

# SCRD-FSR SERIES, RUPTURE DISC & HOLDER

Extremely versatile and adaptable to a large variety of conditions, the SCRD-FSR rupture disc is the high pressure solution in either liquid or vapor applications. The SCRD-FSR rupture disc is well suited for minimizing leakage and corrosion in pressure relief valves, isolating them from process contaminants. The SCRD-FSR rupture disc is specifically designed for high pressure applications. The ring attached to the perimeter of the disc interlocks with a groove in the holder to prevent disc slippage at high operating and rupture pressures. This is a forward acting disc.



SCRD-FSR Rupture Disc

## SPECIFICATIONS

<b>SIZES</b>	1 – 24 in	DN25 – DN600				
<b>DISC MATERIALS</b>	316 / 316L SST Hastelloy® C276 Inconel® 600 Monel® 400 Nickel 200/201	1.4401 / 1.4404 2.4819 2.4816 2.4360 / 2.4361 2.4066 / 2.4068				
<b>BURST PRESSURE RANGE</b>	100 – 6000 psig	6.89 – 413.69 barg				
<b>BURST PRESSURE TOLERANCE</b>	See table on page 2					
<b>OPERATING RATIO</b>	For standard applications 90%	For CE or KOSHA applications < 2.76 barg = 90% > 2.76 barg = 95%				
<b>STANDARD MANUFACTURING RANGE</b>	Zero	N/A				
<b>MAX OPERATING TEMP</b>	See table on page 2	See table on page 2				
<b>K<sub>RG</sub> / K<sub>RL</sub> / K<sub>RGL</sub> &amp; MNFA <sup>(1)</sup></b>	K <sub>RG</sub> = 0.55 / K <sub>RL</sub> = 2.40					
<b>CYCLING / PULSATING DUTY</b>	Not Recommended <sup>(2)</sup>					
<b>VACUUM RESISTANCE</b>	Full					
<b>BACK PRESSURE</b>	Can withstand full vacuum					
<b>PROCESS MEDIA</b>	Gas / Vapor, Liquid, & two phase					
<b>FRAGMENTATION</b>	Non-fragmenting <sup>(3)</sup>					
<b>APPROVALS</b>	 ASME	 CE MARKED	 KOSHA	 SELO	 CRN	 EAC

(1) Information on Kr-values and MNFA can be found [here \(TB8104\)](#).  
 (2) For Cycling / Pulsating duty, please consult Fike’s data sheets for AXIUS or ATLAS discs.  
 (3) Must be specified when ordering.

OPTIONS

<b>BURST INDICATOR<sup>(1)</sup></b>	BurstCheck™ / BurstCheck Plus™ / RI / RI2
<b>COATINGS</b>	FEP, PUR (Polyurethane), Gold Plate <sup>(2)</sup>
<b>LINERS</b>	FEP, PFA <sup>(2)</sup>

- (1) More information on burst indicators can be found [here \(Burst Indicators Data Sheet\)](#).
- (2) See additional coating and liner data on next page.
- (3) Note: FEP (Fluorinated ethylene propylene) is typically green to indicate clearly where the coating is (in comparison to a clear coat).

MINIMUM / MAXIMUM BURST PRESSURE IN PSIG/BARG @ 72°F/22°C<sup>(1)</sup>

Material	316/316L SST 1.4401/1.4404		Hastelloy® C276 2.4819		Inconel® 600 2.4816		Max Burst Pressure Non-Fragmenting		Max Burst Pressure		
	900°F	482°C	900°F	482°C	1100°F	593°C	PSIG	BARG	PSIG	BARG	
Size	PSIG	BARG	PSIG	BARG	PSIG	BARG	PSIG	BARG	PSIG	BARG	
In	DN	Min.	Min.	Min.	Min.	Min.	Max.	Max.	Max.	Max.	
1	25	2250	155.13	2250	155.13	2250	155.13	3500	241.32	6000	413.69
1.5	40	1800	124.10	1800	124.10	1800	124.10	2750	189.61	6000	413.69
2	50	1600	110.31	1600	110.31	1600	110.31	3000	206.84	6000	413.69
3	80	1300	89.63	1300	89.63	1300	89.63	1750	120.66	6000	413.69
4	100	1100	75.84	1100	75.84	1100	75.84	1300	89.63	6000	413.69
6	150	500	34.47	500	34.47	500	34.47	1000	69.95	6000	413.69
8	200	450	31.03	Consult Factory	Consult Factory	450	31.03	750	51.71	6000	413.69
10	250	400	27.58			400	27.58	600	41.37	3450	237.87
12	300	350	24.13			350	24.13	500	34.47	2000	137.90
14	350	300	20.68			300	20.68	400	27.58	1600	110.32
16	400	250	17.24			250	17.24	350	24.13	1600	110.32
18	450	200	13.79			200	13.79	300	20.68	700	48.26
20	500	150	10.34			150	10.34	200	13.79	700	48.26
24	600	115	7.93			110	7.58	150	10.34	700	48.26

(1) For applications requiring burst pressures or sizes outside of this table, please contact Fike.

Material		Monel® 400 2.4360 / 2.4361		Nickel 200/201 2.4066 / 2.4068		Max Burst Pressure Non-Fragmenting		Max Burst Pressure	
Max Operating Temperature		900°F	482°C	800°F	427°C				
Size		PSIG	BARG	PSIG	BARG	PSIG	BARG	PSIG	BARG
In	DN	Min.	Min.	Min.	Min.	Max.	Max.	Max.	Max.
1	25	2250	155.13	2250	155.13	3500	241.32	6000	413.69
1.5	40	1800	124.10	1800	124.10	2750	189.61	6000	413.69
2	50	1600	110.31	1600	110.31	3000	206.84	6000	413.69
3	80	1300	89.63	1300	89.63	1750	120.66	6000	413.69
4	100	1100	75.84	1100	75.84	1300	89.63	6000	413.69
6	150	500	34.47	500	34.47	1000	69.95	6000	413.69
8	200	450	31.03	450	31.03	750	51.71	6000	413.69
10	250	400	27.58	400	27.58	600	41.37	3450	237.87
12	300	350	24.13	350	24.13	500	34.47	2000	137.90
14	350	300	20.68	300	20.68	400	27.58	1600	110.32
16	400	250	17.24	250	17.24	350	24.13	1600	110.32
18	450	200	13.79	200	13.79	300	20.68	700	48.26
20	500	150	10.34	150	10.34	200	13.79	700	48.26
24	600	100	6.89	100	6.89	150	10.34	700	48.26

### BURST / PERFORMANCE TOLERANCES

BURST PRESSURE		TOLERANCE	
PSIG @ 72°F	BARG @ 22°C	PSI	BAR
≤ 40	≤ 2.76	± 2	± 0.14
> 40	> 2.76	± 5%	± 5%

### OPTIONAL COATING AND LINER MATERIAL DATA

COATING/LINER MATERIAL	TEMPERATURE RANGE	
	°F	°C
FEP	-40 to 450	-40 to 232
PUR	-80 to 250	-62 to 121

## HOLDERS FOR SCRD-FSR: GI INSERT TYPE AND VISCOUS TEE



**GI INSERT TYPE**



**VISCOUS TEE HOLDER**

“G Insert” type rupture disc holders are furnished with a method of preassembly so the rupture disc may be installed at a workbench or some other convenient location. Once the disc is in place the unit may be assembled and installed into the line, minimizing the chance of damage to the rupture disc.

The Viscous Tee Bursting Disc Safety Device design causes the process media to continuously sweep across the surface of the rupture disc, minimizing product build-up and plugging that could affect disc performance.

### SPECIFICATIONS <sup>(1)(2)(4)</sup>

<b>SIZE</b>	0.50 – 24 inches	DN15 – DN600
<b>FLANGE RATING</b>	ASME 300 – 2500	N/A
<b>FLANGE FACING</b>	Serrated gasket faces standard, others available	
<b>MATERIAL<sup>(3)</sup></b>	Stainless Steel 316, Stainless Steel 304, Hastelloy®, Inconel®, and Carbon Steel	1.4401/1.4404, 1.4301/1.4306, 2.4819, 2.4816, 2.4816, 1.0460
<b>PRE-ASSEMBLY SCREWS</b>	GI Insert Type includes pre-assembly screws	

- (1) GI Insert type holders are designed to fit within the standard bolt circle as defined by the customer specified flange rating.
- (2) Additional Flange ratings available upon request.
- (3) Additional materials available upon request. Consult factory if necessary.
- (4) Full G available upon request, consult factory.

### ACCESSORIES <sup>(1)</sup>

<b>GAUGE TAPS</b>	When a gauge tap is requested, a ½” NPT is provided unless otherwise specified. See Dimensions table for limitations. For additional tap sizes/configurations consult factory
<b>EXCESS FLOW VALVE</b>	Installed to prevent pressure build-up between the rupture disc and downstream piping
<b>J-HOOK</b>	Used to ensure proper installation orientation
<b>EYEBOLTS</b>	Used to handle large and heavy holders
<b>JACKSCREWS</b>	Provide a means of separating piping flanges safely for rupture disc assembly installation

(1) More information on Accessories can be found [here \(Accessories Data Sheet\)](#).

### OPTIONS

<b>COATINGS</b>	FEP
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HOLDER HEIGHTS – GI (.50/DN15 – 4/DN100)

Size		ASSEMBLY HEIGHT <sup>(1)(2)</sup>			Max Gauge Tap
		FLANGE RATING (ANSI)	GI INSERT TYPE		
In	DN			In	mm
.50	15	300	2.00	50.8	Consult Factory
		600	2.00	50.8	
		900 <sup>(2)</sup>	1.94	49.3	
		1500 <sup>(2)</sup>	1.94	49.3	
		2500 <sup>(2)</sup>	2.13	54.1	
.75	20	300	1.94	49.3	Consult Factory
		600	1.94	49.3	
		900 <sup>(2)</sup>	1.88	47.8	
		1500 <sup>(2)</sup>	1.88	47.8	
		2500 <sup>(2)</sup>	2.13	54.1	
1	25	300	1.94	49.3	½"
		600	1.94	49.3	
		900	2	50.8	
		1500	2	50.8	
		2500	2.38	60.5	
1.5	40	300	1.94	49.3	½"
		600	1.94	49.3	
		900 <sup>(2)</sup>	2.13	54.1	
		1500 <sup>(2)</sup>	2.13	54.1	
		2500 <sup>(2)</sup>	2.88	73.2	
2	50	300	2.06	52.3	½"
		600	2.06	52.3	
		900	2.5	63.5	
		1500	2.5	63.5	
		2500	3.25	82.6	
3	80	300	2.19	55.6	½"
		600	2.19	55.6	
		900	2.75	69.9	
		1500 <sup>(2)</sup>	3	76.2	
		2500 <sup>(2)</sup>	4.38	111.3	
4	100	300	2.19	55.6	½"
		600	2.56	65	
		900	2.88	73.2	
		1500 <sup>(2)</sup>	3.38	85.9	
		2500 <sup>(2)</sup>	4.94	125.5	

(1) Assembly height does not include rupture disc.

(2) High yield strength materials are recommended for higher flange ratings due to additional loads.

HOLDER HEIGHTS – GI (6/DN150 – 24/DN600)

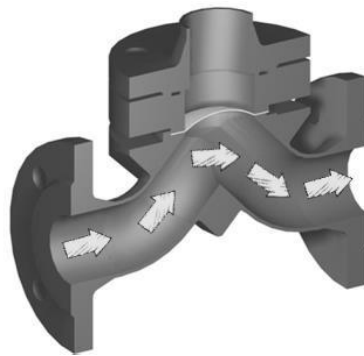
Size		ASSEMBLY HEIGHT <sup>(1)(2)</sup>			Max Gauge Tap
		FLANGE RATING (ANSI)	GI INSERT TYPE		
In	DN			In	mm
6	150	300	2.56	65	½"
		600	3.06	77.7	
		900	3.5	88.9	
8	200	300	2.69	68.3	½"
		600	3.81	96.8	
		900	4.31	109.5	
10	250	300	3.06	77.7	½"
		600	4.31	109.5	
		900	4.69	119.1	
12	300	300	3.31	84.1	½"
		600	4.44	112.8	
		900	5.44	138.2	
14	350	300	3.56	90.4	½"
		600	4.69	119.1	
16	400	300	3.81	96.8	½"
		600	5.19	131.8	
18	450	300	4.06	103.1	½"
		600	5.56	141.2	
20	500	300	4.31	109.5	½"
		600	6.06	153.9	
24	600	300	4.69	119.1	½"
		600	7.06	179.3	

- (1) Assembly height does not include rupture disc.
- (2) High yield strength materials are recommended for higher flange ratings due to additional loads.

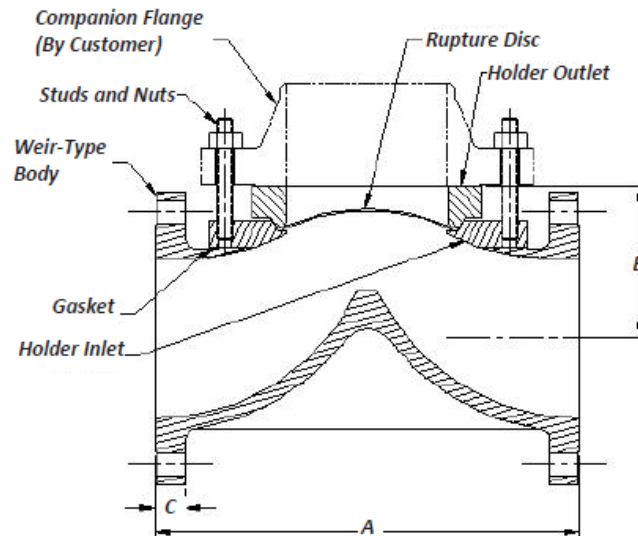
**HOLDER DIMENSIONS – VISCOUS TEE** <sup>(1)(2)(3)(4)(5)</sup>

Size		A		B (APPROX.)		C	
In	DN	In	mm	In	mm	In	mm
2	DN50	7.50	190.5	3.13	79.4	0.75	19.1
3	DN80	10.00	254.0	3.88	98.6	0.94	24.0
4	DN100	12.50	317.5	4.25	108.0	0.94	24.0
6	DN150	16.00	406.4	5.75	146.1	1.00	25.4

- (1) For 150 ANSI Viscous Tee assemblies.
- (2) Companion flange bolt pattern is not 150 ANSI standard on 2" / DN50 and 6" / DN150 sizes.
- (3) Reference Figure 2 for dimensions call-outs.
- (4) Dimension B, Figure 2, depends on companion flange configuration.
- (5) Flange ratings available through ASME 2600.



**Figure 1**



**Figure 2**