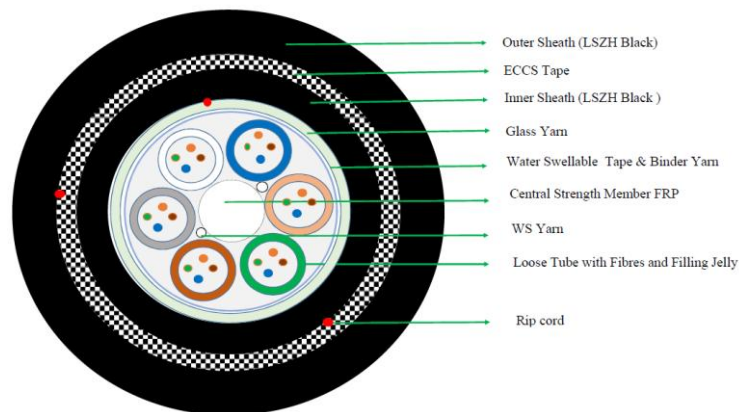


Single Mode OFC

Multi Loose Tube – High Tensile Strength

Double Jacketed Armored – LSZH

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, backbone networks, and harsh Environments
- Genius Network Brand Performance warranty for 25 Years

Product Construction

Cable Type	Single Mode, MLT, Armoured cable
Fiber Grade	G.652D
Fiber Count	6F to 96F
Armoring Type	ECCS Tape
Strength Member	FRP Rod
Rip Cord	Yes
Outer Jacket Material	LSZH
Inner Jacket Material	LSZH
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	250 ± 50	250 ± 50	250 ± 50	250 ± 50	270 ± 50

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	< 0.8 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°

