



TPE Power Cable

Chainflex® CF34

TPE Energy Chain® cable, oil-resistant, bio-oil-resistant, UV-resistant, flame-retardant

Conductor
Highly flexible
special
conductor

Core
Conductors
stranded around
high tensile
center core

Outer jacket
gusset filled,
pressure
extruded,
TPE blend



Construction

Conductors: Finely stranded bare copper wires, according to EN 60228.

Conductor insulation: Mechanically high quality TPE blend

Conductor twisting: Conductors cabled with short pitch over a high-tensile-strength center core.

Conductor colors: Black with white numbers, one conductor green-yellow.

1. U / L1 / C / L+
2. V / L2
3. W / L3 / D / L-
4. 4 / N
5. green / yellow

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:** black

Technical Data

Minimum bending radius, moving: 7.5 x outer cable diameter

Minimum bending radius, fixed: 4 x outer cable diameter

Permissible temperature, moving: -31°F to +194°F (-35°C to +90°C)

Permissible temperature, fixed: -40°F to +194°F (-40°C to +90°C)

Voltage: 1000V

Testing voltage: 4000V

Oil resistance: High

UV resistance: High

Regulations: cRUus: UL AWM style for USA & Canada: 21184 80°C 1000V **Flame resistance:** IEC 60332-1-2, CEI 20-35, FT1, VW-1 **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 standard 14644-1.

Typical Applications

- for maximum mechanical load requirements
- indoor and outdoor applications, UV-resistant
- for unsupported and gliding travel up to 1312 ft (400m)
- torsion +/-90° with 3 ft cable length
- storage and retrieval units for high-bay warehouses, machine tools, quick handling, cleanroom, semiconductor in-section, ship-to-shore, outdoor cranes, low temperature applications

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)
CF34-15-04	16	4 x 1.5	.34	(8.5)	37	(55)	71	(105)
CF34-25-04	14	4 x 2.5	.41	(10.5)	64.4	(96)	108.7	(162)
CF34-40-04	12	4 x 4	.47	(12.0)	103	(152)	159	(234)
CF34-60-04	10	4 x 6	.55	(14.0)	160	(235)	232	(341)
CF34-60-05	10	5 x 6	.61	(15.5)	191.3	(285)	281.9	(420)
CF34-100-04	8	4 x 10	.67	(17.0)	266	(391)	361	(531)
CF34-100-05	8	5 x 10	.77	(19.5)	347.0	(517)	461.1	(687)
CF34-160-04	6	4 x 16	.81	(20.5)	424.8	(633)	548.3	(817)
CF34-160-05	6	5 x 16	.91	(23.0)	536.9	(800)	719.5	(1072)
CF34-250-04	4	4 x 25	.98	(25.0)	667.1	(994)	849.7	(1266)
CF34-100-04-O-PE ^{††}	8	4 x 10	.67	(17.0)	266	(391)	361	(531)
CF34-160-04-O-PE	6	4 x 16	.81	(20.5)	424.8	(633)	548.3	(817)
CF34-500-03-O-PE ^{††}	1	3 x 50	1.18	(30.0)	968	(1423)	1323	(1947)

NOTE: The mentioned external diameters are maximum values.

^{††}O-PE = no ground (green/yellow wire)

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