SINGLE ELEMENT VENT FOR HYGIENIC APPLICATIONS
TYPE SANI-V™

DESCRIPTION

Damage to industrial equipment subjected to explosions can be controlled through the use of explosion venting. Explosion venting as a concept introduces a ‘weak element’ in the pressure envelope of the equipment, relieving the internal combustion pressure in case of an explosion.

Fike’s high performance Sani-V™ explosion vents for Clean in Place / Steam in Place applications are designed:

- with lightweight construction for simplified handling and minimal risk related to damage during installation;
- to meet all applicable requirements of European Standard for Explosion Venting Devices (EN 14797) and NFPA 68 Guide for Venting of Deflagrations;
- to satisfy the specific needs for clean production environments.

FEATURES AND BENEFITS

- Crevice free design
- Full aseptic materials of construction
- Leak proof until burst
- Minimized risk for accidental contamination
- No extra mounting frame, saving materials and labour costs
- Protected sealing element
- Optimum relief area
- Compliance with European ATEX Directive

APPROVALS:

- ATEX
OTHER KEY VALUES

- Certified burst pressure
- No maintenance
- Highest operating ratio
- Fail Safe design
- Non-fragmenting
- High-mechanical integrity

MAIN INDUSTRIES SERVED

- Pharmaceutical
- Biotech
- Food and beverage
- Cosmetics
- Dairy

SPECIFICATIONS

<table>
<thead>
<tr>
<th>Type</th>
<th>Sani-V™</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shapes</td>
<td>Rectangular</td>
</tr>
<tr>
<td>Sizes ¹</td>
<td>470 x 570 mm to 1000 x 1000 mm (see table below)</td>
</tr>
<tr>
<td>Materials of Construction ² (Food Grade Quality)</td>
<td>Stainless Steel Membrane : SST Seal : Silicone Process Gasket : EPDM (up to 120°C) / Silicone (up to 240°C)</td>
</tr>
<tr>
<td>Maximum Operating Pressure / Maximum Vacuum Rating</td>
<td>Up to 50% of the minimum burst pressure</td>
</tr>
<tr>
<td>Burst Pressure Tolerance ³</td>
<td>Nominal burst pressure ≤ 100 mbarg: ± 15 mbarg 100 mbarg &lt; burst pressure ≤ 250 mbarg: ± 25 mbarg Burst pressure &gt; 250 mbarg: ± 50 mbarg</td>
</tr>
<tr>
<td>Operating Temperature Range ⁴</td>
<td>-40°C up to 240°C continuous (up to 260°C intermittent)</td>
</tr>
</tbody>
</table>

(1) Other sizes are available on request, consult factory.  
(2) Other materials are available on request, consult factory.  
(3) For certain sizes and burst pressures, reduced tolerances may be available. Consult factory.  
(4) As specified by ATEX Guidelines 2014/34/EU 1st edition the certification applies for operating temperature range between -20°C and +60°C. Consult factory for further information.
The Sani-V™ can be supplied with electrical break-wire type burst indicator. For thermal / acoustic insulation an Ex-Cover is recommended. Consult Fike for details.

**STANDARD DIMENSIONS**

Fike offers a range of standard Sani-V explosion vents in rectangular configurations with the following characteristics.

<table>
<thead>
<tr>
<th>Nominal Size</th>
<th>Relief Area</th>
<th>Efficiency</th>
<th>Burst pressure in mbarg at 22°C</th>
<th>Bolts</th>
<th>Angled Frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>mm</td>
<td>m²</td>
<td>%</td>
<td>Min</td>
<td>Max</td>
<td>Qty, D2, Size</td>
</tr>
<tr>
<td>470 x 570</td>
<td>0.267</td>
<td>100</td>
<td>75</td>
<td>460</td>
<td>26, 14, M10</td>
</tr>
<tr>
<td>500 x 1000</td>
<td>0.500</td>
<td>100</td>
<td>50</td>
<td>260</td>
<td>34, 14, M10</td>
</tr>
<tr>
<td>566 x 900</td>
<td>0.509</td>
<td>100</td>
<td>50</td>
<td>260</td>
<td>34, 14, M10</td>
</tr>
<tr>
<td>900 x 900</td>
<td>0.809</td>
<td>100</td>
<td>35</td>
<td>200</td>
<td>40, 14, M10</td>
</tr>
<tr>
<td>1000 x 1000</td>
<td>0.999</td>
<td>100</td>
<td>35</td>
<td>200</td>
<td>44, 14, M10</td>
</tr>
</tbody>
</table>

To accommodate cost and delivery demands of the market, these vent sizes have been selected which are produced for stock with a nominal burst pressure of 0.1 barg ± 15% at 22°C.

Beside the standard range of Fike explosion vents, Fike offers a wide variety of optional materials, dimensions and configurations. Fike Sani-V explosion vents can be made to practically any customer requirements.

*U.S. Patent 7,234,279 and Foreign Patents.*