CF170-D

ECONOMY

PUR Control Cable

Chainflex® CF170-D*

PUR-Energy Chain® cable, oil & coolant resistant, PVC-free, halogen-free, low temperature flaxible

Price Index

Conductor
Fine wire stranded conductor

Strain relief
Center core for high tensile strength

Core
Cabled in layers with extremely short pitch

Outer jacket
gusset filled pressure extruded

Construction

Conductors: Finely stranded bare copper wires. According to EN 60228.
Conductor insulation: Mechanically high-quality, TPE-insulating compound.
Conductor twisting: Conductors concentrically layered with short pitch. Not recommended for long travel/gliding applications.
Conductor colors: Conductors black with white numbers, one green-yellow.
Outer jacket: PUR-based, low-adhesion blend, adapted to the requirements of the Energy Chain®. Silicon-free in compliance with PV 3.10.7 - status 1992. **Color:** grey (RAL 7040).

Technical Data

Minimum bending radius, moving: <10m travel = 7.5 x outer diameter; ≥10m travel = 10 x outer diameter
Minimum bending radius, fixed: 5 x out cable diameter
Permissible temperature, moving: -31°F to +176°F (-35°C to +80°C)
Permissible temperature, fixed: -40°F to +176°F (-40°C to +80°C)
Oil-resistance: High
UV-resistant: Medium
Voltage: 300V
Testing voltage: 2000 V (according to DIN VDE 0281-2)
Regulations: DESINA, CE, RoHS: 2002/95/EC; Please reference the Design Section (Chapter 1) for more information.

Typical Applications

- for medium mechanical load requirements
- indoor and outdoor applications without direct sun radiation
- especially for freely suspended travel distances
- machining units/machine tools, low temperature applications

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)
*CF170-05-12-D	20	12 x 0.5	.39	(10)	39.4	(58)	85	(125)
*CF170-05-18-D	20	18 x 0.5	.45	(11,5)	58.5	(86)	122.4	(180)
*CF170-05-30-D	20	30 x 0.5	.55	(14,0)	97.9	(144)	190.4	(280)
*CF170-07-03-D	18	3 x 0.75	.26	(6,5)	14.96	(22)	34.0	(50)
*CF170-07-05-D	18	5 x 0.75	.30	(7.5)	24.5	(36)	47.6	(70)
*CF170-07-07-D	18	7 x 0.75	.33	(8,5)	34.0	(50)	68.0	(100)
*CF170-07-12-D	18	12 x 0.75	.41	(10.5)	58.4	(86)	108.8	(160)
*CF170-07-18-D	18	18 x 0.75	.49	(12,5)	88.4	(130)	156.4	(230)
*CF170-07-20-D	18	20 x 0.75	.53	(13.5)	97.9	(144)	195.8	(288)
*CF170-10-03-D	17	3 x 1	.28	(7)	19.7	(29)	37.4	(55)
*CF170-10-05-D	17	5 x 1	.31	(8)	32.6	(48)	57.8	(85)
*CF170-10-07-D	17	7 x 1	.37	(9.5)	45.6	(67)	88.4	(130)
*CF170-10-18-D	17	18 x 1	.53	(13.5)	117.6	(173)	197.2	(290)
*CF170-10-25-D	17	25 x 1	.63	(16)	163.2	(240)	265.2	(390)
*CF170-15-03-D	16	3 x 1.5	.30	(7.5)	29.2	(43)	49.0	(72)
*CF170-15-04-D	16	4 x 1.5	.31	(8)	39.4	(58)	61.2	(90)
*CF170-15-05-D	16	5 x 1.5	.33	(8.5)	46.2	(68)	72.1	(106)
*CF170-15-07-D	16	7 x 1.5	.41	(10,5)	68.7	(101)	122.4	(180)
*CF170-15-12-D	16	12 x 1.5	.51	(13.0)	117.6	(173)	183.6	(270)
*CF170-15-18-D	16	18 x 1.5	.59	(15.0)	176.1	(259)	265.2	(390)
*CF170-15-25-D	16	25 x 1.5	.75	(19)	244.8	(360)	367.2	(540)
*CF170-25-04-D	14	4 x 2.5	.39	(10)	65.3	(96)	102.0	(150)
*CF170-25-05-D	14	5 x 2.5	.39	(10)	77.2	(113.5)	120.4	(177)
*CF170-25-07-D	14	7 x 2.5	.51	(13.0)	114.2	(168)	190.4	(280)
*CF170-40-04-D	12	4 x 4	.47	(12)	104.7	(154)	149.6	(220)
*CF170-60-04-D	10	4 x 6	.55	(14)	217.6	(230)	156.4	(320)
*CF170-100-04-D	8	4 x 10	.71	(18)	261.12	(384)	360.4	(530)

NOTE: The mentioned external diameters are maximum values.
*Call for availability

PUR Control Cables

Chainflex® CF7*

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

Price Index

CF7

STANDARD

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

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

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

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