



SANI-V EXPLOSION VENTS

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 were designed:

- With lightweight construction for simplified handling and minimal risk related to damage during installation
- To meet all applicable requirements of NFPA 68, and European Standard for Explosion Venting Devices (EN14797)
- To satisfy the needs for clean production environments

Applicable industries for Fike's explosion vents include pharmaceutical, biotech, food and beverage, cosmetics, and many others.



FEATURES

- Crevice free process area (CIP/SIP compliant)
- Full aseptic materials of construction
- Positive sealing
- Minimized risk for accidental contamination
- No external mounting frame (for most popular burst pressures)
- Protected sealing element
- Outstanding operating pressure performance
- Optimal relief area

Other key features include:

- High mechanical integrity
- Certified burst pressure
- Maintenance-free
- High operating ratio
- 50% burst pressure vacuum rating
- Fail safe design
- Non-fragmenting
- Compliant with European ATEX-Directive 94/9/EC and NFPA 68 Guidelines

BENEFITS

- No crevices or openings where bacteriological hazards may exist
- Complies with requirements of general food, beverage, and drug administrations
- Unique seal offers long-term pressure seal under harsh operating conditions and acts as a bacteriological barrier
- Provides instantaneous full opening of membrane, eliminating undetected small openings and unwanted risk of contamination
- Eliminates handling of external frames
- Vent pressure sealing area protected against mechanical damage
- Offers excellent service life (positive/vacuum pressures up to 50% of the minimum burst pressure)
- Provides 100% venting efficiency

Form No. X.1.11.01-1

SPECIFICATIONS

- Materials of construction (food grade quality):
 - Membrane: Stainless Steel
 - Seal: Silicone
 - Process Gasket: EPDM, up to 120°C (245°F), Silicone, up to 240°C (460°F)
- Maximum Operating Pressure/Maximum Vacuum Rating: Up to 50% of the minimum stamped burst pressure
- Burst Pressure Tolerance:
 - ± 15 mbarg for nominal burst pressure ≤ 100 mbarg; ± 0.25 psig for nominal burst pressure ≤ 1.5 psig
 - ± 25 mbarg for nominal burst pressure ≤ 250 mbarg; ± 0.36 psig for burst pressure ≥ 1.5 and < 3.6 psig
 - ± 50 mbarg for nominal burst pressure ≥ 250 mbarg; ± 0.75 psig for burst pressure ≥ 3.6 psig
- Operating Temperature Range: -40 to 240°C / -40 to 460°F (continuous); up to 260°C/500°F intermittent

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

Explosion vent Dimensions are nominal				Burst Pressure (psi at 72°F)					External Dimensions	
Relief area m ²	Relief area Ft ²	Size mm	Size inches	Minimum	Maximum	Bolts			mm	inches
						Qty	D2	Size		
.267	2.9	470 x 570	18.5 x 22	1.0	6.5	26	.5"	3/8"	578 x 678	22.75 x 26.7
.500	5.4	500 x 1000	19.5 x 39	.75	3.75	34	.5"	3/8"	608 x 1108	24 x 43.5
.509	5.4	566 x 900	22 x 35	.75	3.75	34	.5"	3/8"	674 x 1008	26.5 x 39.5
.809	8.7	900 x 900	35 x 35	.50	2.9	40	.5"	3/8"	1008 x 1008	39.5 x 39.5
.999	10.8	1000 x 1000	39 x 39	.50	2.9	44	.5"	3/8"	1108 x 1108	43.5 x 43.5

OPTIONAL EQUIPMENT

The Sani-V can be supplied with electrical break-wire type burst indicator. For thermal/acoustic insulation an Ex-Cover is recommended.

All above data is subject to change without notice. They must not be used unless confirmed in writing.

