



Chainflex® CFLG

PVC Energy Chain® step-index glass fiber optic cable,
with supply cores

Description

In order to achieve the desired flexibility and harnessing ability, polymer fiber optics were used in the past. Today, it is possible to use glass fiber optic conductors, even for continuous-flex applications. The fiber optic cables used in igus® Chainflex® CFLG afford the advantage of combining the high optical transmission quality typical of glass with excellent ability to be harnessed

Construction

Conductors: Finely stranded bundled bare copper wires. Designed in accordance with VDE 0295, Class 5.

Conductor insulation: Mechanically robust PVC-insulating compound.

Conductor colors: Black with white numbers

Glass fiber optic cable: Glass-fiber optic cable with quartz fiber conductor. Fiber-optic cable diameter 200/230 µm with Aramide strain relief.

Outer jacket: PVC-based, low-adhesion blend, adapted to the requirements of the Energy Chain®. Color: blue (RAL 5011).

Technical Data

Minimum bending radius for flexible use: 10 x outer cable diameter

Permissible temperature range for continuous flexing: +23°F to +158°F (-5°C to +70°C)

VDE voltage: 300/500V

Attenuation: At 820 nm, 6 dB/km; with 1300 nm 30 dB/km.

Bandwidth: 20 MHz x km

Part No	AWG	No. of Conductors and Rated Cross- Section in mm ²	Outer Diameter (approx)		Copper Index		Weight	
			in.	(mm)	lbs/mft	(kg/km)	lbs/mft	(kg/km)
CFLG-07-02-02	18	2 x 0.75, 2 x LWL	.35	(9)	9.8	(14.4)	47.6	(70)

Conductor
Highly flexible
copper conductor

FOC
Glass fiber yarn
twisting over
200-/230-µm
glass fibers

Core
Elements stranded
with short pitch

Outer jacket
Highly abrasion-
resistant, low-
adhesion PVC
blend

Internet: <http://www.igus.com>

email: sales@igus.com

QuickSpec: <http://www.igus.com/qs/chainflex.asp>

NOTE: The mentioned external diameters are maximum values.