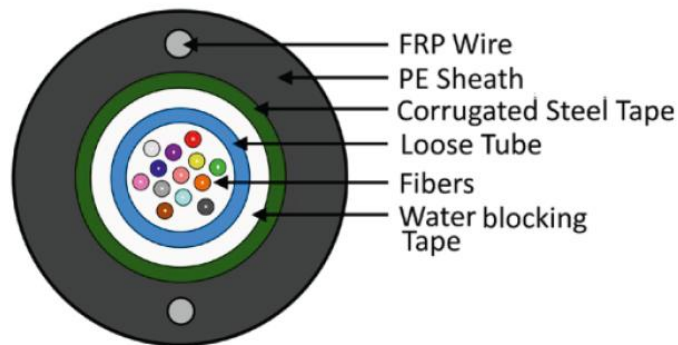


Single Mode OFC

Uni Loose Tube Armored – FRP Rod

Cable Construction



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

Key Features

- Small cable diameter, light weight and excellent bending properties
- Two parallel round Steel wires 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
Armoring Type	ECCS Tape
Strength Member	FRP Rod
Rip Cord	Yes
Outer Jacket Material	HDPE (UV Stabilized)
Loose Tube Material	PBT (With Thixotropic Jelly)
Loose Tube Color	White / Natural
Fiber Color	Blue to White for 6F Blue to Aqua for 12F

Parameter	Values		
Outer Cable diameter	9.5 ± 0.5 mm	8.5 ± 0.5 mm	7.5 ± 0.5 mm
Central Tube Diameter	3.0 ± 0.1 mm	3.0 ± 0.1 mm	2.0 ± 0.1 mm
Strength Members Count	2 Nos	2 Nos	2 Nos
Strength Members Diameter	1.0 mm	0.8 mm	0.5 mm
Moisture Barrier	WS Tape	WS Tape	WS Tape
Outer Sheath Thickness	2.25 mm nominal	2.00 mm nominal	1.80 mm nominal
Cable Weight (kg/km)	85.0 ± 10 % Kg	70.0 ± 10 % Kg	55.0 ± 10 % Kg

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	≤0.34 dB/km
Attenuation Loss @ 1550 nm	≤0.22 dB/km
Polarization Mode Dispersion	≤0.2 ps/√km
MFD @1310 nm	9.2 μm ± 0.4 μm
MFD @1550 nm	10.4 μm ± 0.4 μm
Cut-off wavelength	≤1260 λ _{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 μm±0.5 μm
Cladding Diameter	125 μm±1.0 μm
Coating Diameter (Uncolored)	245 μm ±7 μm
Coating Diameter (colored)	255 μm ±10 μm
Core/cladding concentricity	≤0.6 μm
Coating - Cladding concentricity	≤12.0 μm
Cladding non circularity	≤1.0%

Mechanical Parameters

Parameter	Values		
Outer Cable diameter	9.5 ± 0.5 mm	8.5 ± 0.5 mm	7.5 ± 0.5 mm
Tensile Strength - Short	3000 N	2500 N	1500 N
Tensile Strength - Long	1000 N	1000 N	700 N
Crush Resistance - Short	3000 N / 100 mm	2500 N / 100 mm	1500 N / 100 mm
Crush Resistance - Long	1000 N / 100 mm	1000 N / 100 mm	700 N / 100 mm
Bend Radius - Short	20D	20D	20D
Bend Radius - Long	10D	10D	10D
Torsion	±180°	±180°	±180°

Note – D in Bend Radius Parameter indicate Cable outer Diameter

Standards, Compliances & Certifications

- RoHS Compliant
- Compliance with ISO/IEC 11801, EIA/TIA 568C.3, ITU-T G.652D
- Compliance to 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

Packaging

Packaging

Wooden Drum – 2Km±10%

Ordering Information

Part Number	Product Description
GFS2CALTUF9PE006	Genius Fiber Optic cable 6 core Single Mode Unitube Armored FRP HDPE 09mm
GFS2CALTUF9PE012	Genius Fiber Optic cable 12 core Single Mode Unitube Armored FRP HDPE 09mm
GFS2CALTUF8PE006	Genius Fiber Optic cable 6 core Single Mode Unitube Armored FRP HDPE 08mm
GFS2CALTUF8PE012	Genius Fiber Optic cable 12 core Single Mode Unitube Armored FRP HDPE 08mm
GFS2CALTUF7PE006	Genius Fiber Optic cable 6 core Single Mode Unitube Armored FRP HDPE 07mm
GFS2CALTUF7PE012	Genius Fiber Optic cable 12 core Single Mode Unitube Armored FRP HDPE 07mm

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

