

Control cable | PVC | chainflex® CFSOFT2

36

20 million

Double strokes guaranteed

5 x d






Bend radius, e-chain®

5m








Travel distance, e-chain®

- For heaviest duty applications and very small radii down to 5 x d
  - Highly flexible, soft design
  - PVC outer jacket
- Shielded
  - Oil-resistant
  - Flame-retardant



Dynamic information

	Bend radius	e-chain® linear flexible	minimum 5 x d minimum 4 x d minimum 3 x d
	Temperature	e-chain® linear flexible	+5°C up to +70°C -5°C up to +70°C (following DIN EN 60811-504)
	v max.	fixed	-15°C up to +70°C (following DIN EN 50305)
	a max.	unsupported	10m/s
	Travel distance	gliding	5m/s
			80m/s²
			Short, very fast applications with small radii and restricted installation space, Class 1



Cable structure

	Conductor	Very finely stranded special conductors with especially soft and bending resistant design, made of bare copper wires.
	Core insulation	Mechanically high-quality TPE mixture.
	Core structure	Cores wound in a layer with especially short pitch length.
	Core identification	Cores < 0.75mm²: Colour code in accordance with DIN 47100. Cores ≥ 0.75mm²: Black cores with white numbers, one green-yellow core.
	Intermediate layer	Foil taping over the outer layer.
	Overall shield	Extremely bending-resistant braiding made of tinned copper wires. Coverage linear approx. 70%, optical approx. 90%
	Outer jacket	Low-adhesion, oil-resistant PVC mixture, adapted to suit the requirements in e-chains® (following DIN EN 50363-4-1). Colour: jet black (similar to RAL 9005)

Electrical information

	Nominal voltage	300/500V (following DIN VDE 0298-3) 300V (following UL)
	Testing voltage	2,000V (following DIN EN 50395)

Properties and approvals

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

EPLAN download, configurators ► [www.igus.eu/CFSOFT2](http://www.igus.eu/CFSOFT2)

36-month guarantee ... more than 1,350 cable types from stock ... no cutting charges



EU2023

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UL-verified chainflex® guarantee ... [www.igus.eu/ul-verified](http://www.igus.eu/ul-verified)

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 7.1.2.1



Flame-retardant



Silicone-free



UL verified



UL/CSA AWM



NFPA



EAC



REACH



Lead-free



Cleanroom



CE



UKCA

According to IEC 60332-1-2, Cable Flame, VW-1, FT1, FT2 / Horizontal Flame

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

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

See data sheet for details ► [www.igus.eu/CFSOFT2](http://www.igus.eu/CFSOFT2)

Following NFPA 79-2018, chapter 12.9

Certificate No. RU C-DE.ME77.B.00300/19

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

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

According to ISO Class 2. The outer jacket material of this series complies with CF5.10.07 - tested by IPA according to standard DIN EN ISO 14644-1

Following 2014/35/EU

In accordance with the valid regulations of the United Kingdom (as at 08/2021)

Guaranteed service life (details see page 28-29)

Double strokes*	10 million	15 million	20 million
Temperature, from/to [°C]	R min. [factor x d]	R min. [factor x d]	R min. [factor x d]
+5/+15	6.8	7.5	8.5
+15/+60	5	6	7
+60/+70	6.8	7.5	8.5

\* Higher number of double strokes? Service life calculation online ► [www.igus.eu/chainflexlife](http://www.igus.eu/chainflexlife)

Typical application areas

- For heaviest duty applications and very small radii down to 5 x d, Class 7
- Especially for short, very fast applications with small radii and restricted installation space, Class 1
- Light oil influence, Class 2
- No torsion, Class 1
- Especially soft cable design, for reduced forces
- Pick and place machines, automatic doors, cleanroom, very quick handling

Part No.	Number of cores and conductor nominal cross section [mm²]	Outer diameter (d) max. [mm]	Copper index [kg/km]	Weight [kg/km]
CFSOFT2.02.03	(3x0.25)C	6.0	17	41
CFSOFT2.02.08	(8x0.25)C	7.5	38	86
CFSOFT2.03.04	(4x0.34)C	6.5	24	50
CFSOFT2.05.04	(4x0.5)C	7.5	36	80

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



Example image