

# SYSTEMS AND PARTS

**StuvEx NV (Belgium)**  
Heiveldekens 8, 2550 Kontich  
Tel. +32 3 4582552  
info@stuvex.eu – www.stuvex.eu

StuvEx Safety Systems (UK & IRL)  
Chertsey, Surrey, KT16 8RE - United Kingdom  
Tel. +44 1932 571303 - Fax +44 1932 570548  
info@stuvex.co.uk - www.stuvex.co.uk

## STUVENT EXPLOSION VENT

### Background

The pressure increase in process equipment caused by a dust/gas explosion can be controlled if a vent installed on the equipment is opened at the right moment. In order to reduce the risks for man and environment caused by the outgoing flame jet, the pressure venting must always be done into open air and in a safe direction.

### Product

If location and environment allow, a traditional explosion vent - a thin metal membrane that opens at a specified pressure - is a simple and a very economical solution.

#### Explosion venting with a Stuvent explosion vent

A Stuvent venting panel has important advantages:

- Suitable both for dust and gas explosions
- 100% effective
- Usable with underpressure and overpressure depending on type
- Smooth interior surface eliminates 'dead corners'
- Integrated gasket for simple and fast mounting
- Construction is such that projections at opening are avoided.

The Stuvent explosion vent is an ATEX safety system for the venting of explosion pressure. Its efficient functioning as a safety system depends on the right venting area and correct positioning on the process equipment. See also EN 14491.

### Functioning

#### Explosion venting

The Stuvent explosion vent is remarkably simple: when the pre-set opening pressure is exceeded, the vent opens on the three pre-cut sides. The fourth side is not pre-cut to avoid it flying away.

#### Signalling

The Stuvent explosion vent can optionally be equipped with a rupture sensor.



GE 2000



KER



GE Round



EBS Sensor



DS\_S&P-STUVENT\_SI\_14\_03\_EN

## System description

**The STUVENT explosion vent is available in both round and rectangular form.**

Depending on the application, the explosion vent can be supplied in various models:

- Type KE: if only relatively small pressure variations are present, a simple flat explosion vent is sufficient.
- Type KER: to facilitate mounting, the KE can also be supplied with reinforced edges for mounting without a counter-frame.
- Type KEW: for mounting on curved surfaces (such as a silo wall), curved explosion vents with a specific radius can be supplied.
- Type GE: in the case of large pressure changes and/or significant underpressure, it is advisable to install a convex venting panel. Depending on the size and the model, the GE type can be used up to an absolute vacuum.

### Various process conditions

- The STUVENT explosion vent can be used for dust, gas and hybrid mixtures.
- For processes with both overpressure and vacuum.
- The STUVENT explosion vent is made of stainless steel.
- Various gaskets are available: for high temperatures, for food and hygienic environments and with FDA approval.
- To avoid problems with condensation, an insulation layer up to 100 mm thick can be applied to all disc types.

### Various installation conditions

- Installation is possible in all positions.

## Intended use

**This product is an “ATEX certified safety system”.**

Consequently, any application must be based on the instructions contained in the ATEX certificate, the product specifications and the user manual.

## Technical specifications

For further details, we refer to the technical datasheet.

