

INSTALLATION AND OPERATING INSTRUCTIONS

Automatic Air Vents

TYPICAL APPLICATIONS:

Armstrong AVA and AVV automatic air vents continuously remove air that can accumulate in a Hydronic system. Effective air elimination helps to reduce system operating noise caused by entrained air in the hydronic fluid and also helps to extend system component life by reducing the risk of corrosion or cavitation. AVA and AVV automatic air vents may be used on their own, or with Armstrong air removal traps for maximum air elimination performance.

In operation, when sufficient air is accumulated in the air vent chamber, the float mechanism opens the vent valve, and system pressure expels the air to the atmosphere. When the air is expelled the float closes the vent, and the cycle repeats. Additionally, these valves help serve as a vacuum break when the system is drained. All vents are equipped with a manual shut-off. Models supplied with service check valves may be removed for service or replacement while the hydronic system is operating.



TECHNICAL DATA	
Maximum Working Pressure	150 psi (1034 kPa)
Maximum Working Temperature	248°F (120°C)
Minimum Working Temperature	15°F (-10°C)

MATERIALS OF CONSTRUCTION	
Body and Cover	Brass
Internal Components	Non-Ferrous

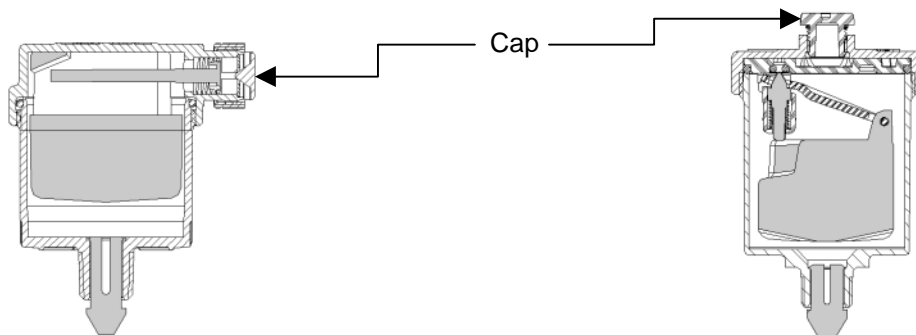


Fig. 1a Model AVA Automatic Air Vent

Fig. 1b Model AVV Automatic Air Vent



INSTALLATION:

1. Select the desired mounting method:
 - a. For nominal hydronic fluid air removal during system operation, or only when circulation is stopped, the air vent may be mounted directly to the system piping or a fitting equipped with a threaded tap.
 - b. For maximum air removal performance, especially during hydronic system operation, install an Armstrong air removal trap, and mount the air vent to the corresponding air vent port.
2. Locate the air vent at a high point in the hydronic system piping where air is expected to accumulate.
3. Ensure there is sufficient room to operate the air vent manual shut-off.
4. Screw the supplied service check valve or male/female adapter to the air vent (if applicable).
5. Always mount the air vent vertically to ensure proper float mechanism operation.
6. Use pipe tape or compound on the mounting threads to ensure a liquid tight seal.
7. If desired, the manual shut-off cap of AVV model air vents may be removed and replaced by a fitting (not supplied) to enable connection of a drain hose.

OPERATION:

1. During hydronic system filling or draining, open the manual shut-off cap fully, to enable maximum air venting or vacuum break capacity.
2. For normal operation, close the manual shut-off cap and then open one full turn. Do not remove the cap or leave it fully open, or water expulsion or mechanism fouling by debris may occur.
3. When automatic venting or vacuum break operation is not desired, close the manual shut-off cap.

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