



TIGHT BUFFER PLENUM FIBER OPTIC CABLES PRODUCT SPECIFICATION 99XXX22JRBNOOP

This document establishes the specification requirements for an indoor/outdoor multimode distribution fiber optic cable. This cable construction consists of 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

Water swellable aramid yarns are pulled in with the tight-buffered fibers under the outer jacket.

1.3 Outer Sheath

Black UV Resistant 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
9900222JRBNOOP	2	4.3	.170	18	12
9900422JRBNOOP	4	4.4	.185	21	14
9900622JRBNOOP	6	4.6	.200	27	18
9900822JRBNOOP	8	5.0	.215	31	20
9901222JRBNOOP	12	5.8	.250	39	26



2.0 FIBER CHARACTERISTICS

2.1 Physical Parameters (nominal)

Fiber Type	Multimode Graded Index*
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:	Impact Resistance: 25 Impacts (min.)
Installation: 4-fiber 1405N/315lbf, 6&8-fiber 1610N/362lbf	Flexing, ±90°: 25 Cycles (min.)
12-fiber 2700N/600lbf	Crush Resistance: 100N/cm
Long Term: 4-fiber 455N/102lbf, 6&8-fiber 535N/120lbf	Temperature rating:
12-fiber 600N/135lbf	Operation: -20°C to +85°C
Minimum bending radius:	Installation: 0°C to +75°C
Loaded: 20 x diameter	Storage: -40°C to +85°C
Unloaded: 10 x diameter	

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