For fiber laser between 890 - 1060 nm

iXblue Photonics Neodymium Aluminosilicate double clad fibers have been developed to maximize fiber efficiency through a precisely controlled host composition. Compared to a standard Neodymium fiber, the 1.06-micron emission is reduced through careful fiber design optimization.

Our double clad fibers are routinely tested to various parameters such as photodarkening and environmental behavior.

Key Features
- Host composition optimized for high energy efficiency and low clustering
- Low splicing losses
- High NA, high performance low-index cladding
- Low background losses
- Low macrobending losses at operating wavelength

Applications
- 0.9 to 1.064 µm fiber lasers

Related Products
- Matching passive fiber
- Associated fiber bragg mirror

Main Specifications

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Core diameter (µm)</th>
<th>Core NA</th>
<th>Clad absorption @ 1000 nm (dB/m)</th>
<th>Cladding diameter (µm)</th>
<th>Coating diameter (µm)</th>
<th>Multimode clad shape</th>
</tr>
</thead>
<tbody>
<tr>
<td>IXF-2CF-ND-O-5-125-D</td>
<td>4 +/- 0.5</td>
<td>0.14</td>
<td>&gt; 0.15</td>
<td>125 +/- 3</td>
<td>245 +/- 15</td>
<td>Octagonal</td>
</tr>
<tr>
<td>Polarization Maintaining Fibers</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>IXF-2CF-ND-PM-5-80-PM*</td>
<td>5 +/- 0.5</td>
<td>0.16</td>
<td>&gt; 0.35</td>
<td>80 +/- 3</td>
<td>170 +/- 15</td>
<td>Panda</td>
</tr>
<tr>
<td>IXF-2CF-ND-PM-20-80-V2</td>
<td>20 +/- 2</td>
<td>0.065</td>
<td>2.3</td>
<td>80 +/- 3</td>
<td>170 +/- 10</td>
<td>Panda</td>
</tr>
</tbody>
</table>

* Associated passive fibers, as well as a fiber combiners adapted to this fiber

Common specifications
- MM background (dB/km) < 50
- Cladding NA ≥ 0.46
- Core-clad offset (µm) < 10
- Proof test level (kpsi) 100
- LP01 cutoff wavelength (µm) 1
- Operating wavelength (nm): 900 - 960

Matching Fiber Combiner

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Number of MM port</th>
<th>Pump signal transmission (%)</th>
<th>Signal transmission (%)</th>
<th>PER (dB)</th>
<th>Maximum pump signal power (W)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IXS-COMB-PM-2+1-1-4-80-P*</td>
<td>2</td>
<td>75</td>
<td>93</td>
<td>19</td>
<td>15</td>
</tr>
<tr>
<td>IXS-COMB-PM-2-1-1-20-80-P*</td>
<td>2</td>
<td>75</td>
<td>&gt;95</td>
<td>TBC</td>
<td>20</td>
</tr>
</tbody>
</table>

* Panda PM design