

Pressure Relief Valve (PRV) - Operator's Manual



Supported Models

- 8075255

Warning Information

- Read this manual completely as well as other manuals that came with this equipment prior to any operation.
- DO NOT disassemble valve while installed on equipment.
- Adjustment or disassembly will break the tamperproof paste and void the valve's warranty. Adjustment or disassembly should only be performed by ABS personnel.
- Always follow all company and OSHA safety standards.

General Information

The ABS 1 psi pressure relief valve is designed to be the most reliable and cost-effective safety device for preventing vacuum vessels from being pressurized. This valve comes as a standard feature on all ABS Air Filtration Units, and is designed to require zero maintenance from the user. This valve comes calibrated from the factory to regulate pressure levels at or below 1 psi, and allows the escape of any pressurized air introduced into the vessel. While under vacuum, this valve seals shut to ensure system efficiency.

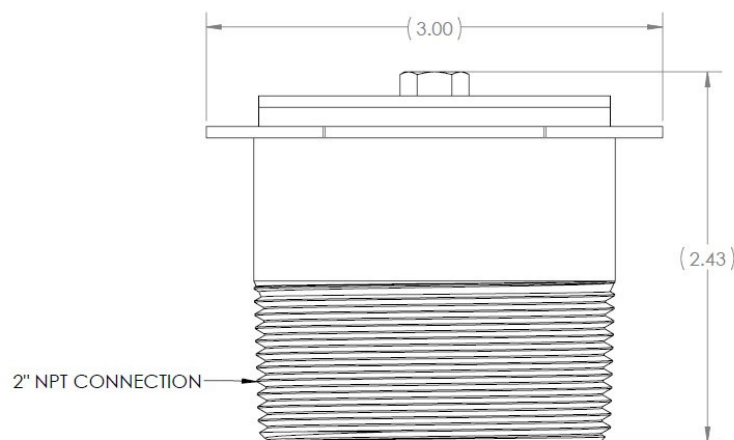
Safety Information

Advanced Blending Solutions recommends that you provide proper safety training to all employees involved in the operation and maintenance of any ABS equipment. Only trained personnel should work with this equipment. **Failure to follow any safety guideline can result in serious injury and/or death.**

- Never disassemble a valve while installed on equipment.
- Valves must only be adjusted, disassembled, or otherwise worked on by ABS personnel.
- Only use valve when it is fully assembled.

Specifications

This valve is designed to properly vent a vessel experiencing a maximum rate of 15 cubic feet per minute of internally introduced air, regulated to a pressure of 90 pounds per square inch. The standard thread size of the connection is 2" NPT.



Operating Instructions

Caution: Valves should be installed, uninstalled, and adjusted by ABS personnel. Adjusting a valve will break its bead of tamperproof paste and void its warranty. Do not work on any ABS equipment if you are not properly trained. Make sure equipment is powered down and locked out/tagged out properly before working on it.

Theory of Operation

The valve will remain closed and under vacuum during normal operation, opening only in the event that compressed air is supplied to the vessel while all of its airways are closed. While open, the valve may emit a hissing sound that will cease once pressure is relieved and the valve closes.

Installation

1. Apply thread sealant to the pipe threads on the bottom of the valve.
2. Install the valve into the 2" NPT coupling on the vacuum vessel. For ABS Air Filtration Units, this coupling is located on the top rounded section.
3. Turn the valve clockwise into the coupling until snug. It is recommended to use the wrench designed for this valve available from ABS to prevent damage.

Uninstallation

1. Turn the valve counterclockwise to loosen it from the fitting. It is recommended to use the wrench designed for this valve available from ABS to prevent damage.
2. Continue loosening until the valve is free and remove it.

Troubleshooting Guide

Symptom	Probable Cause	Corrective Action	Secondary Action (If Corrective Action doesn't remedy issue)
Valve chatters or flutters during operation	Valve is oversized for system	Contact ABS	
Valve doesn't open at all	Valve is not calibrated properly	Contact ABS	
	Valve is seized shut	Pull valve open manually, then release	Replace valve
Pressure level climbs above valve's setpoint	Valve is not calibrated properly	Contact ABS	
	Valve is undersized for system	Contact ABS	
Valve does not close/constantly leaks	Interference from foreign debris	Lift seal, remove any contamination	Contact ABS
	Failed component(s)	Replace valve	

Maintenance

The ABS 1 psi pressure relief valve is designed to require zero maintenance from the user. Inspect monthly to verify that the valve:

1. Opens freely when the seal is pulled up by hand (When not under vacuum).
2. Is free of contamination between the rubber seal and the opening.
3. Closes and seals fully when the seal is released.
4. Shows no signs of wear or damage on the rubber seal.

Note any signs of potential malfunction. Please refer to the Troubleshooting Guide section if any malfunctions occur.

Warranty Information

Please refer to your closeout documents for specific warranty information.