

PUR Control Cables



CF7



STANDARD

Chainflex® CF7*

PUR Energy Chain® cable, oil-resistant, coolant-resistant, notch-proof, flame-retardant, hydrolysis-resistant and microbe-resistant

Price Index



Construction

Conductors: Finely stranded bundled bare copper wires. According to EN 60228.

Conductor insulation: Mechanically high-quality, PVC-insulating compound.

Conductor twisting: Number of conductors < 12 Conductors concentrically layered with short pitch. Number of conductors ≥ 12 Conductors layered in braids around a polymer, high-tensile-strength core; short pitches matched in the direction of the pitch for extremely low torsion.

Conductor colors: Conductors black with white numbers, one green-yellow.

Outer jacket: Low-adhesion PUR blend, adapted to the requirements of the Energy Chain®. Silicon-free in compliance with PV 3.10.7 - status 1992. **Color:** green (RAL 6005).

Technical Data

Minimum bending, moving: <10m travel = 6.8 x outer diameter; ≥10m travel = 7.5 x outer diameter

Minimum bending, fixed: 4 x outer cable diameter

Permissible temperature, moving: -4°F to +176°F (-20°C to +80°C)

Permissible temperature, fixed: -40°F to +176°F (-40°C to +80°C)

Oil-resistance: High

UV-resistance: Medium

Voltage: 300V 20-16 AWG, 600V 14 AWG

Testing voltage: 2000 V (according to DIN VDE 0281-2)

Regulations: cRUus; UL AWM: for USA & Canada styles 20317 80°C 20-16 AWG; 20234 80°C 14 AWG,

Flame resistance: FT1 CE, RoHS: 2002/95/EC; Please reference the Design Section (Chapter 1) for more information.

Typical Applications

- for high mechanical load requirements
- indoor and outdoor applications with average sun exposure
- especially for freely suspended and gliding travel distances up to 328 ft (100m).
- machining units/machine tools, storage and retrieval units for high-bay warehouses, packaging industry, quick handling, refrigerating sector

Conductor
Especially bend-resistant fine wire stranded conductor

Strain relief
Center core for high tensile strength

Core
Braiding in bundles around high tensile strength core

Outer jacket
Gusset-filling, pressure extruded PUR 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)
CF7-05-04	20	4 x 0.5	.26	(6.5)	12.2	(18)	32.0	(47)
CF7-05-12	20	12 x 0.5	.45	(11.5)	98.6	(58)	98.6	(145)
CF7-05-25	20	25 x 0.5	.61	(15.5)	81.6	(120)	215.6	(317)
CF7-07-04	18	4 x 0.75	.26	(6.5)	19.7	(29)	41.5	(61)
CF7-07-05	18	5 x 0.75	.28	(7)	24.5	(36)	47.6	(70)
CF7-07-07	18	7 x 0.75	.33	(8.5)	34.0	(50)	57.1	(84)
CF7-07-12	18	12 x 0.75	.49	(12.5)	58.5	(86)	106.1	(156)
CF7-07-18	18	18 x 0.75	.61	(15.5)	88.4	(130)	154.4	(227)
CF7-07-36	18	36 x 0.75	.91	(23)	163.9	(241)	414.8	(610)
CF7-10-03	17	3 x 1	.26	(6.5)	19.7	(29)	40.1	(59)
CF7-10-04	17	4 x 1	.28	(7)	25.8	(38)	43.8	(73)
CF7-10-07	17	7 x 1	.35	(9)	45.6	(67)	84.3	(124)
CF7-10-12	17	12 x 1	.53	(13.5)	78.2	(115)	151.0	(222)
CF7-10-18	17	18 x 1	.67	(17)	117.6	(173)	208.76	(307)
CF7-10-25	17	25 x 1	.75	(19)	163.2	(240)	326.4	(480)
CF7-15-03	16	3 x 1.5	.28	(7)	29.2	(43)	61.9	(91)
CF7-15-04	16	4 x 1.5	.31	(8)	39.4	(58)	71.4	(105)
CF7-15-07	16	7 x 1.5	.39	(10)	68.7	(101)	97.9	(144)
CF7-15-12	16	12 x 1.5	.61	(15.5)	117.6	(173)	172.0	(253)
CF7-15-25	16	25 x 1.5	.85	(21.5)	244.8	(360)	367.2	(540)
CF7-25-04	14	4 x 2.5	.43	(11)	65.3	(96)	108.8	(160)
CF7-25-07	14	7 x 2.5	.55	(14)	114.2	(168)	182.2	(268)

NOTE: The mentioned external diameters are maximum values.

*Call for availability

PDF: www.igus.com/pdf/chainflex.asp
Specs/CAD/RFQ: www.igus.com/chainflex.asp
RoHS info: www.igus.com/RoHS.asp