



**Service Pressure:** Up to 175 PSIG  
**Temperature Range:** -40°F\* to 120°F (-40°C\* to 49°C)  
**Purge Valve:** 1/2" NPT inlet  
 Brass Construction

**Ordering Information:**

Stock No.	Model/Description
1119784	NGP-SPV -Potter Nitrogen Self Purge Valve

**NOTICE**

If installed below 40°F, the ball valve shall remain closed when not actively purging. If moisture gains access to the inside of the NGP-SPV either thoroughly dry out the device and inspect for leaks or have it replaced, as ice can form inside the PAV and rupture.

**General Description**

The Potter Nitrogen Self Purge valve (NGP-SPV) is designed to work with Potter Nitrogen Generators Systems to effectively purge corrosive oxygen from a fire sprinkler system while maintaining adequate system pressure. Potter's Self Purge Valve is the easiest way to ensure high purity nitrogen is equally distributed throughout the fire sprinkler system. Simply install the NGP-SPV off a tee connection at the end of the sprinkler system. No electrical connections are required. When the nitrogen generator is in operation the purge orifice automatically bleeds out the oxygen as well as the residual moisture in the system. The purge valve also provides a sampling port to monitor the nitrogen purity within the system piping.

In the event of an alarm condition the NGP-SPV has a built in high pressure water shut-off valve that automatically closes when the water reaches the vent.

**NOTICE**

When environmental conditions below 40°F are possible. In the event of sprinkler system activation inspect the position of the ball valve. If the ball valve is open the NGP-SPV shall be thoroughly dried and inspected for leaks or replaced.

A plug is supplied to keep the purge orifice free of debris when not in use. A ball valve allows for isolation of the assembly, maintenance of strainer screen, replacement of air vent, or maintenance of the purge orifice.

**Installation and Servicing (See Figure 1 & 2)**

1. Read and understand the instructions provided before proceeding with installation. The NGP-SPV shall be installed in accordance with local ordinances and the applicable NFPA 13, NFPA 13D, or NFPA 13R standard.
2. The Engineer of Record should select the installation location for the Model NGP-SPV AUTO. This is usually located at the end point of the system.

3. The location of the NGP-SPV must not interfere with the spray pattern of any sprinkler head.

**CAUTION**

NGP-SPV valves must be installed in a level horizontal position. See Figure 2.

4. The piping must be level and arranged in such a manner that water will not become trapped. Trapped water could cause the NGP-SPV not to purge.
5. Using the union, position the purge orifice (N<sub>2</sub> sampling part) for easy access.
6. After installation, close ball valve prior to initiating test or purging process.
7. Purging process operation instructions are located in the Potter Nitrogen Generator Manual.
8. At the completion of the purging process, close ball valve.
9. The unit should be inspected periodically. Thereafter, the manufacturer recommends quarterly or more frequently inspections.
10. 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.
11. Plug should be installed in orifice when purging process is not being performed to keep orifice free of debris and buildup.

Fig. 1 NGP-SPV Auto Assembly

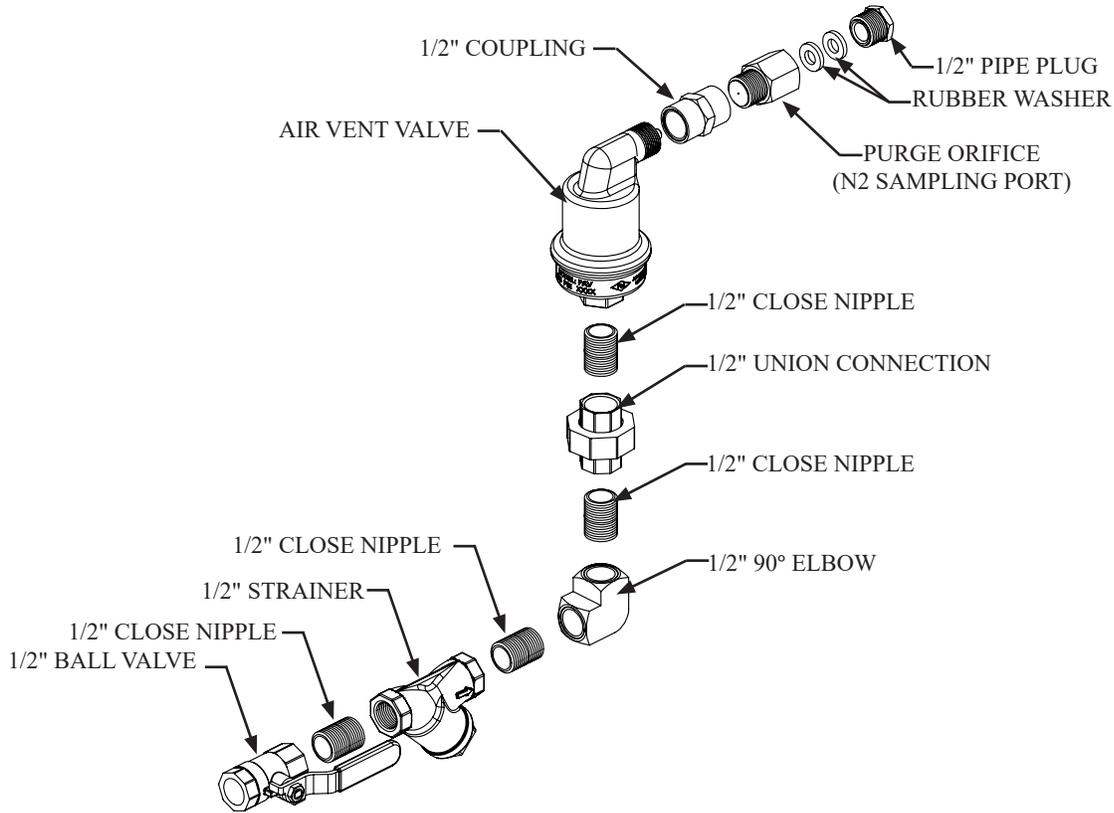
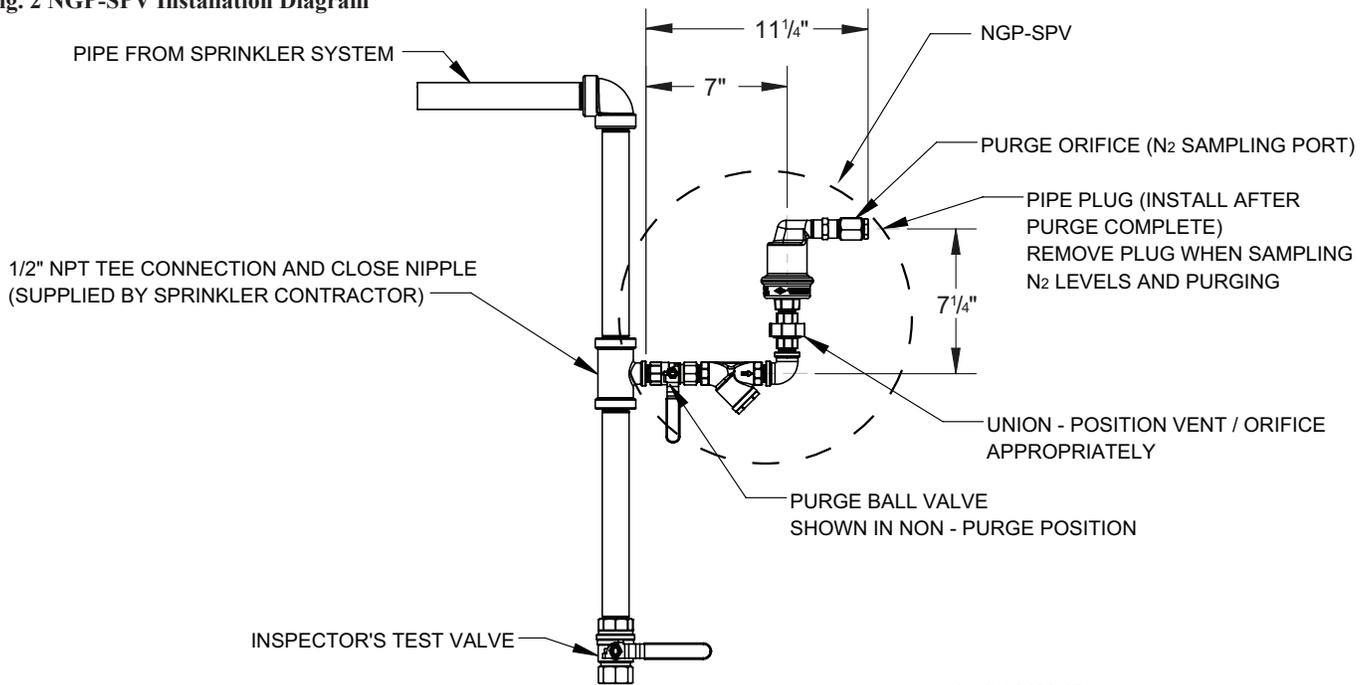


Fig. 2 NGP-SPV Installation Diagram



NGP-SPV shown installed horizontal and level.

DWG. #0400-13