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Power cable, 4-position, PUR halogen-free, black-gray RAL 7021, Plug straight M12, T-coded, on free cable end, cable length: 1.5 m

#### Why buy this product

- ☑ Protection against incorrect connection using special T-coding
- Our standard: robust halogen-free PUR cable



#### **Key Commercial Data**

Packing unit	1 STK
GTIN	4 046356 838764
GTIN	4046356838764

#### Technical data

#### Dimensions

Length of cable	1.5 m

#### Ambient conditions

Ambient temperature (operation)	-25 °C 85 °C (Plug / socket)
Degree of protection	IP65
	IP67
	IP68

#### General

Rated current at 40°C	12 A
Rated voltage	63 V (DC)
	63 V DC
Rated surge voltage	1.5 kV



#### Technical data

#### General

Number of positions	4
Insulation resistance	$\geq$ 100 M $\Omega$
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	CuSn
Contact surface material	Ni/Au
Contact carrier material	PA
Material of grip body	PA
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 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	≥ 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



#### Technical data

#### Cable

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	$\geq$ 1 G $\Omega$ *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)

#### **Environmental Product Compliance**

REACh SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

### Drawings

Schematic diagram



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

Cable cross section



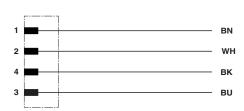
PUR halogen-free black [PUR]



# Dimensional drawing

Plug, M12 x 1, straight

#### Circuit diagram



Contact assignment of the M12 plug

## **Approvals**

Approvals

Approvals

UL Listed / cUL Listed / cULus Listed

Ex Approvals

#### Approval details

UL Listed	U <sub>L</sub> LISTED	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm		E468743
Nominal voltage UN			63 V	
Nominal current IN			12 A	
mm²/AWG/kcmil			16	

cUL Listed	CUL	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm		E468743
Nominal voltage UN			63 V	
Nominal current IN			12 A	
mm²/AWG/kcmil			16	



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