DATA SHEET

AD SERIES RUPTURE DISC – AD, AD-V

DESCRIPTION

The Fike AD Series Bolt Type Rupture Disc is specifically designed for overpressure and/or vacuum protection of atmospheric vessels. The AD-V Series Bolt Type Rupture Discs are designed for overpressure only. For sanitary applications, please see data sheet R.1.44.01 AD-H Series.

AD Rupture Disc

FEATURES AND BENEFITS

- Flat disc, no special holders required, installs directly between standard pipe flanges.
- Gaskets are pre-attached on both sides of rupture disc
- Standard materials of construction are 316 SST top and bottom sections with a fluoropolymer seal
- 50% operating ratio
- Low burst pressures available, 1 PSIG (70 MBARG) to 15 PSIG (1030 MBARG)
- Standard sizes available 2 IN (DN50) to 24 IN (DN600) in nominal pipe sizes. Larger sizes are available
- Maximum operating temperature is 500°F (260°C)
- Burst in either direction at same pressure (1:1 ratio) (AD Disc Only)
- AD-V (Vacuum) bursts in one direction and withstands full vacuum (Note: The 24” size will withstand full vacuum from 1-4.50 PSIG (70-310 MBARG). For pressures greater than 4.50 PSIG (310 MBARG) the AD-V will withstand 7 PSIG (480 MBARG) vacuum.
- Zero manufacturing range standard

APPROVALS:

- CE Marked
- CSL
- CSA
- UKCA

PRESSURE RELIEF VALVE APPLICATION

- AD discs can be used downstream of pressure relief valves to protect valve internals from corrosive atmospheres.

ACCESSORIES

- All AD series discs are available with an approved (CSA, IECEx, ATEX, and UKEX) integral burst indicator solution. Specify AD-BI
  - The AD-BI has an 18 IN lead wire with a weatherproof connector
  - Mating lead cables are available in 10 ft. (P/N D3513-115-10) and 25 ft. (P/N 3513-115-25) lengths

MINIMUM / MAXIMUM BURST PRESSURES

		AD, AD-V Discs			
		316/316L SST (1.4401/1.4404) PSIG (MBARG) @ 72°F (22°C)		**Relief Area** in² (cm²)	
IN	**DN**	**Min. BP**	**Max. BP**	**AD**	**AD-V**
2	50	7 (483)	15 (1034)	2.27 (14.60)	1.77 (11.40)
3	80	5 (345)	15 (1034)	5.73 (36.90)	4.52 (29.2)
4	100	4 (276)	15 (1034)	9.62 (62.10)	7.69 (49.6)
6	150	3 (207)	15 (1034)	24.6 (159)	20.59 (133)
8	200	2.5 (172)	15 (1034)	44.2 (285)	38.48 (248)
10	250	2 (138)	13 (896)	70.9 (457)	63.62 (410)
		13.01 (897)	15 (1034)		49.26 (318)
12	300	2 (138)	12 (827)	104 (670)	95.03 (613)
		12.01 (828)	15 (1034)		74.47 (480)
14	350	1.5 (103)	10 (689)	118 (760)	108.43 (700)
		10.01 (690)	15 (1034)		84.49 (545)
16	400	1.25 (86)	9 (620)	159 (1030)	125.90 (812)
		9.01 (621)	15 (1034)		110.96 (716)
18	450	1 (69)	8 (551)	207 (1340)	152.43 (983)
		8.01 (552)	15 (1034)		138.67 (895)
20	500	1 (69)	6 (413)	262 (1690)	181.47 (1171)
		6.01 (414)	15 (1034)		173.96 (1122)
24	600	1 (69)	4.50 (310)	389 (2510)	285.87 (1844)
		4.51 (311)	15 (1034)		254.40 (1641)

Notes:

- *Single or multi-petal designs cannot be selected but are determined by burst pressure and vacuum support. Please consult factory for additional information.*
- *FEP, PTFE, and PFA are optional seal materials but are typically selected based on temperature and or pressure requirements. Maximum rated temperature for FEP and PTFE is 400°F (204°C) and 500°F (260°C) for PFA. Please consult factory for additional information.*

BURST/PERFORMANCE TOLERANCE

Size		Tolerance	
Inch	DN	BP ≤ 4 PSIG (275 MBARG)	BP > 4 PSIG (275 MBARG)
≤ 14	≤ 350	± 1 (0.7)	± 1 (0.7)
> 14	> 350	± 0.5 (0.35)	± 1 (0.7)

GASKET INFORMATION

Gasket Material	Maximum Temperature
Non-Asbestos	500°F (260°C)
Teflon®	500°F (260°C)
Viton®	450°F (232°C)
Blue Gylon® 3504	500°F (260°C)
White Gylon® 3510	500°F (260°C)

HOW TO SPECIFY

Previous Lot Number:	
OR	
Size	
Flange Rating	
Burst Pressure	@ (Temperature)
Gasket Material	
Vacuum	Yes / No
Integral Burst Indicator	Yes / No
Certifications	CE

Performance Attributes		Process Media		Rupture Disc Holder
Operating Ratio	Vacuum Resistant	Liquid	Vapor / Gas	Companion Flanges
				
50%	yes*	yes	yes	yes

** Varies by model*