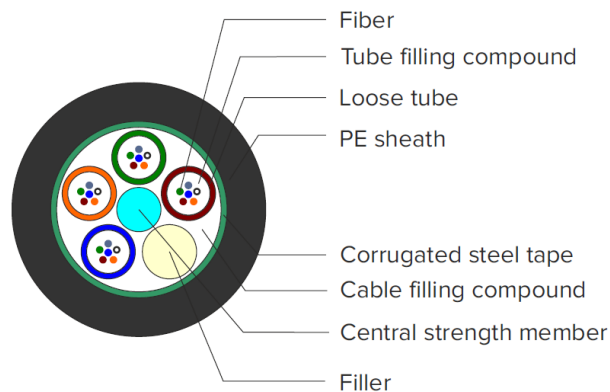


Single Mode OFC

Multi Loose Tube Armored

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 steel armoring and an HDPE / LSZH sheath for enhanced mechanical strength and suitability for duct and underground installations.

Key Features

- Gel-filled loose tubes ensure moisture protection and fiber stability
- ECCS armoring enhances protection from impact and rodents
- HDPE outer sheath ensures durability in harsh outdoor environment
- High-strength central member improves cable tensile performance
- 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, MLT, Armored cable
Fiber Grade	G.652D
Fiber Count	6F to 144F
Armoring Type	ECCS Tape
Strength Member	Steel wire or Steel wire coated with PE
Strength Member Diameter	1.2 mm Minimum
Rip Cord	Yes
Outer Jacket Material	HDPE / LSZH
Outer Sheath Thickness	1.5 mm (Nominal)
Outer Jacket Color	Black
Loose Tube Material	PBT (With Thixotropic Jelly)
Loose Tube Diameter	1.6 mm Minimum
Loose tube Thickness	0.30±0.05 mm
Filler Material	PP
Moisture Barrier	Polyester Tape & Flooding Jelly

Parameter	Values						
Fiber count	6	8	12	24	48	96	144
Loose tube count	1	2	2	4	6	8	12
Fiber count per tube	6	4	6	6	8	12	12
Tube Color (As per EIA/TIA 598)	Blue	Blue & Orange	Blue & Orange	Blue to Brown	Blue to white	Blue to Black	Blue to Aqua
Fiber Color (As per EIA/TIA 598)	Blue to White	Blue to Brown	Blue to White	Blue to White	Blue to Black	Blue to Aqua	Blue to Aqua
Filler count	4	3	3	1	1	0	0
Cable diameter (mm)	9.0±0.5	9.0±0.5	9.0±0.5	9.0±0.5	10.0±0.5	12.5±0.5	15.5±0.5
Weight (Approx.) Kg	92±15	92±15	92±15	92±15	120±25	172±25	212±25

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/ $\sqrt{\text{km}}$
MFD @1310 nm	$9.1 \mu\text{m} \pm 0.4 \mu\text{m}$
MFD @1550 nm	$10.4 \mu\text{m} \pm 0.4 \mu\text{m}$
Cut-off wavelength	≤ 1260 nm
Zero-dispersion wavelength	1312 ± 12 nm
Zero-dispersion slope	≤ 0.092 ps/nm ² *km
Core Diameter	$9.1 \mu\text{m} \pm 0.5 \mu\text{m}$
Cladding Diameter	$125 \mu\text{m} \pm 1.0 \mu\text{m}$
Core non-circularity	$< 2.0\%$
Cladding non-circularity	$< 0.8\%$
Coating diameter – Uncolored	$245 \pm 8 \mu\text{m}$
Coating diameter – colored	$255 \pm 10 \mu\text{m}$
Coating/cladding concentricity error	$< 10 \mu\text{m}$
Coating non-circularity	5%
Core/cladding concentricity error	$< 0.8 \mu\text{m}$

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

Parameter	Values						
Fiber count	6	8	12	24	48	96	144
Tensile Strength - Short Term (N)	2200N	2200N	2200N	2200N	2200N	3000N	3000N
Tensile Strength - Long Term (N)	600N	600N	600N	600N	600N	1000N	1000N
Crush Resistance - Short Term (N/100mm)	2500 N/100mm						
Crush Resistance - Long Term (N/100mm)	1000 N/100mm						
Bend Radius (Static)	10D (D – Diameter of the Cable)						
Bend Radius (Dynamic)	20D (D – Diameter of the Cable)						
Torsion	±180°						

Standards, Compliances & Certifications

- RoHS Compliance
- 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 to 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
GFS2CALTMSAPE006	Genius Fiber Optic cable 6 core Single Mode Multitube Armored HDPE
GFS2CALTMSAPE012	Genius Fiber Optic cable 12 core Single Mode Multitube Armored HDPE
GFS2CALTMSAPE024	Genius Fiber Optic cable 24 core Single Mode Multitube Armored HDPE
GFS2CALTMSAPE048	Genius Fiber Optic cable 48 core Single Mode Multitube Armored HDPE
GFS2CALTMSALS006	Genius Fiber Optic cable 6 core Single Mode Multitube Armored LSZH
GFS2CALTMSALS012	Genius Fiber Optic cable 12 core Single Mode Multitube Armored LSZH
GFS2CALTMSALS024	Genius Fiber Optic cable 24 core Single Mode Multitube Armored LSZH

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