



TPE Control Cables

Chainflex® CF10-UL

TPE Energy Chain® cable, shielded, oil-resistant, bio-oil-resistant, flame retardant, UV-resistant, low temperature flexibility

Conductor
Highly flexible special conductor

Strain relief
Center core for high tensile strength

Core
Bundles around high tensile strength core

Inner jacket
Gusset filled pressure extruded

Overall shield
Highly flexible braided copper shield

Outer jacket
Pressure extruded, TPE blend



Construction

Conductors: Bare copper conductors with very fine stranding. According to EN 60228

Conductor insulation: TPE, thin-walled version

Conductor twisting: Number of conductors < 12 Conductors concentrically layered with short pitch. Number of conductors ≥ 12 Conductors layered in braids around a high-tensile-strength core; short pitches matched in the direction of the pitch for extremely low torsion.

Conductor colors: Black with white numbers, one conductor green/yellow with cross-sections 18-12 AWG; 20-24 AWG DIN 47100.

Intermediate jacket: TPE

Shield: Tinned copper shield, coverage approx. 90% optical.

Outer jacket: TPE: particularly abrasion-resistant, high-flex blend, oil-resistant, coolant-resistant. Silicon-free in compliance with PV 3.10.7 - status 1992. **Color:** dark blue (RAL 5011).

Technical Data

Minimum bending radius, moving: 5 x outer cable diameter

Minimum bending radius, fixed: 3 x outer cable diameter

Permissible temperature, moving: -31°F to +212°F (-35°C to +100°C)

Permissible temperature, fixed: -40°F to +212°F (-40°C to +100°C)

UV resistance: High

Oil resistance: High

Flame resistance: FT1

Voltage: 300V 24 AWG; 600V 20-12 AWG

Regulations: cRUus: UL AWM USA & Canada styles 21529 90°C 300V 20-24 AWG; 21530 90°C 600V 18-12 AWG

NFPA 79: Complies to NFPA 79 2012 chapter 12.9

CE: 2006/95/EG CEI: 20-35

RoHS: Complies to 2011/65/EU (RoHS-II)

Cleanroom: According to ISO Class 1, material/cable tested by IPA according to ISO standard 14644-1.

Test cable : CF34-25-04

Typical Applications

- for maximum mechanical load requirements
- indoor and outdoor applications
- especially for unsupported and gliding travel distances up to 1312 ft (400m) and more.
- storage and retrieval units for high-bay warehouses, machining units/machine tools, quick handling, cleanroom, semiconductor insertion, ship-to-shore, outdoor cranes, low temperature applications



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Price Index

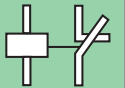


CLASS
6.4.4

Part No.	AWG	No. of Conductors and Rated Cross- Section in mm ²	Outer Diameter (approx)		Copper Index		Weight	
			in.	(mm)	lbs/mft	(kg/km)	lbs/mft	(kg/km)
CF10-UL-02-04	24	4 x 0.25	.28	(7)	16.8	(25)	47.6	(71)
CF10-UL-02-08	24	8 x 0.25	.33	(8.5)	24.8	(37)	67.7	(101)
CF10-UL-02-12	24	12 x 0.25	.39	(10)	42.2	(63)	102.5	(153)
CF10-UL-05-04	20	4 x 0.5	.33	(8.5)	24.8	(37)	67.7	(101)
CF10-UL-05-05	20	5 x 0.5	.33	(8.5)	28.8	(43)	74.4	(111)
CF10-UL-05-12	20	12 x 0.5	.51	(13)	71.0	(106)	172.9	(258)
CF10-UL-05-18	20	18 x 0.5	.59	(15)	97.8	(146)	222.4	(332)
CF10-UL-05-25	20	25 x 0.5	.63	(16)	124.0	(185)	275.4	(411)
CF10-UL-07-04	18	4 x 0.75	.35	(9)	32.8	(49)	82.4	(123)
CF10-UL-07-05	18	5 x 0.75	.37	(9.5)	45.6	(68)	100.5	(150)
CF10-UL-07-07	18	7 x 0.75	.43	(11)	60.3	(90)	130.0	(194)
CF10-UL-07-12	18	12 x 0.75	.57	(14.5)	95.8	(143)	225.1	(336)
CF10-UL-07-24	18	24 x 0.75	.75	(19)	184.9	(276)	387.3	(578)
CF10-UL-10-03	17	3 x 1	.35	(9)	32.2	(48)	80.4	(120)
CF10-UL-10-04	17	4 x 1	.37	(9.5)	47.6	(71)	103.9	(155)
CF10-UL-10-05	17	5 x 1	.41	(10.5)	55.6	(83)	116.6	(174)
CF10-UL-10-07	17	7 x 1.0	.47	(12)	74.4	(111)	154.1	(230)
CF10-UL-10-12	17	12 x 1	.57	(14.5)	114.6	(171)	247.9	(370)
CF10-UL-10-18	17	18 x 1	.75	(19)	183.6	(274)	322.0	(473)
CF10-UL-10-24	17	24 x 1.0	.85	(21.5)	231.8	(346)	475.0	(709)
CF10-UL-15-04	16	4 x 1.5	.41	(10.5)	63.0	(94)	128.6	(192)
CF10-UL-15-05	16	5 x 1.5	.43	(11)	144.1	(215)	75.0	(112)
CF10-UL-15-07	16	7 x 1.5	.51	(13)	99.8	(149)	186.9	(279)
CF10-UL-15-12	16	12 x 1.5	.69	(17.5)	162.8	(243)	340.4	(508)
CF10-UL-15-18	16	18 x 1.5	.85	(21.5)	251.3	(375)	485.1	(724)
CF10-UL-25-04	14	4 x 2.5	.47	(12)	93.8	(140)	179.6	(268)
CF10-UL-25-07	14	7 x 2.5	.59	(15)	152.1	(227)	270.7	(404)
CF10-UL-25-12	14	12 x 2.5	.85	(21.5)	270.7	(404)	538.7	(804)
CF10-UL-40-04	12	4 x 4	.53	(13.5)	138.0	(206)	247.2	(369)

NOTE: The mentioned external diameters are maximum values.

Internet: www.igus.com
email: sales@igus.com
RFQ: www.chainflex.com/rfq



No Minimum Order • No Cut Charges on up to 10 cuts of the same part number