

1.0 SCOPE

This document establishes the specifications for a self-supporting central tube design, singlemode OS1 fibers with a polyethylene jacket typically used for fiber to the home or business suitable for aerial, duct or direct burial.

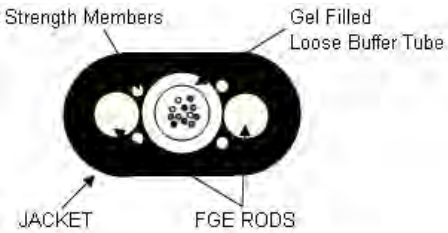
2.0 APPLICABLE DOCUMENTS

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

Cross Section for 2-12 Fibers	Components
 <p>Strength Members</p> <p>Gel Filled Loose Buffer Tube</p> <p>JACKET</p> <p>FGE RODS</p>	<p>Gel Filled Buffer Tube(s) Strength Elements Epoxy Glass Rods Outer Jacket</p>

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, two fiberglass epoxy rods and fiberglass yarns.

5.3 Cable strength

Solid dielectric epoxy glass rods are pulled in longitudinal on each side of the loose tube.
Dimension: 1.7mm

5.4 Outer Sheath

MD Black Polyethylene (UV Resistant).
A ripcord is applied under outer sheath.

5.5 Cable Markings

Indent printed- REMFO 52F SERIES, FIBER OPTIC CABLE, No. of Fibers-SM, REMEE PRODUCTS CORP., TELEPHONE HANDSET SYMBOL, MM/YY (Month & Year of Manufacture), Sequentially meter marked.

5.6 Nominal Cable Dimensions & Weights

Remeer Products Part Number	No. of Fibers	Cable OD (in.)	Cable OD (mm)	Weight LB/MFT	Weight KG/KM
52F-002-76M-EBCBSG	2	.180 x .330	4.6 x 8.4	27	40
52F-004-76M-EBCDSG	4	.180 x .330	4.6 x 8.4	27	40
52F-006-76M-EBCFSG	6	.180 x .330	4.6 x 8.4	27	40
52F-008-76M-EBCHSG	8	.180 x .330	4.6 x 8.4	27	40
52F-012-76M-EBCLSG	12	.180 x .330	4.6 x 8.4	27	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 ² -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

6.0 MECHANICAL & ENVIRONMENTAL PERFORMANCE

Maximum Tensile Load for:

- Installation: 1375N / 310lbf
- Long Term: 413N / 93lbf
- Minimum bending radius:
Loaded: 20 x diameter
Unloaded: 10 x diameter

Impact Resistance: 25 Impacts (min.)

Flexing, ±90°: 25 Cycles (min.)

Temperature rating:

- Operation, -40°C to +70°C
- Installation, -30°C to +70°C
- Storage, -50°C to +70°C

Crush Resistance: 220N/cm

Maximum Spans: NESC Heavy 150ft, NESC Medium 300ft, NESC Light 400ft

7.0 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.



1751 State Rte 17A Florida, NY 10921
800 431-3864