The E-2000® FUSION allows you to quickly and easily make field terminations with the performance you expect from Diamond-quality E-2000® 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 E-2000® FUSION is then field terminated via a low loss fusion splice using the new Diamond Zeus D50 Fusion Field Termination Kit. The E-2000® FUSION is available for SM and MM fiber (250µm, 600µm and 900µm) and cable (1.6-to 3.1mm) in both 0° PC or 8° APC versions. 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
- No need of glue
- Outstanding optical performance consistent and repeatable low IL / high RL
- No polishing eliminates the need for costly consumables
- Fusion spliced pigtail performance and reliability without the cost and space associated with splice enclosures, trays and protectors
- E-2000® features:
  - Integrated protective caps and shutters for mechanical endface protection and eye-safety
  - Interchangeable, user-definable color-coding and mechanical keying options
  - Simplex and compact version
  - Intermateable with a wide range of E-2000® components including, attenuators, hybrid mating adapters, transition adapters, etc.

**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>SINGLE MODE 8° APC</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>typ. 0.25 max 0.5</td>
<td>dB</td>
<td>IEC 61300-3-4; λ = 1300/1550nm</td>
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<tr>
<td>Return Loss (RL)</td>
<td>min. 40</td>
<td>min. 50</td>
<td>min. 70*</td>
<td>dB</td>
<td>IEC 61300-3-6; λ = 1300/1550nm</td>
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<tr>
<td>Repeatability of IL</td>
<td>max. ±0.1</td>
<td></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></td>
<td>According to field experiences</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>-25/+70°C*</td>
<td></td>
<td></td>
<td>°C</td>
<td></td>
</tr>
<tr>
<td>Storage temperature</td>
<td>-25/+70°C**</td>
<td></td>
<td></td>
<td>°C</td>
<td></td>
</tr>
</tbody>
</table>

* Measured with high precision reflectometer

**Specifications subject to change without notice**

BDD 1950269  08.10
E-2000® FUSION SIMPLEX TYPES AND DIMENSIONS

Connectors 900 µm - 3 mm boot style

Available types:
- E-2000® Fusion Simplex PC
- E-2000® Fusion Simplex APC

Ferrule material: Zirconia/metal insert
External parts: Plastic

E-2000® Simplex mating adapter

Material: Plastic
Mating sleeve: Zirconia

For complete product description and ordering information, please refer to the part-specific E-2000® Simplex datasheet.

COLOR KEYING

The E-2000® system permits the user to specify the color of the thumb-latch and the mating adapter frame so that different line types, uses, destinations and points of origin, etc. can be readily identified.

The thumb-latch and frame are available in eight distinct colors:

1. Blue
2. Beige (White)
3. Black
4. Red
5. Orange
6. Yellow
7. Green
8. Violet

MECHANICAL KEYING

Additionally, it will become increasingly necessary to guard against improper connection in multiple-service patch facilities. The E-2000® system permits the inclusion of a mechanical keying mechanism to ensure channel differentiation.

The mechanical keying options are also color-coded as follows:

1. Red
2. Brown
3. Yellow
4. Orange
5. Violet
6. Beige (White)

NOTE As standard, Diamond uses colored connector bodies, cable boots and mating adapter housings to identify the fiber type (SM or MM 50/62.5µm) and ferrule polish (PC or APC).

Diamond’s standard connector/boot/adaptor colors are as follows: Beige/Black/Beige for MM PC 50µm, Beige/Beige/Beige for MM PC 62.5µm, Blue/Blue/Blue for SM PC, and Green/Green/Green for SM APC. Other colors are available upon request.
**E-2000® FUSION COMPACT TYPES AND DIMENSIONS**

E-2000® Fusion Compact connectors 900 µm - 3 mm boot style

Available types:  
- E-2000® Fusion Compact PC  
- E-2000® Fusion Compact APC  

Ferrule material: Zirconia/metal insert  
External parts: Plastic

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E-2000® Compact mating adapter  
Material: Plastic  
Mating sleeve: Zirconia

For complete product descriptions and ordering information, please refer to the part-specific E-2000® Compact datasheet.

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**CUTOUT DIMENSIONS**

a)  
Max wall thickness 1.6 mm  

b)  
Max wall thickness 1.6 mm

c)  
Max wall thickness 1.6 mm

d)  
Max wall thickness 1.6 mm

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**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