

CF300

igus®

# TPE Power Cable

CLASS  
6.4.4

Price Index



## Chainflex® CF300

TPE Energy Chain® cable, 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.

**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)

**Nominal voltage:** 1000 V

**Testing voltage:** 4000V

**Oil resistance:** High

**UV resistance:** High

**Regulations:** **cRUUS:** UL AWM style for USA & Canada: 21218 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. 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

**Conductor**  
Highly flexible  
special  
conductor

**Conductor  
insulation**  
Pressure  
extruded  
TPE blend

**Outer jacket**  
Pressure  
extruded, TPE  
blend

Clean-  
Room

150

Part No.	AWG	No. of Conductors and Rated Cross- Section in mm <sup>2</sup>	Outer Diameter		Copper Index		Weight	
			in.	(mm)	lbs/mft	(kg/km)	lbs/mft	(kg/km)
CF300-40-01	12	1 x 4.0	.26	(6.5)	25.5	(38)	41.0	(61)
CF300-60-01	10	1 x 6.0	.28	(7)	39.4	(58)	57.8	(85)
CF300-100-01	8	1 x 10.0	.31	(8)	65.3	(96)	88.4	(130)
CF300-160-01	6	1 x 16.0	.37	(9.5)	104.7	(154)	129.2	(190)
CF300-250-01	4	1 x 25.0	.45	(11.5)	163.2	(240)	190.4	(280)
CF300-350-01	2	1 x 35.0	.49	(12.5)	228.5	(336)	272.0	(400)
CF300-500-01	1	1 x 50.0	.57	(14.5)	326.4	(480)	353.6	(520)
CF300-700-01	2/0	1 x 70.0	.63	(16)	424.0	(623)	460.0	(676)
CF300-950-01	3/0	1 x 95.0	.75	(19.0)	577.0	(848)	631.0	(927)
CF300-1200-01	4/0	1 x 120.0	.85	(21.5)	720.0	(1059)	779.0	(1145)
CF300-1500-01	300 MCM	1 x 150.0	.91	(23)	897.0	(1318)	960.0	(1411)
CF300-1850-01	350 MCM	1 x 185.0	1.06	(27.0)	1285.7	(1890)	1370.1	(2014)

NOTE: The mentioned external diameters are maximum values.