

## Reverse Acting Scored Rupture Disc/YC Series

BasCo®

The convex of reverse acting rupture disc is on the high pressure process side. When the metal disc is compression-loaded, the disk reverses and bursts along the prescored line 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 only
- 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 2 barg to 70 barg
- Resisting product build-up. The smooth convex side of the disc is exposed to the process media
- 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 discs supplied with liners and BI is lower than the base disk material.

### Protection of Safety Relief Valve

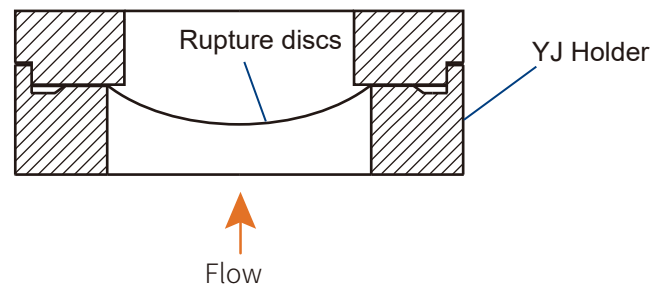
- When a disk is mounted under a Safety Relief Valve, the working components of the valve are isolated from hostile environments.
- Tell-Tale Assembly: Pressure Gauge, Tee, Excess Flow Valve, Tube



Before and after bursting of YC Rupture Disc



YJ Holder



Reverse acting rupture discs mount in YJ Holders

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

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	261	1450	18	100	435	1885	30	130	435	1885	30	130	435	1885	30	130	580	1885	40	130
1"	25	145	1450	10	100	232	1885	16	130	232	1885	16	130	232	1885	16	130	362.5	1885	25	130
1¼"	32	116	1450	8	100	232	1885	16	130	232	1885	16	130	232	1885	16	130	319	1885	22	130
1½"	40	87	1450	6	100	203	1885	14	130	203	1885	14	130	203	1885	14	130	261	1885	18	130
2"	50	72.5	1450	5	100	174	1885	12	130	174	1885	12	130	174	1885	12	130	217.5	1885	15	130
2½"	65	72.5	1305	5	90	145	1740	10	120	145	1740	10	120	145	1740	10	120	217.5	1740	15	120
3"	80	58	1160	4	80	145	1740	10	120	145	1740	10	120	145	1740	10	120	217.5	1740	15	120
4"	100	43.5	1015	3	70	130.5	1450	9	100	130.5	1450	9	100	130.5	1450	9	100	174	1450	12	100
5"	125	43.5	870	3	60	116	1160	8	80	116	1160	8	80	116	1160	8	80	174	1160	12	80
6"	150	43.5	725	3	50	101.5	870	7	60	101.5	870	7	60	101.5	870	7	60	145	870	10	60
8"	200	29	580	2	40	87	725	6	50	87	725	6	50	87	725	6	50	145	725	10	50
10"	250	29	435	2	30	72.5	580	5	40	72.5	580	5	40	72.5	580	5	40	145	580	10	40
12"	300	21.8	290	1.5	20	58	435	4	30	58	435	4	30	58	435	4	30	130.5	435	9	30
14"	350	21.8	145	1.5	10	50.8	362.5	3.5	25	50.8	362.5	3.5	25	50.8	362.5	3.5	25	116	362.5	8	25
16"	400	14.5	116	1	8	36.3	290	2.5	20	36.3	290	2.5	20	36.3	290	2.5	20	116	290	8	20
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