

ELEGUARD™ EXPLOSION VENTS

DESCRIPTION

Fike Corporation designs simple, reliable explosion protection solutions to meet your safety requirements. Fike's EleGuard is a single element, explosion venting device specifically designed for use in protecting bucket elevators from damaging explosions. This cost-effective explosion vent is also easy to install because of its integrated frame, requiring only six bolts.



In addition, the EleGuard can be installed with Fike's EleQuench™ flame filter to provide safe venting options for indoor applications.

EleGuard explosion vents used in combination with EleQuench flame filters should include a rupture indicator (RI) to provide supervision and notification when the vent ruptures. The EleGuard can be factory-equipped with an RI, featuring a 3 meter cable with flying leads, for connection to monitoring equipment. Extension cables of 10 and 25 meters are also available.

STANDARD FEATURES AND BENEFITS

Integral Frame	Fast, easy, no-weld 6 bolt installation
Instantaneous Full Opening	Reduced risk for accidental contamination, elimination of undetected openings
Fail-Safe Design	Certified burst pressure provides full, predictable opening at or below its rated burst pressure even if the vent is damaged
Dynamically Tested - Fike exclusive!	Tested under full-scale explosion conditions not just computer modeling
Optimal Explosion Relief Characteristics	Low mass and full open design provide high efficiency and maximum pressure relief
High Mechanical Integrity	Longer service life
Easy Installation by Plant Personnel	Reduced downtime and maintenance costs
Non-Fragmenting Design	Reduced risk to personnel and equipment
Maintenance Free	Reduced cost of ownership

SPECIFICATIONS

Compliance:	ATEX Certified / NFPA 61
Materials of Construction:	304 SST / Silicone FDA Seal / Neoprene FDA Gasket
Maximum Operating Pressure:	25% of the minimum stamped burst pressure
Standard Burst Pressure Tolerance:	± 0.21 psig
Operating Temperature Range:	-4°F up to 140°F / -20°C up to 60°C
Optional Equipment:	Rupture Indicator (RI); Atmospheric Insulation; Flameless Venting, Weldless Mounting Kit, Extension Cables

Form No. X.1.21.01-5

Relief Area		Nominal Size		Outside Dimensions		Standard P/N	
ft ²	m ²	in	mm	in	mm	Without RI	With RI
.85	.08	6.69 x 18.50	170 x 470	10.16 x 21.96	258 x 558	34504820012	34504820017
1.32	.12	10.63 x 18.03	270 x 458	14.09 x 21.50	358 x 546	34500820013	34500820017
1.60	.15	11.81 x 19.68	300 x 500	15.28 x 23.15	388 x 588	34505820008	34505820010
2.44	.22	13.78 x 25.59	350 x 650	17.24 x 29.06	438 x 738	34503820011	34503820017

Notes:

- All dimensions are nominal.
- If vent must comply with NFPA 61, order the EleGuard panel with a maximum burst pressure of 1 psi.
- Available standard with 1 psi burst pressure at 72°F.
- Custom sizes and burst pressures available. Consult factory for pricing and lead times.

ACCESSORIES

The optional EleGuard Rupture Indicator (RI) includes a 3 meter cable with flying leads for connection to monitoring equipment. Extension cables are available if additional length is required. Extension cables include a convenient feed through connector, making it simple to achieve a secure connection.

Fike P/N	Description
93700006-S	10 meter RI Extension Cable with feed through connector
93700007-S	25 meter RI Extension Cable with feed through connector

INSTALLATION

The EleGuard can be installed directly onto the bucket elevator, using minimal bolting arrangements and without the use of additional installation frames. With the standard integral gasket on the process side, the EleGuard is ready for installation upon arrival. Refer to 06-309-1 for installation instructions.

MOUNTING KITS

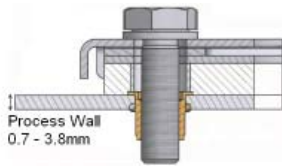
The optional mounting kit contains the required quantity and size of fasteners, including a self retaining nut, eliminating the need to spot-weld fasteners to the elevator.

Each EleGuard special tooling kit includes a hex plug, hex screw, and needle bearing needed to form the self retaining rivet nut. The special tooling kit parts are all reusable.

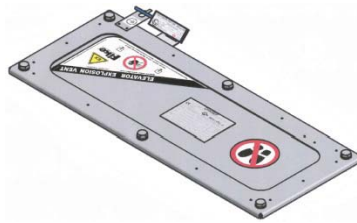
Fike P/N	Description
34501100-S	EleGuard Weldless Mounting Kit*, with special tooling kit** included
25130900	EleGuard Weldless Mounting Kit*, without special tooling kit**

* Limited for use with elevator wall thickness between 0.7 and 3.8mm.

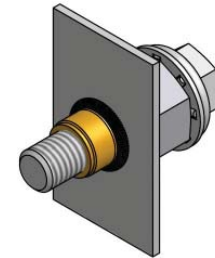
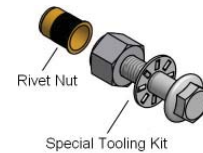
** Only one special tooling kit is required when purchasing multiple EleGuard vents. For example, when ordering 3 EleGuard vents, only one (1) special tooling kit is required.



EleGuard Process Attachment



EleGuard Vent with Rupture Indicator



Mounting Kit Components, with Special Tooling Kit



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