

SHX, HYGIENIC RUPTURE DISC

The SHX rupture disc is a forward acting, cross-scored rupture disc, ideal for high-pressure hygienic applications. The concave surface of the SHX rupture disc remains in contact with the process media and is designed to burst along the cross score pattern when subjected to a predetermined pressure. In addition, the hub ring prevents the disc petals from fragmenting at the maximum burst pressure and provides a rigid support to prevent the disc from slipping.



SHX 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

SIZES	1.5 – 2 in	DN40 – DN50		
DISC MATERIALS	316 / 316L SST	1.4401 / 1.4404		
BURST PRESSURE RANGE	250 – 1500 psig	17.24 – 103.42 barg		
BURST PRESSURE TOLERANCE	See table on page 2			
OPERATING RATIO	For standard applications 90%	For CE or KOSHA applications 95%		
STANDARD MANUFACTURING RANGE	Zero	N/A		
MAX OPERATING TEMP	250°F	121°C		
VACUUM RESISTANCE	Full			
PROCESS MEDIA	Gas / Vapor, Liquid, & two phase			
FRAGMENTATION	Non-fragmenting			
APPROVALS	 CE MARKED	 KOSHA	 EAC	 3-A

OPTIONS

BURST INDICATOR⁽¹⁾	BCH	
LINERS	FEP / PFA on process side	
ELECTROPOLISH (AVERAGE WETTED SURFACE FINISH)	8 – 16 Ra	0.2 – 0.4 µm
PASSIVATION	Yes	
PAINT-FREE SST TAG	Yes	
CLAMPS	Sold Separately ⁽²⁾	

- (1) More information on burst indicators can be found [here \(Burst Indicators Data Sheet\)](#).
- (2) See additional clamp information on next page.

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

MATERIAL			316/316L SST 1.4401/1.4404			
SIZE		FERRULE	PSIG		BARG	
In	DN		MIN	MAX	MIN	MAX
1.5	40	ASME BPE	300	1500	20.68	103.42
2	50	ASME BPE	250	1000	17.24	68.95

BURST / PERFORMANCE TOLERANCES

BURST TOLERANCE	PERFORMANCE TOLERANCE
5%	5% or 10% ⁽¹⁾

- (1) Both performance tolerance options are available over entire burst pressure range.

GASKET INFORMATION

GASKET MATERIAL ⁽²⁾	SERVICE TEMPERATURE (°F)		SERVICE TEMPERATURE (°C)	
	MIN	MAX	MIN	MAX
White EPDM (Peroxide Cured) ⁽³⁾	-40	250	-40	121
White EPDM (Sulfur Cured) ⁽¹⁾⁽³⁾	-40		-40	
Black EPDM (Sulphur Cured) ⁽³⁾	-40		-40	
PTFE ⁽⁴⁾	-20		-28	
Silicon (Platinum Cured) ⁽³⁾	-40		-40	
Viton ^{®(3)}	-20		-28	
SST Filled PTFE ⁽⁴⁾	-40		-40	

- (1) 3-A approval applies to all gaskets except white EPDM (Sulphur Cured).
- (2) All gaskets are FDA 21CFR177.2600, USP Class VI, and EC 1935/2004 approved.
- (3) For best sealing results, choose more elastomeric gasket materials such as Silicon, Viton[®], or EPDM.
- (4) 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.

STANDARD 13 MHHM CLAMP (LOW PRESSURES)⁽¹⁾⁽²⁾

SIZE	TEMPERATURE		MAX PRESSURE RATING	
	In	°F	°C	PSIG
1.5	70	21	500	34.47
	250	121	300	20.68
2	70	21	450	31.03
	250	121	300	20.68

- (1) One piece design
- (2) SST 316/316L construction



13 MHHM Clamp

A8647-100-X, FIKE MODIFIED 13 MHP CLAMP (HIGH PRESSURES)⁽¹⁾⁽²⁾⁽³⁾⁽⁴⁾

SIZE	TEMPERATURE		MAX PRESSURE RATING	
	In	°F	°C	PSIG
1.5	70	21	1500	103.42
	250	121	1200	82.74
2	70	21	1000	68.95
	250	121	800	55.16

- (1) The A8647-100-X is recommended for high pressures.
- (2) This modified 13 MHP clamp is notched to allow proper installation of the rupture disc
- (3) Assembly includes bolts, washers, and nuts
- (4) SST 316/316L construction



*A8647-100-X
Modified 13 MHP Clamp*