

CV-S EXPLOSION VENTS

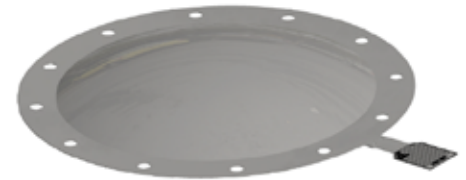
DESCRIPTION

Fike designs simple, reliable explosion protection solutions to meet your safety requirements. The Fike CV-S explosion vent is especially designed to provide non-fragmenting opening when protecting industrial processing equipment. Round CV-S vents operate up to full vacuum levels depending on vent size. Rectangular CV-S vents are designed for use in applications where the operating pressure approaches the burst pressure, or where moderate vacuum pressure may exist.

Typical applications include separation, drying, storage, conveyance, and processing operations. Fike offers a stock vent program with lower costs and shipping within 2 days on popular sizes and burst pressures.

FEATURES AND BENEFITS

- 100% Venting Efficiency
- Non-Fragmenting Composite Design
- High Mechanical Integrity
- Compliant with NFPA 68



SPECIFICATIONS

Type:	Round	Rectangular
Sizes:	6 to 44" (15 to 112cm)	9 x 12" to 44 x 69" (230 x 300mm to 1110 x 1750mm)
Compliance:	NFPA 68, EN 14797, ATEX Certification available (consult factory)	
Materials of Construction:	316 SST / FEP or PFA / 316 SST	
Maximum Operating Pressure:	90% of the minimum stamped burst pressure for BP ≤ 1.5 psig 80% of the minimum stamped burst pressure for BP > 1.5 psig	85% of minimum stamped burst pressure
Maximum Vacuum Rating:	Full vacuum (-14.7) for sizes up to 30" -7.35 psig for sizes > 30"	Varies based on size (see table on pg 2)
Burst Pressure Tolerance:	± 0.25 psig for burst pressures < 1 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 400°F / -40 to 204°C (FEP) -40 to 500°F / -40 to 260°C (PFA)	
Optional Accessories:	Burst indicators/monitoring system; Ex-Cover weather covers; Flameless venting; Atmospheric insulation; Process insulation	

ROUND VENTS

Vent Size		Relief Area		Minimum Burst Pressure		Maximum Burst Pressure	
IN	cm	ft ²	m ²	psig	mbarg	psig	mbarg
6 Dia.	15 Dia.	.13	.012	6.0	414	15.0	1030
8 Dia.	20 Dia.	.26	.024	4.5	310	15.0	1030
10 Dia.	25 Dia.	.43	.040	3.6	248	11.0	760
12 Dia.	30 Dia.	.65	.060	3.0	207	10.0	690
14 Dia.	36 Dia.	.91	.085	2.6	179	10.0	690
16 Dia.	41 Dia.	1.23	.11	2.2	152	10.0	690
18 Dia.	46 Dia.	1.58	.15	2.0	138	10.0	690
20 Dia.	51 Dia.	1.97	.18	1.8	124	10.0	690
22 Dia.	56 Dia.	2.41	.23	1.6	110	10.0	690
*24 Dia.	61 Dia.	2.89	.27	1.5	103	10.0	690
26 Dia.	66 Dia.	3.41	.32	1.5	103	10.0	690
*30 Dia.	76 Dia.	4.59	.43	1.5	103	10.0	690
32 Dia.	81 Dia.	5.24	.49	1.5	103	10.0	690
*36 Dia.	91 Dia.	6.68	.62	1.0	69	10.0	690
40 Dia.	102 Dia.	8.30	.77	1.0	69	10.0	690
44 Dia.	112 Dia.	10.08	.94	1.0	69	10.0	690

* To accommodate cost and delivery demands of the market, a number of CV-S style explosion vents have been selected which are produced for stock with a nominal burst pressure of 1.5 psig, ± 0.25 psig at 72°F.

Note: Custom sizes are available. All dimensions are nominal.

RECTANGULAR VENTS

Vent Size		Relief Area		Burst Pressure		Vacuum Rating	
IN	mm	ft ²	m ²	psig	mbarg	psig	mbarg
12 x 18	300 x 460	1.16	0.11	1.5	103	-8.9	-614
24 x 24	610 x 610	3.44	0.32	1.5	103	-4.1	-283
18 x 35	460 x 890	3.75	0.35	1.5	103	-4.1	-283
24 x 36	610 x 910	5.29	0.49	1.5	103	-3.0	-207
36 x 36	910 x 910	8.15	0.76	1.5	103	-3.0	-207
36 x 44	910 x 1120	10.05	0.93	1.5	103	-1.7	-117

Note: To accommodate cost and delivery demands of the market, the rectangular vent sizes in the table above are produced for stock with a nominal burst pressure of 1.5 psig, ±0.5 psig at 72°F. Custom sizes are available. All dimensions are nominal.

INSTALLATION

CV-S rectangular and circular vents can be mounted in several lightweight angle frame configurations. CV-S circular vent designs may be created on special request to accommodate installation between standard flanges in accordance with DIN 3632 PN 10 or ANSI B16.5 150. Fike offers vent frames of multiple configurations and materials.

For installation and maintenance instructions refer to Form # 06-308-1. For flameless venting installation refer to Form # E06-045 (Round) and Form # E06-085 (Square).