Fibre Optic Cable | TPE | chainflex® CFLG.G







- 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

Temperature

| Bend | radius |
|------|--------|
| | |

e-chain® linear min. 10 x d

flexible min. 8 x d fixed min. 5 x d

e-chain® linear -40 °C up to +80 °C

flexible -50 °C up to +80 °C (following DIN EN 60811-504) fixed -55 °C up to +80 °C (following DIN EN 50305)

unsupported 10 m/s

6 m/s

v max. gliding a max. 20 m/s^2

Unsupported travels and up to 400 m and more for gliding applications, Class 6

Cable structure



Travel distance

 $9/125 \mu m$, $50/125 \mu m$, $62.5/125 \mu m$ fibres in gel-filled tubes.



Gel-filled fibre sheath surrounded by GRP rods and torsion protection braid in the outer jacket.



► Product range table

Fibres

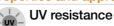


igus chainflex CFL6.6

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)

Properties and approvals



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)

Following DIN EN 60754 Halogen-free

High

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

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

(**E**CE Following 2014/35/EU

For hanging applications, please use cables of the series CFLG.LB - see page

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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

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































Fibre Optic Cable | TPE | chainflex® CFLG.G

igus" chainflex" CFLG.G

G =with green-yellow earth core x =without earth core

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. | | | | |

| 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



Delivery time 24hrs or today. Delivery time means time until goods are shipped.































