

### 1.0 SCOPE

This document establishes the specifications for an outdoor, heavy duty, singlemode OS1, central loose tube design with a PE jacket.

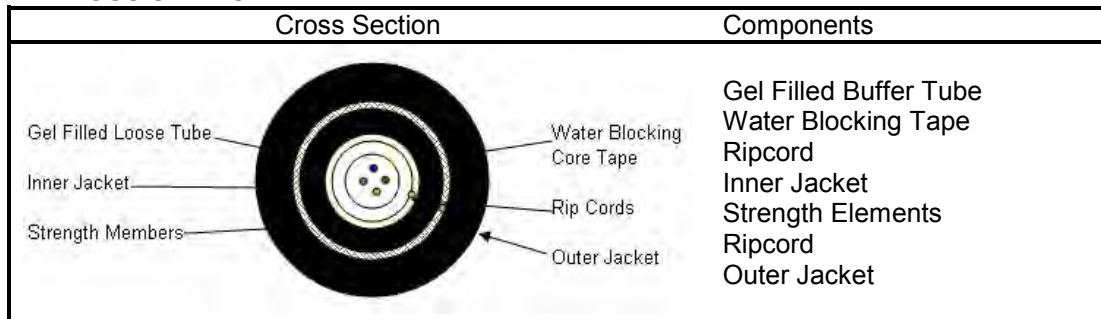
### 2.0 APPLICABLE DOCUMENTS

Reference Documents: TIA/EIA FOTP Standards 455  
Color Coding of Fiber Optic Cables TIA/EIA-598

### 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



### 5.0 OVERALL CABLE CONSTRUCTION

#### 5.1 Buffer tube

High Modulus Polymeric material.

Dimension: 3.0 mm., nominal.

Tube color: white

Fiber color code: per TIA/EIA-598

Filling compound: A non-toxic and dermatological safe antioxidant hydrocarbon based gel.

#### 5.2 Cable Core:

The cable core consists of the buffer tube with a moisture resistant water-blocking tape applied over the tube to prevent water ingress and migration with a nominal of a 25% overlap.

#### 5.3 Inner sheath

MD PE

A ripcord is applied under sheath.

#### 5.4 Cable strength

Circumferential strength members are placed over the inner sheath and under the outer sheath.

#### 5.5 Outer Sheath

UV Resistant Black MD PE.

Wall thickness (nominal): 1.52mm.

A ripcord is applied under outer sheath.

#### 5.6 Cable Markings

Indent printed- REMFO 55 SERIES, FIBER OPTIC CABLE, XX (No. of Fibers)-SM, REMEE PRODUCTS CORP., MM/YY (Month & Year of Manufacture), sequentially marked.

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
55-002-76M-MBCBNN	2	8.7	.341	60	40
55-004-76M-MBCDNN	4	8.7	.341	60	40
55-006-76M-MBCFNN	6	8.7	.341	60	40
55-008-76M-MBCHNN	8	8.7	.341	60	40
55-012-76M-MBCLNN	12	8.7	.341	60	40

6.0 FIBER CHARACTERISTICS

6.1 Physical Parameters

Fiber Type	Singlemode*
Maximum Attenuation @ 1310/1550nm	.40/.30 dB/km
Core Diameter, nominal	8.3 μm
Cladding Diameter	125.0 ± 1.0 μm
Primary Coating Diameter	245 ± 10 μm
Maximum Dispersion Slope	0.092 ps/nm <sup>2</sup> -km
Fiber Cutoff Wavelength	1150-1350nm
Cabled Cutoff Wavelength	<1260nm
Mode Field Diameter @ 1310nm	9.2 ± 0.4μm
Mode Field Diameter @ 1550nm	10.5 ± 1.0μm
Cladding Non-circularity	<1%
Core/Clad Offset	<.80 μm
Zero Dispersion Wavelength	1300-1322nm
Numerical Aperture	0.13
Group Refractive Index @ 1310/1550nm	1.467/1.4675
Proof Test	100 kpsi

\*According to ITU G.652b

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 +70°C

Installation, -0°C to +70°C

Storage, -40°C to +75°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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