

PVC Power cable | CF30

- for high load requirements
- PVC outer jacket
- oil-resistant
- flame-retardant



	<b>Conductor</b>	< 10 mm²: stranded conductor in especially bending-resistant version consisting of bare copper wires (following EN 60228). ≥ 10 mm²: conductor cable consisting of pre-leads (following EN 60228).
	<b>Core insulation</b>	Mechanically high-quality, especially low-capacitance TPE mixture.
	<b>Core stranding</b>	Cores stranded in short pitch lengths over a centre for high tensile stresses.
	<b>Core identification</b>	<b>Energy conductor:</b> Cores black with white numerals, one core green-yellow. 1. core: U / L1 / C / L+    2. core: V / L2 3. core: W / L3 / D / L-    4. core: 4 / N
	<b>Outer jacket</b>	Low-adhesion, oil-resistant mixture on the basis of PVC, adapted to suit the requirements in energy chains® (following DIN VDE 0281 Part 13). Colour: Jet black (similar to RAL 9005)
	<b>CFRIP</b>	Strip cables 50% faster! The tear strip is in the outer jacket (starting from manufacturing date 5/2013). Video ▶ <a href="http://www.igus.eu/CFRIP">www.igus.eu/CFRIP</a>
	<b>Bending radius</b>	<b>moved</b> minimum 7,5 x d <b>fixed</b> minimum 4 x d
	<b>Temperature</b>	<b>moved</b> +5 °C to +70 °C for use in energy chains® with > 50.000 cycles -5 °C to +70 °C following DIN EN 60811, part 1-4 chapter 8.2 <b>fixed</b> -20 °C to +70 °C
	<b>v max. unsupported/gliding</b>	10 m/s, 5 m/s
	<b>a max.</b>	80 m/s²
	<b>Travel distance</b>	Freely suspended travel distances and up to 100 m for gliding applications, Class 4
	<b>Torsion</b>	± 90 °, with 1 m cable length
	<b>UV-resistant</b>	Medium

Class 5.4.2 (5 high load requirements 4 travel distance up to 100 m 2 oil-resistant)

	<b>Nominal voltage</b>	600/1000 V (following DIN VDE 0250).
	<b>Testing voltage</b>	4000 V (following DIN VDE 0281-2).
	<b>Oil</b>	Oil-resistant (following DIN EN 50363-4-1), Class 2.
	<b>Flame-retardant</b>	According to IEC 60332-1-2, CEI 20-35, FT1, VW-1
	<b>Silicon-free</b>	Free from silicon which can affect paint adhesion (following PV 3.10.7 – status 1992).
	<b>UL/CSA</b>	Style 10492 and 2570, 1000 V, 80 °C
	<b>NFPA</b>	Following NFPA 79-2012 chapter 12.9
	<b>CEI</b>	Following CEI 20-35
	<b>CE</b>	Following 2006/95/EG
	<b>Lead free</b>	Following 2011/65/EC (RoHS-II)
	<b>Clean room</b>	According to ISO Class 2. Outer jacket material complies with CF5.10.07, tested by IPA according to standard 14644-1.
	<b>CTP</b>	Certified according to N° C-DE.PB49.V.00397
	<b>EAC</b>	Certified according to N° TC RU C-DE.ME77.B.00964

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Double strokes*				5 million	7,5 million	10 million
Temperature, from/to [°C]	v max. [m/s]	a max. [m/s²]	Travel distance [m]	R min. [factor x d]	R min. [factor x d]	R min. [factor x d]
-5 / +5				10	11	12
+5 / +60	10	5	≤ 100	7,5	8,5	9,5
+60 / +70				10	11	12

\* higher number of double strokes possible

Typical application area

- for high load requirements
- light oil influence
- preferably indoor applications, but also outdoor ones at temperatures > 5 °C
- freely suspended travel distances and up to 100 m for gliding applications
- Storage and retrieval units for high-bay warehouses, machining units/package machines, quick handling, indoor cranes



Image exemplary.

Delivery program Part No.	Number of cores and conductor nominal cross section [mm²]	External diameter max. [mm]	Copper index [kg/km]	Weight [kg/km]
CF30.15.04	4 G 1,5	8,5	64	106
CF30.25.04	4 G 2,5	10,5	106	175
CF30.25.05	5 G 2,5	11,5	132	211
CF30.40.04	4 G 4,0	12,0	174	247
CF30.40.05	5 G 4,0	13,0	218	315
CF30.60.04	4 G 6,0	14,0	253	353
CF30.60.05	5 G 6,0	15,5	317	445
CF30.100.04	4 G 10,0	17,5	435	598
CF30.100.05	5 G 10,0	20,0	547	767
CF30.160.04	4 G 16,0	21,0	697	920
CF30.160.05	5 G 16,0	24,0	879	1166
CF30.250.04	4 G 25,0	25,5	1094	1420
CF30.350.04	4 G 35,0	29,0	1551	1786
CF30.500.04	4 G 50,0	35,0	2222	2768

**Note:** The mentioned external diameters are maximum values and may tend toward lower tolerance limits.  
G = with green-yellow earth core    x = without earth core