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HO/HOV SERIES
RUPTURE DISC

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Fike's HO Rupture Disc is a composite disc consisting of two components, the seal member and a slotted top. In this configuration the slotted top section contains the seal and the seal transmits the pressure load to the top section. The slotted top section controls the burst pressure of the disc and allows the use of fluoropolymer as a seal member. In addition to the typical seal materials available, tantalum, titanium or other precious metals may be used when dealing with corrosive media. The HOV Rupture Disc (high operating and vacuum) is constructed the same as the HO Disc with the addition of a vacuum support under the seal member.

The HO/HOV is commonly manufactured with a 316 SST top section and vacuum support with an FEP fluoropolymer seal member for temperatures up to 400°F (204°C). Alternate seal materials are available, see table on the following page for burst pressure ranges per size and seal material. Alternate top section and vacuum support materials are available as well, such as Nickel, Monel®, Hastelloy®, Inconel® and Tantalum.

Rupture disc - HO/HOV SERIES

FEATURES AND BENEFITS

- Can operate up to 80% of its marked burst pressure.
- Configuration requires a smaller amount of precious metal due to the top section controlling the burst pressure.
- Operates in both gas and liquid applications.

Accessories and holders	Options	Approvals
HO/HOV Rupture Discs are designed for installation in flanges which utilize the standard 30° angular seating arrangement. The HO/HOV utilizes the bolt type or union type holders. For more information on the bolt type holders, please see data sheet R.1.18.01 and for union type holders please see data sheet R.1.09.01.	Available with PFA fluoropolymer liner with a maximum temperature of 500°F (260°C). Polyurethane 250°F (121°C) and Teflon® 450°F (232°C) protective coatings also available. Alternate top section and vacuum support materials such as Nickel, Monel, Hastelloy, Inconel and Tantalum. Various seal materials (see following page) for temp. >500°F (260°C) and burst pressures than acceptable for the standard fluoropolymer seal.	- ASME - CE Marked

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

Material / Size		316/316L SST		Inconel 400 ® 600		Monel®	
		Max Temp: 900°F (482°C)		Max. Temp: 1100°F (593°C)		Max. Temp: 800°F (427°C)	
IN	DN	Min. BP	Max. BP	Min. BP	Max. BP	Min. BP	Max. BP
1	25	482 (33.24)	6000 (413.69)	410 (28.27)	6000 (413.69)	190 (13.10)	6000 (413.69)
1.5	40	365 (25.17)	3000 (206.85)	290 (19.99)	3000 (206.85)	128 (8.83)	3000 (206.85)
2	50	195 (13.45)	3000 (206.85)	180 (12.41)	3000 (206.85)	75 (5.17)	3000 (206.85)
3	80	135 (9.31)	3000 (206.85)	130 (8.96)	3000 (206.85)	46 (3.17)	3000 (206.85)
4	100	105 (7.24)	3000 (206.85)	100 (6.89)	3000 (206.85)	38 (2.62)	3000 (206.85)
6	150	85 (5.86)	2160 (148.93)	75 (5.17)	2160 (148.93)	33 (2.28)	2160 (148.93)
8	200	65 (4.48)	1440 (99.29)	40 (2.76)	1440 (99.29)	24 (1.65)	1440 (99.29)
10	250	50 (3.45)	720 (49.64)	32 (2.21)	720 (49.64)	20 (1.38)	720 (49.64)
12	300	50 (3.45)	720 (49.64)	27 (1.86)	720 (49.64)	20 (1.38)	720 (49.64)
14	350	48 (3.31)	720 (49.64)	23 (1.59)	720 (49.64)	20 (1.38)	720 (49.64)
16	400	44 (3.04)	720 (49.64)	20 (1.38)	720 (49.64)	18 (1.24)	720 (49.64)
18	450	38 (2.62)	720 (49.64)	18 (1.24)	720 (49.64)	18 (1.24)	720 (49.64)
20	500	30 (2.07)	720 (49.64)	16 (1.10)	720 (49.64)	18 (1.24)	720 (49.64)
24	600	27 (1.86)	720 (49.64)	45 (3.10)	720 (49.64)	40 (2.76)	720 (49.64)

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

Material / Size		Nickel 200/201		Aluminum 1100		Aluminum 1100, Teflon® coated, bo sides	
		Max. Temp: 800°F (427°C)		Max. Temp: 600°F (316°C)		Max Temp: 250°F (121°C)	
IN	DN	Min. BP	Max. BP	Min. BP	Max. BP	Min. BP	Max. BP
1	25	190 (13.10)	6000 (413.69)	51 (3.52)	1500 (103.42)	75 (5.17)	1500 (103.42)
1.5	40	128 (8.83)	3000 (206.85)	35 (2.41)	1500 (103.42)	53 (3.65)	1500 (103.42)
2	50	75 (5.17)	3000 (206.85)	23 (1.59)	1125 (77.57)	42 (2.90)	1125 (77.57)
3	80	46 (3.17)	3000 (206.85)	15 (1.03)	750 (51.71)	38 (2.62)	750 (51.71)
4	100	38 (2.62)	3000 (206.85)	12 (.83)	600 (41.37)	23 (1.59)	600 (41.37)
6	150	33 (2.28)	2160 (148.93)	11 (.76)	450 (31.03)	15 (1.03)	450 (31.03)
8	200	24 (1.65)	1440 (99.29)	8 (.55)	338 (23.30)	12 (.83)	338 (23.30)
10	250	20 (1.38)	720 (49.64)	6 (.41)	263 (18.13)	12 (.83)	263 (18.13)
12	300	20 (1.38)	720 (49.64)	4 (.28)	225 (15.51)	11 (.76)	225 (15.51)
14	350	20 (1.38)	720 (49.64)	4 (.28)	225 (15.51)	9 (.62)	225 (15.51)
16	400	18 (1.24)	720 (49.64)	4 (.28)	225 (15.51)	9 (.62)	225 (15.51)
18	450	18 (1.24)	720 (49.64)	4 (.28)	188 (12.96)	9 (.62)	188 (12.96)
20	500	18 (1.24)	720 (49.64)	4 (.28)	188 (12.96)	9 (.62)	188 (12.96)
24	600	40 (2.76)	720 (49.64)	4 (.28)	150 (10.34)	9 (.62)	150 (10.34)

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

Material / Size		Aluminum 1100, Teflon® coated, one sides		Aluminum 1100, Polyurethane coated, one side		Silver		Fluoropolymer Film	
		Max Temp: 250˚F (121˚C)		Max Temp: 250˚F (121˚C)		Max Temp: 250˚F (121˚C)		Max. Temp: 500˚F (260˚C)	
IN	DN	Min. BP	Max. BP	Min. BP	Max. BP	Min. BP	Max. BP	Min. BP	Max. BP
1	25	51 (3.52)	1500 (103.42)	53 (3.65)	1500 (103.42)	188 (12.96)	6000 (413.69)	31.6 (2.18)	465 (32.06)
1.5	40	35 (2.41)	1500 (103.42)	38 (2.62)	1500 (103.42)	128 (8.83)	3000 (206.84)	23 (1.59)	305 (21.03)
2	50	30 (2.07)	1125 (77.57)	33 (2.28)	1125 (77.57)	83 (5.72)	3000 (206.84)	15 (1.03)	200 (13.79)
3	80	21 (1.45)	750 (51.71)	23 (1.59)	750 (51.71)	53 (3.65)	3000 (206.84)	12 (.83)	140 (9.65)
4	100	17 (1.17)	600 (41.37)	18 (1,24)	600 (41.37)	38 (2.62)	2250 (155.13)	8 (.55)	105 (7.24)
6	150	12 (.83)	450 (31.03)	12 (.83)	450 (31.03)	30 (2.07)	1500 (103.42)	6 (.41)	80 (5.52)
8	200	8 (.55)	338 (23.30)	9 (.62)	338 (23.30)	26 (1.79)	750 (51.71)	4.5 (.31)	70 (4.83)
10	250	8 (.55)	263 (18.13)	9 (.62)	263 (18.13)			3.6 (.25)	65 (4.48)
12	300	6 (.41)	225 (15.51)	8 (.55)	225 (15.51)			3 (.21)	55 (3.79)
14	350	6 (.41)	225 (15.51)	8 (.55)	225 (15.51)			2.6 (.18)	50 (3.45)
16	400	6 (.41)	225 (15.51)	8 (.55)	225 (15.51)			2.3 (.16)	45 (3.10)
18	450	6 (.41)	188 (12.96)	8 (.55)	188 (12.96)			2 (.14)	40 (2.76)
20	500	6 (.41)	188 (12.96)	8 (.55)	188 (12.96)			1.8 (.12)	35 (2.41)
24	600	6 (.41)	150 (10.34)	8 (.55)	150 (10.34)			1.5 (.10)	40 (2.76)

Notes:

- Consult factory for discs larger than 24 IN (DN600) in diameter.
- Flat seat design is available for sizes greater than 24 IN (DN600).
- Lower minimum burst pressures may be possible. Consult Fike for availability and performance limitations.

AVAILABLE MANUFACTURING RANGES

Specified Rupture Pressure		Manufacturing Range
PSIG @ 72°F	BARG @ 22°C	% @ 72°F (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 90	3.2 to 6.2	+12 to -6
91 to 270	6.3 to 18.6	+10 to -5
271+	18.7+	+6 to -3

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 factoryance limitations.

HOW TO SPECIFY

Performance Attributes			Process Media		Rupture Disc Holders	
Operating Ratio	Vacuum Resistant	Pulsating /cyclic	Liquid	Vapor / Gas	Bolted Type	Union Type
						
80%	Yes	Yes	Yes	Yes	Yes	Yes

HOW TO SPECIFY

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