

Burst Tolerances for STD Rupture Discs

Marked Rupture Pressure @ 72° F	Burst Tolerance
3 - 40	± 2 PSIG
over 40	± 5 %

Angular Seat STD Rupture Disc Vacuum Support Requirements

Disk Material	Full Vacuum	2/3-Vacuum	1/2-Vacuum
Nickel-200/201	1200 psig	975 psig	725 psig
Inconel-600	1200 psig	975 psig	725 psig
Monel-400	1200 psig	975 psig	725 psig
Hastelloy C-276	1200 psig	975 psig	725 psig
316 Stainless Steel	1200 psig	975 psig	725 psig
Aluminum	450 psig	360 psig	270 psig

If the burst pressure of a rupture disc at operating temperature is below these minimum pressures, a vacuum support is required. For back pressures greater than 14.7 psi and other disc metals, consult factory.

Standard Manufacturing Ranges For STD Rupture Discs

Specified Rupture Pressure		Manufacturing Range %
PSIG @ 72° F	BARG @ 22° C	
3 - 6	0.21 - 0.41	+40 to -20
7 - 10	0.48 - 0.69	+30 to -15
11 - 15	0.76 - 1.0	+20 to -10
16 - 25	1.1 - 1.7	+16 to -8
26 - 45	1.8 - 3.1	+14 to -7
46 - 90	3.2 - 6.2	+12 to -6
91 - 270	6.3 - 18.6	+10 to -5
271 - 500	18.7 - 34.5	+8 to -4
501 - Up	34.5 - Up	+6 to -3

Free Flow Area/Minimum Net Flow Area (MNFA)

Disk Size In.	Net Flow Area Sq. In.
0.25	0.049
0.5	0.19
0.75	0.44
1	0.6
1.5	1.48
2	2.85
3	5.41
4	10.3
6	22.6
8	45.6
10	72.7
12	101
14	135
16	176
18	230
20	279
24	415