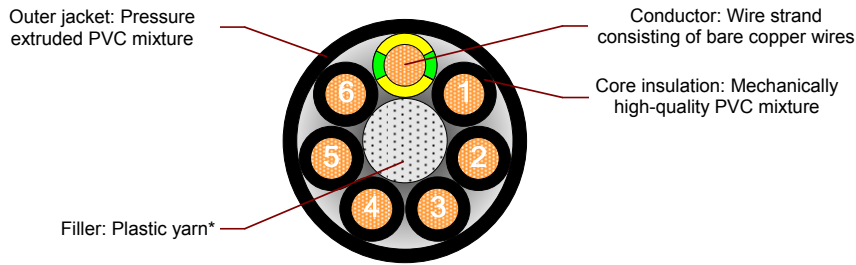


Data sheet

CF880

PVC - e-chain® - control cable for flexible load requirements (class 3.1.1): flame-retardant.



* For exceptions see [construction table](#).

Example drawing
(For a detail overview see [construction table](#))

Core design:

Conductor: Wire strand consisting of bare copper wires (following DIN EN 60228).
Core insulation: Mechanically high-quality PVC mixture.
Core identification: Black cores with white numerals & one core greenyellow.

Jacket design:

Outer jacket: Low-adhesion mixture on the basis of PVC adapted to suit the requirements in e-chains®.
 • flame-retardant (according to IEC 60332-1-2, CEI 20-35, VW-1, FT-1)
 • silicon-free (following PV 3.10.7 - status 1992)
 • lead-free (following 2011/65/EU (RoHS-II))
 • UV-resistance: Medium

Colour outer jacket: Jet Black (similar to RAL 9005)

Cable marking (White):

„00000 m*** igus chainflex M CF880.---° ---° 300/500V E310776

cigus AWM Style 2464 VW-1 AWM I/II A/B 80°C 300V FT-1 EAC/CTP

CE RoHS-II conform www.igus.de +++ chainflex cable works +++

** **Length printing:** Not calibrated. Only intended as an orientation aid.

⊙ / ⊚: Cable identification according to part no. (see [technical table](#) for details).

Ex.: CF880.15.04.: ⇒ ...igus chainflex CF880.15.04 4G1,5 300/500V...

General mechanical values:

(for individual details see [technical table](#))

Guaranteed lifetime for this series according to the "chainflex® guarantee club" conditions (see chainflex® catalogue and www.igus.eu/chainflex-guarantee)				
Double strokes*		1 million	3 million	5 million
Temperature (from/to) [°C]	Travel distance (TD)	Min. bending radius for e-chain® use [Factor multiplied by outer diameter (d)] (Ex.: CF880.05.02 at 20°C: 12,5 x 5,5 mm → Min. bending radius 68,75 mm)		
+5 / +15	≤ 10 m	15,0	16,0	17,0
+15 / +60		12,5	13,5	14,5
+70 / +70		15,0	16,0	17,0

*: Minimum guarantee lifetime of the cable under the specified conditions.

The installation of the cable is recommended within the middle temperature range.

Temperature range	-20 °C ←	+5 °C ←	+15 °C ↔ +60 °C	→ +70 °C
Min. bending radius for fixed installation	12,5 x d	10,0 x d	7,5 x d	10,0 x d
Torsion (at 1 m cable length)	---	±15 °	±45 °	±15 °

General electrical values:

(for individual details see [technical table](#))

Nominal voltage: 300 / 500 V (following DIN VDE 0245)

Test voltage: 2 kV (following DIN EN 50396)

Certifications: cigus: (E310776: Style 11008 & 2464, 300 V / 80 °C)

Guidelines: CE, NFPA (following 79-2012 chapter 12.9), EAC & TR (CTP)

Data sheet

CF880

chainflex[®]
cable works.

PVC - e-chain[®] - control cable for flexible load requirements (class 3.1.1): flame-retardant.

Dynamic values:

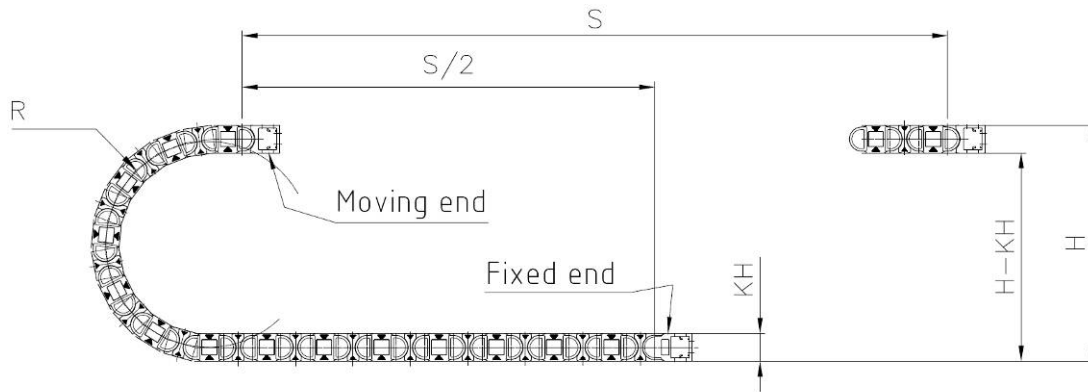
Max. speed in e-chain[®] use:*** **Unsupported (up to 6 m):** $v = 3 \text{ m / s}$

Max. acceleration in e-chain[®] use:*** $a = 20 \text{ m / s}^2$

*** These values are based on specific applications or tests.
They do not represent the limit of what is technically feasible.

Typical lab test setup for this cable group:

Test bending radius R: approx. 75 - 225 mm
Test travel S: approx. 1 - 5 m
Test period: min. 1,0 - 1,5 million double strokes
Test speed: approx. 0,5 - 2 m / s
Test acceleration: approx. 0,5 - 1,5 m / s²



e-chain[®] - control cable for flexible load requirements:

- for 1 million movements (double strokes) in e-chains[®]
- for areas of application without influence of oil
- for unsupported travel distances up to 6 m
- CE, RoHS-II, cULus, NFPA, EAC & TR (CTP)

Typical application areas:

Preferably indoor applications.
Wood/stone processing, packaging industry, supply system, handling, adjusting equipment.



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Date	Author
11 Dec. 2015	D. Borsberg

Data sheet

CF880

PVC - e-chain® - control cable for flexible load requirements (class 3.1.1): flame-retardant.

Technical tables:

Mechanical values:

① Part no.	② Number of cores & nominal cross section [mm²]****	External diameter (d)***** [max. mm]	Copper index [kg / km]	Weight [kg / km]
CF880.05.02	2x0,5	5,5	11	38
CF880.05.03	3G0,5	6,0	16	45
CF880.05.04	4G0,5	6,5	22	54
CF880.05.05	5G0,5	7,0	27	67
CF880.05.07	7G0,5	8,5	37	99
CF880.05.12	12G0,5	9,5	64	145
CF880.05.18	18G0,5	11,5	96	211
CF880.05.25	25G0,5	13,5	132	291
CF880.07.02	2x0,75	6,0	16	47
CF880.07.03	3G0,75	6,5	24	56
CF880.07.04	4G0,75	7,0	32	69
CF880.07.05	5G0,75	7,5	40	84
CF880.07.07	7G0,75	9,0	56	125
CF880.07.12	12G0,75	10,5	96	186
CF880.07.18	18G0,75	13,0	143	278
CF880.07.24	24G0,75	14,5	191	369
CF880.07.25	25G0,75	15,0	198	384
CF880.10.02	2x1,0	6,5	22	54
CF880.10.03	3G1,0	6,5	32	68
CF880.10.04	4G1,0	7,0	43	83
CF880.10.05	5G1,0	8,0	53	101
CF880.10.07	7G1,0	9,5	74	153
CF880.10.12	12G1,0	11,5	127	229
CF880.10.18	18G1,0	13,5	191	334
CF880.10.24	24G1,0	15,5	254	451
CF880.10.25	25G1,0	16,0	264	471
CF880.15.02	2x1,5	7,5	32	83
CF880.15.03	3G1,5	8,5	48	106
CF880.15.04	4G1,5	9,0	64	131
CF880.15.05	5G1,5	10,0	80	166
CF880.15.07	7G1,5	12,5	111	250
CF880.15.12	12G1,5	14,5	191	372
CF880.15.18	18G1,5	17,5	286	548
CF880.15.24	24G1,5	20,5	381	739
CF880.15.25	25G1,5	21,0	396	768
CF880.25.03	3G2,5	9,0	80	147
CF880.25.04	4G2,5	10,5	106	189
CF880.25.05	5G2,5	11,5	132	235
CF880.25.07	7G2,5	14,0	185	354
CF880.25.12	12G2,5	16,5	317	533
CF880.25.25	25G2,5	24,0	660	1112
CF880.40.04	4G4,0	12,0	169	278
CF880.60.04	4G6,0	13,5	254	384

**** G ⇒ Cable contains a greenyellow core.

***** External diameters are maximum values and may tend toward lower tolerance limits.

Subject to misprints and errors. Technical modifications are possible at any time.
Maybe older batches do not have all or other features.

Please refer regarding the availability of the items also the information in the latest chainflex® catalogue.

Date	Author
11 Dec. 2015	D. Borsberg



+++ chainflex® cable works +++

igus® chainflex® M CF880

Image
exemplary



igus®

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Data sheet

CF880





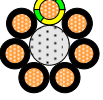
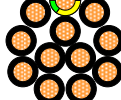
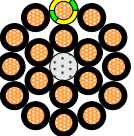
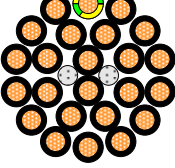
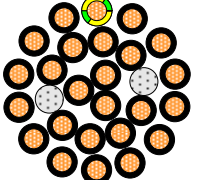
PVC - e-chain[®] - control cable for flexible load requirements (class 3.1.1): flame-retardant.

Electrical values:

Nominal cross section [mm ²] (following)	Conductor resistance [approx. Ω / km] at 20 °C	
	DIN IEC 60344	DIN VDE 0298-4
0,5	39	8
0,75	26	12
1,0	19,5	15
1,5	13,3	18
2,5	8	26
4,0	4,95	34
6,0	3,3	44

* The max. current rating depends on factors such as the individual environmental conditions and the type of installation.

Construction table:

Part no.	Core stranding	Part no.	Core stranding
No. of cores		No. of cores	
CF880.XX.02		CF880.XX.03	
2		3	
CF880.XX.04		CF880.XX.05	
4		5	
CF880.XX.07		CF880.XX.12	
7		12	
CF880.XX.18		CF880.XX.24	
18		24	
CF880.XX.25			
25			

