

TPE Power Cable

Chainflex® CF35

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

igus®

CF35

Price Index



CLASS
6.4.4

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. green / yellow

Inner Jacket: TPE

Shielding: Tinned copper braid, 90% optical coverage

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 (RAL 9005)

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.

Test cable CF34-25-04

Typical Applications

- for maximum mechanical load requirements
- indoor and outdoor applications, UV-resistant
- designed for AC motors with variable frequency drive (VFD)
- for unsupported and gliding travel up to 1312 ft (400m)
- 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

Core
Conductors
stranded
around
high-tensile
center core

Inner jacket
gusset filled
pressure extruded
TPE blend

Overall shield
Highly flexible
braided copper
shield

Outer jacket
Pressure
extruded,
TPE blend

Part No.	AWG	No. of Conductors and Rated Cross- Section in mm²	Outer Diameter (approx)		Copper Index		Weight	
			in.	(mm)	lbs/mft	(kg/km)	lbs/mft	(kg/km)
CF35-05-04	20	4 x 0.5	.32	(8.0)	26.5	(39)	55.1	(81)
CF35-07-04	18	4 x 0.75	.34	(8.5)	35.3	(52)	67.3	(99)
CF35-15-04	16	4 x 1.5	.37	(9.5)	56.0	(82)	99.0	(146)
CF35-25-04	14	4 x 2.5	.45	(11.5)	85.9	(128)	138.9	(207)
CF35-40-04	12	4 x 4	.53	(13.5)	134.9	(201)	218.8	(326)
CF35-60-04	10	4 x 6	.63	(16.0)	200.0	(298)	302.0	(450)
CF35-100-04	8	4 x 10	.77	(19.5)	305.0	(449)	457.0	(672)
CF35-160-04	6	4 x 16	.91	(23.0)	485.2	(723)	673.2	(1003)
CF35-250-04	4	4 x 25	1.08	(27.5)	778.5	(1160)	1022.8	(1524)

NOTE: The mentioned external diameters are maximum values.

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



cRUus

Clean-
Room