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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: 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
Weight per Piece (excluding packing)	580.0 g
Custom tariff number	85444290
Country of origin	Germany

#### Technical data

#### **Environmental Product Compliance**

REACh SVHC	DOTE 15571-58-1	
Dimensions		
Length of cable	5 m	
Ambient conditions		

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



## Technical data

#### Ambient conditions

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	
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 mm²	
AWG power supply	16	
Conductor structure, voltage supply	78x 0.15 mm	
Core diameter including insulation	2.35 mm ±0.05 mm	
Thickness, insulation	$\geq 0.25 \text{ mm}$	
Wire colors	brown, white, blue, black	
Overall twist	4 wires, twisted	
Length of twist, overall twist	90 mm	



## Technical data

#### Cable

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/s²
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



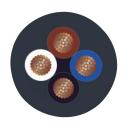
Schematic diagram



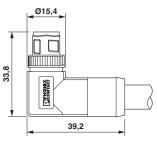
Pin assignment for M12 plug, 4-pos., T-coded, view of plug side

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

Cable cross section



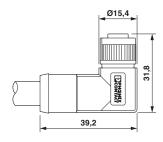
Dimensional drawing



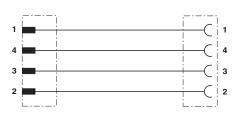
PUR halogen-free black [PUR]

M12 x 1 male plug, angled

Dimensional drawing



Circuit diagram



M12 x 1 socket, angled

Contact assignment of M12 connector/socket

#### Classifications

#### eCl@ss

eCl@ss 5.1	27143423
eCl@ss 6.0	27143423
eCl@ss 8.0	27279218
eCl@ss 9.0	27060311

#### **ETIM**

ETIM 5.0	EC001855



Approvals		
Approvals		
Approvals		
UL Listed / cUL Listed / cULus Listed		
Ex Approvals		
Approvals submitted		
Approval details		
UL Listed		
mm²/AWG/kcmil	16	
Nominal current IN	12 A	
Nominal voltage UN	63 V	
cUL Listed		
mm²/AWG/kcmil	16	
Nominal current IN	12 A	
Nominal voltage UN	63 V	
	<u> </u>	

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