

## V<sub>MAX</sub><sup>TM</sup> EXPLOSION VENTS

### DESCRIPTION

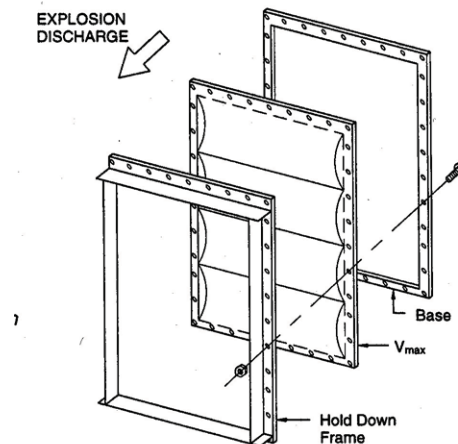
Fike Corporation designs simple, reliable explosion protection solutions to meet your safety requirements. Fike's high performance V<sub>max</sub> vent feature a single membrane, multi-dome surface that provides the longest service life for harsh conditions such as pulsating or cycling, higher operating pressures, and stronger vacuum. The V<sub>max</sub> 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 psi to 25% minimum stamped burst pressure (typical of dust collectors). Typical applications include separation, drying, storage, conveyance, and processing operations.



### FIKE SERVICES

Fike expertise creates the right explosion protection solution for your specific application:

- Engineers and application specialists familiar with your application and applicable codes
- Rapid Response - lower costs and lead times with Fike's exclusive stock program shipping the most popular sizes and burst pressures in 48 hours
- Product testing and hazard analysis
- Vent relief area sizing software and insertable AutoCAD® details online at [www.Fike.com](http://www.Fike.com) (NFPA/European standards)



### 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.
- FDA approved materials suitable for food and pharmaceutical applications.
- High operating ration allows lower burst pressures, more flexible process conditions, and safer vent design. The V<sub>max</sub> vent has an operating ratio of 80% and provides a longer service life.
- Instantaneous full opening reduces risk of accidental contamination due to undetected openings.
- Fail-safe design with certified burst pressures provides full, predictable opening at or below its rated burst pressure even if the vent is damaged.
- Dynamically tested under the full-scale explosion conditions.
- 100% venting efficiency.
- Easy installation by plant personnel reduces down-time and maintenance costs.
- Non-fragmenting design reduces risk to personnel and equipment.

Form No. X.1.09.01-4

## SPECIFICATIONS

Code compliance: NFPA 68

Materials of Construction (food grade quality):

- Membrane: 316 stainless steel
- Seal: Teflon<sup>®</sup>

Vacuum rating: -7.0 12x18, -4.0 all other sizes

Maximum Operating Pressure/Maximum Vacuum Rating: 80% of the minimum stamped burst pressure

Burst Pressure Tolerance:

- $\pm$  0.25 psig for burst pressures 1 psig or less
- $\pm$  0.50 psig for burst pressures greater than 1 psig

Operating Temperature Range: 0-350°F (17-176°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

Vent Size Inches (cm)	12 x 18 (30 x 46)	24 x 24 (61 x 61)	18 x 35 (46 x 89)	24 x 36 (61 x 91)	24 x 44 (61 x 112)	36 x 36 (91 x 91)	36 x 44 (91 x 112)
Available burst pressure in psig	1.5* 2.00 2.50 3.00 3.50	1.50* 2.00 2.50 3.00 3.50	1.50* 2.00 2.50 3.00 3.50	1.00 1.50* 2.00 2.50 3.00 3.50	1.50	1.00 1.50* 2.00 2.50 3.00 3.50	.50 1.00 1.50* 2.00 2.50
*stock program	4.00 4.50 5.00	3.50 4.00	4.00 4.50	3.00 3.50		3.00 3.50	2.00 2.50
Vacuum Rating in psig	-7.0	-4.0	-4.0	-4.0	-4.0	-4.0	-4.0
Relief Area in ft <sup>2</sup> (m <sup>2</sup> )	1.36 (0.13)	3.75 (0.35)	4.13 (0.37)	5.71 (0.53)	7.01 (0.65)	8.63 (0.80)	10.60 (0.98)

