

readycable® servo cable suitable for Siemens

6FX_002-5DG21, basic cable PVC 15xd

MAT9451531



readycable® servo cable suitable for Siemens

6FX_002-5DG21, basic cable PVC 15xd

- For flexing applications
- PVC outer jacket
- Not oil-resistant
- Silicone-free
- Flame retardant
- Overall shield
- Guarantee up to 4 years

Product description

Introducing the readycable® servo cable, designed for Siemens 6FX_002-5DG21. This PVC cable is perfect for flexing applications, especially in indoor settings without oil exposure. Ideal for unsupported travels up to 10 meters, it excels in wood and stone processing, packaging, and handling devices. With a flame-retardant design and overall shielding, this silicone-free cable ensures safety and reliability in your operations. Choose readycable® for dependable performance in demanding environments.

Manufacturer attributes

Manufacturer Part No	6FX_002-5DG21
Cable type	Basic cable

Connectors

Connector A	round plug, socket
Connector B	open cable end

General properties

Number of cores and conductor nominal cross-section	(4G1.5+(2x1.5)C)C
Outer diameter (d) max. mm	12.5 mm
Weight per km	200 kg/km
Copper index kg/km	124 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

Power cores and control pair elements wound together in an optimised pitch length.



Conductor colours

Power cores: 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- 1 control pair: Cores black with white numbers. 1st control wire: 5 2nd control wire: 6

Core group 1 core structure

4G1.5

Core group 2 core structure

(2x1.5)C)C



Element shield

Foil taping of optimised, flexible foil shield.



Overall shield

Braiding made of tinned copper wires. Cover approx. 60% optical.



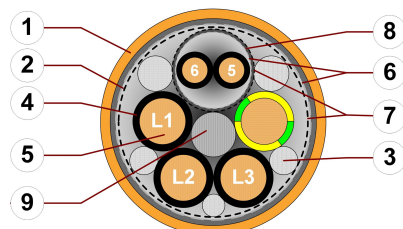
Outer jacket

Low-adhesion PVC mixture, adapted to suit the requirements in e-chains®.



Outer jacket colour

Pastel orange (comparable to RAL 2003)



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



Properties and approvals

	UV resistance	none
	Oil resistance	No oil resistance
	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 10492 and 2570, 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	187.5 mm
	Min. bend radius, flexible (factor)	12 x d
	Min. bend radius, fixed (factor)	8 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)	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]
+5 / +15	17.5	18.5	19.5
+15 / +60	15	16	17
+60 / +70	17.5	18.5	19.5

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

Certificates and standards

