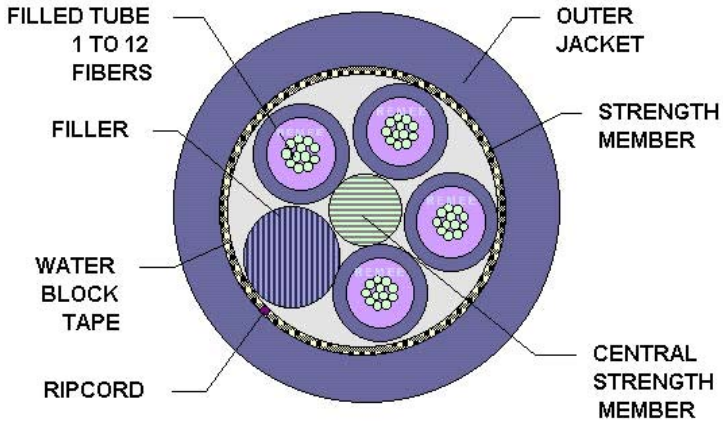
OSP LOOSE TUBE INDOOR/OUTDOOR FIBER OPTIC CABLE
PRODUCT SPECIFICATION
47XXX76EABSXNF

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



2.0 OVERALL CABLE CONSTRUCTION

2.1 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.

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

2.3 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.

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

2.5 Outer Sheath
UV Resistant Black Riser Rated PVC. (or color per customer request)
A ripcord is applied under the outer sheath.

2.6 Cable Markings
Indent printed: CCT GROUP47, FIBER OPTIC CABLE, # of fibers-fiber type, TELEPHONE HANDSET SYMBOL, MM/YY (month and year of manufacture), OFNR C(ETL)US, sequentially meter marked. Special print as required by customer.

2.7 Nominal Cable Dimensions & Weights

CCT Part Number	No. of Fibers	No. of Fibers per Tube	Cable OD (mm)	Cable OD (in.)	Weight KG/KM	Weight LB/1000ft
4700676EABSFNF	6	6	11.3	.443	122	82
4700876EABSHNF	8	8	11.3	.443	122	82
4701276EABSFNF	12	6	11.3	.443	120	81
4701276EABSLNF	12	12	11.3	.443	122	82
4701676EABSHNF	16	8	11.3	.443	120	81
4701876EABSFNF	18	6	11.3	.443	118	80
4702476EABSFNF	24	6	11.3	.443	116	78
4702476EABSLNF	24	12	11.3	.443	120	81
4703076EABSFNF	30	6	11.3	.443	114	77
4703676EABSFNF	36	6	12.0	.473	133	89
4703676EABSLNF	36	12	11.3	.443	118	79
4704876EABSFNF	48	6	13.9	.548	173	116
4704876EABSLNF	48	12	11.3	.443	116	78
4706076EABSLNF	60	12	11.3	.443	114	77
4707276EABSLNF	72	12	12.0	.473	132	89
4708476EABSLNF	84	12	13.0	.513	151	101
4709676EABSLNF	96	12	13.9	.548	172	116
4710876EABSLNF	108	12	15.1	.593	204	137
4712076EABSLNF	120	12	16.0	.628	232	156
4713276EABSLNF	132	12	16.8	.663	260	175
4714476EABSLNF	144	12	17.7	.698	291	195
4719276EABSLNF	192	12	17.9	.704	251	169
4721676EABSLNF	216	12	18.6	.734	277	186
4728876EABSLNF	288	12	21.4	.844	364	245

3.0 FIBER CHARACTERISTICS

Fiber Type	Single mode*
Maximum Attenuation @ 1310/1550nm	040/0.30 dB/km
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 ± 7 µm
Cabled Cutoff Wavelength	<1260nm
Mode Field Diameter	9.0 ± 0.4µm @1310nm 10.1 ± 0.5µm @1550nm
Temperature Dependence	≤0.05dB/km (-60°C to 85°C)
Zero Dispersion Slope	0.090ps/nm^2-km
Maximum PMD Link Design Value	0.06ps/√km
Group Refractive Index @ 1310/1550	1.467 / 1.468
Proof Test	100 kpsi

**According to ITU G.652.d*

4.0 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: -20°C to +60°C
- Storage: -40°C to +70°C

Twist Test: 25 Cycles (min.)

5.0 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.

6.0 APPLICABLE DOCUMENTS

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