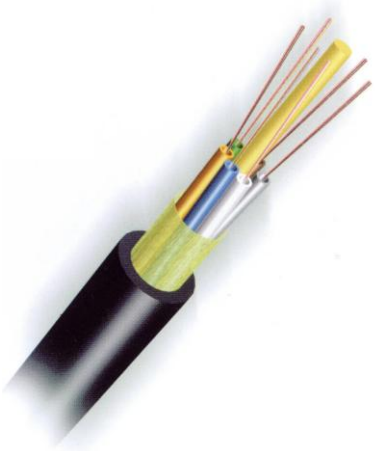
Outdoor Fiber Cable – Loose Tube

Product Type: TOFTY



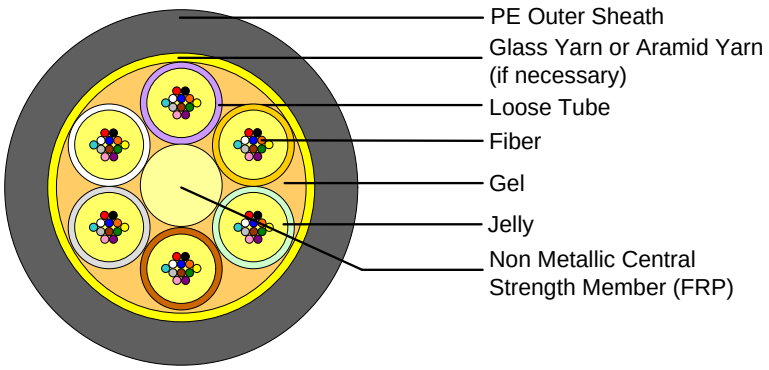
Optical Cable Specifications

Application

The fiber optic cable consists of six loose tubes stranded around the non-metallic central strength member, over which an outer sheath of polyethylene (PE) is extruded. The loose tubes are made of good temperature property material. A number of singlemode or multimode fibers are secondary coated into the loose tube with excess length and tube filled with moisture-proof compound. All the interstices of cable core are filled with water blocking compound. The cable is appropriate for long distance telecom, LAN in high-voltage are or access to telecom network.

Cable features

- Singlemode 9/125µm or Multimode 50/125µm or 62.5/125µm
- Jelly-filled cable core
- Loose tube material: Polybutylene Terephthalate (PBTP)
- Adopts special SZ cross-directional stranding method
- Non-metallic central strength member (FRP)
- Reinforced with glass or aramid yarn
- Non metallic structure provides excellent anti-electromagnetism, anti-thunder and anti-static performances
- Color coding complies with TIA/EIA-598B



Mechanical Specifications

Fiber count	Cable diameter (mm)	Cable weight (kg/km)	Min. bending radius (mm)		Allowable tension (N)		Max. crush loading force (N/100mm)	
			Static state	Dynamic state	Short term	Long term	Short term	Long term
2-24	10.0	80	10 times cable diameter	20 times cable diameter	1500	600	1000	300
26-36	10.8	94						
38-60	11.6	105						
62-72	12.4	125						
74-96	13.9	164						
98-120	15.6	214						
122-144	17.2	270						
146-216	17.6	280						
218-288	22.6	450						

Optical fiber specifications – Singlemode

Fiber Code	S9	
Wavelength (nm)	1310	1550
Core/Cladding (μm)	9/125	
Mode-Field Diameter (μm)	(9.3) ± 0.5	(10.5) ± 1.0
Max. Attenuation (dB/km)	≤ 0.35	≤ 0.22
Dispersion Coefficient (ps/km·nm)	λ @ 1285nm~1339nm	λ @ 1550nm
	≤ 3.5	≤ 18
Cutoff wavelength (nm)	λ_c = 1260 ± 70	
Glass concentricity error (μm)	≤ 0.8	
Cladding non-circularity (%)	≤ 1.0	
Proof test (Kpsi)	≥ 100Kpsi (0.7GN/m^2)	
Dynamic fatigue (tensile)	≥ 20	
Compliance	ITU-T G.652 (Categories A, B, C & D)	

Optical fiber specifications – Multimode

Fiber Code	M5		M6	
Wavelength (nm)	850	1300	850	1300
Core/Cladding (μm)	50/125		62.5/125	
Core non-circularity (%)	≤ 6.0			
Cladding non-circularity (%)	≤ 1.0			
Core/Cladding non-concentricity (%)	≤ 6.0			
Numerical Aperture	0.20 ± 0.02		0.275 ± 0.015	
Max. Attenuation (dB/km)	≤2.5	≤0.7	≤3.0	≤0.8
Performance (MHz.km)	≥500	≥1000	≥400	≥1000
Proof test (Kpsi)	≥ 100			
Dynamic fatigue (tensile)	≥ 25			

Notes

- Fiber colors by EIA/TIA-598-B: Blue/Orange/Green/Brown/Slate/White/Red/Black/Yellow/Violet/Rose/Aqua
- Diameter represents a nominal vary and may vary by ±5%