

PVC Power Cable

Chainflex® CF31

PVC Standard Energy Chain® cable, shielded, oil-resistant, flame-retardant



CF31

Price Index



CLASS
5.3.2

Construction

Conductor: 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

Intermediate jacket: PVC-based blend, adapted to the requirements of the Energy Chain®.

Total shielding: Tinned copper braid, 90% optical coverage

Outer jacket: PVC-based, low-adhesion blend, adapted to the requirements of the Energy Chain®. Silicone-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: +23°F to +158°F (-5°C to +70°C)

Permissible temperature, fixed: -4°F to +158°F (-20°C to +70°C)

Voltage: 1000V

Testing voltage: 4000V

Oil resistance: Medium

UV resistance: Medium

Regulations: cRUus: UL AWM style for USA & Canada: 2570 80°C 1000V **Flame Resistance:** FT1, **CE:** CEI 20-20, **RoHS:** 2002/95/EC; Please reference the Design Section (Chapter 1) for more information.

Cleanroom: According to ISO Class 2, material/cable tested by IPA according to standard 14644-1.

Test cable CF5-10-07

Typical Applications

- for high mechanical load requirements
- preferably indoor applications, outdoor is acceptable for temperatures greater than +41°F (+5°C)
- for unsupported and gliding travel up to 328 ft (100m)
- storage and retrieval units for high-bay warehouses, machine tools, quick handling, indoor cranes
- designed for AC motors with variable frequency drive (VFD)

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)
CF31-15-04	16	4 x 1.5	.43	(11.0)	56	(82)	115	(169)
CF31-25-04	14	4 x 2.5	.49	(12.5)	87	(128)	161	(237)
CF31-25-05	14	5 x 2.5	.53	(13.5)	106	(156)	189	(278)
CF31-40-04	12	4 x 4	.55	(14.0)	131	(192)	217	(319)
CF31-40-05	12	5 x 4	.59	(15.0)	167	(246)	264	(388)
CF31-60-04	10	4 x 6	.63	(16.0)	202.0	(297)	320.0	(470)
CF31-60-05	10	5 x 6	.73	(18.5)	243.5	(358)	384.4	(565)
CF31-100-04	8	4 x 10	.81	(20.5)	329.3	(484)	513.0	(754)
CF31-100-05	8	5 x 10	.87	(22.0)	406.8	(598)	614.3	(903)
CF31-160-04	6	4 x 16	.91	(23.0)	501.4	(737)	711.6	(1046)
CF31-250-04	4	4 x 25	1.12	(28.5)	735.4	(1081)	1092	(1605)
CF31-350-04	2	4 x 35	1.25	(32.0)	1015.7	(1493)	1420.4	(2088)
CF31-500-04	1	4 x 50	1.48	(37.5)	1415.7	(2081)	2048.3	(3011)
CF31-700-04	2/0	4 x 70	1.85	(47.0)	2014	(2961)	3163	(4650)

NOTE: The mentioned external diameters are maximum values.

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



7.5x



10.145