TPE Ethernet Cables

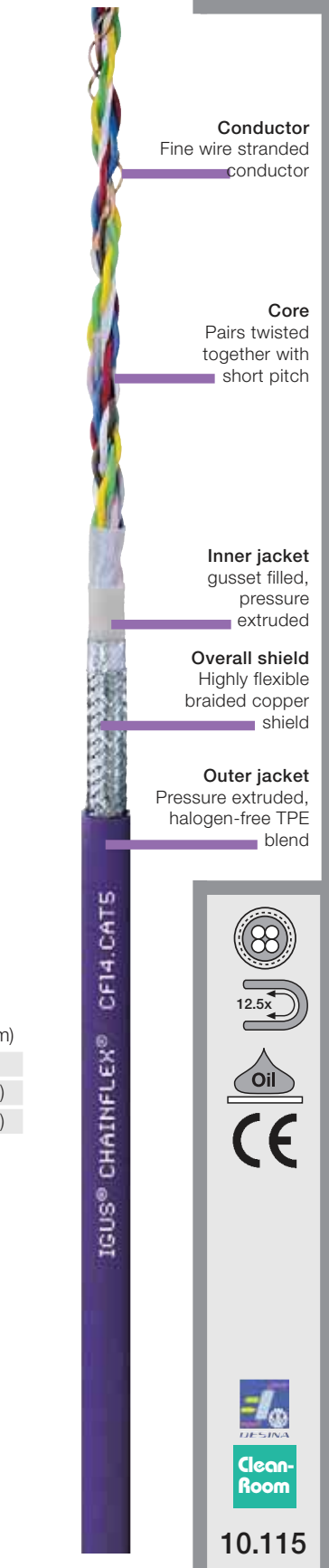
Chainflex® CF14

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

CF14

CLASS 6.3.4

Price Index



Construction

Conductors: Finely stranded bare copper conductors with extreme flexibility
Conductor insulation: Foamed polymer
Conductor twisting: Twisted pairs are cabled together with a short pitch
Conductor colors: Color code DIN 47100
Intermediate jacket: TPE blend, adapted to the requirements of the Energy Chain®.
Shield: Tinned copper braid, 80% optical coverage
Outer jacket: TPE: particularly abrasion-resistant, high-flex blend, oil-resistant, coolant-resistant. Color: violet (RAL 4011).

Technical Data

Minimum bending radius, moving: 12.5 x outer cable diameter
Minimum bending radius, fixed: 7.5 x outer cable diameter
Permissible temperature, moving: -31°F to +158°F (-35°C to +70°C)
Permissible temperature, fixed: -40°F to +158°F (-40°C to +70°C)
UV resistance: Medium
Oil resistance: High
Voltage: 30V
Test voltage: 500V
Characteristic impedance: 100 Ohms
Operating capacitance: approx. 12pF/ft
Transmission rates: up to 100 Mbit/s
Regulations: 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 without direct sunlight
- especially for unsupported and gliding travel up to 328 ft (100m)
- storage and retrieval units for high-bay warehouses, machine tools, quick handling, cleanroom, semiconductor insertion, indoor cranes, low temperature applications

Part No.	AWG	Strand 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)
**CF14-02-02-02-CAT5	24	19/36	2 x 2 x 0.25	.28	(7)	22	(33)	29	(43)
CF14-02-04-02-CAT5	24	19/36	4 x 2 x 0.25	.39	(10)	31	(46)	69	(101)
CF14-02-05-02-CAT5	24	19/36	5 x 2 x 0.25	.41	(10.5)	36	(53)	71	(106)

**Star Quad Design

NOTE: The mentioned external diameters are maximum values.

12.5x

Oil

Clean-Room

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