



Safety is for life.™

## PRODUCT INFORMATION



# EXPLOSION VENT FOR HIGH TO FULL VACUUM AND PRESSURE CYCLING

## Applications

The **ODV explosion vent** is used for demanding vacuum and overpressure cyclic operating conditions. Designed for working pressures of up to **80% of static burst pressure**, the ODV is ideal for use in applications such as filters with frequent jet-pulse cleaning, high vacuum or suction conveyors. The ODV is **vacuum resistant** and the standard explosion pressure is 0.1 bar at 71.6 °F (22 °C).

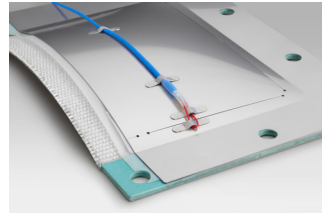
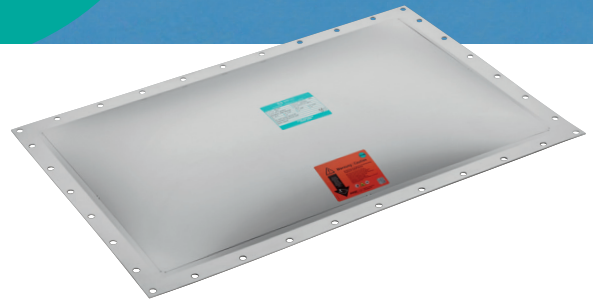
The **ODU explosion vent** is ideal for applications that involve pressure cycling but no vacuum. With this version, the vacuum support used on the ODV is replaced with a supporting third layer.

## Mechanism

When pressure rises, the explosion vent opens at the defined breaking point and releases pressure out of the vessel into the surrounding area.

## Your advantages

- **Low response pressure with possibility of full vacuum resistance.**
- High working pressure resistance of the explosion vent offers **maximum productivity for your processes.**
- Triple-section domed construction ensures **high-pressure cycling resistance and exceptional service life.**
- A variety of shapes/dimensions are available as are **customized solutions.**



### Technical data\*

Standard burst pressure $P_{stat}$	0.1 bar
Max. permitted operating pressure	80% of $P_{stat}$
Temperature	-148 to +446 °F (-100 to +230 °C)
Material	Stainless steel
Tolerance	± 15% at standard burst pressure

\*Our specialists would be pleased to assist you in finding a solution that matches your specific operating conditions.



ATEX  
EC type examination  
certificate no.  
FSA 04 ATEX 1538 X



NFPA Compliant

SIL equivalent SIL 4

You can find detailed information and contact details for enquiries relating to ODV and ODU explosion vents at [www.rembe.us](http://www.rembe.us). Or just give us a call at: T +1 704 716 7022, [info@rembe.us](mailto:info@rembe.us).

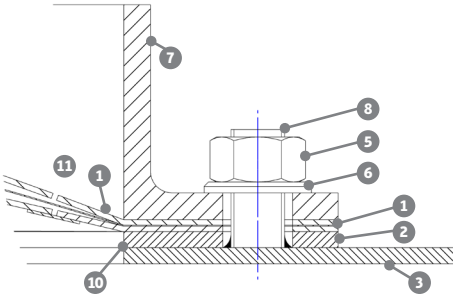




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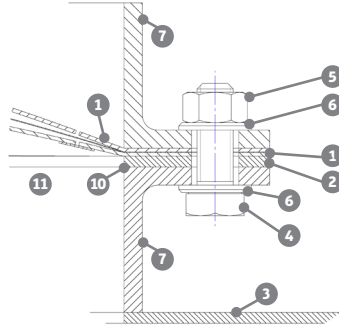
## PRODUCT INFORMATION

### Installation options



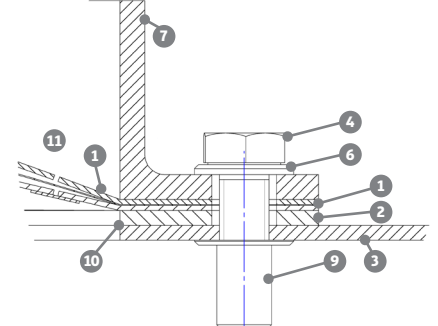
Installation with welded threaded bolts and counterflanges.

- 1 Explosion vent
- 2 Gasket
- 3 Vessel wall (opening dimensions +0/-2 mm)



Installation with flanges and counterflanges.

- 4 Bolt
- 5 Nut
- 6 Washer
- 7 Angular frame



Installation with lock nuts and counterflanges.

- 8 Threaded bolt
- 9 Lock nut
- 10 Edge ( $r \leq 2$  mm)
- 11 Opening

#### Standard dimensions

Max. size of wall opening – nominal vent dimensions		Effective venting area		Max. Vacuum
[in]	[mm]	[sq in]	[cm <sup>2</sup> ]	[mm WC]
5.1 × 19.7	130 × 500	77.5	500	2000
9.0 × 12.0	229 × 305	83.7	540	2000
5.9 × 23.6	150 × 600	111.6	720	3000
7.1 × 16.5	180 × 420	94.6	610	2000
10.6 × 18.3	270 × 465	165.9	1070	1000
9.7 × 18.3	247 × 465	150.4	970	2000
8.1 × 24.0	205 × 610	155	1000	2000
13.4 × 15.2	340 × 385	170.5	1100	2000
12.4 × 16.7	314 × 424	178.3	1150	2000
12.0 × 18.0	305 × 457	186.0	1200	5000
9.7 × 24.0	247 × 610	201.5	1300	3000
13.4 × 17.3	340 × 440	201.5	1300	5000
15.7 × 15.7	400 × 400	217.0	1400	5000
16.1 × 16.1	410 × 410	224.8	1450	5000
15.9 × 16.5	404 × 420	232.5	1500	5000
12.0 × 24.0	305 × 610	248.0	1600	5000
13.9 × 22.8	354 × 580	279.0	1800	2000

#### Standard dimensions

Max. size of wall opening – nominal vent dimensions		Effective venting area		Max. Vacuum
[in]	[mm]	[sq in]	[cm <sup>2</sup> ]	[mm WC]
17.3 × 23.8	440 × 605	372.0	2400	2000
19.3 × 23.2	490 × 590	403.0	2600	7000
19.7 × 24.4	500 × 620	434.0	2800	2000
15.2 × 36.2	386 × 920	496.0	3200	2000
22.4 × 24.4	570 × 620	496.0	3200	2000
23.2 × 24.4	590 × 620	519.3	3350	1000
23.8 × 23.8	605 × 605	519.3	3350	1000
22.4 × 25.4	575 × 645	527.0	3400	2000
24.0 × 24.0	610 × 610	527.0	3400	5000
20.5 × 32.3	520 × 820	620.0	4000	2000
25.7 × 25.7	653 × 653	604.5	3900	1000
23.6 × 31.5	600 × 800	682.0	4400	1000
28.0 × 28.0	710 × 710	728.5	4700	1000
24.4 × 32.3	620 × 820	736.3	4750	5000
23.1 × 36.2	586 × 920	775.0	5000	7000
29.5 × 33.1	750 × 840	914.5	5900	3000
24.4 × 40.2	620 × 1020	930.0	6000	2000

#### Standard dimensions

Max. size of wall opening – nominal vent dimensions		Effective venting area		Max. Vacuum
[in]	[mm]	[sq in]	[cm <sup>2</sup> ]	[mm WC]
31.5 × 31.5	800 × 800	930.0	6000	1000
18.0 × 59.1	457 × 1500	984.3	6350	500
24.0 × 44.0	610 × 1118	992.0	6400	2000
25.4 × 44.5	645 × 1130	1054.0	6800	1000
36.2 × 36.2	920 × 920	1240.0	8000	2000
18.0 × 78.7	457 × 2000	1317.5	8500	300
36.2 × 40.2	920 × 1020	1364.0	8800	500
23.1 × 64.2	586 × 1630	1379.5	8900	500
39.4 × 39.4	1000 × 1000	1472.5	9500	500
36.0 × 44.0	915 × 1118	1503.5	9700	500
40.2 × 40.2	1020 × 1020	1534.5	9900	500
23.1 × 74.5	586 × 1893	1612.0	10400	250
36.2 × 49.4	920 × 1254	1705.0	11000	500
29.1 × 64.2	740 × 1630	1774.8	11450	100
29.5 × 64.2	750 × 1630	2092.5	13500	50
44.5 × 74.8	1130 × 1900	1891.0	12200	300

Other dimensions available on request.

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