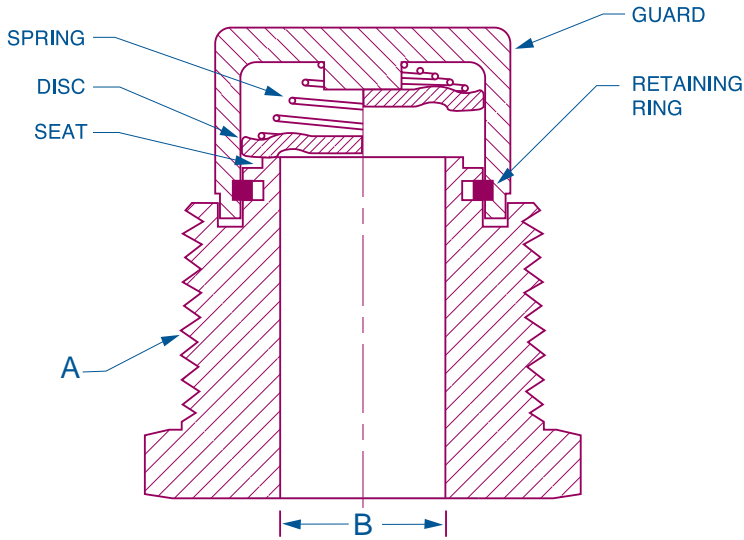


# Vacuum Breaker



## Features:

- 1" to 4" size
- 450 to 6000 CWP
- Threaded O.D. (MNPT)
- Unthreaded inlet bore
- Stainless Steel Construction
- Spring-assisted silent closing
- Horizontal or vertical installation
- Tight shut-off - lapped disc & seat
- Easy maintenance
- Versatile
- OPTIONS:
  - Inconel® 750 Spring
  - Soft seat

DFT® Vacuum Breakers provide effective protection against collapse of pressure vessels, tanks and rolls. They prevent condensate "back-up" when equipment is shut down or inlet steam is reduced by modulating control valves. In piping systems, DFT Vacuum Breakers are used to break siphons, prevent pipe collapse during transient pressure drops, and to provide addition of air on the downstream side of check valves to dampen water hammer.



Two DFT Vacuum Breakers used in a "dry can".

## MATERIALS OF CONSTRUCTION

Model	Seat	Disc	Guard	Spring	Retaining Ring	
Vacuum Breakers	BSSV	303 SS	316 SS	CF8M <sup>(1)</sup>	316 SS	316 SS
	BSSV6	316 SS	316 SS	CF8M	316 SS	316 SS

(1) 1" has a 303 SS guard

# Vacuum Breaker

## TECHNICAL INFORMATION

VACUUM BREAKER		CV	Friction Loss (Feet of Pipe)	VALVE CRACKING PRESSURE*		Approx. Net WT. Each (In lbs.)
Nominal Size (MNPT) A	Unthreaded Inlet Bore B			(PSI) (± 10%)	(Inches of Water)	
1"	9/16"	5.8	7	.60 (1)	16.7	.38
1-1/2"	7/8"	13.2	6	.45	12.5	.88
2"	1-3/32"	23.1	7	.38	10.5	1.25
2-1/2"	1-1/2"	36	12.5	.20	5.5	2.25
3"	1-23/32"	57.4	11	.14	3.9	3.75
4"	2-7/32"	90	16	.15	4.3	7.00

(1) Light spring available: Cracking Pressure = .24 PSI (6.5 inches of water)

\*Cracking pressure for vertical flow will be slightly different: upward flow, slightly higher; downward flow, slightly less.

### COLD, NON-SHOCK PRESSURE RATING (2)

Size	1"	1-1/2"	2"	2-1/2"	3"	4"
Vacuum Breaker <small>BSSV</small>	2500	2000	1500	850	700	450
<small>BSSV6</small>	6000	5500	3000	1100	900	450

Sat. Steam Pressure (PSIG) Ref. (3)	Temperature (Deg. F.)	Adjusted Rating as Percent of Cold Rating
-3	200	86%
15	250	82%
52	300	78%
232	400	71%
407	450	69%
665	500	66%
1526	600	62%
3075	700	60%

All stainless steel construction is suitable for cryogenic service. For pressure rating at elevated temperatures for standard metal-seated valves, reduce above rating per chart at right.

Maximum valve temperature rating is limited by soft seal (if any) and spring materials in chart below. For ratings of soft seals using some other elastomers, consult factory.

(2) Contingent on service ratings of matching pipe and fittings.

(3) Saturated steam pressure is given for reference only; pressure limit of valve is the adjusted rating at the given temperature.

MAXIMUM OPERATING TEMPERATURES OF MATERIALS						
	SOFT SEAT (4)				SPRING	
MATERIALS	BUNA-N	EPDM	VITON® TFE® - VITON	ZELON	316 SS	INCONEL® X-750
TEMP. °F	-70 to 250	-75 to 300	-40 to 400	37 to 400	-460 to 450	-460 to 700

(4) Buna-N and Viton are not suitable for steam service.