

HIGH INTEGRITY TYPE HI-CV, HI-CV-CF, HI-CV-S – CIRCULAR SHAPE



DESCRIPTION

Fike's HI (High Integrity) explosion vents are high performance explosion vents especially designed to provide dynamic non-fragmenting opening when protection industrial processing equipment.

Fike HI type explosion vents are available in following distinctive types, each offering ideal solutions for specific applications or industries.

- **HI-CV:** for use in most industrial applications where the operating pressures (both positive and negative) are near to atmospheric.
- **HI-CV-CF:** for use in applications where the explosion vent is exposed to severe pulsatic duty such as they exist with for example reverse jet cleaning systems on dust collectors, etc.
- **HI-CV-S:** designed for use in applications where the operating pressure approaches the burst pressure range, or where high vacuum pressure may exist.

FEATURES AND BENEFITS

- Highest venting efficiency
- Non-fragmenting opening
- Flange alignment independent
- Maintenance free
- Fully compliant with ATEX / EN14797 / NFPA68 / EAC
- Interchangeable with existing circular explosion vents



APPROVALS:

- ATEX
- EN14797
- NFPA68
- EAC



SPECIFICATIONS

Type	HI-CV		HI-CV-CF		HI-CV-S	
Shapes ¹	Circular					
Sizes ¹	6" – 48" / DN150 - DN1200					
Materials of Construction ²	1.4301 (304 SST) / FEP (Teflon) / 1.4301 (304 SST)					
	BP ≤ 0.1 barg	BP > 0.1 barg	BP ≤ 0.1 barg	BP > 0.1 barg	BP ≤ 0.1 barg	BP > 0.1 barg
Max. Operating Pressure	75%	60%	80%	70%	90%	80%
Max. Vacuum Pressure	70%	60%	80%	70%	See Table	
Burst Pressure Tolerance ³	Burst pressure ≤ 70 mbarg : ± 15 mbarg 70 mbarg < burst pressure ≤ 250 mbarg : ± 25 mbarg Burst pressure > 250 mbarg : ± 50 mbarg					
Operating Temperature ⁴	-40°C to 260°C		-40°C to 120°C		-40°C to 260°C	

(1) Other sizes are available on request.

(2) Other materials are available on request.

(3) For certain sizes and burst pressures, reduced tolerances may be available, consult factory.

(4) For operating temperatures exceeding 204°C, advise when ordering.



STANDARD WELDING NECK FLANGES DIN 2632/EN 1092-1 PN10 & 150 ANSI B16.5

Explosion Vent												
DIN/EN		Relief area in m ²		ANSI 150	Relief Area in m ²		Minimum Burst Pressure in mbarg at 22°C			Maximum Burst Pressure in mbarg at 22°C		Vacuum Rating in mbarg ¹
mm	"	HI-CV, HI-CV-CF	HI-CV-S	"	HI-CV, HI-CV-CF	HI-CV-S	HI-CV	HI-CV-CF	HI-CV-S	HI-CV	HI-CV-CF, HI-CV-S	HI-CV-S only
150	6	0.015	0.012	6	0.014	0.011	210	415	415	1000	1030	Full
200	8	0.026	0.022	8	0.025	0.021	200	300	300	1000	1030	Full
250	10	0.044	0.038	10	0.042	0.036	140	250	250	649	760	Full
300	12	0.064	0.057	12	0.061	0.055	110	200	200	554	700	Full
350	14	0.078	0.071	14	0.076	0.069	100	180	180	499	700	Full
400 ²	16	0.105	0.097	16	0.102	0.094	85	150	150	434	700	Full
500 ²	20	0.171	0.160	20	0.167	0.156	85	125	125	344	700	Full
600 ²	24	0.252	0.239	24	0.247	0.235	40	100	100	284	700	Full
700	28	0.347	0.331	28	0.398	0.381	35	100	100	244	700	Full
800 ²	32	0.459	0.442	32	0.456	0.438	35	100	100	214	700	955
900	36	0.581	0.562	36	0.583	0.563	35	70	70	189	700	Full
1000	40	0.725	0.703	40	0.727	0.704	35	70	70	169	700	500
1100	44	-	-	44	0.804	0.781	35	70	70	159	700	400
1200	48	1.057	1.030	48	0.886	0.861	35	70	70	154	700	290

(1) Higher vacuum ratings available on request, contact factory for details.

(2) To accommodate cost and delivery demands of the market, a number of explosion vent sizes have been selected which are produced for stock with a nominal burst pressure of 0.1 barg ± 25 mbarg at 22°C.



LIGHTWEIGHT ANGULAR FRAMES (LAF)

Explosion Vent								
Vent Size		Relief Area in m ²		Minimum Burst Pressure in mbarg at 22°C		Maximum Burst Pressure in mbarg at 22°C		Vacuum Rating in mbarg ¹
mm	"	HI-CV, HI-CV-CF	HI-CV-S	HI-CV	HI-CV-CF, HI-CV-S	HI-CV	HI-CV-CF, HI-CV-S	HI-CV-S only
150	6	0.015	0.012	210	415	1000	1030	Full
200	8	0.027	0.023	200	300	1000	1030	Full
250	10	0.044	0.039	140	250	649	700	Full
300	12	0.064	0.057	110	200	554	700	Full
350	14	0.079	0.071	100	180	499	700	Full
400 ²	16	0.106	0.097	85	150	434	700	Full
450	18	0.133	0.124	70	150	389	700	Full
500 ²	20	0.171	0.160	50	120	344	700	Full
550	22	0.226	0.213	40	120	299	700	Full
600 ²	24	0.252	0.239	40	100	284	700	Full
700	28	0.349	0.333	35	90	244	700	Full
750	30	0.398	0.381	35	90	229	700	Full
800 ²	32	0.462	0.444	35	80	210	700	955
850	34	0.550	0.531	35	70	199	700	Full
900	36	0.589	0.569	35	70	184	700	Full
1000	40	0.734	0.712	35	70	169	700	500
1050	42	0.805	0.781	35	70	164	700	400
1100	44	0.886	0.862	35	70	159	700	290

(1) Higher vacuum ratings available on request, contact factory for details.

(2) To accommodate cost and delivery demands of the market, a number of explosion vent sizes have been selected which are produced for stock with a nominal burst pressure of 0.1 barg ± 25 mbarg at 22°C.

U.S. Patent 7,017,767 and Foreign Patents.