

PRODUCT INFORMATION

EXPLOSION VENTING

EX-GO-VENT



REMBE® GMBH
SAFETY+CONTROL

Rectangular Single Layer Burst Panel ...for Explosion Venting at Low Vacuum



In plants producing organic products considerable volumes of fine dust are permanently present. In the beginning it can be considered this fine dust is only combustible. However, enriched with oxygen this combustible material transforms into a highly explosive mixture. If an ignition source is then introduced resulting in an explosion and fire, this will cause enormous consequential damage for plant and personnel. Acc. to ATEX directive 94/9/EG manufacturers are obliged to reduce the risk of a dust explosion.

Explosion protection by certified explosion panels provides a cost effective and good engineered solution. i.e.: If a dust explosion occurs the explosion pressure is reduced to a harmless level within the plant.

The EX-GO-VENT incorporating bionic structures guarantees extraordinary stability suitable for most standard applications. The flat, single layer explosion panel has a perfect venting efficiency due to its low specific weight. Unlike other manufacturers' options, the EX-GO-VENT is NOT torque dependent during installation. Typically, mounting is made directly on roofs, bulkheads or round shaped equipment and provides a guaranteed leak-tight sealing against arduous weather conditions or other water ingress.

Features

- Standard burst pressure
pstat. = 0.1 barg @ 22 °C*
= 1.45 psig @ 71.6 °F*
- Operating pressure or vacuum
standard 50 % from pstat.*
- Temperature from -40 °C up to 180 °C*
(-40 °F up to 356 °F)*
- Material: 304 stainless steel, silicon
gasket (FDA compliant)
- Customised dimensions, e.g.: Triangular, Sail
- or Trapezium shape, etc. in order to utilise full
capacity and optimise customer equipment
configuration
- Mounting without using the usual counter frame
- Direct installation on plain walls as well
as on cylindrical equipment, e. g. cyclones,
filters, silos, etc.
- Elimination of dead-space and product
accumulation, making it suitable for sterile
applications, e. g. in food industry
- Mounting possible on cylindrical walls with
diameter ≥ 3.5 m (9.8 ft)
- Round EX-GO-VENTs are also available

* For non-standard operating conditions, e. g. higher operating pressure, vacuum, pulsation and temperature please contact epd@rembe.de or call + 49 (0) 29 61 - 74 05 - 0 to discuss your requirements.



Filter system: Holtrop & Jansma, NL



Elevator with EX-GO-VENT panels



EX-GO-VENT explosion panels protecting a biomass handling facility

Applications

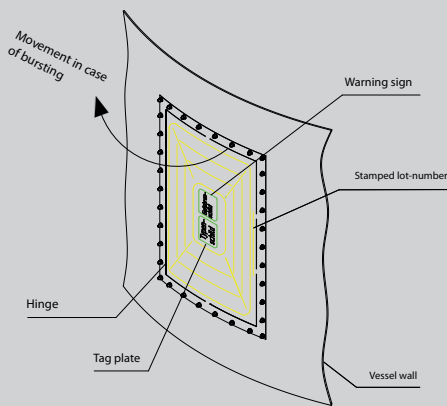
- Explosion venting of silos, filter, bucket elevators, cyclones, grinders and more

Your benefits

- Perfect venting efficiency
- Sanitary installation
- Wide range of applications
- Easy and quick mounting
- Considerable cost reductions due to integrated gasket and mounting frame



EX-GO-VENT installation: quick and easy



Quality and Certifications

Certifications

- ATEX (BVS 03 ATEX ZQS/E210)
- KTA 1401 – Nuclear Power
- ESA - Aerospace
- CML
- ASME
- GOST
- Gospromnadzor
- KOSHA
- various international inspections

All series

Certification IAW

- ATEX guideline 94/9 EG

Approval IAW ATEX certificate no.

- FSA 04 ATEX 1538 X

Every batch

- Manufacture and certified IAW the requirements of EN14797
- Burst test certificates with each supply IAW EN10204-3.1

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 IAW VDI guideline 3673, HBG-BGI 739, EN14491, or NFPA 68. Full sizing calculation details and product information are provided with the order documentation.

Max. Dimensions of Wall Opening = Nominal Venting Dimensions		Single-Layer Explosion Vent EX-GO-VENT for low vacuum Effective Vent Area	
[mm]	[in]	[cm²]	[sq in]
130 x 500	5.1 x 19.7		
229 x 305	9.0 x 12.0	700	108.5
150 x 600	5.9 x 23.6		
180 x 420	7.1 x 16.5	750	116.3
270 x 465	10.6 x 18.3		
200 x 460	7.9 x 18.1	920	142.6
247 x 465	9.7 x 18.3		
205 x 610	8.1 x 24.0	1250	193.8
340 x 385	13.4 x 15.2	1300	201.5
314 x 424	12.4 x 16.7		
305 x 457	12.0 x 18.0	1350	209.3
345 x 405	13.6 x 15.9		
315 x 467	12.4 x 18.4	1470	227.9
247 x 610	9.7 x 24.0	1500	232.5
330 x 470	13.0 x 18.5	1550	240.3
340 x 440	13.4 x 17.3		
400 x 400	15.7 x 15.7	1600	248.0
410 x 410	16.1 x 16.1	1680	260.4
404 x 420	15.9 x 16.5		
305 x 610	12.0 x 24.0	1860	288.3
354 x 580	13.9 x 22.8	2050	317.8
375 x 655	14.8 x 25.8		
440 x 605	17.3 x 23.8		
470 x 610	18.5 x 24.0	2850	441.8
490 x 590	19.3 x 23.2	2890	448.0
500 x 620	19.7 x 24.4		
300 x 1000	11.8 x 39.4	3000	465.0
386 x 920	15.2 x 36.2		
454 x 760	17.9 x 29.9	3400	527.0
570 x 620	22.4 x 24.4		
450 x 800	17.7 x 31.5		
600 x 600	23.6 x 23.6	3600	558.0
590 x 620	23.2 x 24.4		
605 x 605	23.8 x 23.8		
575 x 645	22.4 x 25.4		
610 x 610	24.0 x 24.0	3720	576.6
457 x 890	18.0 x 35.0	4100	635.5
650 x 650	25.6 x 25.6	4220	654.1
520 x 820	20.5 x 32.3	4260	660.3
370 x 1220	14.6 x 48.0	4500	697.5
653 x 653	25.7 x 25.7		
600 x 800	23.6 x 31.5		
710 x 710	28.0 x 28.0	5000	775.0
620 x 820	24.4 x 32.3	5100	790.5
586 x 920	23.1 x 36.2	5400	837.0
500 x 1100	19.7 x 43.3	5500	852.5
750 x 840	29.5 x 33.1		
620 x 1020	24.4 x 40.2	6320	979.6
800 x 800	31.5 x 31.5	6400	992.0
457 x 1500	18.0 x 59.1		
610 x 1118	24.0 x 44.0	6800	1054.0
645 x 1130	25.4 x 44.5		
720 x 1020	28.3 x 40.2		
760 x 1114	29.9 x 43.9	8450	1309.8
840 x 920	33.1 x 36.2		
920 x 920	36.2 x 36.2	8500	1317.5
457 x 2000	18.0 x 78.7		
920 x 1020	36.2 x 40.2		
586 x 1630	23.1 x 64.2		
1000 x 1000	39.4 x 39.4	10000	1550.0
915 x 1118	36.0 x 44.0	10230	1585.7
770 x 1340	30.3 x 52.8	10300	1596.5
1020 x 1020	40.2 x 40.2	10400	1612.0
790 x 1340	31.1 x 52.8	10500	1627.5
586 x 1893	23.1 x 74.5		
920 x 1254	36.2 x 49.4		
740 x 1630	29.1 x 64.2		
740 x 1893	29.1 x 74.5		
750 x 1900	29.5 x 74.8		
1130 x 1130	44.5 x 44.5	12750	1976.3
860 x 1520	33.9 x 59.8	13000	2015.0
940 x 1440	37.0 x 56.7	13500	2092.5
940 x 1600	37.0 x 63.0	15040	2331.2
1110 x 1460	43.7 x 57.5	16000	2480.0
920 x 1920	36.2 x 75.6	17500	2712.5
1000 x 2000	39.4 x 78.7	20000	3100.0

* Standard burst pressure pstat = 0.1 barg @ 22 °C (71.6 °F), further sizes, gasket materials, burst pressures, etc. on request.