



TIGHT BUFFER PLENUM FIBER OPTIC CABLES PRODUCT SPECIFICATION 99XXX12SRANOOP

This document establishes the specification requirements for an indoor/outdoor multimode OM3 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: 900 μ m, 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

Aqua UV Resistant plenum rated jacket (or color per customer request)

1.4 Cable Markings

Indent printed: CCT GROUP99, FIBER OPTIC CABLE, # of fibers-50/125, 10GIG OM3, 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 |
|----------------------------|--------------------------|--------------------------|---------------------------|-------------------------|-----------------------------|
| 9900212SRANOOP | 2 | 4.3 | .170 | 18 | 12 |
| 9900412SRANOOP | 4 | 4.4 | .185 | 21 | 14 |
| 9900612SRANOOP | 6 | 4.6 | .200 | 27 | 18 |
| 9900812SRANOOP | 8 | 5.0 | .215 | 31 | 20 |
| 9901212SRANOOP | 12 | 5.8 | .250 | 39 | 26 |



2.0 FIBER CHARACTERISTICS

2.1 Physical Parameters (nominal)

| | |
|---|------------------------------|
| Fiber Type | Multimode* |
| Maximum Attenuation @ 850/1300nm** | 3.0 /1.0 dB/km |
| LED Performance (Overfilled Launch Bandwidth) | 1500/500MHz-km@850/1300 |
| Laser EMB Performance | 2000/500MHz-km@850/1300 |
| Core Diameter, nominal | 50 ± 3.0 µm |
| Cladding Diameter | 125.0 ± 2.0 µm |
| Primary Coating Diameter | 245 ± 5 µm |
| Cladding Non-circularity | <2% |
| Core-Clad Concentricity | ≤3.0 µm |
| Zero Dispersion Wavelength | 1300-1320nm |
| Maximum Zero Dispersion Slope | 0.101 ps/nm ² -km |
| Numerical Aperture | 0.20 ± .015 |
| Group Refractive Index @ 850/1300nm | 1.481/1.476 |
| Proof Test | 100 kpsi |

**Guaranteed Gigabit Ethernet Distance of 300mtr at 850nm for 10 Gb/s per IEEE802.3ae and 1000mtr at 850nm for 1 Gb/s 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

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| Reference Documents: | TIA/EIA FOTP Standards 455 |
| | Color Coding of Fiber Optic Cables TIA/EIA-598 |
| | UL 910 |
| | GR-409-CORE |