Multicore Fibers

Multicore doped fibers - unique base for next gen telecom fiber amplifier

Based on our original telecom experience of making Twincore fibers for the Add/drop multiplexers, iXblue has developed this unique 12 core Erbium-Ytterbium co-doped fiber.

Both core composition and number of core have been selected in order to provide the best efficiency and lower electrical power consumption versus standard single core pumping scheme.

Having 12 core in the same fiber would also be ideal when user needs to bundle multiple signals in phase - coherent combining.

Key Features
- 12 core Er/Yb
- Clad pumping
- Reduced overall electrical power consumption
- Homogeneous core composition
- Active & passive fibers available

Applications
- Telecom fiber amplifier
- 1.5 µm laser & amplifier

Main Specifications of Double Clad Fiber

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Core diameter (µm)</th>
<th>Core NA</th>
<th>Cladding diameter (µm)</th>
<th>Coating diameter</th>
<th>Clad absorption @915nm (dB/km)</th>
<th>Core absorption @1536nm (dB/km)</th>
<th>MFD</th>
</tr>
</thead>
<tbody>
<tr>
<td>IXF-2CF-MC12-EY-6</td>
<td>6 +/- 0.5</td>
<td>0.19</td>
<td>187.5 +/- 2.5</td>
<td>355 +/- 15</td>
<td>3.5 +/- 0.5</td>
<td>40 +/- 10</td>
<td>6.5 +/- 0.5</td>
</tr>
<tr>
<td>IXF-2CF-MC12-PAS-6</td>
<td>6 +/- 0.5</td>
<td>0.19</td>
<td>187.5 +/- 2.5</td>
<td>355 +/- 15</td>
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