

## **URA Series**

## Universal Reverse-Acting Rupture Disks



... a breakthrough in the science of rupture disk technology

Unique holder ensures proper disk orientation



# to scored reverse-acting disks Low and high burst pressures available in a single design Excels in liquid or gas applications

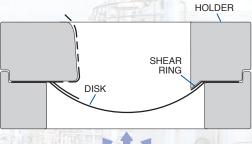
- 0% manufacturing range is standard
- Operates to 90% of the disk's rated burst pressure

Single disk design covers 95% of plant requirementsScoreless design offers higher cycle life when compared

Non-fragmenting design

**Features** 

- Withstands full vacuum without vacuum support
- Excellent for isolating safety relief valves
- Damage ratio of 1.0 or less
- Resists product buildup. Only the smooth convex side of the disk is exposed to the process medium
- Additional TFE corrosion protection available (specify URA-L)
- 3-dimensional stainless steel tag is standard
- ASME UD marking available





#### **PRESSURE**

The process pressure is applied to the convex side of the URA Disk placing the dome of the disk into compression. As the pressure rises past 90%, the dome becomes unstable eventually collapsing onto a shear ring that efficiently cuts the disk wide open upon reversal. The state-of-the-art shear ring allows the disk to function on both low pressure and liquid applications.

### URA Disk

Minimum and Maximum Pressures Ratings – **psig** (bar) @72°F (22°C) Temperature Specifications

	1										
Disk Size	Minimum URA-L with TFE Liner	Disk Material Burst Pressure Range									
		Nickel		Inconel		Monel		316SS		Hastelloy	
		min.	max.	min.	max.	min.	max.	min.	max.	min.	max.
1"	34	22	1000	22	1000	22	1000	24	1000	24	1000
25 mm	2.34	1.52	68.97	1.52	68.97	1.52	68.97	1.66	68.97	1.66	68.97
1-1/2"	20	20	900	20	1000	20	900	22	1000	22	1000
40 mm	1.38	1.38	62.07	1.38	68.97	1.38	62.07	1.52	68.97	1.52	68.97
2"	18	18	850	18	900	18	850	20	900	20	1000
50 mm	1.24	1.24	58.62	1.24	62.07	1.24	58.62	1.38	62.07	1.38	68.97
3"	16	16	750	16	900	16	750	18	900	18	1000
80 mm	1.10	1.10	51.72	1.10	62.07	1.10	51.72	1.24	62.07	1.24	68.97
4"	14	14	650	14	800	14	650	16	800	16	900
100 mm	0.97	0.97	44.83	0.97	55.17	0.97	44.83	1.10	55.17	1.10	62.07
6"	12	12	400	12	450	12	400	14	450	14	500
150 mm	0.83	0.83	27.59	0.83	31.03	0.83	27.59	0.97	31.03	0.97	34.48
8"	12	12	250	12	300	12	250	12	300	12	350
200 mm	0.83	0.83	17.24	0.83	20.69	0.83	17.24	0.83	20.69	0.83	24.14
Max. Temp.	500°F(260°C)	750°F (399°C)		900°F (482°C)		800°F (427°C)		900°F (482°C)		900°F (482°C)	

MONEL - TM Huntington Alloys INCONEL - TM International Nickel HASTELLOY - TM Cabot Corp.

## C)

#### Manufacturing Range Burst Tolerance @ 72°F (22°C)

Specified Burst Pressure psig (bar)	Available Manufacturing Ranges	Burst Tolerance
40 (2.76) and below	0%, -5%, -10%	± 2 psig (0.14)
Above 40 (2.76)	0%, -5%, -10%	± 5%

#### Notes:

- 0% manufacturing range is standard. Disk will be marked with specified rating
- Burst tolerances are the maximum expected variation from the disk's marked burst pressure

#### **General Notes:**

- Standard Shear Ring material is 316SS Other materials available
- Larger sizes and other materials are available Contact ZOOK

# **URA-I Series** *Disk Holder*

#### **Features**

- Insert type Rupture Disk Holder designed exclusively to be used with the URA Series Rupture Disk
- Non-torque sensitive flat seat design
- The URA-I Holder and Rupture Disk are assembled using safety designed side clips
- Standard materials of construction: 316SS and carbon steel. Other materials available upon request
- Permanently attached stainless steel nameplates are standard. Nameplates indicate flow direction and provide visual verification that holder assembly is properly oriented in the piping system
- Available options include: gauge tap; nipple and tee; excess flow valve; pressure gauge; J-hook; special facings and coatings



Holder Dimensions – Inches (mm)

Nominal	ASME B16.5 F							
Size	Class 150 O.D.	Class 300/600 ▲ O.D.	Height					
1"	2-1/2"	2-3/4"	1-1/2"					
25 mm	63.50	69.85	38.10					
1-1/2"	3-1/4"	3-5/8"	1-5/8"					
40 mm	82.55	92.08	41.28					
2"	4"	4-1/4"	1-3/4"					
50 mm	101.60	107.95	44.45					
3"	5-1/4"	5-3/4"	2-1/8"					
80 mm	133.35	146.05	53.98					
4"	6-3/4"	7"▲	2-7/8"					
100 mm	171.45	177.80	73.03					
6"	8-5/8"	9-3/4"▲	3-11/16"					
150 mm	150 mm 219.08		93.68					
8"	10-7/8"	12"▲	3-13/16"					
200 mm	276.23	304.80	96.85					

- Available to fit DIN and JIS flanges
- ▲ Contact ZOOK for flange class rating 600



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