Control cable | PVC | chainflex® CF881

Example image

- For flexing applications
- PVC outer jacket
- Shielded
- Flame retardant

Dynamic information

Bend radius	**e-chain®**	minimum 12.5 x d
	flexible	minimum 10 x d
	fixed	minimum 7 x d
Temperature	**e-chain®**	+5 °C to +70 °C
	flexible	-5 °C to +70 °C (following DIN EN 60811-504)
	fixed	-15 °C to +70 °C (following DIN EN 50305)
v max.	**unsupported**	3 m/s
a max.		20 m/s²
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 PVC mixture.
Core structure	Cores wound with an optimised pitch length.
Core identification	Black cores with white numerals, one core green-yellow.
Overall shield	Braiding made of tinned copper wires. Coverage approx. 60 % optical
Outer jacket	Low-adhesion PVC mixture, adapted to suit the requirements in e-chains®. Colour: Jet black (similar to RAL 9005)

Electrical information

Nominal voltage	300/500 V
Testing voltage	2000 V (following DIN EN 50395)

Class 3.1.1.1

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°				

Properties and approvals

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/CSA	Style 11008 and 2464, 300 V, 80 °C
NFPA	Following NFPA 79-2012 chapter 12.9.
EAC	Certificate no. RU C-DE.ME77.B.01560 (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]
+5/+15	15	16	17
+15/+60	12.5	13.5	14.5
+60/+70	15	16	17

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

Typical mechanical application areas

- For flexing applications, Class 3
- Without influence of oil, Class 1
- Preferably indoor applications
- Especially for unsupported travels, Class 1
- Wood/stone processing, Packaging industry, supply systems, Handling, adjusting equipment

CF881
PVC
12.5 x d

PVC | iguPUR | PUR | TPE

Control cable | PVC | chainflex® CF881

Class 3.1.1.1

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 highest
Torsion: none **1** 2 3 ±180°

CF881
PVC
12.5 x d

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
CF881.05.03	(3G0.5)C	6.5	34	60
CF881.05.04	(4G0.5)C	7.0	44	75
CF881.05.05	(5G0.5)C	7.5	50	86
CF881.05.07	(7G0.5)C	9.0	72	123
CF881.05.12	(12G0.5)C	10.5	104	172
CF881.05.18	(18G0.5)C	12.0	141	238
CF881.05.25	(25G0.5)C	14.5	203	338
CF881.07.02	(2x0.75)C	6.5	34	60
CF881.07.03	(3G0.75)C	7.0	47	76
CF881.07.04	(4G0.75)C	7.5	55	88
CF881.07.05	(5G0.75)C	8.0	69	111
CF881.07.07	(7G0.75)C	10.0	90	150
CF881.07.12	(12G0.75)C	11.5	136	215
CF881.07.18	(18G0.75)C	13.5	194	306
CF881.07.25	(25G0.75)C	16.0	280	433
CF881.10.02	(2x1.0)C	7.0	44	73
CF881.10.03	(3G1.0)C	7.5	55	85
CF881.10.04	(4G1.0)C	8.0	72	107
CF881.10.05	(5G1.0)C	8.5	82	126
CF881.10.07	(7G1.0)C	10.5	114	177
CF881.10.12	(12G1.0)C	12.0	173	256
CF881.10.18	(18G1.0)C	14.5	262	386
CF881.10.25	(25G1.0)C	17.0	356	524
CF881.15.02	(2x1.5)C	8.5	61	104
CF881.15.03	(3G1.5)C	9.0	77	125
CF881.15.04	(4G1.5)C	10.0	98	159
CF881.15.05	(5G1.5)C	11.0	120	192
CF881.15.07	(7G1.5)C	13.0	163	270
CF881.15.12	(12G1.5)C	16.0	272	425
CF881.15.18	(18G1.5)C	18.5	387	608
CF881.15.25	(25G1.5)C	22.0	519	814
CF881.25.03	(3G2.5)C	10.0	114	171
CF881.25.04	(4G2.5)C	11.0	146	221
CF881.25.05	(5G2.5)C	12.0	178	262
CF881.25.07	(7G2.5)C	15.0	256	384
CF881.25.12	(12G2.5)C	17.5	409	585
CF881.25.25	(25G2.5)C	25.0	792	1140

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