The ST™ FUSION allows you to quickly and easily make field terminations with the performance you expect from Diamond-quality ST™ connectors. The key to this system is DIAMOND’s advanced “crocodile alberino” fusion field ferrule assembly. The ferrule assembly consists of a factory-terminated fiber endface, fiber stub, and integrated splice protection. The fiber endface is core-centered via Diamond’s well-known Active Core Alignment process and factory-polished to the company’s precise specifications. The ST™ FUSION is then field terminated via a low loss fusion splice using the new Diamond ZEUS D50 Fusion Field Termination Kit. The ST™ FUSION is available for SM and MM fiber (250µm, 600µm & 900µm) and cable (1.6-to 3.1 mm) in 0° PC version. Other fiber types can also be accommodated upon request.

FEATURES AND BENEFITS

- Simple, fast and reliable field termination 
  reduces operator error and cost per termination
- Outstanding optical performance 
  consistent and repeatable low IL / high RL
- No polishing 
  eliminates the need for costly consumables 
  operator independent performance
- Fusion spliced pigtail performance and reliability without the cost and space associated with splice enclosures, trays and protectors

AVAILABLE AS

- Connector set, (to be terminated with Diamond special equipment)

SPECIFICATIONS

<table>
<thead>
<tr>
<th></th>
<th>MULTIMODE 0° PC</th>
<th>SINGLE MODE 0° PC</th>
<th>UNITS</th>
<th>TEST CONDITIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insertion Loss (IL)</td>
<td>typ. 0.2 max 0.5</td>
<td>typ. 0.25 max 0.5</td>
<td>dB</td>
<td>IEC 61300-3-4; λ = 1300/1550nm</td>
</tr>
<tr>
<td>Return Loss (RL)</td>
<td>min. 40</td>
<td>min. 50</td>
<td>dB</td>
<td>IEC 61300-3-6; λ = 1300/1550nm</td>
</tr>
<tr>
<td>Repeatability of IL</td>
<td>max. &lt;0.1</td>
<td></td>
<td>dB</td>
<td>IEC 61300-2-2; λ = 1300/1550nm</td>
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<tr>
<td>Service life</td>
<td>1000 mate/demate cycles</td>
<td></td>
<td></td>
<td>According to field experience</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>-25°/+70°</td>
<td></td>
<td>°C</td>
<td></td>
</tr>
<tr>
<td>Storage temperature</td>
<td>-25°/+70°</td>
<td></td>
<td>°C</td>
<td></td>
</tr>
</tbody>
</table>

* May be further limited by cable specifications.
**CONNECTOR TYPE AND DIMENSIONS**

**ST™ Fusion connectors 900 µm - 3 mm boot style**

**Available types:** **ST™ Fusion PC**

**Ferrule material:** Zirconia/copper-nickel alloy insert

**External parts:** Plastic black

**ADAPTER TYPES AND DIMENSIONS**

**External parts:** Metal or plastic

**Mating sleeve:** Zirconia

**ST™ Metal mating adapter**

**CUTOUT DIMENSIONS**

**ST™ Plastic mating adapter**

**NOTE** Diamond’s standard boot colors are as follows: Black for MM PC 50µm, Beige for MM PC 62.5µm, and Blue for SM PC. Other colors are available upon request.

**ORDER INFORMATION**

Please refer to the part numbers provided in the separate P/N list.

For other configurations, please contact your nearest local Diamond representative or fill in the contact form available on the [www.diamond-fo.com](http://www.diamond-fo.com) website.
TERMINATION KIT
DIAMOND’s new ZEUS D50 Fusion Field Termination Kit provides all the tools and instructions necessary for high performance field terminations of DIAMOND’s Fusion E-2000®, F-3000®, SC, FC and ST™ connectors.

ORDER INFORMATION
Please refer to the part-specific ZEUS D50 Fusion Field Termination Kit datasheet.

BASE KIT
1. ZEUS D50 fusion splicer
2. Fiber cleaver
3. Stripping pliers
   - Soft bag
4. Holder left and right
5. Connector assembling tools
6. Holder for Alberino Crocodile