

## Build Specifications for Indoor Plenum Singlemode Pre-Terminated Fiber Optic Assemblies - Custom Made in USA by QuickTreX®

- All Singlemode Pre-Terminated Assemblies will be custom made at the time of your order, built with Corning® fiber to your specifications.
- All multi-strand fiber assemblies will be constructed using a breakout made with 2mil color coded buffer tubing for each leg. The buffer tubes will be securely fastened to the outer jacket using high strength adhesive type heat shrink tubing.
- The standard breakouts will be 14" for 2 and 4 strand. 18" for 6 strand, 24" for 12 strand and 36" for 24 strand.
- The connectors will be staggered to minimize the size of the pulling basket which will be <sup>3</sup>/<sub>4</sub>".
- No duplex clips will be used to pair the connectors unless otherwise specified. For connectors that come with duplex clips, we will provide those clips to the customer in a plastic bag that will be attached to the assembly.
- Heat shrink tubing will be used at:
  - 1) The transition from the buffer tubes to the cable jacket.
  - 2) Where the basket meets with the turn buckle (pulleye hook)
  - 3) Where the basket ends and connects with the cables jacket.
- One wrap around label is to be attached to each end of the cable assembly for identification. The label text includes the cable part#, and a unique serialized number.
- Pull Eyes (pulling baskets) (if so equipped) are made from Super strong polyethylene mesh and feature a free-spinning buckle to eliminate twisting of the cable during the pull.

## **TESTING**

All fiber ends are visually inspected with a fiberscope of 400 power or better for surface defects including, cracking, pitting, and scratches, on the glass surface of the connector. All ends are tested utilizing a Loss Test Set to the following standards: SM: IL – Max 0.2dB Min - .01dB - ORL (optical return loss) - 55dB

Note on "Loss Over Distance": Singlemode Fiber has a typical loss per Kilometer of 1.0 dB at 1310 MN, 1.0 dB at 1383 MN, 0.75 dB at 1550 MN. \* All test results will be included on the QuickTreX sticker found on the reel of the assembly.

## **Indoor Plenum Fiber Specs:**

Optical Characteristics					
Items	Single Mode	OM1	OM2	OM <sub>3</sub>	OM4
Core Size	8.2 um	62.5 um	50 um	50 um	50 um
Wavelength	(1310/ 1550) nm	(850/ 1300) nm	(850/1300) nm	(850/1300) nm	(850/ 1300) nm
Max. Attenuation	(0.5/ 0.4) dB/ km	(3.5/ 1.5) dB/ km	(3.5/ 1.5) dB/ km	(3.5/ 1.5) dB/ km	(3.5/ 1.5) dB/ km
Bandwidth (EMB) (High Performance)	-	220 MHz @850nm	850 MHz @850nm	2000 MHz @850nm	4700 MHz @850nm
Link Length (10Gb/s)	-	-	150 mtr	300 mtr	550 mtr

Physical Characteristics	Value
Nominal Outer Diameter (mm) of 2, 4, 6, 8, 12, 24 (fiber count)	4.40/ 4.80/ 5.30/ 5.80/ 6.30/ 8.10
Weight (lbs/km) of 2, 4, 6, 8, 12, 24 (fiber count)	40/ 52/ 64/ 87/ 115/ 140
Minimum Bend Radius, Installation (cm) of 2, 4, 6, 8, 12, 24 (fiber count)	6.6/ 7.2/ 7.95/ 8.7/ 9.45/ 12.15
Minimum Bend Radius, Operation (cm) of 2, 4, 6, 8, 12, 24 (fiber count)	4.40/ 4.80/ 5.30/ 5.80/ 6.30/ 8.10

Temperature Range	Indoor
Storage Temperature	-40 C to +70 C
Operating Temperature	o C to +70 C

Exclusive

## Features:

- 900um Tight Buffers
- Aramid yarn strength members
- OFNP(Plenum) rated construction
- Exclusive use of Corning® optical fibers
- Durable jacket offers added protection during installation and in rugged use applications

\*these specifications are an example of the specifications of the fiber that will be used in the construction of a pre-terminated assembly. Due to cable availability, specs may vary slightly. If you are ready to place an order, and need to confirm exact specs, please email sales@lanshack.com.