

Control cable | TPE | chainflex® CF99.PLUS



100 million
Double strokes guaranteed

3 x d
Bend radius, e-chain®

100m
Travel distance, e-chain®

- For heaviest duty applications and very small radii down to 3 x d
- TPE outer jacket
- Shielded
- Oil and bio-oil-resistant
- PVC and halogen-free
- Low-temperature-flexible
- Hydrolysis and microbe-resistant

100 million double strokes in e-chains® guaranteed!

Dynamic information

	Bend radius	e-chain® linear flexible fixed	minimum 3 x d minimum 3 x d minimum 2 x d
	Temperature	e-chain® linear flexible fixed	-35°C up to +90°C -50°C up to +90°C (following DIN EN 60811-504) -55°C up to +90°C (following DIN EN 50305)
	v max.	unsupported gliding	10m/s 6m/s
	a max.		100m/s ²
	Travel distance		Short, very fast applications with small radii and restricted installation space, Class 5
Cable structure			
	Conductor	Conductor consisting of a highly flexible special alloy.	
	Core insulation	Mechanically high-quality TPE mixture.	
	Core structure	Cores wound in a layer with especially short pitch length.	
	Core identification	Colour code in accordance with DIN 47100.	
	Inner jacket	TPE mixture adapted to suit the requirements in e-chains®.	
	Overall shield	Extremely bending resistant braiding made of alloy 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: Steel blue (similar to RAL 5011)	

Electrical information

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

Example image

EPLAN download, configurators ► www.igus.eu/CF99PLUS

4-years guarantee ... more than 1,350 cable types from stock ... no cutting charges

Basic requirements

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 7.5.4.1

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
	Silicone-free	Free from silicone which can affect paint adhesion (following PV 3.10.7 – status 1992)
	Halogen-free	Following DIN EN 60754
	PFAS-free	Use of PFAS-free materials according to the content of the REACH directive and its rules for the production and processing of chemical substances
	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)
	Cleanroom	According to ISO Class 1. The outer jacket material of this series complies with CF9.15.07 - tested by IPA according to standard DIN EN ISO 14644-1
	CE	Following 2014/35/EU

Guaranteed service life (details see page 28-29)

Double strokes*	5 million	40 million	100 million
Temperature, from/to [°C]	R min. [x d]	R min. [x d]	R min. [x d]
-35/-25	4	6	7
-25/+80	3	5	6
+80/+90	4	6	7

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

Typical application areas

- For heaviest duty applications and very small radii down to 3 x d, Class 7
- Especially for short, very fast applications with small radii and restricted installation space, Class 5
- Almost unlimited resistance to oil, also with bio-oils, Class 4
- No torsion, Class 1
- Indoor and outdoor applications, UV-resistant
- Pick and place machines, automatic doors, cleanroom, very quick handling



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

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Example image

Part No.	Number of cores and conductor nominal cross section [mm ²]	Outer diameter (d) max. [mm]	Copper index [kg/km]	Weight [kg/km]
CF99.PLUS.01.02	(2x0.14)C	6.0	12	39
CF99.PLUS.01.04	(4x0.14)C	6.5	16	48
CF99.PLUS.01.08	(8x0.14)C	8.0	28	76
CF99.PLUS.02.04	(4x0.25)C	7.0	23	60
CF99.PLUS.03.08	(8x0.34)C	9.5	45	111

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 on page 24/25 and online: www.igus.eu/cf-case



Order example: CF99.PLUS.01.02 – to your desired length (0.5m steps)

CF99.PLUS chainflex® series .01 Code nominal cross section .02 Number of cores



Order online ► www.igus.eu/CF99PLUS



Delivery time 24hrs or today.

Delivery time means time until goods are shipped.

Class 7.5.4.1

Basic requirements
Travel distance
Oil resistance
Torsion

low	1	2	3	4	5	6	7	highest
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3 x d



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