

## Reverse Acting Knife Blade Rupture Disc/YD Series

BasCo®

The convex of reverse acting rupture disc is on the high pressure process side. When the solid metal disc is compression-loaded, the disk reverses with the knife blades on the upper holder cutting it to relieve pressure.

### Technical features

- Non-fragmentation design
- Operating ratios up to 90% of the low end of burst tolerance
- Suitable for gas service
- Standard manufacturing design range and total tolerance ensures marked rating on disk tag does not exceed the MAWP of equipment
- Withstands full vacuum without additional support
- Standard materials: Stainless Steel, Inconel, Monel, Nickel, Aluminum. Exotic materials on requests.
- Sizes from 25mm to 600mm
- Burst ratings from 0.5 barg to 150 barg
- Use of rupture discs in combination with safety valves
- 3-dimensional stainless steel tag engraved with complete disc specifications

### Options

- Fluoropolymer liners can prevent corrosion of rupture discs
- Note: The maximum temperature rating of rupture disks supplied with liners is lower than the base disk material.

### Holder

YDJ inserted holder is designed for YD series rupture discs.  
Standard Holder Material: Stainless Steel, Carbon Steel, etc

### Accessories

Pressure Gauge, Tee, Tube, Excessive Flow Valve, Special Flange Face, Coating

### Protection of Safety Relief Valve

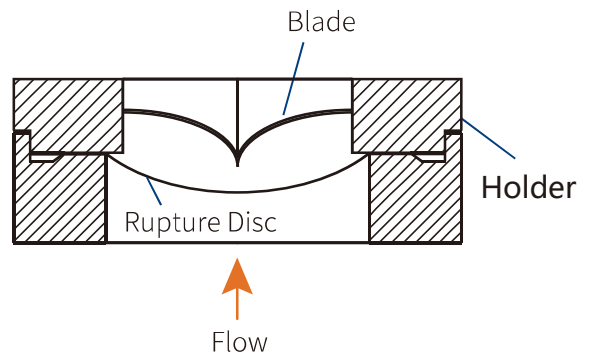
- When a disk is mounted under a Safety Relief Valve, the working components of the valve are isolated from hostile environments.
- Tell-Tale Assembly: Pressure Gauge, Tee, Excess Flow Valve, Tube



Before and after bursting of YD Rupture Disc



YDJ Holder



YD Rupture Disc mounts in YDJ Holder



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

Disk Size		Nickel				Monel				Inconel				316L			
NPS [in]	DN [mm]	psig		barg		psig		barg		psig		barg		psig		barg	
		min,	max,	min,	max,	min,	max,	min,	max,	min,	max,	min,	max,	min,	max,	min,	max,
1"	25	101.5	1740	7	120	101.5	1740	7	120	101.5	1740	7	120	101.5	1740	7	120
1¼"	32	87	1740	6	120	87	1740	6	120	87	1740	6	120	87	1740	6	120
1½"	40	79.8	1595	5.5	110	79.8	1595	5.5	110	79.8	1595	5.5	110	79.8	1595	5.5	110
2"	50	50.8	1595	3.5	110	50.8	1595	3.5	110	50.8	1595	3.5	110	50.8	1595	3.5	110
2½"	65	50.8	1450	3.5	100	50.8	1450	3.5	100	50.8	1450	3.5	100	50.8	1450	3.5	100
3"	80	43.5	1450	3	100	43.5	1450	3	100	43.5	1450	3	100	43.5	1450	3	100
4"	100	43.5	1450	3	100	43.5	1450	3	100	43.5	1450	3	100	43.5	1450	3	100
5"	125	29	1160	2	80	29	1160	2	80	29	1160	2	80	29	1160	2	80
6"	150	29	870	2	60	29	870	2	60	29	870	2	60	29	870	2	60
8"	200	29	798	2	55	29	798	2	55	29	798	2	55	29	798	2	55
10"	250	29	725	2	50	29	725	2	50	29	725	2	50	29	725	2	50
12"	300	29	580	2	40	29	580	2	40	29	580	2	40	29	580	2	40
14"	350	29	435	2	30	29	435	2	30	29	435	2	30	29	435	2	30
16"	400	29	435	2	30	29	435	2	30	29	435	2	30	29	435	2	30
Max. Temp.		752°F (400°C)				806°F (430°C)				896°F (480°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