

Forward Acting Scored Rupture Disc/LC FGD Series

Technical features

- Solid metal scored disc designed for Non-fragmentation
- Operating ratios up to 85% of the low end of burst tolerance
(Contact BasCo for higher ratios)
- Withstand full vacuum without additional support
- Suitable for liquid, gas, or two-phase applications
- Sizes from 20mm to 600mm
- Burst ratings from 1 barg to 250 barg
- Standard materials: Nickel, Stainless Steel
- Able to be combined with safety valve
- Attached 3-dimensional stainless steel tag is engraved with complete disc specifications

Working Principle

LC,FGD Series Discs mount with the concave surface facing the process media. As pressure increases above the recommended operating ratio, the score lines weaken until rupture occurs. When the Disc ruptures, the Disc opens along the score lines and folds back against the holder outlet.

Options

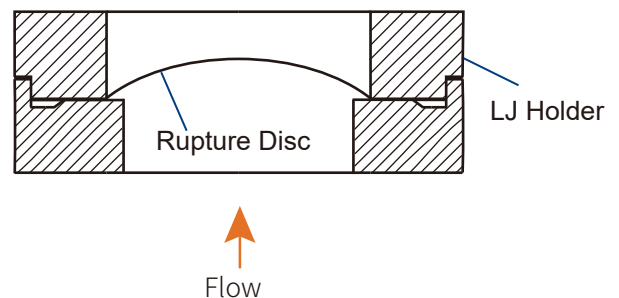
- Fluoropolymer liners or coatings
- Burst Indicator
- Railcar Disc

Protection of Safety relief valves

- Use of rupture discs in combination with relief valves can prevent corrosion of the relief valve internals.
- Tell-Tale Assembly: Pressure Gauge, Tee, Excess Flow Valve, Tube



LJ



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. |
| 1" | 25 | 203 | 2030 | 14 | 140 | 290 | 2900 | 20 | 200 | 290 | 2900 | 20 | 200 | 290 | 2900 | 20 | 200 | 377 | 2900 | 26 | 200 |
| | 32 | 159.5 | 2030 | 11 | 140 | 217.5 | 2900 | 15 | 200 | 217.5 | 2900 | 15 | 200 | 217.5 | 2900 | 15 | 200 | 290 | 2900 | 20 | 200 |
| 1½" | 40 | 159.5 | 2030 | 11 | 140 | 217.5 | 2900 | 15 | 200 | 217.5 | 2900 | 15 | 200 | 217.5 | 2900 | 15 | 200 | 290 | 2900 | 20 | 200 |
| 2" | 50 | 130.5 | 2030 | 9 | 140 | 174 | 2900 | 12 | 200 | 174 | 2900 | 12 | 200 | 174 | 2900 | 12 | 200 | 232 | 2900 | 16 | 200 |
| 2½" | 65 | 101.5 | 1740 | 7 | 120 | 145 | 2610 | 10 | 180 | 145 | 2610 | 10 | 180 | 145 | 2610 | 10 | 180 | 188.5 | 2610 | 13 | 180 |
| 3" | 80 | 101.5 | 1450 | 7 | 100 | 145 | 2175 | 10 | 150 | 145 | 2175 | 10 | 150 | 145 | 2175 | 10 | 150 | 188.5 | 2175 | 13 | 150 |
| 4" | 100 | 72.5 | 1450 | 5 | 100 | 101.5 | 2175 | 7 | 150 | 101.5 | 2175 | 7 | 150 | 101.5 | 2175 | 7 | 150 | 130.5 | 2175 | 9 | 150 |
| 5" | 125 | 72.5 | 1160 | 5 | 80 | 87 | 1740 | 6 | 120 | 87 | 1740 | 6 | 120 | 87 | 1740 | 6 | 120 | 116 | 1740 | 8 | 120 |
| 6" | 150 | 58 | 1015 | 4 | 70 | 72.5 | 1450 | 5 | 100 | 72.5 | 1450 | 5 | 100 | 72.5 | 1450 | 5 | 100 | 101.5 | 1450 | 7 | 100 |
| 8" | 200 | 43.5 | 1015 | 3 | 70 | 58 | 1450 | 4 | 100 | 58 | 1450 | 4 | 100 | 58 | 1450 | 4 | 100 | 72.5 | 1450 | 5 | 100 |
| 10" | 250 | 43.5 | 870 | 3 | 60 | 43.5 | 1160 | 3 | 80 | 43.5 | 1160 | 3 | 80 | 43.5 | 1160 | 3 | 80 | 58 | 1160 | 4 | 80 |
| 12" | 300 | 29 | 725 | 2 | 50 | 36.3 | 870 | 2.5 | 60 | 36.3 | 870 | 2.5 | 60 | 36.3 | 870 | 2.5 | 60 | 43.5 | 870 | 3 | 60 |
| 14" | 350 | 29 | 507.5 | 2 | 35 | 36.3 | 507.5 | 2.5 | 35 | 36.3 | 507.5 | 2.5 | 35 | 36.3 | 507.5 | 2.5 | 35 | 43.5 | 507.5 | 3 | 35 |
| 16" | 400 | 29 | 290 | 2 | 20 | 29 | 290 | 2 | 20 | 29 | 290 | 2 | 20 | 29 | 290 | 2 | 20 | 43.5 | 290 | 3 | 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