Unlike conventional ferrules, the Diamond lensed ferrule operates on the Expanded Beam principle. Setting new standards in terms of optical performance by using single-mode fibers, lensed ferrules are used for applications that were not suitable, until now, because of high optical requirements.

**XB lensed ferrule**

**FEATURES**
- High precision ferrule
- Single mode fiber 9um
- Low insertion Loss
- Similar RL to standard contact connectors
- High power reliability

**E-2000® XB connector**

**FEATURES**
- Contactless connection
- 900um Fiber to 3mm Cable
- Easy Cleaning
- Mating durability: 500 cycling
- Max 3W at 1550nm
- Field repair
- Color-coding and mechanical keying to ensure correct matings

**STANDARDS**
- Performance standard IEC 61753-1
- RoHs compliant
- Reach
OPTICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>MEASUREMENT / TEST</th>
<th>METHOD</th>
<th>VALUES SINGLE MODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insertion loss, random mated</td>
<td>IEC 61300-3-34</td>
<td>IL type 0.6 dB max 1 dB</td>
</tr>
<tr>
<td>Return loss</td>
<td>IEC 61300-3-6</td>
<td>RL min. 35 dB</td>
</tr>
</tbody>
</table>

MECHANICAL AND ENVIRONMENTAL CONDITIONS

<table>
<thead>
<tr>
<th>MEASUREMENT / TEST</th>
<th>METHOD</th>
<th>VALUES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change of temperature (Reliability)</td>
<td>IEC 61300-2-22</td>
<td>-40°C / +85°C / 1 h dwell / 500 cycles</td>
</tr>
<tr>
<td>Cold</td>
<td>IEC 61300-2-17</td>
<td>40°C / 96 h</td>
</tr>
<tr>
<td>Dry heat (Reliability)</td>
<td>IEC 61300-2-18</td>
<td>+85°C / 96 h</td>
</tr>
<tr>
<td>Damp heat, cyclic</td>
<td>IEC 61300-2-46</td>
<td>+25°C / +55°C / 95% r.h. / 144 h</td>
</tr>
<tr>
<td>Fibre retention</td>
<td>IEC 61300-2-4</td>
<td>5 N / 1 min</td>
</tr>
<tr>
<td>Vibration, sinusoidal</td>
<td>IEC 61300-2-1</td>
<td>10 Hz - 55 Hz / 90 min</td>
</tr>
<tr>
<td>Mating durability</td>
<td>IEC 61300-2-2</td>
<td>500 cycles</td>
</tr>
<tr>
<td>Optical power cycling</td>
<td>IEC 61300-2-14</td>
<td>3 W</td>
</tr>
</tbody>
</table>

DRAWINGS AND DIMENSIONS

E-2000® XB SIMPLEX AND COMPACT CONNECTORS

E-2000® XB Simplex connectors 900µm - 3mm boot style

Ferrule material: Zirconia/Lense
External parts: Plastic

E-2000® XB Simplex connectors 900µm short boot

E-2000® XB Compact connectors 900µm - 3mm boot styles
E-2000® XB SIMPLEX ADAPTERS

E-2000® XB Simplex mating adapter with screw fixing clip

E-2000® XB Simplex mating adapter with quick fixing clip
(Typ A: for higher packaging density within E-2000® cutout)

E-2000® XB Simplex mating adapter with quick fixing clip
(Typ B: for excellent stability within SC cutout)

E-2000® XB Simplex mating adapter with print fixing clip

E-2000® XB Simplex mating adapter with 45° screw fixing clip

CUTOUT DIMENSIONS

Max wall thickness 1.6mm
**E-2000® XB COMPACT ADAPTERS**

- **E-2000® XB Compact mating adapter with screw fixing clip**
  - Diagram showing front side with dimensions.
  - Cutout dimensions provided.

- **E-2000® XB Compact mating adapter with quick fixing clips**
  - Diagram showing front side with dimensions.

- **E-2000® XB Compact mating adapter with print fixing clip (snap closure)**
  - Diagram showing front side with dimensions.

- **E-2000® XB Compact mating adapter with print fixing clip (6 pins)**
  - Diagram showing front side with dimensions.

- **E-2000® XB Compact mating adapter with 45° screw fixing clip**
  - Diagram showing front side with dimensions.
  - Shown as right mounting.