

Explosion vent panel for Energy Storage Systems

Type Fike EXV™ ESS

The Fike EXV ESS Energy Storage Explosion vent panel is specifically designed for high performance in near-atmospheric outdoor roof applications. The bulged leak-tight design guarantees long lifetime in outdoor weather conditions. Ease of handling is realized by lightweight, single element design with integrated top-frame and process gasket. Reliable operation and burst according to the highest Fike engineering and manufacturing standards.



SPECIFICATIONS

Type		Fike EXV™ ESS	
Sizes		490x590 to 1020x1020	
Material of Construction	Wetted and non-wetted parts	1.4301 (AISI type 304)	
	Gaskets	EPDM sponge rubber with closed cell structure	
Burst Pressure		1.45 psig @ 71.6°F	100 mbarg @ 22°C
Burst Pressure Tolerance		± 0.36psig	± 25mbarg
Maximum Operating pressure		0.72 psig @ 71.6°F	50 mbarg @ 22°C
Maximum Vacuum Rating		-0.72 psig @ 71.6°F	-50 mbarg @ 22°C
Operating Temperature Range		-4°F to 140°F	-20°C to +60°C
Ambient Temperature		-4°F to 140°F	-20°C to +60°C
Relief Area		490x590	0.289 m ²
		645x645	0.416 m ²
		586x920	0.539 m ²
		920x920	0.846 m ²
		1020x1020	1.040 m ²
Process Connections		LAF	
Explosion Hazards	K_{st}	≤ 380 bar.m/s	
	K_g	≤ 200 bar.m/s	
	P_{red}	≤ 8.7 psig	≤ 0.6 barg
Compliant		NFPA 68	
Approvals			
ATEX Approvals	Marking	⊕ GD	
	Norms	EN 14797:2006	
	Certification	IBExU16ATEX2239 X	
European Conformity CE Approval		CE-0948	
UKCA Approval	Approval	UKCA	
	Certification	CML 21UKEX9725X	
Leak tightness		IPx5 ⁽¹⁾	

(1) Only size 490x590, other sizes upon request.

OPTIONS

- Rupture Indicator

Provides an electrical signal that indicates opening of the explosion vent.

- Fike EXV™ ESS Rupture Indicator

More information can be found on datasheet P14360.

INSTALLATION REQUIREMENTS

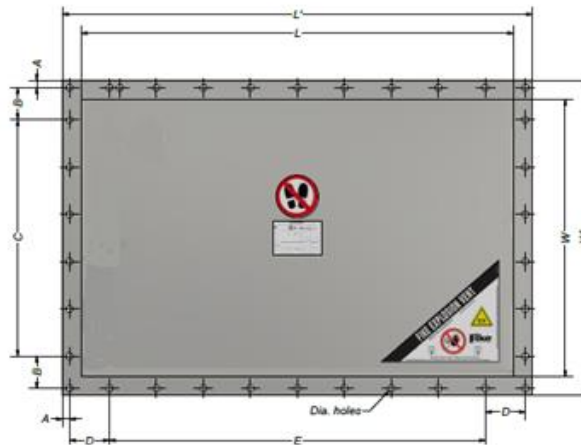
Bolts, nuts, washers are provided by the customer.

No additional top frame required. Top frame is integrated on the panel.

Fike recommend using bonded sealing washers which prevent leakage through the bolts holes of the vent panel. Specifications of the bonded sealing washers can be found in the manual. These washers cannot be ordered by Fike.

DIMENSIONS

Fike offers a range of rectangular Fike EXV ESS in panels with the following dimensions.



Size	W	W'	L	L'	A	B	C	D	E	Bulge Height	Bolt specifications	
mm	mm	mm	mm	mm	mm	mm	qty ⁽²⁾	mm	qty ⁽²⁾	mm	qty	size
490x590	490	570	590	670	15	70	5x EQ SP @ 100mm	70	6x EQ SP @ 100mm	70	26	M10
645x645	645	735	645	735	12.5	130	4x EQ SP @ 150mm	130	4x EQ SP @ 150mm	85	20	M10
586x920	586	666	920	1000	15	68	6x EQ SP @ 100mm	85	9x EQ SP @ 100mm	83	34	M10
920x920	920	1000	920	1000	15	85	9x EQ SP @ 100mm	85	9x EQ SP @ 100mm	117	40	M10
1020x1020	1020	1100	1020	1100	15	85	10x EQ SP @ 100mm	85	10x EQ SP @ 100mm	130	44	M10

(2) The number refers to the number of holes in that particular leg of the frame. The holes are equally spaced at 100mm.

ORDERING

Please include the following specifications when ordering a Fike EXV ESS:

Size	Part number
490x590	50471020001-S
645x645	50443020001-S
586x920	50430020001-S
920x920	50431020001-S
1020x1020	50411020001-S

- (3) The Fike EXV ESS Rupture Indicator needs to be ordered separately.