

## Vmax EXPLOSION VENTS

### DESCRIPTION

Fike Corporation designs simple, reliable explosion protection solutions to meet your safety requirements. Fike's high performance Vmax vent features a single membrane, multi-dome surface that provides the longest service life for harsh conditions such as pulsating or cycling, higher operating pressures, and stronger vacuum.

The Vmax vent has been tested to perform after 100,000 positive pressure cycles from 0 to 80% of the minimum stamped burst pressure and approximately 1,000,000 vacuum-to-positive cycles of -1 psig to 25% minimum stamped burst pressure (typical of dust collectors).

Typical applications include separation, drying, storage, conveyance, and processing operations.



### FEATURES AND BENEFITS

Inconel® Metal Tabs	Provide stable burst pressure ratings independent of temperature fluctuations due to process conditions or weather which in turn provides a longer service life.
High Operating Ratio	Higher operating ratios allow lower burst pressures, more flexible process conditions, and safer vent design. The Vmax vent has an operating ratio of 80% and provides a longer service life.
Instantaneous Full Opening	Reduced risk of accidental contamination due to undetected openings.
Fail-Safe Design	Certified burst pressure provides full, predictable opening at or below its rated burst pressure even if the vent is damaged.
Dynamically Tested	Tested under full-scale explosion conditions.
100% Venting Efficiency	Optimal relief area saves money.
Easy Installation by Plant Personnel	Reduced down time and maintenance costs.
Non-Fragmenting Design	Reduced risk to personnel and equipment.

### SPECIFICATIONS

Compliance:	NFPA 68
Materials of Construction :	Membrane: 316 SST Seal: PTFE
Vacuum rating:	-4.0 psig for all sizes
Maximum Operating Pressure:	80% of the minimum stamped burst pressure
Burst Pressure Tolerance:	± 0.25 psig for burst pressures 1 psig or less ± 0.50 psig for burst pressures greater than 1 psig
Operating Temperature Range:	0 - 350°F (-17 - 175°C)
Operating environment:	The vent panel is specifically designed for dry material applications. If the process vessel is to be washed out or cleaned by CIP (Clean-In-Place) or SIP (Steam-In-Place), the vent should be removed first.
Optional equipment:	Burst indicators/monitoring system; Atmospheric insulation; Process insulation; Weather covers; Flameless Venting

<b>Vent Size Inches (mm)</b>	<b>12 x 18 (300 x 460)</b>	<b>24 x 24 (610 x 610)</b>	<b>18 x 35 (460 x 890)</b>	<b>24 x 36 (610 x 910)</b>	<b>36 x 36 (910 x 910)</b>	<b>36 x 44 (910 x 1120)</b>
<b>Available burst pressure in psig</b>	1.50 2.00 2.50 3.00 3.50 4.00 4.50 5.00	1.50 2.00 2.50 3.00 3.50 4.00	1.50 2.00 2.50 3.00 3.50 4.00 4.50	1.00 1.50 2.00 2.50 3.00 3.50	1.00 1.50 2.00 2.50 3.00 3.50	.50 1.00 1.50 2.00 2.50
<b>Vacuum Rating in psig</b>	-4.0	-4.0	-4.0	-4.0	-4.0	-4.0
<b>Relief Area in ft<sup>2</sup> (m<sup>2</sup>)</b>	1.30 (0.12)	3.67 (0.34)	4.01 (0.37)	5.59 (0.52)	8.51 (0.79)	10.45 (0.97)