



**OSP LOOSE TUBE OFNR CENTRAL TUBE CONSTRUCTION  
FIBER OPTIC WIRE  
PRODUCT SPECIFICATION  
67XXX12CABCXNN**

This document establishes the specifications for an indoor/outdoor, multimode, 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 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 with a moisture resistant water-blocking tape applied over the tube to prevent water ingress and migration with a nominal of a 25% overlap.

**1.3 Cable strength**

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

**1.4 Outer Sheath**

UV Resistant Flame Retardant Black PVC

Wall thickness (nominal): 1.52mm.

A ripcord is applied under outer sheath.

**1.5 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.

**1.6 Nominal Cable Dimensions & Weights**

CCT Part Number	Cable OD (in.)	Cable OD (mm)	Weight LB/MFT	Weight KG/KM
6700212CABCBN	.271	6.9	36	53
6700412CABCDNN	.271	6.9	36	53
6700612CABCFFNN	.271	6.9	36	53
6700812CABCFFNN	.271	6.9	36	53
6701012CABCJNN	.271	6.9	36	53
6701212CABCLNN	.271	6.9	36	53



## **2.0 FIBER CHARACTERISTICS - Physical Parameters**

<b><u>Fiber Type</u></b>	<b><u>Multimode*</u></b>
Maximum Attenuation @ 850/1300nm	3.0 /1.0 dB/km
Minimum Bandwidth @850/1300nm	500/500MHz-km
Core Diameter, nominal	50 ± 2.5 µm
Cladding Diameter	125.0 ± 2.0 µm
Primary Coating Diameter	245 ± 10 µm
Cladding Non-circularity	<1%
Core-Clad Concentricity	≤1.5 µm
Zero Dispersion Wavelength	1300-1320nm
Numerical Aperture	0.20 ± .015
Group Refractive Index @ 850/1300nm	1.483/1.478
Proof Test	100 kpsi

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

## **3.0 MECHANICAL & ENVIRONMENTAL PERFORMANCE**

Maximum Tensile Load for:	Impact Resistance: 25 Impacts (min.)
Installation: 1335N / 300lbf	Flexing, ±90°: 25 Cycles (min.)
Long Term: 334N / 75lbf	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	

## **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