Product Specification

STL Bow-Lite 200 Fibre

ITU-T G.657.A1 Single Mode Optical Fibre

Product Description

STL Bow-Lite 200 Single Mode Optical Fibre is a reduced coating diameter optical fibre with low bend sensitivity and low water peak attenuation.

Product Application

STL Bow-Lite 200 fibre is ideal for use in access and Fibre To The Home (FTTH) applications, including full spectrum CWDM. Especially for use in cables with high fibre counts and lower diameter micro cable.

Product Benefits

STL Bow-Lite 200 fibre has special characteristics of low bend sensitivity across the O, E, S, C & L-bands (1260-1625 nm) in addition to low water peak, characterized by the attenuation at 1380-1390 nm being less than the attenuation at 1310 nm.

Standard Compliance

STL routinely calibrates and recertifies process equipment and measurement benches against internationally traceable standards from NPL/NIST, and follow test methods compliant with EIA/TIA, CEI-IEC and ITU standards.

Parameters

Optical Parameters		
Attenuation Max. (dB/km)		
1310 nm		≤ 0.34
1383 nm# #After hydrogen aging according to IEC-60793-2-50 regarding the B-652.D fibre category		≤ 0.34
1550 nm		≤ 0.20
1625 nm		≤ 0.22
Macro bend loss (dB)		
1 turn 10 mm radius	1550nm	≤ 0.2
10 turns 15 mm radius		≤ 0.5
1 turn 10 mm radius	1625nm	≤ 0.2
10 turns 15 mm radius		≤ 0.5
Mode Field Diameter (µm) at 1310 nm		8.8 ± 0.4
Mode Field Diameter (µm) at 1550 nm		10.0 ± 0.5
Cable cutoff wavelength (nm)		≤ 1260
Zero dispersion wavelength (nm)		1300 to 1324
Dispersion at 1550nm (ps/nm.km)		≤ 17.5
Zero Dispersion Slope (ps/nm².km)		≤ 0.090
PMD LDV (ps/√ km)		≤ 0.06
Individual Fibre PMD* (ps/√ km) * Individual PMD values may change when cabled		≤ 0.1
Point of discontinuities 1310nm & 1550nm (dB)		≤ 0.05
Geometrical Parameters		
Cladding Diameter (µm)		125 ± 0.7
Core Clad Concentricity error (µm)		≤ 0.5
Cladding Non-circularity (%)		≤ 0.7
Coating Diameter (uncoloured) (µm)		190 ± 10
Coating Cladding Concentricity error (µm)		≤ 10
Environmental Characteristics		
Temperature dependence	-60°C to +85°C	≤ 0.05 (Induced Attenuation at 1310, 1550, 1625 nm (dB/km)
Temperature humidity cycling	-10°C to +85°C, 95% RH	
Water Immersion	30 days, 23 ± 2°C	
High temperature and humidity aging	30 days 85 ± 2°C, 85% RH	
Accelerated Aging (Temperature)	30 days, 85 ± 2°C	
Mechanical Characteristics		
Proof Testing		≥ 125 (kpsi) (0.86GN/m²) (This is equivalent to 1.2% strain)
Fibre Curl (m)		≥ 4
Performance Characteristics		
Coating strip force		≥ 1.0 N (0.2 lbf) and ≤ 5.0 N (1.1 lbf)
Dynamic fatigue parameter (N_d)		≥ 20
Effective group index of refraction (Typical Values)		1.4670 at 1310 nm 1.4675 at 1550 nm 1.4680 at 1625 nm
Attenuation in the wavelength region from 1285 - 1330 nm in reference to the attenuation at 1310 nm (dB/km)		≤ 0.03
Attenuation in the wavelength region from 1525 - 1575 nm in reference to the attenuation at 1550 nm (dB/km)		≤ 0.02

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For additional information please contact your sales representative.
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