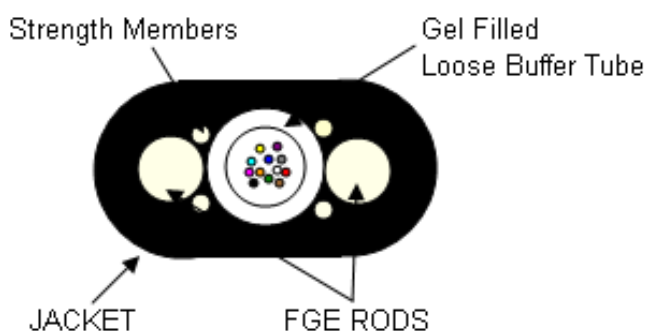




## OSP LOOSE TUBE FIBER TO THE HOME CABLE PRODUCT SPECIFICATION 62FXXX12AEBXCXSG

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.

#### 2.6 Nominal Cable Dimensions & Weights

CCT Part Number	No. of Fibers	Cable OD (in.)	Cable OD (mm)	Weight LB/MFT	Weight KG/KM
62F00212AEBBCSG	2	.180 x .330	4.6 x 8.4	27	40
62F00412AEBBCDSG	4	.180 x .330	4.6 x 8.4	27	40
62F00612AEBBCFSG	6	.180 x .330	4.6 x 8.4	27	40
62F00812AEBBCHSG	8	.180 x .330	4.6 x 8.4	27	40
62F01212AEBBCLSG	12	.180 x .330	4.6 x 8.4	27	40



### **3.0 FIBER CHARACTERISTICS – Physical Parameters**

<b>Fiber Type</b>	<b>Multimode Graded Index</b>
Maximum Attenuation @ 850/1300nm	3.00 /1.00 dB/km
Minimum Bandwidth @850/1300nm	400/400MHz-km
Core Diameter, nominal	50 ± 3 μm
Cladding Diameter	125.0 ± 2.0 μm
Primary Coating Diameter	245 ± 10 μm
Cladding Non-circularity	<2%
Core-Clad Concentricity	≤3 μm
Zero Dispersion Wavelength	1297-1316nm
Maximum Zero Dispersion Slope	0.101 ps/nm <sup>2</sup> -km
Numerical Aperture	0.20 ± .015
Group Refractive Index @ 850/1300nm	1.490/1.486
Proof Test	100 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°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