

Explosion venting, Sani-V-S™

Rectangular



Fike's high performance Sani-V-S™ explosion vents for clean in place/steam in place applications are designed with lightweight construction, multi-dome single membrane, integrated top frame and bursting line sealed off within the frame. Compared with the flat Sani-V, the bulged Sani-V-S has higher vacuum resistance.

SPECIFICATIONS

Type		Sani-V-S™			
Sizes		36x36" to 44x44"		470x570 mm to 1000x1000 mm	
Material of Construction	Membrane	1.4301 (304) (Standard) 1.4404 (316L) (Optional)			
	Seal	Silicone			
Process Gasket	EPDM (standard)	-40°F to +248°F		-40°C to +120°C	
	Silicone	-40°C to +446°F		-40°C to +230°C	
Burst Pressure	36x36"	1.5 psig	470x570 mm	100-700 mbarg	
	38x46"	0.75-4 psig	500x1000 mm	100-500 mbarg	
	44x44"	1.5 psig	566x900 mm	100-500 mbarg	
			900x900 mm	100-400 mbarg	
			1000x1000 mm	100-250 mbarg	
Burst Pressure Tolerance	Nominal BP ≤ 1.5 psig: ± 0.25 psig		Nominal BP ≤ 100 mbarg: ± 15 mbarg		
	1.5 psig > BP ≤ 3.6 psig: ± 0.50 psig		100 mbarg > BP ≤ 250 mbarg: ± 25 mbarg		
	BP > 3.6 psig: ± 1 psig		BP > 250 mbarg: ± 50 mbarg		
Maximum Operating pressure		Up to 80% of the minimum burst pressure			
Operating Temperature Range		-4°F to +320°F		-20°C to +160°C	
Ambient Temperature		-4°F to +140°F		-20°C to +60°C	
Relief Area	36x36"	8.493 ft ²	470x570 mm	0.262 m ²	
	38x46"	11.517 ft ²	500x1000 mm	0.491 m ²	
	44x44"	12.809 ft ²	566x900 mm	0.501 m ²	
			900x900 mm	0.799 m ²	
			1000x1000 mm	0.988 m ²	
Process Connections		LAF			
Explosion Hazards	K _{st}	≤ 435 bar.m/s			
	K _g	≤ 326 bar.m/s (38"x46" P _{stat} = 0.75 psig)			
	P _{red, max}	29 psig	2barg		
		12.4 psig (38"x46" P _{stat} = 0.75 psig) ⁽¹⁾	0.885 barg (38"x46" P _{stat} = 0.052 barg) ⁽¹⁾		
		10.95 psig (38"x46" P _{stat} = 0.75 psig) ⁽²⁾	0.755 barg (38"x46" P _{stat} = 0.052 barg) ⁽²⁾		
Compliant		NFPA 68			

Approvals		
ATEX Approvals	Marking	 GD
	Norms	EN 14797: 2006 EN 1127-1
	Certification	IBExU04ATEX2056 X IBExU20ATEX2055 X (38"x46" P _{stat} = 0.75 psig) ⁽¹⁾ IBExU20ATEX2056 X (38"x46" P _{stat} = 0.75 psig) ⁽²⁾
European Conformity CE Approval		CE 0948
UKCA Approval	Approval	UKCA
	Certification	Pending CML 21UKEX9724X (38"x46") ⁽¹⁾ CML 21UKEX9723X (38"x46") ⁽²⁾
Other Approvals		EAC

1) Manufactured in USA.

2) Manufactured in Belgium.

OPTIONS

- Rupture Indicator
Provides an electrical signal that indicates opening of the explosion vent.
 - RI - Integrated circuit strip Rupture Indicator
 - BI – Integrated circuit strip Burst Indicator (Only for 38"x46" P_{stat} = 0.75 psig manufactured in USA)
 - RI2 - Integrated circuit strip Rupture Indicator – Supervised SIL2
 - MRI – Add-on Magnetic Rupture Indicator
 More information of the Rupture Indicators can be found on datasheet X.2.58.01 and X.1.51.01
- Flameless Venting
Flame filter that quenches the flames that are ejected through the opened explosion vent.
 - FlamQuench SQ → More information can be found on datasheet X.2.25.01
- Weather Protection
Protects the explosion vent against the impact of weather conditions.
 - Ex-Cover Rectangular → More information can be found on datasheet X.2.48.01

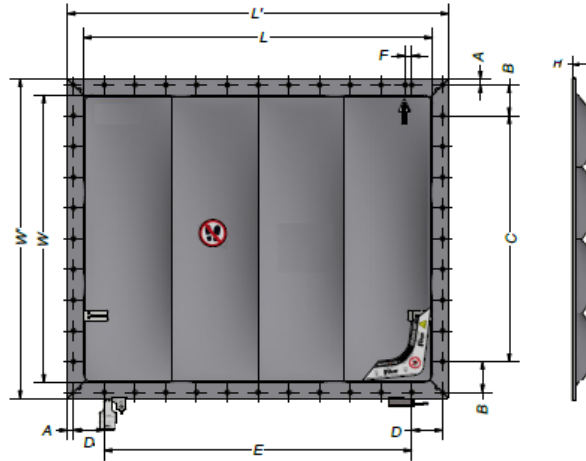
INSTALLATION REQUIREMENTS

Bolts, washers and nuts are provided by the customer.

Vent panel has integral top frame. Additional top frame is required when BP > 1.5 psig (100 mbarg) and/or P_{red,max} > 0.8barg. In that case, vent panels has to be mounted with 40x40x4mm or 45x45x5mm angle profiles top frame and can be provided by Fike if needed. If delivered by Fike, the angle profiles comply with DIN EN 10 056-1/DIN EN 10 056-2.

DIMENSIONS

Below are tabulated the dimensions of the most common vent sizes. Other sizes can be made upon request.



Size	W	W'	L	L'	A	B	C	D	E	F	H	Appr. weight lb	Bolt specifications	
	inch	inch	inch	inch	inch	inch	qty ⁽³⁾	inch	qty ⁽³⁾	inch	inch		qty	size
36x36	35.37	39.31	35.37	39.31	0.66	3.00	9x EQ SP @ 4.00"	3.00	9x EQ SP @ 4.00"	0.87	5.31	35	40	3/8"
36x44	37.37	41.75	45.37	49.57	0.78	4.00	9x EQ SP @ 4.00"	4.00	11x EQ SP @ 4.00"	0.87	6.69	37	44	3/8"
38x46	43.76	47.31	43.76	47.31	0.66	3.00	11x EQ SP @ 4.00"	3.00	11x EQ SP @ 4.00"	N/A	3.47	40	48	3/8"

Size	W	W'	L	L'	A	B	C	D	E	F	H	Appr. Weight kg	Bolt specifications	
	mm	mm	mm	mm	mm	mm	qty ⁽³⁾	mm	qty ⁽³⁾	mm	mm		qty	size
470x570	474	578	574	678	19	70	5x EQ SP @ 100mm	70	6x EQ SP @ 100mm	22	56	7	27	M10
500x1000	504	608	1004	1108	19	85	5x EQ SP @ 100mm	85	10x EQ SP @ 100mm	N/A	79	8	34	M10
566x900	570	674	904	1008	19	68	6x EQ SP @ 100mm	85	9x EQ SP @ 100mm	22	58	9	35	M10
900x900	904	1008	904	1008	19	85	9x EQ SP @ 100mm	85	9x EQ SP @ 100mm	22	80	12	41	M10
1000x1000	1004	1108	1004	1108	19	85	10x EQ SP @ 100mm	85	10x EQ SP @ 100mm	N/A	81	14	44	M10

3) The number refers to the number of holes in the particular leg of the frame. The holes are equally spaced at 4.00" or 100mm.

ORDERING

Please include the following specifications when ordering a Sani-V-S rectangular explosion vent:

- Size
- Material of construction
- Process gasket
- Burst pressure
- Operating temperature
- Options⁽⁴⁾
 - Rupture Indicator
 - Cable length: 3m standard (Optional 10m or 25m)

4) The FlamQuench SQ and Ex-Cover Rectangular need to be ordered separately, if needed.