

HOV-FS

APPROVAL:

- ASME

DESCRIPTION

The HOV-FS is a forward-acting, flat-seated rupture disc device, commonly used for overpressure protection of steam turbine condensers. The HOV-FS utilizes similar technology as the conventional HOV (see data sheet R.1.22.01), but is offered in larger sizes featuring a flat seat design. The HOV-FS features either a single hinge (SH) or multi-petal (MP) opening style, depending on size, burst pressure and material. Typical construction for the HOV-FS is a 316 SST top section and vacuum support, with an FEP Fluoropolymer seal. Other seal materials are available on tables 1 and 2 to meet temperature and burst pressure requirements.



FEATURES AND BENEFITS

- Alternate top and bottom section materials: Inconel® 600, Monel® 400, Nickel 200, Hastelloy® C276
- Can operate up to 80% of its marked burst pressure
- Operates in both gas and liquid applications
- ASME UD Certification available when used in Fike rupture disc holder

ACCESSORIES AND HOLDERS

HOV-FS Rupture Discs are designed for installation in a unique Fike G-insert holder assembly, which is installed between ANSI B16.47 (please specify Series A or B) companion flanges. The HOV-FS, when installed in the Fike G-insert holder assembly is designed for full-vacuum conditions. The unique HOV-FS GI (insert) holder is designed and quoted depending on application specifications. The GI holder can also be designed to contain the crown-section of the rupture disc, often required for fixed-piping installations.

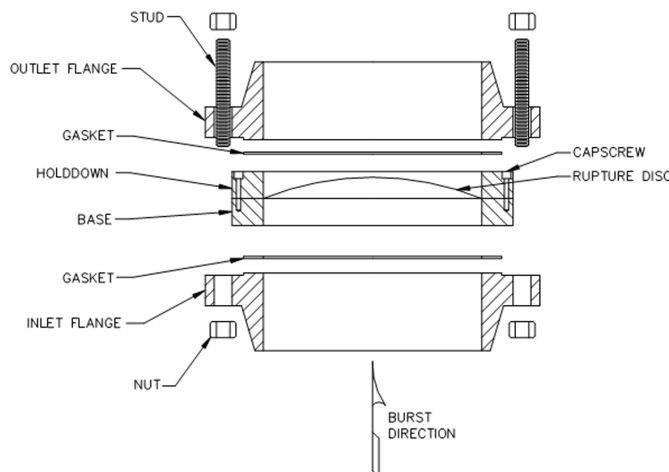


Figure 1 - HOV-FS in Fike GI holder

The HOV-FS may be designed to be installed directly between standard process flanges; consult factory for more information. Depending on the customer performance and equipment specifications, an inlet support ring may be required for high-vacuum conditions. The customer may find it advantageous to use spool sections to aid in installation and removal of the rupture disc.

MINIMUM/MAXIMUM BURST PRESSURE IN PSIG (BARG) @ 72°F (22°C) FOR SEAL MATERIAL

Table 1: Catalog Min/Max for Single Hinge (SH) for selected seal materials

Size		Seal Material Minimum BP PSIG @ 72 F (BARG @ 22°C)			Maximum BP PSIG (BARG)
IN	DN	FEP/PFA Fluoropolymer	Aluminum	316 SST	All
24	600	1.5 (.10)	2.4 (.17)	27 (1.86)	40 (2.76)
26	650	1.5 (.10)	2.4 (.17)	27 (1.86)	35 (2.41)
28	700	1.5 (.10)	2.4 (.17)	27 (1.86)	35 (2.41)
30	750	1.5 (.10)	2.4 (.17)	27 (1.86)	30 (2.07)
32	800	1.5 (.10)	2.4 (.17)	27 (1.86)	30 (2.07)
34	850	1.5 (.10)	2.4 (.17)	N/A	30 (2.07)
36	900	1.5 (.10)	2.4 (.17)	N/A	25 (1.72)
38	950	1.5 (.10)	2.4 (.17)	N/A	25 (1.72)
40	1000	1.5 (.10)	2.4 (.17)	N/A	25 (1.72)
42	1050	1.5 (.10)	2.4 (.17)	N/A	20 (1.38)
44	1100	1.5 (.10)	2.4 (.17)	N/A	20 (1.38)
48	1200	1.5 (.10)	N/A	N/A	20 (1.38)

Table 2: Catalog Min/Max for Multi-Petal (MP) for selected seal materials

Size		Seal Material Minimum BP PSIG @ 72 F (BARG @ 22°C)			Maximum BP PSIG (BARG)
IN	DN	FEP/PFA Fluoropolymer	Aluminum	316 SST	All
24	600	14.3 (.99)	14.3 (.99)	32.7 (2.25)	65 (4.48)
26	650	14.3 (.99)	14.3 (.99)	32.7 (2.25)	65 (4.48)
28	700	14.3 (.99)	14.3 (.99)	32.7 (2.25)	65 (4.48)
30	750	14.3 (.99)	14.3 (.99)	32.7 (2.25)	65 (4.48)
32	800	14.3 (.99)	14.3 (.99)	32.7 (2.25)	45 (3.10)
34	850	14.3 (.99)	14.3 (.99)	N/A	45 (3.10)
36	900	14.3 (.99)	14.3 (.99)	N/A	37 (2.55)
38	950	14.3 (.99)	14.3 (.99)	N/A	37 (2.55)
40	1000	14.3 (.99)	14.3 (.99)	N/A	37 (2.55)
42	1050	14.3 (.99)	14.3 (.99)	N/A	30 (2.07)
44	1100	14.3 (.99)	14.3 (.99)	N/A	30 (2.07)
48	1200	14.3 (.99)	N/A	N/A	30 (2.07)

STANDARD MANUFACTURING RANGES

Specified Rupture Pressure		Manufacturing Range % @ 72°F (22°C)
PSIG @ 72°F	BARG @ 22°C	
< 4	< .3	zero
4 to 8	.3 to .6	+40 to -40
9 to 12	.7 to .8	+30 to -30
13 to 20	.9 to 1.4	+20 to -10
21 to 45	1.5 to 3.1	+16 to -8
46 to 65	3.2 to 4.5	+12 to -6

Other Manufacturing Ranges Available:

- Zero
- Reduced
- Performance Tolerance ($\pm 10\%$, $\pm 5\%$)
- Special Min/Max







BURST/PERFORMANCE TOLERANCE

Marked Burst Pressure		Tolerance	
PSIG	BARG	PSIG	BARG
< 5	< .35	±1	.07
5 - 14.99	.35 - 1.03	±1.5	.10
15 - 40	1.04 - 2.76	±2	.14
> 40	> 2.76	±5%	±5%

Note: Other burst/performance tolerances are available. Please consult factory.

HOW TO SPECIFY

Previous Lot Number:	
OR	
Size:	
Burst Pressure:	@ (Temperature)
Top Section Material:	
Seal Material:	
Bottom Section Material:	
Vacuum:	Yes / No
Certification:	ASME

Performance Attributes			Process Media		Rupture Disc Holder
Operating Ratio	Vacuum Resistant	Pulsating/ Cyclic	Liquid	Vapor / Gas	Bolted Type
					
80%	yes	yes	yes	yes	yes