

AD SERIES - 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.



FEATURES AND BENEFITS

- Flat disc, no special holders required, install between standard ASME 150 companion flanges. (Other flange ratings available upon request)
- Compressed non-asbestos (Aramid fiber with nitrile rubber binder) gaskets are pre-attached on both sides of disc.
- Standard materials of construction are SST top and bottom sections with a fluoropolymer seal.
- 50% operating ratio.
- Low burst pressures available, 1 PSIG (.07 BARG) to 15 PSIG (1.03 BARG).
- Standard sizes available 2" (DN50) to 24" (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 (.07-.31 BARG). For pressures greater than 4.50 PSIG (.31 BARG) the AD-V will withstand half vacuum)
- Zero manufacturing range standard

PRESSURE RELIEF VALVE APPLICATION

AD type rupture discs are designed for isolating equipment such as pressure relief valves from corrosive atmospheres. AD discs can be used downstream to protect valve internals and upstream to protect from atmospheric conditions.

ACCESSORIES

AD-BI

- All AD series discs are available with a CSA approved integral burst indicator solution. Specify AD-BI.
- The AD-BI has an 18" 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

Form No. R.1.19.01-5

MINIMUM/MAXIMUM BURST PRESSURES IN PSIG (mBARG) @ 72°F (22°C)

		AD, AD-V Discs			
		316/316L SST		Relief Area in ² (cm ²)	
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 and PFA are optional seal materials but should be selected based on temperature requirements. Maximum rated temperature for FEP is 400°F (260°C) and 500°F (260°C) for PFA. Please consult factory for additional information.

BURST/PERFORMANCE TOLERANCE






- ±1 psig (70 mbarg) on discs 2" (DN50) through 14" (DN350), ± 0.5 psig (35 mbarg) on discs 16" (DN400) and larger.
- ± 1 psig (70 mbarg) when nominal requested pressure exceeds 4 psig (275 mbarg).

GASKET OPTIONS

Gasket Material	Max Temp
Non-Asbestos	500°F (260°C)
Teflon	500°F (260°C)
Viton	450°F (232°C)
Blue Gylon	500°F (260°C)
White Gylon	500°F (260°C)

HOW TO SPECIFY

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

CERTIFICATIONS



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