

1.0 SCOPE

This document establishes the specifications for a riser rated, indoor/outdoor, all dielectric, singlemode OS1, dry block fiber optic cable in a loose buffer tube design suitable for duct or lashed applications.

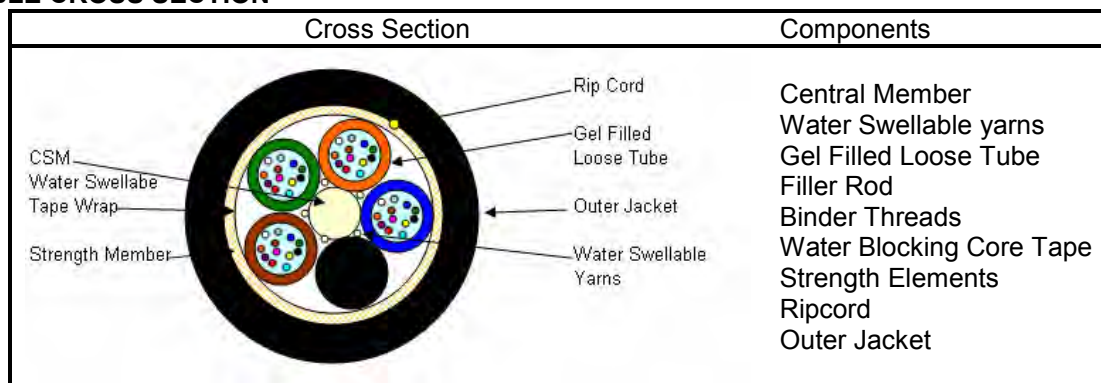
2.0 APPLICABLE DOCUMENTS

Reference Documents: TIA/EIA FOTP Standards 455
Color Coding of Fiber Optic Cables TIA/EIA-598
UL 1666

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: 2.8 mm., nominal.

Tube and fiber color code per EIA/TIA-598 or as specified by customer.

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

5.2 Dielectric Central strength member with water swellable yarns. An up-coat of polymer (if necessary per construction)

5.3 Cable Core:

The cable elements are stranded around the CSM, using reverse oscillation.

Moisture Resistance: A water blocking tape is applied over the cable core to prevent water ingress and migration with a nominal of 25% overlap.

Non-wicking binder yarns are applied over the core tape.

5.4 Cable strength

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

5.5 Outer Sheath

UV Resistant Black Riser Rated PVC. (or color per customer request)

A ripcord is applied under the outer sheath.

5.6 Cable Markings

Indent printed- REMFO 27 SERIES, FIBER OPTIC CABLE, # of fibers-SM, REMEE PRODUCTS CORP., TELEPHONE HANDSET SYMBOL, MM/YY (Month & Year of manufacture), OFNR C(ETL)US, Sequentially marked. Special print as required by customer.

Date: August 8, 2011

5.7 Nominal Cable Dimensions & Weights

Remeo Products Part Number	No. of Fibers	No. of Fibers per Tube	Cable OD (mm)	Cable OD (in.)	Weight KG/KM	Weight LB/1000ft
27-006-76M-ABSXNF	6	6	11.3	.443	122	82
27-008-76M-ABSXNF	8	8	11.3	.443	122	82
27-012-76M-ABSXNF	12	6	11.3	.443	120	81
27-012-76M-ABSLNF	12	12	11.3	.443	122	82
27-016-76M-ABSXNF	16	8	11.3	.443	120	81
27-018-76M-ABSXNF	18	6	11.3	.443	118	80
27-024-76M-ABSXNF	24	6	11.3	.443	116	78
27-024-76M-ABSLNF	24	12	11.3	.443	120	81
27-030-76M-ABSXNF	30	6	11.3	.443	114	77
27-036-76M-ABSXNF	36	6	12.0	.473	133	89
27-036-76M-ABSLNF	36	12	11.3	.443	118	79
27-048-76M-ABSXNF	48	6	13.9	.548	173	116
27-048-76M-ABSLNF	48	12	11.3	.443	116	78
27-060-76M-ABSLNF	60	12	11.3	.443	114	77
27-072-76M-ABSLNF	72	12	12.0	.473	132	89
27-084-76M-ABSLNF	84	12	13.0	.513	151	101
27-096-76M-ABSLNF	96	12	13.9	.548	172	116
27-108-76M-ABSLNF	108	12	15.1	.593	204	137
27-120-76M-ABSLNF	120	12	16.0	.628	232	156
27-132-76M-ABSLNF	132	12	16.8	.663	260	175
27-144-76M-ABSLNF	144	12	17.7	.698	291	195
27-192-76M-ABSLNF	192	12	17.9	.704	251	169
27-216-76M-ABSLNF	216	12	18.6	.734	277	186
27-288-76M-ABSLNF	288	12	21.4	.844	364	245

6.0 FIBER CHARACTERISTICS

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

*ITU G.652b



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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, $\pm 90^\circ$: 25 Cycles (min.)

Temperature Rating:

Operation, -40°C to +70°C

Installation, -20°C to +55°C

Storage, -40°C to +70°C

Twist Test: 25 Cycles (min.)

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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