## Ultra-low attenuation of 0.154 dB/km, and large effective area of 110 µm² typical

- For regional to middle-reach repeatered (500 – 8,000 km) and long-reach unrepeatered (~ 600 km) submarine systems

### General

#### Effective Area

| Typical effective area at 1550 nm | 110 µm² |

#### Attenuation

| Typical attenuation at 1550 nm | 0.154 dB/km |

#### Core Glass

- Pure Silica

### Optical Characteristics

#### Attenuation

- Attenuation at 1550 nm (Individual) ≤ 0.164 dB/km
- Attenuation at 1550 nm (Average in total quantity) ≤ 0.157 dB/km
- Point discontinuity at 1550 nm ≤ 0.05 dB

#### Effective Area

| Effective area at 1550 nm | 110 ± 12 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 | ≤ 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>≤ 0.1 dB</td>
</tr>
<tr>
<td>30 mm</td>
<td>100</td>
<td>1625 nm</td>
<td>≤ 0.1 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.

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