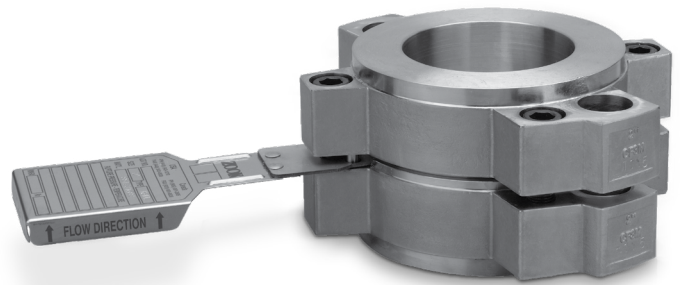


The RA Series of rupture disks are complementary designs to cover the majority of rupture disk applications and are designed to be used in the RAH Series disk holder.

### Features

- Designed for Non-fragmentation
- Operating ratios up to 95% of the low end of burst tolerance
- Disk design offers high cycle life
- Suitable for liquid, gas, or two-phase applications
- Standard manufacturing design range and total tolerance 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" (25 mm) through 12" (300 mm)
- Burst ratings from 26 psig (1.79 barg) to 1000 psig (68.97 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 Series disk holder
- 3-dimensional stainless steel tag permanently engraved with complete disk specifications
- ASME UD, CE (PED), and TÜV compliance available

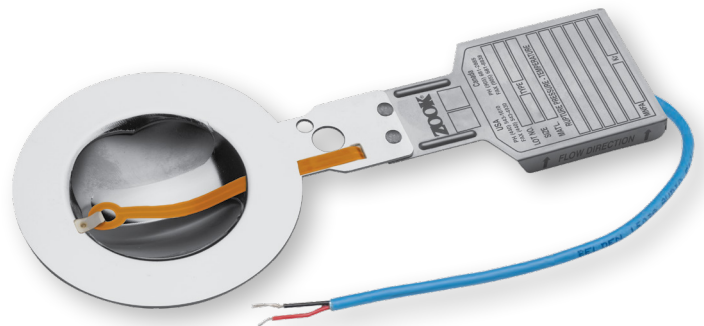


RA8 Series disk mounts into RAH Series disk holder (refer to RAH Series data sheet)

### Options

- RA8-L\*** A process side PFA Teflon liner provides protection from corrosive media
- RA8-BI\*** Equipped with ZOOK's Integral Burst Indicator
- RA8+** Factory tested to 100% of the low end of the tolerance to insure no disks will burst low

\*Note: The maximum temperature rating of rupture disks supplied with liners and BI's is lower than the base disk material



### 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.

# RA8 Series Specifications

## Minimum and Maximum Pressure Ratings - psig (barg) @ 72°F (22°C)

Disk Size	Minimum Burst Pressure										Maximum Burst Pressure		MNFA in <sup>2</sup> (mm <sup>2</sup> )		
	316		Inconel 600		Monel 400		Nickel 200/201		Hastelloy C276		RA8-L	RA8-BI			
	Liquid	Gas	Liquid	Gas	Liquid	Gas	Liquid	Gas	Liquid	Gas				Liquid	Gas
1"	200	144	200	144	200	144	200	144	200	144	Same as minimum material	Same as minimum material	1000	720	0.86
25 mm	13.790	9.929	13.790	9.929	13.790	9.929	13.790	9.929	13.790	9.929			68.947	49.642	554
1-1/2"	167	120	167	120	167	120	167	120	167	120			1000	720	2.00
40 mm	11.514	8.274	11.514	8.274	11.514	8.274	11.514	8.274	11.514	8.274			68.947	49.642	1,290
2"	118	100	118	100	118	100	118	100	118	100			850	720	3.36
50 mm	8.136	6.895	8.136	6.895	8.136	6.895	8.136	6.895	8.136	6.895			58.605	49.642	2,167
2-1/2"	92	83	92	83	92	83	92	83	92	83			640	450	4.79
65 mm	6.344	5.723	6.344	5.723	6.344	5.723	6.344	5.723	6.344	5.723			44.126	31.026	3,090
3"	68	65	68	65	68	65	68	65	68	65			425	285	7.25
80 mm	4.689	4.482	4.689	4.482	4.689	4.482	4.689	4.482	4.689	4.482			29.302	19.650	4,677
4"	69	55	69	55	69	55	69	55	69	55			425	285	12.53
100 mm	4.758	3.793	4.758	3.793	4.758	3.793	4.758	3.793	4.758	3.793			29.302	19.650	8,083
6"	67	45	67	45	67	45	67	45	67	45			350	225	26.59
150 mm	4.620	3.103	4.620	3.103	4.620	3.103	4.620	3.103	4.620	3.103			24.131	15.513	17,154
8" **	54	35	54	35	54	35	54	35	54	35			300	180	45.48
200 mm **	3.724	2.414	3.724	2.414	3.724	2.414	3.724	2.414	3.724	2.414			20.684	12.410	29,341
10" **	46	30	46	30	46	30	46	30	46	30			150	100	70.52
250 mm **	3.172	2.069	3.172	2.069	3.172	2.069	3.172	2.069	3.172	2.069			10.342	6.894	45,496
12" **	38	26	38	26	38	26	38	26	38	26			110	75	98.33
300 mm **	2.621	1.793	2.621	1.793	2.621	1.793	2.621	1.793	2.621	1.793			7.584	5.171	63,438
Max. Temp.	900°F (482°C)		900°F (482°C)*		800°F (427°C)		750°F (399°C)		900°F (482°C)		500°F (260°C)	400°F (204°C)			

Notes: For materials, sizes, burst ratings and temperatures not shown, contact ZOOK  
 \* Contact ZOOK for higher temperatures  
 \*\* Process media fluid state (Liquid or Gas) is required on 8" and larger RA8 disks

## Manufacturing Design Range & Total Performance Tolerance

ASME						PED				
Burst Pressure (psig)		Manufacturing Design Range			Burst Tolerance	Burst Pressure (barg)		Total Performance Tolerance		
Minimum	Maximum	Good	Better	Best		Minimum	Maximum	Good	Better	Best
1.0	<2.5	-10%	-5%	-0%	±0.33 psig	0.069	<0.172	±50%	-	±0.023 barg
2.5	<5.0	-10%	-5%	-0%	±0.5 psig	0.172	<0.345	±30%	±25%	±0.035 barg
5.0	<7.0	-10%	-5%	-0%	±0.5 psig	0.345	<0.483	±20%	±17.5%	±0.035 barg
7.0	<11.0	-10%	-5%	-0%	±0.8 psig	0.483	<0.759	±20%	±15%	±0.055 barg
11.0	<15	-10%	-5%	-0%	±1.3 psig	0.759	<1.034	±20%	±15%	±0.090 barg
15.0	<26	-10%	-5%	-0%	±2.0 psig	1.034	<1.793	±20%	±15%	±0.138 barg
26.0	<40	-10%	-5%	-0%	±2.0 psig	1.793	<2.758	±15%	±12.5%	±0.138 barg
40.0	Max	-10%	-5%	-0%	±5%	2.758	Max	±10%	±7.5%	±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

Krl (Liquid)	Krg (Gas)
1.16	0.59

Teflon - Trademark of The Chemours Company  
 Inconel - Trademark of Special Metals Corporation  
 Monel - Trademark of Special Metals Corporation  
 Hastelloy - Trademark of Haynes International



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**SERVING AMERICA, CENTRAL & SOUTH AMERICA**  
 16809 Park Circle Drive  
 Chagrin Falls, Ohio 44022  
 United States  
 Toll Free: +1 800 543 1043  
 Phone: +1 440 543 1010  
 E-mail: [sales@zookdisk.com](mailto:sales@zookdisk.com)

**SERVING EUROPE, MIDDLE EAST & AFRICA**  
 Navigation House, Bridge St.  
 Killamarsh, Sheffield, S21 1AL  
 United Kingdom  
 Phone: +44 (0) 1909 560999  
 E-mail: [sales.europe@zookdisk.com](mailto:sales.europe@zookdisk.com)

**SERVING CANADA**  
 4400 South Service Road  
 Burlington, Ontario, L7L 5R8  
 Canada  
 Toll Free: +1 800 370 6057  
 Phone: +1 905 681 2885  
 E-mail: [sales.canada@zookdisk.com](mailto:sales.canada@zookdisk.com)

**SERVING ASIA PACIFIC**  
 Menara LGB TTDI  
 Unit 6-3A, Level 6, Menara LGB,  
 No. 1, Jalan Wan Kadir,  
 Taman Tun Dr. Ismail,  
 60000 Kuala Lumpur, Malaysia  
 Phone: +603 2706 0098  
 E-mail: [sales.asia@zookdisk.com](mailto:sales.asia@zookdisk.com)