

TPE Motor cable | CF330-D

- For maximum mechanical load requirements
- TPE outer jacket
- Oil-resistant
- Bio-oil-resistant
- PVC-free/halogen-free
- UV-resistant
- Hydrolysis/microbe-resistant

Dynamic Information

	Bend radius	E-Chain®	min. 7.5 x d
		flexible	min. 6 x d
		fixed	min. 4 x d
	Temperature	E-Chain®	-31 °F to +194 °F (-35 °C to +90 °C)
		flexible	-58 °F to +194 °F (-50 °C to +90 °C)
		fixed	-67 °F to +194 °F (-55 °C to +90 °C)
	v max.	unsupported	32.81 ft/s (10 m/s)
		gliding	19.69 ft/s (6 m/s)
	a max.	328.1 ft/s² (100 m/s²)	
	Travel distance	Unsupported travel distances and for gliding applications up to 1312 ft (400 m) and more, Class 6	
	Torsion	± 90°, with 3.281 ft (1 m) cable length	

Cable structure

	Conductors	Conductor consisting of bare copper wires (according to EN 60228).
	Conductor insulation	Mechanically high-quality TPE mixture.
	Outer jacket	Low-adhesion mixture on the basis of TPE, especially abrasion-resistant and highly flexible, adapted to suit the requirements in E-Chains®. Color: Jet black (similar to RAL 9005)

Electrical Information

	Nominal voltage	1000 V
	Test voltage	4000 V (following DIN EN 50396)

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 EN 50267-2-1
	EAC	Certified according to no. TC RU C-DE.ME77.B.01255

Configurators ▶ www.igus.com/CF330

Requirements	low	1	2	3	4	5	6	7	highest
Travel distance	unsupported	1	2	3	4	5	6	1,312 ft +	
Oil resistance	none	1	2	3	4	highest			
Torsion	none	1	2	3	±180°				

Class 7.6.4.2

	Lead-free	Following 2011/65/EC (RoHS-II)
	Cleanroom	According to ISO Class 1. Outer jacket material complies with CF9-15-07, tested by IPA according to standard 14644-1
	DESINA	According to VDW, DESINA standardisation
	CE	Following 2014/35/EC

Guaranteed lifetime according to guarantee conditions (Page 22-25)

Cycles*	5 million			7.5 million			10 million		
	Temperature, from/to [°F]	v max. [ft/s] unsupported	a max. [ft/s²] gliding	Travel distance [ft]	R min. [factor x d]	R min. [factor x d]	R min. [factor x d]	R min. [factor x d]	R min. [factor x d]
-31 / -13				≤ 1,312	10	11	12		
-13 / +176		32.81	19.69	328.10	7.5	8.5	9.5		
+176 / +194					10	11	12		

* Higher number of cycles possible - please ask for your individual calculation.

Typical application areas

- For maximum mechanical load requirements
- Almost unlimited resistance to oil, also with bio-oils
- Indoor and outdoor applications, UV-resistant
- Unsupported travel distances and for gliding applications up to 1312 ft (400 m) and more
- Storage and retrieval units for high-bay warehouses, Machining units/machine tools, quick handling, Clean room, semiconductor insertion, outdoor cranes, low temperature applications

Part No.	AWG	Number of Conductors and rated cross section [mm²]	Outer diameter max.		Copper index		Weight	
			in.	mm	lbs/mft	kg/km	lbs/mft	kg/km
CF330-60-01-D	10	1 x 6.0	0.28	7.0	39.0	58	51.7	77
CF330-100-01-D	8	1 x 10.0	0.31	8.0	64.5	96	79.3	118
CF330-160-01-D	6	1 x 16.0	0.37	9.5	103.5	154	121.6	181
CF330-250-01-D	4	1 x 25.0	0.43	11.0	161.3	240	185.5	276
CF330-350-01-D	2	1 x 35.0	0.49	12.5	225.8	336	253.3	377
CF330-500-01-D	1	1 x 50.0	0.57	14.5	322.5	480	350.8	522
CF330-700-01-D	2/0	1 x 70.0	0.65	16.5	467.7	696	497.3	740
CF330-950-01-D	3/0	1 x 95.0	0.79	20.0	616.2	917	669.3	996
CF330-1200-01-D	4/0	1 x 120.0	0.85	21.5	779.5	1160	833.9	1241
CF330-1500-01-D	300	1 x 150.0	0.93	23.5	964.3	1435	1020.0	1518
CF330-1850-01-D	350	1 x 185.0	1.04	26.5	1193.4	1776	1329.2	1978

Note: The mentioned outer diameters are maximum values.
G = with green-yellow earth core x = without earth core

Order example: CF330-160-01-D – In your desired length
CF330-D Chainflex® series -160 Code nominal cross section -01 Number of conductors

Online order ▶ www.chainflex.com/CF330

Delivery time 24hr or today.
Delivery time means time until shipping of goods.

1,244 types from stock ... no cutting costs*
... no minimum order quantity ... *(up to 10 cuts of the same part number)

36 months guarantee on every chainflex® cable ...
... up to 10 million cycles guaranteed ...

