

**10 million**

Double strokes guaranteed

**7.5 x d**

Bend radius, e-chain®

**100m**

Travel distance, e-chain®

- For extremely heavy duty applications
- PUR outer jacket
- Shielded
- Oil-resistant and coolant-resistant

- Notch-resistant
- Flame-retardant
- Hydrolysis and microbe-resistant
- PVC and halogen-free

**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**

-25°C up to +80°C

flexible

-40°C up to +80°C (following DIN EN 60811-504)

fixed

-50°C up to +80°C (following DIN EN 50305)

**v max.**

unsupported

10m/s

**a max.**

gliding

5m/s

**Travel distance**

Unsupported travels and up to 100m for gliding applications, Class 5

Cable structure**Conductor**

Stranded conductor in especially bending-resistant version consisting of bare copper wires (following DIN EN 60228).

**Core insulation**

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

**Core structure**

Power cores with control pair elements wound with elements for high tensile stresses.

**Core identification****Power cores:** 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-

1 control pair: Black cores with white numbers.

1. Control core: 4 2. Control core: 5

2 control pairs: Black cores with white numbers.

1. Control core: 5 2. Control core: 6 3. Control core: 7 4. Control core: 8

Star quad: yellow, black, red, white

Extremely bending-resistant braiding made of tinned copper wires.

**Element shield****Inner jacket**

TPE mixture adapted to suit the requirements in e-chains®.

**Overall shield**

Extremely bending-resistant braiding made of tinned copper wires.

**Outer jacket**Coverage linear approx. 70%, optical approx. 90%
the requirements in e-chains® (following DIN EN 50363-10-2)
Colour: Pastel orange (similar to RAL 2003)**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)

Class 6.5.3.1**Properties and approvals****UV resistance**

Medium

**Oil resistance**

Oil-resistant (following DIN EN 50363-10-2), Class 3

**Offshore**

MUD-resistant following NEK 606 - status 2016

**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)

**Halogen-free**

Following DIN EN 60754

**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/CF27D**NFPA**

Following NFPA 79-2018, chapter 12.9

**DNV**

Type Approval Certificate TAE00003XA (Issue 04/2025)

Current information in the data sheet ► www.igus.sk/CF27D**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 CF77.UL.05.12.D - tested by IPA according to standard DIN EN ISO 14644-1

**DESINA**

According to VDW, DESINA standardisation

**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]
-25/-15	10	11	12
-15/+70	7.5	8.5	9.5
+70/+80	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 100m for gliding applications, Class 5
- Almost unlimited resistance to oil, Class 3
- 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



4-year
guarantee
for 10 years
guarantee
calculator based
on 2 billion test
cycles per year

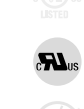


Image exemplary

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	
1 control pair shielded						
CF27.07.05.02.01.D	(4G0.75+(2x0.5)C)C	11.5	76	169	 www.igus.sk/ CF27D	
CF27.15.15.02.01.D	(4G1.5+(2x1.5)C)	13.0	145	244		
CF27.25.15.02.01.D	(4G2.5+(2x1.5)C)C	14.5	199	306		
CF27.40.15.02.01.D	(4G4.0+(2x1.5)C)C	16.0	256	403		
CF27.60.15.02.01.D	(4G6.0+(2x1.5)C)C	17.5	343	505		
CF27.100.15.02.01.D	(4G10+(2x1.5)C)C	21.0	536	746		
CF27.160.15.02.01.D	(4G16+(2x1.5)C)C	24.0	797	1086		
CF27.250.15.02.01.D	(4G25+(2x1.5)C)C	28.0	1173	1528		
CF27.350.15.02.01.D	(4G35+(2x1.5)C)C	32.0	1618	1998		
2 control pairs shielded						
CF27.07.03.02.02.D	(4G0.75+2x(2x0.34)C)C	12.5	103	196		
CF27.10.07.02.02.D	(4G1.0+2x(2x0.75)C)	13.5	148	245		
CF27.15.07.02.02.D	(4G1.5+2x(2x0.75)C)C	14.5	167	287		
CF27.25.15.02.02.D	(4G2.5+2x(2x1.5)C)C	16.0	254	383		
CF27.40.15.02.02.D	(4G4.0+2x(2x1.5)C)C	17.5	308	459		
CF27.60.15.02.02.D	(4G6.0+2x(2x1.5)C)C	19.5	412	604		
CF27.100.15.02.02.D	(4G10+2x(2x1.5)C)C	22.5	592	842		
CF27.160.15.02.02.D	(4G16+2x(2x1.5)C)C	26.0	878	1223		
CF27.250.15.02.02.D	(4G25+2x(2x1.5)C)C	31.0	1250	1699		
1 star-quad shielded						
CF27.15.05.04.D	(4G1.5+(4x0.5)C)C	12.5	131	231		
CF27.25.05.04.D	(4G2.5+(4x0.5)C)C	14.0	176	292		
CF27.40.05.04.D	(4G4.0+(4x0.5)C)	16.0	244	376		
without control pair						
CF27.07.04.D	(4G0.75)C	9.5	55	115		
CF27.15.04.D	(4G1.5)C	11.0	90	165		
CF27.25.04.D	(4G2.5)C	12.5	135	231		
CF27.500.04.D	(4G50)C	37.0	2244	2817		

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



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

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 6.5.3.1



Order example: **CF27.40.15.02.01.D** - to your required length (0.5m steps)

CF27.D chainflex® series .40 Code nominal cross section .10 Code nominal cross section signal pairs
.02 Identification pairs .01 Number of pairs



Order online ► www.igus.sk/CF27D



Delivery time 24hrs or today.

Delivery time means time until goods are shipped.

cost down...



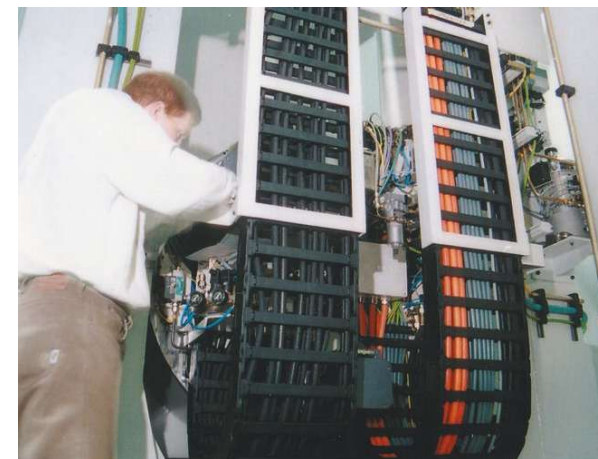
Reduce cost, improve technology, now!

Do the chainflex® price check ...

www.igus.sk/cf-price-check

... for example: **reduce cost with CF21.UL ...**

...life up



Modular design, easy to retrofit: igus® E4 e-chain® and chainflex® cables.



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



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