



DATA SHEET

REVERSE ACTING SCORED TYPE SRX



DESCRIPTION

The Fike SRX bursting discs are reverse-acting, compression-loaded, and scored with an X-pattern to facilitate opening without knifeblades. The concept of 'reverse-acting' means that the disc is installed with the crown in the direction of the process side. Once reversal pressure is achieved, the crown of the disc is reversed from the inlet side of the assembly to the outlet side. The pre-weakened scoreline facilitates the full opening of the disc.

Due to the high flow coefficient, the high operating ratio of 95%, and the backpressure resistance, the SRX bursting discs are mainly used for relief valve isolation.

The SRX bursting discs are available in a wide range of materials and can isolate the relief valve from the corrosive action of the process, so that the valve can be constructed from less expensive materials.

FEATURES AND BENEFITS

- Fugitive emission reduction
- Reduced torque sensitivity
- Extended service life
- High operating ratio
- Non-fragmenting
- Safety ratio
- DiscLoc™ locator
- Three-dimensional tag
- The SRX will withstand full vacuum, or back pressure service in magnitudes equivalent to the stamped burst pressure



APPROVALS:

- CE
- UD



SPECIFICATIONS

Type of Disc	SRX				
Action	Reverse-Acting Scored				
Sizes ¹	DN25 – DN600 / 1" – 24"				
Disc Material ²	14401 / 1.4404 (316 / 316L SST)	Nickel 200 / 201	Monel® 400	Inconel® 600	Hastelloy® C276
Max. Operating Temperature	482°C	427°C	482°C	593°C	482°C
Protective Coating / Lining ^{3,4}	Yes				
Ratio of Operating Pressure to Minimum Burst Pressure	95%				
Cycling Duty	S	S	S	S	S
Pulsating Duty (light)	S	S	S	S	S
Pulsating Duty (heavy)	S	S	S	S	S
Full or Partial Vacuum	R	R	R	R	R
Polymerisation Processes	NR	NR	NR	NR	NR
Hydraulic Service ⁵	R	R	R	R	R
Non-Fragmenting	R	R	R	R	R
Seat Configuration	SRX Flat				
O-ring Seal for Reduced Fugitive Emission	Viton (optional)				
Use in Flanged Holders – Type BT	Yes				
Use in Union Type Holders – Type UT	No				
Use in Screw Type Holders – Type ST	No				

S = SUPERIOR R = RECOMMENDED NR = NOT RECOMMENDED

(1) Consult Fike for discs larger than DN30 (12").

(2) Consult Fike for other materials.

(3) Maximum temperature for various coatings: Urethane Acrylic 65°C, Urethane 120°C and Fluoropolymer 230°C.

(4) Tantalum liner (process side) available on 1.4401 (316 SST), Nickel and Inconel seal.

(5) Reverse acting bursting discs always need a minimum free vapour volume to assure proper and complete opening (consult table below for minimum values) and should not be used on 100% hydraulic service.



BURST PRESSURES IN BARG AT 22°C

Material		1.4401 / 1.4404 (316 / 316L SST)		Nickel 200 / 201		Monel® 400		Inconel® 600		Hastelloy® C276		Minimum Vessel Free Vapour Volume (in dm ³)
Size		482°C		427°C		482°C		593°C		482°C		
DN	Inch	Min BP	Max BP	Min BP	Max BP	Min BP	Max BP	Min BP	Max BP	Min BP	Max BP	
25	1	18.96	56.54	5.86	56.54	7.58	56.54	7.58	56.54	22.06	56.54	0.22
40	1.5	18.96	56.54	5.86	56.54	7.58	56.54	7.58	56.54	22.06	56.54	0.22
50	2	15.86	56.54	5.17	56.54	6.21	56.54	6.21	56.54	18.27	56.54	0.46
80	3	11.38	49.64	4.14	49.64	4.83	49.64	4.83	49.64	13.79	49.64	1.49
100	4	8.96	49.64	3.44	49.64	4.14	49.64	4.14	49.64	11.03	49.64	3.36
150	6	6.21	43.44	2.76	43.44	3.10	43.44	3.10	43.44	7.93	43.44	11.5
200	8	6.21	34.47	2.41	34.47	2.76	34.47	2.76	34.47	7.93	34.47	26.2
250	10	5.52	24.13	2.07	24.13	2.41	24.13	2.41	24.13	7.03	24.13	51.5
300	12	4.83	17.24	1.86	17.24	2.07	17.24	2.07	17.24	6.14	17.24	88.9
350	14	3.86	11.38	1.86	11.38	2.07	11.38	2.07	11.38	CF	CF	120
400	16	2.48	10.34	1.72	10.34	1.93	10.34	2.07	10.34	CF	CF	180
450	18	2.34	9.31	1.72	9.31	1.93	9.31	2.07	9.31	CF	CF	260
500	20	2.21	8.27	1.38	8.27	1.86	8.27	2.07	8.27	CF	CF	370
600	24	2.07	8.27	1.38	8.27	1.86	8.27	2.07	8.27	CF	CF	650

CF = CONSULT FACTORY

PERFORMANCE TOLERANCES ¹

Burst Pressure in barg at 22°C	Performance Tolerance at 22°C
1.5 < burst pressure < 2.76	stand. ± 10% / red. ± 0.15 barg
≥ 2.76	stand. ± 10% / red. ± 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 ± 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 ± 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	Pulsating / Cycling	Liquid	Polymerisation	Vapour / Gas	Bolted Type	Pretorqueable
95%	Yes	Yes	Yes	Yes ¹	No	Yes	Yes	Yes

(1) Minimum vapour volume required (see table)