Ultra-low attenuation of 0.148 dB/km or 0.152 dB/km, and large effective area of 130 µm² typical

For transoceanic (6,000 – 12,000 km) systems

**General**

**Effective Area**

Typical effective area at 1550 nm 130 µm²

**Attenuation**

Typical attenuation at 1550 nm

LL: 0.152 dB/km

ULL: 0.148 dB/km

**Core Glass**

Pure Silica

**Optical Characteristics**

**Attenuation**

Attenuation at 1550 nm

(Individual)

LL: ≤ 0.160 dB/km

ULL: ≤ 0.156 dB/km

Attenuation at 1550 nm

(Average in total quantity) *1)

LL: 0.152 ± 0.003 dB/km

ULL: 0.148 ± 0.003 dB/km

Point discontinuity at 1550 nm

≤ 0.05 dB

**Effective Area**

Effective area at 1550 nm 130 ± 15 µm²

**Chromatic Dispersion**

Chromatic dispersion at 1550 nm ≤ 22 ps/nm/km

Chromatic dispersion slope at 1550 nm ≤ 0.070 ps/nm²/km

**Cable Cutoff Wavelength (λcc)**

λcc ≤ 1530 nm

**Polarization Mode Dispersion (PMD)**

Individual fiber PMD *2) ≤ 0.1 ps/r-km

**Geometrical Characteristics**

**Glass Geometry**

Core-cladding concentricity error ≤ 0.8 µm

Cladding diameter 125.0 ± 1.0 µm

Cladding non-circularity ≤ 2.0 %

**Coating Geometry**

Coating diameter (Natural) 245 ± 10 µm

Coating diameter (Colored) 250 ± 15 µm

Coating-cladding concentricity error ≤ 12 µm

**Mechanical Characteristics**

**Proof Test**

Proof stress level 2.0% (200 kpsi = 1.43 GPa)

**Macrobending Loss**

<table>
<thead>
<tr>
<th>Bending radius</th>
<th>Number of turns</th>
<th>Wavelength</th>
<th>Induced Attenuation</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 mm</td>
<td>100</td>
<td>1550 nm</td>
<td>≤ 2.0 dB</td>
</tr>
<tr>
<td>30 mm</td>
<td>100</td>
<td>1625 nm</td>
<td>≤ 2.0 dB</td>
</tr>
</tbody>
</table>

**Packaging**

**Delivery Length**

5 ~ 100 km

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*1) Average attenuation will be applied only to a batch with the total quantity of 4,000 km or more.

*2) Measured on fiber with free tension. PMD values may change when fiber is cabled. This PMD value will be achieved when cabled properly.

This document states a standard specification. Upon request, alternative value offerings will be available.