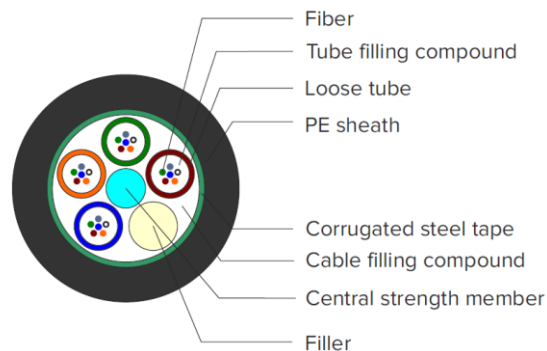


Single Mode OFC

Multi Loose Tube Armored – 2700 Tensile Strength

Cable Construction



Genius Multi Loose Tube (MLT) Armored Fiber Optic Cable is designed for reliable outdoor communication networks with high-performance data transmission. Its gel-filled loose tube design provides excellent fiber protection and stability. The cable features ECCS armouring and an HDPE / LSZH sheath for enhanced mechanical strength and suitability for duct and underground installations. This cable is support high tensile Strength of 2700 N.

Key Features

- Gel-filled loose tubes ensure moisture protection and fiber stability
- ECCS armouring enhances protection from impact and rodents
- HDPE outer sheath ensures durability in harsh outdoor environment
- High-strength central member enhances tensile strength up to 2700 N
- Wide temperature tolerance ensures reliable outdoor performance
- Multiple fiber counts support flexible network deployment.
- Genius Network Brand Performance warranty for 25 Years

Product Construction

| | |
|---------------------------|--|
| Cable Type | Single Mode, Multi tube, Armored cable |
| Fiber Grade | G.652D |
| Fiber Count | 6F to 48F |
| Armoring Type | ECCS Tape |
| Strength Member | FRP Rod |
| Strength Member Diameter | 2.0 ± 0.1 mm |
| Periphery Strength Member | Glass Roving Yarn |
| Rip Cord | Yes (Below ECCS Tape) |
| Outer Jacket Material | LSZH / HDPE (Anti Rodent & Anti Termite) |
| Outer Sheath Thickness | 1.8 mm (Nominal) |
| Outer Jacket Color | Black |
| Loose Tube Material | PBT (With Thixotropic Jelly) |
| Loose Tube Diameter | 1.9±0.1 mm |
| Moisture Barrier | Polyester Tape & Binder Yarn |

| Parameter | Values | | | |
|-------------------------------------|---------------|---------------|---------------|---------------|
| Fiber count | 6 | 12 | 24 | 48 |
| Loose tube count | 1 | 2 | 4 | 4 |
| Fiber count per tube | 6 | 6 | 6 | 12 |
| Filler count | 5 | 4 | 2 | 2 |
| Tube Color (As per EIA/TIA 598) | Blue | Blue & Orange | Blue to Brown | Blue to Brown |
| Fiber Color (As per EIA/TIA 598) | Blue to White | Blue to White | Blue to White | Blue to Aqua |
| Cable diameter (mm) | 11.5 ± 0.5 | 11.5 ± 0.5 | 11.5 ± 0.5 | 11.5 ± 0.5 |
| Weight (Approx.) Kg | 130 ± 10% | 130 ± 10% | 130 ± 10% | 130 ± 10% |

Note – Weight of LSZH Cable is Additional to Approx 30Kg to 50Kg

Fiber Characteristics

| | |
|--------------------------------------|-------------------------------|
| Fiber Grade | G652D |
| Attenuation Loss @ 1310 nm | ≤0.35 dB/km |
| Attenuation Loss @ 1550 nm | ≤0.21 dB/km |
| Polarization Mode Dispersion | ≤0.2 ps/√km |
| MFD @1310 nm | 9.1 μm ± 0.4 μm |
| MFD @1550 nm | 10.4 μm ± 0.4 μm |
| Cut-off wavelength | ≤1260 nm |
| Zero-dispersion wavelength | 1312 ± 12 nm |
| Zero-dispersion slope | ≤0.092 ps/nm ² *km |
| Core Diameter | 9.1 μm±0.5 μm |
| Cladding Diameter | 125 μm±1.0 μm |
| Core non-circularity | < 2.0% |
| Cladding non-circularity | < 0.8% |
| Coating diameter – Uncolored | 245±8 μm |
| Coating diameter – colored | 255±10 μm |
| Coating/cladding concentricity error | < 10 μm |
| Coating non-circularity | 5% |
| Core/cladding concentricity error | < 0.8μm |

Environmental Specification

| | |
|--------------------------|----------------|
| Operation Temperature | -40°C to +70°C |
| Installation Temperature | -10°C to +60°C |
| Storage Temperature | -40°C to +70°C |

Mechanical Parameters

| | |
|-----------------------|---------------------------------|
| Max. Tensile Strength | 2700 N |
| Max. Crush Test | 2500 N /100 mm |
| Bend Radius (Static) | 10D (D – Diameter of the cable) |
| Bend Radius (Dynamic) | 20D (D – Diameter of the cable) |
| Torsion | ±180° |

Standards, Compliances & Certifications

- RoHS Compliant
- Compliance with ANSI/TIA-568-C.3, ANSI/TIA 568.3-D, ISO/IEC 11801, CENELEC, EN 50173,
- Compliance with Telcordia GR-326-CORE, IEC 874-1, ITU-T G.652D
- Compliance to Mechanical Test Standard IEC 60794-1-E2/E2/E3/E4/E6/E7
- Compliance with Water Penetration Test Standard IEC 60794-1-2 F5
- Compliance with temperature Standards for Fiber Cable IEC 60794-1-2-F1
- Compliance with IEC 60332-1, IEC 60754-1, IEC 61034-2, ASTM D2843 & ASTM D2863 for LSZH Jacketed Cable

Packaging

Packaging

Wooden Drum – 2Km±10%

Ordering Information

| Part Number | Product Description |
|------------------|---|
| GFS2CALTMSTPE006 | Genius Fiber Optic cable 6 core Single Mode Single Jacket 2700N Multitube Armored HDPE |
| GFS2CALTMSTPE012 | Genius Fiber Optic cable 12 core Single Mode Single Jacket 2700N Multitube Armored HDPE |
| GFS2CALTMSTPE024 | Genius Fiber Optic cable 24 core Single Mode Single Jacket 2700N Multitube Armored HDPE |
| GFS2CALTMSTPE048 | Genius Fiber Optic cable 48 core Single Mode Single Jacket 2700N Multitube Armored HDPE |
| GFS2CALTMSTLS006 | Genius Fiber Optic cable 6 core Single Mode Single Jacket 2700N Multitube Armored LSZH |
| GFS2CALTMSTLS012 | Genius Fiber Optic cable 12 core Single Mode Single Jacket 2700N Multitube Armored LSZH |
| GFS2CALTMSTLS024 | Genius Fiber Optic cable 24 core Single Mode Single Jacket 2700N Multitube Armored LSZH |

Note – Last 3 Digit of Part Number Indicate Number Of cores in Fiber Cable