Conax Technologies has adapted our proven soft sealant capability to include the ability to compress a soft sealant material around the outside diameter of a fiber optic cable. The fiber optic cable is encased within a rugged stainless steel sheath that protects the cable from damage during the sealing process. This sheath is then placed through a sealing gland. This process allows the fiber optic cable to be sealed without the use of epoxies and with minimal out-gassing.

The fiber optic feedthrough sub-assembly can be used with various Conax Technologies sealing glands, including multiple hole fittings and can be adapted for special applications.

Features

- Wide range of connector terminations: ST, SMA, FC, FC/APC, FC/PC and SC/APC
- Standard fiber core sizes: 8.3, 62.5, 100, 200, 400, 600, 700 micron & larger
- Adaptable to customer-supplied fiber
- Can seal outside jacket diameters from 400 to 1040 microns
- Protection Tubing: Standard furcation tube (black in color) is constructed of a polypropylene inner tube with a dried Kevlar® Aramid yarn strength member and a 3.0 mm outer polyethylene jacket.
- Models FSA2 and FSA4 are available with a low-outgassing furcation tube. Please specify FSA2B or FSA4B for this feature.

Specifications

- Helium Leak Rate: $1 \times 10^{-6}$ scc/sec typical
- Transmission Loss: Less than 0.3db typical (not including connectors)
- Pressure Rating: 1000 psig (70 bar) standard, up to 3000 (207 bar) psig optional
- Temperature Rating: -4˚ F to +185˚ F (-20˚ C to +85˚ C)
  Higher temperature models are available in some configurations. Please consult factory.

Catalog Numbering System

<table>
<thead>
<tr>
<th>Model Type</th>
<th>Fiber Core Size</th>
<th>Tube Seal Length (mm)</th>
<th>Mounting Gland</th>
<th>Conduit Length (mm)</th>
<th>Process Length (mm)</th>
<th>Connector Termination Process Side</th>
<th>Connector Termination Process Side</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSA1</td>
<td>0 – 8.3 µm</td>
<td>1 – 55 mm (2.0”)</td>
<td>XX – No Gland</td>
<td></td>
<td></td>
<td>XX – No Connector</td>
<td>XX – No Connector</td>
</tr>
<tr>
<td>FSA2</td>
<td>1 – 62.5 µm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>905 – SMA 905</td>
<td>905 – SMA 905</td>
</tr>
<tr>
<td>FCA2B – low outgassing</td>
<td>2 – 100 µm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>906 – SMA 906</td>
<td>906 – SMA 906</td>
</tr>
<tr>
<td>FSA3</td>
<td>3 – 200 µm</td>
<td>2 – 76 mm (3.0”)</td>
<td></td>
<td></td>
<td></td>
<td>ST – ST</td>
<td>ST – ST</td>
</tr>
<tr>
<td>FSA4</td>
<td>4 – 400 µm</td>
<td>3 – 102 mm (4.0”)</td>
<td></td>
<td></td>
<td></td>
<td>FST – ST with female adapter</td>
<td>FST – ST with female adapter</td>
</tr>
<tr>
<td>FSA4B – low outgassing</td>
<td>6 – 600 µm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>FC – FC</td>
<td>FC – FC</td>
</tr>
<tr>
<td></td>
<td>7 – 700 µm</td>
<td>4 – 114 mm (4.5”)</td>
<td></td>
<td></td>
<td></td>
<td>FC/PC – FC with PC Polish</td>
<td>FC/PC – FC with PC Polish</td>
</tr>
<tr>
<td></td>
<td>9 – Customer supplied fiber</td>
<td>5 – 127 mm (5.0”)</td>
<td></td>
<td></td>
<td></td>
<td>FC/APC – FC with APC, 8˚ Angle Polish</td>
<td>FC/APC – FC with APC, 8˚ Angle Polish</td>
</tr>
</tbody>
</table>

Example: FSA2-4-2-PG2AT-2000/1500-906/ST
Conax Technologies offers high performance cable assemblies for use in applications such as laser delivery systems, telecommunications, fiber-to-fiber connections, test & measurement systems and research. These cable assemblies feature high quality, reliable factory terminations and are available in a variety of lengths, fiber types and connection styles. Each cable assembly can be optically tested for connection losses.

**Features**
- Available with or without connector terminations
- Standard fiber core sizes available: 8.3, 62.5, 100, 200, 400 micron and larger
- Will provide cable for customer-supplied fiber
- Protection Tubing: FCA1 and FCA2 use a standard furcation tube (black in color) constructed of a polypropylene inner tube with a dried Kevlar® Aramid yarn strength member and a 3.0 mm outer polyethylene jacket. These models are also available with a low outgassing furcation tube (blue in color) constructed of a PVDF inner jacket with a dried Kevlar® Aramid yarn strength member and a 3.0 mm PVDF outer jacket. FCA3 uses the standard furcation tube with a stainless steel overbraid. Please specify FCA1B or FCA2B for this feature.

**Specifications**
- Transmission Loss: Less than 0.3db typical (not including connectors).
- Temperature Rating: -4° F to +185° F (-20° C to +85° C)
  Higher temperature models are available in some configurations. Please consult factory.

**Benefits**
- Rugged construction
- Fiber optic cable is protected inside the sheath
- Uses low outgassing materials

**Catalog Numbering System**

**Example:** FCA2B-4-1000-ST/ST
HIGH PERFORMANCE FIBER CABLE ASSEMBLIES

FCA SERIES

ASSEMBLY INSTRUCTIONS

FCA1

FCA2 with stainless steel connector on one end and ST-to-ST adapter on the opposite end.

FCA2

FCA3

FCA2 with stainless steel connector on one end and ST-to-ST adapter on the opposite end.

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