

OSP LOOSE TUBE OFNR CENTRAL TUBE CONSTRUCTION FIBER OPTIC WIRE PRODUCT SPECIFICATION 67XXX74EABCXNN

This document establishes the specifications for an indoor/outdoor, 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 <u>Cable strength</u>

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-SM, MM/YY (month and year of manufacture), TELEPHONE HANDSET SYMBOL 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
6700274EABCBNN	.271	6.9	36	53
6700474EABCDNN	.271	6.9	36	53
6700674EABCFNN	.271	6.9	36	53
6700874EABCFNN	.271	6.9	36	53
6701074EABCJNN	.271	6.9	36	53
6701274EABCLNN	.271	6.9	36	53



67XXX74EABCXNN Page 2 of 2

2.0 FIBER CHARACTERISTICS - Physical Parameters

Fiber TypeMaximum Attenuation @ 1310/1550nm

Single mode*
0.35/0.25 dB/km

Core Diameter 8.2 µm

Cladding Diameter $125.0 \pm 0.7 \mu m$

Maximum Core/Clad Concentricity Error 0.5 μ m Maximum Cladding Non-circularity 0.7% Primary Coating Diameter 245 \pm 5 μ m Cabled Cutoff Wavelength <1260nm

Mode Field Diameter $9.2 \pm 0.4 \mu m \ @1310 nm \\ 10.4 \pm 0.5 \mu m \ @1550 nm$

Temperature Dependence ≤0.05dB/km (-60°C to 85°C)

Zero Dispersion Slope 0.089ps/nm²-km Maximum PMD Link Design Value 0.06ps/ \sqrt{km} Group Refractive Index @ 1310/1550 1.4677 / 1.4682

Proof Test 100 kpsi

*According to ITU G.652.d

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 $+70^{\circ}\text{C}$ Loaded: 20 x diameter Installation: -20°C to $+55^{\circ}\text{C}$ Unloaded: 10 x diameter Storage: -40°C to $+70^{\circ}\text{C}$

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