



10 million

Double strokes guaranteed



10 x d

Bend radius, e-chain®



400m

Travel distance, e-chain®

- For maximum voltages and outputs
- igupren outer jacket
- Shielded
- Oil-resistant
- Flame-retardant

Dynamic information



Bend radius

e-chain® linear

minimum 10 x d

flexible

minimum 8 x d

fixed

minimum 5 x d



Temperature

e-chain® linear

-20°C up to +80°C

flexible

-25°C up to +80°C (following DIN EN 60811-504)

fixed

-30°C up to +80°C (following DIN EN 50305)



v max.

unsupported

10m/s



a max.

gliding

6m/s



Travel distance

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

Cable structure



Conductor

Highly-flexible cable consisting of tinned copper wires (following DIN EN 60228).



Core insulation

Inner and outer semiconducting layer made of conductive rubber. Insulating sheath made of highly-quality, heat-resistant and ozone-proof ethylene propylene rubber (EPR).



Overall shield

Extremely bending-resistant, tinned copper shield.

Coverage approx. 95% optical



Outer jacket

Low-adhesion iguprene mixture, especially abrasion resistant, adapted to suit the requirements in e-chains® (following VDE 0207, Part 21).
Colour: Fire red (similar to RAL 3000)

Electrical information



Nominal voltage

6/10kV (following DIN VDE 0250), other voltages upon request.



Testing voltage

17kV (following DIN VDE 0250, Part 813)

Basic requirements
Travel distance
Oil resistance
Torsion

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

Class 6.6.3.1

Properties and approvals



UV resistance

High



Oil resistance

Oil-resistant (following DIN EN 60811-404)



Flame-retardant

According to IEC 60332-1-2



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“



REACH

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



Lead-free

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



CE

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]
-20/-10	12.5	13.5	14.5
-10/+70	10	11	12
+70/+80	12.5	13.5	14.5

* Higher number of double strokes? Service life calculation online ► www.igus.sk/chainflexlife

Typical application areas

- For maximum voltages and outputs, Class 6
- Unsupported travels and up to 400m and more for gliding applications, Class 6
- Almost unlimited resistance to oil, Class 3
- No torsion, Class 1
- Indoor and outdoor applications, UV-resistant
- Ship to shore, crane applications, conveyor technology

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
New CFCRANE1x25/16-6/10kV	(1x25/16)C	25.5	526	977	 www.igus.sk/CFCRANE
New CFCRANE1x35/16-6/10kV	(1x35/16)C	26.5	653	1123	
New CFCRANE1x50/16-6/10kV	(1x50/16)C	27.5	676	1279	
New CFCRANE1x70/16-6/10kV	(1x70/16)C	30.5	1036	1626	
New CFCRANE1x95/16-6/10kV	(1x95/16)C	33.5	1307	2,002	
New CFCRANE1x120/16-6/10kV	(1x120/16)C	35.0	1593	2332	
New CFCRANE1x185/25-6/10kV	(1x185/25)C	39.0	2311	3241	

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

