DESCRIPTION

In-line hybrid adapter are used to directly mate connectors with different mechanical interface. Their optical performance and compact size make a logical and cost-effective alternative to hybrid patch assemblies. They are available for SM PC/APC and MM PC connector types. Diamond offers three different hybrid families: Standard, E-2000® and F-3000®.

SPECIFICATIONS FOR: STANDARD AND E-2000® HYBRIDS

<table>
<thead>
<tr>
<th></th>
<th>MULTIMODE 0° PC</th>
<th>SINGLE MODE 0° PC</th>
<th>SINGLE MODE 0° APC</th>
<th>UNITS</th>
<th>TEST CONDITIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insertion Loss (IL)*</td>
<td>typ. 0.15</td>
<td>typ. 0.2</td>
<td>typ. 0.2</td>
<td>dB</td>
<td>IEC 61300-3-4; λ = 1300/1550nm</td>
</tr>
<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>
</tr>
<tr>
<td>Service life</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>According to field experience</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>-40/+85</td>
<td></td>
<td></td>
<td>°C</td>
<td></td>
</tr>
<tr>
<td>Storage temperature</td>
<td>-40/+90</td>
<td></td>
<td></td>
<td>°C</td>
<td></td>
</tr>
</tbody>
</table>

* IL measured using two reference cables

NOTE Optical and mechanical specifications are based on the use of the connector of corresponding standard; the above table reflects typical values.

SPECIFICATIONS FOR: F-3000® HYBRIDS

<table>
<thead>
<tr>
<th></th>
<th>MULTIMODE 0° PC</th>
<th>SINGLE MODE 0° PC</th>
<th>SINGLE MODE 0° APC</th>
<th>UNITS</th>
<th>TEST CONDITIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insertion Loss (IL)*</td>
<td>typ. 0.2</td>
<td>typ. 0.4</td>
<td>typ. 0.4</td>
<td>dB</td>
<td>IEC 61300-3-4; λ = 1300/1550nm</td>
</tr>
<tr>
<td>Repeatability IL</td>
<td>± 0.1</td>
<td>± 0.2</td>
<td>± 0.2</td>
<td>dB</td>
<td>IEC 61300-2-2; λ = 1300/1550nm</td>
</tr>
<tr>
<td>Service life</td>
<td>500 mate/demate cycles</td>
<td></td>
<td></td>
<td></td>
<td>According to field experience</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>-40/+85</td>
<td></td>
<td></td>
<td>°C</td>
<td></td>
</tr>
<tr>
<td>Storage temperature</td>
<td>-40/+90</td>
<td></td>
<td></td>
<td>°C</td>
<td></td>
</tr>
</tbody>
</table>

* IL measured using two reference cables at room temperature

STANDARD HYBRIDS TYPES AND DIMENSIONS

**HYB. LSA (DIN) / FC (key 2.2 mm)**

External parts: Cu-Ni alloy  
Mating sleeve: Zirconia

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**DIAMOND**

Fiber Optic Components

**NETWORK ACCESSORIES**

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DIAMOND SA I Via dei Patrizi 5 I CH-6616 Losone - Switzerland  
Tel. +41 58 307 45 45 I e-mail info@diamond-fo.com

www.diamond-fo.com

Specifications subject to change without notice

800 1951621 08_20
**HYB. FC (key 2.2 mm) / LSA (DIN)**
External parts: Cu-Ni alloy

**HYB. LSA (DIN) / ST™**
External parts: Cu-Ni alloy/Ni-plated Zamak

**HYB. ST™ / LSA (DIN)**
External parts: Ni-plated Zamak/Cu-Ni alloy

**HYB. LSA (DIN) / SC**
External parts: Ni-plated Zamak/Plastic

**HYB. SC / ST™**
External parts: Cu-Ni alloy/Plastic
**HYB. FC (key Ø 2.2 mm) / SC, Square**

Available types:  
- HYB. FC/SC MM PC Square
- HYB. FC/SC SM PC Square
- HYB. FC/SC SM APC Square

External parts: Ni-plated Brass/Plastic  
key ø: 2.2 mm

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**HYB. FC (key Ø 2 mm) / SC, Square**

Available types:  
- HYB. FC/SC SM APC Square

External parts: Ni-plated Brass/Plastic  
key ø: 2 mm

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**HYB. SC / FC (key Ø 2.2 mm)**

Available types:  
- HYB. SC/FC MM PC
- HYB. SC/FC SM PC
- HYB. SC/FC SM APC

External parts: Ni-plated Zamak/Plastic  
key ø: 2.2 mm

---

**HYB. SC / FC (key Ø 2 mm)**

Available types:  
- HYB. FC/SC SM APC

External parts: Ni-plated Zamak/Plastic  
key ø: 2 mm
HYB. FC (key 2.2 mm) / ST™, Square

External parts: Ni-plated Brass/Ni-plated Zamak

HYB. ST™ / FC (key 2.2 mm)

External parts: Cu-Ni alloy

HYB. SC / ST™ Duplex (for SM PC version)

External parts: Plastic

HYB. SC / ST™ Duplex (for MM version)

External parts: Plastic

NOTE Standard plastic body colors: beige for MM PC, blue for SM PC and green for SM APC.
**E-2000® HYBRIDS TYPES AND DIMENSIONS**

**HYB. E-2000®/LSA (DIN)**

**Available types:**
- HYB. E-2000®/LSA (DIN) MM PC
- HYB. E-2000®/LSA (DIN) SM PC
- HYB. E-2000®/LSA (DIN) SM APC

**External parts:** Ni-plated Zamak/Plastic

**Dimension b:** 2 or 2.2 mm for APC, only 2.2 mm for PC

**HYB. E-2000®/FC**

**Available types:**
- HYB. E-2000®/FC MM PC
- HYB. E-2000®/FC SM PC
- HYB. E-2000®/FC SM APC

**External parts:** Ni-plated Zamak/Plastic

**Dimension b:** 2 or 2.2 mm for APC, only 2.2 mm for PC

**HYB. E-2000®/SC**

**Available types:**
- HYB. E-2000®/SC MM PC
- HYB. E-2000®/SC SM PC
- HYB. E-2000®/SC SM APC

**External parts:** Plastic

**HYB. E-2000®/ST™**

**Available types:**
- HYB. E-2000®/ST™ MM PC
- HYB. E-2000®/ST™ SM PC

**External parts:** Ni-plated Zamak/Plastic

**Dimension b:** 2 or 2.2 mm for APC, only 2.2 mm for PC

**NOTES**
- Standard body and frame colors: beige for MM PC, blue for SM PC and green for SM APC.
- Other frame colors or frames with mechanical keying are available upon request. (Please refer to the part-specific color and mechanical keying of E-2000® Simplex datasheet).
**F-3000® HYBRIDS TYPES AND DIMENSION**

**HYB. F-3000®/LSA (DIN)**

Available types:
- HYB. F-3000®/LSA (DIN) MM PC
- HYB. F-3000®/LSA (DIN) SM PC
- HYB. F-3000®/LSA (DIN) SM APC

External parts: Ni-plated Zamak/Plastic

**HYB. F-3000®/FC**

Available types:
- HYB. F-3000®/FC MM PC
- HYB. F-3000®/FC SM PC
- HYB. F-3000®/FC SM APC

External parts: Ni-plated Zamak/Plastic

Dimension b: 2 or 2.2 mm for APC, only 2.2 mm for PC

**HYB. F-3000®/SC**

Available types:
- HYB. F-3000®/SC MM PC
- HYB. F-3000®/SC SM PC
- HYB. F-3000®/SC SM APC

External parts: Plastic

**HYB. F-3000®/LSH (E-2000®)**

Available types:
- HYB. F-3000®/LSH (E-2000®) MM PC
- HYB. F-3000®/LSH (E-2000®) SM PC
- HYB. F-3000®/LSH (E-2000®) SM APC

External parts: Plastic

**NOTES**
- Standard body and frame colors: beige for MM PC, blue for SM PC and green for SM APC.
- Other frame colors or frames with mechanical keying are available upon request. Please refer to the part-specific color and mechanical keying of E-2000® Simplex datasheet.

**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.

Other versions upon request.