TIGHT BUFFER PLENUM FIBER OPTIC CABLE
PRODUCT SPECIFICATION
99XXX76ERYSFNP

This document establishes the specification requirements for a indoor distribution fiber optic cable. This cable construction consists of single mode fibers in a distribution tight-buffered design with a plenum rated jacket. It contains test values for all-important mechanical, optical, and environmental parameters and as such, is the basis for all-incoming inspection and acceptance.

1.0 OVERALL CABLE CONSTRUCTION

1.1 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.

1.2 Sub-unit consists of aramid yarns that are pulled in with the tight-buffered fibers under a sub-unit jacket that is uniquely identified.

1.3 Cable strength Member
Fiberglass Epoxy Rod (dielectric)
An up coat of plenum material (if necessary per construction for symmetry)

1.4 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.

1.5 Outer Sheath
Yellow plenum rated jacket (or color per customer request)

1.6 Cable Markings
REMFO 33 SERIES, FIBER OPTIC CABLE, XX (denotes number of fibers)-SM, REMEE PRODUCTS CORP., MM/YY (month & year of manufacture), OFNP C(ETL)US, Sequentially marked.
Special print as required by customer.

1.7 Nominal Cable Dimensions & Weights

CCT Part Number	No. of Fibers	Cable OD (mm)	Cable OD (in.)	Weight KG/KM	Weight LB/1000ft
9901876ERYSFNP	18	13.9	0.546	173	116
9902476ERYSFNP	24	13.9	0.546	170	114
9903676ERYSFNP	36	16.7	0.656	253	170
9904876ERYSLNP	48	16.1	0.634	225	151
9906076ERYSLNP	60	17.7	0.696	275	185
9907276ERYSLNP	72	19.2	0.756	334	224
9909676ERYSLNP	96	23.5	0.926	506	340

2.0 **FIBER CHARACTERISTICS** - Physical Parameters (nominal)

Fiber Type	Single mode*
Maximum Attenuation @ 1310/1550nm**	0.40/0.30 dB/km
Core Diameter	8.2 µm
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 ± 5 µm
Cabled Cutoff Wavelength	<1260nm
Mode Field Diameter	9.2 ± 0.4µm @1310nm 10.4 ± 0.5µm @1550nm
Temperature Dependence	≤0.05dB/km (-60°C to 85°C)
Zero Dispersion Slope	0.089ps/nm^2-km
Maximum PMD Link Design Value	0.06ps/√km
Group Refractive Index @ 1310/1550	1.4677 / 1.4682
Proof Test	100 kpsi

**According to ITU G.652.d*
***Measured attenuations on shipping reels will not exceed the nominal values by .75dB/km.*

3.0 **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:	-20°C to +85°C
Installation:	0°C to +75°C
Storage:	-40°C to +85°C

4.0 **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.

5.0 **APPLICABLE DOCUMENTS**

Reference Documents:
- TIA/EIA FOTP Standards 455
- Color Coding of Fiber Optic Cables TIA/EIA-598
- UL 910
- GR-409-CORE