PermLock™
Fiber Optic Mechanical Splice
Non-Spark Aviation Application Qualified
(protected by patent US7918612B1)

Product Description
The Agilent's PermLock™ Fiber Optic Mechanical Splice is the latest technology to connect two fibers easily and reliably without the use of fusion splicing. Designed for aerospace applications, it offers a hazard-free-environment, absence of spark, high voltage, and heat. Moreover, the glass sealed splice offers low optical loss, wide-temperature operation, 25-year service life, and low cost of ownership. The patent pending design enables fiber self-alignment with high repeatability. A “light-bridging” material fills the fiber gap for stable, ultra low loss splice. Agiltron supplies a hand-held and battery powered curing kit for quick and easy cleave and splicing, even with polyimide coating fiber. PermLock™ Fiber Optic Splice has passed the most stringent aerospace qualification. The splice has several outer-jacket options suited for various applications. This product is well suited for applications in aerospace, shipboard/submarine, mining, and communication networks, as well as field optical fiber repair and fiber-to-home installation.

Features
- Low Insertion Loss
- Low Reflection Loss
- Easy to Use
- High Reliability
- Rugged
- Spark Free
- Low Cost

Applications
- LAN/MAN/WAN
- Military
- Aerospace
- Field Use
- Mining

Performance Specifications

<table>
<thead>
<tr>
<th>Fiber Optic Mechanical Splice</th>
<th>Typical</th>
<th>Unit</th>
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</thead>
<tbody>
<tr>
<td>Insertion Loss ¹</td>
<td>&lt; 0.1</td>
<td>dB</td>
</tr>
<tr>
<td>Return Loss</td>
<td>&lt; 40</td>
<td>dB</td>
</tr>
<tr>
<td>Cable Diameter</td>
<td>1.8, 2.2, 3.0</td>
<td>mm</td>
</tr>
<tr>
<td>Splice Dimension</td>
<td>&lt; Φ 4.2 x 40</td>
<td>mm</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-55 ~ 165</td>
<td>°C</td>
</tr>
<tr>
<td>Pull Strength</td>
<td>10</td>
<td>LB</td>
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<tr>
<td>Fiber Types</td>
<td>SM / MM</td>
<td></td>
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</tbody>
</table>

¹. Excluding connectors.

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