

## 1.0 SCOPE

This document establishes the specification requirements for an indoor/outdoor distribution fiberoptic cable. This cable construction consists of multimode OM1 fibers in a distribution tight-buffered design with a riser rated PVC jacket.

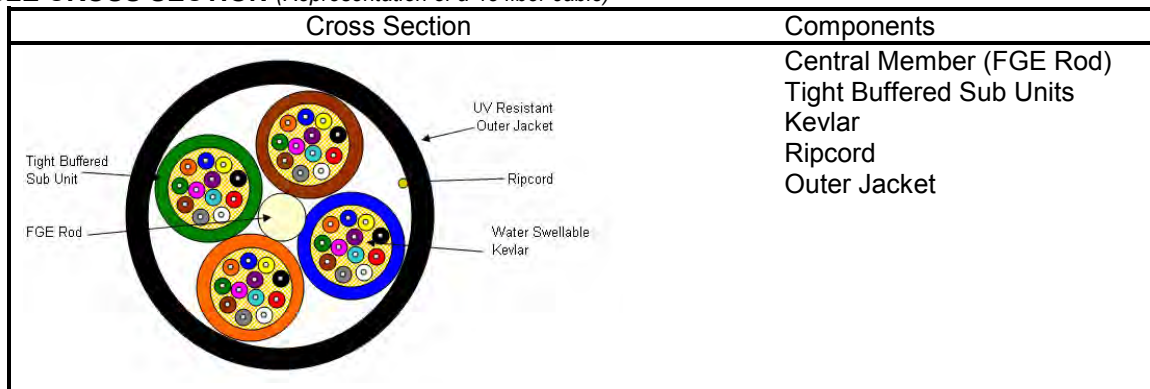
## 2.0 APPLICABLE DOCUMENTS

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)-62.5/125, 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
11-018-22J-GBSFXF	18	13.7	0.540	142	96
11-024-22J-GBSFXF	24	13.7	0.540	142	96
11-036-22J-GBSFXF	36	16.8	0.660	221	148
11-048-22J-GBSLXF	48	16.0	0.628	198	133
11-060-22J-GBSLXF	60	17.7	0.696	233	157
11-072-22J-GBSLXF	72	19.3	0.760	302	203
11-096-22J-GBSLXF	96	23.4	0.920	447	300
11-144-22J-GBSLXF	144	27.9	1.098	586	394

6.0 FIBER CHARACTERISTICS

6.1 Physical Parameters (nominal)

Fiber Type	Multimode Graded Index*
Maximum Attenuation @ 850/1300nm**	3.2 /1.0 dB/km
Minimum Bandwidth @850/1300nm	200/600MHz-km
Core Diameter, nominal	62.5 ± 3 µm
Cladding Diameter	125.0 ± 1.0 µm
Primary Coating Diameter	245 ± 10 µm
Cladding Non-circularity	<2%
Core/Clad Offset	3 µm
Zero Dispersion Wavelength	1320-1365nm
Numerical Aperture	0.275 ± .015
Group Refractive Index @ 850/1300nm	1.496/1.491
Proof Test	100 kpsi

\*Guaranteed Gigabit Ethernet Distance of 300/550mtr 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: 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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