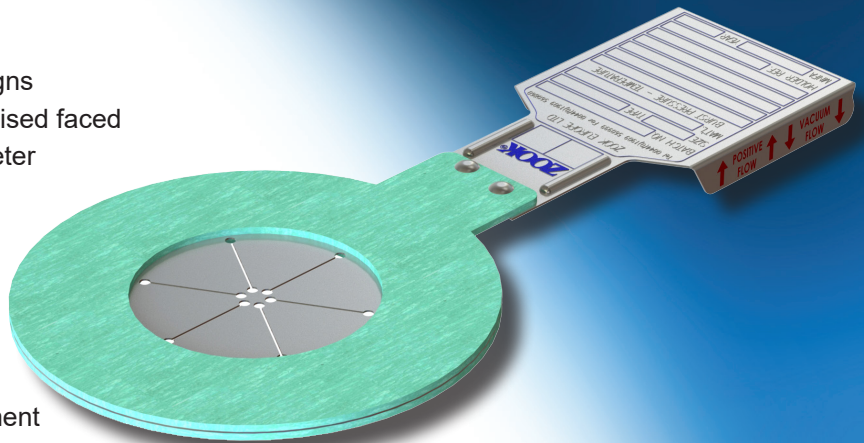




# ARD Series Flange Mounted Low Pressure Metal Rupture Disks

## Features

- State-of-the-art laser slotted metal section
- Available in uni-directional or bi-directional designs
- Mounts between standard ANSI, DIN and JIS raised faced flange bore, or equivalent with same bore diameter
- No disk holder required
- Standard materials of construction: 316 metal section(s), Teflon seal, Compressed fiber gaskets (Other materials available)
- Operating pressures to 50% of the disk's marked burst pressure
- Flange specific O.D. ensures proper disk alignment
- Sizes 1" (25 mm) thru 44" (1100 mm)
- Burst ratings 1 psig (0.07 barg) to 60 psig (4.14 barg)
- Temperature ratings to 500°F (260°C)
- 0% manufacturing range

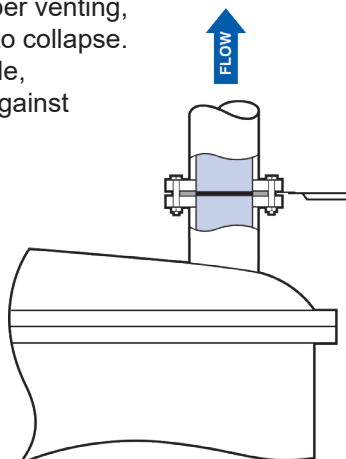


## Options

- Burst Indication
- Teflon Gaskets

### Storage Tank Protection

Storage tanks are made from relatively light gauge materials. This limits their ability to contain pressure and, if they are emptied without proper venting, makes them vulnerable to collapse. ARD Disks provide simple, inexpensive protection against either condition.

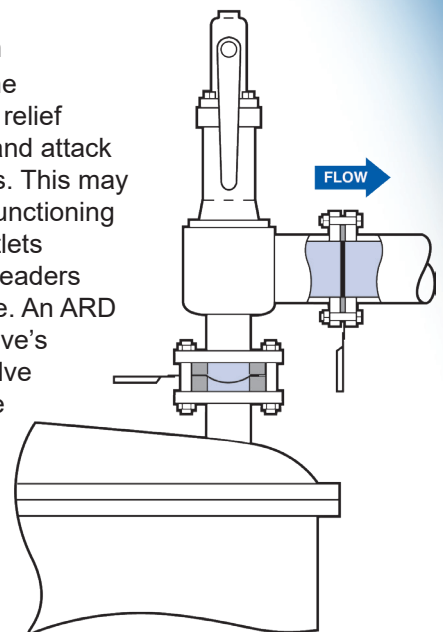


### CAUTION

Disk size should be at least equal to the size of the flow inlet or outlet connection (whichever is greater) to the tank. Maximum rupture pressure should be no greater than the design pressure or vacuum (whichever is smaller) of the tank. Minimum rupture pressure should be at least double the maximum working pressure or vacuum (whichever is greater) to which the tank will be exposed.

### Relief Valve Protection

Corrosive elements in the atmosphere can enter a relief valve through its outlet and attack the valve's working parts. This may prevent the valve from functioning properly. Valves with outlets connected to common headers are especially vulnerable. An ARD Disk mounted on the valve's outlet flange protects valve components from hostile environments. Consult ZOOK for guidance on applicable code issues related to this application.



### CAUTION

Disk size should be the same as the outlet flange of the valve. Maximum rupture pressure should be no greater than the set pressure of the valve. Minimum rupture pressure should be at least double the maximum working pressure in the header.



# ARD Series Specifications

## Disk Type Specifications

Disk Type	Materials of Construction	Function	Features	Nominal Thickness
ARD	Gasket/Seal/Cap/Seal/Gasket	Bi-Directional	Bursts at the specified pressure in both directions	1/8" (3.18 mm)
ARDL	Gasket/Cap/Seal/Gasket	Uni-Directional	Bursts at the specified pressure in one direction	
ARDS	Gasket/Cap/Seal/Cap/Gasket	Bi-Directional	Bursts at two different set pressures as specified	
ARDV*	Gasket/Cap/Seal/Support/Gasket	Uni-Directional	Bursts at the specified pressure in one direction, withstands full vacuum	

### Notes:

\*ARDV series disk has a non-opening vacuum support. Contact ZOOK for flow and free area specifications  
Standard gasket material is non-asbestos compressed fiber. Contact ZOOK for optional materials

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

Disk Size	ARDL, ARDS, ARDV	ARD	Maximum Burst Rating (all Types)
	Minimum Burst Rating	Minimum Burst Rating	
1"	10	20	60
25 mm	0.69	1.38	4.14
1-1/2"	6	10	60
40 mm	0.41	0.69	4.14
2"	6	7	60
50 mm	0.41	0.48	4.14
2-1/2"	5	6	60
65 mm	0.34	0.41	4.14
3"	4	5	60
80 mm	0.28	0.34	4.14
4"	3	4	60
100 mm	0.21	0.28	4.14
5"	2.5	3	60
125 mm	0.17	0.21	4.14
6"	2	2	60
150 mm	0.14	0.14	4.14
8"	1.5	1.6	60
200 mm	0.10	0.11	4.14
10"	1.25	1.25	60
250 mm	0.08	0.08	4.14
12"	1	1	60
300 mm	0.07	0.07	4.14
Max. Temp.	500°F (260°C)		

## Manufacturing Design Range & Total Performance Tolerance

Burst Pressure				Burst Tolerance	Total Performance Tolerance
Minimum		Maximum			
psig	barg	psig	barg	psig	barg
1.0	0.07	<2.5	0.17	±0.33	±0.023
2.5	0.17	<5.0	0.34	±0.5	±0.035
5.0	0.34	<7.0	0.48	±0.5	±0.035
7.0	0.48	<11.0	0.76	±0.8	±0.055
11.0	0.76	<15	1.03	±1.3	±0.090
15.0	1.03	<26	1.79	±2.0	±0.138
26.0	1.79	<40	2.76	±2.0	±0.138
40.0	2.76	Max		±5%	±5%

**Note:** Burst tolerances are the maximum expected variation from the disk's marked burst pressure

**Notes:** • See website for additional disk pressure ratings 14" (350 mm) - 44" (1100 mm)  
• Contact ZOOK if disk is to be mounted into other style flanges



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**Safety through knowledge and performance.**