



RA6 Series

Reverse-Acting Metal Rupture Disks

The RA Series of rupture disks are complementary designs to cover the majority of rupture disk applications and are designed to be used in the RAH type holder.



Features

- Designed for Non-fragmentation
- Scoreless design offers higher cycle life when compared to scored reverse acting disks
- Standard operating ratio of 90% of the marked rating on disk tag. May be extended to 95% of the minimum burst pressure. (Contact ZOOK for operating ratio on pressures below 40 psig)
- Certified for liquid, gas, or two-phase applications
- Standard manufacturing ranges of 0%, -5%, and -10% ensures marked rating on disk tag does not exceed the MAWP of equipment
- Withstands full vacuum without vacuum support
- Wide range of standard and exotic materials available
- Withstands back pressure up to the positive set pressure of the disk
- Sizes from 1" (25mm) through 24" (600mm)
- Burst ratings from 12 psi (0.83 barg) to 200 psig (13.97 barg)
- Resists product build-up. The smooth convex side of the disk is exposed to the process media
- Damage ratio of 1.0 or less
- Unique alignment pin design ensures proper disk orientation into RAH holder
- 3-dimensional stainless steel tag permanently engraved with complete disk specifications
- ASME UD, CE, and TUV compliance available

Safety Relief Valve Protection

When a disk is mounted under a Safety Relief Valve, the working components of the valve are isolated from hostile environments.

Option Liners

TFE liners are available to provide protection from corrosive media.

Note that the maximum temperature ratings for disks supplied with liners is lower than an unlined disk.

RA6 Series Minimum and Maximum Pressure Ratings – psig (barg) @ 72°F (22°C)

Disk Size	With Liner (RA6-L)	Minimum Burst Pressures – psig @ 72°F (barg @ 22°C)								Maximum Burst Pressure		MNFA in ² (cm ²)
		316SS		Inconel		Monel		Nickel		Liquid	Gas	
		Liquid	Gas	Liquid	Gas	Liquid	Gas	Liquid	Gas			
1"	34	26	26	26	26	26	26	26	26	200	144	0.86
25 mm	(2.34)	(1.79)	(1.79)	(1.79)	(1.79)	(1.79)	(1.79)	(1.79)	(1.79)	(13.79)	(9.93)	(5.5)
1-1/2"	20	22	22	20	20	20	20	20	20	167	120	2.00
40 mm	(1.38)	(1.52)	(1.52)	(1.38)	(1.38)	(1.38)	(1.38)	(1.38)	(1.38)	(11.52)	(8.28)	(12.90)
2"	18	20	20	18	18	18	18	18	18	118	100	3.36
50 mm	(1.24)	(1.38)	(1.38)	(1.24)	(1.24)	(1.24)	(1.24)	(1.24)	(1.24)	(8.14)	(6.9)	(21.70)
3"	16	18	18	16	16	16	16	16	16	68	65	7.25
80 mm	(1.1)	(1.24)	(1.24)	(1.1)	(1.1)	(1.1)	(1.1)	(1.1)	(1.1)	(4.69)	(4.48)	(46.80)
4"	14	16	16	14	14	14	14	14	14	69	55	12.53
100 mm	(0.97)	(1.1)	(1.1)	(0.97)	(0.97)	(0.97)	(0.97)	(0.97)	(0.97)	(4.76)	(3.79)	(80.80)
6"	12	14	14	12	12	12	12	12	12	67	45	26.59
150 mm	(0.83)	(0.97)	(0.97)	(0.83)	(0.83)	(0.83)	(0.83)	(0.83)	(0.83)	(4.62)	(3.1)	(171.50)
8"	12	12	12	12	12	12	12	12	12	54	35	45.48
200 mm	(0.83)	(15.24)	(0.83)	(0.83)	(0.83)	(0.83)	(0.83)	(0.83)	(0.83)	(3.72)	(2.41)	(293.40)
10"	12	12	12	12	12	12	12	12	12	46	30	70.52
250 mm	(0.83)	(0.83)	(0.83)	(0.83)	(0.83)	(0.83)	(0.83)	(0.83)	(0.83)	(3.17)	(2.07)	(455.00)
12"	12	12	12	12	12	12	12	12	12	38	26	98.33
300 mm	(0.83)	(0.83)	(0.83)	(0.83)	(0.83)	(0.83)	(0.83)	(0.83)	(0.83)	(2.62)	(1.79)	(634.40)
Max. Temp.	500°F (260°C)	900°F (482°C)		900°F (482°C)		900°F (482°C)		750°F (399°C)				

NOTE: For materials, sizes, burst ratings and temperatures not shown, contact ZOOK

Manufacturing Range / Burst Tolerance psig (barg) @ 72°F (22°C)

Specified Burst Pressure Rating	Manufacturing Ranges	Burst Tolerance
1 to below 5 (0.07 to below 0.34)	0%, -5%, -10%	+/-0.50 (+/-0.03)
5 to below 10 (0.34 to below 0.69)		+/-0.80 (+/-0.06)
10 to below 15 (0.69 to below 1.03)		+/-1.30 (+/-0.09)
15 to 40 (1.03 to 2.76)		+/-2.00 (+/-0.14)
Above 40 (Above 2.76)		+/-5% (+/-5%)

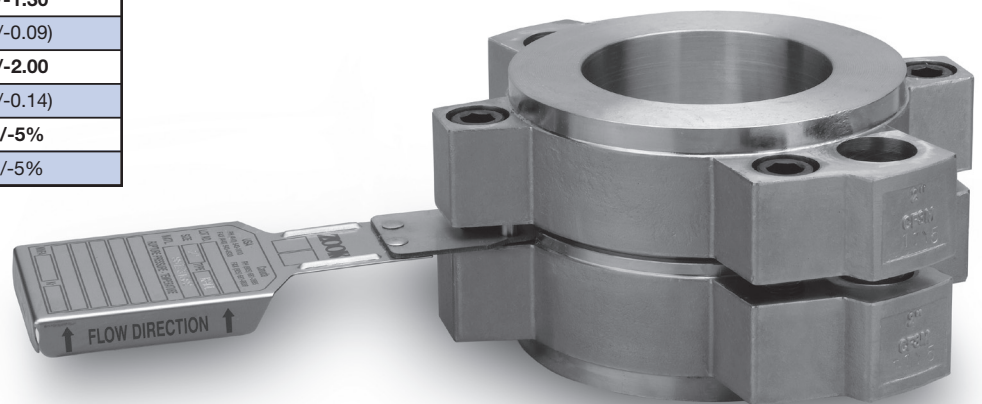
Notes:

- 0% manufacturing range might not be available in all materials
- Burst tolerances are the maximum expected variation from the disk's marked burst pressure

Certified Flow Resistance factors

Disk Type	K _{rl} (Liquid)	K _{rg} (Gas)
RA6 Series	0.98	0.80

RA6 Series Disk mounts into RAH Series Disk Holder (refer to ZOOK product bulletin 475100)



Monel – TM Huntington Alloys
Inconel – TM International Nickel



ZOOK Enterprises, LLC
16809 Park Circle Drive
Chagrin Falls, OH 44022 U.S.A.
Toll Free **800.543.1043**
Phone **440.543.1010**
Fax **440.543.4930**
E-mail **sales@zook.cc**

ZOOK Canada, Inc.
4400 South Service Road
Burlington, ON Can. L7L 5R8
Toll Free **800.370.6057**
Phone **905.681.2885**
Fax **905.681.8838**
E-mail **sales.canada@zook.cc**

ZOOK Europe, LTD.
Navigation House, Bridge Street
Killamarsh, Sheffield UK. S21 1AL
Phone **0044 (0) 1909 560999**
Fax **0044 (0) 1909 560860**
E-mail **zookeurope@zook.cc**

visit us on the web at www.zook.cc