

SRX RUPTURE DISC

DESCRIPTION

Fike SRX rupture disc is a reverse acting rupture disc with a cross scored design for use with vapor services only. These discs have many high performance characteristics that make them ideal for demanding applications such as the isolation of pressure relief valves.

FEATURES AND BENEFITS

- SRX rupture discs have superior service life in heavily pulsating and cyclic duty when compared to forward acting (tension loaded) rupture discs. This is primarily due to the reverse buckling (compression loaded) design
- The SRX is designed to be non-fragmenting. The cross score configuration controls the disc opening and enables the disc to rupture without fragmentation
- SRX discs will sustain process operating pressures as high as 90% of the marked disc rating, without premature failure due to metal fatigue
- The SRX will withstand full vacuum, or back pressure service in magnitudes equivalent to the stamped burst pressure
- SRX discs perform reliably even under less than ideal installation conditions due to their special seating configuration
- 316/316L SST, Inconel® 600, Monel® 400, Nickel 200/201, and Hastelloy® C276 are available as standard materials of construction. Consult factory for other materials
- The DiscLoc™ locator tab prevents incorrect, inverted installation in the holder. Prominent flow arrows indicate the process flow direction during venting

PRESSURE RELIEF VALVE APPLICATION

When SRX discs are used to isolate pressure relief valves, a combination capacity factor of 0.9 may be used. Higher combination capacity factors may be established by testing and certification in accordance with the ASME Code, Section VIII, Div I. See Fike Technical Bulletin TB8103 for more information.

OPTIONS

- Available with fluoropolymer liner 450°F (232°C)
- Polyurethane 250°F (121°C) and Teflon® 450°F (232°C) protective coatings also available
- Standard O-rings are available in Viton® with a maximum operating temperature of 450°F (232°C)
- Available with Tantalum liner 500°F (Consult Factory)

ACCESSORIES AND HOLDERS

Holders

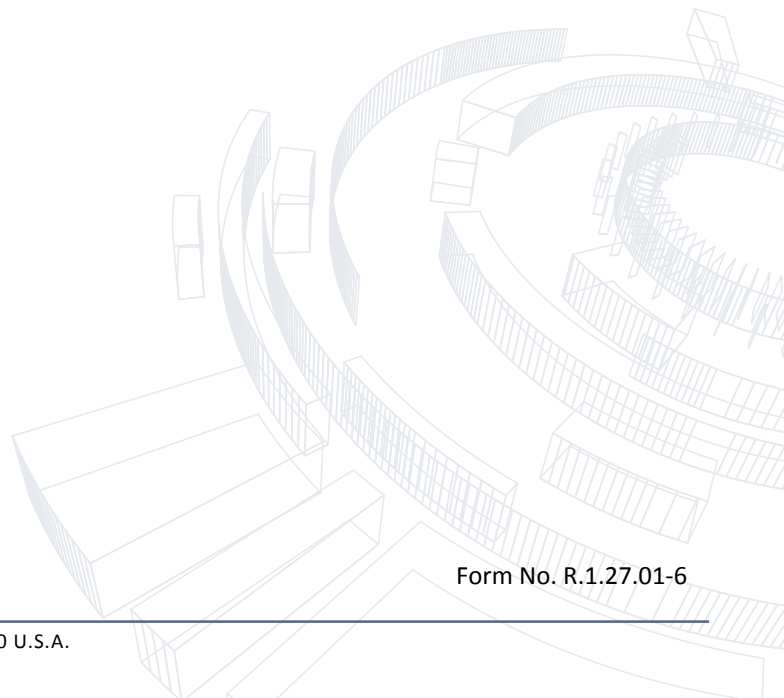
SRX holders are available in a variety of materials and configurations. See Insert Type Holder data sheet R.1.05.01 or TQ Series Pretorqueable Holders data sheet R.1.45.01 for complete specifications.



SRX Rupture Disc

APPROVALS:

- ASME
- CE Marked



Form No. R.1.27.01-6

MINIMUM/MAXIMUM BURST PRESSURES IN PSIG (BARG) @ 72°F (22°C)

IN	DN	316/316L SST		Inconel® 600		Monel® 400		Nickel 200/201		Hastelloy® C276	
		Max Temp: 900°F (482°C)		Max Temp: 1100°F (593°C)		Max Temp: 900°F (482°C)		Max Temp: 800°F (427°C)		Max Temp: 900°F (482°C)	
		Min. BP	Max. BP	Min. BP	Max. BP	Min. BP	Max. BP	Min. BP	Max. BP	Min. BP	Max. BP
1	25	275 (18.96)	820 (56.54)	110 (7.58)	820 (56.54)	110 (7.58)	820 (56.54)	85 (5.86)	820 (56.54)	320 (22.06)	820 (56.54)
1.5	40	275 (18.96)	820 (56.54)	110 (7.58)	820 (56.54)	110 (7.58)	820 (56.54)	85 (5.86)	820 (56.54)	320 (22.06)	820 (56.54)
2	50	230 (15.86)	820 (56.54)	90 (6.21)	820 (56.54)	90 (6.21)	820 (56.54)	75 (5.17)	820 (56.54)	265 (18.27)	820 (56.54)
3	80	165 (11.38)	720 (49.64)	70 (4.83)	720 (49.64)	70 (4.83)	720 (49.64)	60 (4.14)	720 (49.64)	200 (13.79)	720 (49.64)
4	100	130 (8.96)	720 (49.64)	60 (4.14)	720 (49.64)	60 (4.14)	720 (49.64)	50 (3.44)	720 (49.64)	160 (11.03)	720 (49.64)
6	150	90 (6.21)	630 (43.44)	45 (3.10)	630 (43.44)	45 (3.10)	630 (43.44)	40 (2.76)	630 (43.44)	115 (7.93)	630 (43.44)
8	200	90 (6.21)	500 (34.47)	40 (2.76)	500 (34.47)	40 (2.76)	500 (34.47)	35 (2.41)	500 (34.47)	115 (7.93)	500 (34.47)
10	250	80 (5.52)	350 (24.13)	35 (2.41)	350 (24.13)	35 (2.41)	350 (24.13)	30 (2.07)	350 (24.13)	102 (7.03)	350 (24.13)
12	300	70 (4.83)	250 (17.24)	30 (2.07)	250 (17.24)	30 (2.07)	250 (17.24)	27 (1.86)	250 (17.24)	89 (6.14)	250 (17.24)
14	350	56 (3.86)	165 (11.38)	30 (2.07)	165 (11.38)	30 (2.07)	165 (11.38)	27 (1.86)	165 (11.38)	CF	CF
16	400	36 (2.48)	150 (10.34)	30 (2.07)	150 (10.34)	28 (1.93)	150 (10.34)	25 (1.72)	150 (10.34)	CF	CF
18	450	34 (2.34)	135 (9.31)	30 (2.07)	135 (9.31)	28 (1.93)	135 (9.31)	25 (1.72)	135 (9.31)	CF	CF
20	500	32 (2.21)	120 (8.27)	30 (2.07)	120 (8.27)	27 (1.86)	120 (8.27)	20 (1.38)	120 (8.27)	CF	CF
24	600	30 (2.07)	120 (8.27)	30 (2.07)	120 (8.27)	27 (1.86)	120 (8.27)	20 (1.38)	120 (8.27)	CF	CF

Notes:

CF=Consult Factory

1" and 1.5" SRX with liner not available with ASME UD certification.

Solid Tantalum is available. Consult factory for options.

MINIMUM FREE VAPOR VOLUME

Size	IN	1	1.5	2	3	4	6	8	10	12
	DN	25	40	50	80	100	150	200	250	300
Cubic Inches (in³)		13	13	28	91	205	701	1,597	3,141	5,428
Cubic Centimeters (cm³)		213	213	459	1,491	3,359	11,487	26,170	51,472	88,949

Size	IN	14	16	18	20	22	24
	DN	350	400	450	500	550	600
Cubic Feet (ft³)		4.23	6.45	9.33	13.00	17.40	22.80
Cubic Meters (m³)		0.12	0.18	0.26	0.37	0.49	0.65

AVAILABLE MANUFACTURING RANGES

Available Manufacturing Ranges
+0/-10%
+0/-5%
Zero

Other Manufacturing Ranges Available:









- Reduced
- Performance Tolerance ($\pm 10\%$, $\pm 5\%$)
- Special Min/Max

BURST/PERFORMANCE TOLERANCE

Marked Burst Pressure		Tolerance	
PSIG	BARG	PSIG	BARG
≤ 40	≤ 2.76	± 2	± 0.14
> 40	> 2.76	$\pm 5\%$	$\pm 5\%$

HOW TO SPECIFY

Previous Lot Number:	
OR	
Size:	
Flange Rating:	
Burst Pressure:	@ (Temperature)
Seal Material:	
Manufacturing Range:	Std: Other:
Coatings:	
Optional O-Rings:	Yes / No Qty:
Certifications:	ASME CE

Performance Attributes				Process Media		Rupture Disc Holders	
Operating Ratio	Non-Fragmenting	Vacuum Resistant	Pulsating/Cyclic	Liquid	Vapor/Gas	Bolted/Type	Pre-Torque
							
90%	yes	yes	yes	no*	yes	yes	yes

* Minimum vapor volume required - see table