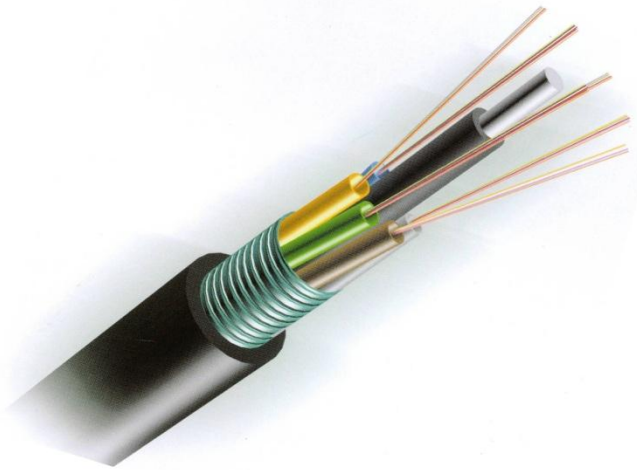


Outdoor Fiber Cable – Loose Tube

Product Type: TOTS



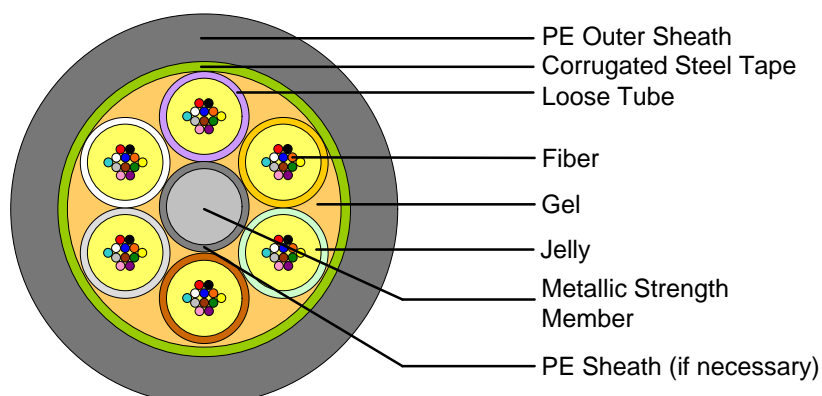
Optical Cable Specifications

Application

The cable consists of six loose tubes or more (or some fillers) stranded around the metal central strength member, protected by corrugated steel tape longitudinal folded and PE outer sheath. The cable is lightweight, small in diameter, and designed for direct burial, duct and aerial installation. The loose tube design with a steel tape armoring provides rigid protection, rodent resistance and stable performance over a wide temperature range.

Cable features

- Up to 432 fiber count
- Singlemode (9/125 μm) or Multimode (50/125 μm or 62.5/125 μm)
- PE or LSOH jacket, 1.5mm thick
- 0.15mm corrugated steel tape, $\geq 3\text{mm}$ overlap width
- Loose tube material: Polybutylene Terephthalate (PBTP)
- Jelly compound tube filling
- Central strength member: 1.5mm diameter steel wire
- Filler: Polypropylene
- 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	10.3	128	10 times cable diameter	20 times cable diameter	1500	600	1000	300
26-36	11.2	147						
38-60	12.1	161						
62-72	12.9	187						
74-96	14.4	235						
98-120	16.1	290						
122-144	17.7	350						
146-216	18.1	365						
218-288	23.1	530						
290-432	23.5	540						

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%