



TIGHT BUFFER PLENUM FIBER OPTIC CABLES PRODUCT SPECIFICATION 99XXX22JRZNONP

This document establishes the specification requirements for a distribution fiber optic cable. This cable construction consists of multimode 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

Orange plenum rated jacket (or color per customer request).

1.4 Cable Markings

Indent printed: CCT GROUP99, FIBER OPTIC CABLE, # of fibers-62.5/125, 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
9900222JRZNONP	2	4.3	.170	18	12
9900422JRZNONP	4	4.7	.185	21	14
9900622JRZNONP	6	5.1	.200	27	18
9900822JRZNONP	8	5.3	.210	30	20
9901222JRZNONP	12	6.4	.250	39	26



2.0 FIBER CHARACTERISTICS

2.1 Physical Parameters (nominal)

Fiber Type	Multimode Graded Index* (Laser Optimized)
Maximum Attenuation @ 850/1300nm**	3.2 /1.0 dB/km
Minimum Bandwidth @850/1300nm	200/600MHz-km
Core Diameter, nominal	62.5 ± 3 µm
Cladding Diameter	125.0 ± 1.0 µm
Primary Coating Diameter	245 ± 10 µm
Cladding Non-circularity	<2%
Core/Clad Offset	3 µm
Zero Dispersion Wavelength	1320-1365nm
Numerical Aperture	0.275 ± .015
Group Refractive Index @ 850/1300nm	1.496/1.491
Proof Test	100 kpsi

**Guaranteed Gigabit Ethernet Distance of 300/550mtr per IEEE802.3z.*

***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