

AD-H SERIES – AD-H BT & AD-H TC, HYGIENIC RUPTURE DISC

The Fike AD-H Series rupture discs are specifically designed for overpressure protection of atmospheric vessels in hygienic applications. This disc is flat and consists of a metal top section and a fluoropolymer seal. The AD-H BT is designed to be installed between standard ASME 150 companion flanges (other flange ratings available upon request). The AD-H TC is designed for installation in hygienic ferrules and NA-Connect fittings.



AD-H TC Rupture Disc

Fike hygienic rupture discs are in compliance with 3-A standard 60-01. As a result, certified rupture discs are designated as “One Time Installation” and are designed to be easily cleaned through CIP (Clean-In-Place) methods and not intended for removal and reinstallation in order to maintain 3-A compliance.

SPECIFICATIONS

DISC MODEL	AD-H BT		AD-H TC	
SIZES	2 – 24 in	DN50 – DN600	1.5 – 4 in	DN40 – DN100
DISC MATERIALS	Seal: FEP / PFA		Seal: PTFE	
	Top Section: 316 / 316L	Top Section: 1.4401 / 1.4404	Top Section: 316 / 316L	Top Section: 1.4401 / 1.4404
BURST PRESSURE RANGE	1 – 15 psig	69 – 1034 mbarg	5 – 15 psig	345 – 1034 mbarg
BURST PRESSURE TOLERANCE	See table on page 2			
OPERATING RATIO	50%	55%	50%	55%
STANDARD MANUFACTURING RANGE	Zero	N/A	Zero	N/A
MAX OPERATING TEMP	See Min / Max Burst Pressure Table		See AD-H TC Gasket Information Table	
CYCLING / PULSATING DUTY	Not Recommended			
VACUUM RESISTANCE	Not Recommended			
PROCESS MEDIA	Gas / Vapor, Liquid, & two phase			
APPROVALS	 CE MARKED		 3-A	 CE MARKED

OPTIONS

BURST INDICATOR⁽¹⁾	Integral
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(1) More information on burst indicators can be found [here \(Burst Indicators Data Sheet\)](#).

MINIMUM / MAXIMUM BURST PRESSURE IN PSIG/BARG @ 72°F/22°C

AD-H BT					
TOP SECTION MATERIAL		316/316L SST 1.4401/1.4404			
SEAL MATERIAL		FEP	PFA	FEP	PFA
MAX OPERATING TEMPERATURE		400°F	500°F	205°C	260°C
SIZE		PSIG		mBARG	
In	DN	MIN	MAX	MIN	MAX
2	50	7		483	1034
3	80	5		345	
4	100	4		276	
6	150	3		207	
8	200	2.5		172	
10	250	2		138	
12	300	2		138	
14	350	1.5		103	
16	400	1.25		86	
18	450	1		69	
20	500	1		69	
24	600	1		69	

AD-H TC						
TOP SECTION MATERIAL		316/316L SST 1.4401/1.4404				
SEAL MATERIAL		PTFE				
MAX OPERATING TEMPERATURE		See AD-H TC Gasket Information Table				
SIZE		FERRULE	PSIG		mBARG	
In	DN		MIN	MAX	MIN	MAX
1.5	40	ASME BPE	10	15	689	1034
2	50	ASME BPE	8		552	
3	80	ASME BPE	6		413	
4	100	ASME BPE	5		345	
-	40	DIN 32676 Row A	9		620	
-	50	DIN 32676 Row A	7		483	
-	38	ISO 2852 Table 2	9		620	
-	51	ISO 2852 Table 2	7		483	
-	76	ISO 2852 Table 2	6		413	

BURST / PERFORMANCE TOLERANCES

SIZE		BURST PRESSURE		TOLERANCE	
In	DN	PSIG	mBARG	PSI	mBAR
1.5 – 14	40 – 350	All pressures		± 1	± 70
> 14	> DN350	≤ 4	≤ 276	± 0.5	± 35
> 14	> DN350	> 4	> 276	± 1	± 70

AD-H BT GASKET INFORMATION

GASKET MATERIAL	MAXIMUM SERVICE TEMPERATURE	
	°F	°C
Non-Asbestos	500	260
Teflon®	500	260
Viton®	450	232
Blue Gylon	500	260
White Gylon	500	260

AD-H TC GASKET INFORMATION

GASKET MATERIAL	SERVICE TEMPERATURE (°F)		SERVICE TEMPERATURE (°C)	
	MIN	MAX	MIN	MAX
White EPDM (Peroxide Cured) ⁽¹⁾⁽⁴⁾	-40	275	-40	135
White EPDM (Sulfur Cured) ⁽²⁾⁽⁴⁾	-40	300	-40	149
Black EPDM (Sulphur Cured) ⁽⁴⁾	-40	300	-40	149
PTFE ⁽⁵⁾	-20	450	-28	232
Silicon (Platinum Cured) ⁽⁴⁾	-40	450	-40	232
Viton® ⁽⁴⁾	-20	450	-28	232
SST Filled PTFE ⁽⁵⁾	-40	450	-40	232

- (1) Not available in all sizes.
- (2) 3-A approval applies to all gaskets except white EPDM (Sulphur Cured).
- (3) All gaskets are FDA 21CFR177.2600, USP Class VI, and EC 1935/2004 approved.
- (4) For best sealing results, choose more elastomeric gasket materials such as Silicon, Viton®, or EPDM.
- (5) PTFE is subject to cold flow in gasketed connections and may result in leakage and the need for frequent re-tightening. SST Filled PTFE is highly resistant to cold flow and is a preferable alternative to PTFE in most applications.