

DATA SHEET

CV-SF EXPLOSION VENTS

DESCRIPTION

Fike Corporation designs simple, reliable explosion protection solutions to meet your safety requirements. The CV-SF vent is constructed with a support frame with back-up bars in the vent frame assembly to provide extra support for higher vacuum conditions while maintaining a flat profile. The Fike CV-SF vent is a composite membrane, high performance explosion vent that provides a superior service life for static to light pressure cycling conditions. Typical applications include separation, drying, storage, conveyance, and processing operations.

STANDARD FEATURES AND BENEFITS

Instantaneous Full Opening	Reduced risk for accidental contamination, elimination of 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 - Fike exclusive	Tested under full-scale explosion conditions not just computer modeling		
High Mechanical Integrity	Longer service life		
Easy Installation by Plant Personnel	Reduced downtime and maintenance costs		
Non-Fragmenting Design	Reduced risk to personnel and equipment		
Maintenance Free	Reduced cost of ownership		

SPECIFICATIONS

Compliance:	NFPA 68
Materials of Construction:	316 SST / FEP or PFA / 316 SST
Maximum Operating Pressure:	75% of the minimum stamped burst pressure for BP ≤ 1.5 psig 60% of the minimum stamped burst pressure for BP > 1.5 psig
Vacuum Rating:	Full vacuum with back-up bars
Standard Burst Pressure Tolerance:	± 0.25 psig for burst pressures < 1.0 psig ± 0.5 psig for burst pressures 1.0 - 4.0 psig ± 1.0 psig for burst pressures > 4.0 psig
Operating Temperature Range:	-40 to 204°C / -40 to 400°F (FEP) -40 to 260°C / -40 to 500°F (PFA)
Optional Equipment:	Burst Indicators / Monitoring System; Atmospheric Insulation; Process Insulation; Flameless Venting; Weather Covers; Alternative materials, temperature ranges, and tighter tolerances are available

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Vent Size		Relief Area		Minimum Burst Pressure		Maximum Burst Pressure	
IN	cm	ft ²	m²	psig	mbarg	psig	mbarg
9 x 12	23 x 30	.410	.038	2.0	138	10.0	690
12 x 12	30 x 30	.592	.055	2.0	138	8.0	550
12 x 18	30 x 46	.965	.090	1.5	103	8.0	550
*12 x 24	30 x 61	1.337	.124	1.5	103	8.0	550
18 x 18	46 x 46	1.559	.145	1.0	69	8.0	550
18 x 24	46 x 61	2.160	.201	1.0	69	8.0	550
18 x 30	46 x 76	2.762	.257	1.0	69	8.0	550
24 x 24	61 x 61	2.983	.277	1.0	69	8.0	550
20 x 30	51 x 76	3.112	.289	1.0	69	8.0	550
*18 x 35	46 x 89	3.309	.307	1.0	69	8.0	550
18 x 36	46 x 91	3.418	.318	1.0	69	8.0	550
24 x 30	61 x 76	3.814	.354	1.0	69	8.0	550
*24 x 36	61 x 91	4.720	.439	.5	35	8.0	550
30 x 30	76 x 76	4.866	.452	.5	35	8.0	550
24 x 44	61 x 112	5.853	.544	.5	35	8.0	550
30 x 36	76 x 91	6.022	.559	.5	35	8.0	550
24 x 48	61 x 122	6.457	.600	.5	35	8.0	550
36 x 36	91 x 91	7.324	.680	.5	35	8.0	550
30 x 44	76 x 112	7.468	.694	.5	35	8.0	550
*36 x 44	91 x 112	9.082	.844	.5	35	8.0	550
44 x 44	112 x 112	11.090	1.030	.5	35	8.0	550
44 x 69	112 x 175	18.048	1.677	.5	35	8.0	550

^{*} Standard sizes are available with a 1.5 psig nominal burst pressure at 72°F.

- Custom sizes are available
- All dimensions are nominal

INSTALLATION

CV-SF rectangular vents can be mounted in several lightweight angle frame configurations. Fike offers frames of multiple configurations and materials.

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