The convex of reverse acting rupture disc is on the high pressure process side. When the metal disc is compression-loaded, the disk reverses with a crocodile tooth diaphragm cutting it to relieve pressure.

Technical features

- Non-fragmentation design
- Operating ratios up to 90% of the low end of burst tolerance
- Disc design offers high cycle life(compared with forward acting rupture disc)
- Suitable for gas service
- 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
- Wide range of standard and exotic materials available
- Sizes from 25mm to 600mm
- Burst ratings from 0.21barg to 50 barg
- Use of rupture discs in combination with safety valves
- 3-dimensional stainless steel tag engraved with complete disc specifications

Options

- Fluoropolymer liners or coatings
- Burst Indicator

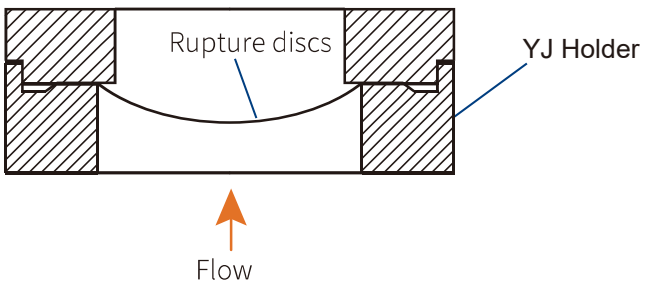
*Note: The maximum temperature rating of rupture disks supplied with liners and BI is lower than the base disk material.

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 YE Rupture Disc

YJ Holder



Reverse acting rupture discs mount in YJ Holders

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

Disk Size		Nickel				Monel				Inconel				316L				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	43.5	583	3	40.2	43.5	661	3	45.6	58	783	4	54	43.5	870	3	60	130.5	870	9	60
1"	25	29	486	2	33.5	29	551	2	38	36.3	653	2.5	45	29	725	2	50	87	725	6	50
1¼"	32	20.3	438	1.4	30.2	26.1	496	1.8	34.2	26.1	587	1.8	40.5	26.1	653	1.8	45	58	653	4	45
1½"	40	1.5	341	0.1	23.5	18.9	386	1.3	26.6	18.9	457	1.3	31.5	18.9	508	1.3	35	43.5	508	3	35
2"	50	11.6	262	0.8	18.1	14.5	297	1	20.5	14.5	352	1	24.3	14.5	392	1	27	29	392	2	27
2½"	65	7.3	165	0.5	11.4	14.5	187	1	12.9	14.5	222	1	15.3	14.5	247	1	17	21.8	247	1.5	17
3"	80	7.3	136	0.5	9.4	11.6	154	0.8	10.6	11.6	183	0.8	12.6	11.6	203	0.8	14	17.4	203	1.2	14
4"	100	7.3	87	0.5	6	11.6	99	0.8	6.8	11.6	117	0.8	8.1	11.6	131	0.8	9	11.6	131	0.8	9
5"	125	7.3	68	0.5	4.7	11.6	77	0.8	5.3	11.6	91	0.8	6.3	11.6	102	0.8	7	11.6	102	0.8	7
6"	150	7.3	58	0.5	4	10.2	67	0.7	4.6	10.2	78	0.7	5.4	10.2	87	0.7	6	10.2	87	0.7	6
8"	200	7.3	39	0.5	2.7	10.2	44	0.7	3	10.2	52	0.7	3.6	10.2	58	0.7	4	10.2	58	0.7	4
10"	250	7.3	33	0.5	2.3	10.2	39	0.7	2.7	10.2	46	0.7	3.2	10.2	51	0.7	3.5	10.2	51	0.7	3.5
12"	300	7.3	29	0.5	2	10.2	33	0.7	2.3	10.2	39	0.7	2.7	10.2	44	0.7	3	10.2	44	0.7	3
Max. Temp.		752°F (400°C)				806°F (430°C)				896°F (480°C)				752°F (400°C)				986°F (530°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