DESCRIPTION
Diamond FC connectors are available in SM PC/APC and MM PC as well as for the following technologies: PM, PZ, VIS/NIR, Low wavelengths, fusion and high temperature. These connectors are manufactured with our patented two-part ferrule and “Active Core Alignment” (ACA) technology aiming to reduce the insertion loss values by minimizing fiber-to-fiber eccentricity. Diamond FC connectors are available as terminated connectors, Splice On Connectors (SOC) and connector set to be terminated with Diamond special equipment.

SPECIFICATIONS FOR STANDARD VERSION

<table>
<thead>
<tr>
<th></th>
<th>MULTIMODE</th>
<th>SINGLE MODE</th>
<th>SINGLE MODE</th>
<th>UNITS</th>
<th>TEST CONDITIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0° PC</td>
<td>0° APC</td>
<td>0° PC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insertion Loss (IL)</td>
<td>typ. 0.15</td>
<td>max. 0.4</td>
<td>typ. 0.2</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>50</td>
<td>min. 70*</td>
<td>dB</td>
<td>IEC 61300-3-6; λ = 1300/1550nm</td>
</tr>
<tr>
<td>Repeatability of IL</td>
<td>max ±0.1</td>
<td>dB</td>
<td></td>
<td></td>
<td>IEC 61300-2-2; λ = 1300/1550nm</td>
</tr>
<tr>
<td>Service life</td>
<td>1000 mate/demate cycle</td>
<td>-</td>
<td>According to field experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating temperature</td>
<td>-40/+85°C</td>
<td>°C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Storage temperature</td>
<td>-40/+90°C</td>
<td>°C</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Measured with high precision reflectometer
** May be further limited by cable specifications

APPLICATIONS
- Telecommunications, CATV, LAN, MAN, WAN, Test & Measurement, Industry, Medical

STANDARDS
- IEC 61 754-13 "Fiber optic interfaces - Type FC-PC connector family"
- CECC 86 115-801 "Detail specification-connector set of assessed quality for optical fibers and cables - Style FC"

AVAILABLE AS
- Terminated connector
- Connector set, (to be terminated with Diamond special equipment)
- Splice On Connectors to be terminated with DIAMOND ZEUS D50 Fusion field termination kit. For more information please refer to the part-specific ZEUS D50 Fusion Field Termination Kit datasheet.

Specifications subject to change without notice
**DRAWINGS AND DIMENSIONS**

**FC STANDARD & MINI CONNECTORS**

**FC Standard connectors 900 µm - 3 mm boot style**

Available types:
- FC Standard PC (Key ø 2 mm)
- FC Standard PC (Key ø 2.14 mm)
- FC Standard APC (Key ø 2 mm)
- FC Standard APC (Key ø 2.14 mm)

Ferrule material: Zirconia/metal insert
External parts: Ni-plated brass

**FC Mini connectors 900 µm - boot style**

Available types:
- FC Mini PC (Key ø 2 mm)
- FC Mini PC (Key ø 2.14 mm)
- FC Mini APC (Key ø 2 mm)
- FC Mini APC (Key ø 2.14 mm)

Ferrule material: Zirconia/metal insert
External parts: Ni-plated brass

**NOTE** Diamond’s standard boot colors are as follows: Black for MM PC 50µm, Beige for MM PC 62.5µm, Blue for SM PC, and Green for SM APC. Other colors are available upon request.
**FC STANDARD & MINI MATING ADAPTERS**

**FC mating adapter square flange**

**FC mating adapter hexagonal flange**

**FC mating adapter round flange**

**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 website.

Other versions available upon request.