

Connection cable suitable for Keyence iOP-87905
PVC, 12.5xd
MAT904194317



Connection cable suitable for Keyence
iOP-87905 PVC, 12.5xd

Product description

Introducing the Connecting Cable suitable for Keyence iOP-87905, designed for medium duty applications. With a durable PVC outer jacket, this cable is oil-resistant and flame-retardant, ensuring longevity in various environments. Ideal for indoor and outdoor use at temperatures above 5°C, it supports unsupported travel distances and gliding applications up to 20m. Perfect for bus connections in storage, machining, and handling units, this cable guarantees 10 million double strokes for reliable performance.

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	68 kg/km
Copper index kg/km	39 kg/km

Electricity attributes

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



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 PVC mixture, adapted to suit the requirements in e-chains® (according to DIN EN 50363-4-1).
Outer jacket colour	Red lilac (comparable to RAL 4001)

Properties and approvals

UV resistance	Medium
Oil resistance	Oil-resistant (according to DIN EN 50363-4-1), Class 2
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)
UL verified	Certificate no. V293650: "igus 4-year chainflex cable guarantee and service life calculator based on 2 billion test cycles per year"
UL/CSA AWM	Style 1598 and 2571, 30 V, 80 °C
NFPA	According to NFPA 79-2018, chapter 12.9
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 CF240.02.24 - tested by IPA according to standard DIN EN ISO 14644-1
CE	According to 2014/35/EU

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®	+5°C up to +70°C
Temperature, flexible	-5°C to +70°C (according to DIN EN 60811-504)
Temperature, fixed	-15°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

