

readycable® servo cable suitable for Siemens

6FX8002-5CN56, basic cable PVC 7.5xd

MAT9761561



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

Product description

Introducing the readycable® servo cable, expertly designed for Siemens 6FX8002-5CN56 applications. This heavy-duty cable features a durable PVC outer jacket and overall shielding for reliable performance. It's flame retardant, silicone-free, and offers medium UV resistance, making it suitable for both indoor and outdoor use in temperatures above 5°C. Ideal for storage and retrieval units, machining units, and indoor cranes, this cable is perfect for demanding environments.

Manufacturer attributes

Manufacturer Part No	6FX8002-5CN56
Cable type	Basic cable

Connectors

Connector A	M40 connector, socket, 6-pin
Connector B	Sinamics connector

General properties

Number of cores and conductor nominal cross-section	(4G6.0)C
Outer diameter (d) max. mm	16 mm
Weight per km	455 kg/km
Copper index kg/km	288 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 [μ Ω/km]	3.3000



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

Cores wound with a short pitch length around a high tensile strength centre element.



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
(4G6.0)C

Core group 1 core structure



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, oil-resistant PVC mixture, adapted to suit the requirements in e-chains® (according to DIN EN 50363-4-1).



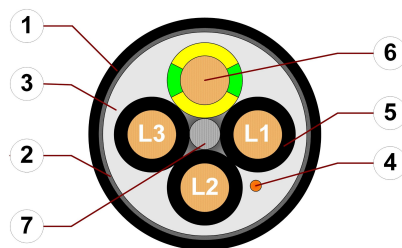
Outer jacket colour

Jet black (comparable to RAL 9005)



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. 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	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 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	120 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

