

# Motor cable | iguPUR | chainflex® CF896

- 36** 5 million Guaranteed double strokes
- 15 x d** Bend radius, e-chain®
- 10 m** Travel distance, e-chain®

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

## Dynamic information

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

## Cable structure

<b>Conductor</b>	Conductor consisting of bare copper wires (according to DIN EN 60228).
<b>Core insulation</b>	Mechanically high-quality, especially low-capacitance TPE mixture.
<b>Core structure</b>	Cores wound with an optimised pitch length.
<b>Core identification</b>	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-
<b>Overall shield</b>	Braiding made of tinned copper wires. Coverage optical approx. 60 %
<b>Outer jacket</b>	Low-adhesion iguPUR mixture, adapted to suit the requirements in e-chains®. Colour: Pastel orange (similar to RAL 2003)

## Electrical information

<b>Nominal voltage</b>	600/1000 V (following DIN VDE 0298-3) 1000 V (following UL)
<b>Testing voltage</b>	4000 V (following DIN EN 50395)

## Properties and approvals

<b>UV resistance</b>	Medium
<b>Oil resistance</b>	Oil-resistant (following DIN EN 50363-10-2), Class 3
<b>Flame retardant</b>	According to IEC 60332-1-2, FT1, VW-1

EPLAN download, configurators ► [www.igus.eu/CF896](http://www.igus.eu/CF896)

36 month guarantee ... 1,354 types from stock ... no cutting charges

Basic requirements  
Travel distance  
Oil resistance  
Torsion

low	1	2	3	4	5	6	7	highest
unsupported	1	2	3	4	5	6	≥ 400 m	
none	1	2	3	4	highest			
none	1	2	3	4	±360°			

## Class 3.1.3.1

- Silicone-free** Free from silicone which can affect paint adhesion (following PV 3.10.7 – status 1992)
- UL verified** 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/CF896](http://www.igus.eu/CF896)
- UL/CSA AWM**
- NFPA** Following NFPA 79-2018, chapter 12.9
- EAC** Certificate No. RU C-DE.ME77.B.00302/19 (TR ZU)
- REACH** In accordance with regulation (EC) No. 1907/2006 (REACH)
- Lead-free** Following 2011/65/EC (RoHS-II/RoHS-III)
- CE** Following 2014/35/EU

## Guaranteed service life (details see page 26-27)

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]	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? Service life calculation online ► [www.igus.eu/chainflexlife](http://www.igus.eu/chainflexlife)

## Typical mechanical application areas

- For flexing applications, Class 3
- Especially for unsupported travels, Class 1
- With influence of oil, Class 3
- Indoor and outdoor applications without direct sun radiation
- Machining units/machine tools, low temperature applications

Part No.	Number of cores and conductor nominal cross section [mm <sup>2</sup> ]	Outer diameter (d) max. [mm]	Copper index [kg/km]	Weight [kg/km]
CF896.15.04	(4G1.5)C	9.0	82	122
CF896.25.04	(4G2.5)C	10.5	132	173
CF896.40.04	(4G4.0)C	12.0	204	257
CF896.60.04	(4G6.0)C	14.5	306	378
CF896.100.04	(4G10)C	18.5	458	653
CF896.160.04	(4G16)C	21.0	709	835

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

**Guarantee**  
igus chainflex

# 36

month guarantee

**igus 36-month chainflex cable guarantee and service life calculator based on 2 billion test cycles per year**

**Guarantee**  
igus chainflex

# 36

month guarantee

igus 36-month chainflex cable guarantee and service life calculator based on 2 billion test cycles per year



Example image