

Control cable | TPE | chainflex® CF98



- For heaviest duty applications and especially small radii up to 4 x d
- TPE outer jacket
- Oil-resistant, bio-oil-resistant
- PVC and halogen-free
- Low-temperature-flexible
- Hydrolysis and microbe-resistant

Dynamic information

	Bend radius	e-chain® linear minimum 4 x d flexible minimum 4 x d fixed minimum 3 x d
	Temperature	e-chain® linear -35 °C to +90 °C flexible -50 °C to +90 °C (following DIN EN 60811-504) fixed -55 °C to +90 °C (following DIN EN 50305)
	v max.	unsupported 10 m/s gliding 6 m/s
	a max.	100 m/s ²
	Travel distance	Short, very fast applications with small radii and tight design space, Class 5
	Torsion	± 90°, with 1 m cable length, Class 2

Cable structure

	Conductor	Conductor consisting of a special highly flexible alloy.
	Core insulation	Mechanically high-quality TPE mixture.
	Core structure	Cores wound in a layer with a short pitch length.
	Core identification	Colour code in accordance with DIN 47100. CF98.02.03.INI: brown, blue, black CF98.03.04.INI: brown, blue, black, white
	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	300/300 V
	Testing voltage	1500 V

Example image

Basic requirements	low	1	2	3	4	5	6	7	highest
Travel distance	unsupported	1	2	3	4	5	6	≥ 400 m	
Oil resistance	none	1	2	3	4	highest			
Torsion	none	1	2	3	± 180°				

Class 7.5.4.2

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.
	EAC	Certificate no. RU C-DE.ME77.B.01254 (TR ZU)
	Lead-free	Following 2011/65/EU (RoHS-II).
	Cleanroom	According to ISO Class 1. Outer jacket material complies with CF9.15.07, tested by IPA according to standard 14644-1.
	CE	Following 2014/35/EU.

Guaranteed lifetime according to guarantee conditions (Page 22-23)

Double strokes*	20 million	30 million	40 million
Temperature, from/to [°C]	R min. [factor x d]	R min. [factor x d]	R min. [factor x d]
-35/-25	5	6	7
-25/+80	4	5	6
+80/+90	5	6	7

* Higher number of double strokes? Online lifetime calculation: www.igus.eu/chainflexlife

Typical mechanical application areas

- For heaviest duty applications and especially small radii up to 4 x d
- Almost unlimited resistance to oil, also with bio-oils
- Indoor and outdoor applications, UV resistant
- Especially for short, very fast applications with small radii and tight design space
- Pick and place machines, automatic doors, Clean room, very quick handling equipment

Part No.	Number of cores and conductor nominal cross section [mm ²]	Outer diameter (d) max. mm	Copper index kg/km	Weight kg/km
CF98.01.02	2x0.14	4.0	4	11
CF98.01.03 ¹⁾	3x0.14	4.5	6	14
CF98.01.04	4x0.14	5.0	9	16
CF98.01.08	8x0.14	6.5	16	24
CF98.02.03.INI	3x0.25	5.0	12	25
CF98.02.04	4x0.25	5.5	16	30
CF98.02.07	7x0.25	6.5	26	53
CF98.02.08	8x0.25	7.0	30	60
CF98.03.04.INI	4x0.34	5.5	19	35
CF98.03.07 ¹⁾	7x0.34	7.0	32	55
CF98.05.04	4x0.5	6.0	31	40

¹⁾ Phase-out model
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

