

readycable® servo cable suitable for Siemens

6FX_002-5DS33, basic cable PUR 7.5xd

MAT9851532



readycable® servo cable suitable for Siemens

6FX_002-5DS33, basic cable PUR 7.5xd

- For extremely heavy duty applications
- PUR outer jacket
- Shielded
- Oil-resistant and coolant-resistant
- Notch-resistant
- Flame retardant
- Hydrolysis and microbe-resistant
- Guarantee up to 4 years

Product description

Introducing the readycable® servo cable, designed for Siemens 6FX_002-5DS33 applications. This heavy-duty cable features a durable PUR outer jacket, making it resistant to oil, UV rays, and extreme temperatures. It's perfect for both indoor and outdoor use, ensuring reliable performance in storage systems, machining units, and cleanrooms. With its flame-retardant, halogen-free, and notch-resistant qualities, this cable is built to withstand the toughest conditions while maintaining safety and efficiency.

Manufacturer attributes

Manufacturer Part No	6FX_002-5DS33
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	(4G25+(2x1.5)C)C
Outer diameter (d) max. mm	28 mm
Weight per km	1528 kg/km
Copper index kg/km	1173 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

4G25

Core group 2 core structure

(2x1.5)C)C



Element shield

Extremely bend-resistant braiding made of tinned copper wires.

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, halogen-free, highly abrasion-resistant PUR mixture, adapted to suit the requirements in e-chains® (according to DIN EN 50363-10-2).



Outer jacket colour

Pastel orange (comparable to RAL 2003)

CFRIP®

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



Dynamic properties

	Min. bend radius, e-chain (factor)	7.5 x d
	Min. bend radius, e-chain	210 mm
	Min. bend radius, flexible (factor)	6 x d
	Min. bend radius, fixed (factor)	4 x d
	Temperature e-chain®	-25°C up to +80°C
	Temperature, flexible	-40°C to +80°C (according to DIN EN 60811-504)
	Temperature, fixed	-50°C to +80°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]
-25 /-15	10	11	12
-15 /+70	7.5	8.5	9.5
+70 / +80	10	11	12

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



Properties and approvals

	UV resistance	Medium
	Oil resistance	Oil-resistant (according to DIN EN 50363-10-2), Class 3
	Offshore	MUD-resistant according to NEK 606 - status 2018
	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)
	Halogen-free	According to DIN EN 60754
	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 20234, 1000 V, 80 °C
	NFPA	According to NFPA 79-2018, chapter 12.9
	DNV	Type approval certificate TAE00003XA
	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 CF77.UL.05.12.D - tested by IPA according to standard DIN EN ISO 14644-1
	DESINA	According to VDW, DESINA standardisation
	CE	According to 2014/35/EU



Certificates and standards

