

1.0 SCOPE

This document establishes the specification requirements for an indoor multimode OM4, distribution fiberoptic cable. This cable construction consists of a distribution tight-buffered design with a plenum rated jacket.

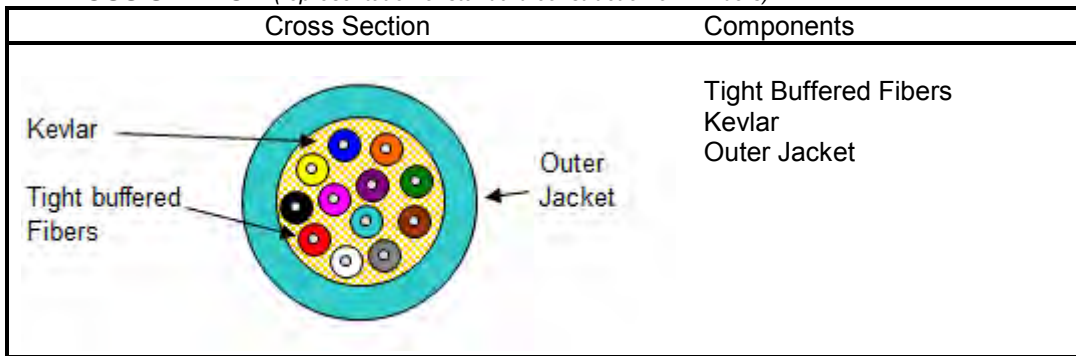
2.0 APPLICABLE DOCUMENTS

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 standard construction of 12 fibers)*



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 Cable strength

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

5.3 Outer Sheath

Aqua plenum rated jacket (or color per customer request)

5.4 Cable Markings

REMFO 33 SERIES, FIBER OPTIC CABLE, XX (No. of fibers)-50/125, 10GIG OM4, REMEE PRODUCTS CORP., MM/YY (month & year of manufacture), OFNP C(ETL)US, Sequentially meter marked.

Special print as required by customer.

5.5 Nominal Cable Dimensions & Weights

Remees Products Part Number	No. of Fibers	Cable OD (mm)	Cable OD (in.)	Weight KG/KM	Weight LB/1000ft
33-002-12H-RANONP	2	4.3	.170	18	12
33-004-12H-RANONP	4	4.7	.185	21	14
33-006-12H-RANONP	6	5.1	.200	27	18
33-008-12H-RANONP	8	5.3	.210	30	20
33-012-12H-RANONP	12	6.4	.250	39	26

6.0 FIBER CHARACTERISTICS

6.1 Physical Parameters (nominal)

Fiber Type	Multimode*
Maximum Attenuation @ 850/1300nm**	3.0 /1.0 dB/km
LED Performance (Overfilled Launch Bandwidth)	3500/500MHz-km@850/1300
Laser EMB Performance	4700/500MHz-km@850/1300
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
Maximum Zero Dispersion Slope	0.11 ps/nm ² -km
Numerical Aperture	0.20 ± .015
Group Refractive Index @ 850/1300nm	1.483/1.478
Proof Test	100 kpsi

*Guaranteed Gigabit Ethernet Distance of 550mtr 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.

7.0 MECHANICAL & ENVIRONMENTAL PERFORMANCE

Maximum Tensile Load for:

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

Long Term: 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.)

Crush Resistance: 100N/cm

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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