Stilling Chamber Instruction Manual

HF scientific, inc.
3170 Metro Parkway
Fort Myers, FL 33916-7597
Phone: (239) 337-2116
Fax: (239) 332-7643

Stilling Chamber (Cat. # 70919)

HF scientific, inc.
Stilling Chamber Part # 20106

STILLING CHAMBER COMPLETE WITH AUTOMATIC AIR RELEASE

It is only used on applications where the OnLine Monitor is measuring a flowing stream of water or other liquid. The stilling chamber is used to remove air bubbles from the liquid before it reaches the flow through unit of the on-line turbidimeter. Air bubbles may cause unstable or incorrect readings on the monitor.

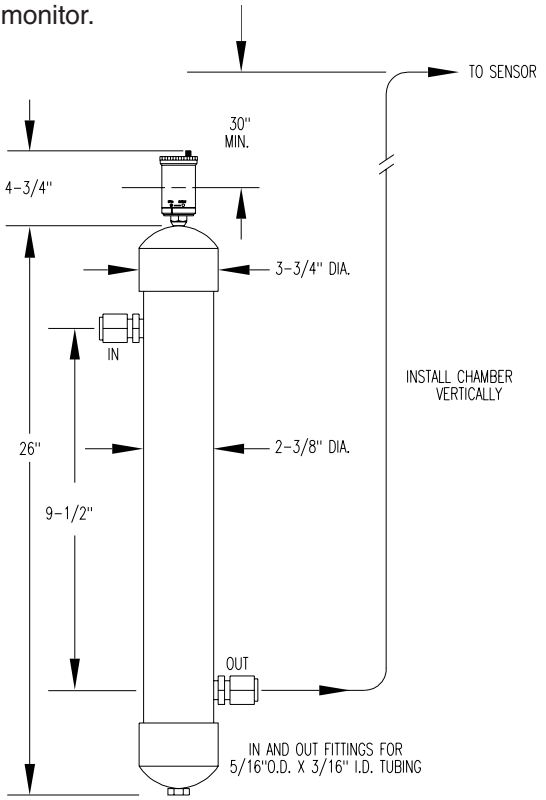

Figure 1

METHOD OF OPERATION

The stilling chamber is a cylinder approximately 2" (5cm) diameter x 26" (66 cm) long. The liquid enters the stilling chamber via the outlet fitting near the top of the stilling chamber (see figure 1). As the liquid

passes through the stilling chamber, its velocity becomes very low due to the large diameter of the stilling chamber. This permits the fine air bubbles in the liquid to rise to the top of the stilling chamber.

The automatic air vent in the top of the stilling chamber removes the air as it collects at the top of the stilling chamber.

The stilling chamber should be located in the line before the liquid reaches the sensor. The outlet from the stilling chamber should be run vertically at least 30" (75cm) above the top of the automatic air release before being led to the sensor.

The BRAUKMANN Automatic Air Vent has a maximum working pressure of 90 psi and maximum temperature range to 225°F (106° C). It is designed for use on all types of hot water radiators, convectors, base board convectors, heating units, venting pipes and fittings.

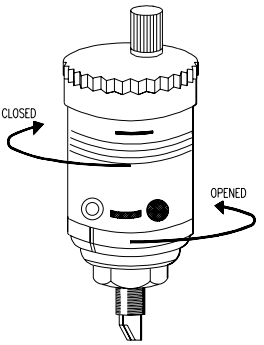

Figure 2 Shown in Open Position

OPERATING INSTRUCTIONS

1. Before filling the system, make sure the red vent cap is securely tight and that the valve is in the closed position (see figure 2) by turning vent body clockwise. Use hands only to avoid damaging the vent.

2. With the valve in the closed position, flush the system as required to remove dirt, debris and contaminates.

3. Fill the system with the appropriate solution.

4. Start operation by turning the air vent body counter-clockwise to the open position (see figure 2).

5. Make sure the red vent cap is tightend all the way to the stop position for proper operation. Use hands only to tighten.

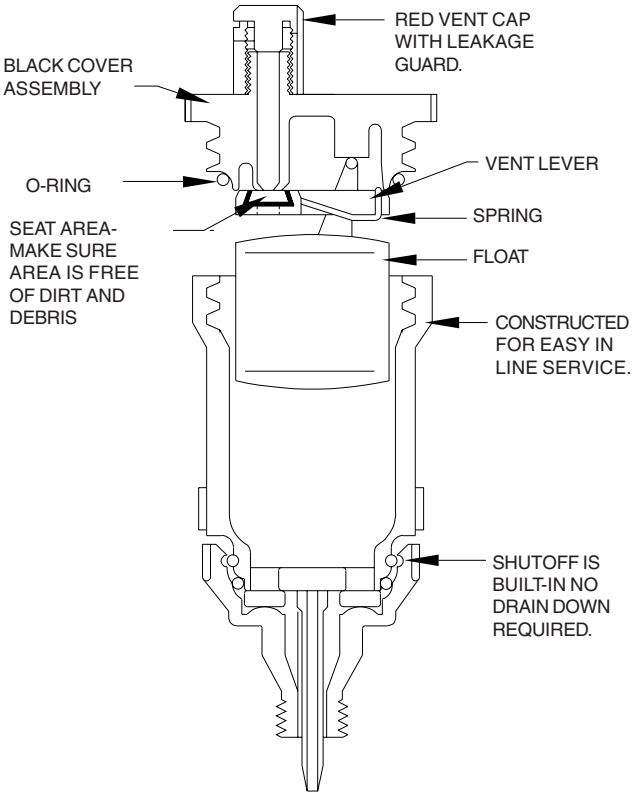

Figure 3

CLEANING INSTRUCTIONS

1. Turn the vent body clockwise to the closed position, isolating the vent from the system (see figure 2).

2. Remove the float assembly by unscrewing the top of the body and lifting the black cover assembly up (see figure 3).

3. Carefully clean the seat area of any dirt or debris.

4. Carefully clean any dirt or debris from inside the vent chamber.

5. Replace the float assembly, making sure that the O-ring is seated properly (see figure 3).

6. Replace black cover assembly on air vent body. Using hands only turn until handtight.

7. Operate by turning the air vent body counter clockwise to the open position. Use hands only (see figure 3).

8. Make sure the red vent cap is tightend all the way to the stop position for proper operation. Use hands only to tighten.