



SRA Series Cross-Scored Reverse-Acting Metal Rupture Disks

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 gas service only
- 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" (25mm) through 12" (300mm)
- Burst ratings from 27 psig (1.86 barg) to 1480 psig (102.04 barg)
- Resists product build-up. The smooth convex side of the disk is exposed to the process media
- Unique alignment pins design ensures proper disk orientation into SR7A Series disk holder
- 3-dimensional stainless steel tag permanently engraved with complete disk specifications
- ASME UD, CE (PED), and TÜV compliance available

Options

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

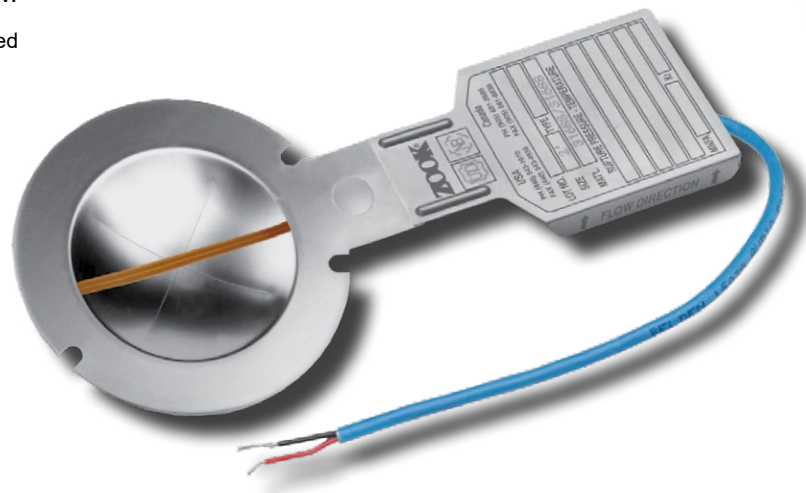
*Note: The maximum temperature rating of rupture disks supplied with liners and BI's is lower than the base disk material.

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.



**SRA Series disk mounts
into SR7A Series disk holder**



SRA Series Specifications

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

| Disk Size | Minimum Burst Pressure | | | | | | Maximum Burst Pressure | MNFA in ² (mm ²) | SR7A Holder (Overall Height) | |
|------------|---|----------------|---------------|---------------|----------------|--------------------------|--------------------------|---|------------------------------|---------|
| | 316 | Inconel | Monel | Nickel | Hastelloy C276 | SRA-L | | | | SRA-BI |
| | Gas Services Only - A gas pocket is required below disk for liquid applications - Contact ZOOK for additional information | | | | | | | | | |
| 1" | 221 | 141 | 122 | 92 | 221 | Same as minimum material | Same as minimum material | 1480 | 0.86 | 1-7/8 |
| 25 mm | 15.24 | 9.72 | 8.41 | 6.34 | 15.24 | | | 102.04 | 554 | 47.63 |
| 1-1/2" | 234 | 98 | 98 | 81 | 234 | | | 1480 | 2.04 | 1-7/8 |
| 40 mm | 16.14 | 6.76 | 6.76 | 5.59 | 16.14 | | | 102.04 | 1,316 | 47.63 |
| 2" | 188 | 83 | 83 | 60 | 188 | | | 1480 | 3.36 | 1-7/8 |
| 50 mm | 12.97 | 5.72 | 5.72 | 4.14 | 12.97 | | | 102.04 | 2,167 | 47.63 |
| 3" | 154 | 66 | 65 | 55 | 154 | | | 1480 | 7.39 | 2-1/4 |
| 80 mm | 10.62 | 4.55 | 4.48 | 3.79 | 10.62 | | | 102.04 | 4,767 | 57.15 |
| 4" | 122 | 54 | 55 | 48 | 122 | | | 1480 | 12.73 | 2-15/16 |
| 100 mm | 8.41 | 3.72 | 3.79 | 3.31 | 8.41 | | | 102.04 | 8,212 | 74.62 |
| 6" | 94 | 47 | 44 | 35 | 94 | | | 1480 | 28.89 | 3-5/8 |
| 150 mm | 6.48 | 3.24 | 3.03 | 2.41 | 6.48 | | | 102.04 | 18,638 | 92.08 |
| 8" | 42 | 44 | 41 | 33 | 42 | | | 700 | 50.03 | 3-1/4 |
| 200 mm | 2.89 | 3.03 | 2.83 | 2.28 | 2.89 | | | 48.28 | 32,277 | 107.95 |
| 10" | 36 | 40 | 39 | 30 | 36 | | | 700 | 78.85 | 4-1/8 |
| 250 mm | 2.48 | 2.76 | 2.69 | 2.07 | 2.48 | | | 48.28 | 50,870 | 104.78 |
| 12" | 33 | 37 | 36 | 27 | 33 | | | 600 | 112 | 4-5/8 |
| 300 mm | 2.28 | 2.55 | 2.48 | 1.86 | 2.28 | | | 41.38 | 72,257 | 117.48 |
| 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

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

| Krg (Gas) |
|-----------|
| 2.00 |

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



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Safety through knowledge and performance.