



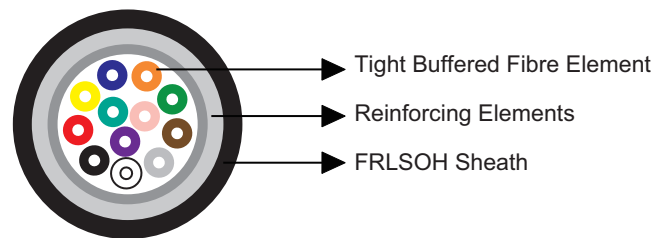
## Tight Buffer Optical Fiber Cables

### Application

These optical fiber cables are designed to data transmission in ship and specially in cruise ship where low smoke, halogen free and fire retardant cables are required to increase safety on board.

### Standards

- IEC 60332-1-2
- IEC 60332-3-22
- IEC 60754-1/2
- IEC 61034



### Construction

- Coated Optical Fiber: 250/900µm.
- Reinforcing Elements: Glass yarns with watertight tape.
- Outer Sheath: LSOH and FR compound.

### Fiber Specification

		G50/125		G62.5/125		E9/125	
Geometry/Mechanical Properties							
Core Diameter	µm	50 ± 2.5		62.5 ± 3			
Mode Field Diameter (at 1310 nm)	µm					9.2 ± 0.4	
Cladding Diameter	µm	125 ± 2		125 ± 1		125 ± 2	
Coating Diameter	µm	245 ± 10		245 ± 5		245 ± 10	
Core Non-circularity	%	< 5		< 5			
Cladding Non-circularity	%	< 1		< 1		< 1	
Core/Clad Concentricity Error	µm	< 1.5		< 1.5		< 0.8	
Eccentricity of Coating	µm	< 10		< 10		< 10	
Screen Test		≥100 kpsi		≥100 kpsi		≥100 kpsi	
Transmission Properties		OM2		OM1		OS1	
Wavelength	nm	850	1300	850	1300	1310	1550



Attenuation Max.	dB/km	2.7	0.8	3.2	0.9	0.36	0.22
Bandwidth Min.	MHz. km	500	1000	250	600		
Effective Group of Refraction		1.483	1.478	1.497	1.493	1.4695	1.4701
Numerical Aperture		0.200 ± 0.015		0.275 ± 0.015			
Dispersion Coefficient Max.	ps/nm.km					3.5	18
Zero Dispersion Wavelength	nm						1300 -1322
Dispersion Slope	ps/nm <sup>2</sup> .km						≤0.092
Cutoff Wavelength (cabled)	nm						≤1250
Polarization Mode Dispersion	ps/km <sup>1/2</sup>						≤0.1

## Mechanical and Thermal Properties

Bending Radius for Fixed Installations: 15 × OD

Temperature Range: -20°C ~ +60°C

## Dimensions and Weight

Part No.	No. of Optical Fibers	Nominal Overall Diameter mm	Nominal Weight kg/km
MLN-MTA-X-2/4-H-VT-G	2/4	6.4	45
MLN-MTA-X-6/8-H-VT-G	6/8	7.2	52
MLN-MTA-X-10/12-H-VT-G	10/12	7.7	60

Note: X: Fiber type (0=Fiber and copper conductors in cable 4=50/125 multi-mode fiber (OM3); 5=50/125 multi-mode fiber (OM2); 6=50/125 multi-mode fiber (OM1); 7=NZDS SM fiber per G.656.; 8=NZDS SM fiber per G.655.; 9=Standard SM fiber per G.652.D)