

readycable® hybrid cable suitable for Elau iE-MO-109, iVW3E1109Rxxx, basic cable PUR 10xd

MAT9850706



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- For medium-duty applications
- PUR outer jacket
- Shielded
- Oil-resistant and coolant-resistant
- Notch-resistant
- Flame retardant
- Hydrolysis and microbe-resistant
- PVC and halogen-free
- Guarantee up to 4 years

Product description

Introducing the readycable® hybrid cable, designed for Elau iE-MO-109 and iVW3E1109Rxxx applications. This versatile cable features a durable PUR outer jacket, offering impressive resistance to oil, flames, and coolants. Ideal for medium-duty indoor and outdoor use, it ensures reliable performance in low-temperature environments. With its halogen-free and silicone-free construction, it's perfect for various processing and machine tools, making it a smart choice for your connectivity needs.

Manufacturer attributes

Manufacturer Part No	iE-MO-109, iVW3E1109Rxxx
Cable type	Basic cable

Connectors

Connector A	Wire end sleeve
Connector B	Wire end sleeve



General properties

Number of cores and conductor nominal cross-section	(4G25+2x(2x1.5)C)C
Outer diameter (d) max. mm	27.5 mm
Weight per km	1422 kg/km
Copper index kg/km	1219 kg/km

Electricity attributes

 Nominal voltage	600/1,000V (according to DIN VDE 0298-3)
UL Voltage Rating	1000 V
 Test voltage	4000V (according to DIN EN 50395)

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, especially low-capacity XLPE mixture.
 Core stranding	Power cores and control pair elements wound with a short pitch length around a high tensile strength centre element.
 Conductor colours	Power cores: Cores black with white digits, one core green-yellow. 1st core: U / L1 / C / L+ 2nd core: V / L2 3rd core: W / L3 / D / L- 2 control pairs: cores black with white digits. 1st control wire: 5 2nd control wire: 6 3rd control wire: 7 4th control wire: 8
Core group 1 core structure	4G25
Core group 2 core structure	2x(2x1.5)C
 Element shield	Flexible braiding made of tinned copper wires.
 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	Pastel orange (comparable to RAL 2003)



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: "igus 4-year chainflex cable guarantee and service life calculator based on 2 billion test cycles per year"
	UL/CSA AWM	Style 30052 und 21209, 1000 V, 90°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)
	CE	According to 2014/35/EU



Dynamic properties

	Min. bend radius, e-chain (factor)	10 x d
	Min. bend radius, e-chain	275 mm
	Min. bend radius, flexible (factor)	8 x d
	Min. bend radius, fixed (factor)	5 x d
	Temperature e-chain®	-25°C up to +80°C
	Temperature, flexible	-40°C to +80°C (according to DIN EN 60811-504)
	Temperature, fixed	-50°C to +80°C (according to DIN EN 50305)
	v max. unsupported (speed)	10 m/s
	v max. gliding (speed)	2 m/s
	a max. (acceleration)	50 m/s ²
	travel length	Class 2
	torsion	No torsion



chainflex®Lifetime

Guaranteed service life for this series according to guarantee conditions
Further information: [chainflex® guarantee](#)

Double strokes*	5 million	7.5 million	10 million
Temperature,	R min.	R min.	R min.
from/to [°C]	[Factor x d]	[Factor x d]	[Factor x d]
-25 /-10	12.5	13.5	14.5
-15 /+70	10	11	12
+70 / +80	12.5	13.5	14.5

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

Certificates and standards

