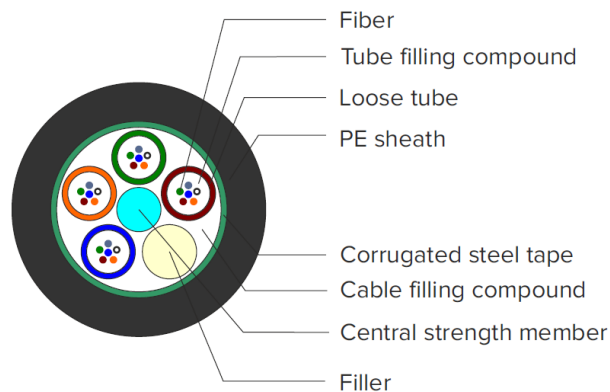


# Multi Mode OFC

## 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
- RoHS Compliant
- Genius Network Brand Performance warranty for 25 Years

## Product Construction

Cable Type	MM, Multi tube, Armored
Fiber Grade	OM4 / OM3
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

Note – LSZH Jacketed cable weight is approximate 10% additional to table weight

## Fiber Characteristics

Fiber Grade	OM4 / OM3
Attenuation Loss @ 850nm	≤2.6 dB/Km For OM4 ≤2.9 dB/Km for OM3
Attenuation Loss @ 1300nm	≤0.6 dB/Km For OM4 ≤0.8 dB/Km for OM3
Polarization Mode Dispersion	≤0. 2ps/√km
Effective Modal Bandwidth	> 4800 MHz·km for OM4 > 2000 MHz·km For OM3
Core Diameter	50 μm±2.0 μm
Cladding Diameter	125 μm±1.0 μm
Core non-circularity	< 5.0%
Cladding non-circularity	< 2%
Coating diameter – Uncolored	245±8 μm
Coating diameter – colored	254±10 μm
Coating/cladding concentricity error	< 10 μm
Coating non-circularity	5%
Core/cladding concentricity error	< 2 μm

## 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, Certifications & Compliances

- RoHS Compliant
- Compliance with ANSI/TIA-568-C.3, ANSI/TIA 568.3-D, ISO/IEC 11801 2nd Ed., CENELEC, EN 50173,
- Compliant 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

Packing

Wooden Drum – 2Km±10%

## Ordering Information

Part Number	Product Description
GFM4CALTMSAPE006	Genius Fiber Optic cable 6 core OM4 Multitube Armored HDPE
GFM4CALTMSAPE012	Genius Fiber Optic cable 12 core OM4 Multitube Armored HDPE
GFM4CALTMSAPE024	Genius Fiber Optic cable 24 core OM4 Multitube Armored HDPE
GFM4CALTMSALS006	Genius Fiber Optic cable 6 core OM4 Multitube Armored LSZH
GFM4CALTMSALS012	Genius Fiber Optic cable 12 core OM4 Multitube Armored d LSZH
GFM4CALTMSALS024	Genius Fiber Optic cable 24 core OM4 Multitube Armored LSZH
GFM3CALTMSAPE006	Genius Fiber Optic cable 6 core OM3 Multitube Armored HDPE
GFM3CALTMSAPE012	Genius Fiber Optic cable 12 core OM3 Multitube Armored HDPE
GFM3CALTMSAPE024	Genius Fiber Optic cable 24 core OM3 Multitube Armored HDPE
GFM3CALTMSALS006	Genius Fiber Optic cable 6 core OM3 Multitube Armored LSZH
GFM3CALTMSALS012	Genius Fiber Optic cable 12 core OM3 Multitube Armored LSZH
GFM3CALTMSALS024	Genius Fiber Optic cable 24 core OM3 Multitube Armored LSZH

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