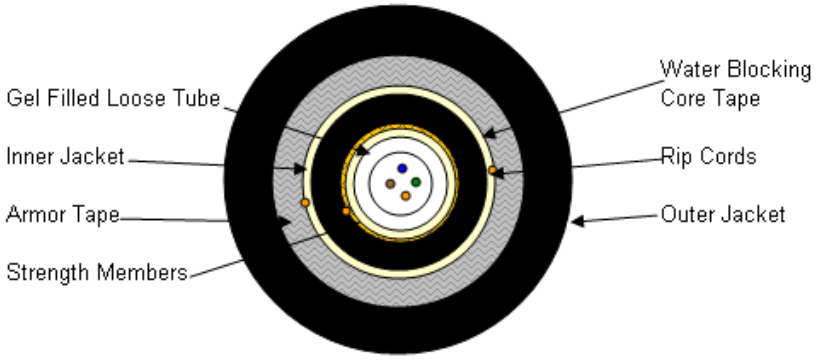
OSP LOOSE TUBE, DOUBLE JACKET, SINGLE ARMOR, CENTRAL TUBE DESIGN FIBER OPTIC WIRE PRODUCT SPECIFICATION 63XXX76MMBCXNN

This document establishes the specifications for a single mode, single 3mm central tube design with single armor and double polyethylene jacket suitable for direct burial, duct or lashed aerially. 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: 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.

2.2 Cable Core
The cable core consists of the buffer tube with a moisture resistant water-blocking tape applied over the tube to prevent water ingress and migration with a nominal of a 25% overlap.

2.3 Cable strength
Circumferential strength members are placed over the cable core and under the inner sheath.

2.4 Inner Sheath
Black Polyethylene

2.5 Moisture Resistance
A moisture resistant water-blocking tape applied over the inner sheath to prevent water ingress and migration with a nominal of a 25% overlap.

2.6 Steel Armor Tape
Tape is 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 joint or 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.

2.7 Outer Sheath
Black Polyethylene (UV Resistant)
Wall thickness (nominal): 1.52mm.

2.8 Cable Markings
Indent printed: CCT GROUP63, FIBER OPTIC CABLE, # of fibers-SM, MM/YY (month and year of manufacture), TELEPHONE HANDSET SYMBOL sequentially meter marked. Special print as required by customer.

2.9 Nominal Cable Dimensions & Weights

CCT Part Number	No. of Fibers	Cable OD (in.)	Cable OD (mm)	Weight LB/MFT	Weight KG/KM
6300276MMBCBNN	2	.437	11.1	79	118
6300476MMBCDNN	4	.437	11.1	79	118
6300676MMBCFNN	6	.437	11.1	79	118
6300876MMBCHNN	8	.437	11.1	79	118
6301076MMBCJNN	10	.437	11.1	79	118
6301276MMBCLNN	12	.437	11.1	79	118

3.0 FIBER CHARACTERISTICS – 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*

4.0 MECHANICAL & ENVIRONMENTAL PERFORMANCE

Maximum Tensile Load for:
- Installation: 1335N / 300lbf
- Long Term: 600N / 135lbf

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

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