



Safety is for life.™

## PRODUCT INFORMATION



## SUPERIOR PERFORMANCE FOR LOW PRESSURE APPLICATIONS

The ODV is a triple-section, forward acting, rupture disc design suitable for a range of low to medium pressure applications. This cost-effective solution comprises three rupture disc elements, a top section burst element, a sealing membrane and an integrated vacuum support, ensuring superior performance and durability across a wide range of process conditions. REMBE®'s unique manufacturing process uses precision laser machinery to create the critical burst elements to define the burst pressure for accurate, full bore, burst opening.

The ODV is an excellent pressure relief solution for a wide range of applications in various industry sectors. Compatible with conditions operating as low as 0.05 bar g, the ODV is suitable for gas, liquid and two phase flow applications. The 30° seat, forward acting rupture disc is a non-fragmenting design available from DN 20 to DN 600 (3/4"-24")\* making it the ideal solution to fulfil various process conditions.

\*Further nominal sizes available upon request.

Process medium	Suitability
Gas/Steam	✓✓
Liquid with gas cushion	✓✓
Liquid	✓✓
Two phase flow	✓✓

✓✓ Recommended

## Your advantages

- Manufactured with REMBE®'s **precision laser technology** – ensures accurate performance and opening.
- Suitable for a wide range of pressures – maximises positions where disc can be installed across the facility.
- Versatile, corrosion resistant solution – triple-section construction ensures **maximum corrosion resistance** for long-term, reliable performance.
- Compatible with a wide range of process conditions – **versatile cost-effective solution** suitable for numerous applications.

**Made in Germany**



You can find detailed information and contact details for enquiries relating to ODV at [www.rembe.de](http://www.rembe.de). Give us a call on: T +49 2961 7405-0 or contact us via email: [info@rembe.de](mailto:info@rembe.de).





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### Versatile, corrosion resistant solution

The ODV is a versatile, high-performance solution, offering superior corrosion resistance without the incurring the costs associated with a solid metal rupture disc alternative. The critical burst element is isolated from the process media by the sealing membrane minimising the risk of corrosion affecting the burst pressure. This customisable solution enables the selection of the most appropriate metallic top and bottom section according to the process conditions, keeping costs to a minimum. The sealing membrane, typically a non-metallic fluoropolymer, isolates process media from the critical burst element and enhances the leak rate of the rupture disc, limiting loss of process media during normal operation. The bottom section, vacuum support, ensures the disc is suitable for full vacuum conditions and increased back pressure resistance at low burst pressures without reducing the vent area. Available in a range of standard and exotic metallic elements from stainless steel as

standard to tantalum, the ODV is a truly versatile solution offering large vent areas across low to medium burst pressures.

### Safe installation and notification of disc burst

The standard 30° seating arrangement of the ODV ensures accurate performance and installation of the disc into REMBE®'s IG Rupture Disc Holder. The IG Rupture Disc Holder features an inclined seating arrangement creating the optimum seal for the disc ensuring superior leak tight integrity.

Alternatively, available with a flat seat design for installation into the IG HL Rupture Disc Holder, and as a special version for installation directly between flanges\*. Compatible with a range of REMBE®'s signalling devices including its advanced NIMU signalling device for reliable notification of disc burst.

\*dependent on process conditions. See ODV F Datasheet for more information.

## Certification

Works Certificate	PED	ASME	KOSHA (South Korea)	CML (China)	TR CU (EAEU)

## Technical Data

Applications			
Power plants	✓	Petrochemical	✓
Turbines	✓	Process vessels	✓
Condensers	✓	Chemical reactors	✓
Refineries	✓	Chemical chillers	✓
Chemical	✓	Storage vessels	✓

Product Parameters		
Feature	Characteristics	Variations
Signalling available	✓	NIMU, SIGU, SK, FOS, SB-(S), SBK-S, SGK
Burst tolerance [%]	± 10 (±5; -0/+10; +0/-10 upon request)	-
Manufacturing design range [%]	0	-
Operating ratio [%]	80	-
Non-fragmenting design	✓	-
Temperature range [°C]	-80 to 600*	-
Leakrate [mbar l s <sup>-1</sup> ]	10 <sup>-1</sup> to 10 <sup>-6</sup>	-

\*Temperature limits for PED certification may vary.



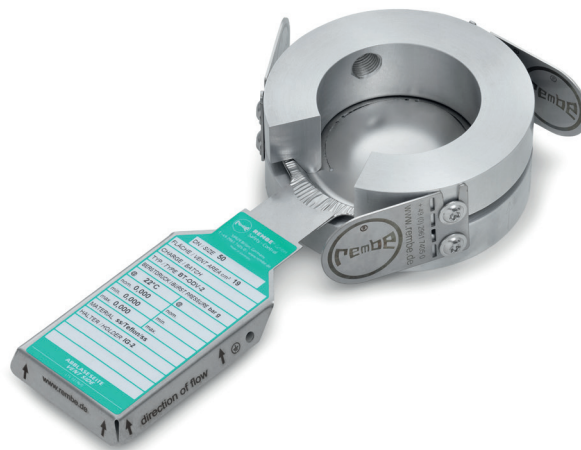
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### Burst Pressure Range (PED)

DN	NPS [in]	Vent area		Burst pressure			
		ODV [cm <sup>2</sup> ]	ODV [in <sup>2</sup> ]	ODV (IG) min. [bar g]	ODV (IG) max.[bar g]	ODV (IG) min. [psi g]	ODV (IG) max. [psi g]
20	0.75	2.7	0.42	0.5	200	7.25	14500
25	1	4.5	0.70	0.5	200	7.25	14500
32	1.25	8.5	1.6	0.5	200	7.25	14500
40	1.5	10	3.0	0.5	200	7.25	14500
50	2	19	5.4	0.5	200	7.25	14500
65	2.5	35	7.8	0.5	70	7.25	5800
80	3	50	12.4	0.5	70	7.25	5800
100	4	80	18.6	0.5	50	7.25	5800
125	5	120	24.8	0.5	35	7.25	5800
150	6	160	43.4	0.5	30	7.25	5800
200	8	280	68.2	0.5	16	7.25	5800
250	10	440	101	0.5	14	7.25	5800
300	12	650	171	0.5	10	7.25	5800
350	14	885	137	0.5	8	7.25	3630
400	16	1130	175	0.5	6	7.25	3630
450	18	1590	246	0.5	6	7.25	2320
500	20	1800	279	0.5	6	7.25	2320
550	22	–	–	–	–	7.25	1450
600	24	2626	407	0.5	6	7.25	1450
650	26	–	–	–	–	7.25	928
700	28	–	–	–	–	7.25	928
750	30	–	–	–	–	7.25	928
800	32	–	–	–	–	7.25	928

Further nominal sizes available upon request.



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