


BS&B[®]

SVI Rupture Disk Assembly for Relief Valve Isolation

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The SVI is a single-use rupture disk (bursting disc) assembly for isolating safety relief valves and for retrofit with fixed piping.

Features

Solid metal reverse buckling S-90 disk welded into a holder assembly

- Petals open up along cross-scored lines
- Available in standard sizes: 1 1/2 inch (40mm) through 6 inches (150mm)
- The SVI fits between standard companion flanges and drops into inlet bore
- Designed to isolate relief valves from process media and keep process fluid from leaking to the atmosphere.
- Standard disk materials are nickel and Inconel[®], and the body and flange are 316 stainless steel - consult BS&B for other disk material options
- Fluoropolymer boot available upon request for added corrosion resistance on inlet side of disk assembly
- +-5% and -10% manufacturing design range (MDR) available

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Benefits

- Leak-tight welded construction
- Simple installation without sensitivity to companion flange torque
- Used with standard flat fiber, elastomer, or spiral wound gaskets
- Simple retrofit to existing relief valve systems
- Designed for non-fragmentation
- Full vacuum resistance
- Back pressure resistant to at least burst pressure
- Compact low mass construction
- Available with ASME "UD" stamp or "CE" mark

Specifications for SVI Rupture Disks at 72°F (22°C)

Nominal size		Nickel 200				Inconel® 600			
in	mm	psig		barg		psig		barg	
		Min	Max	Min	Max	Min	Max	Min	Max
1.5	40	125	400	9	28	150	400	10	28
2	50	90	400	6	28	110	400	8	28
2.5	65	90	400	6	28	110	400	8	28
3	80	75	350	5	24	90	350	6	24
4	100	60	300	4	21	72	300	5	21
6	150	50	250	3.5	17	60	250	4	17

Engineering Information

Minimum and maximum pressure ratings applicable at 72°F (22°C). SVI body is 316 stainless steel. Other materials available upon request.

Manufacturing Design Range (MDR)

SVI rupture disk assemblies are available with 5% and 10% MDR.

Example: If a 200 psig SVI is ordered with a 10% MDR, it may be tagged at any pressure between 200 and 180 psig (13.8 to 12.4 barg).

Burst Tolerance

SVI rupture disk assemblies have a +5% burst tolerance.

Performance Tolerance

As an alternative to MDR and burst tolerance (which is always used for ASME 'UD' stamped SVI assemblies), a 'performance tolerance' may be specified where MDR and tolerance are combined into a single minimum and maximum burst pressure rating. A 'performance tolerance' will be used for CE marked SVI assemblies.

Recommended maximum temperatures for each metal:

Inconel®900°F (482°C)

Nickel.....750°F (398°C)

How to Select

1. Select the proper SVI assembly to fit the pipe size in the above chart (fits schedule 80 and lighter piping).
2. Check proper material for application pressure and temperature requirements as well as desired corrosion resistance.
3. To order specify: quantity; temperature; burst pressure; optional fluoropolymer boot; disk and material of disk and body.



The SVI assembly slips into existing piping. ASME code requires a tell-tale indicator to be used with rupture disks and relief valves used in combination

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