

readycable® power cable suitable for Siemens

6FX_002-5DS51, basic cable PVC 7.5xd

MAT9751523



readycable® power cable suitable for Siemens

6FX_002-5DS51, basic cable PVC 7.5xd

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

Product description

Introducing the readycable® power cable, designed for Siemens 6FX_002-5DS51 applications. This robust cable features a durable PVC outer jacket, making it ideal for heavy-duty use. It's oil-resistant, flame-retardant, and silicone-free, ensuring safety and longevity. Suitable for both indoor and outdoor environments (above 5°C), it excels in unsupported and gliding travels up to 100m. Perfect for storage and retrieval units, machining units, and indoor cranes, this cable is your reliable solution for demanding tasks.

Manufacturer attributes

Manufacturer Part No	6FX_002-5DS51
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	(4G6.0+(2x1.5)C)C
Outer diameter (d) max. mm	18 mm
Weight per km	546 kg/km
Copper index kg/km	343 kg/km



Electricity attributes



Nominal voltage

600/1,000V (according to DIN VDE 0298-3)

UL Voltage Rating

1000 V



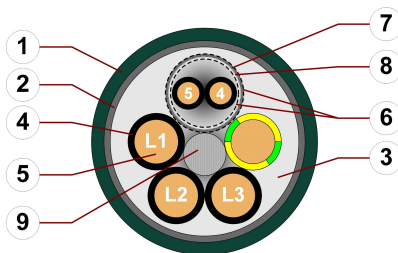
Test voltage

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 with control pair elements wound with elements for high-tensile stresses.
	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- Control pair: Cores black with white numbers. 1st control wire: 4 2nd control wire: 5
Core group 1 core structure		4G6.0
Core group 2 core structure		(2x1.5)C)C
	Element shield	Extremely bend-resistant braiding made of tinned copper wires.
Inner jacket		PVC 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 PVC mixture, adapted to suit the requirements in e-chains® (according to DIN EN 50363-4-1).
	Outer jacket colour	Moss green (comparable to RAL 6005)
CFRIP®		Strip cables faster: a tear strip is moulded into the inner jacket



1. Outer jacket: pressure-extruded, oil-resistant PVC mixture
2. Overall shield: extremely flexible braiding made of tinned copper wires.
3. Inner jacket: pressure-extruded, gusset-filling PVC mixture
4. Core insulation: mechanically high-quality, especially low-capacitance TPE mixture
5. Conductor: particularly resistant to bending made of bare copper wires
6. Element banding: plastic foil
7. Element shield: extremely flexible tinned copper wire
8. Shield film: aluminium-coated plastic foil
9. Strain relief: high tensile strength centre element



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: "The igus 4-year chainflex cable guarantee and service life calculator based on 2 billion test cycles per year"
	UL/CSA AWM	Style 30052 und 20886, 1000V, 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)
	Cleanroom	According to ISO Class 2. The outer jacket material of this series complies with CF5.10.07 - 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	135 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)	10 m/s
	v max. gliding (speed)	5 m/s
	a max. (acceleration)	80 m/s ²
	travel length	Class 5
	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]
+5 / +15	10	11	12
+15 / +60	7.5	8.5	9.5
+60 / +70	10	11	12

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

Certificates and standards

