



RUPTURE PIN

Advanced Pressure Relief Valves



*National Sales
Partner for*



Advantages Over the Competition

- 1 We have over 17,000 valves operating worldwide with a satisfaction rate of 99.9% in over 22 years!
- 2 Pins buckle at set pressure
- 3 No worker safety concerns
- 4 No product loss
- 5 No environmental pollution
- 6 No fragmentation
- 7 Extremely accurate
- 8 Low maintenance costs
- 9 Low pin replacement costs
- 10 Full bore relief in milliseconds
- 11 Pin can be replaced by one person in only one minute
- 12 Minimal downtime
- 13 Works close to set point
- 14 Does not require vacuum support
- 15 Can sense upstream pressure only or differential pressure only
- 16 Pins are rugged and can be stored at the valve
- 17 No costly handling
- 18 It is easy to tell when a pin is buckled visually or remotely when using a proximity sensor
- 19 You don't break the line to change the pin
- 20 Buckling stress is lower than yield stress
- 21 Few inspections
- 22 Replacement pins can be produced quickly
- 23 Replacement pins can be shipped immediately
- 24 We make custom valves to your specifications
- 25 We take on "mission impossible" projects
- 26 Settings can be changed in minutes without breaking the line by changing the pin
- 27 Reliability can be checked in the field under pressure
- 28 It is safe for your system providing emergency relief
- 29 There is no size limit large or small
- 30 There is no pressure limit for pressure or vacuum

Get the POWER of the PIN!



For nearly 40 years, many of the world's top companies have experienced the performance advantages of this advanced relief valve technology.

These companies have come to trust the technology because they understand what uniquely sets it apart and gives it the edge over other relief valves and rupture discs on the market.

The rupture pin is the heart of each advanced pressure relief valve and is vital to the function, accuracy and consistency of the valve.

By modifying the pin, you can control the valve's performance – from small changes to more dramatic changes. It is for this reason that each pin is carefully crafted using a precise manufacturing process.

This process ensures that each valve will perform its function accurately, consistently and within an extremely tight tolerance – something other products on the market simply can't achieve.

GET THE POWER OF THE PIN for the best overall value on the market and keep people, systems, products and the environment safe!



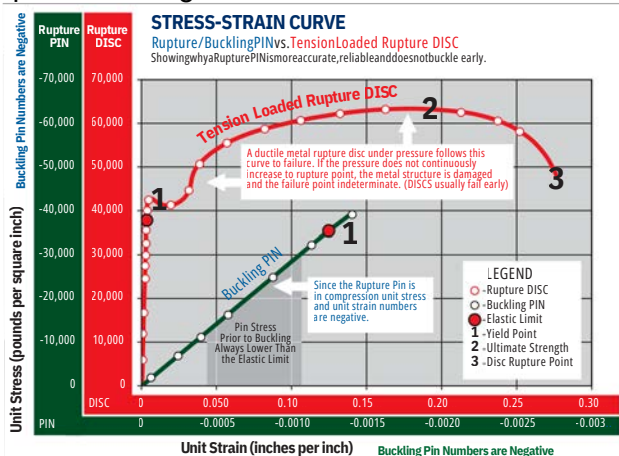
Rupture Pin vs. Rupture Disc

Why Rupture Discs Fail

The main weaknesses of the disc is the fact that the disc's stress at the burst point is much greater than the yield stress. The stress-strain curve of the forward acting/tension loaded rupture disc is shown. Once the disc is pressured beyond its yield point, the disc is irreversibly damaged.

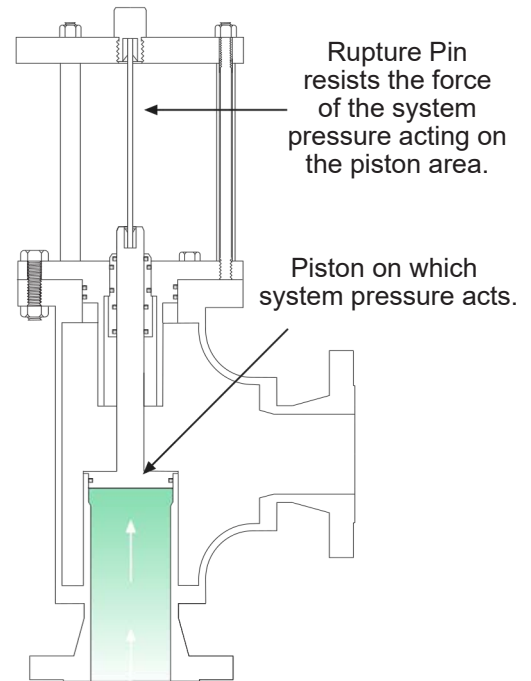
Unless the pressure continues to increase to the burst pressure, the disc will fail far below set point, usually at the next pressure increase over yield point. Yes, when the disc breaks early, it "fails safe", but consider the needless pollution, loss of product, downtime, disc replacement cost and labor to replace the disc. With the Rupture Pin, the stress is always below the elastic limit.

Because its mechanism of buckling is Euler's Law, the pin can't fatigue.

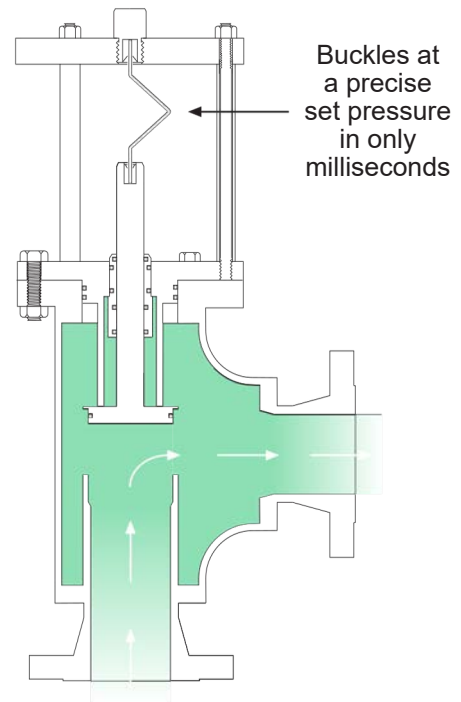


Valve Operation

It opens in milliseconds to relieve pressure.



CLOSED - Pressure below set point



FULL OPEN - Pressure at set point