

CF6



ECONOMY



PVC Control Cable

Chainflex® CF6

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

**igus**®

Price Index



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

Inner jacket
gusset filled pressure extruded

Overall shield
Highly flexible braided copper shield

Outer jacket
Pressure extruded, oil-proof PVC blend

Construction

Conductors: Finely stranded bundled bare copper wires. According to EN60228.

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: Black with white numbers, one conductor green-yellow 20-16 AWG; DIN 47100 24 AWG

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

Shield: Tinned copper braid. Coverage: approx. 90% optical

Outer jacket: PVC-based, low-adhesion 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 radius, moving: <10m travel = 6.8 x outer diameter; ≥10m travel = 7.5 x outer 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)

Oil-resistance: Medium

UV Resistance: Medium

Voltage: 300V 24-16 AWG, 600V 14 AWG

Testing voltage: 2000 V

Flame resistance: FT1

Regulations: cRUus AWM; UL AWM: For USA & Canada styles 2464 80°C 20-16 AWG; 2570 80°C 14 AWG,

CE: CEI 20-20, VDE: 0245, RoHS: 2002/95/EC; Please reference the Design Section (Chapter 1) for more information.

Typical Applications

- for high mechanical load requirements
- preferably indoor applications, can be used in outdoor applications with temperatures > 23°F
- especially for freely suspended travel distances and for gliding applications up to 328 ft (100m).
- storage and retrieval units for high-bay warehouses, machining units/package machines, quick handling, indoor cranes

Internet: <http://www.igus.com>email: sales@igus.comQuickSpec: <http://www.igus.com/qs/chainflex.asp>

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

PVC Control Cable

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CF6

igus® Energy Chain
Systems®

Telephone 1-800-521-2747
Fax 1-401-438-7270

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

Part No.	AWG	No. of Conductors and Rated Cross- Section In mm ²	Outer Diameter (approx)		Copper Index		Weight	
			in.	(mm)	lbs/ft	(kg/km)	lbs/ft	(kg/km)
CF6-02-04	24	4 x 0.25	.28	(7)	19.0	(28)	37.4	(55)
CF6-02-24**	24	24 x 0.25	.53	(13.5)	68.0	(100)	170.0	(250)
CF6-05-05	20	5 x 0.5	.35	(9)	32.6	(48)	77.5	(114)
CF6-05-07	20	7 x 0.5	.43	(11)	42.8	(63)	96.6	(142)
CF6-05-09	20	9 x 0.5	.49	(12.5)	52.4	(77)	123.8	(182)
CF6-05-12	20	12 x 0.5	.51	(13)	63.2	(93)	160.5	(206)
CF6-05-18	20	18 x 0.5	.59	(15)	81.6	(120)	163.2	(276)
CF6-05-24**	20	24 x 0.5	.67	(17)	129.2	(190)	275.4	(405)
CF6-07-03	18	3 x 0.75	.33	(8.5)	35.4	(52)	74.8	(110)
CF6-07-04	18	4 x 0.75	.35	(9)	36.7	(54)	81.6	(120)
CF6-07-05	18	5 x 0.75	.39	(10)	49.6	(73)	102.0	(150)
CF6-07-07	18	7 x 0.75	.47	(12)	63.2	(93)	129.2	(190)
CF6-07-12	18	12 x 0.75	.55	(14)	93.8	(138)	179.5	(264)
CF6-07-18	18	18 x 0.75	.69	(17.5)	138.7	(204)	278.8	(410)
CF6-07-24**	18	24 x 0.75	.71	(18)	170.0	(250)	316.9	(466)
CF6-10-03	17	3 x 1	.33	(8.5)	41.5	(61)	70.0	(103)
CF6-10-04	17	4 x 1	.33	(8.5)	51.0	(75)	78.2	(115)
CF6-10-05	17	5 x 1	.43	(11)	59.2	(87)	115.6	(170)
CF6-10-07	17	7 x 1	.51	(13)	76.8	(113)	147.6	(217)
CF6-10-12	17	12 x 1	.59	(15)	116.3	(171)	212.8	(313)
CF6-10-18	17	18 x 1	.73	(18.5)	177.5	(261)	319.6	(470)
CF6-10-24**	17	24 x 1	.83	(21)	208.8	(307)	399.8	(588)
CF6-15-03	16	3 x 1.5	.39	(10)	55.1	(81)	105.4	(155)
CF6-15-04	16	4 x 1.5	.41	(10.5)	57.8	(85)	115.6	(170)
CF6-15-05	16	5 x 1.5	.43	(11)	72.1	(106)	129.2	(190)
CF6-15-07	16	7 x 1.5	.55	(14)	104.0	(153)	183.6	(270)
CF6-15-12	16	12 x 1.5	.71	(18)	157.8	(232)	279.5	(411)
CF6-15-18	16	18 x 1.5	.87	(22)	249.6	(367)	433.2	(637)
CF6-15-25	16	25 x 1.5	.96	(24.5)	334.6	(492)	556.9	(819)
CF6-25-04	14	4 x 2.5	.49	(12.5)	91.8	(135)	187.0	(275)

The Chainflex® types marked with ** are cables based on 4-conductor bundles. Due to their excellent electrical properties (star-quad with particularly low crosstalk), these cables can be used in virtually all applications normally requiring twisted-pair cables.

NOTE: The mentioned external diameters are maximum values.

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