

ARD Series

Flange Mounted Low Pressure

Metal Rupture Disks

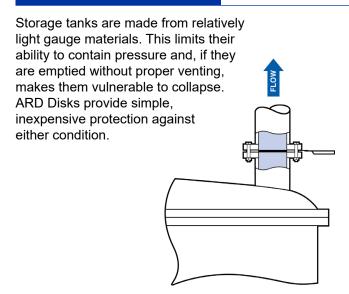
Features

- 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 48" (1200 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

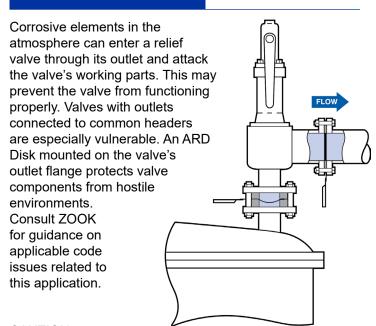
Storage Tank Protection



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



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	
ARD-L	Gasket/Cap/Seal/Gasket	Uni-Directional	Bursts at the specified pressure in one direction	1/8"
ARD-S	Gasket/Cap/Seal/Cap/Gasket	Bi-Directional	Bursts at two different set pressures as specified	(3.18 mm)
ARD-V*	Gasket/Cap/Seal/Support/Gasket	Uni-Directional	Bursts at the specified pressure in one direction, withstands full vacuum	

Notes: *ARD-V 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	ARD-L, ARD-S, ARD-V	ARD Minimum	Maximum Burst Rating (All Types)	
	Burst Rating	Burst Rating		
1"	10	20	60	
25 mm	0.690	1.379	4.136	
1-1/2"	6	10	60	
40 mm	0.414	0.690	4.136	
2"	6	7	60	
50 mm	0.414	0.483	4.136	
2-1/2"	5	6	60	
65 mm	0.345	0.414	4.136	
3"	4	5	60	
80 mm	0.276	0.345	4.136	
4"	3	4	60	
100 mm	0.207	0.276	4.136	
5"	2.5	3	60	
125 mm	0.173	0.207	4.136	
6"	2	2	60	
150 mm	0.138	0.138	4.136	
Max.Temp.	500°F (260°C)			

Disk Size	ARD-L, ARD-S, ARD-V	ARD	Maximum Burst Rating (All Types)	
	Minimum Burst Rating	Minimum Burst Rating		
8"	1.5	1.6	60	
200 mm	0.104	0.111	4.136	
10"	1.25	1.25	60	
250 mm	0.087	0.087	4.136	
12"	1	1	60	
300 mm	0.069	0.069	4.136	
14"	1	1	60	
350 mm	0.069	0.069	4.136	
16"	1	1	60	
400 mm	0.069	0.069	4.136	
18"	1	1	55	
450 mm	0.069	0.069	3.792	
20"	1	1	50	
500 mm	0.069	0.069	3.447	
24"	1	1	45	
600 mm	0.069	0.069	3.102	
Max.Temp.	500°F (260°C)			

Disk Size	ARD-L, ARD-S, ARD-V	ARD	Maximum Burst Rating (All Types)	
	Minimum Burst Rating	Minimum Burst Rating		
28"	1	1	40	
700 mm	0.069	0.069	2.757	
30"	1	1	35	
750 mm	0.069	0.069	2.413	
32"	1	1	35	
800 mm	0.069	0.069	2.413	
34"	1	1	30	
850 mm	0.069	0.069	2.068	
36"	1	1	25	
900 mm	0.069	0.069	1.723	
40"	1	1	20	
1000 mm	0.069	0.069	1.378	
44"	1	1	15	
1100 mm	0.069	0.069	1.034	
48"	1	1	15	
1200 mm	0.069	0.069	1.034	
Max.Temp.	500°F (260°C)			

Note: Contact ZOOK for sizes larger than 24" and or if disk is to be mounted into other style flanges

Manufacturing Design Range & Total Performance Tolerance

Burst Pressure				Burst	Total
Minimum		Maximum		Tolerance	Performance Tolerance
psig	barg	psig	barg	psig	barg
1.0	0.069	<2.5	<0.172	±0.33	±0.023
2.5	0.172	<5.0	<0.345	±0.5	±0.035
5.0	0.345	<7.0	<0.483	±0.5	±0.035
7.0	0.483	<11.0	<0.759	±0.8	±0.055
11.0	0.759	<15	<1.034	±1.3	±0.090
15.0	1.034	<26	<1.793	±2.0	±0.138
26.0	1.793	<40	<2.758	±2.0	±0.138
40.0	2.758	Max		±5%	±5%

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

Teflon - Trademark of The Chemours Company



ARD_082023

zookdisk.com

SERVING AMERICA, CENTRAL & SOUTH AMERICA

16809 Park Circle Drive Chagrin Falls, Ohio 44022 United States Toll Free: +1 800 543 1043

Toll Free: +1 800 543 1043 Phone: +1 440 543 1010 E-mail: 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

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

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