



**OSP LOOSE TUBE FIBER TO THE HOME CABLE  
PRODUCT SPECIFICATION  
62FXXX22LEBCXSG**

This document establishes the specifications for a central tube design with a polyethylene jacket typically used for fiber to the home or business. 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 OVERALL CABLE CONSTRUCTION**

1.1 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.

1.2 Cable Core

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

1.3 Cable strength

Solid dielectric epoxy glass rods are pulled in longitudinal on each side of the loose tube.  
 Dimension: 1.7mm

1.4 Outer Sheath

MD Black Polyethylene (UV Resistant)  
 A ripcord is applied under outer sheath.

1.5 Cable Markings

Indent printed: CCT GROUP62F, FIBER OPTIC CABLE, # of fibers-62.5/125, MM/YY (month and year of manufacture), sequentially meter marked. Special print as required by customer.

1.6 Nominal Cable Dimensions & Weights

CCT Part Number	No. of Fibers	Cable OD (in.)	Cable OD (mm)	Weight LB/MFT	Weight KG/KM
62F00222LEBCBSG	2	.180 x .330	4.6 x 8.4	27	40
62F00422LEBCDSG	4	.180 x .330	4.6 x 8.4	27	40
62F00622LEBCFSG	6	.180 x .330	4.6 x 8.4	27	40
62F00822LEBCHSG	8	.180 x .330	4.6 x 8.4	27	40
62F01222LEBCLSG	12	.180 x .330	4.6 x 8.4	27	40



## **2.0 FIBER CHARACTERISTICS**

### Physical Parameters

Fiber Type	Multimode Graded Index
Maximum Attenuation @ 850/1300nm	3.2 /1.0 dB/km
Minimum Bandwidth @850/1300nm	350/500MHz-km
Core Diameter, nominal	62.5 ± 2.5 µm
Cladding Diameter	125.0 ± 1.0 µm
Primary Coating Diameter	245 ± 10 µm
Cladding Non-circularity	<1%
Core/Clad Offset	1 µm
Zero Dispersion Wavelength	1320-1365nm
Numerical Aperture	0.275 ± .015
Group Refractive Index @ 850/1300nm	1.496/1.491
Proof Test	100 kpsi

*\*Guaranteed Gigabit Ethernet Distance of 500/1000mtr per IEEE802.3z.*

## **3.0 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°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	

## **4.0 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.

## **5.0 APPLICABLE DOCUMENTS**

Reference Documents:  
TIA/EIA FOTP Standards 455  
Color Coding of Fiber Optic Cables TIA/EIA-598