DATA SHEET

SRL RUPTURE DISC

SRL Rupture Disc

DESCRIPTION

The Fike SRL rupture disc is reverse-bulged and perimeter-scored to facilitate opening without knife-blades. It is ideal for such demanding applications as the isolation of pressure relief valves. Sophisticated finite element analysis (FEA) techniques were used to develop the SRL's Contour Modified™ design.

FEATURES AND BENEFITS

- SRL rupture discs can be used in a wide variety of applications including liquid, vapor and two phase media flow
- SRL can operate up to 90% of its marked burst pressure for burst pressures over 40 PSIG (2.76 BARG), and up to 90% of the minimum of the burst tolerance at 40 PSIG (2.76 BARG) and below
- SRL will withstand full vacuum without the aid of a vacuum support (see performance attributes)
- If damaged during normal installation, the rupture disc will open at less than 1.5 times the stamped burst pressure
- SRL discs perform reliably even under less-than-ideal bolt loading conditions due to their special seating configuration
- The perimeter score configuration, along with the integral ring, control its opening and enable the disc to rupture without fragmentation
- The single hinge design helps achieve low burst pressure and full opening upon rupture
- The DiscLoc™ locator tab prevents incorrect, inverted installation in the holder. Prominent flow arrows indicate the process flow direction during venting

APPROVALS:

- ASME
- CE Marked

PRESSURE RELIEF VALVE APPLICATION

When SRL 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 certifying in accordance with ASME Code, Section VIII, Division 1. See Fike Technical Bulletin TB8103 for more information.

OPTIONS

- Available with fluoropolymer liner with a maximum temperature of 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)

ACCESSORIES AND HOLDERS

Holders

The SRL uses the XL and XLO (low profile) series of rupture disc holders. These 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. Can be used in Double Disc holder assembly (refer to data sheet R.1.51.01).

Note: 1.5 IN SRL rupture disc requires 1.5 IN SRL Holder.

AVAILABLE MANUFACTURING RANGES

Available Manufacturing Ranges	< 20 PSIG (1.38 BARG)	Between 20 to 40 PSIG (1.38-2.76 BARG)	Greater than 40 PSIG (2.76 BARG)
+0/-10%	No	Standard	Standard
+0/-5%	No	No	Yes
+0 PSIG to -2 PSIG (.14 BARG)	Standard	No	No
Zero	Yes	Yes	Yes

BURST/PERFORMANCE TOLERANCE

Marked Burst Pressure		Tolerance	
PSIG	BARG	PSIG	BARG
≤ 40	≤ 2.76	± 2	± .14
> 40	> 2.76	± 5%	± 5%

Form No. R.1.26.01-5

704 SW 10th Street • P.O. Box 610 • Blue Springs, Missouri 64013-0610 U.S.A.
Phone: 816•229•3405 • www.fike.com

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

		316/316L SST		Inconel® 600		Monel® 400		Nickel 200/201		Hastelloy® C276		Tantalum	
		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)		Max Temp: 500°F (260°C)	
IN	DN	Min. BP	Max. BP	Min. BP	Max. BP	Min. BP	Max. BP	Min. BP	Max. BP	Min. BP	Max. BP	Min. BP	Max. BP
1	25	50 (3.45)	275 (18.97)	50 (3.45)	155 (10.69)	30 (2.07)	185 (12.76)	30 (2.07)	85 (5.86)	60 (4.14)	320 (22.07)	30 (2.07)	185 (12.76)
1.5	40	50 (3.45)	275 (18.97)	50 (3.45)	155 (10.69)	30 (2.07)	185 (12.76)	30 (2.07)	85 (5.86)	60 (4.14)	320 (22.07)	30 (2.07)	185 (12.76)
2	50	25 (1.72)	230 (15.86)	25 (1.72)	180 (12.41)	18 (1.24)	160 (11.03)	18 (1.24)	75 (5.17)	45 (3.10)	265 (18.28)	25 (1.72)	150 (10.34)
3	80	22 (1.52)	190 (13.10)	22 (1.52)	150 (10.34)	15 (1.03)	140 (9.66)	15 (1.03)	60 (4.14)	40 (2.76)	200 (13.79)	15 (1.03)	140 (9.65)
4	100	20 (1.38)	180 (12.41	20 (1.38)	150 (10.34)	12 (.83)	140 (9.66)	12 (.83)	50 (3.45)	35 (2.41)	160 (11.03)	12 (.83)	115 (7.93)
6	150	18 (1.24)	150 (10.34)	18 (1.24)	150 (10.34)	10 (.69)	125 (8.62)	10 (.69)	50 (3.45)	32 (2.21)	115 (7.93)	10 (.69)	100 (6.90)
8	200	17 (1.17)	135 (9.35)	17 (1.17)	130 (8.97)	10 (.69)	110 (7.59)	10 (.69)	70 (4.83)	30 (2.07)	115 (7.93)	10 (.69)	80 (5.52)

Note: 1.5" SRL with Fluoropolymer liner is not available with ASME UD certification.

HOW TO SPECIFY

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

Performance Attributes			Process Media		Rupture Disc Holders	
Operating Ratio	**Non-Fragmenting**	**Vacuum Resistant**	**Liquid**	**Vapor/Gas**	**Bolted/Type**	**Pre-Torque**
						
90%	yes	yes*	yes	yes	yes	yes

** Consult factory if full vacuum is required and specified burst pressure is below 15 PSIG (1.03 BARG)*

SRL design is covered by United States patents 5,467,886 and foreign patents. SRL is a trademark of Fike Corporation.

Form No. R.1.26.01-5, January 2014. Specifications are subject to change without notice.