# PRODUCT INFORMATION

**EXPLOSION VENTING** 



# **EX-GO-VENT-HYP**



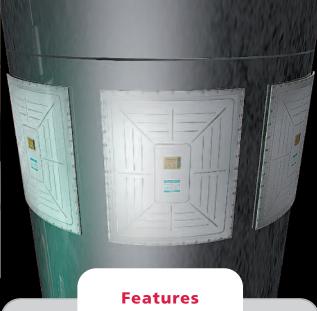
### SANITARY Explosion Venting

# ...versatile implementation in hygienically demanding areas

In dust-bearing plants, and in accordance with ATEX 153 (Directive 1999/92/EG), the operator is obligated to reduce the risks of a dust explosion. According to ATEX 114 (Directive 94/9/EG), EC type-tested bursting discs offer an economic solution and in the event of a dust explosion, the explosion pressure is reduced to a harmless residual pressure level within the plant.

Besides these safety-technical requirements, additional demands are placed on those types of protection systems that should not conflict with the actual objective of the product's quality assurance. However, since every protection system is connected to a container to be protected, the risk of undesired product contamination is a concern due to the accumulation of possible sediments. This risk should always be taken into consideration particularly when engineering plants processing food or pharmaceuticals.

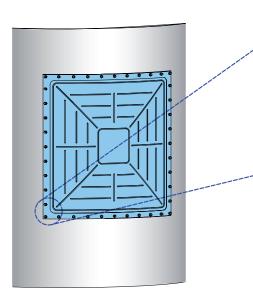
To address this requirement, the flat bursting disc EX-GO-VENT-HYP has been especially developed for hygienically demanding applications found in the industries of food processing and pharmaceuticals. The smooth surfaces, in connection with the patented, full surface and tapered sealing concept, enable the implementation of these special bursting discs in previously critical plants such as spray-dryers with/without wet cleaning, fluidized bed dryers, filters and mixers. To ensure a wide-spread acceptance of the application in operational practice, the design of the EX-GO-VENT-HYP is based on the strict criteria of EHEDG (European Hygienic Engineering & Design Group).



- Standard bursting pressure p<sub>stat</sub> = 0.1 bar @ 22 °C\*1
- Operating pressure up to 50% from p<sub>stat</sub>
- Temperatures from -40 °C up to +180 °C\*1
- Material: Stainless steel, full-surface silicon gasket (FDA-approved, hygienic performance)
- Ideal for direct mounting and even surfaces as well as on cylindrical containers
- Highest impermeability through an integrated gasket in the burst panel integral framework
- Elimination of dead space and product accumulation, therefore suitable for deployment within sanitary working conditions, e.g. milk powder dryers
- Insulation for below the dew point available\*2
  - \*1 For other operational conditions, such as higher operating pressure, vacuum, pulsation and temperature: Please feel free to contact us at epd@rembe.de or call us at +49(0)2961 7405-0.
  - \*2 optional

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# gasket explosion panel flat steel frame gasket

flat steel frame

explosion panel

vessel wall

vessel wall

gasket

## Safety and Profitability

Since the EX-GO-VENT-HYP can be integrally molded to the container's radius, it is also ideal for installation on cylindrical containers; this eliminates any dead space.

With the optionally available closed-cell silicon cushion insulation for outdoor plants, any accumulation, caused by below dew points, is prevented. Losses of temperature and energy are reduced to a minimum.

The special bursting disc EX-GO-VENT-HYP with its sanitary design improves product quality and simultaneously protects the entire process from contamination and production downtimes caused by explosions.

#### **Application**

Venting of hygienically demanding food processing and pharmaceutical plants, such as silos, cyclones, spray-dryers, filters, etc.

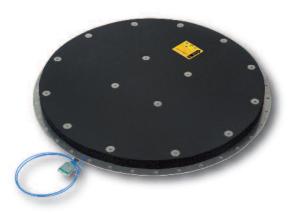
Technical Data				
EX-GO-VENT-HYP - rectangular shaped explosion vent				
Max. Dimensions of Wall Opening = Nominal Venting Dimensions		Effective Vent Area		
[mm]	[in]	[cm²]	[sq in]	
305 x 610	12.0 x 24.0	1860	288.3	
490 x 590	19.3 x 23.2	2890	448.0	
457 x 890	18.0 x 35.0	4100	635.5	
586 x 920	23.1 x 36.2	5400	837.0	
610 x 1118	24.0 x 44.0	6800	1054.0	
920 x 920	36.2 x 36.2	8500	1317.5	
1000 x 1000	39.4 x 39.4	10000	1550.0	
915 x 1118	36.0 x 44.0	10230	1585.7	
1020 x 1020	40.2 x 40.2	10400	1612.0	
EV CO VENTUYD ground should houseling disc				

EX-GO-VENT-HYP - round shaped bursting disc				
Max. Dimensions of Wall Opening = Nominal Venting Dimensions		Effective Vent Area		
[mm]	[in]	[cm²]	[sq in]	
DN 600	24''	2500	387.5	
DN 700	28''	3500	542.5	
DN 800	32''	4600	713.5	
DN 900	36''	5900	914.5	
DN 1000	40''	7400	1147.0	
DN 1100	44''	8950	1387.0	
DN 1200	48''	10000	1550.0	
DN 1300	52''	12500	1937.5	
DN 1400	56''	15000	2325.0	
Standard bursting progress potat. 0.1 bars @ 22 °C /1 45 prig @ 71.6 °C\				

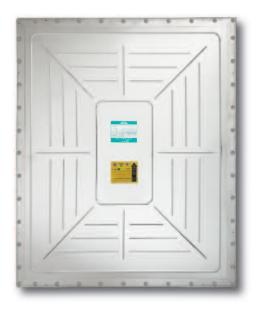
Standard bursting pressure pstat = 0.1 barg @ 22 °C (1.45 psig @ 71.6 °F)

Other operational conditions, such as higher operating pressure, vacuum, pulsation and temperature on request





EX-GO-VENT-HYP round and rectangular shaped special bursting discs with integrated insulation for applications in industries of food processing and pharmaceuticals







#### **Quality and Certifications**

#### Certifications

- ATEX (BVS 11 ATEX ZQS/E210)
- KTA 1401 Nuclear Power
- ESA Aerospace
- CML
- ASME
- GOST
- Gospromnadzor
- KOSHA
- EHEDG
- Additional international inspections

#### **All Series**

- Certification IAW ATEX Directive 94/9 EG
- Approval IAW
   ATEX Certificate
   No. FSA 04 ATEX 1538 X

#### **Every batch**

- Manufacture and certified IAW the requirements of EN 14797
- Burst test certificate with each supply IAW EN 10204-3.1

The REMBE® team provides total support in sizing your venting area requirements and recommending a cost effective solution suitable for your specific application(s). Sizing calculations are made in IAW VDI Directives 3673, EN14491, EN 14994, NFPA 68, etc. Full sizing calculation details and product information are provided with the order documentation on request.

#### **Customer Benefits**

- High venting efficiency
- Hygienic installation
- Safeguarding / increasing product quality
- Integrally formed (optional) to the container's geometry (only possible with rectangular-shaped bursting discs)
- Simple and quick mounting
- Economical through integrated, FDA-certified gasket