

**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
- Shielded
- Oil and bio-oil-resistant
- Flame-retardant
- UV-resistant
- Hydrolysis and microbe-resistant

**Now with 90°C
UL/CSA AWM
approval**

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.		80m/s²
	Travel distance		Unsupported travels and up to 400m and more for gliding applications, Class 6

Cable structure

	Conductor	Cores <10mm²: Stranded conductor in especially bending-resistant version consisting of bare copper wires (following DIN EN 60228).
		Cores ≥ 10mm²: Conductor cable consisting of pre-leads (following DIN EN 60228). Mechanically high-quality, especially low-capacitance XLPE mixture.
	Core insulation	
	Core structure	Cores wound with a short pitch length around a high tensile strength centre element.
	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
	Inner jacket	TPE mixture adapted to suit the requirements in e-chains®.
	Overall shield	Extremely bending-resistant braiding made of tinned copper wires. Coverage linear approx. 70%, optical approx. 90%
	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 inner jacket Video ► www.igus.sk/CFRIP

Electrical information

	Nominal voltage	600/1,000V (following DIN VDE 0298-3) 1,000V (following UL)
	Testing voltage	4,000V (following DIN EN 50395)

4-year guarantee ... more than 1,350 cable types from stock ... no cutting costs

Class 6.6.4.1

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
	UL-verified	Certificate No. V293650: „igus 4-year chainflex cable guarantee and service life calculator based on 2 billion test cycles per year“
	UL/CSA AWM	See data sheet for details ► www.igus.sk/CF35UL
	NFPA	Following NFPA 79-2018, chapter 12.9
	DNV	Type Approval Certificate TAE00003X9 (Issue 04/2025) Current information in the data sheet ► www.igus.sk/CF35UL
	REACH	In accordance with regulation (EC) No. 1907/2006 (REACH)
	Lead-free	Following 2011/65/EC (RoHS-II/RoHS-III)
	Cleanroom	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
- No torsion, Class 1
- 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



igus 4-year
chainflex cable
guarantee and
service life
calculator based
on 2 billion test
cycles per year

Strip cables 50% faster with CFRIP® tear strip

igus® chainflex® CF35.UL

Image exemplary

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
CF35.UL.05.04	(4G0.5)C	7.5	42	79	 www.igus.sk/CF35UL
CF35.UL.07.04	(4G0.75)C	8.0	58	90	
CF35.UL.15.04	(4G1.5)C	10.0	89	146	
CF35.UL.25.04	(4G2.5)C	11.5	133	207	
CF35.UL.40.04	(4G4.0)C	13.0	203	290	
CF35.UL.60.04	(4G6.0)C	16.0	288	423	
CF35.UL.100.04	(4G10)C	18.5	468	632	
CF35.UL.160.04	(4G16)C	23.0	738	974	
CF35.UL.250.04	(4G25)C	27.5	1153	1481	
CF35.UL.60.03.O.PE ¹¹⁾	(3x6.0)C	14.5	229	344	
CF35.UL.250.03.O.PE ¹¹⁾	(3x25)C	24.5	880	1163	

¹¹⁾ Phase-out model

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

**Cables available in the chainflex® CASE**

Simple savings on delivery, storage space and re-ordering with the chainflex® CASE - ship'n store by igus®.

More on this online: www.igus.sk/cf-case



Class 6.6.4.1

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°



Order example: **CF35.UL.05.04** - to your required length (0.5m steps)
CF35.UL chainflex® series **.05** Code nominal cross section **.04** Number of cores



Order online ► www.igus.sk/CF35UL



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

cost down...



...life up

Reduce cost, improve technology, now!

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

... for example: **reduce cost with CF310.UL ...**

4-year guarantee ... more than 1,350 cable types from stock ... no cutting costs

UL-verified chainflex® guarantee ... www.igus.sk/ul-verified