## New

# Motor cable | TPE | chainflex® CF34.UL.D





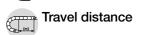


- For extremely heavy duty applications
- TPE outer jacket
- Oil and bio-oil-resistant
- Flame-retardant
- UV-resistant
- Hydrolysis and microbe-resistant

New core UL 90°C

#### **Dynamic information**

Bend radius	e-chain® linear	mininum 7.5 x d	
R	flexible	minimum 6 x d	
	fixed	minimum 4 x d	
Temperature	e-chain <sup>®</sup> 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	10 m/s	
	gliding	6 m/s	
a max.	80 m/s <sup>2</sup>		



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



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

#### Cable structure



Cores < 10 mm<sup>2</sup>: Stranded conductor in especially bending-resistant version

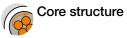
consisting of bare copper wires (following DIN EN 60228).

Cores ≥ 10 mm<sup>2</sup>: Conductor cable consisting of pre-leads (following DIN EN

60228).



Core insulation Mechanically high-quality, especially low-capacitance XLPE mixture.



Cores wound with a short pitch length around a high tensile strength centre

Core identification

Black cores with white numbers, one green-yellow core.

1. Core: U / L1 / C / L+ 2. Core: V / L2

3. Core: W / L3 / D / L- 4. Core: 4 / N

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)

CFRIP®

Strip cables faster: a tear strip is moulded into the outer jacket

Video ▶ www.igus.eu/CFRIP

### **Electrical information**



600/1000 V (following DIN VDE 0298-3) Nominal voltage

1000 V (following UL)

Testing voltage

4000 V (following DIN EN 50395)

Class 6.6.4.2

Properties and approvals

NFPA

UV resistance

Oil-resistant (following DIN EN 60811-404), bio-oil-resistant (following VDMA Oil resistance 24568 with Plantocut 8 S-MB tested by DEA), Class 4

Flame retardant According to IEC 60332-1-2, FT1, VW-1

High

Basic requirements

Travel distance

Oil resistance

Torsion

Following NFPA 79-2018, chapter 12.9

DNV-GL Type approval certificate No. TAE00003X9

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

CTP Certificate No. C-DE.PB49.B.00420 (Fire protection)

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

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

Cleanroom According to ISO Class 1, material/cable tested by IPA according to DIN EN

ISO standard 14644-1

DESINA According to VDW, DESINA standardisation

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					

#### Typical mechanical application areas

- For extremely heavy duty applications, Class 6
- 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

( **E**CE











CF34.UL.D

TPE

7.5 x d

36

























321

Strip cables 50 % faster

Basic requirements Travel distance Oil resistance Torsion 4

CF34.UL.D TPE 7.5 x d

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



















igus chainflex CF34.UL.D

Example image

Part No.	Number of cores and conductor nominal cross section	Outer diameter (d) max.	Copper index	Weight
	[mm²]	[mm]	[kg/km]	[kg/km]
CF34.UL.15.04.D	4G1.5	8.0	61	102
CF34.UL.25.04.D	4G2.5	10.0	100	159
CF34.UL.40.04.D	4G4.0	11.5	163	236
CF34.UL.60.04.D	4G6.0	13.5	237	332
CF34.UL.60.05.D	5G6.0	15.0	297	406
CF34.UL.100.04.D	4G10	16.5	407	537
CF34.UL.100.05.D	5G10	19.5	515	670
CF34.UL.160.04.D	4G16	20.0	646	819
CF34.UL.160.05.D	5G16	22.5	815	1009
CF34.UL.250.04.D	4G25	24.5	1014	1271
CF34.UL.100.04.O.PE.D	4x10	16.5	407	537
CF34.UL.160.04.O.PE.D	4x16	20.0	646	819

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



Order example: CF34.UL.15.04.D – to your desired length (0.5 m steps) CF34.UL.D chainflex® series .15 Code nominal cross section .04 Number of cores



Online order ▶ www.chainflex.eu/CF34.UL.D



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





Reduce cost, improve technology, now!

Do the chainflex® price check now ... www.igus.eu/cf-price-check

... for example: Reduce cost with CF300.UL.D

Guarantee **ेववववववववववव** 

chainflex cable guarantee and service life calculator based on 2 billion test cycles per year

igus 36-month



