

## 1.0 SCOPE

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

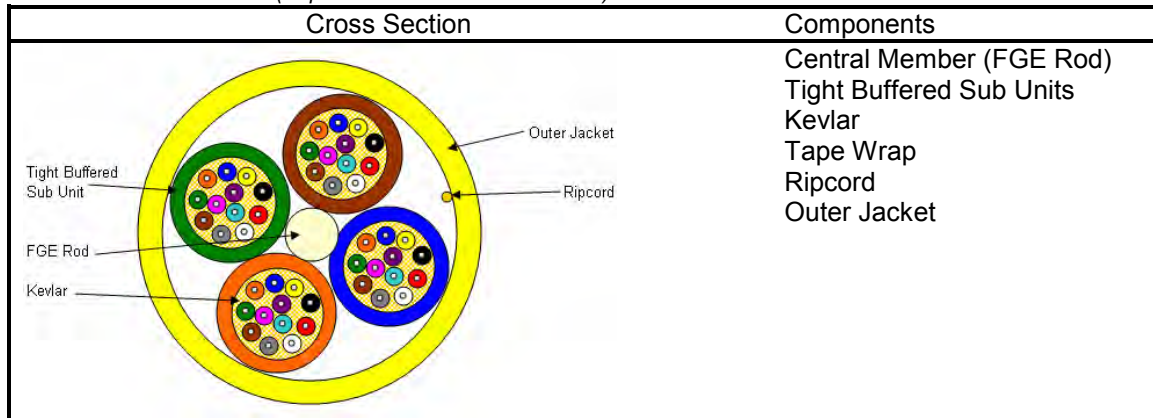
## 2.0 APPLICABLE DOCUMENTS

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 aramid yarns that are pulled in with the tight-buffered fibers under a sub-unit jacket.

### 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.

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

Yellow 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**

Remeo Products Part Number	No. of Fibers	Cable OD (mm)	Cable OD (in.)	Weight KG/KM	Weight LB/1000ft
11-018-76E-AYSFNF	18	13.9	0.546	155	104
11-024-76E-AYSFNF	24	13.9	0.546	151	101
11-036-76E-AYSFNF	36	16.9	0.666	230	155
11-048-76E-AYSLNF	48	16.1	0.634	201	135
11-060-76E-AYSLNF	60	17.7	0.696	246	165
11-072-76E-AYSLNF	72	19.2	0.756	304	204
11-096-76E-AYSLNF	96	23.5	0.926	471	316
11-144-76E-AYSLNF	144	27.4	1.078	580	390

**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 <sup>2</sup> -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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