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Power cable, 4-position, PUR halogen-free, black-gray RAL 7021, Plug straight M12 SPEEDCON, T-coded, on Socket straight M12 SPEEDCON, T-coded, Cable length: 0.6 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 046356 838719
GTIN	4046356838719

## Technical data

#### Dimensions

Length of cable	0.6 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	$\geq$ 10 G $\Omega$
Coding	T power

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# Technical data

## General

Status display	No
Protective circuit/component	Unwired
Overvoltage category	III
Degree of pollution	3
Insertion/withdrawal cycles	> 100
Material	

#### Material

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

V0

## Standards and Regulations

### Cable

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	400000
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



# Technical data

## Cable

Material conductor insulation	PP
Conductor material	Bare Cu litz wires
Insulation resistance	$\geq$ 1 GΩ*km (at 20 °C)
Conductor resistance	$\leq$ 13 $\Omega$ /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

#### Cable cross section



PUR halogen-free black [PUR]

Plug, M12 x 1, straight, shielded

## Schematic diagram



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

#### Dimensional drawing





## Dimensional drawing





Circuit diagram

M12 x 1 socket, straight

Contact assignment of the M12 connector and the M12 socket

# Approvals

Approvals

#### Approvals

UL Listed / cUL Listed / cULus Listed

#### Ex Approvals

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## Approval details

UL Listed	LISTED	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm		FILE E 468743
mm²/AWG/kcmil			16	
Nominal current IN			12 A	
Nominal voltage UN			63 V	

cUL Listed	CUL	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm		FILE E 468743
mm²/AWG/kcmil			16	
Nominal current IN			12 A	
Nominal voltage UN			63 V	

cULus Listed





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