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# Power cable - SAC-4P-MRT/ 1,0-PUR/FRT SCO - 1415196

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Power cable, 4-position, PUR halogen-free, Plug angled M12 SPEEDCON, T-coded, on Socket angled M12 SPEEDCON, T-coded, Cable length: 1 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 041216

## Technical data

### Dimensions

Length of cable	1 m
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### 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

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## 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
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### 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

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## 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	27061801
eCl@ss 6.0	27279218
eCl@ss 8.0	27279218

### ETIM

ETIM 5.0	EC001855
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## Approvals

### Approvals

#### Approvals

UL Listed / cUL Listed / cULus Listed

#### Ex Approvals

# Power cable - SAC-4P-MRT/ 1,0-PUR/FRT SCO - 1415196

## Approvals

Approvals submitted

### Approval details

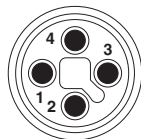
UL Listed	
mm <sup>2</sup> /AWG/kcmil	16
Nominal current I <sub>N</sub>	12 A
Nominal voltage U <sub>N</sub>	63 V

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	
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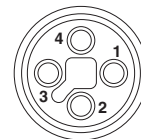
## Drawings

Schematic diagram



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

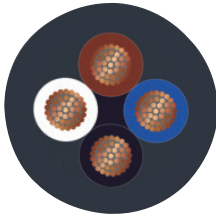
Schematic diagram



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

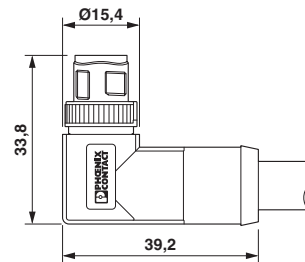
# Power cable - SAC-4P-MRT/ 1,0-PUR/FRT SCO - 1415196

Cable cross section



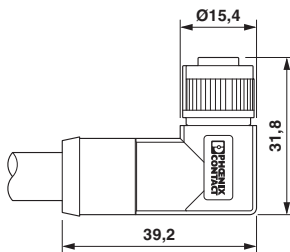
PUR halogen-free black [PUR]

Dimensional drawing



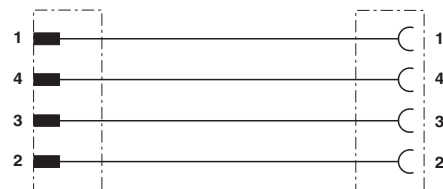
M12 x 1 male plug, angled

Dimensional drawing



M12 x 1 socket, angled

Circuit diagram



Contact assignment of M12 connector/socket

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