

CF310

CLASS  
6.4.4

Price Index



**Conductor**  
Highly flexible  
special  
conductor



**Conductor insulation**  
Pressure  
extruded  
TPE blend



**Overall Shield**  
Highly flexible  
braided copper  
shield



**Outer jacket**  
Pressure  
extruded,  
TPE blend



CRUUS

Clean-  
Room

10.150

# TPE Power Cable

## Chainflex® CF310

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

### Construction

**Conductors:** Finely stranded bare copper wires, according to EN60882

**Conductor insulation:** Mechanically high quality TPE blend.

**Total shielding:** Tinned copper braid, 90% optical coverage

**Outer jacket:** TPE: particularly abrasion-resistant, high-flex blend, oil-resistant, coolant-resistant and UV-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:** 1000 V

**Testing voltage:** 4000V

**Oil resistance:** High

**UV resistance:** High

**Regulations:** **cRUus:** UL AWM style for USA & Canada: 21184 80°C 1000V **Flame Resistance:** FT1, **CE, RoHS:**

2002/95/EC; Please reference the Design Section (Chapter 1) for more information.

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

Test cable CF34-25-04

### Typical Applications

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

Part No.	AWG	No. of Conductors and Rated Cross-Section in mm <sup>2</sup>	Outer Diameter (approx) in. (mm)	Copper Index lbs/mft (kg/km)	Weight lbs/mft (kg/km)
CF310-40-01	12	1 x 4.0	.26 (6.5)	37 (55)	50 (74)
CF310-60-01	10	1 x 6.0	.30 (7.5)	51 (75)	66 (97)
CF310-100-01	8	1 x 10.0	.34 (8.5)	82 (120)	98 (144)
CF310-160-01	6	1 x 16.0	.39 (10.0)	121 (178)	143 (210)
CF310-250-01	4	1 x 25.0	.45 (11.5)	185 (272)	214 (314)
CF310-350-01	2	1 x 35.0	.53 (13.5)	259 (380)	288 (423)
CF310-500-01	1	1 x 50.0	.59 (15)	357 (524)	386 (568)
CF310-700-01	2/0	1 x 70.0	.69 (17.5)	469 (689)	509 (748)
CF310-950-01	3/0	1 x 95.0	.81 (20.5)	626 (920)	678 (997)
CF310-1200-01	4/0	1 x 120.0	.87 (22)	776 (1140)	839 (1233)
CF310-1500-01	300 MCM	1 x 150.0	.94 (24)	977 (1436)	1054 (1549)
CF310-1850-01	350 MCM	1 x 185.0	1.04 (26.5)	1244 (1829)	1297 (1906)

**NOTE:** The mentioned external diameters are maximum values.

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