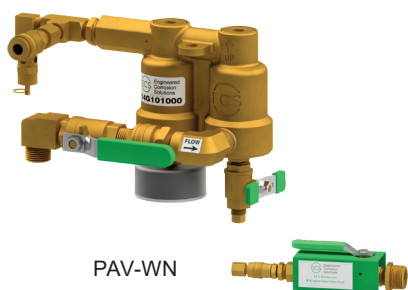


PAV-WN/WNS

ECS Nitrogen Inerting Vent

ECS Engineered
Corrosion
Solutions



PAV-WN

Features

ECS Nitrogen Inerting Vent (U.S. Patents No. 8,636,023)

- Patented redundant float design - Eliminates piping to a drain
- Quick Connect - Easy installation and servicing
- Pressure Gauge (PAV-WN) - Visual monitoring from the floor
- Available in Supervised (PAV-WNS)
- Isolation Ball Valve Included
- Nitrogen Injection Port (PNIP-1) Included
- Entire Assembly is FM 1344 Approved - Air Vents for Automatic Sprinkler Systems
- Entire Assembly is UL VPMG Listed - Valves, Automatic Air Release



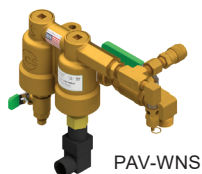
General Description

The ECS Nitrogen Inerting Vent (PAV-WN/WNS) is the only device that provides automatic controlled venting of trapped gases in wet pipe fire sprinkler systems during the Wet Pipe Nitrogen Inerting (WPNI) process. As a fire sprinkler system is filled with water, trapped gas migrates to the high point of the system near the vent installation location which allows for trapped gas 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 reduce internal corrosion activity. Venting the trapped gas in a wet pipe sprinkler system can also decrease water delivery time and reduce false water flow alarms.

The controlled venting is achieved by integrating a pressure relief valve on the gas discharge piping assembly of the ECS Nitrogen Inerting Vent. During the wet pipe nitrogen inerting process, the vent remains closed to facilitate purging of corrosion causing oxygen from the FPS piping network. Once the piping has been appropriately inerted with nitrogen gas using the ECS WPNI protocol and filled with water, the vent allows trapped gases to vent from the piping as the system returns to normal pressure. When the PAV-WN/WNS is used in conjunction with the nitrogen inerting process to provide internal corrosion control for wet pipe fire sprinkler systems by injecting nitrogen gas into the piping network to achieve a nitrogen gas concentration of at least 98%, this controlled venting achieves the following:

1. Prevents premature venting of nitrogen gas during Wet Pipe Nitrogen Inerting process.
2. Allows for gas sampling in remote areas of the FPS piping network to measure the nitrogen concentration levels within the system.
3. Allows for venting the trapped gas within the system when the FPS is filled with water and put into service.



PAV-WNS



RIS-1
(Optional)

When water reaches the ECS Nitrogen Inerting Vent, the primary gas-venting valve will close. In the event the primary valve fails and water leaks past the valve, the secondary gas-venting valve will close. This redundant design eliminates the need to plumb the ECS Nitrogen Inerting Vent to a drain.

A significant water leak from a primary valve failure will cause a pressure spike inside the vent that exceeds 50 psig. With a PAV-WN, pressure is displayed on a gauge visible from the floor below the vent up to a distance of 30 feet. If the gauge reading is in the yellow area, the vent has failed. With a PAV-WNS "supervised" vent, instead of a pressure gauge, a pressure switch, with a single contact for electronic monitoring, senses the pressure and will change state if the pressure exceeds 50 psig.

Specifications

Dimensions	PAV-WN: 10" (L) x 6" (W) x 7" (H) 254mm (L) x 152.4mm (W) x 177.8 (H) PAV-WNS: 10" (L) x 6" (W) x 9" (H) 254mm (L) x 152.4mm (W) x 228.6 (H)
Weight	9 Lbs (4kg)*
Service Pressure	Up to 175 PSIG (12 Bar)
Relief Valve Setting	40 PSIG (2.8 Bar)
System Connection	Vent: ½" NPT Male (12.7mm) Injection Port: 1" NPT Male (25.4mm)
Temperature Range	40°F - 175°F (5°C - 79°C)
Clear Height	5.5" (139.7mm)
Optional Equipment	Remote Inerting Station (RIS-1)

*Support Hanger Not Required

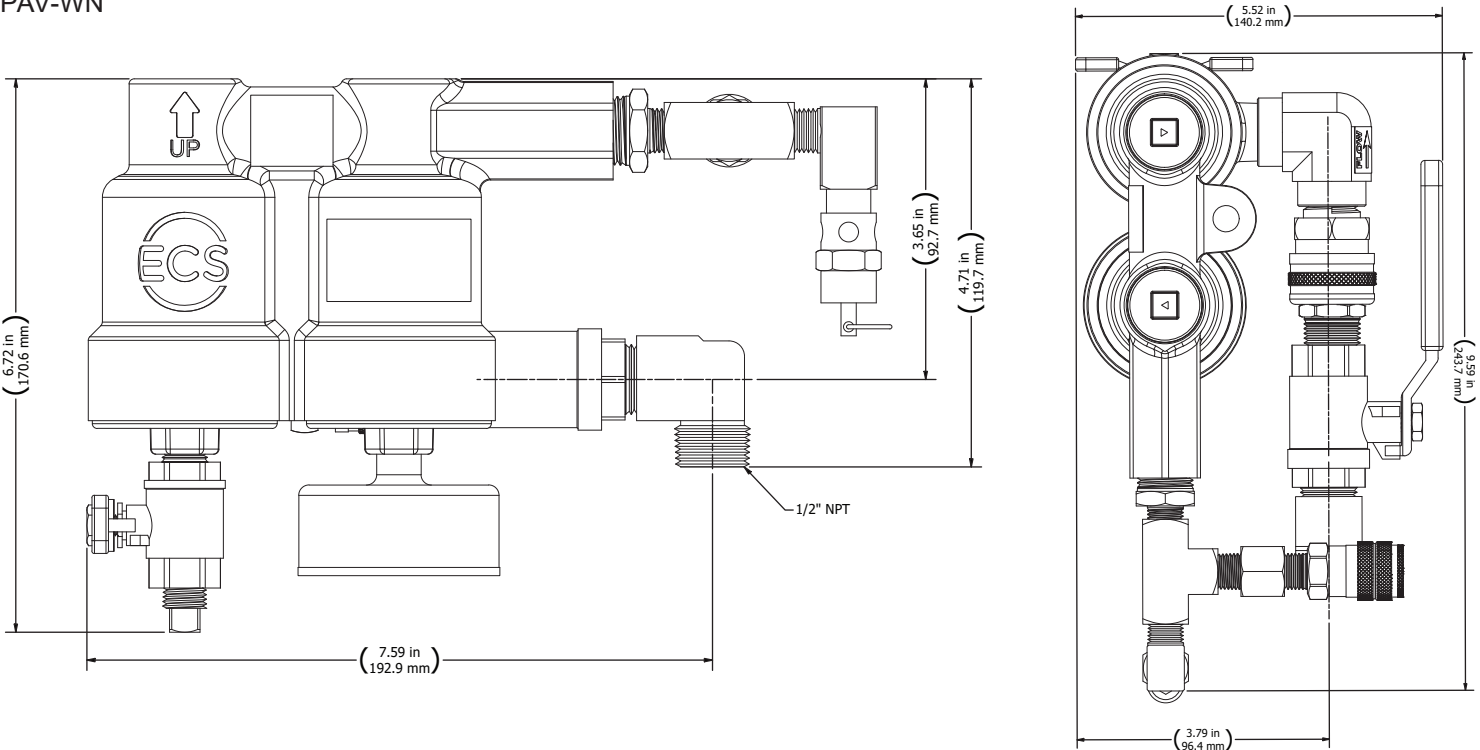
Electrical Connection (PAV-WNS only)

Contact Rating	5A @30VDC/125VAC/250VAC
Contact Form	C (SPDT)
Electrical Connection	Screw Terminals
Conduit Connection	½" NPT Threads

PAV-WN/WNS

ECS Nitrogen Inerting Vent

PAV-WN



PAV-WNS

