

DurableAccess™ [A2] bend insensitive single-mode fiber exceeds the requirements of ITU-T G.657.A2 and can fully utilize the 1260-1625nm wavelength band for transmission. It has better bending performance within the bending radius range of 7.5-15mm, and is used for the last one-mile applications such as FTTH. Accurate dimension ensures low splicing loss and high splicing efficiency, excellent mechanical properties and environmental characteristics ensure stable performance of optical fibers in various usage environments.

Optical Characteristics

Attenuation	
1310nm	≤0.35 dB/km
1383nm	≤0.35 dB/km
1550nm	≤0.21 dB/km
1625nm	≤0.23 dB/km

Point Discontinuity	
1310/1550nm	≤0.02dB

Cut-off Wavelength	
Cable cut-off wavelength (λcc)	≤1260nm

Mode Field Diameter (MFD)	
MFD at 1310nm	8.6±0.4μm



Macro bending Induced Attenuation			
Bending radius	Number of Turns	Wavelength	Attenuation
7.5mm	1	1550nm	≤0.50dB
7.5mm	1	1625nm	≤1.00dB
10mm	1	1550nm	≤0.10dB
10mm	1	1625nm	≤0.20dB
15mm	10	1550nm	≤0.03dB
15mm	10	1625nm	≤0.10dB

Dispersion	
Zero-dispersion wavelength	1300-1324nm
Zero-dispersion slope	0.073~0.092ps/nm²/km
Dispersionat 1550 wavelength	≤18.6ps/nm/km

Polarization Mode Dispersion	
Max. individual fiber PMD	≤0.2ps/√km
PMD link design value	≤0.1ps/√km

Geometric Characteristics

Geometrical Parameter	
Cladding diameter	125±0.7μm
Core/clad concentricity error	≤0.5μm
Cladding non-circularity	≤1.0%
Fiber curl R	≥4m
Coating diameter	245±10μm
Coating-Cladding Concentricity	≤10μm



Mechanical Characteristics

Proof Test	
Proof stress level	1.52GPa (2.2%, 220kpsi, 19.6N)

Strip Force	
Force (peak)	1.0N≤F≤8.9N
Force (average)	1.0N≤F≤5.0N

Tensile Strength	
Unaged (median; 0.5m)	≥3.80GPa (≥550kpsi)
Aged (median; 0.5m)	≥3.14GPa (≥460kpsi)

Dynamic fatigue parameters	
Fatigue	≥20

Environmental Characteristics

Test items	Conditions	Induced Attenuation at 1550, 1625nm
Temperature	-60°C to + 85°C	≤0.03dB/km
Water Immersion	+ 23°C/30Days	≤0.03dB/km
Steady damp-heat	+ 85°C/85%RH/30Days	≤0.03dB/km
Dry heat aging	+ 85°C/30Days	≤0.03dB/km

