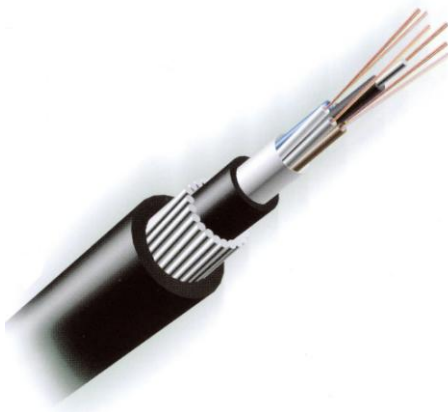


Outdoor Fiber Cable – Loose Tube

TOTA33



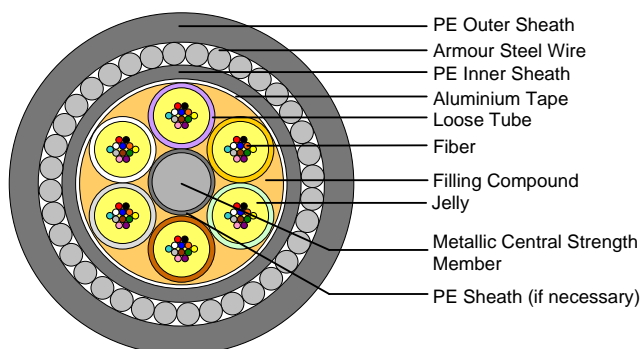
Optical Cable Specifications

Application

The fiber optic cable consists of six loose tubes stranded around the metallic central strength member, protected by overlapping flat aluminium tape longitudinally applied, over which an inner sheath of PE is applied. The cable is also armoured with spirally applied steel wires layer, over which an outer sheath of PE is applied. The spirally applied steel wires enhance tension, press and impact properties. This cable is designed for underwater and direct burial cabling and can be used in long distance communication, LAN, CATV and computer transmission applications. The cable's excellent mechanical properties allows it to be used in sever environmental conditions such as steep slopes and/or strong river currents.

Cable features

- Singlemode (9/125 μ m) or Multimode (50/125 μ m or 62.5/125 μ m)
- Jelly-filled cable core
- Loose tube material: Polybutylene Terephthalate (PBTP)
- Adopts special SZ cross-directional stranding method
- Central strength member: Phosphated steel wire
- Double-sided PE aluminium tape – PE inner sheath
- Steel wire spiralling layer with PE outer sheath
- Color coding complies with TIA/EIA-598B



Mechanical Specifications

Fiber Count	2 ~ 24	26 ~ 36	38 ~ 60
Outer Diameter (mm)	19.3	20.0	20.8
Max Weight (kg/km)	770	810	870
Min Bending Radius - Short Term	12.5 times O.D.		
Min Bending Radius - Long Term	25 times O.D.		
Max Tensile Load (N) - Short Term	20000		
Max Tensile Load (N) - Long Term	10000		
Crush Resistance (N/100mm) – Short Term	5000		
Crush Resistance (N/100mm) – Long Term	3000		
Operating Temperature	-40°C to +70°C		

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)	$\lambda_c = 1260 \pm 70$	
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)	≤ 2.3	≤ 0.5	≤ 2.6	≤ 0.6
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%