EXPLOSION VENTING SOLUTIONS

INNOVATIVE, PROVEN, COST-EFFECTIVE TECHNOLOGY
Fike is the leader in delivering patented, innovative technologies to the explosion protection market. With over 65 years of field experience, Fike understands the complexities of plant processes, relevant code compliance and the critical nature of continued plant operation.

Proven to be one of the most effective forms of passive explosion protection, explosion venting provides overpressure protection from potential deflagration hazards by providing a planned pathway for the expanding gases to escape. Fike is a leader in the development of effective, cost efficient, ATEX certified explosion venting solutions. Economically priced and offering a long service life, Fike’s wide range of explosion venting solutions are ideal for many applications.

Fike Expertise

Fike Explosion Vents

- Require little to no maintenance
- Proven to perform as designed and all models’ performance is validated using large scale explosion tests
- Engineered to provide optimal performance characteristics:
  - Low mass
  - Cyclic pressure capability
  - Vacuum resistance
  - High venting efficiency
  - Certified burst pressures ($P_{\text{STAT}}$)
- Full opening, non-fragmenting vent design, eliminating restraints
- No moving parts for greater reliability
- Low product cost, simple installation, and long service life
- Weather covers, burst indicators, insulation and vacuum bar options available
## Fike Explosion Protection Vents Product Overview

### Composite Explosion Protection Vents

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Burst Pressure Range</th>
<th>Operating Ratio</th>
<th>Non-fragmenting</th>
<th>Vacuum Rating</th>
<th>Pulsating/Cycling</th>
<th>Explosion Vent Stocking Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>CV</td>
<td>Simple, reliable</td>
<td>0.5 - 10.0 PSIG 35 - 690 MBARG</td>
<td>60 - 75%</td>
<td>Yes*</td>
<td>Partial</td>
<td>Good</td>
<td>Yes</td>
</tr>
<tr>
<td>CV-S</td>
<td>High performance</td>
<td>1.0 - 15.0 PSIG 69 - 1030 MBARG</td>
<td>60 - 90%</td>
<td>Yes*</td>
<td>Full/Partial</td>
<td>Best</td>
<td>Yes</td>
</tr>
<tr>
<td>CV-SF</td>
<td>Withstands full vacuum conditions with use of backup bars</td>
<td>0.5 - 10.0 PSIG 35 - 690 MBARG</td>
<td>60 - 75%</td>
<td>Yes</td>
<td>Full</td>
<td>Good</td>
<td>Yes</td>
</tr>
<tr>
<td>CV-CF</td>
<td>Extended service life under heavy pulsating and cycling conditions</td>
<td>0.75 - 10.0 PSIG 52 - 690 MBARG</td>
<td>60 - 75%</td>
<td>Yes*</td>
<td>Partial</td>
<td>Best</td>
<td></td>
</tr>
<tr>
<td>CV</td>
<td>Insulation extends service life in high temperature applications</td>
<td>0.5 - 15.0 PSIG 35 - 1030 MBARG</td>
<td>60 - 75%</td>
<td>Yes</td>
<td>Partial</td>
<td>Good</td>
<td></td>
</tr>
<tr>
<td>CV-S</td>
<td>Insulation extends service life in high temperature applications</td>
<td>0.7 - 15.0 PSIG 50 - 1030 MBARG</td>
<td>80%</td>
<td>Yes</td>
<td>Full</td>
<td>Better</td>
<td></td>
</tr>
</tbody>
</table>

### Sanitary Explosion Vents

<table>
<thead>
<tr>
<th>Model</th>
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</thead>
<tbody>
<tr>
<td>SANI-VS</td>
<td>Sturdy performance over a wide range of temperatures</td>
<td>0.3 - 10.2 PSIG 21 - 203 MBARG</td>
<td>80%</td>
<td>Yes</td>
<td>Partial</td>
<td>Best</td>
<td></td>
</tr>
<tr>
<td>SANI-VSA</td>
<td>3-A and EHEDG Certified; designed for clean production environments</td>
<td>0.3 - 10.2 PSIG 21 - 203 MBARG</td>
<td>80%</td>
<td>Yes</td>
<td>Partial</td>
<td>Best</td>
<td></td>
</tr>
<tr>
<td>SANI-V+</td>
<td>Versatile, economical</td>
<td>0.5 - 6.5 PSIG 35 - 448 MBARG</td>
<td>50%</td>
<td>Yes</td>
<td>Partial</td>
<td>Good</td>
<td></td>
</tr>
<tr>
<td>SANI-VA</td>
<td>3-A and EHEDG Certified; designed for clean production environments</td>
<td>0.5 - 6.5 PSIG 35 - 448 MBARG</td>
<td>50%</td>
<td>Yes</td>
<td>Partial</td>
<td>Good</td>
<td></td>
</tr>
<tr>
<td>CV-H</td>
<td>Liner on process side supports hygienic applications</td>
<td>0.5 - 15.0 PSIG 35 - 1030 MBARG</td>
<td>60 - 75%</td>
<td>Yes</td>
<td>Good</td>
<td></td>
<td></td>
</tr>
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</table>

### High Performance / Special Application Explosion Vents

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</tr>
</thead>
<tbody>
<tr>
<td>VMAX+</td>
<td>Stable performance over a wide range of temperatures</td>
<td>0.5 - 5.0 PSIG 35 - 345 MBARG</td>
<td>80%</td>
<td>Yes</td>
<td>Partial</td>
<td>Best</td>
<td>Yes</td>
</tr>
<tr>
<td>ELEGUARD</td>
<td>Designed specifically to protect bucket elevators</td>
<td>0.7 - 2.9 PSIG 50 - 200 MBARG</td>
<td>25%</td>
<td>Yes</td>
<td>Good</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Vent Stocking Program

Fike’s Stock Explosion Venting Program gives you the added advantages of quick turn-around and reduced costs. When you select one of the listed stock vents, you realize shipment within 48 hours*, at a price less than a custom manufactured vent.

Select from the following venting solutions, each available in multiple sizes:

- **CV** - Ideal for static to light pressure cycling and light vacuum conditions.
- **CV-S** - Optimal for full or moderate vacuum process conditions with some pulsating/cycling.
- **CV-SF** - Supports full vacuum conditions with use of back-up bars in the frame assembly.
- **VMAX** - Multi-domed, high performance explosion vent provides excellent service life in challenging process conditions, stable performance over a wide range of temperatures and is vacuum rated.

*Stock program varies by market

### Vent Accessories

- **Frames** are available in a variety of materials and designs.
- **Easy plant-wide monitoring with Burst Indicators.**
- **Protection Weather Covers** are lightweight, corrosion resistant environmental protection. Weather covers minimize the effect of dirt, wind, snow, etc., while safeguarding the operation of the explosion vent.
Flameless Explosion Venting

During normal venting, an explosion is freely discharged, allowing flames and dust to exit the process vessel being protected. When the process vessel is located indoors, ducts are generally used to safely convey the explosion outside the building. However, ductwork has disadvantages and may result in decreased venting efficiency. Flameless venting, in combination with Fike explosion vents, can extinguish the flame from the vented explosion without the use of expensive ducting, limitations to equipment location, or more costly explosion protection.

- Eliminates need for expensive ducts
- Enhanced venting efficiency over venting with ductwork
- Virtually maintenance free

Highly suited for indoor applications, flameless venting is designed to protect people and equipment from flames and dust, releasing post-combustion gases only.

FlamQuench II™
- For use with round vents
- Field refurbish kits available
- FM/CE Approvals

FlamQuench SQ
- For use with rectangular vents
- Field refurbish kits available
- CE Approvals

EleQuench®
- For use with EleGuard explosion vents
- CE Approvals

Testing Services

Every application, process and facility is unique and requires a complete assessment to determine what needs to be protected and the most effective means for accomplishing the safety goals. Fike offers a wide range of both standard and non-standard explosibility tests designed to assist companies in identifying and mitigating costly explosion hazards — all completed at Fike’s own state-of-the-art testing laboratories.

Contact Fike for a hazard evaluation.
Fike is a global team of experienced professionals dedicated to life and business safety. We work closely with our clients to solve highly complex problems with easy-to-use products and services.