



Example image

36

10,000,000

Cycles guaranteed

7.5 x d

Bend radius E-Chain®

328.1 ft

Travel distance E-Chain®

● For high mechanical load requirements

● PVC outer jacket

● Shielded

● Twisted pair

● Oil-resistant

● Flame-retardant

Dynamic Information

Bend radius

E-Chain® linear

flexible

fixed

min. 7.5 x d

min. 6 x d

min. 4 x d

Temperature

E-Chain® linear

flexible

fixed

+41 °F to +158 °F (+5 °C to +70 °C)

+23 °F to +158 °F (-5 °C to +70 °C)

+5 °F to +158 °F (-15 °C to +70 °C)

v max.

unsupported

gliding

16.41 ft/s (5 m/s)

9.84 ft/s (3 m/s)

a max.

164.1 ft/s² (50 m/s²)

Travel distance

Unsupported travel distances and for gliding applications up to 328.1 ft (100 m), Class 5

Cable structure

Conductor

Conductor consisting of bare copper wires.

Conductor insulation

Mechanically high-quality TPE mixture.

Conductor construction

Twisted Pairs cabled together with short pitch lengths.

Color code

Color code in accordance with DIN 47100.

Intermediate layer

Polyester tape over external layer

Overall shield

Extremely bending-resistant tinned copper braid.
90 % optical coverage

Outer jacket

Low-adhesion, oil-resistant mixture on the basis of PVC, adapted to suit the requirements in E-Chains® (following DIN EN 50363-4-1).
Color: Gray (similar to RAL 7001)

Electrical Information

Nominal voltage

300 V

Test voltage

1500 V (following DIN EN 50395)

Class 5.5.2.1

Properties and approvals

Oil resistance

Oil-resistant (following DIN EN 50363-4-1), Class 2

Flame resistance

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

Silicone-free

Free from silicone which can affect paint adhesion (following PV 3.10.7 – status 1992)

UL verified

Certificate No. B129699: igus 36-month chainflex cable guarantee and service life calculator based on 2 billion test cycles per year

UL/CSA AWM

300 V, +80 °C

NFPA 79

See data sheet for details ► www.igus.com/CF211

EAC

Complies to Electrical Standard for Industrial Machinery NFPA 79 Section 12.9

REACH

Certificate No. RU C-DE.ME77.B.00300/19 (TR ZU)

Lead-free

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

Cleanroom

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

CE

Following 2014/35/EU

Guaranteed service life (details see page 26-27)

Cycles*	5 million	7.5 million	10 million
Temperature, from/to [°F]	R min. [factor x d]	R min. [factor x d]	R min. [factor x d]
+41/+59	10	11	12
+59/+140	7.5	8.5	9.5
+140/+158	10	11	12

* Higher number of cycles? Online lifetime calculation ► www.chainflex.com/chainflexlife

Typical application areas

- For high mechanical load requirements, Class 5
- Unsupported travel distances and for gliding applications up to 328 ft (100 m), Class 5
- Light oil influence, Class 2
- Preferably indoor applications, can be used in outdoor applications with temperatures > 41 °F
- Storage and retrieval units for high-bay warehouses, machining units/ packaging machines, Handling, indoor cranes

Configurators ► www.igus.com/CF211

36 month guarantee ... 1,354 types from stock ... no cutting charges



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

Guarantee

igus chainflex

36

up to 36 months guarantee

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

CF211

CF211

UL

UL

REACH

REACH

RoHS

RoHS

Clean-Room

Clean-Room

CE

CE

