

Fibre Optic Cable | TPE | chainflex® CFLG.G

36

10 million

Guaranteed double strokes

10 x d






Bend radius e-chain®

400 m





Travel distance, e-chain®

- Glass-fibre cable for heaviest duty applications
  - TPE outer jacket
  - Oil and bio-oil-resistant
- PVC and halogen-free
  - Low-temperature-flexible
  - Hydrolysis and microbe-resistant

Dynamic information

	<b>Bend radius</b>	<b>e-chain® linear</b>	min. 10 x d
		<b>flexible</b>	min. 8 x d
		<b>fixed</b>	min. 5 x d
	<b>Temperature</b>	<b>e-chain® linear</b>	-40 °C up to +80 °C
		<b>flexible</b>	-50 °C up to +80 °C (following DIN EN 60811-504)
		<b>fixed</b>	-55 °C up to +80 °C (following DIN EN 50305)
	<b>v max.</b>	<b>unsupported</b>	10 m/s
	<b>a max.</b>	<b>gliding</b>	6 m/s
	<b>Travel distance</b>	Unsupported travels and up to 400 m and more for gliding applications, Class 6	

Cable structure









	<b>Fibre Optic Cable</b>	9/125 µm, 50/125 µm, 62.5/125 µm fibres in gel-filled tubes.	
	<b>Core structure</b>	Gel-filled fibre sheath surrounded by GRP rods and torsion protection braid in the outer jacket.	
	<b>Core identification</b>	Fibres ► Product range table	
	<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)	

Basic requirements  
Travel distance  
Oil resistance  
Torsion

low	1	2	3	4	5	6	7	highest
unsupported	1	2	3	4	5	6	≥ 400 m	
none	1	2	3	4	highest			
none	1	2	3	4	±360°			

Class 7.6.4.1

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>Lead-free</b>	Following 2011/65/EC (RoHS-II)
	<b>Cleanroom</b>	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
	<b>CE</b>	Following 2014/35/EU
	<b>Info</b>	For hanging applications, please use cables of the series CFLG.LB - see page 204!

Guaranteed service life (details see 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]
-40/-30	12.5	13.5	14.5
-30/+70	10	11	12
+70/+80	12.5	13.5	14.5

\* 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 (horizontal), Class 6
- Almost unlimited resistance to oil, also with bio-oils, Class 4
- No torsion, Class 1
- Maximum EMC protection, with high transmission qualities
- Indoor and outdoor applications
- crane applications, Conveyor technique, low temperature applications



Example image





Example image

Part No.	Number of fibres/ Fibre diameter/ Conductor nominal cross section	Outer diameter (d) max.	Weight
		[mm]	[kg/km]
CFLG.6G.62.5/125.TC	6x62,5/125	10.0	80
CFLG.12G.62.5/125.TC	12x62,5/125	10.0	80
CFLG.6G.50/125.TC	6x50/125	10.0	80
CFLG.12G.50/125.TC	12x50/125	10.0	80
CFLG.12E.9/125.TC	12x9/125	10.0	80

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

Part No.	Bandwidth [MHz x km] @ 850 nm	Bandwidth [MHz x km] @ 1300 nm	Attenuation [dB/km] @ 850 nm	Attenuation [dB/km] @ 1300 nm
CFLG.6G.62.5/125.TC	≥ 200	≥ 500	≤ 3.5	≤ 1.0
CFLG.12G.62.5/125.TC	≥ 200	≥ 500	≤ 3.5	≤ 1.0
CFLG.6G.50/125.TC	≥ 500	≥ 500	≤ 3.0	≤ 1.0
CFLG.12G.50/125.TC	≥ 500	≥ 500	≤ 3.0	≤ 1.0

Part No.	Attenuation [dB/km] @ 1310 nm	Attenuation [dB/km] @ 1550 nm	Chromatic dispersion [ps/nm x km] @ 1310 nm	Chromatic dispersion [ps/nm x km] @ 1550 nm
CFLG.12E.9/125.TC	≤ 0.35	≤ 0.25	3.5	18

Part No.	Fibre identification	Hollow core identification
CFLG.6G.62.5/125.TC	ecru, yellow, green, red, violet, blue	orange
CFLG.12G.62.5/125.TC	ecru, yellow, green, red, violet, blue, light-blue, grey, brown, black, orange, pink	orange
CFLG.6G.50/125.TC	ecru, yellow, green, red, violet, blue	blue
CFLG.12G.50/125.TC	ecru, yellow, green, red, violet, blue, light-blue, grey, brown, black, orange, pink	blue
CFLG.12E.9/125.TC	ecru, yellow, green, red, violet, blue, light-blue, grey, brown, black, orange, pink	yellow

- Order example: CFLG.6G.62.5/125.TC – to your desired length (0.5 m steps)  
CFLG.G chainflex® series .6G Number of fibres .62,5/125 Fibre diameter .TC Special identification
- Online order ► [www.chainflex.eu/CFLG.G](http://www.chainflex.eu/CFLG.G)
- Delivery time 24hrs or today.  
Delivery time means time until goods are shipped.

