

readycable® encoder cable suitable for Sigmatek

iF-R0-300-xxx-0-00, basic cable, PVC 7.5xd

MAT9722901



readycable® encoder cable suitable for

Sigmatek iF-R0-300-xxx-0-00, basic cable,

PVC 7.5xd

- For heavy-duty applications
- PVC outer jacket
- Oil resistant (following DIN EN 50363-4-1)
- Flame retardant
- Silicone-free
- Guarantee up to 4 years

Product description

Introducing the readycable® encoder cable, designed specifically for Sigmatek iF-R0-300-xxx-0-00 applications. This robust cable features a durable PVC outer jacket, making it ideal for heavy-duty use. It is oil resistant, flame retardant, and silicone-free, ensuring reliability in various environments. Suitable for both indoor and outdoor applications above 5°C, it supports unsupported travel distances and is perfect for machinery like storage and retrieval units. Trust readycable® for your demanding connectivity needs.

Manufacturer attributes

Manufacturer Part No	F-R0-300-xxx-0-00
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General properties

Number of cores and conductor nominal cross-section	(8x(2x0.25))C
Outer diameter (d) max. mm	10.5 mm
Weight per km	137 kg/km
Copper index kg/km	78 kg/km

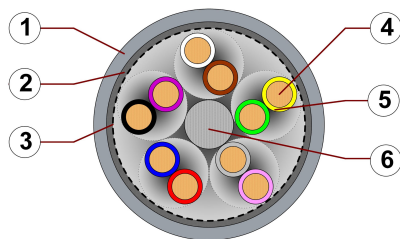


Electricity attributes

	Nominal voltage	300/300V (according to DIN VDE 0298-3)
	UL Voltage Rating	300 V
	Test voltage	1500V (according to DIN EN 50395)
	Maximum conductor resistance at 20°C [Ω /km]	79.0000

Cable structure

	Conductor	Very finely stranded special conductors of a particularly bend-resistant design, made of bare copper wires.
	Core insulation	Mechanically high-quality TPE mixture.
	Core stranding	Cores twisted in pairs with short pitch lengths, core pairs then wound with short pitch lengths.
	Conductor colours	Colour code according to DIN 47100
	Overall shield	Extremely flexible braiding made of tinned copper wires. Coverage linear approx. 70%, optical approx. 90%
	Outer jacket	Low-adhesion, oil-resistant PVC mixture, adapted to suit the requirements in e-chains® (according to DIN EN 50363-4-1).
	Outer jacket colour	Silver grey (comparable to RAL 7001)



1. Outer jacket: pressure extruded, oil-resistant PVC mixture
2. Overall shield: extremely flexible braiding made of tinned copper wires.
3. Banding: plastic foil
4. Conductor: very finely stranded special conductor of particularly bend-resistant design made of bare copper wires
5. Core insulation: mechanically high-quality TPE mixture
6. Strain relief: high tensile strength centre element



Dynamic properties

	Min. bend radius, e-chain (factor)	7.5 x d
	Min. bend radius, e-chain	78.75 mm
	Min. bend radius, flexible (factor)	6 x d
	Min. bend radius, fixed (factor)	4 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)	5 m/s
	v max. gliding (speed)	3 m/s
	a max. (acceleration)	50 m/s ²
	travel length	Class 5
	torsion	No torsion



chainflex® Lifetime

Guaranteed service life for this series according to the guarantee conditions

More information: chainflex® Guarantee

Double strokes* 5 million 7.5 million 10 million

Temperature, R min. R min. R min.

from/to [°C] [factorxd] [factorxd] [factorxd]

-25/-15 10 11 12

-15/+70 7.5 8.5 9.5

+70/+80 10 11 12

* Higher number of double strokes possible - use the service life calculation function on this page.

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 10493 and 2464, 300 V, 80 °C
	NFPA	According to NFPA 79-2018, chapter 12.9
	REACH	In accordance with Regulation (EC) No. 1907/2006 (REACH)
	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

Certificates and standards

