Multi-layered Explosion Vent - Flat

Robust flat explosion venting panel for excellent service life

Dusty conditions commonly associated with the storage and handling of grains and powders can potentially lead to dangerous explosions. Elfab's multi-layered bursting panel range combined stainless steel and fluropolymer to create a high performance explosion venting solution. Elfab is unique in having its explosion vents approved as a "protective System" II GD (when used with an Elfab approved Frame).

To meet the relief area requirements of a wide variety of applications, Elfab offers its flat Multi-layered Explosion Vents in a square, rectangular, round or trapezoid construction with a wide range of bolt pattern configurations. This unique range of explosion venting panels are of non-fragmenting design and are available in a selection of sizes. The Multi-layered explosion vent range is suitable for high temperature applications with a standard burst pressure offering of 0.05 or 0.1 BarG @15/30°C with a 25% tolerance.

Offering a low maintenance solution with a dust tight seal and excellent corrosion resistance, this flat non-fragmenting design is now a widely-used explosion protection solution for limited vacuum applications.

Custom manufactured using outstanding in-house processes to meet your requirements

Elfab's outstanding in-house manufacturing capabilities and unique process efficiency is enhanced by its state-of-the-art machinery, including a 5-axis laser cutter and extensive testing facilities.

The expanding range of competitively priced, certified opening explosion vents combines Elfab's distinctive design and manufacturing process with the ability to customise a solution to suit your specific requirements.

Optional integral burst detection for immediate shut-down

Elfab's flat Multi-layered Explosion Panels are available with the optional benefit of an integral burst detection system for instantaneous notification when panel has burst. Elfab's unique ATEX-approved burst detection system, Vent-Tel, was specifically designed for its range of explosion venting panels to further ensure onsite safety for its customers. Vent-Tel is a non-invasive, fail safe, burst detection system providing an excellent solution for identifying when an explosion panel has functioned under harsh operating conditions.

Operating on a simple reed switch and magnet technology, Vent-Tel is designed to offer a practical solution for explosion vent burst detection. The magnet is pulled away from the sensor in the event of a panel burst, giving an open circuit signal. It signals a burst within the installation and in turn, can trigger an immediate shut-down of the process.

When connected to an intrinsically safe circuit this ExII 1GD EEx ia IIC detection device ensures a safe and compliant plat that fulfils the demanding regulatory developments within the bulk handling industry. An EC-Type Examination Certificate ITS03 ATEX 11359 is available.

Existing explosion venting panel installations without a burst detection system can be retrofitted with Vent-Tel.

- Suitable for high temperatures
- Fail-Safe rapid full venting
- Low installation costs
- Maintenance free
- Non-fragmenting design
- High temperature capability
- Excellent corrosion resistance
- Dust tight seal

The Multi-layered Flat Explosion Vent is available in a variety of sizes, burst pressures and temperature ranges to suit your specific requirements.

Capability	Multi-layered Flat Explosion Vent
Size Range	See Product Download
Vent Area	0.02 m2 to 1.25 m2 (0.22 ft2 to 13.46 ft2)
Temperature Range	-40°C/200°C*
Operating Ratio	60%
Tolerance	+/-25%
Burst Pressure Range	0.05barg to 0.49barg
Standard Burst Pressure Offering	0.05barg or 0.1barg @ 15/30°C
Level of vacuum capability	Limited
Torque Dependent (Y/N)	N
Vent-Tel Detection	Optional
Optional Accessories	Frame, Gasket
Shape Designs	Rectangular, Square, Round, Trapezoid
Materials	Stainless Steel as standard

*Higher temperatures available on request