

readycable® power cable suitable for Siemens

6FX_002-5CN31, basic cable, iguPUR 15xd

MAT9561577



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- For flexing applications
- iguPUR outer jacket
- Overall shield
- Flame retardant
- Silicone-free
- UV resistance: medium
- Oil-resistant (according to DIN EN 50363-10-2)
- Guarantee up to 4 years

Product description

Introducing the readycable® power cable, designed for Siemens 6FX_002-5CN31. This versatile basic cable features an iguPUR outer jacket, making it ideal for flexing applications and suitable for both indoor and outdoor use. Its flame-retardant and oil-resistant properties ensure durability in various environments. With medium UV resistance and a design for unsupported travels up to 10m, this cable is perfect for processing and machine tools, as well as low-temperature applications.

Manufacturer attributes

Manufacturer Part No	6FX_002-5CN31
Cable type	Basic cable

Connectors

Connector A	M40 connector, socket, 6-pin
Connector B	Sinamics connector/ring cable lug

General properties

Number of cores and conductor nominal cross-section	(4G2.5)C
Outer diameter (d) max. mm	10.5 mm
Weight per km	173 kg/km
Copper index kg/km	132 kg/km

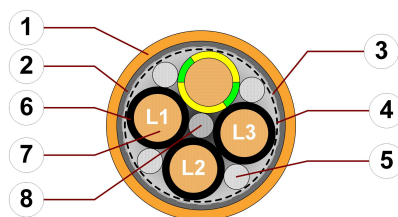


Electricity attributes

	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	Conductor consisting of bare copper wires (according to DIN EN 60228).
	Core insulation	Mechanically high-quality, especially low-capacitance TPE mixture.
	Core stranding	Cores wound with an optimised pitch length.
	Conductor colours	cores black with white numbers, one core green-yellow. 1st core: U / L1 / C / L+ 2nd core: V / L2 3rd core: W / L3 / D / L- (4G2.5)C
	Core group 1 core structure	
	Overall shield	Braiding made of tinned copper wires. Cover approx. 60% optical.
	Outer jacket	Low-adhesion iguPUR mixture, adapted to suit the requirements in e-chains®.
	Outer jacket colour	Pastel orange (comparable to RAL 2003)



1. Outer jacket: pressure extruded iguPUR mixture
2. Overall shield: braiding made of tinned copper wires
3. Shield film: aluminium-coated plastic foil
4. Banding: plastic foil
5. Filler: plastic yarns
6. Core insulation: mechanically high-quality, especially low-capacity TPE mixture
7. Conductor: strands consisting of bare copper wires
8. Strain relief: plastic core element



Properties and approvals

	UV resistance	Medium
	Oil resistance	Oil-resistant (according to DIN EN 50363-10-2), Class 3
	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: "The igus 4-year chainflex cable guarantee and service life calculator based on 2 billion test cycles per year"
	UL/CSA AWM	Style 10492 and 20940, 1000 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)
	CE	According to 2014/35/EU



Dynamic properties

	Min. bend radius, e-chain (factor)	15 x d
	Min. bend radius, e-chain	157.5 mm
	Min. bend radius, flexible (factor)	12 x d
	Min. bend radius, fixed (factor)	8 x d
	Temperature e-chain®	-40°C up to +80°C
	Temperature, flexible	-5°C up to +80°C
	Temperature, fixed	-50°C to +80°C (according to DIN EN 50305)
	v max. unsupported (speed)	3 m/s
	v max. gliding (speed)	0 m/s
	a max. (acceleration)	20 m/s ²
	travel length	Class 1
	torsion	No torsion



chainflex®Lifetime

Guaranteed service life for this series according to guarantee conditions

Further information: [chainflex® guarantee](#)

Double strokes*	1 million	3 million	5 million
Temperature,	R min.	R min.	R min.
from/to [°C]	[Factor x d]	[Factor x d]	[Factor x d]
-20 / -10	17.5	18.5	19.5
-10 / +70	15	16	17
+70 / +80	17.5	18.5	19.5

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

Certificates and standards

