Conax Technologies Sensor Wire Seals are designed to seal virtually any transducer, sensor or detector elements in a wide range of vacuum or pressure boundaries.

The most common use of these seals is for instrument leads on vibration transducers, proximity probes, pressure sensors, temperature sensors, flow meters, and strain gages. Virtually any sensor lead that passes through a pressure boundary can be sealed using one of our compression seal fitting styles.

Don’t hesitate to contact our sales engineers directly with your specific needs.

### BEARING WIRE SEALS (BSWS)

Conax Technologies BSWS assemblies were originally designed for use with embedded bearing temperature sensors to prevent oil migrating along the sensor leads. They seal on the individual insulated leads exiting an oil-filled bearing house. They may also be used to seal all types of insulated instrumentation leadwire. These sealing assemblies can be found in large motors, generators, turbines, pumps, compressors and journal bearing pedestals.

Construction consists of 303SST standard bodies, caps and followers with a Viton sealant. Standard assemblies seal 2 to 14 wires in a variety of wire gauges. Please consult Conax Technologies for custom needs.

- **Temperature Range:** Ambient to +100°F (+37.8°C)
- **Pressure Range:** To 50 psig (3.4 bar)

#### Accessories

The replaceable sealant permits repeated use of the same fitting. Elements can be easily assembled or replaced in the field. To replace the sealant or elements, simply loosen the cap, replace the necessary items, relubricate and retorque the cap.

Glands are supplied factory lubricated. If glands are cleaned prior to assembly or when reused, the glands should be relubricated to maintain the published torque and pressure ratings. See page 103 for information on our lubrication kit.

To order a Replacement Sealant, order RS – (Gland) – (Element) – (Number of Holes) – (Sealant)

**Example:** RS-BSWS4-20-2-V

### Catalog Numbering System

- **Gland Style**
  - BSWS4 • 1/2 NPT
  - BSWS5 • 3/4 NPT
- **Element Size**
  - 20 • 0.044-0.059" dia. over insulation
  - 22 • 0.037-0.051" dia. over insulation
  - 24 • 0.032-0.045" dia. over insulation
  - 26 • 0.028-0.041" dia. over insulation
  - 125 • 0.123-0.127" dia. over insulation
- **Cap Style**
  - A – has mounting thread only
  - B – has cap end threaded
- **Number of Elements Sealed**
  - 2
  - 3
  - 4
  - 5
  - 6
  - 7
  - 8
  - 9
  - 10
  - 11
  - 12
  - 13
  - 14
- **Sealant**
  - V – Viton

**Example:** BSWS4-20-A3-V

See Specifications Chart for maximum wires accommodated by each model.
### Specifications – BSWS

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Number of Wires</th>
<th>Diameter Over Insulation</th>
<th>Thread NPT</th>
<th>Length 'A'</th>
<th>Length 'B'</th>
<th>Body Cap</th>
<th>Body Cap</th>
<th>Cap</th>
<th>Cap</th>
<th>Pressure Rating Viton</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSWS4-20</td>
<td>2-8</td>
<td>0.044-0.059</td>
<td>1/2</td>
<td>2.50</td>
<td>63.5</td>
<td>1.000</td>
<td>1.000</td>
<td>25.4</td>
<td>25.4</td>
<td>50</td>
</tr>
<tr>
<td>BSWS4-22</td>
<td>2-8</td>
<td>0.037-0.051</td>
<td>1/2</td>
<td>2.50</td>
<td>63.5</td>
<td>1.000</td>
<td>1.000</td>
<td>25.4</td>
<td>25.4</td>
<td>50</td>
</tr>
<tr>
<td>BSWS4-24</td>
<td>2-8</td>
<td>0.032-0.045</td>
<td>1/2</td>
<td>2.50</td>
<td>63.5</td>
<td>1.000</td>
<td>1.000</td>
<td>25.4</td>
<td>25.4</td>
<td>50</td>
</tr>
<tr>
<td>BSWS4-26</td>
<td>2-8</td>
<td>0.028-0.041</td>
<td>1/2</td>
<td>2.50</td>
<td>63.5</td>
<td>1.000</td>
<td>1.000</td>
<td>25.4</td>
<td>25.4</td>
<td>50</td>
</tr>
<tr>
<td>BSWS5-20</td>
<td>2-14</td>
<td>0.044-0.059</td>
<td>3/4</td>
<td>2.88</td>
<td>73.0</td>
<td>3.63</td>
<td>92.1</td>
<td>1.250</td>
<td>1.500</td>
<td>31.8</td>
</tr>
<tr>
<td>BSWS5-22</td>
<td>2-14</td>
<td>0.037-0.051</td>
<td>3/4</td>
<td>2.88</td>
<td>73.0</td>
<td>3.63</td>
<td>92.1</td>
<td>1.250</td>
<td>1.500</td>
<td>31.8</td>
</tr>
<tr>
<td>BSWS5-24</td>
<td>2-14</td>
<td>0.032-0.045</td>
<td>3/4</td>
<td>2.88</td>
<td>73.0</td>
<td>3.63</td>
<td>92.1</td>
<td>1.250</td>
<td>1.500</td>
<td>31.8</td>
</tr>
<tr>
<td>BSWS5-26</td>
<td>2-14</td>
<td>0.028-0.041</td>
<td>3/4</td>
<td>2.88</td>
<td>73.0</td>
<td>3.63</td>
<td>92.1</td>
<td>1.250</td>
<td>1.500</td>
<td>31.8</td>
</tr>
<tr>
<td>BSWS5-125</td>
<td>2-4</td>
<td>0.123-0.127</td>
<td>3/4</td>
<td>2.88</td>
<td>73.0</td>
<td>3.63</td>
<td>92.1</td>
<td>1.250</td>
<td>1.500</td>
<td>31.8</td>
</tr>
<tr>
<td>BSWS5-120-B2-G</td>
<td>2</td>
<td>0.115-0.130</td>
<td>3/4</td>
<td>2.88</td>
<td>73.0</td>
<td>3.63</td>
<td>92.1</td>
<td>1.250</td>
<td>1.500</td>
<td>31.8</td>
</tr>
<tr>
<td>BSWS5-120-B4-G</td>
<td>4</td>
<td>0.115-0.131</td>
<td>3/4</td>
<td>2.88</td>
<td>73.0</td>
<td>3.63</td>
<td>92.1</td>
<td>1.250</td>
<td>1.500</td>
<td>31.8</td>
</tr>
<tr>
<td>BSWS5-120-B6-G</td>
<td>6</td>
<td>0.115-0.132</td>
<td>3/4</td>
<td>2.88</td>
<td>73.0</td>
<td>3.63</td>
<td>92.1</td>
<td>1.250</td>
<td>1.500</td>
<td>31.8</td>
</tr>
</tbody>
</table>

BSWS assemblies may be purchased with SAE/MS thread mount, weld neck or flange style mounts. Consult factory for details.

All pressure and torque ratings were determined at 68˚ F (20˚C) using stainless steel rod as the element. Pressure ratings may degrade at higher temperatures.

Pressure rating guide values are provided for glands with elements restrained by the compressed sealant. Higher pressure may be attained with additional element restraints.

For proper assembly of these sealing glands, see the Assembly Instructions provided on page 110.

* Hex size for the body and cap are the same unless a cap size is provided in parentheses.

---

### Transducer Wire Seals (TWS)

This version of the Conax sensor wire seal is designed to seal transducer cables entering low-pressure oil-filled cavities in rotating equipment. Since these transducers are typically manufactured with a factory assembled sensor and connector, the sealing gland has split internals to seal the outside jacket of the transducer’s cable.

The Transducer Wire Seal comes standard with a four hole split Viton sealant and with four split PTFE backing disks. The backing disks will have 1, 2, or 3 holes so one sealing gland can seal up to three vibration, proximity and pressure transducer sensor cables.

And unlike competitors’ designs, the Conax design requires only one PTFE backing disk and does not require the end user to punch out the holes.

Call Conax today to learn more about complete line of sensor wire seals — and how we can customize a solution for your application.