

Power cable - SAC-4P-MRT/ 2,0-PUR/FRT SCO - 1415197

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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: 2 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
Weight per Piece (excluding packing)	220.0 g
Custom tariff number	85444290
Country of origin	Germany

Technical data

Dimensions

Length of cable	2 m
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Ambient conditions

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

General

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Technical data

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
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 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

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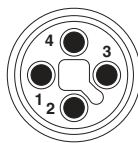
Technical data

Cable

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 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)

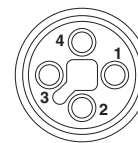
Drawings

Schematic diagram



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

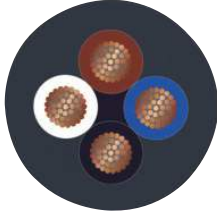
Schematic diagram



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

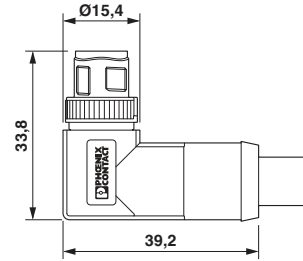
Power cable - SAC-4P-MRT/ 2,0-PUR/FRT SCO - 1415197

Cable cross section



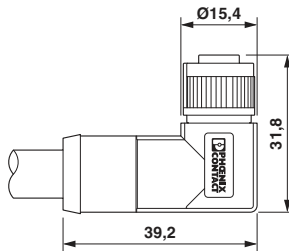
PUR halogen-free black [PUR]

Dimensional drawing



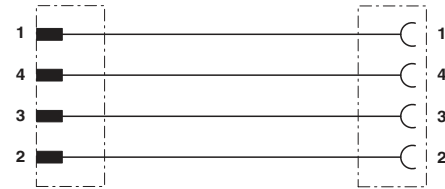
M12 x 1 male plug, angled

Dimensional drawing



M12 x 1 socket, angled

Circuit diagram



Contact assignment of M12 connector/socket

Classifications

eCl@ss

eCl@ss 5.1	27061801
eCl@ss 6.0	27279218
eCl@ss 8.0	27279218
eCl@ss 9.0	27060311

ETIM

ETIM 5.0	EC001855
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Approvals

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UL Listed / cUL Listed / cULus Listed

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Approvals


Ex Approvals

Approvals submitted

Approval details

UL Listed	
mm ² /AWG/kcmil	16
Nominal current I _N	12 A
Nominal voltage U _N	63 V

cUL Listed	
mm ² /AWG/kcmil	16
Nominal current I _N	12 A
Nominal voltage U _N	63 V

cULus Listed 
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