



ELE-QUENCH™ FLAMELESS EXPLOSION VENTING FOR ELEVATOR APPLICATIONS

DESCRIPTION

Fike Corporation designs simple, reliable explosion protection solutions to meet your safety requirements. Approximately half of grain dust explosions originate from a bucket elevator. Fike developed the EleGuard explosion vent with easy installation features for use on elevator legs. For indoor elevators where vent ducting is not desirable, affordable, or possible, Fike offers a flame filter companion to the EleGuard vent. The Ele-Quench flame arrester prevents the release of flame and product, typically relieved during an explosion. The Ele-Quench filter and EleGuard vent bolt directly onto the elevator.

Full-scale explosion testing revealed that venting efficiency remains 100% with the Ele-Quench. This means that the P_{red} will not be increased when adding the Ele-Quench flame filter; therefore it is not necessary to enlarge the vent area in order to keep the same P_{red} as the vent panel alone.

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
- Product testing and hazard analysis
- Vent relief area sizing software online at www.Fike.com (NFPA/European standards)

APPLICATIONS

- Bucket elevators
- Starches $\leq K_{st} 150$
- P_{red} (equipment strength) is limited to 1 barg

STANDARD FEATURES

Flame Filter

Integral Frame and Gasket

Fail-Safe Design

Dynamically Tested - Fike exclusive!

100% Venting Efficiency

High Mechanical Integrity

Easy Installation by Plant Personnel

Non-Fragmenting Design

Maintenance Free

BENEFITS

Prevents dust and flames from emerging from vented areas - perfect for indoor applications

Fast, easy, no-weld 6 bolt installation with a EleGuard vent

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

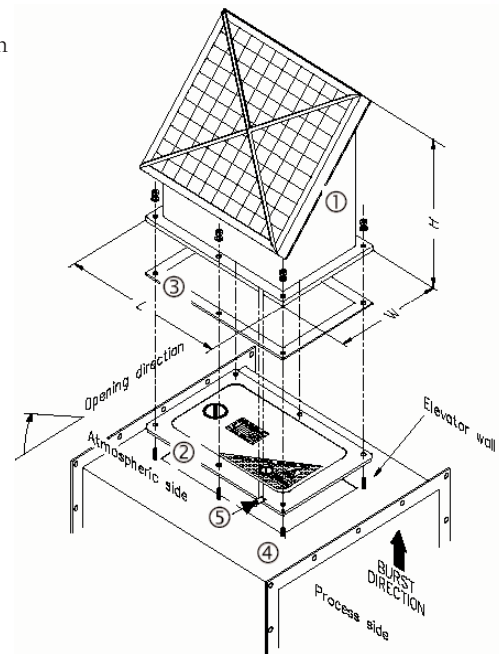
Optimal relief area, the explosion protection design is made for the EleGuard vent alone with no allowance required for the Ele-Quench

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:	Stainless Steel, neoprene gasket
Companion Explosion Vents:	EleGuard, must be ordered separately
Sizes (given in EleGuard dimensions):	170 x 470; 270 x 458; 300 x 500; and 350 x 650mm
Operating Conditions:	Device is not exposed to process conditions
Environmental Conditions:	Ambient pressures and temperatures (-40° to 140°F). Keep device deposit free
Hazard:	Materials similar to starches, and $K_{st} \leq 150$ bar m/s $P_{red} \leq$ of 1 bar/14.5 psi

Ele-Quench ①	Dimensions	Weight	In Combinations with EleGuard Vent Panel ②		Bolt Specs ③ bolts/nuts/washers not incl		
			Fike Part No.	L xW x H	Lb.	Fike Dwg No.	Nominal size
34604900	579 x 306 x 361 mm 23 x 12 x 14.25 in	42	345048	170 x 470 mm 6.7 x 18.5 in	6	50 mm 2 in	M10
34600900	564 x 404 x 516 mm 22 x 16 x 20 in	60	345008	270 x 458 mm 10.6 x 18 in	6	50 mm 2 in	M10
34605900	606 x 434 x 567 mm 24 x 17 x 22 in	73	345058	300 x 500 mm 11.8 x 19.7 in	6	50 mm 2 in	M10
34603900	756 x 484 x 630 mm 30 x 19 x 25 in	101	345038	350 x 650 mm 13.8 x 25.6 in	6	50 mm 2 in	M10

