Torsion

# Single core flat cable | TPE | chainflex® CFFLAT

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

## **Dynamic information**

Bend radius e-chain® linear minimum 5 x d flexible minimum 4 x d fixed minimum 3 x d e-chain® linear -35°C up to +90°C Temperature

flexible -50°C up to +90°C (following DIN EN 60811-504) -55°C up to +90°C (following DIN EN 50305) fixed

10m/s unsupported v max. gliding 6m/s

100m/s<sup>2</sup>

Travel distance Unsupported travels and up to 100m for gliding applications, Class 5

#### Cable structure

Conductor Highly flexible braided special conductor.

Mechanically high-quality TPE mixture. Core insulation

> Low-adhesion, extremely abrasion-resistant and highly flexible TPE mixture, adapted to suit the requirements in e-chains<sup>®</sup>.

Colour: Steel blue (similar to RAL 5011)

#### **Electrical information**

Outer jacket

Nominal voltage 600/1,000V (following DIN VDE 0298-3)

4,000V (following DIN EN 50395) **Testing voltage** 

## Properties and approvals

Class 7.5.4.1

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)

Following DIN EN 60754 Halogen-free

**UL** verified Certificate No. B129699: "igus 36-month chainflex cable guarantee and

service life calculator based on 2 billion test cycles per year'

Certificate No. RU C-DE.ME77.B.00863/20

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

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

According to ISO Class 1. The outer jacket material of this series complies with Cleanroom CF9.15.07 - tested by IPA according to standard DIN EN ISO 14644-1

Following 2014/35/EU

**UK** UKCA In accordance with the valid regulations of the United Kingdom (as at 08/2021)  $\mathsf{C}\mathsf{A}$ 

## Typical application areas

- For heavy-duty applications, Class 7
- Unsupported travels and up to 100m for gliding applications, Class 5
- Almost unlimited resistance to oil, also with bio-oils, Class 4
- No torsion, Class 1
- Indoor and outdoor applications, UV-resistant
- Storage and retrieval units for high-bay warehouses, for small installation spaces and bend radii, machining units/machine tools, quick handling, cleanroom, semiconductor insertion, low-temperature applications

Part No.	Number of cores and conductor nominal cross section	Outer dimensions	Copper index	Weight
	[mm²]	[mm]	[kg/km]	[kg/km]
CFFLAT.40.01	1x4.0	14.0x5.5	48	117

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





























CFFLAT

chainflex

Snot