

1.0 SCOPE

This document establishes the specification requirements for a distribution fiberoptic cable. This cable construction consists of multimode OM2 fibers in a distribution tight-buffered design with a plenum rated jacket.

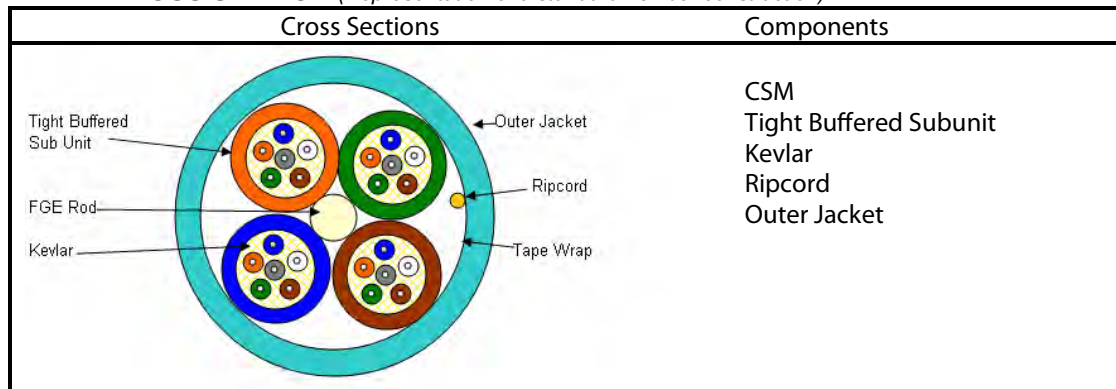
2.0 APPLICABLE DOCUMENTS

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

3.0 REQUIREMENTS

This document contains test values for all important mechanical, optical, and environmental parameters and as such, is the basis for all incoming inspection and acceptance.

4.0 CABLE CROSS SECTION *(Representation of a standard 48 fiber construction)*



5.0 OVERALL CABLE CONSTRUCTION

5.1 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.

5.2 Sub-unit consists of aramid yarns that are pulled in with the tight-buffered fibers under a sub-unit jacket that is uniquely identified.

5.3 Cable strength Member

Fiberglass Epoxy Rod (dielectric)

An up coat of plenum material (if necessary per construction for symmetry).

5.4 Cable Core

Sub-units and fillers (if needed) are stranded around the CSM, using reverse oscillation.

A non-wicking and non-hygroscopic tape is applied longitudinally with a nominal 25% overlap.

Binder yarns are applied over the core tape.

5.5 Outer Sheath

Aqua plenum rated Remguard[®] jacket (or color per customer request)

5.6 Cable Markings

REMFO 33 SERIES, FIBER OPTIC CABLE, XX (denotes number of fibers)

PRODUCTS CORP., MM/YY (month & year of manufacture), OFNP

Special print as required by customer.

-50/125, 10GIG OM 2, REMEE
C(ETL)US, Sequentially marked.

5.7 Nominal Cable Dimensions & Weights

Remeer Products Part Number	No. of Fibers	Cable OD (mm)	Cable OD (in.)	Weight KG/KM	Weight LB/1000ft
33-018-12D-R ASFNP	18	13.9	0.546	173	116
33-024-12D-R ASFNP	24	13.9	0.546	170	114
33-036-12D-R ASFNP	36	16.7	0.656	253	170
33-048-12D-R ASLNP	48	16.1	0.634	225	151
33-060-12D-R ASLNP	60	17.7	0.696	275	185
33-072-12D-R ASLNP	72	19.2	0.756	334	224
33-096-12D-RASLNP	96	23.5	0.926	520	349

6.0 FIBER CHARACTERISTICS

6.1 Physical Parameters (nominal)

Fiber Type	Multimode OM2*
Maximum Attenuation @ 850/1300nm**	3.0 /1.0 dB/km
Minimum Bandwidth @850/1300nm [Overfilled Launch, LED based sources]	750/500MHz -km
Transmission Link Lengths at 850nm & 1300nm(LX4) for 10Gb/s*	150/150mtrs
Core Diameter, nominal	50 ± 2.5 µm
Cladding Diameter	125.0 ± 1.0 µm
Primary Coating Diameter	245 ± 10 µm
Cladding Non-circularity	<1%
Core-Clad Concentricity	≤1.5 µm
Zero Dispersion Wavelength	1295 -1320nm
Numerical Aperture	0.20 ± .015
Group Refractive Index @ 850/1300nm	1.483/1.478
Proof Test	100 kpsi

*At 850nm operating wavelength with transmitters meeting encircled flux of ≤30% at radius 4.5µm and ≥86% at radius 19.0µm.

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

7.0 MECHANICAL & ENVIRONMENTAL PERFORMANCE

Maximum Tensile Load for:
Installation: 2700N / 607lbf
Long Term: 890N / 200lbf
Minimum bending radius:
Loaded: 20 x diameter
Unloaded: 10 x diameter
Crush Resistance: 220N/cm

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

8.0 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.



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