



TIGHT BUFFER PLENUM FIBER OPTIC CABLES PRODUCT SPECIFICATION 99XXX76ERYNONP

This document establishes the specification requirements for a distribution fiber optic cable. This cable construction consists of single mode fibers in a distribution tight-buffered design with a plenum rated 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 Tight Buffered Fiber

Dimension: 900µm, nominal.

Tight buffered fiber color code: 1-blue, 2-orange, 3-green, 4-brown, 5-slate, 6-white, 7-red, 8-black, 9-yellow, 10-violet, 11-rose, and 12-aqua.

1.2 Cable strength

Aramid yarns are pulled in with the tight-buffered fibers under the outer jacket.

1.3 Outer Sheath

Yellow plenum rated jacket (or color per customer request)

1.4 Cable Markings

Indent printed: CCT GROUP 99, FIBER OPTIC CABLE, # of fibers-SM, TELEPHONE HANDSET SYMBOL MM/YY (month and year of manufacture), OFNP C(ETL)US sequentially meter marked.
Special print as required by customer.

1.5 Nominal Cable Dimensions & Weights

CCT Part Number	No. of Fibers	Cable OD (mm)	Cable OD (in.)	Weight KG/KM	Weight LB/1000ft
9900276ERYNONP	2	4.3	.170	18	12
9900476ERYNONP	4	4.7	.185	21	14
9900676ERYNONP	6	5.1	.200	27	18
9900876ERYNONP	8	5.3	.210	30	20
9901276ERYNONP	12	6.4	.250	39	26



2.0 FIBER CHARACTERISTICS - Physical Parameters (nominal)

<u>Fiber Type</u>	<u>Single mode*</u>
Maximum Attenuation @ 1310/1550nm**	0.40/0.30 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 ± 0.5μm @1550nm
Temperature Dependence	≤0.05dB/km (-60°C to 85°C)
Zero Dispersion Slope	0.089ps/nm ² -km
Maximum PMD Link Design Value	0.06ps/√km
Group Refractive Index @ 1310/1550	1.4677 / 1.4682
Proof Test	100 kpsi

**According to ITU G.652.d*

***Measured attenuations on shipping reels will not exceed the nominal values by .75dB/km.*

3.0 MECHANICAL & ENVIRONMENTAL PERFORMANCE

Maximum Tensile Load for:

Installation: 2&4-fiber 1405N/315lbf, 6&8-fiber 1610N/362lbf
12-fiber 2700N/600lbf

Long Term: 2&4-fiber 455N/102lbf, 6&8-fiber 535N/120lbf
12-fiber 600N/135lbf

Minimum bending radius:

Loaded: 20 x diameter

Unloaded: 10 x diameter

Impact Resistance: 25 Impacts (min.)

Flexing, ±90°: 25 Cycles (min.)

Temperature rating:

Operation, -20°C to +85°C

Installation, 0°C to +75°C

Storage, -40°C to +85°C

Crush Resistance: 100N/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
 UL 910
 GR-409-CORE