

ODV F

Forward acting rupture disc

SUPERIOR PERFORMANCE FOR HOLDERLESS APPLICATIONS

The ODV F is a triple-section, forward acting rupture disc designed specifically for installation between industry standard flanges. 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 F 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.

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.

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

✓✓ Recommended

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





Safety is for life.™

DATA SHEET

Certification



Works Certificate



PED



CML (China)



TR CU (EAEU)

Technical Data

Product Parameters

Feature	Characteristics	Variations
Holder compatibility	Flange	-
Signalling available	✓	SK, SR
Pulsating/Cycling	✓	-
Vacuum resistance	✓	-
Back pressure resistance	✓	-
Torque independent burst pressure	✓	-
Burst tolerance [%]	± 10 (±5; -0/+10; +0/-10 upon request)	-
Manufacturing design range [%]	0	-
Operating ratio [%]	80	-
Non-fragmenting design	✓	-
Temperature range PED [°C]	-10 to 250	-
Leakrate [mbar ls ⁻¹]	10 ⁻¹ to 10 ⁻⁵	-

Note: Vacuum resistance is size and pressure dependent and may require additional vacuum support.
All parameters to be confirmed by REMBE® dependent on customers application.

Temperature Range PED

Material	min. Temperature [°C]	max. Temperature [°C]
Inconel	-196	600*
Hastelloy	-196	400
Monel	-10	425
Nickel	-10	600
Stainless steel	-80	320
Titanium	-10	300
Tantalum	-10	250
PTFE/PFA	-79	230
FEP	-10	200
Klingersil	-10	300
PTFE Glass fiber	-10	230
GYLON® blue	-210	260

*Temperature limits for PED certification may vary.



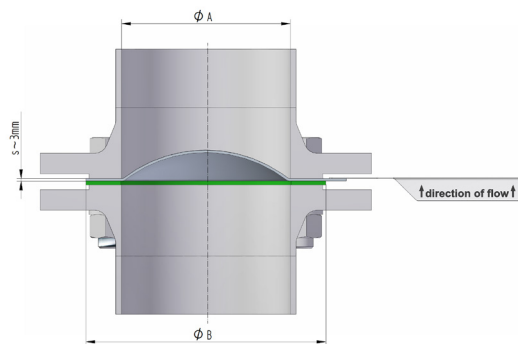
Technical data ODV for installation directly between flanges (ODV F and ODU F*)

DN [mm]	NPS [in]	Installation between weld-neck flanges according to DIN 2631 or EN 1092-1** (PN6)	Vent area		burst pressure		Standard vacuum resistance [mm WS]	Ø A [mm]	Ø B [mm]	H max. [mm]
			[cm²]	[in²]	min. [barg]	max. [barg]				
25	1	✓	4,5	0,7	2,0	6,0	absolut	29	56	12
40	1.5	✓	10	1,6	1,5	6,0	absolut	41	78	15
50	2	✓	17	2,6	0,70	6,0	absolut	55	89	20
65	2.5	✓	25	3,9	0,70	6,0	absolut	71	115	25
80	3	✓	35	5,4	0,50	5,0	absolut	83	130	35
100	4	✓	68	11	0,30	5,0	absolut	107	152	35
125	5	✓	90	14	0,30	5,0	absolut	132	180	40
150	6	✓	125	19	0,20	2,0	absolut	160	205	45
200	8	✓	245	38	0,10	2,0	absolut	208	260	50
250	10	✓	400	62	0,10	2,0	absolut	261	315	60
300	12	✓	600	93	0,10	2,0	absolut	310	370	70
350	14	✓	750	120	0,10	2,0	absolut	342	420	80
400	16	✓	1000	160	0,10	2,0	absolut	393	470	80
450	18	only EN 1092-1**	1365	210	0,05	2,0	absolut	465	528	80
500	20	✓	1660	260	0,05	1,0	absolut	494	575	90
550	22	only ANSI	2150	330?	0,05	1,0	absolut	560	660	90
600	24	✓	2500	390	0,05	1,0	absolut	596	675	90
700	28	✓	3500	540	0,05	1,0	-5000	697	780	100
750	30	only ANSI	4200	650	0,05	1,0	-3000	762	876	100
800	32	✓	4600	710	0,05	1,0	-3000	799	885	100
900	36	✓	5900	910	0,05	1,0	-1000	900	985	100
1000	40	✓	7400	1100	0,05	1,0	-1000	1002	1085	100
1100	44	only ANSI	8950	1400	0,025	0,80	-500	1102	1200	120
1200	48	✓	10000	1600	0,025	0,80	-500	1204	1300	120
1250	50	only ANSI	11700	1800	0,025	0,50	-100	1250	1380	120
1300	52	only ANSI	12500	1900	0,025	0,50	-100	1300	1420	120
1400	56	✓	15000	2300	0,025	0,50	-100	1404	1500	120

*ODU F when no vacuum resistance is required

**Replaces DIN 2631 and following.

Different sizes, pressure classes, temperatures, materials and fittings available on request.

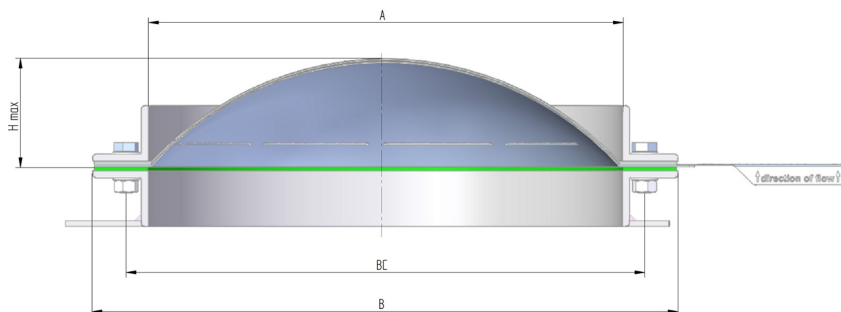




Technical data ODV for installation between flat steel/angular rings (ODV FL)

NPS [in]	DN [mm]	Vent area		burst pressure		Standard vacuum resistance [mm WS]	A [mm]	B [mm]	H max. [mm]	BC bolt circle [mm]	Bore Ø [mm]	Number of bores	Flat steel ring up to 6"/ DN 150 [mm]	Angular ring from 8" / DN 200 [mm]
		[cm ²]	[in ²]	min. [bar]	max. [bar]									
1"	25	4.5	0.7	2.0	5.0	absolut	27	56	12	47	6.5	4	56/27 × 5	-
1½"	40	10	1.6	1.5	5.0	absolut	41	78	15	68	6.5	4	78/41 × 5	-
2"	50	17	2.6	0.70	1.0	absolut	55	89	20	78	7.5	4	89/55 × 5	-
2½"	65	25	3.9	0.70	1.0	absolut	71	115	25	103	7.5	4	115/71 × 5	-
3"	80	35	5.4	0.50	1.0	absolut	83	130	35	115	8.5	4	130/83 × 6	-
4"	100	68	11	0.30	1.0	absolut	107	152	35	137	8.5	6	152/107 × 6	-
5"	125	90	14	0.30	1.0	absolut	132	180	40	164	8.5	6	180/132 × 6	-
6"	150	125	19	0.20	1.0	absolut	160	205	45	186	8.5	8	205/160 × 6	-
8"	200	245	38	0.10	1.0	absolut	208	260	50	243	8.5	8	-	30/30/4
10"	250	400	62	0.10	1.0	absolut	261	315	60	296	8.5	8	-	30/30/4
12"	300	600	93	0.10	1.0	absolut	310	370	70	355	11	12	-	40/40/5
14"	350	750	120	0.10	1.0	absolut	342	420	80	387	11	12	-	40/40/5
16"	400	1000	160	0.10	1.0	absolut	393	470	80	443	13	16	-	45/45/5
18"	450	1365	210	0.05	1.0	absolut	465	555	80	515	13	16	-	45/45/5
20"	500	1660	260	0.05	1.0	absolut	494	575	90	544	13	20	-	45/45/5
22"	550	2150	330	0.05	1.0	absolut	560	660	90	615	13	20	-	45/45/5
24"	600	2500	390	0.05	1.0	absolut	596	675	90	646	13	20	-	45/45/5
28"	700	3500	540	0.05	1.0	-5000	697	780	100	752	13	28	-	50/50/5
30"	750	4200	650	0.05	1.0	-3000	762	876	100	817	13	28	-	50/50/5
32"	800	4600	710	0.05	1.0	-3000	799	885	100	854	13	28	-	50/50/5
36"	900	5900	910	0.05	1.0	-1000	900	985	100	955	13	32	-	50/50/5
40"	1000	7400	1100	0.05	1.0	-1000	1002	1085	100	1057	13	36	-	50/50/5
44"	1100	8950	1400	0.025	0.80	-500	1102	1200	110	1160	13	44	-	50/50/5
48"	1200	10000	1600	0.025	0.80	-500	1204	1300	120	1259	13	40	-	50/50/5
50"	1250	11700	1800	0.025	0.50	-100	1250	1380	120	1320	13	44	-	50/50/5
52"	1300	12500	1900	0.025	0.50	-100	1300	1420	120	1370	13	48	-	50/50/5
56"	1400	15000	2300	0.025	0.50	-100	1404	1500	120	1459	13	44	-	50/50/5

Different sizes, pressure classes, temperatures, materials and fittings available on request.



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