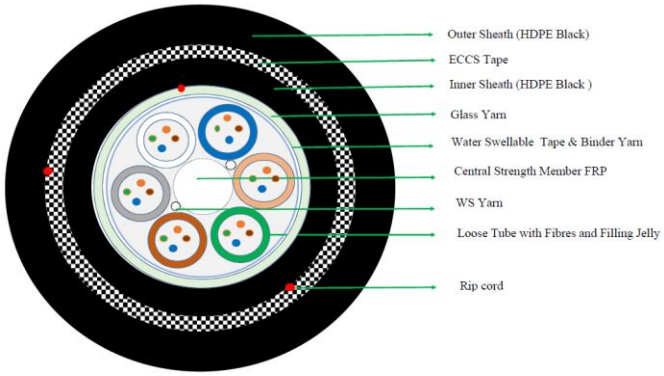
Multi Mode OFC

Multi Loose Tube – High Tensile Strength Double Jacketed Armored – HDPE

Cable Construction



Genius High Tensile Strength Double Jacket Armored Fiber Optic Cable is designed for reliable performance in demanding installations. The double jacket construction enhances durability and protection against harsh environments. ECCS armoring provides strong resistance to rodents, crushing and mechanical damage making it ideal for outdoor ducts and backbone networks.

Key Features

- High tensile strength for reliable performance in demanding installations.
- Double jacket construction enhances mechanical durability and protection
- ECCS armored layer protects against rodents, crushing, and impacts
- Water-blocking materials prevent from moisture ingress
- Ideal for outdoor ducts, Underground application, backbone networks, and harsh Environments
- Genius Network Brand Performance warranty for 25 Years

Product Construction

Cable Type	Multi Mode, Multi tube, Armored cable
Fiber Grade	OM4 / OM3
Fiber Count	6F to 96F
Armoring Type	ECCS Tape
Strength Member	FRP Rod
Rip Cord	Yes
Outer Jacket Material	HDPE
Inner Jacket Material	HDPE
Outer Sheath Thickness	1.8 mm (Nominal)
Inner Sheath Thickness	1.2 mm (Nominal)
Inner & Outer Jacket Color	Black
Loose Tube Material	PBT (With Thixotropic Jelly)
Loose Tube Diameter	1.9 ± 0.1 mm
Filler Material	PP
Moisture Barrier	Water Swellable Tape & WS Yarn

Parameter	Values				
Fiber count	6	12	24	48	96
Loose tube count	3	3	6	6	8
Fiber count per tube	2	4	4	8	12
Filler Count	3	3	0	0	0
Tube Color (As per TIA 598)	Blue to Green	Blue to Green	Blue to white	Blue to white	Blue to Black
Fiber Color (As per TIA 598)	Blue & Orange	Blue to Brown	Blue to Brown	Blue to Black	Blue to Aqua
Strength Member Diameter (mm)	2.0 ± 0.05	2.0 ± 0.05	2.0 ± 0.05	2.0 ± 0.05	3.2 ± 0.05
Cable diameter (mm)	15.0 ± 2.0	15.0 ± 2.0	15.0 ± 2.0	15.0 ± 2.0	15.5 ± 2.0
Weight (Approx.) Kg	200 ± 50	200 ± 50	200 ± 50	200 ± 50	200 ± 50

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	≤0.2 ps/√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%
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

Mechanical Parameters

Tensile Strength	4000 N
Crush Resistance	4000 N / 100 mm
Bend Radius (Short)	20D (D – Diameter of the cable)
Bend Radius (Long)	10D (D – Diameter of the cable)
Torsion Strength	±180°

Environmental Specification

Operation Temperature	-40°C to +60°C
Installation Temperature	-10°C to +50°C
Storage Temperature	-40°C to +60°C

Standards Certifications & Compliances

- 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
- Compliant to Mechanical Test Standard IEC 60794-1- E2/E2/E3/E4/E6/E7
- Compliant to Water Penetration Test Standard IEC 60794-1-2 F5
- Compliant to temperature Standards for Fiber Cable IEC 60794-1-2-F1

Packaging

Packing	Wooden Drum – 2Km±10%

Ordering Information

Part Number	Product Description
GFM4CALTHTAPE006	Genius Fiber Optic cable 6 core OM4 Multitube High Tensile Armored HDPE-HDPE
GFM4CALTHTAPE012	Genius Fiber Optic cable 12 core OM4 Multitube High Tensile Armored HDPE-HDPE
GFM4CALTHTAPE024	Genius Fiber Optic cable 24 core OM4 Multitube High Tensile Armored HDPE-HDPE
GFM3CALTHTAPE006	Genius Fiber Optic cable 6 core OM3 Multitube High Tensile Armored HDPE-HDPE
GFM3CALTHTAPE012	Genius Fiber Optic cable 12 core OM3 Multitube High Tensile Armored HDPE-HDPE
GFM3CALTHTAPE024	Genius Fiber Optic cable 24 core OM3 Multitube High Tensile Armored HDPE-HDPE

Note – Last 3 digit of Part Number indicate fiber count in the cable

Version No – R1

Date – 18.05.2026