WVBSS

Stainless Steel Vacuum Breaker

Model	**WVBSS**
Sizes	**1/2"**
Connections	**NPT**
Body Material	**Stainless Steel**
PMO Max. Operating Pressure	**300 PSIG**
TMO Max. Operating Temperature	**752°F**
PMA Max. Allowable Pressure	**300 PSIG up to 752°F**
TMA Max. Allowable Temperature	**752°F @ 300 PSIG**

TYPICAL APPLICATIONS

The **WVBSS** Vacuum Breaker is used on heat exchangers, air coils, jacketed kettles, pressing machines, boiler feed water tanks, sparge systems, water lines or anywhere else an unwanted vacuum may occur. The WVBSS allows air to enter the steam or liquid system in order to "break the vacuum" caused by the condensing of steam or draining of liquid from a system. The elimination of vacuum is necessary to allow proper drainage of liquid from process systems.

HOW IT WORKS

The Vacuum Breaker functions like a simple check valve. Outside air is allowed to enter the system through the air inlet. However, when steam or water try to escape, the vacuum breaker closes off tightly.

FEATURES

- **All stainless steel construction**
- **Small & compact**

SAMPLE SPECIFICATION

Vacuum Breakers shall be of all stainless steel construction with a hardened stainless steel ball valve design.

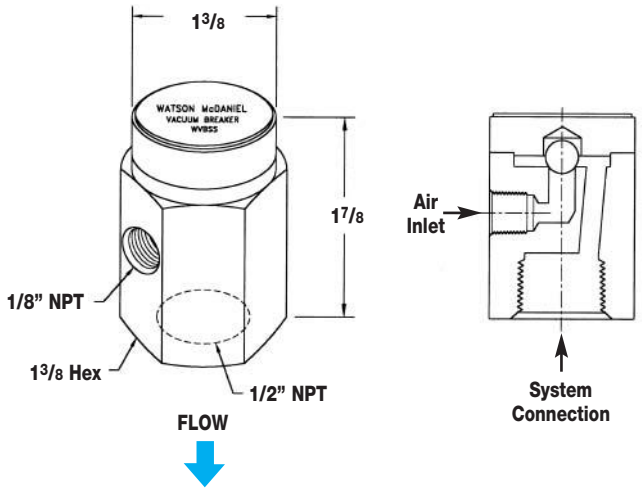
INSTALLATION

Unit must be installed in a vertical position and should be placed at the highest point in the system.

MATERIALS

Body	Stainless Steel, Series 300
Ball	Hardened Stainless Steel
Nameplate	Stainless Steel, Series 300

DIMENSIONS – *inches*



CAPACITIES – *Air (SCFM)*

Size NPT	inches Hg Vacuum 2	4	6	8	10	12
1/2"	2.4	3.4	4.0	4.3	4.7	4.9

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WSSCV Series

Stainless Steel Check Valves

Model	**WSSCV**
Sizes	**1/2", 3/4", 1", 1¼", 1½", 2", 3"**
Connections	**NPT, SW**
Body Material	**316 Stainless Steel**
PMO Max. Operating Pressure	**500 PSIG**
PMA Max. Allowable Pressure	**750°F PSIG @ 100°F**
TMA Max. Allowable Temperature	**850°F @ 420 PSIG**

Note: WSSCV is supplied with standard spring for 1/4 PSIG cracking pressure; optional 5 PSIG cracking pressure spring is available upon request.

TYPICAL APPLICATIONS

The Model **WSSCV** is an all stainless steel in-line check valve for steam, gas, or liquid service. It provides tight shut-off, minimizes water hammer and also stops recycling of pumps by preventing back flow of liquid. Used in the petrochemical, pulp & paper, textile and food & beverage industries. The WSSCV all stainless steel check valves will operate much longer and are less problematic than bronze or cast iron check valves.

FEATURES & OPTIONS

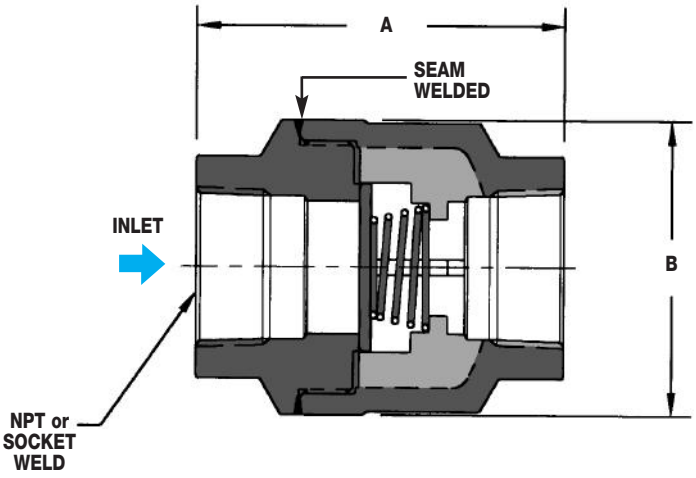
- **316 Stainless Steel Body and Internals**
- **Low cracking Pressure on spring (1/4 PSI) to minimize resistance and maximize flow.**
- **Available with optional 5 PSI cracking pressure (must specify at time of order)**
- **Available with NPT, SW, or optional Flanged connections**
- **Spring made from Inconel-X-750 to handle extreme temperature as well as corrosive applications**
- **Body is seam welded to eliminate O-rings or gasket seals which can be affected by high temperature steam or hot condensate**
- **Spring assisted closing of check valve to minimize noise and wear**

SAMPLE SPECIFICATION

Check valve shall have a 316 stainless steel body and disc. Spring shall be made from Inconel-X-750. Check valve body to be seam welded together to eliminate need for O-ring or gasket.

MATERIALS

Body	316 Stainless Steel
Disc	316 Stainless Steel
Spring	Inconel-X-750



DIMENSIONS & SPECIFICATIONS – *inches/pounds*

Size	1/2"	3/4"	1"	1¼"	1½"	2"	3"
MODEL	WSSCV-12	WSSCV-13	WSSCV-14	WSSCV-15	WSSCV-16	WSSCV-17	WSSCV-19
A	2.69	3.00	3.32	3.81	4.75	5.03	6.87
B	1.62	2.12	2.56	3.06	3.44	4.38	6.19
Weight (lbs)	1.1	1.5	1.9	3.8	4.7	7.7	18.8
Standard Cracking Pressure*	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**
Optional Cracking Pressure*	**5.0**	**5.0**	**5.0**	**5.0**	**5.0**	**5.0**	**5.0**
Cv	7	13	22	39	54	93	180

* **Note:** Pressure at which valve opens and flow occurs (PSI).