

Model TAV-W Air Vent, Wet

General Description

The TYCO Model TAV-W Wet Air Vent provides automatic venting of trapped air in wet pipe fire sprinkler systems. As a fire sprinkler system is filled with water, trapped air migrates to the high point of the system near the vent installation location which allows for trapped air to be vented. Trapped air contains oxygen which is the primary cause of corrosion in fire sprinkler systems. Corrosion in wet pipe fire sprinkler systems is directly proportional to the amount of oxygen trapped within the system piping, so a reduction in trapped air will in turn reduce the internal corrosion activity of the fire sprinkler system. Venting the trapped air in a wet pipe sprinkler system can also decrease water delivery time and reduce false water flow alarms.

The Wet Air Vent must be installed as shown on the engineering design documents. If a location is not provided, install the air vent at an accessible high point on the fire sprinkler system, remote from the system riser, where gas can be vented and at a location that the pressure gauge, provided for visual monitoring, can be viewed from directly below. The TAV-W is also equipped with brass components that allows the device to be installed in areas subject to external corrosion. The float mechanism on the Wet Air Vent will automatically close when water reaches the vent and the redundant design eliminates the need to plumb the TAV-W to drain. If the primary air vent valve allows any significant amount of water to leak past the second air vent, the valve will close preventing water from discharging and provide a system pressure reading on the pressure gauge. This condition will be an indication that the primary

automatic gas vent valve has failed and requires service or replacement. The pressure gauge is designed to be visible from the floor below the Wet Air Vent from a distance of approximately 30 feet.

NOTICE

The TYCO Wet Air Vent described herein must be installed and maintained in compliance with this document, in addition to the standards of any other authorities having jurisdiction. Failure to do so may impair the performance of the related devices.

The owner is responsible for maintaining their fire protection system and devices in proper operating condition. Contact the installing contractor or product manufacturer with any questions.

Technical Data

Specifications

Service Pressure
Up to 175 PSIG (12 Bar)

System Connection
½ in. NPT Male

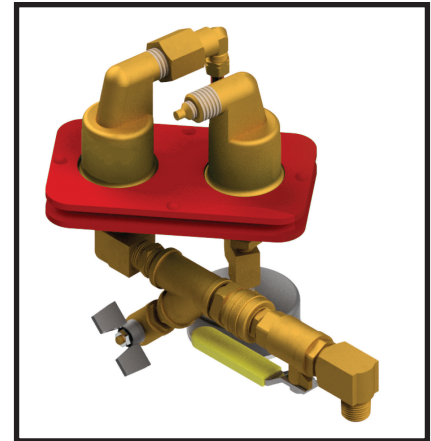
Temperature Range
40°F to 120°F (4,5°C to 48,8°C)

Dimensions
14 in. (L) x 7 in. (D) x 7 in. (H)
(356 mm (W) x (178 mm (D) x (178 mm (H))

Weight
8 lb (3,6 kg)

Clear Height
5 in. (127 mm)

- Patented redundant float design eliminates piping to a drain
- Support Hanger Not Required



Operation

Step 1. Once the fire sprinkler system has been hydrostatically tested, open the isolation ball valve on the TAV-W. Trapped gas should be expected to immediately vent from the device if the system has been re-filled with water.

Step 2. The isolation ball valve must remain in the open position to allow for venting of any additional trapped gas remaining in the system that may migrate to the vent location.

Step 3. Plumbing the TAV-W to drain is not required. Occasionally during venting operations a small amount of water may leak past the primary gas vent valve and collect in the intermediate plumbing. This is considered normal and not a failure of the valve.

Step 4. Water traps that would restrict operation of the Wet Air Vent can be cleared by closing the isolation ball valve and removing the “Y” strainer plug. Once the water trap has been drained, replace the “Y” strainer plug and reopen the isolation ball valve.

IMPORTANT

Refer to Technical Data Sheet TFP2300 for warnings pertaining to regulatory and health information.

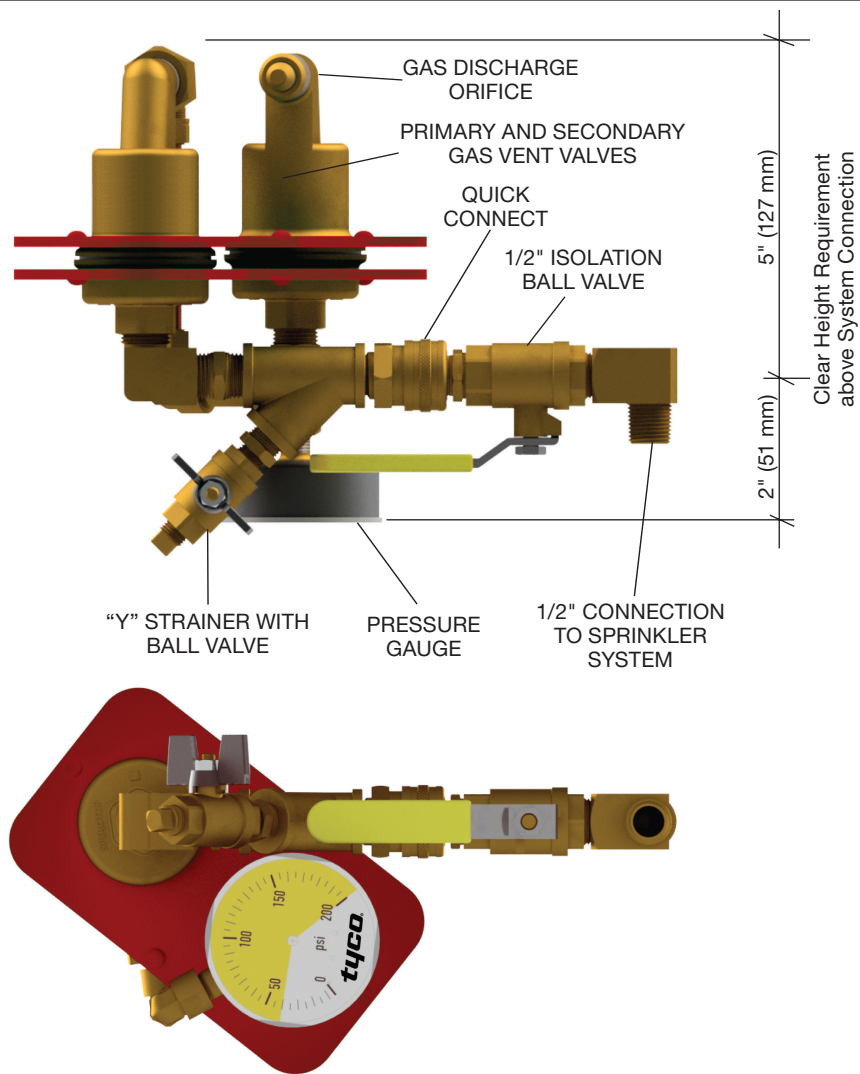
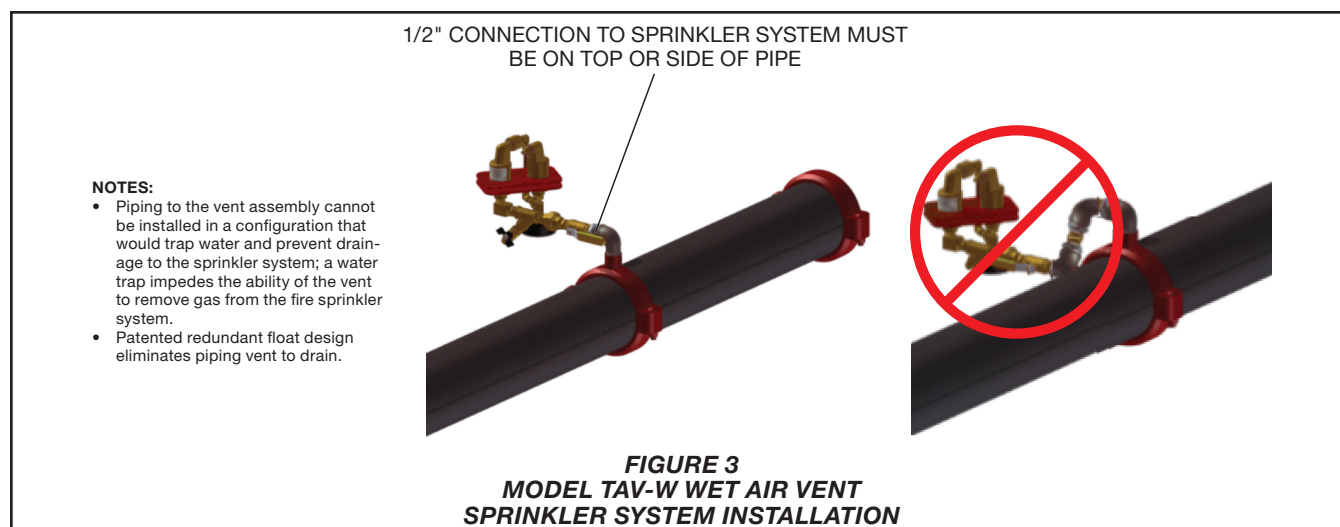


FIGURE 2
MODEL TAV-W WET AIR VENT
ASSEMBLY



Installation

Step 1. The TYCO Wet Air Vent is equipped with an isolation ball valve to connect to the fire sprinkler system. Once the TAV-W has been assembled at the provided quick connect (see Figure 2), the contractor must install a 1/2 in. outlet (welded or mechanical) to connect the vent assembly to the sprinkler system.

Step 2. Install the TAV-W vent assembly at the location provided by the engineering design documents in a level position at an accessible high point on the sprinkler system where trapped gas can be vented.

Note: Piping to the vent assembly cannot be installed in a configuration that would trap water and prevent drainage to the sprinkler system; a water trap impedes the ability of the vent to remove gas from the fire sprinkler system.

Step 3. Inspection of the vent assembly should be performed after installation and hydrostatic testing of the fire sprinkler system. Inspection should be performed periodically thereafter in accordance with the applicable NATIONAL FIRE PROTECTION AGENCY (NFPA) codes and standards and/or the authority having jurisdiction.

Note: Redundant float design eliminates piping the TAV-W to a drain.

Care and Maintenance

The TYCO Wet Air Vent must be inspected annually at a minimum.

Step 1. Check the pressure gauge on the bottom of the vent assembly for a system pressure reading.

Step 2. If a system pressure reading is detected, the primary vent valve may require service or replacement.

- While isolation ball valve is in the open position check for air/water leaks.
- Close isolation ball valve to perform maintenance on the TYCO Automatic Air Vent.
- While isolation ball valve is in the closed position, inspection the "Y" strainer blockage, clean as necessary.
- If replacement is required, contact Johnson Controls Technical Services for replacement parts and instructions.

Limited Warranty

For warranty terms and conditions, visit www.tyco-fire.com.

Ordering Procedure

Contact your local distributor for availability. When placing an order, indicate the full product name and Part Number (P/N).

Air Vent Wet

Specify: Model TAV-W Air Vent, Wet, P/N TAVW01

