

CF2

PUR Control Cables

Chainflex® CF2

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



igus®
Price Index



STANDARD



Conductor

Highly flexible
special conductor

Strain relief

Center element for
high tensile
stresses

Core

Braiding in bundles
around high-tensile
center cord

Inner jacket

Gusset-filling,
pressure
extruded

Overall shield

Highly flexible
braided copper
shield

Outer jacket

Pressure extruded
PUR blend

Construction

Conductors: Bare copper conductors with very fine stranding. 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: Black with white numbers, one conductor green-yellow on all cross-sections. Color code in accordance with DIN 47100 in the case of 26 and 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: 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:** gray (RAL 7016).

Technical Data

Minimum bending radius, moving: 5 x outer cable diameter

Minimum bending radius, 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)

UV-resistance: High

Oil-resistance: High

Voltage: 300V

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

Regulations: UL AWM 20317 80°C 300V, CSA AWM I/II A/B 80°C 300V FT1, CE, RoHS: 2002/95/EC; Please reference the Design Section (Chapter 1) for more information.

Typical Applications

- for maximum mechanical load requirements
- indoor and outdoor applications
- especially for freely suspended and gliding travel distances up to 328 ft (100m)
- storage and retrieval units for high-bay warehouses, machining units/packages machines, quick handling, indoor cranes, refrigerating sector

Internet: <http://www.igus.com>
email: sales@igus.com
QuickSpec: <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

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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)
CF2-01-04	26	4 x 0.14	.24	(6)	11.6	(17)	27.2	(40)
CF2-01-08	26	8 x 0.14	.31	(8)	19.7	(29)	44.2	(65)
CF2-01-12	26	12 x 0.14	.35	(9)	33.3	(49)	68.7	(101)
CF2-01-18	26	18 x 0.14	.40	(10)	45.6	(67)	85.0	(125)
CF2-01-24**	26	24 x 0.14	.47	(12)	56.4	(83)	91.8	(135)
CF2-01-36	26	36 x 0.14	.51	(13)	52.8	(88)	136.0	(200)
CF2-01-48	26	48 x 0.14	.67	(17)	91.8	(135)	210.8	(310)
CF2-02-04	24	4 x 0.25	.28	(7)	16.3	(24)	36.0	(53)
CF2-02-08	24	8 x 0.25	.31	(8)	28.9	(41)	56.4	(83)
CF2-02-18	24	18 x 0.25	.51	(13)	65.3	(96)	129.2	(190)
CF2-02-24**	24	24 x 0.25	.55	(14)	81.6	(120)	149.6	(220)
CF2-02-48	24	48 x 0.25	.79	(20)	156.4	(230)	306.0	(450)
CF2-05-05	20	5 x 0.5	.44	(11)	43.5	(64)	115.6	(170)
CF2-05-07	20	7 x 0.5	.51	(13)	55.8	(82)	142.8	(210)
CF2-05-09	20	9 x 0.5	.59	(15)	58.2	(97)	176.8	(260)
CF2-05-12	20	12 x 0.5	.71	(18)	98.6	(145)	265.2	(390)
CF2-05-18	20	18 x 0.5	.87	(22)	130.6	(192)	353.6	(520)
CF2-05-24**	20	24 x 0.5	.91	(23)	161.8	(238)	421.6	(620)
CF2-07-03	18	3 x 0.75	.39	(10)	34.7	(51)	95.2	(140)
CF2-07-04	18	4 x 0.75	.39	(10)	38.8	(57)	108.8	(160)
CF2-07-05	18	5 x 0.75	.47	(12)	53.0	(78)	142.8	(210)
CF2-07-07	18	7 x 0.75	.55	(14)	69.4	(102)	163.2	(240)
CF2-07-12	18	12 x 0.75	.75	(19)	124.4	(183)	299.2	(440)
CF2-07-24**	18	24 x 0.75	.98	(25)	205.4	(302)	489.6	(720)
CF2-10-03	17	3 x 1	.40	(10)	42.8	(63)	102.0	(150)
CF2-10-04	17	4 x 1	.41	(10.5)	46.2	(68)	106.8	(157)
CF2-10-05	17	5 x 1	.47	(12)	61.9	(91)	136.0	(200)
CF2-10-07	17	7 x 1	.56	(14)	81.6	(120)	176.8	(260)
CF2-10-12	17	12 x 1	.79	(20)	144.8	(213)	326.4	(480)
CF2-10-24**	17	24 x 1	1.03	(26)	246.8	(363)	530.4	(780)
CF2-15-03	16	3 x 1.5	.44	(11)	57.8	(85)	129.2	(190)
CF2-15-07	16	7 x 1.5	.63	(16)	110.8	(163)	231.2	(340)
CF2-15-12	16	12 x 1.5	.91	(23)	196.5	(289)	442.0	(650)

** 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.

igus® Energy Chain
Systems®

Telephone 1-800-521-2747
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PDF: www.igus.com/pdf/chainflex.asp
Specs/CAD/RFQ: www.igus.com/chainflex.asp
RoHS info: www.igus.com/RoHS.asp

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