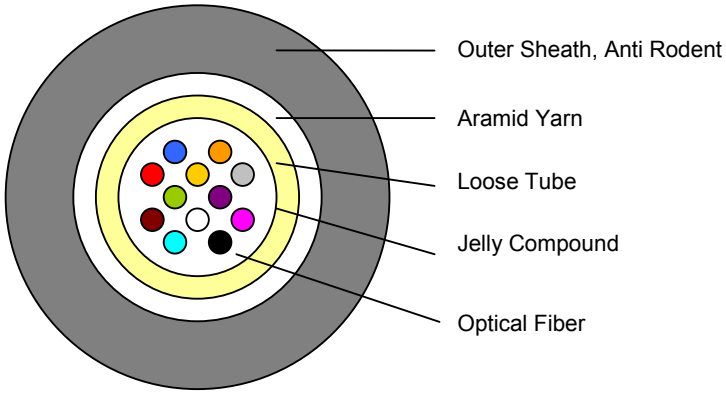
Unmet INDOOR FIBER OPTIC CABLE

Cable Description

x is Number of Cores and x ≤12
MM, 2~12C, Flame-Retardant Jacket, All Dielectric

Cable Cross Section



Application

Indoor

Identification of optical fiber & Loose Tube

Optical Fiber				Loose Tube
1	Blue	7	Red	White
2	Orange	8	Black	
3	Green	9	Yellow	
4	Brown	10	Violet	
5	Grey	11	Pink	
6	White	12	Aqua	

UNRP05XFI

Optical Fiber Performance

1.Optical & Geometrical Performance

Core Diameter: 50 ± 2.5μm
Cladding Diameter: 125 ± 1μm
Cladding Non-Circularity: ≤ 1%
Coating Diameter : 245 ± 10μm
Coating Non-Circularity Error: ≤ 6%
Core/Clad Concentricity: ≤ 1.5μm
Attenuation Coefficient Error: ≤ 2.7dB/km at 850nm, ≤ 0.8dB/km at 1300nm
Bandwidth: ≥ 400MHz.km at 850nm, ≥ 800MHz.km at 1300nm
Numerical Aperture: 0.20 ± 0.015
Point Discontinuity: ≤ 0.1 dB at 850 & 1300nm
Effective Group Index of: 1.482 at 850nm
Refraction (Neff): 1.477 at 1300nm

2. Mechanical & Environmental Performance

Proof Test Level: ≥ 0.69GPa (≥100kpsi)
Macro bending (at 75mmdia. x100 turns): ≤ 0.05 dB at 850&1300nm
Temperature Dependence (-60°C to 85 C) : ≤ 0.10 dB/km at 850&1300nm
Damp Dependence (+80°C,85%RH for 30Days): ≤ 0.20 dB/km at 850&1300nm
Water soak Dependence (+20°C for 30Days): ≤ 0.20 dB/km at 850&1300nm

Cable Description

- **Fiber Coloring:** UV Curable Acrylic Color Ink
- **No. of Tube:** 1Tubes
- **No. of fiber/Tube:** Max. 12 Fibers
- **Loose Tube Material:** PBT
- **Filling compound (Tube):** Thixotropic Jelly
- **Strength Member:** Aramid Yarn
- **Outer Sheath:** Flame-Retardant PVC, Nom.1.0mm Thick.
- **Cable Marking:** Cable type, Fiber Counts, Name of Manufacturer, Year of Manufacturing, Cable Length in meter
- **Cable Outside Diameter:** Nom. 6.0mm
- **Cable Weight:** Approx. 35kg/km
- **Packing:** Export Wooden Drum
- **Bending Radius:**
  Static: 10D (Diameter of cable)
  Dynamic: 20D (Diameter of cable)

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Mechanical & Environmental Performance

Item	Reference	Test Condition	Acceptance Criteria
Tensile Strength	IEC 794-1-E1	Long Term: 300N Short Term: 1000N	Attenuation Increase: ≤0.1dB
Crush	IEC 794-1-E3	Loading: 1000N/100mm	Attenuation Increase: ≤0.1dB
Impact	IEC 794-1-E4	Loading: 1N.m Cycle: 5	Attenuation Increase: ≤0.1dB
Repeated Bend	IEC 794-1-E6	Bending Radius: X 20D Cycle: 30	Attenuation Increase: ≤0.1dB
Torsion	IEC 794-1-E7	Length: 1m Torsion angle: ±180	Attenuation Increase: ≤0.1dB
Temp. Cycling	IEC 794-1-F1	Step: +20°C->-20°C°C->+60°C->+20°C, 24Hrs	Attenuation Increase: ≤0.1dB/km