






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°				








Measuring system cable | iguPUR | chainflex® CF894

- For flexing applications
- iguPUR outer jacket
- Oil-resistant
- Shielded
- Flame retardant



Dynamic information

 Bend radius	e-chain® linear flexible fixed	minimum 15 x d minimum 12 x d minimum 8 x d
 Temperature	e-chain® linear flexible fixed	-20 °C to +80 °C -40 °C to +80 °C (following DIN EN 60811-504) -50 °C to +80 °C (following DIN EN 50305)
 v max.	unsupported	3 m/s
 a max.		20 m/s ²
 Travel distance		Unsupported travel distances up to 10 m, Class 1

Cable structure











 Conductor	Conductor consisting of bare copper wires (following DIN EN 60228).	
 Core insulation	Mechanically high-quality TPE mixture.	
 Core structure	According to measuring system specification.	
 Core identification	According to measuring system specification. ▶ Product range table	
 Element shield	Foil taping of optimised, bending-resistant foil shield. Coverage approx. 100 % optical	
 Overall shield	Braiding made of tinned copper wires. Coverage approx. 60 % optical	
 Outer jacket	Low-adhesion iguPUR mixture, adapted to suit the requirements in e-chains®. Colour: Yellow-green (similar to RAL 6018)	

Electrical information

 Nominal voltage	50 V
 Testing voltage	500 V

Class 3.1.3.1

Properties and approvals

 UV resistance	Medium.
 Oil resistance	Oil-resistant (following DIN EN 50363-10-2), Class 3.
 Flame retardant	According to IEC 60332-1-2, CEI 20-35, FT1, VW-1
 Silicone-free	Free from silicone which can affect paint adhesion (following PV 3.10.7 – status 1992).
 UL/GSA	Style 1589 and 20236, 30 V, 80 °C
 NFFPA	Following NFPA 79-2012 chapter 12.9.
 EAC	Certificate no. RU C-DE.ME77.B.01559 (TR ZU)
 CTP	Certificate no. C-DE.PB49.B.00449 (Fire safety)
 Lead-free	Following 2011/65/EU (RoHS-II).
 CE	Following 2014/35/EU.

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

Double strokes*	1 million	3 million	5 million
Temperature, from/to [°C]	R min. [factor x d]	R min. [factor x d]	R min. [factor x d]
-20/-10	17.5	18.5	19.5
-10/+70	15	16	17
+70/+80	17.5	18.5	19.5

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

Typical mechanical application areas

- For flexing applications
- With influence of oil
- Indoor and outdoor applications without direct solar radiation
- Especially for unsupported travels
- Machining units/machine tools, low temperature applications



Example image



Example image

Part No.	Number of cores and conductor nominal cross section [mm²]	Outer diameter (d) max. [mm]	Copper index [kg/km]	Weight [kg/km]	Part No.	Core group	Colour code
CF894.001	(3x(2x0.14)C+(4x0.14)+(2x0.5))C	8.5	43	90	CF894.001	3x(2x0.14)C 4x0.14 2x0.5	green/yellow, black/brown, red/orange grey, blue, white-yellow, white-black brown-red, brown-blue
CF894.006	(3x(2x0.14)C+(4x0.14)+(4x0.22)+(2x0.5))C	9.0	53	113	CF894.006	3x(2x0.14)C 4x0.14 4 x 0.22 2x0.5	green/yellow, black/brown, red/orange grey, blue, white-yellow, white-black brown-yellow, brown-grey, green-black, brown-red brown-red, brown-blue
CF894.011	(4x(2x0.34)+4x0.5)C	9.5	68	116	CF894.011	4x(2x0.34) 4x0.5	black/brown, red/orange, yellow/green, blue/violet blue-white, black-white, red-white, yellow-white
CF894.015	(4x(2x0.14)+4x0.5)C	8.5	47	90	CF894.015	4x(2x0.14) 4x0.5	brown/green, violet/yellow, grey/pink, red/black blue, white, brown-green, white-green
CF894.022	((2x0.25)+5x0.5)C	8.0	44	83	CF894.022	5x0.5 2x0.25	blue, green, yellow, grey, pink white, brown
CF894.028	(2x(2x0.15)+(2x0.38))C	7.5	43	66	CF894.028	2x(2x0.15) 2x0.38	green/yellow, pink/blue red, black

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



Order example: **CF894.011** – to your desired length (0.5 m steps)
CF894 chainflex® series .011 Measuring system code



Online order ► www.chainflex.eu/CF894



Delivery time 24h or today.
Delivery time means time until shipping of goods.

