



## Introduction:

Duct Cable is designed to be pulled into ducts in service ducts of an optical cable communication network. Its non-metallic characteristic enables it to be installed in an environment where there is electrical interference, for example alongside power lines. The cable design is available in unitube loose fibres. The design is lightweight and flexible and able to withstand normal installation forces of strain, crush, bend and twist.

Non- metallic strength members (FRP) are embedded in the HDPE sheath for protection and strength. Meets IEC 60794, EIA/TIA, ITU-T, EN 1870000, RUS 1755.900 & Telecodia GR-20.

## Application:

- Backbone network routes
- Telecommunication and data trunk
- Secondary distribution
- Placement in ducts or on cable trays

## Technical Specifications:

PHYSICAL CHARACTERISTICS	
Fibre Type	G.652D
Fibre Count	4/6/12
Fibres per Tube	4/6/12
No. of Tubes	1
Tube Diameter (mm)	1.9 ± 0.1
Embedded Strength Member (mm)	2 x 0.8mm FRP embedded in outer sheath
Outer Sheath Material	HDPE
Nominal cable diameter (mm)	5.8 ± 0.3
Cable Weight (kg/km)	30 ± 10%

# FIBER CABLE UNITUBE UNARMoured



MECHANICAL & ENVIRONMENTAL CHARACTERISTICS	
Tensile Strength (N) [Long Term/ Short Term]	150/250
Crush Resistance (N/100 mm)	1000
Impact Strength (N. m)	10
Torsion	±180°
Repeated Bend (@5kg load)	30 cycles
Bending Radius	20 x D (Dynamic) 10 x D (Static)
Temperature Range	-10°C to +60°C (Installation) -20°C to +70°C (Operation) -30°C to +70°C (Storage)
TRANSMISSION CHARACTERISTICS (CABLED FIBRE)	
Attenuation (dB/km)	@ 1310 nm: ≤ 0.36 @ 1550 nm: ≤ 0.23 @ 1625 nm: ≤ 0.26
Chromatic Dispersion (ps/nm.km)	@ 1285-1330 nm: ≤ 3.5 @ 1270-1340 nm: ≤ 5.3 @ 1550 nm: ≤ 18.0 @ 1625 nm: ≤ 22.0
PMD @ 1310 and 1550 nm (ps/√km)	≤ 0.30
Zero Dispersion Slope (ps/nm <sup>2</sup> .km)	≤ 0.092
Zero Dispersion wavelength (nm)	1300 to 1324 nm
Cable Cut off Wavelength (nm)	≤ 1260
MFD (μm)	8.8 to 9.8
Clad dia. (μm)	125 ± 1.0
Clad non-circularity (%)	≤ 1
Core-Clad concentricity error (μm)	≤ 0.6
Coating dia. (μm)	245 ± 10
Coating-Cladding concentricity (μm)	≤ 12.0
Fiber colour code	Blue, orange, Green, Brown, Grey, White, Red, Black, Yellow, Violet, Pink, Aqua/ Nat

## Ordering information

**LZ-FS04UDS** : LANZONE Fiber Optic Cable Single Mode 04 core Unitube design Unarmoured Single sheath cable.

**LZ-FS06UDS** : LANZONE Fiber Optic Cable Single Mode 06 core Unitube design Unarmoured Single sheath cable.

**LZ-FS12UDS** : LANZONE Fiber Optic Cable Single Mode 12 core Unitube design Unarmoured Single sheath cable.