

CF11

igus®

CLASS
6.4.4

Price Index



TPE Data Cable

Chainflex® CF11

TPE Energy Chain cable, shielded, oil-resistant, bio-oil-resistant, PVC-free, halogen-free, UV-resistant, hydrolysis resistant and microbe resistant

Conductor

Fine wire stranded conductor

Core

Pairs twisted together with short pitch

Inner jacket

Gusset filled, pressure extruded

Overall shield

Highly flexible braided copper shield

Outer jacket

Pressure extruded, halogen-free TPE blend



Clean-room

10.102

Construction

Conductors: Finely stranded bare copper conductor with extreme flexibility. According to EN 60228

Conductor insulation: TPE, thin-walled version

Conductor twisting: Twisted pairs are cabled together with a short pitch around a high tensile strength core

Conductor colors: Color code DIN 47100 up to 18 AWG, 17-14 AWG are black with white printed numbers.

Intermediate jacket: TPE blend, adapted to the requirements of the Energy Chain®.

Shield: Tinned copper braid, 90% optical coverage

Outer jacket: TPE: particularly abrasion-resistant, high-flex blend, oil-resistant, coolant-resistant. Color: dark blue (RAL 5011).

Technical Data

Minimum bending radius, moving: 10 x outer cable diameter

Minimum bending radius, fixed: 5 x outer cable diameter

Permissible temperature, moving: -31°F to +212°F (-35°C to +100°C)

Permissible temperature, fixed: -40°F to + 212°F (-40°C to +100°C)

UV-resistance: High

Oil-resistance: High

Voltage: 300V

Test voltage: 1500V

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

Cleanroom: According to ISO Class 1, material/cable tested by IPA according to ISO standard 14644-1. Test cable CF9-15-07

Typical Applications

- for maximum mechanical load requirements
- indoor and outdoor applications, UV-resistant
- especially for unsupported and gliding travel up to 1312 ft (400m) or more
- storage and retrieval units for high-bay warehouses, machining units/machine tools, quick handling, cleanroom, semiconductor insertion, ship to shore, outdoor cranes, low temperature applications

Part No.	AWG	No. of Pairs and Rated Cross-Section in mm ²	Outer Diameter (approx)		Copper Index		Weight	
			in.	(mm)	lbs/mft	(kg/km)	lbs/mft	(kg/km)
CF11-01-04-02	26	4 PR x 0.14	.28	(7)	18.8	(28)	43	(64)
CF11-01-18-02	26	18 PR x 0.14	.55	(14)	58.5	(86)	111.5	(164)
CF11-02-02-02	24	2 PR x 0.25	.26	(6.5)	20.4	(30)	34.0	(50)
CF11-02-03-02	24	3 PR x 0.25	.32	(8)	23.1	(34)	40.8	(60)
CF11-02-04-02	24	4 PR x 0.25	.35	(9)	29.9	(44)	54.4	(80)
CF11-02-05-02	24	5 PR x 0.25	.35	(9)	37.4	(55)	68.0	(100)
CF11-02-06-02	24	6 PR x 0.25	.39	(10)	44.9	(66)	86.4	(122)
CF11-02-09-02	24	9 PR x 0.25	.49	(12.5)	62	(92)	133	(198)
CF11-02-10-02	24	10 PR x 0.25	.51	(13)	67.3	(99)	136	(200)
CF11-02-14-02	24	4 PR x 0.25	.53	(13.5)	81.6	(120)	162	(238)
CF11-03-08-02	22	8 PR x 0.34	.49	(12.5)	61.2	(90)	104.7	(154)
CF11-05-04-02	20	4 PR x 0.5	.39	(10)	61.9	(91)	73.4	(108)
CF11-05-06-02	20	6 PR x 0.5	.45	(11.5)	64.6	(95)	129.2	(190)
CF11-05-08-02	20	8 PR x 0.5	.55	(14)	88	(131)	167	(250)
CF11-07-03-02	18	3 PR x 0.75	.43	(11)	52.4	(77)	89.1	(131)
CF11-10-04-02	17	4 PR x 1.0	.47	(12)	82.3	(121)	122.4	(180)
CF11-15-06-02	16	6 PR x 1.5	.67	(17)	164.6	(242)	284.9	(419)
CF11-25-03-02	14	3 PR x 2.5	.65	(16.5)	142.8	(210)	278.8	(410)

PR = Twisted Pair

NOTE: The mentioned external diameters are maximum values.

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