Polarization Maintaining Fibers

For gyroscope

The IXF-PMG family includes high performance Polarization Maintaining Fibers that are specifically designed for integration into Fiber Optic Gyroscopes on or above the earth. Fiber diameter control is critical during coil winding: our fibers exhibit very high consistency / accuracy of the coating diameter not only in each batch, but also from batch to batch.

Key Features

- Qualified by international inertial sensing manufacturers
- Design for space environment available
- Highly birefringence
- High-polarization extinction in coiled applications
- Zero twist
- Round core
- Cladding diameter: 40, 80, 125 µm
- Various coating diameters, tuned to customers specifications
- High stability coating diameter along each batch and from batch

Applications

- Space environment

Related Products

- Polarizing fibers
- PM Gyro fibers

Main Specifications

IXF-PMG family for Fiber Optic Gyroscopes: Space environment

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Operating Wavelength (nm)</th>
<th>Design Cladding Diameter (µm)</th>
<th>Coating Diameter (µm)</th>
<th>Beat Length* (±/0.02)</th>
<th>Core NA</th>
<th>MFD** (µm)</th>
<th>Attenuation** (dB/km)</th>
<th>Cut-off Wavelength (nm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IXF-PMG-1550-80-019-E</td>
<td>1550</td>
<td>Tiger 80 +/- 1</td>
<td>172 +/- 2</td>
<td>&lt; 1.5</td>
<td>0.19</td>
<td>6.7 +/- 0.5</td>
<td>&lt; 14</td>
<td>&lt; 1480</td>
</tr>
<tr>
<td>IXF-PMG-1550-80-019-E-LS</td>
<td>1550</td>
<td>Tiger 80 +/- 1</td>
<td>128 +/- 2</td>
<td>&lt; 1.5</td>
<td>0.19</td>
<td>6.7 +/- 0.5</td>
<td>&lt; 14</td>
<td>&lt; 1480</td>
</tr>
</tbody>
</table>

* Calculated at 633 nm
** Measured at Operating Wavelength