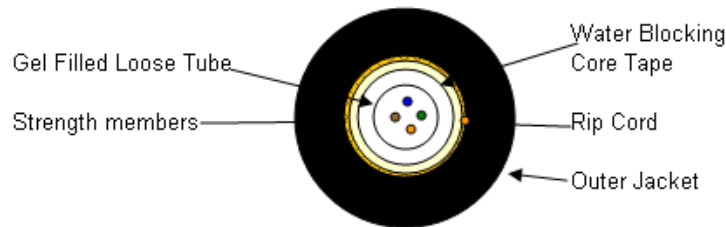




## OSP LOOSE TUBE OFNR CENTRAL TUBE CONSTRUCTION FIBER OPTIC WIRE PRODUCT SPECIFICATION 67XXX12HABCXNF

This document establishes the specifications for an outdoor duct or lashed aerial cable, single 3mm central tube design with a flame retardant PVC jacket. 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 with a moisture resistant water-blocking tape applied over the tube to prevent water ingress and migration with a nominal of a 25% overlap.

#### 2.3 Cable strength

Circumferential strength members are placed over the cable core and under the outer sheath.

#### 2.4 Outer Sheath

UV Resistant Flame Retardant Black PVC

Wall thickness (nominal): 1.52mm.

A ripcord is applied under outer sheath.

#### 2.5 Cable Markings

Indent printed: CCT GROUP67, FIBER OPTIC CABLE, # of fibers-50/125 MM/YY (month and year of manufacture), sequentially meter marked. Special print as required by customer.

Note: This product is not OFNR, ETL or UL listed.



2.6 Nominal Cable Dimensions & Weights

CCT Part Number	No. of Fibers	Cable OD (in.)	Cable OD (mm)	Weight LB/MFT	Weight KG/KM
6700212HABCBNF	2	.271	6.9	36	53
6700412HABCDNF	4	.271	6.9	36	53
6700612HABCDFNF	6	.271	6.9	36	53
6700812HABCDFNF	8	.271	6.9	36	53
6701012HABCJNF	10	.271	6.9	36	53
6701212HABCLNF	12	.271	6.9	36	53

**3.0 FIBER CHARACTERISTICS - Physical Parameters**

<b>Fiber Type</b>	<b>Multimode*</b>
Maximum Attenuation @ 850/1300nm	3.0 /1.0 dB/km
LED Performance (Overfilled Launch Bandwidth)	3500/500MHz-km@850/1300
Laser EMB Performance	4700/500MHz-km@850/1300
Core Diameter, nominal	50 ± 2.5 µm
Cladding Diameter	125.0 ± 1.0 µm
Primary Coating Diameter	245 ± 10 µm
Cladding Non-circularity	<1%
Core-Clad Concentricity	≤1.0 µm
Zero Dispersion Wavelength	1295-1340nm
Maximum Zero Dispersion Slope	0.105 ps/nm <sup>2</sup> -km
Numerical Aperture	0.20 ± .015
Group Refractive Index @ 850/1300nm	1.483/1.476
Proof Test	100 kpsi
<i>*Guaranteed Gigabit Ethernet Distance of 550mtr at 850nm for 10 Gb/s per IEEE802.3ae and 1000mtr at 850nm for 1 Gb/s per IEEE802.3z.</i>	

**4.0 MECHANICAL & ENVIRONMENTAL PERFORMANCE**

Maximum Tensile Load for:	Impact Resistance: 25 Impacts (min.)
Installation: 1335N / 300lbf	Flexing, ±90°: 25 Cycles (min.)
Long Term: 600N / 135lbf	Temperature rating:
Minimum bending radius:	Operation: -40°C to +70°C
Loaded: 20 x diameter	Installation: -20°C to +55°C
Unloaded: 10 x diameter	Storage: -40°C to +70°C
Crush Resistance: 220N/cm	



## **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