

1.0 SCOPE

This document establishes the specification requirements for an indoor/outdoor distribution fiberoptic cable. This cable construction consists of singlemode OS2 fibers in a distribution tight-buffered design with a riser rated PVC jacket.

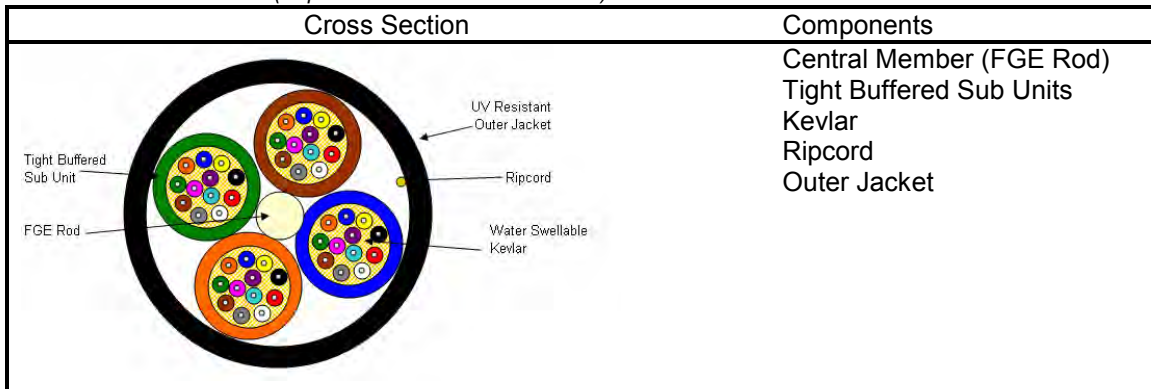
2.0 APPLICABLE DOCUMENTS

Reference Documents: TIA/EIA FOTP Standards 455
Color Coding of Fiber Optic Cables TIA/EIA-598
UL 1666
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 48 fiber cable)*



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 water swellable aramid yarns that are pulled in with the tight-buffered fibers under a sub-unit jacket. The subunits are colored per TIA/EIA-598 or orange and are numbered for identification.

5.3 Cable strength Member

Fiberglass Epoxy Rod (dielectric)

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

5.4 Cable Core

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

Binder yarns are applied over the cable core.

5.5 Outer Sheath

UV Resistant Black riser rated PVC jacket (or color per customer request)

5.6 Cable Markings

REMFO 11 SERIES, FIBER OPTIC CABLE, XX (denotes number of fibers)-SM, REMEE PRODUCTS CORP., MM/YY (month & year of manufacture), OFNR C(ETL)US, Sequentially marked.

Special print as required by customer.

5.7 Nominal Cable Dimensions & Weights

Remee Products Part Number	No. of Fibers	Cable OD (mm)	Cable OD (in.)	Weight KG/KM	Weight LB/1000ft
11-018-76E-GBSFXF	18	13.7	0.540	142	96
11-024-76E-GBSFXF	24	13.7	0.540	142	96
11-036-76E-GBSFXF	36	16.8	0.660	221	148
11-048-76E-GBSLXF	48	16.0	0.628	198	133
11-060-76E-GBSLXF	60	17.7	0.696	233	157
11-072-76E-GBSLXF	72	19.3	0.760	302	203
11-096-76E-GBSLXF	96	23.4	0.920	447	300
11-144-76E-GBSLXF	144	27.9	1.098	586	394

6.0 FIBER CHARACTERISTICS

6.1 Physical Parameters (nominal)

Fiber Type	Single mode*
Maximum Attenuation @ 1310/1550nm	0.40/0.30 dB/km
Cladding Diameter	125.0 ± 0.7 µm
Maximum Core/Clad Concentricity Error	0.5 µm
Maximum Cladding Non-circularity	0.7%
Primary Coating Diameter	245 ± 7 µm
Cabled Cutoff Wavelength	<1260nm
Mode Field Diameter	9.0 ± 0.4µm @1310nm 10.1 ± 0.5µm @1550nm
Temperature Dependence	≤0.05dB/km (-60°C to 85°C)
Zero Dispersion Slope	0.090ps/nm ² -km
Maximum PMD Link Design Value	0.06ps/√km
Group Refractive Index @ 1310/1550	1.467 / 1.468
Proof Test	100 kpsi

*According to ITU G.652.d

**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, -40°C to +85°C
Installation, 0°C to +75°C
Storage, -55°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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