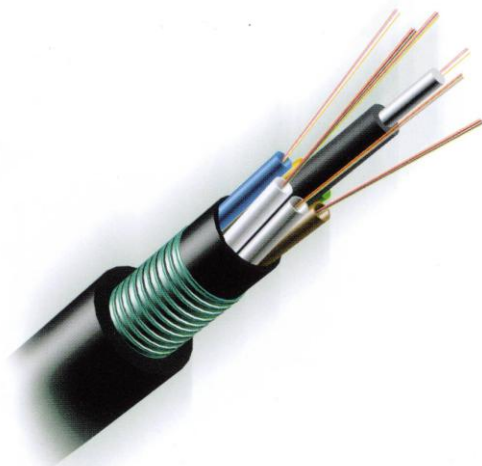


# Outdoor Fiber Cable – Loose Tube TOTY53



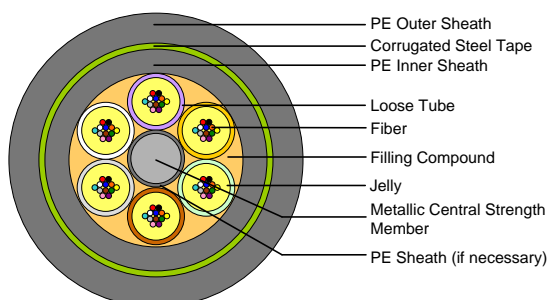
## Optical Cable Specifications

### Application

The cable consists of six loose tubes (or some fillers) stranded around the metal central strength member, PE extruded as inner sheath, then coated corrugated steel tape longitudinal folded and PE extruded as outer sheath to form corrugated steel tape armoring. The loose tube is made of good temperature property material. A number of fiber (2~6) single or multimode fibers are secondary coated into the loose tube with suitable excess length and tube filled with moisture-proof compound. This cable is designed for outdoor transmission lines in core network, for example, junction communication systems.

### Cable features

- Singlemode 9/125 $\mu$ m or Multimode 50/125 $\mu$ m or 62.5/125 $\mu$ m
- Jelly-filled cable core
- Loose tube material: Polybutylene Terephthalate (PBTP)
- Adopts special SZ cross-directional stranding method
- Central strength member: Phosphated steel wire
- Tubes and all interstices of cable core filled with moisture-proof and water blocking compound to ensure no longitudinal water penetration. PE inner sheath acts as radial moisture-proof layer
- Double-sided coated corrugated steel tape armoring with close binding at overlap ensures crush resistance of cable
- Color coding complies with TIA/EIA-598B



## Mechanical specifications

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Fiber count	Cable diameter (mm)	Cable weight (kg/km)	Min. bending radius (mm)		Allowable tension (N)		Max. crush loading force (N/100mm)	
			Dynamic state	Static state	Short term	Long term	Short term	Long term
2-24	12.9	185	12.5 times cable diameter	25 times cable diameter	3000	1000	3000	1000
26-36	13.7	207						
38-60	14.5	220						
62-72	15.3	246						
74-96	16.8	296						
98-120	18.5	346						
122-144	20.1	400						
146-216	20.5	440						
218-288	25.5	630						

## 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 <sup>2</sup> )	
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%