

Flat Composite Rupture Disc/PF Series

BasCo®

Flat composite rupture disc with gasket is evolved from LF rupture disc, mainly used in low pressure application. PF rupture disc can mount between flanges.

Technical features

- State-of-the-art laser slotted metal section
- No disc holder required. Mounts between standard or simple flanges
- Standard materials of construction: 316SS metal section(s), TFE seal, Non-asbestos gaskets (Other materials available)
- Burst ratings from 0.02 barg to 100 barg
- Sizes from 25mm to 1200mm
- Operating ratios up to 50% of the low end of burst tolerance

Storage Tank Protection

Storage Tank Protection Relief Valve Protection Storage tanks are made from relatively light gauge materials. This limits their ability to contain pressure and, if they are emptied without proper venting, makes them vulnerable to collapse. PF series rupture discs provide simple, inexpensive protection against either condition.

Disc size should be at least equal to the size of the flow inlet or outlet connection (whichever is greater) to the tank. Maximum rupture pressure should be no greater than the design pressure or vacuum (whichever is smaller) of the tank. Minimum rupture pressure should be at least 2 times the maximum working pressure or vacuum (whichever is

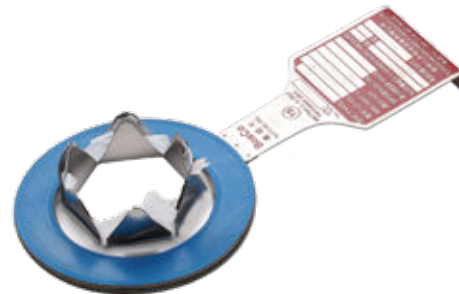
Relief Valve Protection

Corrosive elements in the atmosphere can enter a relief valve through its outlet and attack the valve's working parts. This may prevent the valve from functioning properly. Valves with outlets connected to common headers are especially vulnerable. A PF series rupture disc mounted on the valve's outlet flange protects valve components from hostile environments.

Disc size should be the same as the outlet flange of the valve. Maximum rupture pressure should be no greater than the set pressure of the valve. Minimum rupture



PF Rupture Disc



After bursting of PF Rupture Disc

Burst Tolerance

GB 567-2012	
Rated Burst Pressure bar	Burst Tolerance
$\geq 0.01 \sim < 0.1$	$\pm 50\%$
$\geq 0.1 \sim < 1$	$\pm 25\%$
$\geq 1 \sim < 3$	$\pm 0.015 \text{ Mpa}$
$\geq 3 \sim < 1000$	$\pm 5\%$
$\geq 1000 \sim < 5000$	$\pm 4\%$

Note: Burst tolerances are the maximum expected variation from the disk's marked burst

Options

- Burst Indication
- Teflon Gaskets
- Holder
- Railcar Disc



Minimum and Maximum Burst Pressure Ratings - psig(barg)@72°F(22°C)

Disk Size		Sealing Membrane Materials															
		FEP				PTFE				Aluminum				Nickel			
		psig		barg		psig		barg		psig		barg		psig		barg	
NPS [in]	DN [mm]	min,	max,	min,	max,	min,	max,	min,	max,	min,	max,	min,	max,	min,	max,	min,	max,
1"	25	11.6	1015	0.8	70	29	1015	2	70	87	1450	6	100	348	1450	24	100
1¼"	32	8.7	870	0.6	60	21.75	870	1.5	60	65.25	1087.5	4.5	75	290	1087.5	20	75
1½"	40	5.8	725	0.4	50	14.5	725	1	50	52.2	942.5	3.6	65	217.5	942.5	15	65
2"	50	4.35	580	0.3	40	10.88	580	0.75	40	49.3	797.5	3.4	55	203	797.5	14	55
2½"	65	3.63	522	0.25	36	9.08	522	0.63	36	36.25	725	2.5	50	159.5	725	11	50
3"	80	2.9	464	0.2	32	7.25	464	0.5	32	31.9	580	2.2	40	145	580	10	40
4"	100	2.18	420.5	0.15	29	5.45	420.5	0.38	29	26.1	435	1.8	30	116	435	8	30
5"	125	2.18	377	0.15	26	5.45	377	0.38	26	21.75	435	1.5	30	101.5	435	7	30
6"	150	2.18	333.5	0.15	23	5.45	333.5	0.38	23	18.85	362.5	1.3	25	87	362.5	6	25
8"	200	1.45	304.5	0.1	21	3.63	304.5	0.25	21	14.5	362.5	1	25	72.5	362.5	5	25
10"	250	1.16	246.5	0.08	17	2.9	246.5	0.2	17	11.6	362.5	0.8	25	58	362.5	4	25
12"	300	1.02	203	0.07	14	2.55	203	0.18	14	10.15	290	0.7	20	43.5	290	3	20
14"	350	0.87	174	0.06	12	2.18	174	0.15	12	8.7	290	0.6	20	43.5	290	3	20
16"	400	0.73	145	0.05	10	1.83	145	0.13	10	7.25	232	0.5	16	36.25	232	2.5	16
Max. Temp.		392°F (200°C)				500°F (260°C)				752°F (400°C)				986°F (530°C)			

Disk Size		Sealing Membrane Materials															
		Monel				Inconel				Stainless Steel				Hastelloy C-276			
		psig		barg		psig		barg		psig		barg		psig		barg	
NPS [in]	DN [mm]	min,	max,	min,	max,	min,	max,	min,	max,	min,	max,	min,	max,	min,	max,	min,	max,
1"	25	406	1450	28	100	478.5	1450	33	100	406	1450	28	100	435	1450	30	100
1¼"	32	319	1087.5	22	75	377	1087.5	26	75	319	1087.5	22	75	333.5	1087.5	23	75
1½"	40	261	942.5	18	65	304.5	942.5	21	65	261	942.5	18	65	275.5	942.5	19	65
2"	50	232	797.5	16	55	275.5	797.5	19	55	232	797.5	16	55	261	797.5	18	55
2½"	65	174	725	12	50	203	725	14	50	174	725	12	50	377	725	26	50
3"	80	159.5	580	11	40	174	580	12	40	159.5	580	11	40	333.5	580	23	40
4"	100	130.5	435	9	30	145	435	10	30	130.5	435	9	30	261	435	18	30
5"	125	116	435	8	30	130.5	435	9	30	116	435	8	30	217.5	435	15	30
6"	150	101.5	362.5	7	25	116	362.5	8	25	101.5	362.5	7	25	203	362.5	14	25
8"	200	87	362.5	6	25	101.5	362.5	7	25	87	362.5	6	25	159.5	362.5	11	25
10"	250	72.5	362.5	5	25	87	362.5	6	25	72.5	362.5	5	25	130.5	362.5	9	25
12"	300	58	290	4	20	72.5	290	5	20	58	290	4	20	116	290	8	20
14"	350	58	290	4	20	72.5	290	5	20	58	290	4	20	101.5	290	7	20
16"	400	43.5	232	3	16	58	232	4	16	43.5	232	3	16	87	232	6	16
Max. Temp.		986°F (530°C)				986°F (530°C)				986°F (530°C)				986°F (530°C)			

Notes: For higher temperatures, materials, sizes, burst ratings not shown, contact BasCo.

