

readycable® measuring system cable suitable for
Siemens, 6FX_002-2DC42, TPE 6.8xd

MAT9941518



readycable® measuring system cable suitable
for Siemens, 6FX_002-2DC42, TPE 6.8xd

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

Product description

Introducing the readycable® measuring system cable, designed for Siemens applications. This cable features a durable TPE outer jacket, making it ideal for extremely heavy-duty use. It boasts exceptional oil resistance, including bio-oils, and is both halogen-free and silicone-free. Perfect for indoor and outdoor applications, it withstands unsupported travels and gliding distances of over 400m. Experience reliability in storage, machining, and low-temperature environments with this versatile cable solution.

Connectors

Connector A	connector, RJ45 Y-CONKIT IP67
Connector B	Plug-in connector M17 pin 10-pin

Manufacturer attributes

Manufacturer Part No	6FX_002-2DC42
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General properties

Number of cores and conductor nominal cross-section	(2x(2x0.20)+(2x0.38))C
Outer diameter (d) max. mm	7.5 mm
Weight per km	63 kg/km
Copper index kg/km	44 kg/km



Electricity attributes

	Nominal voltage	50V
	UL Voltage Rating	300 V
	Test voltage	1500V (according to DIN EN 50395)



Cable structure



Conductor

Stranded conductor in an especially flexible design consisting of tinned copper wires (according to DIN EN 60228).



Core insulation

Mechanically high-quality TPE mixture.



Core stranding

According to measuring system specification



Conductor colours

according to measuring system specification

Core group 1 core structure

2x(2x0.20)

Core group 1 colour code

green/yellow, pink/blue

Core group 2 core structure

(2x0.38)



Element shield

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

Element jacket

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

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®.

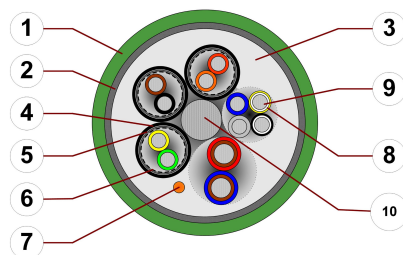


Outer jacket colour

Yellow-green (comparable to RAL 6018)

CFRIP®

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



1. Outer jacket: pressure-extruded, halogen-free TPE mixture
2. Overall shield: extremely flexible braiding made of tinned copper wires
3. Inner jacket: pressure-extruded, gusset-filling TPE mixture
4. Element jacket: mechanically high-quality TPE mixture
5. Element shield: extremely flexible tinned copper wire
6. Banding: plastic foil
7. CFRIP: tear strip for faster stripping
8. Core insulation: mechanically high-quality TPE mixture
9. Conductor: stranded wire conductors in a particularly flexible design made of tinned copper wires
10. Strain relief: high tensile strength centre element



Properties and approvals

	UV resistance	Medium
	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
	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: "The igus 4-year chainflex cable guarantee and service life calculator based on 2 billion test cycles per year"
UL AWM		Style 10467 and 22355, 300 V, 80 °C
	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 CF9.15.07 - tested by IPA according to standard DIN EN ISO 14644-1
	DESINA	According to VDW, DESINA standardisation
	CE	According to 2014/35/EU



Dynamic properties

	Min. bend radius, e-chain (factor)	6.8 x d
	Min. bend radius, e-chain	51 mm
	Min. bend radius, flexible (factor)	5 x d
	Min. bend radius, fixed (factor)	4 x d
	Temperature e-chain®	-35°C up to +90°C
	Temperature, flexible	-50°C to +90°C (according to DIN EN 60811-504)
	Temperature, fixed	-55°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)	100 m/s²
	travel length	Class 6
	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		12.5 million	
Temperature,	R min. [Factor x d]		R min. [Factor x d]		R min. [Factor x d]	
from/to [°C]	< 10 m	≥ 10 m	< 10 m	≥ 10 m	< 10 m	≥ 10 m
-35/-25	8.5	10	9.5	11	10.5	12
-25/+80	6.8	7.5	7.5	8.5	8.8	9.5
+80/+90	8.5	10	9.5	11	10.5	12

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

Certificates and standards

