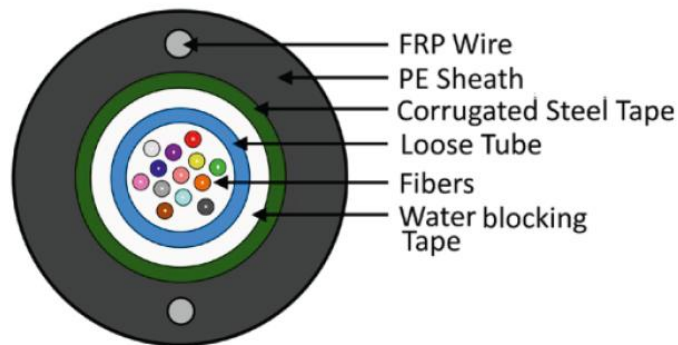


Single Mode OFC

Uni Loose Tube Armored – FRP Rod

Cable Construction



Genius Armored cables consisting of single central loose tube fibers, corrugated steel-polyethylene laminated tape, water blocking tape, two FRP strength members and HDPE / LSZH outer sheath. It's designed for to supporting Aerial, Internal/external duct and tunnel applications

Key Features

- Small cable diameter, light weight and excellent bending properties
- Two parallel round FRP are resistant to tensile and lateral pressure
- Maximum Crush resistance
- G652D grade Fiber and optionally Available in Higher Grade
- Support Aerial, Internal/external duct and tunnel applications
- Genius Network Brand Performance warranty for 25 Years

Product Construction

Cable Type	Single Mode, Unitube, Armored cable
Fiber Grade	G652D
Fiber Count	6F / 12F
Number of Tubes	1 Nos
Number of Fiber per tube	6F / 12F
Loose tube diameter	2.5 mm
Loose tube material	PBT (With Thixotropic Jelly)
Loose Tube Color	White / Natural
Fiber Color	Blue to White for 6F Blue to Aqua for 12F
Armoring Type	ECCS Tape / CSTA
Strength Member	FRP Rod
No of Strength Member	2 Nos
Strength Member Size	0.60 mm + 0.05mm
Rip Cord	Yes
Outer Jacket Material	HDPE / LSZH
Outer Cable Diameter	7.5 mm±0.5 mm
Sheath Thickness	1.5 mm (Nominal)
Moisture Barrier	W S Tape
Weight	54 Kg/km

Environmental Specification

Operation Temperature	-40°C to +70°C
Installation Temperature	-10°C to +70°C
Storage Temperature	-40°C to +70°C

Fiber Characteristics

Fiber Grade	G652D
Attenuation Loss @ 1310 nm	≤ 0.36 dB/km
Attenuation Loss @ 1550 nm	≤ 0.22 dB/km
Polarization Mode Dispersion	≤ 0.1 ps/√km
MFD @1310 nm	9.2 $\mu\text{m} \pm 0.4 \mu\text{m}$
MFD @1550 nm	10.4 $\mu\text{m} \pm 0.4 \mu\text{m}$
Cut-off wavelength	$\leq 1260 \lambda_{cc}$
Zero-dispersion wavelength	1312 ± 12 nm
Zero-dispersion slope	≤ 0.091 ps/nm ² *km
Change in attenuation	≤ 0.05 dB/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 $\mu\text{m} \pm 7 \mu\text{m}$
Coating Diameter (Colored)	254 $\mu\text{m} \pm 10 \mu\text{m}$
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

Tensile Strength (Short)	2000 N
Tensile Strength (Long)	700 N
Crush Resistance (Short)	2000 N / 100 mm
Crush Resistance (Long)	700 N / 100 mm
Bend Radius (Short)	20D (D – Diameter of the cable)
Bend Radius (Long)	10D (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
- 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 – 2 Km±10%

Ordering Information

Part Number	Product Description
GFS2CALTUFAPE006	Genius Fiber Optic cable 6 core Single Mode Unitube Armored FRP HDPE
GFS2CALTUFAPE012	Genius Fiber Optic cable 12 core Single Mode Unitube Armored FRP HDPE
GFS2CALTUFAPE024	Genius Fiber Optic cable 24 core Single Mode Unitube Armored FRP HDPE
GFS2CALTUFALS006	Genius Fiber Optic cable 6 core Single Mode Unitube Armored FRP LSZH
GFS2CALTUFALS012	Genius Fiber Optic cable 12 core Single Mode Unitube Armored FRP LSZH
GFS2CALTUFALS024	Genius Fiber Optic cable 24 core Single Mode Unitube Armored FRP LSZH

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