

chainflex® CFPE

**10 million**

Double strokes guaranteed

**7.5 x d**

Bend radius, e-chain®

**400m**

Travel distance, e-chain®

- For extremely heavy duty applications
- TPE outer jacket
- Oil and bio-oil-resistant
- Flame-retardant
- 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 up to +90°C

flexible

-45°C up to +90°C (following DIN EN 60811-504)

fixed

-50°C up to +90°C (following DIN EN 50305)

**v max.****unsupported**

10m/s

gliding

6m/s

**a max.**100m/s²**Travel distance**

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

**Torsion**

Torsion ±90°, with 1m cable length, Class 2

Cable structure

**Conductor**

Conductor cable consisting of pre-leads (following DIN EN 60228).

**Core insulation**

Mechanically high-quality TPE mixture.

**Core identification**

Green-yellow

**Outer jacket**

Low-adhesion, extremely abrasion-resistant and highly flexible TPE mixture, adapted to suit the requirements in e-chains®. Colour: Signal black (similar to RAL 9004)

Electrical information

**Nominal voltage**

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

**Testing voltage**

1,000V (following UL)

**Testing voltage**

4,000V (following DIN EN 50395)

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

**Flame-retardant**

According to IEC 60332-1-2, Cable Flame, VW-1, FT1, FT2 / Horizontal Flame

**Silicone-free**

Free from silicone which can affect paint adhesion (following PV 3.10,7 – status 1992)

**PTFE-free**

The design of these products does not contain PTFE



Basic requirements
Travel distance
Oil resistance
Torsion

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

Class 6.6.4.2



UL-verified



UL/CSA AWM



NFPA



DNV



REACH



Lead-free



Cleanroom



CE

Certificate No. V293650: igus 4-year chainflex cable guarantee and service life calculator based on 2 billion test cycles per year*

See data sheet for details ► www.igus.sk/CFPE

Following NFPA 79-2018, chapter 12.9

Type Approval Certificate TAE00003XC (Issue 04/2025)

Current information in the data sheet ► www.igus.sk/CFPE

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

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

According to ISO Class 1. The outer jacket material of this series complies with CF34,UL,25,04.D - tested by IPA according to standard DIN EN ISO 14644-1

Following 2014/35/EU

Guaranteed service life (details see page 14-15)

Double strokes*	5 million	7.5 million	10 million
Temperature, from/to [°C]	R min. [x d]	R min. [x d]	R min. [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.sk/chainflexlife

Typical application areas

- For heavy-duty applications, Class 6
- Unsupported travels and up to 400m 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 [mm²]	Outer diameter (d) max. [mm]	Copper index [kg/km]	Weight [kg/km]	Shop and prices online
CFPE.15.01	1G1.5	4.5	16	31	 www.igus.sk/CFPE
CFPE.25.01	1G2.5	5.5	25	42	
CFPE.40.01	1G4.0	6.0	41	59	
CFPE.60.01	1G6.0	7.0	61	83	
CFPE.100.01	1G10	7.5	100	124	
CFPE.160.01	1G16	9.5	159	195	
CFPE.250.01	1G25	11.5	248	294	
CFPE.350.01	1G35	12.5	347	395	
CFPE.500.01	1G50	14.5	495	551	
CFPE.700.01	1G70	16.5	725	813	
CFPE.950.01	1G95	20.0	936	1080	

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

