



TPE Fiber Optic Cable

Chainflex® CFLG-G

TPE Energy Chain® gradient glass fiber optic cable, UV-resistant, halogen-free, oil-resistant, metal-free, low temperature (-40°C), hydrolysis resistant and microbe resistant

FOC
Gradient
fibers

Fiber coating
Gel-filled fiber
sheath

Strain relief
Stranded GRP
rods

Outer jacket
Highly abrasion
resistant TPE
blend with
integrated
torsion
protection
braid

Construction

Fiber: 50/125 µm; 62.5/125 µm fibers in gel filled hollow cores

Core stranding: Strength rods with integrated torsion protection braid over gel-filled fiber sheath

Color code: 6 fiber — natural, yellow, green, red, violet, blue

12 fiber — above colors and light blue, gray, brown, black, orange, pink

Outer jacket: TPE particularly abrasion-resistant, high-flex blend, oil-resistant, coolant resistant, adapted to suit the requirements of an Energy Chain®. Silicone-free in compliance with PV 3.10.7 - status 1992.

Color: Black (RAL 9005)

Technical Data

Minimum bending radius, moving: 15 x outer cable diameter

Minimum bending radius, fixed: 8.5 x outer cable diameter

Permissible temperature, moving: -40°F to +140°F (-40°C to +60°C)

Permissible temperature, fixed: -40°F to +140°F (-40°C to +60°C)

UV Resistance: High

Typical Applications

- for high mechanical load requirements
- maximum EMI protection
- indoor and outdoor applications
- for unsupported and gliding travel up to 1641 ft (500m) and more
- outdoor ship-to-shore, crane applications, conveyor technology

Part No.	Fiber Count	Fiber Diameter	Outer Diameter		Weight	
			µm (approx)	in. (mm)	lbs/mft	(kg/km)
CFLG-6G-62.5/125-TC	6	62.5/125	.45	(11.5)	75	(110)
CFLG-12G-62.5/125-TC	12	62.5/125	.45	(11.5)	75	(110)
CFLG-6G-50/125-TC	6	50/125	.45	(11.5)	75	(110)
CFLG-12G-50/125-TC	12	50/125	.45	(11.5)	75	(110)

Part No.	Bandwidth with 850 nm (Mhz x km)	Attenuation with 850 nm (dB/km)	Bandwidth with 1300 nm (Mhz x km)	Attenuation with 1300 nm (dB/km)
CFLG-6G-62.5/125-TC	≥ 200	≤ 3.0	≥ 500	≤ 0.7
CFLG-12G-62.5/125-TC	≥ 200	≤ 3.0	≥ 500	≤ 0.7
CFLG-6G-50/125-TC	≥ 500	≤ 2.5	≥ 500	≤ 0.7
CFLG-12G-50/125-TC	≥ 500	≤ 2.5	≥ 500	≤ 0.7

NOTE: The mentioned external diameters are maximum values.

