

HIGH PRESSURE APPLICATIONS TYPE SCRD-FSR

DESCRIPTION

Extremely versatile and adaptable to a large variety of conditions, the SCRD-FSR bursting disc is the high pressure solution in either liquid or vapour 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 burst pressures.

The SCRD-FSR bursting disc is well suited for minimising leakage and corrosion in pressure relief valves, isolating them from process contaminants.

FEATURES AND BENEFITS

- Can be used in liquid or vapour applications
- Can be operated as high as 95% of its rated burst pressure
- Withstands full vacuum in all pressure ratings
- Can be manufactured to be non-fragmenting (specify when ordering)
- Ideal for pressure relief valve isolation when non-fragmenting
- Available in a wide range of materials
- Fail-safe / damage ratio ≤ 1



APPROVALS:

- CE
- UD



SPECIFICATIONS

Type of Disc	SCRD-FSR				
Action	Forward-Acting Scored				
Sizes ¹	DN15 – DN600 / ½" – 24"				
Disc Material	1.4404 / 1.4404 (316 / 316L SST)	Inconel 600	Monel 400	Nickel 200 / 201	Hastelloy C276
Max. Operating Temperature	482°C	593°C	482°C	427°C	482°C
Protective Coating	No				
Ratio of Operating Pressure to Minimum Burst Pressure	95%				
Cycling Duty	MC				
Pulsating Duty (light)	MC				
Pulsating Duty (heavy)	MC				
Full or Partial Vacuum	R	R	R	R	R
Polymerisation Processes	NR	NR	NR	NR	NR
Hydraulic Service	R	R	R	R	R
Non-Fragmenting ²	R	R	R	R	R
Seat Configuration	FSR				
Use in Flanged Holders – Type BT ²	Yes				
Use in Union Type Holders – Type UT	NR	NR	NR	NR	NR
Use in Screw Type Holders – Type ST	NR	NR	NR	NR	NR

R = RECOMMENDED MC = MARGINAL CONDITIONS NR = NOT RECOMMENDED

(1) For other sizes, consult factory.

(2) Specify when ordering.

ACCESSORIES AND HOLDERS

The SCRD-FSR bursting disc is mounted in a unique FSR insert style holder that fits between standard flanges. Carbon steel, 316/316L SST (1.4401 / 1.4404) and other materials with serrated, RTJ, tongue and groove, and other flange facings are available.

BURST PRESSURES IN BARG AT 22°C ¹

Size	DN	25	40	50	80	100	150	200	250	300	350	400	450	500	600
	ANSI	1	1.5	2	3	4	6	8	10	12	14	16	18	20	24
Minimum Burst Pressure	1.4401 / 1.4404 (316 / 316L SST) 482°C	155.1	124.1	110.3	89.6	75.8	34.5	31.0	27.6	24.1	20.7	17.2	13.8	10.3	7.9
	Inconel 600 593°C	155.1	124.1	110.3	89.6	75.8	34.5	31.0	27.6	24.1	20.7	17.2	13.8	10.3	7.6
	Monel 400 482°C	155.1	124.1	110.3	89.6	75.8	34.5	31.0	27.6	24.1	20.7	17.2	13.8	10.3	6.9
	Nickel 200 / 201 427°C	155.1	124.1	110.3	89.6	75.8	34.5	31.0	27.6	24.1	20.7	17.2	13.8	10.3	6.9
	Hastelloy C276 482°C	155.1	124.1	110.3	89.6	75.8	34.5	-	-	-	-	-	-	-	-
Maximum Burst Pressure	Non-Fragmenting ¹	241.3	189.6	155.1	120.7	89.6	69.0	51.7	41.4	34.5	27.6	24.1	20.7	17.2	10.3
	Maximum	413.7	413.7	413.7	413.7	413.7	413.7	413.7	102.0	69.0	66.9	55.2	48.3	41.4	37.2

(1) Consult Fike for higher burst pressures without fragmentation.

PERFORMANCE TOLERANCES ¹

Performance Tolerance at 22°C
stand. $\pm 10\%$ / red. $\pm 5\%$







(1) Consult Fike for possibility to reduce tolerances.

Performance tolerance as specified by ISO/EN is a total tolerance which includes both manufacturing and bursting tolerance.

As per ISO/EN the bursting discs can be marked with:

- Specified burst pressure with a performance tolerance (in % or a value)
E.g.: 10 barg at 22°C $\pm 10\%$ (± 1 barg).
- Maximum and minimum burst pressure.
E.g.: Max 11 barg at 22°C - min 9 barg at 22°C

On request bursting discs can be marked as per ASME code section VIII with the average burst test result and the bursting tolerance of $\pm 5\%$ for burst pressures ≥ 2.76 barg. (0.15 barg for burst pressures < 2.76 barg).

Performance Attributes			Process Media		Bursting Disc Holders
Operating Ratio	Non-fragmenting	Vacuum Resistance	Liquid	Vapour / Gas	Bolted Type
					
95%	Yes	Yes	Yes	Yes	Yes