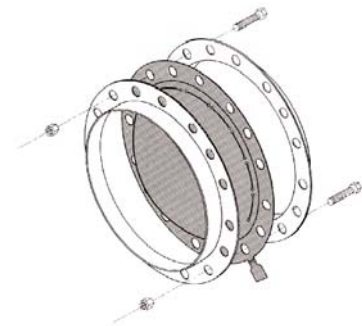


## CV-S EXPLOSION VENT

### DESCRIPTION

Fike Corporation designs simple, reliable explosion protection solutions to meet your safety requirements. The Fike CV-S is a high performance explosion vent and provides superior service life for severe process pressure cycling and pulsating conditions. CV-S vents operate up to full vacuum levels, depending on vent size. Typical applications include separation, drying, storage, conveyance, and processing operations.



Typical Explosion Vent  
And Mounting Frame

### 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 2 days
- Product testing and hazard analysis
- Vent relief area sizing software online at [www.Fike.com](http://www.Fike.com) (NFPA/European standards)

### STANDARD FEATURES

Instantaneous Full Opening

Fail-Safe Design

Dynamically Tested - Fike exclusive!

100% Venting Efficiency

High Mechanical Integrity

Easy Installation by Plant Personnel

Non-Fragmenting Design

Maintenance Free

### BENEFITS

Reduced risk for accidental contamination, elimination of undetected openings

Certified burst pressure provides full, predictable opening at or below its rated burst pressure even if the vent is damaged

Tested under full-scale explosion conditions, not just computer modeling

Optimal relief area

Longer service life

Reduced downtime and maintenance costs

Reduced risk to personnel and equipment

Reduced cost of ownership

### SPECIFICATIONS

Compliance:

Atex Certified / NFPA 68

Materials of Construction:

316 SST / Teflon® / 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

Vacuum Rating:

Full vacuum (-14 psig) for sizes up to 30"; -7.35 psig for sizes > 30"

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° C up to 260° C / -40°F up to 500°F

Optional Equipment:

Burst Indicators / Monitoring System

Atmospheric Insulation

Process Insulation

Weather Covers

Flameless Venting

Alternative materials, temperature ranges, and tighter tolerances are available

Vent Size		Relief Area		Minimum Burst Pressure		Maximum Burst Pressure	
in	cm	ft <sup>2</sup>	m <sup>2</sup>	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	1.5	103	10.0	690
<b>*24 Dia.</b>	<b>61 Dia.</b>	<b>2.89</b>	<b>.27</b>	<b>1.5</b>	<b>103</b>	<b>10.0</b>	<b>690</b>
26 Dia.	66 Dia.	3.41	.32	1.5	103	10.0	690
<b>*30 Dia.</b>	<b>76 Dia.</b>	<b>4.59</b>	<b>.43</b>	<b>1.5</b>	<b>103</b>	<b>10.0</b>	<b>690</b>
32 Dia.	81 Dia.	5.24	.49	1.5	103	10.0	690
<b>*36 Dia.</b>	<b>91 Dia.</b>	<b>6.68</b>	<b>.62</b>	<b>1.0</b>	<b>69</b>	<b>10.0</b>	<b>690</b>
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

- \* These sizes are stocked at the factory for 1.5 psig nominal burst pressure 72°F only
- Custom sizes are available
- All dimensions are nominal

#### INSTALLATION

CV-S circular vents can be mounted in several lightweight angle frame configurations. CV circular explosion vents can also be installed between standard weld neck flanges in accordance with DIN 3632 PN10 or ANSI B16.5 150. Fike offers frames of multiple configurations and materials. If you prefer to make your own frames, drawings can be purchased for a nominal fee.

