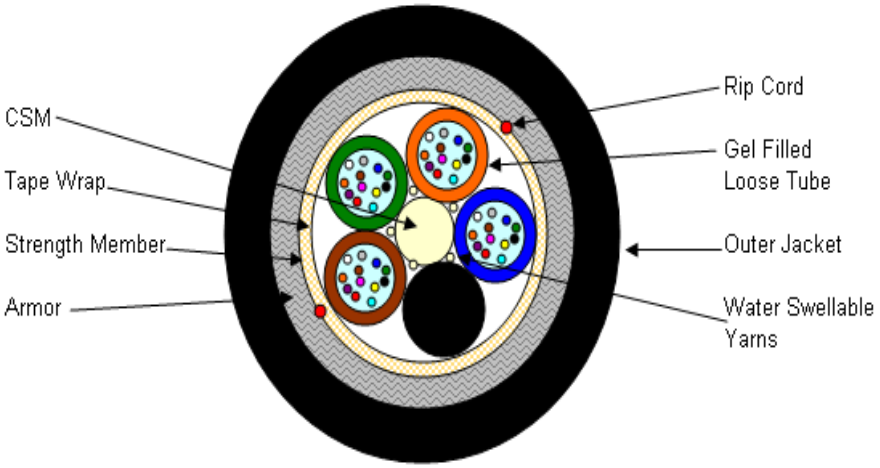
OSP LOOSE TUBE LITE ARMOUR FIBER OPTIC CABLE
PRODUCT SPECIFICATION
48XXX22JEBSXWN

This document establishes the specifications for an outdoor, direct burial, armored fiber optic cable, in a dry block loose buffer tube design. 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 *(Representation of standard 48 fiber construction)*



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
Epoxy glass rod with an up-coat of polymer (if necessary per construction).
Water swellable yarns are to be pulled in with the CSM.

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 armored tape.

2.5 Steel Armor tape

Corrugated flexible steel with plastic coating for bonding to sheath. The armor of each length of cable shall be electrically continuous with no more than one splice allowed per kilometer of cable. The breaking strength of any section of an armor tape containing a factory splice joint, shall not be less than 80% of the breaking strength of an adjacent section of the armor of equal length without a joint.
A ripcord is applied under the armor tape.

2.6 Outer Sheath

UV Resistant Black Polyethylene

2.7 Cable Markings

Indent printed: CCT GROUP48, FIBER OPTIC CABLE, # of fibers-62.5/125 (month and year of manufacture), sequentially meter marked. Special print as required by customer.

2.8 Nominal Cable Dimensions & Weights

CCT Part Number	No. of Fibers	No. of Fibers per	Cable OD	Cable OD (in.)	Weight KG/KM	Weight LB/1000ft
4800622JEBSFWN	6	6	13.4	.528	160	108
4800822JEBSHWN	8	8	13.4	.528	160	108
4801222JEBSFWN	12	6	13.4	.528	165	111
48012-22JEBSLWN	12	12	13.4	.528	165	111
4801622JEBSHWN	16	8	13.4	.528	165	111
4801822JEBSFWN	18	6	13.4	.528	166	112
4802422JEBSFWN	24	6	13.4	.528	167	112
4802422JEBSLWN	24	12	13.4	.528	165	111
4803022JEBSFWN	30	6	13.4	.528	163	110
4803622JEBSFWN	36	6	14.2	.558	185	124
4803622JEBSLWN	36	12	13.4	.528	166	112
4804822JEBSLWN	48	12	13.4	.528	167	112
4806022JEBSLWN	60	12	13.4	.528	163	109
4807222JEBSLWN	72	12	14.2	.558	184	124
4808422JEBSLWN	84	12	15.2	.598	205	138
4809622JEBSLWN	96	12	16.1	.633	224	151
4810822JEBSLWN	108	12	17.2	.678	258	173
4812022JEBSLWN	120	12	18.1	.713	287	193
4814422JEBSLWN	144	12	19.9	.783	342	230
4821622JEBSLWN	216	12	20.5	.809	328	221
4828822JEBSLWN	288	12	23.3	.919	429	288

3.0 FIBER CHARACTERISTICS

Fiber Type	Multimode Graded Index
Maximum Attenuation @ 850/1300nm	3.2 /1.0 dB/km
Minimum Bandwidth @850/1300nm	200/600MHz-km
Core Diameter, nominal	62.5 ± 3 µm
Cladding Diameter	125.0 ± 1.0 µm
Primary Coating Diameter	245 ± 10 µm
Cladding Non-circularity	<2%
Core/Clad Offset	3 µm
Zero Dispersion Wavelength	1320-1365nm
Numerical Aperture	0.275 ± .015
Group Refractive Index @ 850/1300nm	1.496/1.491
Proof Test	100 kpsi

**Guaranteed Gigabit Ethernet Distance of 300/550mtr per IEEE802.3z.*

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: 440N/cm

Impact Resistance: 25 Impacts (min.)
Flexing, ±90°: 25 Cycles (min.)
Temperature Rating:
- Operation: -40°C to +70°C
- Installation: -40°C to +55°C
- Storage: -50°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
- RUS 1755.900
- GR-20-CORE