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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Power cable, 4-position, PUR halogen-free, black-gray RAL 7021, free cable end, on Socket angled M12 SPEEDCON, T-coded, Cable length: 2 m

Why buy this product

- ☑ Easy and safe: 100% electrically tested plug-in components
- High-performance: DC connectors for up to 12 A and 63 V DC
- ☑ Protection against incorrect connection using special T-coding



Key Commercial Data

Packing unit	1 STK
GTIN	4 046356 839785
GTIN	4046356839785

Technical data

Dimensions

Length of cable	2 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	63 V
Number of positions	4
Insulation resistance	≥ 10 GΩ
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
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 2023 / 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 2.25 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, fixed installation 10 x D Number of bending cycles 4000000 Minimum bending radius, drag chain applications 10 m Traversing path 10 m/s² Cable weight 109 kg/km		
Cable abbreviation LigyV1-11Y 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 Traversing rate 3 m/s Acceleration 10 m/s²	Cable type	PUR halogen-free black
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, fixed 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 type (abbreviation)	PUR
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 Traversing rate 3 m/s Acceleration 10 m/s²	Cable abbreviation	Li9YV1-11Y
AWG power supply 78x 0.15 mm Core diameter including insulation 2.35 mm ±0.05 mm Thickness, insulation 2.025 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 Minimum bending radius, drag chain applications 10 x D Traversing path 10 m Traversing rate 3 m/s Acceleration 10 m/s²	UL AWM style	20233 / 10493 (80°C/300 V)
Conductor structure, voltage supply 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 Minimum bending radius, drag chain applications 10 x D Traversing path 10 m Traversing rate 3 m/s Acceleration 10 m/s²	Conductor cross section	4x 1.5 mm²
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 $5 \times D$ Number of bending cycles 4000000 Minimum bending radius, drag chain applications $10 \times D$ Traversing path 10 m Traversing rate 3 m/s^2 Acceleration 10 m/s^2	AWG power supply	16
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/s²	Conductor structure, voltage supply	78x 0.15 mm
Wire colors Drown, white, blue, black Overall twist 4 wires, twisted Length of twist, overall twist 90 mm External sheath, color Duter 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 Minimum bending radius, drag chain applications 10 x D Traversing path 10 m Traversing rate 3 m/s Acceleration 10 m/s²	Core diameter including insulation	2.35 mm ±0.05 mm
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/s²	Thickness, insulation	≥ 0.25 mm
Length of twist, overall twist External sheath, color 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	Wire colors	brown, white, blue, black
External sheath, color 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 black-gray RAL 7021 black-gray RAL 7021 approx. 1.3 mm 8.4 mm ±0.25 mm 5 x D 10 x D 10 x D 10 m 10 m	Overall twist	4 wires, twisted
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	Length of twist, overall twist	90 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	External sheath, color	black-gray RAL 7021
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	Outer sheath thickness	approx. 1.3 mm
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	External cable diameter D	8.4 mm ±0.25 mm
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	Minimum bending radius, fixed installation	5 x D
Minimum bending radius, drag chain applications 10 x D Traversing path 10 m Traversing rate 3 m/s Acceleration 10 m/s²	Minimum bending radius, flexible installation	10 x D
Traversing path 10 m Traversing rate 3 m/s Acceleration 10 m/s²	Number of bending cycles	4000000
Traversing rate 3 m/s Acceleration 10 m/s ²	Minimum bending radius, drag chain applications	10 x D
Acceleration 10 m/s ²	Traversing path	10 m
	Traversing rate	3 m/s
Cable weight 109 kg/km	Acceleration	10 m/s²
	Cable weight	109 kg/km



Technical data

Cable

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)

Environmental Product Compliance

REACh SVHC	DOTE 15571-58-1

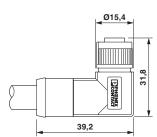
Drawings

Cable cross section



PUR halogen-free black [PUR]

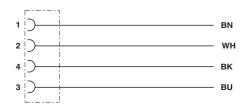
Dimensional drawing



M12 x 1 socket, angled



Circuit diagram



Contact assignment of the M12 socket

Approvals

Approvals

Approvals

UL Listed / cUL Listed / cULus Listed

Ex Approvals

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 cULus Listed



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