

MRK RUPTURE DISC

DESCRIPTION

The Fike MRK (Modified Reverse-acting Knifeblade) rupture disc has a low pressure opening characteristics and is recommended for gas or vapor service only. The special design of the MRK and the swept knife design of the MRK flange assembly is an option for applications where low burst pressures / high back pressure are encountered.

FEATURES AND BENEFITS

- 90% operating ratio for high cyclical performance
- Non-fragmenting
- Will withstand full vacuum without the aid of vacuum support
- Low burst pressures

ACCESSORIES AND HOLDERS

The MRK Rupture Disc is specifically designed to be used with the Fike MRK holder. Please see Data Sheet R.1.29.01.

OPTIONS

- Teflon or Polyurethane coating on process side only
- Burst Indication - BurstCheck, BurstCheck Plus, BC2. For more information, please see Data Sheet R.1.02.01



MRK Rupture Disc

APPROVALS:

- ASME
- CE Marked



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

Size	IN	1	1.5	2	3	4	6	8	10	12	14	16	18	20	24
	DN	25	40	50	80	100	150	200	250	300	350	400	450	500	600
Min. Burst Pressure PSIG (BARG)	316/316L SST, Inconel 600®, Monel 400®, Nickel 200/201, Hastelloy® C276	60 (4.14)	35 (2.41)	28 (1.93)	25 (1.72)	20 (1.38)	15 (1.03)	12 (0.83)	10 (0.69)	7 (0.48)	7 (0.48)	6 (0.41)	5 (0.34)	5 (0.34)	4 (0.28)
Max. Burst Pressure PSIG (BARG)		720 (49.64)	720 (49.64)	720 (49.64)	720 (49.64)	720 (49.64)	720 (49.64)	50 (3.45)	45 (3.10)	40 (2.76)	35 (2.41)	30 (2.07)	25 (1.72)	20 (1.38)	10 (.69)
Minimum Free Vapor Volume	Cubic Feet	.4	.4	.4	1	1.7	4	6.8	10.6	15	20.7	27	34	42	61
	Cubic Meters	.01	.01	.01	.03	.05	.11	.19	.30	.43	.59	.76	.97	1.20	1.72

- Consult Fike for sizes larger than 24 IN (DN600)
- Consult Fike for lower burst pressures with partial opening

MANUFACTURING RANGES

Specified Rupture Pressure		Manufacturing Range % @ 72°F (22°C)
PSIG @ 72°F	BARG @ 22°C	
< 4	< .276	Zero
4 to 6.99	.3 to .4	+40 to -20
7 to 10.99	.5 to .7	+30 to -15
11 to 15.99	.8 to 1.0	+20 to -10
16 to 25.99	1.1 to 1.7	+16 to -8
26 to 45.99	1.8 to 3.1	+14 to -7
46 to 90.99	3.2 to 6.2	+12 to -6
91 to 270.99	6.3 to 18.6	+10 to -5
271 to 500.99	18.7 to 34.5	+8 to -4
501 up	34.6 up	+6 to -3








RUPTURE TOLERANCE*

Specified Rupture Pressure		Manufacturing Range % @ 72°F (22°C)
PSIG @ 72°F	BARG @ 22°C	
< 5	< .345	±1 PSIG/.07 BARG
5 to 14.99	.345 to 1.034	±1.5 PSIG/.103 BARG
15 to 40	1.034 to 2.758	±2 PSIG/.14 BARG
Above 40	Above 2.758	±5%

* Consult Fike for disc with less than standard manufacturing range or rupture tolerance.

HOW TO SPECIFY

Previous Lot Number:	
OR	
Size:	
Material:	
Burst Pressure:	@ (Temperature)
Manufacturing Range:	Std: Other:
Coating:	
Certifications:	ASME CE

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

* Minimum vapor volume required, see table.