The BS&B FlameSaf® breather valves offer a reliable, proven and efficient solution for protecting your personnel and plant without disrupting the operation. Drawing on our extensive experience in the industry, the 945-EL Series of weight loaded pressure and vacuum breather valves for vessels and storage tanks offer a dependable, internationally certified and precise solution to regulate pressure, protecting vessels and storage tanks from overpressure and under pressure situations. Precision engineering means less leakage and lost product. Suitable for flammable liquids, the 945-EL Series is fully certified in accordance with the ATEX Directive 2014/34/EU. The 945-EL Series also features a modular design for ease of maintenance and lower stock requirements for spare parts. Consult your local BS&B representative or call us for consultation on your safety concerns.

**Features**
- Suitable for normal pressure and vacuum relief
- Complies with API 2000 Seventh Edition / EN ISO 28300
- Weight-loaded offset pallet design; discharges to outlet pipe (guidance is internal to the valve body protecting from freeze-up during inclement weather)
- Achieves full open (flowing pressure/vacuum) at just 10% overpressure. Other overpressure settings available on request.
- Provides premium sealing with FEP diaphragms (metal-to-metal available for special requirements or higher settings)
- Leakage rates much tighter than API 2000/EN ISO 28300 requirements
- Pallets, seats & stem-guides made from stainless steel
- Pipeaway design prevents emission losses
- Available in nom. diameter 2” – 12”

**Materials of Construction**

<table>
<thead>
<tr>
<th></th>
<th>Carbon Steel</th>
<th>Stainless Steel</th>
<th>Others on request</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Seat</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Pallet</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Diaphragm</td>
<td>✓</td>
<td></td>
<td>FEP</td>
</tr>
<tr>
<td>Seal</td>
<td>NBR, FPM, EPDM, FEP</td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

**Flange Connection Type**
- EN or DIN: ISO 7005-1
- JIS B 2220
- ASME B16.5

**Valve Settings**
- Pressure: +2.5 up to +250mbarg
- Vacuum: -2.5 to -70mbarg

**Operating Conditions**
- Maximum temperature rating up to 80% of ignition temperature of stored medium.

**Protection**
- Gas/air or vapour/air mixtures II 1/2 G Ex h IIB TX