

readycable® power cable suitable for Siemens

6FX_002-5CA68, extension cable, TPE 7.5xd

MAT9051007



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- For extremely heavy duty applications
- TPE outer jacket
- Overall shield
- Hydrolysis and microbe-resistant
- Flame retardant
- Silicone-free
- UV resistance: High
- Oil-resistant (following DIN EN 60811-404), resistant to bio oils (following VDMA 24568 with Plantocut 8 S-MB tested by DEA)
- CFRIP®
- Guarantee up to 4 years

Product description

Introducing the readycable® power cable, designed for Siemens 6FX_002-5CA68 applications. This durable extension cable features a robust TPE outer jacket, ensuring exceptional resistance to oil, UV, and harsh environmental conditions. Ideal for both indoor and outdoor use, it supports unsupported travels and gliding distances of over 400m. With flame retardant and hydrolysis-resistant properties, this cable is perfect for heavy-duty applications in high-bay warehouses, machining units, and cleanrooms.

Manufacturer attributes

Manufacturer Part No	6FX_002-5CA68
Cable type	Extension cable

Connectors

Connector A	round plug, socket
Connector B	coupling, pin



General properties

Number of cores and conductor nominal cross-section	(4G10)C
Outer diameter (d) max. mm	18.5 mm
Weight per km	632 kg/km
Copper index kg/km	468 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)
Maximum conductor resistance at 20°C [μm]	1.9100



Cable structure



Conductor

Conductor cable made of stranded wires (according to DIN EN 60228).



Core insulation

Mechanically high-quality, especially low-capacity XLPE mixture.



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- 4th core: 4 / N
(4G10)C

Core group 1 core structure



Inner jacket

TPE mixture adapted to suit the requirements in e-chains®.



Overall shield

Extremely flexible braiding made of tinned copper wires. Coverage linear approx. 70%, optical approx. 90%



Outer jacket

Low-adhesion, extremely abrasion-resistant and highly flexible TPE mixture, adapted to suit the requirements in e-chains®.



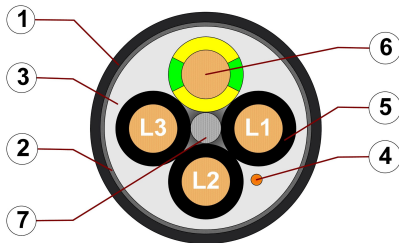
Outer jacket colour

Signal black (comparable to RAL 9004)



CFRIP®

Strip cables faster: a tear strip is moulded into the inner jacket



1. Outer jacket: pressure extruded, flame-retardant TPE mixture
2. Overall shield: extremely flexible braiding made of tinned copper wires
3. Inner jacket: pressure-extruded, gusset-filling TPE mixture
4. CFRIP: tear strip for faster stripping
5. Core insulation: mechanically high-quality, especially low-capacity XLPE mixture
6. Conductor: particularly flexible version consisting of bare copper wires
7. Strain relief: high tensile strength centre element



Properties and approvals

	UV resistance	High
	Oil resistance	Oil-resistant (according to DIN EN 60811-404), bio-oil-resistant (according to VDMA 24568 with Plantocut 8 S-MB tested by DEA), Class 4
	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 22188, 1000 V, 80 °C
	NFPA	According to NFPA 79-2018, chapter 12.9
	DNV	Type approval certificate TAE00003X9
	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 CF34.UL.25.04.D - 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)	7.5 x d
	Min. bend radius, e-chain	138.75 mm
	Min. bend radius, flexible (factor)	6 x d
	Min. bend radius, fixed (factor)	4 x d
	Temperature e-chain®	-35°C up to +90°C
	Temperature, flexible	-45°C to +90°C (according to DIN EN 60811-504)
	Temperature, fixed	-50°C to +90°C (according to DIN EN 50305)
	v max. unsupported (speed)	10 m/s
	v max. gliding (speed)	6 m/s
	a max. (acceleration)	80 m/s ²
	travel length	Class 13
	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,	v max. [m/s]		a max.	Travel	R min. [Factor x d]	R min. [Factor x d]	R min. [Factor x d]
from/to [°C]	unsupported	gliding	[m/s²]	[m]			
-35 / -25					10	11	12
-25 / +80	10	6	80	≤ 400	7.5	8.5	9.5
+80 / +90					10	11	12

* Higher number of double strokes possible - please ask for your individual calculation.

Certificates and standards

