

## EXPLOSION VENT PANEL FOR PROTECTION OF SILO'S TYPE SV-CV

### DESCRIPTION

Large storage vessels of explosive materials shall be fitted with explosion venting. The explosion pressure resistance of such low strength enclosures puts specific requirements on the explosion vent design and performance.

Wall or roof sections are not suitable to provide explosion pressure relief. They do not comply with the requirements as specified in the European Norm EN 14797 "*Explosion venting devices*" and shall not be used as explosion pressure relief devices. Another known concern is the ballistic risks when such sections become detached from the silo and fall down.

The Fike SV-CV type explosion vent has been purposely designed to protection such large storage vessels. In addition to outstanding explosion venting performance, the Fike SV-CV type explosion vent panel has an integrated insulation cover to protect against the elements and to prevent heat losses and condensation on the process side.



### APPROVALS:

- ATEX 18ATEX0019X
- CE



## FEATURES AND BENEFITS

- Purposely designed and built for explosion protection of large storage vessels or storage buildings
- Lowest burst pressure
- Designed to resist high wind loads
- Designed to resist high snow loads
- Provides absolute protection against water ingress
- Built in hold-down frame and gasket, easy installation
- Standard use of insulation reduces condensation, acoustic emission levels and avoids energy losses
- Maintenance free
- No cold bridges when multiple panels are installed adjacent

## SPECIFICATIONS

<b>Type</b>	<b>SV-CV</b>
<b>Nominal Size W x L (mm)</b>	992x992
<b>Materials of construction</b>	Aluminum Gasket = EPDM Wetted = SST
<b>Material used for insulation</b>	UXEM PEC-3402
<b>Vacuum resistance</b>	35 mbarg
<b>Operating temperature</b>	-40°C to +90°C
<b>Ambient temperature</b>	22°C
<b>Thermal conductivity at ambient temperature</b>	0.036 W/(m.K)
<b>Application</b>	$P_{red,max} = 0.4 \text{ bar}$ $K_{st} = 200 \text{ bar.m/s}$ $P_{max} = 9 \text{ bar}$ Venting efficiency <sup>1</sup> = 95 %
<b>Color</b>	Up on request
<b>Relief Area</b>	0.984 m <sup>2</sup>
<b>Operating ratio</b>	70%
<b>Bust pressure / Tolerance</b>	75 mbarg +/- 25mbarg

(1) Venting device efficiency factor, refer to section 5.1 of EN 14491:2012 Dust Explosion Venting Protective Systems.