

Connection cable suitable for Keyence iOP-87903
PUR, 12.5xd
MAT904194283



Connection cable suitable for Keyence
iOP-87903 PUR, 12.5xd

- For medium duty applications
- PUR outer jacket
- Overall shield
- Coolant-resistant
- Notch-resistant
- Oil-resistant (according to DIN EN 50363-10-2)
- Up to 4 years guarantee

Product description

Introducing the Connecting Cable for Keyence iOP-87903, designed for medium duty applications. This cable features a durable PUR outer jacket, offering exceptional resistance to oil, coolant, and notches. Suitable for both indoor and outdoor use (excluding direct sunlight), it supports unsupported travel distances and gliding applications up to 20m. With its flame retardant, PVC-free, and UV-resistant properties, this cable ensures reliable performance in various environments.

General properties

Bus system	USB 3.0
Number of cores and conductor nominal cross-section	(2x(2xAWG28)+2x(2xAWG28)C)C
Outer diameter (d) max. mm	7 mm
Weight per km	64 kg/km
Copper index kg/km	39 kg/km

Electricity attributes

Nominal voltage	50V
UL Voltage Rating	300 V
Test voltage	500V



Properties and approvals

UV resistance	Medium
Oil resistance	Oil-resistant (according to DIN EN 50363-10-2), Class 3
Offshore	MUD-resistant according to NEK 606 - status 2018
Flame-retardant	According to IEC 60332-1-2, Cable Flame, VW-1, FT1, FT2/Horizontal Flame
Silicone-free	Free from silicone which can affect paint adhesion (according to PV 3.10.7 – status 1992)
Halogen-free	According to DIN EN 60754
UL verified	Certificate no. V293650: "The igus 4-year chainflex cable guarantee and service life calculator based on 2 billion test cycles per year"
UL/CSA AWM	Style 1598 and 20236, 30 V, 80 °C
NFPA	According to NFPA 79-2018, chapter 12.9
DNV	Type approval certificate TAE00003X6
Lead-free	According to 2011/65/EU (RoHS-II/RoHS-III)
Cleanroom	According to ISO Class 1. The outer jacket material of this series complies with CF77.UL.05.12.D - tested by IPA according to standard DIN EN ISO 14644-1
DESINA	According to VDW, DESINA standardisation
CE	According to 2014/35/EU

Cable structure

Conductor	Stranded conductor in an especially bend-resistant version consisting of bare copper wires (according to DIN EN 60228).
Core insulation	Mechanically high-quality TPE mixture.
Conductor colours	red/black, green/white-green blue/yellow, orange/purple
Core group 1 core structure	2x(2xAWG28)
Core group 1 colour code	red/black, green/white-green
Core group 2 core structure	2x(2xAWG28)C
Overall shield	Bend-resistant braiding made of tinned copper wires. Coverage approx. 55% linear, approx. 80% optical
Outer jacket	Low-adhesion, halogen-free, highly abrasion-resistant PUR mixture, adapted to suit the requirements in e-chains® (according to DIN EN 50363-10-2).
Outer jacket colour	Red lilac (comparable to RAL 4001)



Dynamic properties

Min. bend radius, e-chain (factor)	12.5 x d
Min. bend radius, e-chain	87.5 mm
Min. bend radius, flexible (factor)	10 x d
Min. bend radius, fixed (factor)	7 x d
Temperature e-chain®	-20°C up to +70°C
Temperature, flexible	-40°C to +70°C (according to DIN EN 60811-504)
Temperature, fixed	-50°C to +70°C (according to DIN EN 50305)
v max. unsupported (speed)	3 m/s
v max. gliding (speed)	2 m/s
a max. (acceleration)	30 m/s²
travel length	Class 3
torsion	No torsion

Certificates and standards

