



## Installation Instructions for Automatic Air Vent (AAV) in Sealed Central Heating Systems

### Introduction

The Automatic Air Vent (AAV) is designed for use in sealed central heating systems. It automatically removes trapped air from the system, ensuring optimal performance, preventing air pockets, and reducing the risk of damage to system components caused by air and corrosion.

### Product Overview

- Product Code: AAV
- Max Working Pressure: 10 BAR
- Working Temperature Range: 0 - 95 °C
- Inlet Fitting: 1/2" BSP
- Material: Brass body
- Dimensions: Height: 94mm, Diameter: 33mm
- Seal Type: O-ring seal (no need for PTFE tape)
- System Compatibility: Suitable for sealed central heating systems
- Installation Requirement: Qualified heating engineer



### **Required Tools and Materials:**

- Automatic Air Vent (AAV) with O-ring seal
- 1/2" BSP Tee piece
- Wrench or spanner for 1/2" BSP fittings
- Pipe cutter (if required)
- Cleaning cloth
- Central heating system shut-off valve

### **Installation Procedure:**

#### **Safety First**

- Ensure the sealed central heating system is turned off and completely depressurized.
- Allow sufficient time for the system to cool down if it has been operating recently.
- Ensure that the work is carried out by a qualified heating engineer.
- Select Installation Location

The Automatic Air Vent should be installed at a high point in the sealed central heating system, as air naturally accumulates at elevated points.

Typical installation points include near the boiler, radiators, or air separators.

A Tee piece with a 1/2" BSP thread is required to connect the AAV to the system. Ensure the selected location has or can accommodate the Tee piece.

#### ***Install the Tee Piece (if necessary)***

If the system does not have a pre-installed 1/2" BSP threaded Tee piece, follow these steps:

Isolate the section of the pipework where the Tee piece will be installed by shutting off the water supply and draining the necessary part of the system.

Cut the pipe at the chosen location using a pipe cutter, ensuring the cut is clean and even.





Fit the 1/2" BSP Tee piece into the pipework and secure it tightly using appropriate fittings. Ensure the Tee piece is aligned correctly for the AAV to screw into the upward-facing 1/2" BSP threaded port.

### **Prepare the Pipework:**

1. Clean the pipe ends to ensure a good seal and remove any debris or dirt.
2. Install the AAV
3. The AAV is equipped with an O-ring seal, so no PTFE tape is necessary.
4. Screw the AAV into the Tee piece's 1/2" BSP threaded port by hand until snug.
5. Use a wrench or spanner to tighten further, ensuring the unit is secure. Do not over-tighten, as the O-ring seal will provide a leak-proof connection.

### **Check the Vent Cap**

6. The AAV has a vent cap on top. For normal operation, ensure the vent cap is in the open position (unscrewed slightly) to allow automatic expulsion of air.
7. If manual venting is needed at any time, the cap can be fully opened to release any trapped air.
8. Refill the System
9. Refill the sealed central heating system with water, ensuring that no air pockets remain.
10. Bleed the radiators to remove any trapped air from other parts of the system.
11. Pressurize the system according to manufacturer guidelines (up to 10 BAR for this AAV model).

### **Test the System:**

- Turn on the sealed central heating system and allow it to reach operating temperature.
- Check for any signs of leakage around the AAV, Tee piece, or other fittings.
- Observe the vent to ensure that it is automatically expelling air as intended.





### **Finalize the Installation:**

Once the system is running smoothly and free of air, make any necessary adjustments.

Ensure that the vent cap is in the correct open position for continued operation.

### **Maintenance:**

The Automatic Air Vent requires minimal maintenance. However, periodic checks should be performed to ensure the vent cap is not blocked and that no leaks are present.

If the vent becomes clogged or fails to expel air, it may need cleaning or replacement.

### **Troubleshooting:**

**No air release:** Check if the vent cap is fully open. If no air is released despite the presence of air pockets, the vent may be clogged.

**Water leakage:** Ensure that the unit is securely fastened and that the O-ring seal is intact. Tighten the fittings if necessary but avoid over-tightening.

### **Guarantee:**

This Automatic Air Vent comes with a 12-month Guarantee from the date of purchase. Refer to the supplier for additional support or replacement if required.

