

Reverse Acting Slotted Rupture Disc/YF Series

BasCo®

The convex of reverse acting rupture disc is on the high pressure process side. YF is a composite design. When the metal disc is compression-loaded, the disk reverses and the sealing film is cut to relieve pressure.

Technical features

- Non-fragmentation design
- Operating ratios up to 90% of the low end of burst tolerance
- Suitable for gas, liquid or two-phase applications
- Standard manufacturing design range and total tolerance ensures marked rating on disk tag does not exceed the MAWP of equipment
- Withstand full vacuum without additional support
- Sizes from 25mm to 600mm
- Burst ratings from 0.15 barg to 70 barg
- Use of rupture discs in series with safety valves
- 3-dimensional stainless steel tag engraved with complete disc specifications

Options

- Fluoropolymer liners or coatings
- Burst Indicator

*Note: The maximum temperature rating of rupture disks supplied with liners and BI is lower than the base disk material.

Protection of Safety Relief Valve

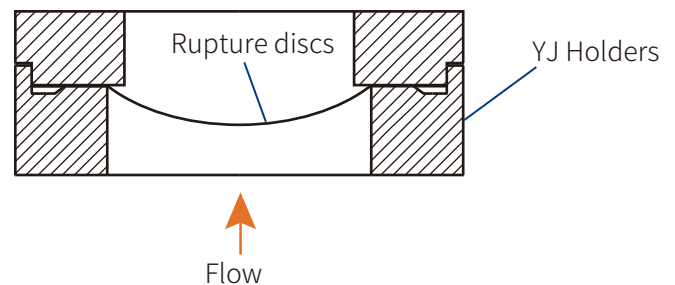
- When a disk is mounted under a Safety Relief Valve, the working components of the valve are isolated from hostile environments.
- Tell-Tale Assembly: Pressure Gauge, Tee, Excess Flow Valve, Tube



Before and after bursting of YF Rupture Disc



YF Rupture Discs mount in YJ Holders



Reverse acting rupture discs mount in YJ Holders

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

Disk Size		Buckling pin element: 316L																			
		Sealing Membrane Materials: Optional material																			
		Nickel				Monel				Inconel				Stainless Steel				Hastelloy C-276			
NPS [in]	DN [mm]	psig		barg		psig		barg		psig		barg		psig		barg		psig		barg	
		min,	max,	min,	max,	min,	max,	min,	max,	min,	max,	min,	max,	min,	max,	min,	max,	min,	max,	min,	max,
¾"	20	73	1015	5	70	87	1015	6	70	87	1015	6	70	72.5	1015	5	70	87	1015	6	70
1"	25	39.2	870	3	60	50.8	870	3.5	60	51	870	3.5	60	39.2	870	2.7	60	50.8	870	3.5	60
1¼"	32	36.3	870	2.5	60	43.5	870	3	60	44	870	3	60	36.3	870	2.5	60	43.5	870	3	60
1½"	40	23.2	725	1.6	50	36.3	725	2.5	50	36	725	2.5	50	23.2	725	1.6	50	36.3	725	2.5	50
2"	50	14.5	580	1	40	29	580	2	40	29	580	2	40	14.5	580	1	40	29	580	2	40
2½"	65	14.5	435	1	30	21.8	435	1.5	30	22	435	1.5	30	14.5	435	1	30	52.2	435	3.6	30
3"	80	11.6	406	0.8	28	21.8	406	1.5	28	22	406	1.5	28	11.6	406	0.8	28	42.1	406	2.9	28
4"	100	11.6	363	0.8	25	14.5	363	1	25	15	363	1	25	11.6	363	0.8	25	24.7	363	1.7	25
5"	125	8.7	305	0.6	21	11.6	305	0.8	21	12	305	0.8	21	8.7	305	0.6	21	17.4	305	1.2	21
6"	150	5.8	305	0.4	21	8.7	305	0.6	21	9	305	0.6	21	5.8	305	0.4	21	14.5	305	1	21
8"	200	4.4	189	0.3	13	5.8	189	0.4	13	6	189	0.4	13	4.4	189	0.3	13	8.7	189	0.6	13
10"	250	4.4	131	0.3	9	4.4	131	0.3	9	4	131	0.3	9	4.4	131	0.3	9	5.2	131	0.36	9
12"	300	2.9	80	0.2	5.5	2.9	80	0.2	5.5	3	80	0.2	5.5	2.9	80	0.2	5.5	3.6	80	0.25	5.5
14"	350	2.9	65	0.2	4.5	2.9	65	0.2	4.5	3	65	0.2	4.5	2.9	65	0.2	4.5	2.9	65	0.2	4.5
16"	400	2.9	46	0.2	3.2	2.9	46	0.2	3.2	3	46	0.2	3.2	2.9	46	0.2	3.2	2.9	46	0.2	3.2
Max. Temp.		752°F (400°C)				752°F (400°C)				752°F (400°C)				752°F (400°C)				752°F (400°C)			

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

Burst Tolerance

GB 567-2012	
Rated Burst Pressure bar	Burst Tolerance
≥ 0.01~ < 0.1	± 50%
≥ 0.1~ < 1	± 25%
≥ 1~ < 3	± 0.015Mpa
≥ 3~ < 1000	± 5%
≥ 1000~ < 5000	± 4%

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