

Control cable | PVC | chainflex® CF130-UL

36

10,000,000

Cycles guaranteed

7.5 x d

Bend radius E-Chain®

164.1 ft

Travel distance E-Chain®

- For medium mechanical load requirements
- PVC outer jacket
- Flame-retardant

Dynamic Information

	Bend radius	E-Chain® linear	min. 7.5 x d
		flexible	min. 6 x d
		fixed	min. 4 x d
	Temperature	E-Chain® linear	+41 °F to +158 °F (+5 °C to +70 °C)
		flexible	+23 °F to +158 °F (-5 °C to +70 °C)
		fixed	+5 °F to +158 °F (-15 °C to +70 °C)
	v max.	unsupported	9.84 ft/s (3 m/s)
		gliding	6.56 ft/s (2 m/s)
	a max.		65.6 ft/s² (20 m/s²)
	Travel distance		Unsupported travel distances and for gliding applications up to 164.1 ft (50 m), Class 4
	Torsion		Torsion ±90°, with 3.281ft (1m) cable length, Class 2

Cable structure

	Conductor	Conductor consisting of bare copper wires (according to DIN EN 60228).
	Conductor insulation	Mechanically high-quality TPE mixture.
	Conductor construction	Number of conductors < 12: Conductors cabled in a layer with short pitch length. Number of conductors ≥ 12: Conductors combined in bundles and stranded together around a high-tensile strength core, using short pitch directions for a low-torsion cable structure.
	Color code	24-22 AWG Color code in accordance with DIN 47100. 20-4 AWG Black with white numbers, one conductor green-yellow.
	Outer jacket	Low-adhesion mixture on the basis of PVC, adapted to suit the requirements in E-Chains® (following DIN EN 50363-4-1). Color: Gray (similar to RAL 7001)
	CFRIP®	Strip 50% faster: a tear strip is molded into the outer jacket Video ► www.igus.com/CFRIP

Electrical Information

	Nominal voltage	300 V
	Test voltage	2000 V (following DIN EN 50395)

Configurators ► www.igus.com/CF130-UL

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



Class 4.4.1.2

Properties and approvals

	Flame resistance	According to IEC 60332-1-2, FT1, VW-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
	UL/CSA AWM	300 V, +60 °C See data sheet for details ► www.igus.com/CF130-UL
	NFPA 79	Complies to Electrical Standard for Industrial Machinery NFPA 79 Section 12.9
	EAC	Certificate No. RU C-DE.ME77.B.00300/19 (TR ZU)
	REACH	In accordance with regulation (EC) No. 1907/2006 (REACH)
	Lead-free	Following 2011/65/EC (RoHS-II/RoHS-III)
	Cleanroom	According to ISO Class 1, material/cable tested by IPA according to DIN EN ISO standard 14644-1
	CE	Following 2014/35/EU

Guaranteed service life (details see page 26-27)

Cycles*	5 million		7.5 million		10 million	
Temperature, from/to [°F]	< 10 m	≥ 10 m	< 10 m	≥ 10 m	< 10 m	≥ 10 m
+41/+59	10	12.5	11	13.5	12	14.5
+59/+140	7.5	10	8.5	11	9.5	12
+140/+158	10	12.5	11	13.5	12	14.5

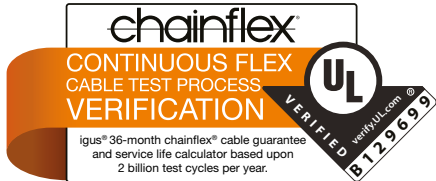
* Higher number of cycles? Online lifetime calculation ► www.chainflex.com/chainflexlife

Typical application areas

- For medium mechanical load requirements, Class 4
- Unsupported travel distances and for gliding applications up to 164 ft (50 m), Class 4
- Without influence of oil, Class 1
- Torsion ±90°, with 3.281ft (1m) cable length, Class 2
- Preferably indoor applications
- Wood/stone processing, Packaging industry, supply systems, Handling, adjusting equipment



chainflex® CF130.UL for woodworking. E-Chain®: E4/light



UL-verified chainflex® guarantee ... www.igus.com/ul-verified



Control cable | PVC | chainflex® CF130-UL

Strip cables 50 % faster



Example image

Part No.	AWG	Number of Conductors and rated cross section	Outer diameter max.		Copper index		Weight	
			[mm ²]	[in.]	[mm]	[lbs/mft]	[kg/km]	[lbs/mft]
CF130-02-03-UL	24	3 x 0.25	0.20	5.0	6.0	9	17.5	26
CF130-02-04-UL	24	4 x 0.25	0.22	5.5	7.4	11	23.5	35
CF130-02-06-UL	24	6 x 0.25	0.24	6.0	10.8	16	32.3	48
CF130-02-07-UL	24	7 x 0.25	0.26	6.5	12.8	19	37.6	56
CF130-02-12-UL	24	12 x 0.25	0.33	8.5	22.2	33	64.5	96
CF130-02-18-UL	24	18 x 0.25	0.39	10.0	30.9	46	82.7	123
CF130-02-20-UL	24	20 x 0.25	0.41	10.5	34.3	51	97.4	145
CF130-02-25-UL	24	25 x 0.25	0.45	11.5	44.3	66	110.2	164
CF130-02-30-UL	24	30 x 0.25	0.49	12.5	50.4	75	126.3	188
CF130-03-02-UL	22	2 x 0.34	0.20	5.0	5.4	8	18.1	27
CF130-03-05-UL	22	5 x 0.34	0.24	6.0	12.1	18	28.2	42
CF130-05-02-UL	20	2 x 0.5	0.22	5.5	7.4	11	25.5	38
CF130-05-03-UL	20	3 G 0.5	0.22	5.5	10.8	16	26.9	40
CF130-05-04-UL	20	4 G 0.5	0.24	6.0	14.1	21	31.6	47
CF130-05-05-UL	20	5 G 0.5	0.26	6.5	17.5	26	37.6	56
CF130-05-07-UL	20	7 G 0.5	0.30	7.5	24.9	37	51.1	76
CF130-05-12-UL	20	12 G 0.5	0.39	10.0	42.3	63	94.1	140
CF130-05-18-UL	20	18 G 0.5	0.47	12.0	63.2	94	129.0	192
CF130-05-25-UL	20	25 G 0.5	0.53	13.5	86.7	129	174.0	259
CF130-07-02-UL	18	2 x 0.75	0.24	6.0	10.8	16	32.3	48
CF130-07-03-UL	18	3 G 0.75	0.24	6.0	15.5	23	33.6	50
CF130-07-04-UL	18	4 G 0.75	0.26	6.5	20.8	31	40.3	60
CF130-07-05-UL	18	5 G 0.75	0.28	7.0	25.5	38	47.0	70
CF130-07-07-UL	18	7 G 0.75	0.31	8.0	36.3	54	64.5	96
CF130-07-12-UL	18	12 G 0.75	0.43	11.0	61.1	91	117.6	175
CF130-07-18-UL	18	18 G 0.75	0.53	13.5	90.0	134	166.6	248
CF130-07-25-UL	18	25 G 0.75	0.63	16.0	125.0	186	232.5	346
CF130-07-36-UL	18	36 G 0.75	0.75	19.0	196.9	293	356.8	531
CF130-07-42-UL	18	42 G 0.75	0.83	21.0	229.1	341	408.6	608
CF130-10-02-UL	17	2 x 1.0	0.24	6.0	14.1	21	37.0	55
CF130-10-03-UL	17	3 G 1.0	0.26	6.5	20.8	31	41.0	61
CF130-10-04-UL	17	4 G 1.0	0.28	7.0	27.6	41	49.7	74
CF130-10-05-UL	17	5 G 1.0	0.30	7.5	33.6	50	58.5	87
CF130-10-07-UL	17	7 G 1.0	0.35	9.0	47.7	71	79.3	118
CF130-10-12-UL	17	12 G 1.0	0.49	12.5	80.6	120	153.2	228
CF130-10-18-UL	17	18 G 1.0	0.59	15.0	120.3	179	207.0	308
CF130-10-25-UL	17	25 G 1.0	0.69	17.5	166.6	248	275.5	410

Note: The given outer diameters are maximum values.
G = with green-yellow earth core x = without earth core

Configurators ▶ www.igus.com/CF130-UL

Class 4.4.1.2

Basic requirements
Travel distance
Oil resistance
Torsion

low	1	2	3	4	5	6	7	highest
unsupported	1	2	3	4	5	6	≥ 1312 ft	
none	1	2	3	4	highest			
none	1	2	3	4	±360°			

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

CFRIP
iF
DESIGN AWARD 2019

UL
LISTED

UL
CFRUS

NFPA

UL
E

UL
E

EAC

REACH

RoHS

Clean-Room

UL
E

CE

Part No.	AWG	Number of Conductors and rated cross section	Outer diameter max.		Copper index		Weight	
			[mm²]	[in.]	[mm]	[lbs/mft]	[kg/km]	[lbs/mft]
CF130-15-02-UL	16	2 x 1.5	0.26	6.5	20.8	31	47.7	71
CF130-15-03-UL	16	3 G 1.5	0.28	7.0	30.9	46	51.1	76
CF130-15-04-UL	16	4 G 1.5	0.31	8.0	41.0	61	62.5	93
CF130-15-05-UL	16	5 G 1.5	0.33	8.5	50.4	75	74.6	111
CF130-15-07-UL ¹⁷⁾	16	7 G 1.5	0.41	10.5	70.6	105	111.5	166
CF130-15-12-UL	16	12 G 1.5	0.51	13.0	120.3	179	193.5	288
CF130-15-18-UL	16	18 G 1.5	0.67	17.0	180.1	268	294.3	438
CF130-15-25-UL	16	25 G 1.5	0.77	19.5	249.3	371	378.3	563
CF130-15-36-UL	16	36 G 1.5	0.91	23.0	389.1	579	596.0	887
CF130-25-03-UL	14	3 G 2.5	0.33	8.5	50.4	75	79.3	118
CF130-25-04-UL	14	4 G 2.5	0.37	9.5	67.2	100	100.1	149
CF130-25-07-UL ¹⁷⁾	14	7 G 2.5	0.47	12.0	116.9	174	168.0	250
CF130-25-12-UL	14	12 G 2.5	0.65	16.5	199.6	297	299.0	445
CF130-40-03-UL	12	3 G 4.0	0.39	10.0	80.0	119	140.4	209
CF130-40-05-UL	12	5 G 4.0	0.47	12.0	133.0	198	197.6	294
CF130-60-04-UL	10	4 G 6.0	0.51	13.0	159.3	237	263.4	392
CF130-60-05-UL	10	5 G 6.0	0.55	14.0	200.9	299	316.5	471

¹⁷⁾ When using the cables with "7G1.5mm²" and "G2.5mm²" minimum bend radius must be 17.5xd with gliding travel distance ≥ 5m.
Note: The given outer diameters are maximum values.
G = with green-yellow earth core x = without earth core

cost down...



...life up

Reduce cost, improve technology, now!

Do the chainflex® price check now ...
www.igus.com/info/cable-price-check

... just one idea for you: Reduce cost with CF880

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