Control cable | PVC | chainflex® CF140.UL

- For medium duty applications
- PVC outer jacket
- Shielded
- Flame retardant

CFRIP® Strip cables 50 % faster

DESIGN AWARD 2016

Example image

Dynamic information

Bend radius	e-chain® linear	minimum 7.5 x d
	flexible	minimum 6 x d
	fixed	minimum 4 x d
Temperature	e-chain® linear	+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
	gliding	2 m/s
a max.		20 m/s²
Travel distance		Unsupported travel distances and up to 50 m for gliding applications, Class 4

Cable structure

Conductor	Finely stranded conductor consisting of bare copper wires (following DIN EN 60228).
Core insulation	Mechanically high-quality TPE mixture.
Core structure	**Number of cores < 12:** Cores wound in a layer with a short pitch length. **Number of cores ≥ 12:** Cores wound in bundles which are then wound around a high tensile strength centre element, all with optimised short pitch lengths and directions.
Core identification	**Cores < 0.5 mm²:** Colour code in accordance with DIN 47100. **Cores ≥ 0.5 mm²:** Black cores with white numerals, one core green-yellow.
Inner jacket	PVC mixture, adapted to suit the requirements in e-chains®.
Overall shield	Bending-resistant braiding made of tinned copper wires. Coverage approx. 55 % linear, approx. 80 % optical
Outer jacket	Low-adhesion PVC mixture, adapted to suit the requirements in e-chains® (following DIN EN 50363-4-1). Colour: Silver-grey (similar to RAL 7001)
CFRIP®	Strip cables faster: a tear strip is moulded into the inner jacket Video ▶ www.igus.eu/CFRIP

Electrical information

Nominal voltage	300/500 V (following DIN VDE 0298-3)
Testing voltage	2000 V (following DIN EN 50395)

Class 4.4.1.1

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 10493 and 20200, 300 V, 60 °C
NFPA	Following NFPA 79-2012 chapter 12.9.
EAC	Certificate no. RU C-DE.ME77.B.01254 (TR ZU)
CTP	Certificate no. C-DE.PB49.B.00416 (Fire safety)
CEI	Following CEI 20-35.
Lead-free	Following 2011/65/EU (RoHS-II).
Cleanroom	According to ISO Class 1. Outer jacket material complies with CF130.15.07. UL - tested by IPA according to standard 14644-1.
CE	Following 2014/35/EU.

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

Double strokes*	5 million		7.5 million		10 million	
Temperature, from/to [°C]	< 10 m	≥ 10 m	< 10 m	≥ 10 m	< 10 m	≥ 10 m
	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]	R min. [factor x d]
+5/+15	10	12.5	11	13.5	12	14.5
+15/+60	7.5	10	8.5	11	9.5	12
+60/+70	10	12.5	11	13.5	12	14.5

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

Typical mechanical application areas

- For medium duty applications
- Without influence of oil
- Preferably indoor applications
- Unsupported travel distances and up to 50 m for gliding applications
- Wood/stone processing, Packaging industry, supply systems, Handling, adjusting equipment

CF140.UL
PVC
7.5 x d

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Strip cables 50% faster

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CF140.UL
PVC
7.5 x d

Example image

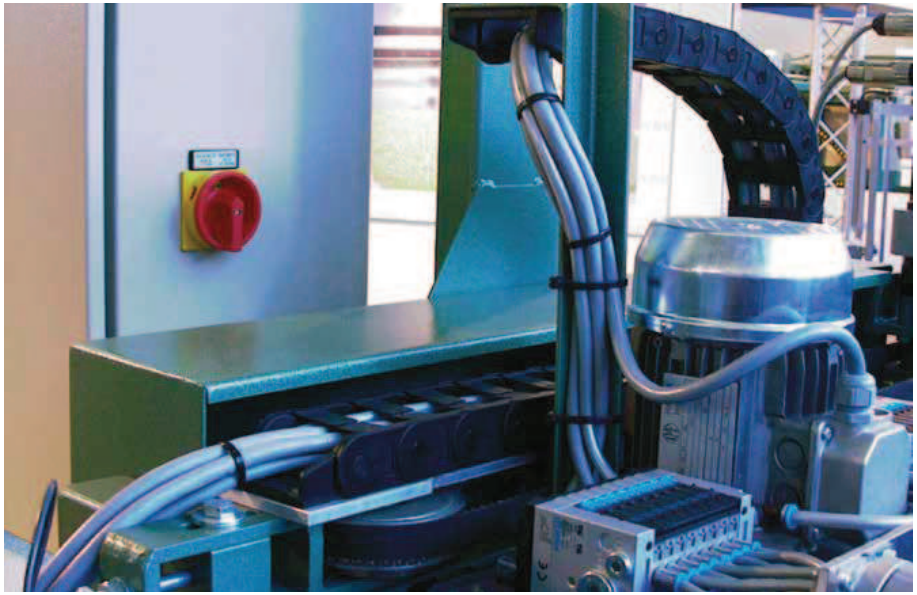
Part No.	Number of cores and conductor nominal cross section [mm²]	Outer diameter (d) max. mm	Copper index kg/km	Weight kg/km
CF140.02.12.UL	(12x0.25)C	10.5	76	118
CF140.03.05.UL	(5x0.34)C	7.5	37	74
CF140.05.03.UL	(3G0.5)C	7.0	34	74
CF140.05.05.UL	(5G0.5)C	8.0	48	94
CF140.05.18.UL	(18G0.5)C	14.5	156	257
CF140.05.36.UL	(36G0.5)C	18.5	274	485
CF140.07.03.UL	(3G0.75)C	8.0	44	87
CF140.07.04.UL	(4G0.75)C	8.5	54	104
CF140.07.05.UL	(5G0.75)C	9.0	64	118
CF140.07.07.UL	(7G0.75)C	10.0	87	156
CF140.07.12.UL	(12G0.75)C	13.0	145	273
CF140.07.18.UL	(18G0.75)C	15.5	207	372
CF140.07.25.UL	(25G0.75)C	18.0	278	497
CF140.07.36.UL [11]	(36G0.75)C	22.0	416	764
CF140.07.42.UL [11]	(42G0.75)C	24.0	489	837
CF140.10.02.UL	(2x1.0)C	8.0	37	88
CF140.10.03.UL	(3G1.0)C	8.5	54	103
CF140.10.04.UL	(4G1.0)C	9.0	65	114
CF140.10.05.UL	(5G1.0)C	9.5	78	132
CF140.10.07.UL	(7G1.0)C	10.5	110	182
CF140.10.12.UL	(12G1.0)C	14.0	178	307
CF140.10.18.UL	(18G1.0)C	17.5	256	430
CF140.10.25.UL	(25G1.0)C	19.5	347	584
CF140.15.03.UL	(3G1.5)C	9.0	72	124
CF140.15.04.UL	(4G1.5)C	9.5	90	146
CF140.15.05.UL	(5G1.5)C	10.5	115	175
CF140.15.07.UL [17]	(7G1.5)C	12.0	153	235
CF140.15.12.UL	(12G1.5)C	16.0	249	403
CF140.15.18.UL	(18G1.5)C	19.0	368	486
CF140.15.25.UL	(25G1.5)C	22.5	495	768
CF140.15.36.UL	(36G1.5)C	26.5	715	1202
CF140.15.42.UL	(42G1.5)C	29.5	841	1422
CF140.25.03.UL	(3G2.5)C	10.5	113	208
CF140.25.04.UL	(4G2.5)C	11.5	148	219

[11] Phase-out model
[17] When using the cables with „7 G 1.5 mm²“ and „7 G 2.5 mm²“ minimum bend radius must be 17.5 x d with gliding travel distance ≥ 5 m.
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: CF140.02.12.UL – to your desired length (0.5 m steps)
CF140.UL chainflex® series .02 Code nominal cross section .12 Code Number of cores

Online order ▶ www.chainflex.eu/CF140.UL

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



chainflex® CF140.UL in the feeder automation. e-chain®: easychain®

Guarantee igus chainflex 36 month guarantee