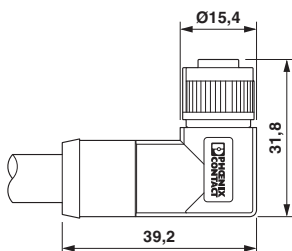
PUR halogen-free black [PUR]

Dimensional drawing



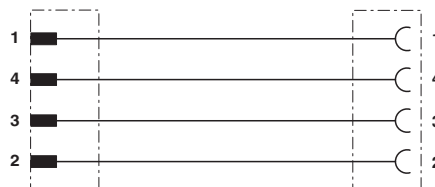
M12 x 1 male plug, angled

Dimensional drawing



M12 x 1 socket, angled

Circuit diagram



Contact assignment of M12 connector/socket

Phoenix Contact 2016 © - 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>

Below is a list of articles with direct links to our shop Electric Automation Network where you can see:

- Quote per purchase volume in real time.
- Online documentation and datasheets of all products.
- Estimated delivery time enquiry in real time.
- Logistics systems for the shipment of materials almost anywhere in the world.
- Purchasing management, order record and tracking of shipments.

To access the product, [click on the green button.](#)

<b>Product</b>	<b>Code</b>	<b>Reference</b>	<b>Product link</b>
Power cable, 4-position, PUR halogen-free, Plug angled M12 SPEEDCON, T-coded, on Socket angled M12 SPEEDCON, T-coded, Cable length: 5 m, for direct current up to 12 A/60 V	1415198	SAC-4P-MRT/ 5,0-PUR/FRT SCO	<a href="#">Buy on EAN</a>