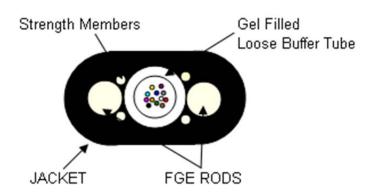


OSP LOOSE TUBE FIBER TO THE HOME CABLE PRODUCT SPECIFICATION 62FXXX12CEBCXSG

This document establishes the specifications for a self supporting central tube design with a polyethylene jacket typically used for fiber to the home or business suitable for aerial, duct or direct burial. It contains test values for all-important mechanical, optical, and environmental parameters and as such, is the basis for all-incoming inspection and acceptance.

1.0 CABLE CROSS SECTION



2.0 OVERALL CABLE CONSTRUCTION

2.1 Buffer tube

High Modulus Polymeric material Dimension: 3.0 mm. nominal.

Tube color: white

Fiber color code: per TIA/EIA-598

Filling compound: A non-toxic and dermatological safe antioxidant hydrocarbon based gel.

2.2 Cable Core

The cable core consists of the buffer tube, two fiberglass epoxy rods and fiberglass yarns.

2.3 Cable strength

Solid dielectric epoxy glass rods are pulled in longitudinal on each side of the loose tube.

Dimension: 1.7mm

2.4 Outer Sheath

MD Black Polyethylene (UV Resistant)

A ripcord is applied under outer sheath.

2.5 Cable Markings

Indent printed: CCT GROUP62F, FIBER OPTIC CABLE, #of fibers-50/125, MM/YY (month and year of manufacture) sequentially meter€marked. Special print as required by customer.



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2.6 Nominal Cable Dimensions & Weights

CCT	No. of Fibers	Cable	Cable	Weight	Weight
Part Number		OD (in.)	OD (mm)	LB/MFT	KG/KM
62F00212CEBCBSG	2	.180 x .330	4.6 x 8.4	27	40
62F00412CEBCDSG	4	.180 x .330	4.6 x 8.4	27	40
62F00612CEBCFSG	6	.180 x .330	4.6 x 8.4	27	40
62F00812CEBCHSG	8	.180 x .330	4.6 x 8.4	27	40
62F01212CEBCLSG	12	.180 x .330	4.6 x 8.4	27	40

3.0 FIBER CHARACTERISTICS

Physical Parameters

Fiber TypeMultimode*Maximum Attenuation @ 850/1300nm3.0/1.0 dB/kmMinimum Bandwidth @850/1300nm500/500MHz-kmCore Diameter, nominal $50 \pm 2.5 \mu m$ Cladding Diameter $125.0 \pm 2.0 \mu m$ Primary Coating Diameter $245 \pm 10 \mu m$ Cladding Non-circularity<1%

Cladding Non-circularity <1%Core-Clad Concentricity $\le 1.5 \,\mu\text{m}$ Zero Dispersion Wavelength 1300-1320nmNumerical Aperture $0.20 \pm .015$ Group Refractive Index @ 850/1300nm 1.483/1.478Proof Test $100 \, \text{kpsi}$

4.0 MECHANICAL & ENVIRONMENTAL PERFORMANCE

Maximum Tensile Load for: Impact Resistance: 25 Impacts (min.)

Installation: 1375N / 310lbf Flexing, ±90°: 25 Cycles (min.)

Long Term: 413N / 93lbf Temperature rating:

Minimum bending radius: Operation: -40° C to $+70^{\circ}$ C

Loaded: 20 x diameter Installation: -30°C to +70°C Unloaded: 10 x diameter Storage: -50°C to +70°C

Crush Resistance: 220N/cm

Maximum Spans: NESC Heavy 150ft, NESC Medium 300ft, NESC Light 400ft

5.0 PREPARATION FOR DELIVERY

The cable shall be packaged to preclude the inducement of damage, due to handling and transportation, and shall be in accordance with the best commercial practices available.

6.0 APPLICABLE DOCUMENTS

Reference Documents:

TIA/EIA FOTP Standards 455

Color Coding of Fiber Optic Cables TIA/EIA-598

^{*}Guaranteed Gigabit Ethernet Distance of 600/600mtr at 850/1300nm for 1 Gb/s per IEEE802.3z.