

Motor cable | TPE | chainflex® CF340

- For heaviest duty applications
- TPE outer jacket
- Shielded
- Oil-resistant, bio-oil-resistant
- PVC and halogen-free
- UV-resistant
- Hydrolysis and microbe-resistant

Dynamic information

	Bend radius	e-chain® linear flexible	minimum 7.5 x d minimum 6 x d
		fixed	minimum 4 x d
	Temperature	e-chain® linear flexible	-35 °C to +90 °C -50 °C to +90 °C (following DIN EN 60811-504)
		fixed	-55 °C to +90 °C (following DIN EN 50305)
	v max.	unsupported	10 m/s
		gliding	6 m/s
	a max.		100 m/s²
	Travel distance		Unsupported travel distances and up to 400 m and more for gliding applications, Class 6

Cable structure

	Conductor	Conductor consisting of pre-wound conductor bundles (following DIN EN 60228).
	Core insulation	Mechanically high-quality TPE mixture.
	Overall shield	Extremely bending-resistant braiding made of tinned copper wires. Coverage approx. 70 % linear, approx. 90 % optical
	Outer jacket	Low-adhesion, extremely abrasion-resistant and highly flexible TPE mixture, adapted to suit the requirements in e-chains®. Colour: Jet black (similar to RAL 9005)

Electrical information

	Nominal voltage	600/1000 V (following DIN VDE 0298-3)
	Testing voltage	4000 V (following DIN EN 50395)

Class 7.6.4.1

Basic requirements	low	1	2	3	4	5	6	7	highest
Travel distance	unsupported	1	2	3	4	5	6	7	≥ 400 m
Oil resistance	none	1	2	3	4	5	6	7	highest
Torsion	none	1	2	3	4	5	6	7	±180°

Properties and approvals

	UV resistance	High.
	Oil resistance	Oil resistant (following DIN EN 60811-404), bio-oil resistant (following VDMA 24568 with Plantocut 8 S-MB tested by DEA), Class 4.
	Silicone-free	Free from silicone which can affect paint adhesion (following PV 3.10.7 – status 1992).
	Halogen-free	Following DIN EN 60754.
	EAC	Certificate no. RU C-DE.ME77.B.02324 (TR ZU)
	Lead-free	Following 2011/65/EU (RoHS-II).
	Cleanroom	According to ISO Class 1. Outer jacket material complies with CF9.15.07, tested by IPA according to standard 14644-1.
	CE	Following 2014/35/EU.

Guaranteed lifetime according to guarantee conditions (Page 22-23)

Double strokes*	5 million	7.5 million	10 million
Temperature, from/to [°C]	R min. [factor x d]	R min. [factor x d]	R min. [factor x d]
-35/-25	10	11	12
-25/+80	7.5	8.5	9.5
+80/+90	10	11	12

* Higher number of double strokes? Online lifetime calculation: www.igus.eu/chainflexlife

Typical mechanical application areas

- For heaviest duty applications
- Almost unlimited resistance to oil, also with bio-oils
- Indoor and outdoor applications, UV resistant
- Unsupported travel distances and up to 400 m and more for gliding applications
- Storage and retrieval units for high-bay warehouses, Machining units/machine tools, quick handling equipment, Clean room, semiconductor handling, outdoor cranes, low temperature applications

Part No.	Number of cores and conductor nominal cross section [mm²]	Outer diameter (d) max. [mm]	Copper index [kg/km]	Weight [kg/km]
CF340.40.01	(1x4.0)C	7.0	54	74
CF340.160.01	(1x16.0)C	10.0	178	209
CF340.250.01	(1x25.0)C	12.0	271	309
CF340.350.01	(1x35.0)C	13.5	383	420
CF340.500.01	(1x50.0)C	15.0	525	567
CF340.700.01	(1x70.0)C	17.5	763	816
CF340.950.01	(1x95.0)C	21.0	995	1072
CF340.1200.01	(1x120.0)C	22.0	1245	1315
CF340.1500.01	(1x150.0)C	24.5	1560	1608
CF340.1850.01	(1x185.0)C	27.5	1890	2110
CF340.2400.01	(1x240.0)C	30.5	2530	2637

Note: The given outer diameters are maximum values and may tend toward lower tolerance limits.
G = with green-yellow earth core x = without earth core