

Outdoor Fiber Cable – Loose Tube TOTA53



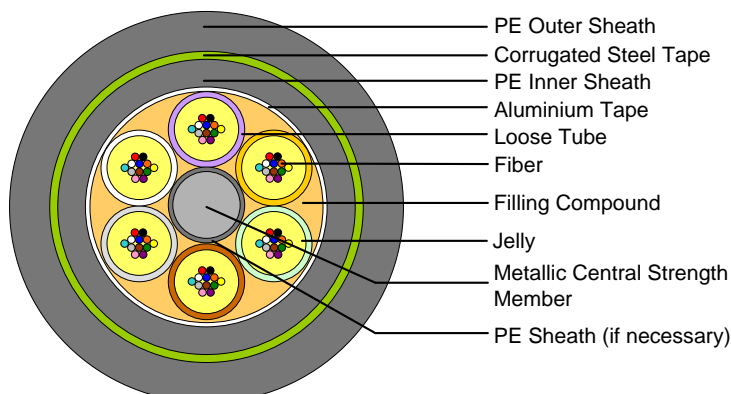
Optical Cable Specifications

Application

The cable consists of six loose tubes or some fillers stranded around the metal central strength member. Outside cable core, aluminum tape is longitudinally folded and PE is extruded as inner sheath, then a layer of corrugated steel tape and PE outer sheath is extruded to form corrugated steel tape armoring. The tube is made of good temperature property material. A number of single or multimode fibers (2-8) are secondary coated into the loose tube with suitable excess length and tube filled with moisture-proof compound.

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
- Double-sided PE corrugated steel tape – PE outer sheath
- 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) | |
|-------------|---------------------|----------------------|---------------------------|-------------------------|-----------------------|-----------|------------------------------------|-----------|
| | | | Dynamic state | Static state | Short term | Long term | Short term | Long term |
| 2-24 | 14.2 | 220 | 12.5 times cable diameter | 25 times cable diameter | 3000 | 1000 | 3000 | 1000 |
| 26-36 | 15.0 | 245 | | | | | | |
| 38-60 | 15.7 | 260 | | | | | | |
| 62-72 | 16.5 | 290 | | | | | | |
| 74-96 | 17.8 | 342 | | | | | | |
| 98-120 | 19.7 | 395 | | | | | | |
| 122-144 | 21.3 | 450 | | | | | | |
| 146-216 | 21.7 | 465 | | | | | | |
| 218-288 | 26.7 | 680 | | | | | | |

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) | ≤ 2.3 | ≤ 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%