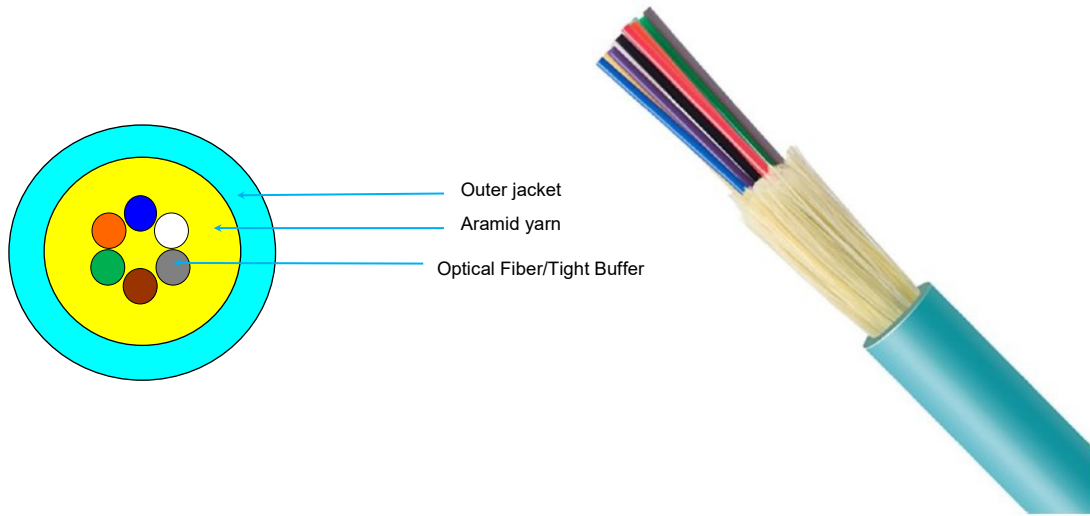


F.O. Indoor All Dielectric Cable



STANDARD COMPLIANCE

- ANSI/TIA-568.3-D
- ISO/IEC 11801
- EN 50173
- IEC 60793
- IEC 60794-1-2
- ITU-T G.652D (Singlemode)
- ITU-T G.651 (Multimode)
- RoHS Compliant
- Telcordia GR-409-Core

APPLICATION SUPPORT

- Indoor/ Intra-building/ Datacenter
- Ethernet
- 100BASE-F Fast Ethernet
- 1000BASE –SX/LX Gigabit Ethernet (IEEE 802.3z)
- 10G Ethernet (IEEE 802.3ae)
- 40/100Gbps Ethernet
- 52/155/622 Mbps and 1.2Gbps ATM
- FDDI, Fiber channel and others.

Fiber Optic Attributes (Singlemode)

Core	Germania (GeO ₂) doped Silica (SiO ₂)
Core Diameter	8.3 μm
Cladding	Silica (SiO ₂)
Primary Coating	2 layers of UV curable resin
Index of refraction Difference	0.36%
Group refractive index	1.169 @1310 nm and 1550 nm
Cladding Diameter	125 ± 1 μm
Cladding Non-Circularity	≤ 1 %
Core/Cladding Concentricity error	≤ 0.6 μm
Coating Diameter (uncooled)	245 ± 5 μm
Coating/Cladding Concentricity error	≤ 12 μm
Colored Fiber Diameter	250 ± 15 μm
Mode Field Diameter	9.3 ± 0.5 μm @ 1310 nm 10.4 ± 0.6 μm @ 1550 nm
Proof test stress	The entire length of fiber is subjected to tensile stress greater than 0.69 GPa
Attenuation with Bending	100 turns, 50 mm diameter ≤ 0.05 dB @ 1310 nm ≤ 0.10 dB @ 1550 nm 1 turns, 32 mm diameter ≤ 0.50 dB @ 1550 nm
Zero-Dispersion Wavelength (λ₀)	1300 ≤ (λ ₀) ≤ 1322 nm
Max. Zero-Dispersion Slope (S_{0max}) at λ₀	≤ 0.092 ps/(nm ² .km)
Chromatic dispersion coefficient, D(λ)	D(λ) = λS _{0max} /4·[1-{λ ₀ /λ} ⁴] ps/(nm·km) ≤ 3.09 ps/(nm.km) @ 1285~1330 nm ≤ 18.21 ps/(nm.km) @ 1550 nm
Coating Strip Force (@ 0°C to +45°C)	1.3 N (0.3 lbf) ≤ F ≤ 8.9 N (2.0 lbf)
Numerical Aperture	0.13 ± 0.01
Attenuation coefficient [Typ. / Max.]	≤ 0.33 / ≤ 0.34 dB/km @ 1310 nm ≤ 0.31 / ≤ 0.35 dB/km @ 1383 nm ≤ 0.19 / ≤ 0.21 dB/km @ 1550 nm ≤ 0.20 / ≤ 0.23 dB/km @ 1625 nm
Cabled Cut-off Wavelength (λ_{cc})	≤ 1270 nm
Polarization Mode Dispersion coefficient (PMD)	≤ 0.20 ps/√km

Fiber Optic Attributes (Multimode)

Cable Type	50/125 μm [OM2 / OM3 / OM4]
Core Diameter	50.0 \pm 2.5 μm
Cladding Diameter	125 \pm 1 μm
Core Non-Circularity	\leq 5 %
Cladding Non-Circularity	\leq 1 %
Core/Cladding Concentricity error	\leq 1.5 μm
Coating Diameter (uncooled)	245 \pm 5 μm
Coating/Cladding Concentricity error	\leq 12 μm
Colored Fiber Diameter	250 \pm 15 μm
Zero-Dispersion Wavelength (λ_0)	1295 \leq (λ_0) \leq 1315 nm
Max. Zero-Dispersion Slope (S_0 max) at λ_0	\leq 0.101 ps/(nm ² .km)
Numerical Aperture	0.20 \pm 0.015
Attenuation [Max. : 850 nm / 1300 nm] [Typ. : OM2/OM3/OM4]	\leq 2.7 / \leq 0.8 dB/km \leq 2.5 / \leq 2.3 / \leq 2.3 dB/km @ 850 nm \leq 0.7 / \leq 0.6 / \leq 0.6 dB/km @ 1300 nm
Bandwidth (MHz/km) : [OM2 / OM3 / OM4]	\geq 500 / \geq 1500 / \geq 3500 @ 850 nm \geq 500 / \geq 500 / \geq 500 @ 1300 nm
850 nm Laser Bandwidth (MHz/km) : [OM2 / OM3 / OM4]	NA / \geq 2000 / \geq 4700

Mechanical and Environmental Specification

Maximum tension load, short term	900 N
Maximum tension load, long term	300 N
Minimum bend radius, loaded	15 x OD.
Minimum bend radius, unloaded	10 x OD.
Installation Temp.	-40°C to 70°C
Operating Temp.	-45°C to 75°C
Storage Temp.	-45°C to 75°C

Fiber Optic Constructions

Item		Description			
		4 core	6 core	12 core	48 core
Tight Buffer	Material	FR-PVC with color coding			
	Diameter (μm)	900			
Strength Member		Aramid Yam			
Outer Jacket	Material	FR-LSZH			
Weight	Kg/km	26	34	40	61
Cable Diameter (Approx.) mm		4.8	5.8	6.5	8.9

TIA/EIA-598-A Color code Fiber and Loose tube Identification

No.	Fiber Identification	Loose Tube Identification
1	Blue	Blue
2	Orange	Orange
3	Green	Green
4	Brown	Brown
5	Slate	Slate
6	White	-
7	Red	-
8	Black	-
9	Yellow	-
10	Violet	-
11	Pink	-
12	Aqua	-

Ordering Information

Description	Part Number		
	OS2 9/125 μm	OM3 50/125 μm	OM4 50/125 μm
F.O. Indoor 6 core LSZH	LMZ-OS2ID06	LMZ-OM3ID06	LMZ-OM4ID06
F.O. Indoor 12 core LSZH	LMZ-OS2ID12	LMZ-OM3ID12	LMZ-OM4ID12
F.O. Indoor 24 core LSZH	LMZ-OS2ID24	LMZ-OM3ID24	LMZ-OM4ID24
F.O. Indoor 48 core LSZH	LMZ-OS2ID48	LMZ-OM3ID48	LMZ-OM4ID48
F.O. Indoor 120 core LSZH	LMZ-OS2ID72	LMZ-OM3ID72	LMZ-OM4ID72