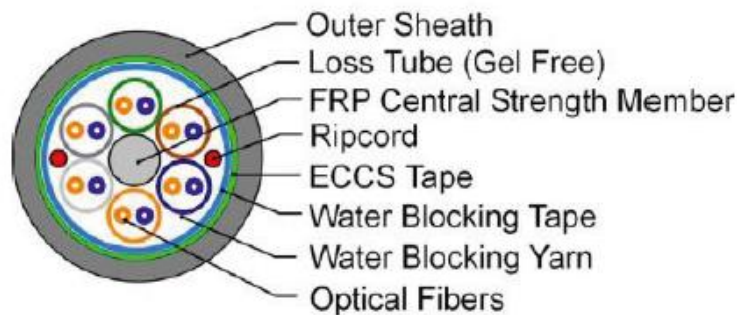


# Single Mode OFC

## Multi Loose Tube Gel Free Dry Core

### Cable Construction



**Genius** Dry Core Fiber Optic Cable is designed with advanced Multi loose tube stranding and a gel-free water blocking system for easy handling and faster installation. It delivers excellent optical performance with low attenuation, high bending endurance, and long-term reliability. Its armored construction provides superior mechanical strength, ensuring high tensile and crush resistance for demanding outdoor applications. Compact, lightweight, and environmentally friendly, it offers consistent performance and extended service life.

### Key Features

- Gel-free dry core design enables quick installation and easy fiber access
- ECCS steel tape armouring ensures high tensile strength and Crush Resistance
- Loose tube design with FRP member for long durability
- Low attenuation optical performance supports reliable long-distance transmission
- Genius Network Brand Performance warranty for 25 Years

## Product Construction

Cable Type	Single Mode, MLT, Dry Core
Fiber Grade	G652D
Fiber Count	6F / 12F
Number of Tubes	3 Tubes for 6F & 6 Tubes for 12F
Number of Fiber per tube	2 Nos
Loose tube diameter	2.2 ±0.1 mm
Loose tube material	PBT (Gel Free)
Loose Tube Color	12F – Blue to White 6F – Blue to Green
Fiber Color	Blue & Orange
Armoring Type	ECCS Tape
Central Strength Member	FRP Rod
Strength Member Size	2.3 ±0.1 mm
Rip Cord	Polyester Rip Cord - 2Nos
Moisture Barrier	Water Observable Tape and Yarn
Outer Jacket Material	HDPE / LSZH
Outer Jacket Color	Black
Outer Cable Diameter	11.5 ±0.5 mm
Sheath Thickness	1.5 mm (Nominal)
Weight	115 Kg/km±10%

## Environmental Specification

Operation Temperature	-20°C to +70°C
Installation Temperature	0°C to +60°C
Storage Temperature	-20°C to +70°C

## Fiber Characteristics

Fiber Grade	G652D
Attenuation Loss @ 1310 nm	$\leq 0.36$ dB/km
Attenuation Loss @ 1550 nm	$\leq 0.23$ dB/km
Polarization Mode Dispersion	$\leq 0.1$ ps/ $\sqrt{\text{km}}$
MFD @1310 nm	$9.4 \mu\text{m} \pm 0.4 \mu\text{m}$
MFD @1550 nm	$10.4 \mu\text{m} \pm 0.4 \mu\text{m}$
Cut-off wavelength	$\leq 1260 \lambda_{\text{cc}}$
Zero-dispersion wavelength	$1312 \pm 12$ nm
Zero-dispersion slope	$\leq 0.091$ ps/nm <sup>2</sup> *km
Core Diameter	$9.1 \mu\text{m} \pm 0.5 \mu\text{m}$
Cladding Diameter	$125 \mu\text{m} \pm 1.0 \mu\text{m}$
Coating Diameter (Uncolored)	$245 \mu\text{m} \pm 7 \mu\text{m}$
Core/cladding concentricity	$\leq 0.6 \mu\text{m}$
Coating - Cladding concentricity	$\leq 12.0 \mu\text{m}$
Cladding non circularity	$\leq 1.0\%$

## Mechanical Properties

Max. Tensile Strength	2000 N
Max. Crush Test	2000 N /100 mm
Cable Bend Test	20D (D – Diameter of the cable)
Torsion Strength	$\pm 180^\circ$

## Standards, Compliances & Certifications

- RoHS Compliant
- Compliance with ISO/IEC 11801, EIA/TIA 568C.3, ITU-T G.652D, GR-20
- Compliance with ANSI/TIA 598-D Color Code standard
- Compliance to Mechanical Test Standard IEC 60794-1-E2/E2/E3/E4/E6/E7
- 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
GFS2DALTMSAPE006	Genius Fiber Optic cable 6 core SM Multitube Dry Core Armored Cable HDPE
GFS2DALTMSAPE012	Genius Fiber Optic cable 12 core SM Multitube Dry Core Armored Cable HDPE
GFS2DALTMSALS006	Genius Fiber Optic cable 6 core SM Multitube Dry Core Armored Cable LSZH
GFS2DALTMSALS012	Genius Fiber Optic cable 12 core SM Multitube Dry Core Armored Cable LSZH

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

