



Rupture Pin A BRAND of _____

Taylor Valve Technology

GET THE **POWER** OF THE PIN



SIL 3

MODEL JA

**SIL 3 Capable Emergency
Shutdown Valves**

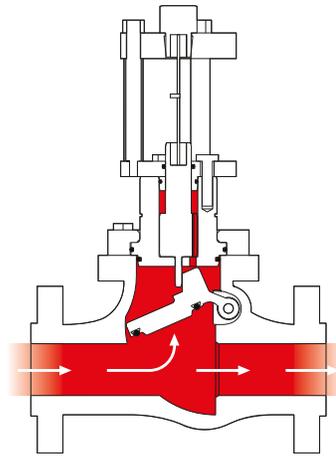


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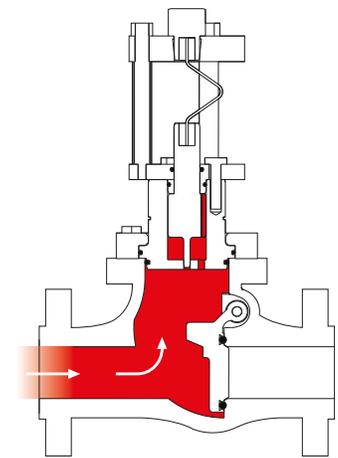
SINCE 1958

ADVANTAGES

- Reliable settings.
- Simple operation.
- Our valve technology utilizes a proven design principle - (Euler's Law).
- Reaches closed position in milliseconds to provide a bubble-tight seal. Closes with the velocity of the system flow.
- +/-5% accuracy of set pressure.
- Fatigue and pulsation are not factors that affect the set pressure of the valve.
- Pins can be changed by one person in minutes. Spare pins can be stored in a container connected to the valve. (Optional)
- A proximity sensor can be installed to monitor the valve. When the valve opens, a reliable signal alerts personnel. (Optional)
- Visual indication of closing.
- Bleed only what is in the isolated valve.
- Unaffected by pulsating pressures.
- Unaffected by changing ambient temperatures of the pin.
- Operates to within 95% of set point.
- Pin cannot fatigue and buckle early.
- Precise pin, obeying Euler's Law, acts as a pressure sensor & actuator.



OPEN (STRAIGHT)
The pin holds the piston in place until the set pressure is reached.



CLOSED (BUCKLED)
When set pressure is reached, pin buckles to close valve.

HOW IT WORKS

Flowing pressure acting on the unbalanced stem area puts an axial force on the pin. At set point, the pin buckles and the valve closes for a bubble-tight seal. If pressure upset is at "A" and you want to protect "B", put an emergency shutdown valve in between the two. The Model "J-A" isolates pressure to prevent downstream damage and proves it is environmentally friendly by eliminating air and ground pollution common with conventional relief valves.

	300#	600#	900#	
OPTIONS*	3"	750 Psi	1500 Psi	2500 Psi
	4"	750 Psi	1500 Psi	X
	6"	X	1500 Psi	2500 Psi
	8"	750 Psi	1500 Psi	X
	10"	X	1500 Psi	X

*Max Set Pressure available at each size and flange combination is listed. Minimum set pressure 50 Psi. Only options available for SIL capable J-A ESVs. Refer to Model J-A ESV brochure for regular offerings.

WHAT IS SIL ?

SIL, or Safety Integrity Level, is a measurement scale of safety system performance for an element with safety instrumented function (SIF) installed in a safety instrumented system (SIS). There are four possible ratings: 1, 2, 3 and 4; the higher the rating, the more functionally safe the system is deemed to be based upon specified risk factors prescribed by IEC 61508 guidelines.

When installing three SIL capable J-A ESVs in a system, a Safety Integrity Level of 3 is achieved with a risk reduction factor of 10,000 to 1,000.

