

Flameless Explosion Venting

Type FlamQuench™ III SQ

The most common basis of safety for protecting industrial processes against the effects of dust explosions is explosion relief venting.

Fike's FlamQuench III SQ technology consists of various layers of high-temperature stainless steel mesh, which absorb the heat produced during combustion and eliminate the passage of flame to the surrounding environment, allowing conventional venting to be used indoors with no release of flame and a marginal release of dust particles.

FlamQuench III SQ is offered in the same sizes as FlamQuench II SQ but a design change in the SST mesh enables higher flameless venting efficiency and larger protected volume capability in FlamQuench III SQ.



SPECIFICATIONS

Type		FlamQuench™ III SQ	
Available metric and imperial sizes		18x24"; 24x24"; 18x35"; 24x36"; 36x36"; 36x44"; 38x46"	400x500mm; 500x500mm; 500x800mm; 470x570mm; 566x900mm; 900x900mm; 1110x1110mm
Material of Construction		Painted Carbon steel	
Compatible Explosion vents ⁽¹⁾		CV, CV-S, SANI-V and SANI-V-S	
Operating Conditions		Not exposed to process conditions	
Operating Temperature Range ⁽²⁾		-40 °F to +500 °F	-40 °C to +260 °C
Ambient Temperature		-40 °F to +140 °F	-40 °C to +60 °C
Maximum Protected Volume		See manual P23190 for more information	
Explosion Hazards	K _{st}		
	P _{red}		
	P _{max}		
Compliant		NFPA68	

- 1) The FlamQuench ATEX approval includes use of these vents and their Armaflex insulated versions.
- 2) The operating temperature range is valid for the process but that the flameless venting device must always remain within the ambient temperature range.

Approvals		
ATEX Approvals	Marking	Ex II D
	Norms	EN 16009:2011
	Certification	INERIS 25ATEX0003X
European Conformity CE Approval		CE 0948
UKCA Approval	Approval	UKCA
	Certification	Pending

OPTIONS

- Dust Cover

The Dust Cover is suited for indoor protection against dust and can also be suited for mild weather protection in outdoor installations, but is not suited to protect against harsh outdoor weather conditions with intense wind, rain- or snowfall. If there is a question about whether the dust cover is suitable, trials should be executed first to determine if the cover is adequate for the weather condition specific to the application.



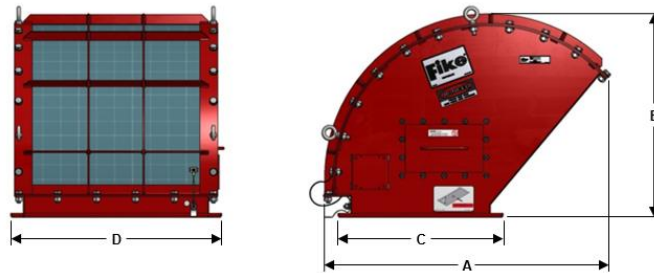
Temperature Range		Material
-40°F to 302°F	-40°C to +150°C	Alpha Maritex double-sided silicone-coated glass fiber cloth

INSTALLATION REQUIREMENTS

The FlamQuench III SQ will be installed directly onto the explosion vents, with the gaskets typically attached to the Fike explosion vent upon delivery.

The explosion vent installed under the FlamQuench III SQ must have an integrated Rupture indicator. Bolts, washers and nuts are provided by the customer.

DIMENSIONS



FlamQuench III SQ

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Size	Dimensions								Weight		Bolt Specifications		
	A		B		C		D				Qty	Size	
	Inch	mm	Inch	mm	Inch	mm	Inch	mm	lbs	Kg		Inch	mm
18" x 24"	37.18	944	26.57	675	21.65	550	27.65	702	230	104	24	3/8"	M10
24" x 24"	47.31	1202	32.35	822	27.65	702	27.65	702	310	141	28	3/8"	M10
18" x 35"	37.29	947	26.55	675	21.65	550	38.66	982	302	137	28	3/8"	M10
24" x 36"	47.31	1202	32.69	830	27.65	702	39.65	1007	400	181	34	3/8"	M10
36" x 36"	67.05	1703	45.89	1166	39.65	1007	39.65	1007	705	320	40	3/8"	M10
36" x 44"	67.03	1703	45.92	1166	39.65	1007	47.66	1211	783	355	44	3/8"	M10
38" x 46"	70.27	1785	47.95	1218	43.57	1106	49.66	1261	845	383	44	3/8"	M10
400 x 500 mm	35.18	894	25.29	642	20.16	512	24.09	612	165	75	22	3/8"	M10
500 x 500 mm	41.69	1059	29.18	741	24.09	612	24.09	612	201	91	24	3/8"	M10
500 x 800 mm	41.69	1059	29.22	742	24.09	612	35.91	912	254	115	30	3/8"	M10
470 x 570 mm	39.76	1008	28.04	712	22.91	582	26.85	682	203	92	26	3/8"	M10
566 x 900 mm	45.98	1168	31.83	808	26.69	678	39.84	1012	304	138	34	3/8"	M10
900 x 900 mm	67.61	1717	45.97	1168	39.84	1012	39.84	1012	573	260	40	3/8"	M10
1110 x 1110 mm	81.19	2062	54.14	1375	48.70	1237	48.70	1237	783	355	32	3/8"	M10

ORDERING

Please include the following specifications when ordering a FlamQuench III SQ.

Sizes	18" x 24"	F0295276 ⁽³⁾	F0294806
	24" x 24"	F0295277 ⁽³⁾	F0294807
	18" x 35"	F0295278 ⁽³⁾	F0294808
	24" x 36"	F0295279 ⁽³⁾	F0294809
	36" x 36"	F0295280 ⁽³⁾	F0294810
	36" x 44"	F0295281 ⁽³⁾	F0294811
	38" x 46"	F0295282 ⁽³⁾	F0294812
	400 x 500 mm	F0294821	
	500 x 500 mm	F0294822	
	500 x 800 mm	F0294823	
	470 x 570 mm	F0294824	
	566 x 900 mm	F0294825	
	900 x 900 mm	F0294826	
	1110 x 1110 mm	F0294827	
Dust Cover	18" x 24"	91420588-S	
	24" x 24"	91424088-S	
	18" x 35"	91421188-S	
	24" x 36"	91420688-S	
	36" x 36"	91420888-S	
	36" x 44"	91424188-S	
	38" x 46"	91420788-S	
	400 x 500 mm	91420088-S	
	500 x 500 mm	91420188-S	
	500 x 800 mm	91420288-S	
	470 x 570 mm	91420388-S	
	566 x 900 mm	91420488-S	
	900 x 900 mm	91421088-S	
	1110 x 1110 mm	91420988-S	

3) This part number has no ATEX or CE approval.