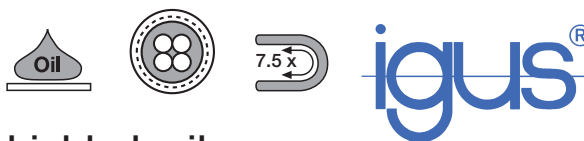


# Power Cables

## Chainflex® CF31

PVC Standard Energy Chain® cable, shielded, oil-resistant, flame-retardant, designed for AC motors with Variable Frequency Drives (VFD)



CF31



STANDARD

### Construction

**Power conductor:** High flexural strength, finely stranded, bundled bare copper wires for 16-8 AWG. For those  $\geq$  6 AWG, copper strands are woven in groups and then braided together

**Conductor insulation\*:** Mechanically tough TPE

**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:** High flexural strength copper shield, coverage approx. 90% optical.

**Outer jacket:** PVC-based, low-adhesion blend, adapted to the requirements of the Energy Chain®. Oil-resistant in accordance with VDE. Color: anthracite grey (RAL 7016).

### Technical Data

**Minimum bending radius for flexible use:** 7.5 x outer cable diameter (smaller radii are often possible -please consult igus®).

**Permissible temperature range for continuous flexing:** +23°F to +158°F (-5°C to +70°C)

**Voltage:** 1000V

**Regulations:** cRUus: UL AWM style for USA & Canada: 2570 80°C 1000V **Flame Resistance:** FT1, VDE 0250,

**CE:** CEI 20-20, **RoHS:** 2002/95/EC; See page 10.23 of the Design section for more information.

Part No.	AWG	No. of Conductors and Rated Cross-Section in mm <sup>2</sup>	Outer Diameter (approx)		Copper Index		Weight	
			in.	(mm)	lbs/mft	(kg/km)	lbs/mft	(kg/km)
CF31-15-04	16	4 x 1.5	.49	(12.5)	65.3	(96)	170.0	(250)
CF31-25-04	14	4 x 2.5	.59	(15)	118.3	(174)	202.6	(298)
CF31-25-05	14	5 x 2.5	.61	(15.5)	114.2	(168)	244.8	(360)
CF31-40-04	12	4 x 4	.63	(16)	137.4	(202)	319.6	(470)
CF31-40-05	12	5 x 4	.73	(18.5)	138.7	(204)	387.6	(570)
CF31-60-04	10	4 x 6	.74	(19)	210.8	(310)	410.0	(603)
CF31-60-05	10	5 x 6	.79	(20)	259.1	(381)	476.0	(700)
CF31-100-04	8	4 x 10	.98	(24)	323.7	(476)	645.3	(949)
CF31-100-05	8	5 x 10	1.02	(26)	406.0	(597)	799.7	(1176)
CF31-160-04	6	4 x 16	1.06	(27)	489.6	(720)	885.4	(1302)
CF31-250-04	4	4 x 25	1.26	(32)	751.4	(1105)	1027.0	(1775)
CF31-350-04	2	4 x 35	1.38	(35)	1022.7	(1504)	1700.0	(2500)
CF31-500-04	1	4 x 50	1.61	(41)	1474.9	(2169)	2380.0	(3500)
CF31-700-04	2/0	4 x 70	1.85	(47)	2013.5	(2961)	3162.0	(4650)

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

