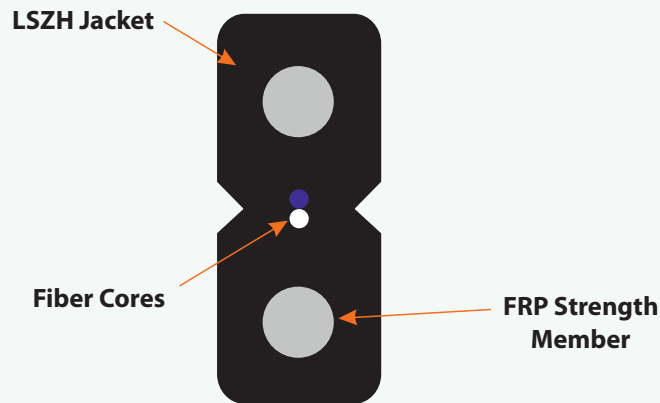


Date: 23.05.2025

Construction Details

No. of Fibres	: 1F or 2F as per requirement
Color of Fibre	: Natural & Blue
Strength Member	: FRP Rod- 2 Nos.
Outer Sheath	: Low Smoke Zero Halogen or PVC
Sheath Colour	: Black/ White

Schematic Diagram Not to Scale



Fibre Characteristics (As per ITU-T Rec. G.657A2)

Attenuation (Transmission Characteristics)

@ 1310nm	: ≤ 0.4 (dB/km)
@ 1550nm	: ≤ 0.3 (dB/km)
@ 1625nm	: ≤ 0.260 (dB/km)

Dispersion

A. Total Dispersion (Chromatic Dispersion)

1285-1330nm	: ≤ 3.5 ps/nm.km
1270-1340nm	: ≤ 5.3 ps/nm.km
1550nm	: ≤ 18 ps/nm.km
1625nm	: NA

B. Polarization Mode Dispersion at 1310 & 1550 nm

At Fibre Stage	: ≤ 0.2 ps/sqrt.km
At Cable Stage	: ≤ 0.3 ps/sqrt.km

C. Dispersion Slope & Wavelength

Zero Dispersion Wavelength	: 1300-1324 nm
Zero Dispersion Slope	: ≤ 0.092 ps/nm ² .km

Geometrical Characteristics

Mode Field Diameter @ 1310 nm	: $8.6 - 9.5\mu\text{m}$ ($\pm 0.4 \mu\text{m}$)
Mode Field Diameter @ 1550 nm	: $10.0 \pm 0.5 \mu\text{m}$
Cladding Diameter	: $125 \pm 1 \mu\text{m}$
Cladding Non Circularity	: $\leq 0.7\%$

Core Clad Concentricity Error

	: $\leq 0.5 \mu\text{m}$
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Coating Diameter(Uncolored)

	: $245 \pm 10 \mu\text{m}$
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Coating/Cladding Concentricity

	: $\leq 12 \mu\text{m}$
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Cut Off Wavelength

Fiber Cut Off Wavelength	: ≤ 1320 nm
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Cable Cut Off Wavelength

	: ≤ 1260 nm
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Mechanical & Operating Characteristics

Operating Temperature	: -20°C to $+60^\circ\text{C}$
Fibre Proof Test	: 1%
Stripability Force	: $1.3 < F < 8.9$ N
Fibre Curl	: ≥ 4 meter radius of curvature

Cable Mechanical & Physical Characteristics

Cable Mechanical Characteristics

Tensile Strength	: 100N
Crush Resistance	: 500N/ 100*100
Impact Resistance	: 2.5Nm
Min. Bending Radius (Long Term)	: 20mm

Cable Physical Characteristics

Cable Diameter (W x H)	: $(3 \pm 0.2\text{mm}) \times (2 \pm 0.2\text{mm})$
Nominal Cable Weight	: 9kg/km
Packing Length	: As per Customer requirement
Packing Details	: As per Customer requirement