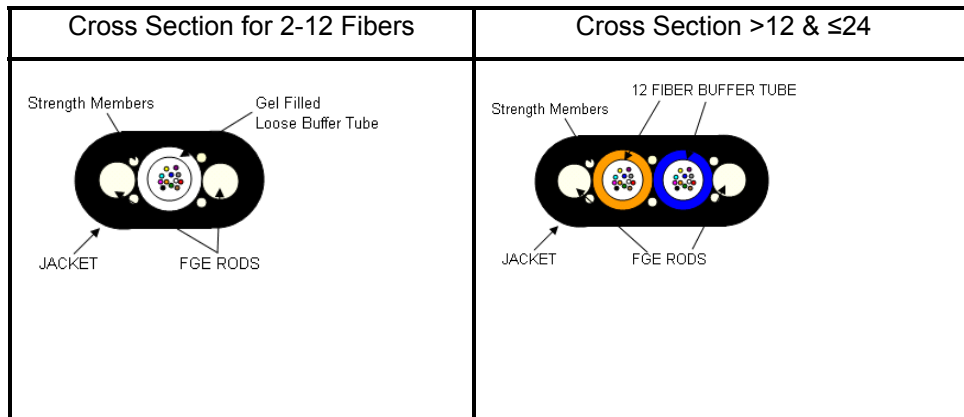




## OSP LOOSE TUBE FIBER TO THE HOME CABLE PRODUCT SPECIFICATION 62FXXX74EEBCXSG

This document establishes the specifications for a self supporting single or dual 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 CABLE CROSS SECTION



### 2.0 OVERALL CABLE CONSTRUCTION

#### 2.1 Buffer tube

High Modulus Polymeric material

Dimension: 3.0 mm. nominal.

Tube and Fiber color code: per TIA/EIA-598

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

12 fibers per tube

#### 2.2 Cable Core

The cable core consists of the 1 or 2 buffer tubes, 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 tubes that are parallel to each other as well (see 1.0).

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 GROUP 62F, FIBER OPTIC CABLE, # of fibers-SM, TELEPHONE HANDSET SYMBOL, 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
62F00274EEBCBSG	2	.180 x .330	4.6 x 8.4	27	40
62F00474EEBCDSG	4	.180 x .330	4.6 x 8.4	27	40
62F00674EEBCFSG	6	.180 x .330	4.6 x 8.4	27	40
62F00874EEBCHSG	8	.180 x .330	4.6 x 8.4	27	40
62F01274EEBCLSG	12	.180 x .330	4.6 x 8.4	27	40
62F01874EEBCXSG	18	.195 x .460	5.0 x 11.7	46	69
62F02474EEBCLSG	24	.195 x .460	5.0 x 11.7	46	69

**3.0 FIBER CHARACTERISTICS**

Physical Parameters

Fiber Type	Single mode*
Maximum Attenuation @ 1310/1550nm	0.35/0.25 dB/km
Core Diameter	8.2 μm
Cladding Diameter	125.0 ± 0.7 μm
Maximum Core/Clad Concentricity Error	0.5 μm
Maximum Cladding Non-circularity	0.7%
Primary Coating Diameter	245 ± 5 μm
Cabled Cutoff Wavelength	<1260nm
Mode Field Diameter	9.2 ± 0.4μm @ 1310nm 10.4 ± 0.8μm @ 1550nm
Temperature Dependence	≤0.05dB/km (-60°C to 85°C)
Zero Dispersion Slope	≤0.892ps/nm <sup>2</sup> -km
Maximum PMD Link Design Value	0.06ps/√km
Group Refractive Index @ 1310/1550	1.467 / 1.468
Proof Test	100 kpsi

*\*According to ITU G.652 d*



#### **4.0 MECHANICAL & ENVIRONMENTAL PERFORMANCE**

Maximum Tensile Load for:  
Installation: 1375N / 310lbf  
Long Term: 413N / 93lbf

Minimum bending radius:  
Loaded: 20 x diameter  
Unloaded: 10 x diameter

Crush Resistance: 220N/cm

Impact Resistance: 25 Impacts (min.)

Flexing,  $\pm 90^\circ$ : 25 Cycles (min.)

Temperature rating:

Operation: -40°C to +70°C

Installation: -30°C to +70°C

Storage: -50°C to +70°C

#### **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