

# Spindle cable/Single core | TPE | chainflex® CF330.D

**36** 10 million Guaranteed double strokes **7.5 x d** Bend radius, e-chain® **400 m** Travel distance, e-chain®

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

### Dynamic information

<b>Bend radius</b>	<b>e-chain® linear flexible</b>	minimum 7.5 x d
	<b>fixed</b>	minimum 6 x d
<b>Temperature</b>	<b>e-chain® linear flexible</b>	-35 °C up to +90 °C
	<b>fixed</b>	-50 °C up to +90 °C (following DIN EN 60811-504)
<b>v max.</b>	<b>unsupported</b>	10 m/s
<b>a max.</b>	<b>gliding</b>	6 m/s
<b>Travel distance</b>		100 m/s <sup>2</sup>
<b>Torsion</b>		Unsupported travels and up to 400 m and more for gliding applications, Class 6
		Torsion ±90°, with 1m cable length, Class 2

### Cable structure

<b>Conductor</b>	Conductor cable consisting of pre-leads (following DIN EN 60228).
<b>Core insulation</b>	Mechanically high-quality TPE mixture.
<b>Outer jacket</b>	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

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

### Properties and approvals

<b>UV resistance</b>	High
<b>Oil resistance</b>	Oil-resistant (following DIN EN 60811-404), bio-oil-resistant (following VDMA 24568 with Plantocut 8 S-MB tested by DEA), Class 4
<b>Silicone-free</b>	Free from silicone which can affect paint adhesion (following PV 3.10.7 – status 1992)
<b>Halogen-free</b>	Following DIN EN 60754
<b>UL verified</b>	Certificate No. B129699: „igus 36-month chainflex cable guarantee and service life calculator based on 2 billion test cycles per year“

Basic requirements	low	1	2	3	4	5	6	7	highest
Travel distance	unsupported	1	2	3	4	5	6	≥ 400 m	
Oil resistance	none	1	2	3	4	highest			
Torsion	none	1	2	3	4	±360°			

## Class 7.6.4.2

**EAC** EAC Certificate No. RU C-DE.ME77.B.02324 (TR ZU)

**REACH** In accordance with regulation (EC) No. 1907/2006 (REACH)

**RoHS** Lead-free Following 2011/65/EC (RoHS-II/RoHS-III)

**Clean-Room** 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** DESINA According to VDW, DESINA standardisation

**CE** CE Following 2014/35/EU

### Guaranteed service life (details see page 26-27)

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? Service life calculation online ► [www.igus.eu/chainflexlife](http://www.igus.eu/chainflexlife)

### Typical mechanical application areas

- For heaviest duty applications, Class 7
- Unsupported travels and up to 400 m and more for gliding applications, Class 6
- Almost unlimited resistance to oil, also with bio-oils, Class 4
- Torsion ±90°, with 1m cable length, Class 2
- Indoor and outdoor applications, UV-resistant
- Storage and retrieval units for high-bay warehouses, Machining units/machine tools, quick handling, Cleanroom, semiconductor insertion, outdoor cranes, low temperature applications

Part No.	Number of cores and conductor nominal cross section [mm <sup>2</sup> ]	Outer diameter (d) max. [mm]	Copper index [kg/km]	Weight [kg/km]
CF330.60.01.D	1x6.0	7.0	61	77
CF330.100.01.D	1x10	7.5	100	119
CF330.160.01.D	1x16	9.5	159	181
CF330.250.01.D	1x25	11.5	248	284
CF330.350.01.D	1x35	12.5	347	385
CF330.500.01.D	1x50	14.5	495	534
CF330.700.01.D	1x70	16.5	710	754
CF330.950.01.D	1x95	20.0	936	1015
CF330.1200.01.D	1x120	21.5	1184	1265
CF330.1500.01.D	1x150	23.5	1469	1548
CF330.1850.01.D	1x185	26.5	1928	2016

**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

Guarantee igus chainflex **36** month guarantee

igus 36-month chainflex cable guarantee and service life calculator based on 2 billion test cycles per year



Example image

igus® chainflex® CF330.D

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