

**Features**

- UL Listed for Fire Sprinkler Branch line applications per UL subject 2573—“Automatic Air Release Valves for Fire Protection Service”
- FM Approved for “Automatic Air Release Valve for Sprinkler Systems”



**Description**

The PAV is an automatic float type air vent used to reduce the amount of air trapped in a pressurized fire sprinkler system. Reducing the amount of air in a fire sprinkler system is essential to help protect the system piping from the effects of corrosion that is often found at the air/water interface in the fire sprinkler system piping.

Removing as much air as possible will also have a positive effect on the performance of vane type waterflow detectors. The operation of vane type waterflow detectors can be delayed or prevented if too much air is trapped in the system piping.

The intent of the product is to vent as much air from the fire sprinkler system as possible. The PAV provides automatic venting of air as the system is being filled. Furthermore, trapped air can also be vented as the air in the system migrates to the vent location over time. The air vent will automatically close when water reaches the vent. The PAV provides a 1/2" NPT-male connection which will allow installers to pipe the outlet to a drain or other suitable location if there are concerns of inadvertent water discharge.

**Technical Specifications**

Service Pressure	Up to 175 PSIG
Environmental Limitations	40°F to 270°F (4.5°C to 132°C)
Air Vent	1/2" NPT inlet / 1/2" outlet to drain 5/64" Orifice Brass Construction
Optional Accessories	Ball valve supervisory switch model RBVS (Supervisory switch only) Used to monitor the position of the isolation valve. Outdoor vent screen assembly for outdoor installations above 40°F. See Figure 2.

\*Specifications subject to change without notice.

## Installation

### NOTICE

It is strongly recommended to install a ball valve in line with the PAV to assist in servicing the strainer without disabling the sprinkler system.

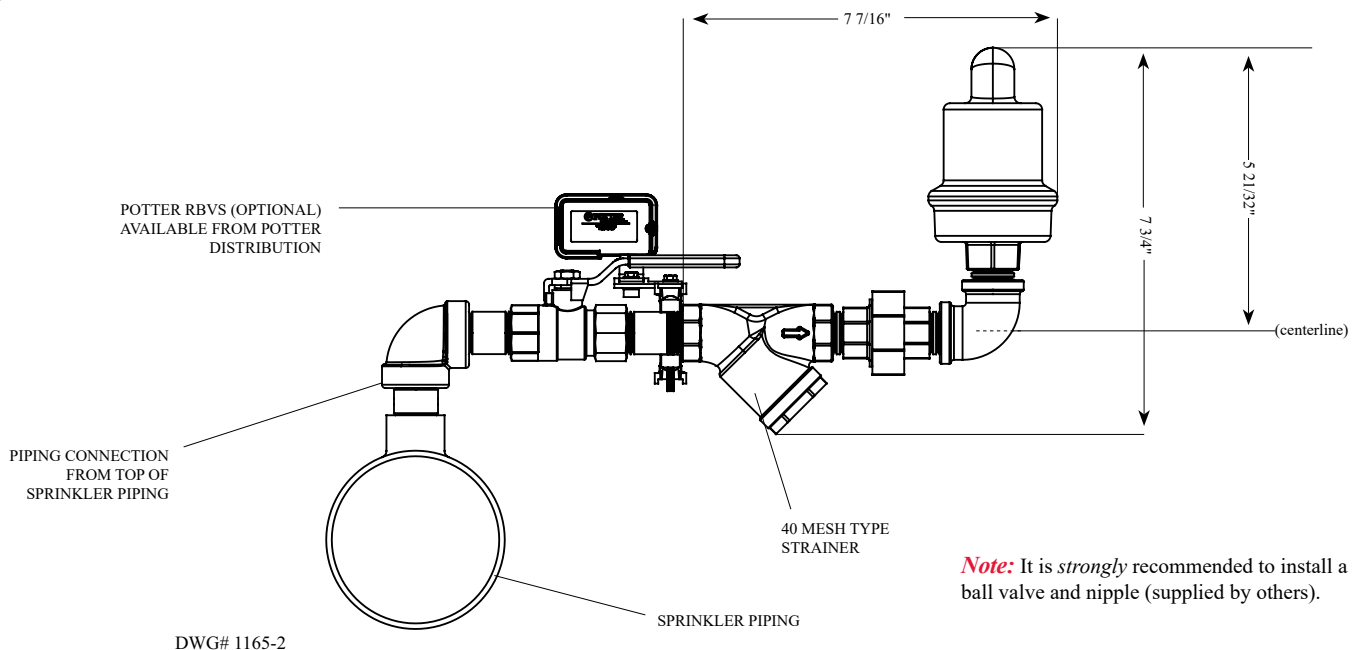
1. Read and understand the instructions provided before you proceed with installation. The PAV shall be installed in accordance with local ordinances and the applicable NFPA13, NFPA13D, or NFPA13R standard.
2. The Engineer of Record should select the Model PAV, Potter Air Vent installation location. Usually at a point in the system that will vent the most air.
3. The location of the PAV must not interfere with the spray pattern of any sprinkler head. The connection point must be off the top of the pipe. (See Fig. 1)
4. The piping must be level or pitch back toward the fire sprinkler system piping and arranged in such a manner that water will not become trapped. The outlet of the PAV contains a 1/2" male NPT threaded connection allowing the device to be piped to a drain or other suitable location if there are concerns about inadvertent water discharge.
5. Immediately after installation and filling of the fire sprinkler system, the PAV should be inspected for leaks and proper operation. The unit should be inspected periodically. Thereafter the manufacturer recommends quarterly or more frequently
6. Inspection should include removal and cleaning of the strainer screen. Remove the screen and flush with clean water. Use a wire brush if necessary to remove any particles trapped in the screen.

## PAV and Shutoff Valve Replacement

The vent used in the PAV is not field replaceable. If the vent should fail, the entire unit must be replaced.

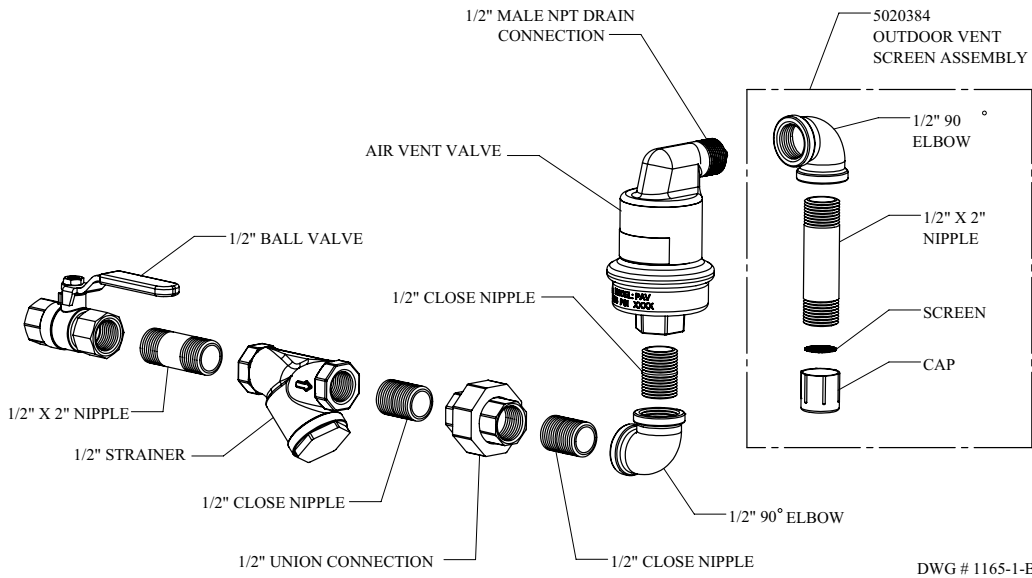
## PAV Outline Drawing

Fig 1



**PAV Assembly**

Fig 2



**Note:** It is *strongly* recommended to install a ball valve and nipple before the strainer. The ball valve and nipple are supplied by others.

**Ordering Information**

Model	Description	Part Number
PAV	Potter Air Vent	1119720
	Outdoor Vent Screen Assembly	5020384
RBVS	Retrofit Ball Valve Switch (w/o cover tamper)	1000040
RBVS-T	RBVS-T Retrofit Ball Valve Switch (with cover tamper)	1000035