

SANI-V-S 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-S™ 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

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
Generating cost-savings in materials and labor
Vent pressure sealing area protected against mechanical damage
Offers excellent service life (positive/vacuum pressures up to 80% of the minimum burst pressure)
Provides 100% venting efficiency

Other key features include:

- High mechanical integrity
- Certified burst pressure
- Maintenance-free
- Highest operating ratio
- Up to full vacuum rating
- Non-fragmenting
- Compliant with European ATEX-Directive 94/9/EC and NFPA 68 Guidelines

SPECIFICATIONS

- Materials of construction(food grade quality):
 - Membrane: Stainless Steel
 - Seal: Silicone
 - Process Gasket: EPDM, up to 245°F (120°C), Silicone, up to 460°F (240°C)
- Maximum Operating Pressure/Maximum Vacuum Rating: Up to 80% 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-S explosion vents in rectangular configurations with the following characteristics:

Explosion vent Dimensions are nominal				Burst Pressure (psi at 72° F)		Vacuum rating (psi)	External Dimensions	
Relief area m ²	Relief area Ft ²	Size mm	Size inches	Minimum	Maximum		mm	inches
.262 .267	2.8	470 x 570	18.5 x 22	1.2 2.1 2.6 5.0	2.1 2.6 5.0 10.2	1.5 3.8 6.3 13.8	578 x 678	22.75 x 26.7
.491 .500	5.8	500 x 1000	19.5 x 39	0.9 1.5 2.8	1.5 2.8 7.3	2.5 4.0 8.0	608 x 1108	24 x 43.5
.501 .509	5.4	566 x 900	22 x 35	1.0 1.4 2.9	1.4 2.9 7.3	3.4 3.5 6.3	674 x 1008	26.5 x 39.5
.799 .809	8.6	900 x 900	35 x 35	0.3 0.7 1.4	0.7 1.4 5.8	0.9 1.4 3.6	1008 x 1008	39.5 x 39.5
.988 .999	10.6	1000 x 1000	39 x 39	0.6 1.1	1.1 3.6	1.0 2.9	1108 x 1108	43.5 x 43.5

OPTIONAL EQUIPMENT

The Sani-V-S 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.



Copyright © Fike Corporation All Rights Reserved.
Form No. X.1.12.01-1 April, 2005 Specifications are subject to change without notice.