## Barnes ones <br> inc.

 Vacuum BreakersBarnes \& Jones Vacuum
Breakers are simple, reliable devices that provide a positive means to automatically relieve or "break" an unwanted vacuum condition. The rugged hex design provides for long service life and ease of installation. Bubble tight sealing is assured due to the soft silicon O-ring and spring pressure against the valve.

## Applications

- Air/Heat Coils for Space Heating
- Process Air Heater
- Shell \& Tube Heat Exchanger
- Make-Up Air Coils
- Textile Dry Cans
- Steam Boilers
- Storage Heaters
- Jacketed Kettles
- Steam Main Zoning
- One Pipe Steam Non-Electric Valve


\% $1 /{ }^{\circ}$ NPT-
VB 3901


4* NPT -

$1 / 2^{x} \mathrm{NPT}$
VB 3856



VB 3875

Figure 2

## Vacuum Breaker Engineering Specifications

Materials

## Vacuum

 Required to Open(INCHES OF MERCURY)


Figure 1

| Model No. | Body | Spring | Valve | Seat |
| :---: | :---: | :---: | :---: | :---: |
| VB 3901 | Brass | Stainless Steet | Brass and Silicon | Brass |
| VB 3902 |  |  |  |  |
| VB 3856 | Brass | Stainless Steel |  |  |
|  |  |  | Stainless Steel | Slilicon |
| VB 3875 |  |  |  |  |

Models are available in four NPT Pipe Sizes. They are $1 / 8^{\prime \prime}, 1 / 4^{\prime \prime}, 1 / 2^{\prime \prime}$ and $3 / 4^{\prime \prime}$, all of which are rated for use with pressures up to 125 PSIG (8.6 Bar), and temperatures to $350^{\circ} \mathrm{F}\left(180^{\circ} \mathrm{C}\right)$. Materials of construction are listed in the table above.

| Model No. | Horizontal * | Vertical |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Bottom Outlet |  |  |
| VB 3901 | 1.27 | 1.25 | 1.75 | 0.2 |
| VB 3902 |  |  |  |  |
| VB 3856 | 0.77 | 0.75 | 1.25 | 0.3 |
| VB 3875 |  |  |  |  |

*Note on installation: The preferred method of installation is in the vertical position. Horizontal installation should be used only if no other option is available and only above the water line.
Vacuum breakers should be placed at the highest practical points.
The table above lists the corresponding "break" points for the various models and positions. Barnes \& Jones will Custom Engineer to customer requirements in applications that require other "break" points.

