Motor cable | TPE | chainflex® CF330.D

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

Dynamic information

Bend radius	e-chain® linear	minimum 7.5 x d
	flexible	minimum 6 x d
	fixed	minimum 4 x d
Temperature	e-chain® linear	-35 °C to +90 °C
	flexible	-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
Torsion		± 90°, with 1 m cable length, Class 2

Cable structure

Conductor	Conductor consisting of pre-wound conductor bundles (following DIN EN 60228).
Core insulation	Mechanically high-quality TPE mixture.
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)

Example image

Class 7.6.4.2

Basic requirements	low	7 highest
Travel distance	unsupported	6 ≥ 400 m
Oil resistance	none	4 highest
Torsion	none	2 ±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.
DESINA	According to VDW, DESINA standardisation.
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]
CF330.60.01.D	1x6.0	7.0	58	77
CF330.100.01.D	1x10.0	8.0	96	118
CF330.160.01.D	1x16.0	9.5	154	181
CF330.250.01.D	1x25.0	11.0	240	276
CF330.350.01.D	1x35.0	12.5	336	377
CF330.500.01.D	1x50.0	14.5	480	522
CF330.700.01.D	1x70.0	16.5	696	740
CF330.950.01.D	1x95.0	20.0	917	996
CF330.1200.01.D	1x120.0	21.5	1160	1241
CF330.1500.01.D	1x150.0	23.5	1435	1518
CF330.1850.01.D	1x185.0	26.5	1776	1978

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

CF330.D
TPE
7.5 x d