

Forward acting rupture discs



ODV

For low to medium pressures

ODV is primarily used for applications with low to medium pressures, e.g. for gases, liquids and applications with two-phase flows. The disc has a standard operating ratio of max. 80%¹. For burst pressures of less than 1 barg, ODV can be installed directly between flanges or angular rings.

ODV has a three-layer design:

The burst element is located on the side facing away from the process to protect it against corrosive media. The breaking points are cut into the burst element using lasers and define the burst pressure with outstanding precision. The sealing element prevents gases from escaping in normal operation. The vacuum support, as the name suggests, enables ODV to be used in processes with a vacuum.

Your advantages

- **Suitable for use even with full vacuum** due to integrated vacuum support.
- **Minimum fragmentation during opening.**

¹Depending on the specific application



Technical data ODV

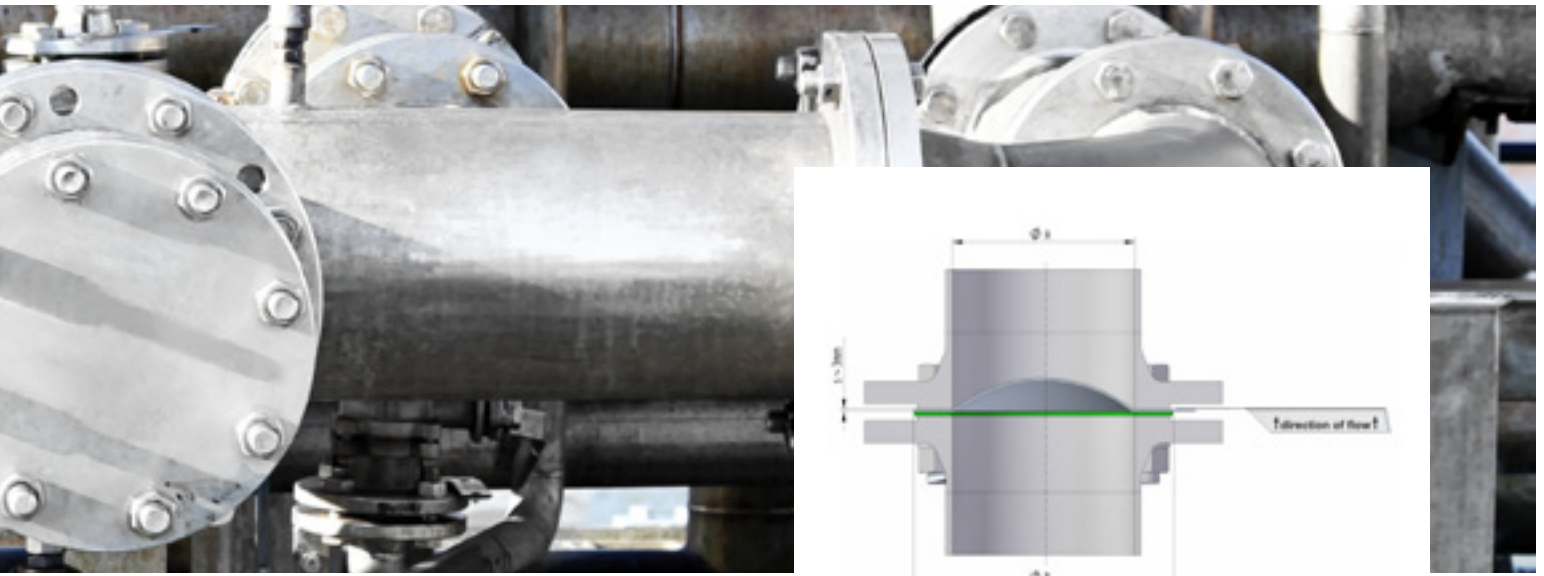
Sealing Membrane		PTFE	FEP	Aluminium	Nickel	Monel*	Inconel*	Stainless Steel	Hastelloy*
		max. allowable temperature**							
NPS [in]	DN [mm]	230 °C	205 °C	120 °C	400 °C	430 °C	600 °C	400 °C	400 °C
		min. burst pressure [barg]							
¾"	20	1.5	3.0	6.0	10	13	20	22	28
1"	25	1.0	2.5	3.5	11	10	17	16	20
1¼"	40	0.90	2.0	2.5	4.5	6.0	10	10	15
2"	50	0.70	1.0	1.5	3.2	4.5	7.5	8.0	10
2½"	65	0.60	1.0	1.3	2.5	3.0	5.0	7.0	6.6
3"	80	0.40	0.60	1.0	2.0	2.5	4.3	6.0	6.0
4"	100	0.30	0.50	0.80	1.6	2.0	3.3	5.0	5.0
6"	150	0.20	0.40	0.50	2.2	2.5	3.1	5.0	5.0
8"	200	0.10	0.20	0.30	1.8	2.0	3.0	4.5	4.5
10"	250	0.09	0.20	0.30	1.5	1.5	2.5	3.5	4.5
12"	300	0.08	0.15	0.20	1.4	1.5	2.0	3.5	4.0
14"	350	0.08	0.15	0.20	1.2	1.5	1.5	3.5	4.0
16"	400	0.08	0.10	0.10	1.0	1.5	1.5	3.0	3.5
18"	450	0.08	0.10	0.10	0.90	1.5	1.5	3.0	3.5
20"	500	0.06	0.10	0.10	0.75	1.5	1.5	2.0	3.0
24"	600	0.05	0.10	0.10	0.75	1.5	1.5	2.0	0.40

* Company names or trademarks combined with material descriptions are only used for description purposes. The product promoted is not product of the respective companies and trademarks.

** Different temperatures may apply for rupture discs with CE mark.

Standard tolerance ±10% including manufacture tolerance.

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



Technical data ODV for installation directly between flanges (ODV-F)

NPS [in]	DN [mm]	Installation between welding-neck flanges according to DIN 2631 or DIN EN 1092-1* (PN6)	Vent area [cm ²]	burst pressure		Standard vacuum re- sistance [mm WS]	Ø A [mm]	Ø B [mm]	H max. [mm]
				min. [barg]	max. [barg]				
1"	25	✓	3,50	2.0	6.0	absolut	29	56	12
1½"	40	✓	9,50	1.5	6.0	absolut	41	78	15
2"	50	✓	17,00	0.70	6.0	absolut	55	89	20
2½"	65	✓	25,00	0.70	6.0	absolut	71	115	25
3"	80	✓	35,00	0.50	5.0	absolut	83	130	35
4"	100	✓	60,00	0.30	5.0	absolut	107	152	35
5"	125	✓	80,00	0.30	5.0	absolut	132	180	40
6"	150	✓	125	0.20	2.0	absolut	160	205	45
8"	200	✓	245	0.10	2.0	absolut	208	260	50
10"	250	✓	400	0.10	2.0	absolut	261	315	60
12"	300	✓	600	0.10	2.0	absolut	310	370	70
14"	350	✓	750	0.10	2.0	absolut	342	420	80
16"	400	✓	1000	0.10	2.0	absolut	393	470	80
18"	450	only DIN EN 1092-1*	1430	0.05	2.0	absolut	465	528	80
20"	500	✓	1660	0.05	1.0	absolut	494	575	90
22"	550	only ANSI	2150	0.05	1.0	absolut	560	660	90
24"	600	✓	2500	0.05	1.0	absolut	596	675	90
28"	700	✓	3500	0.05	1.0	-5000	697	780	100
30"	750	only ANSI	4200	0.05	1.0	-3000	762	876	100
32"	800	✓	4600	0.05	1.0	-3000	799	885	100
36"	900	✓	5900	0.05	1.0	-1000	900	985	100
40"	1000	✓	7400	0.05	1.0	-1000	1002	1085	100
44"	1100	only ANSI	8950	0.025	0.80	-500	1102	1200	120
48"	1200	✓	10000	0.025	0.80	-500	1204	1300	120
50"	1250	only ANSI	11700	0.025	0.50	-100	1250	1380	120
52"	1300	only ANSI	12500	0.025	0.50	-100	1300	1420	120
56"	1400	✓	15000	0.025	0.50	-100	1404	1500	120

*Replaces DIN 2631 and following.

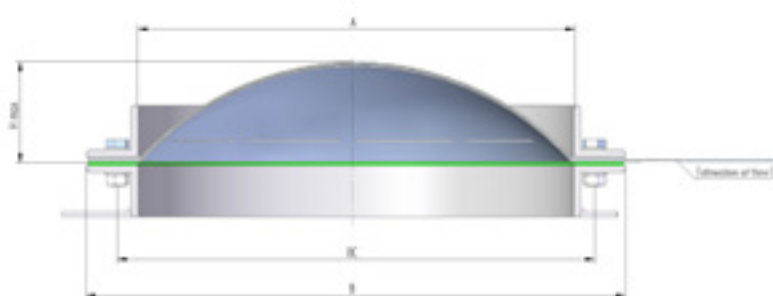
Different sizes, pressure classes, temperatures, materials and fittings available on request.

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

NPS [in]	DN [mm]	Vent area [cm ²]	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]
			min. [barg]	max. [barg]									
1"	25	3.5	2.0	5.0	absolute	27	56	12	47	6.5	4	56/27 × 5	-
1½"	40	9.5	1.5	5.0	absolute	41	78	15	68	6.5	4	78/41 × 5	-
2"	50	17	0.70	1.0	absolute	55	89	20	78	7.5	4	89/55 × 5	-
2½"	65	25	0.70	1.0	absolute	71	115	25	103	7.5	4	115/71 × 5	-
3"	80	35	0.50	1.0	absolute	83	130	35	115	8.5	4	130/83 × 6	-
4"	100	60	0.30	1.0	absolute	107	152	35	137	8.5	6	152/107 × 6	-
5"	125	80	0.30	1.0	absolute	132	180	40	164	8.5	6	180/132 × 6	-
6"	150	125	0.20	1.0	absolute	160	205	45	186	8.5	8	205/160 × 6	-
8"	200	245	0.10	1.0	absolute	208	260	50	243	8.5	8	-	30/30/4
10"	250	400	0.10	1.0	absolute	261	315	60	296	8.5	8	-	30/30/4
12"	300	600	0.10	1.0	absolute	310	370	70	355	11	12	-	40/40/5
14"	350	750	0.10	1.0	absolute	342	420	80	387	11	12	-	40/40/5
16"	400	1000	0.10	1.0	absolute	393	470	80	443	13	16	-	45/45/5
18"	450	1430	0.05	1.0	absolute	465	555	80	515	13	16	-	45/45/5
20"	500	1660	0.05	1.0	absolute	494	575	90	544	13	20	-	45/45/5
22"	550	2150	0.05	1.0	absolute	560	660	90	615	13	20	-	45/45/5
24"	600	2500	0.05	1.0	absolute	596	675	90	646	13	20	-	45/45/5
28"	700	3500	0.05	1.0	-5000	697	780	100	752	13	28	-	50/50/5
30"	750	4200	0.05	1.0	-3000	762	876	100	817	13	28	-	50/50/5
32"	800	4600	0.05	1.0	-3000	799	885	100	854	13	28	-	50/50/5
36"	900	5900	0.05	1.0	-1000	900	985	100	955	13	32	-	50/50/5
40"	1000	7400	0.05	1.0	-1000	1002	1085	100	1057	13	36	-	50/50/5
44"	1100	8950	0.025	0.80	-500	1102	1200	110	1160	13	44	-	50/50/5
48"	1200	10000	0.025	0.80	-500	1204	1300	120	1259	13	40	-	50/50/5
50"	1250	11700	0.025	0.50	-100	1250	1380	120	1320	13	44	-	50/50/5
52"	1300	22500	0.025	0.50	-100	1300	1420	120	1370	13	48	-	50/50/5
56"	1400	25000	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.



You can find detailed information and contact details for enquiries relating to ODV at www.rembe.de.
Or just give us a call: T +49 2961 7405-0, info@rembe.de.

You can find appropriate rupture disc holders for IKB® and signalling devices for IKB® and UKB-LS from page 30.