



**Tight Buffer Optical Fiber Cables**

<b>Application</b>	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.
<b>Standards</b>	IEC 60332-1-2 IEC 60332-3-22 IEC 60754-1/2 IEC 61034
<b>Construction</b>	
<b>Coated Optical Fiber</b>	250/900µm.
<b>Reinforcing Elements</b>	Glass yarns with watertight tape.
<b>Outer Sheath</b>	LSOH and FR compound.

**Fiber Specification**

	G50/125	G62.5/125	E9/125
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**Geometry/Mechanical Properties**

	µm	G50/125	G62.5/125	E9/125
<b>Core Diameter</b>	µm	50 ± 2.5	62.5 ± 3	
<b>Mode Field Diameter (at 1310 nm)</b>	µm			9.2 ± 0.4
<b>Cladding Diameter</b>	µm	125 ± 2	125 ± 1	125 ± 2
<b>Coating Diameter</b>	µm	245 ± 10	245 ± 5	245 ± 10
<b>Core Non-circularity</b>	%	< 5	< 5	
<b>Cladding Non-circularity</b>	%	< 1	< 1	< 1
<b>Core/Clad Concentricity Error</b>	µm	< 1.5	< 1.5	< 0.8
<b>Eccentricity of Coating</b>	µm	< 10	< 10	< 10
<b>Screen Test</b>		≥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
UE092-MTA-X-2/4-H-VT-G	2/4	6.4	45
UE092-MTA-X-6/8-H-VT-G	6/8	7.2	52
UE092-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)