

Honeywell

PRESSMODxx-0000

SV2 Series Valve Pressure Modules

PRESSMOD11-000, 12-000, 13-000, 14-000
PRESSMOD41-000, 42-000, 43-000, 44-000

INSTALLATION INSTRUCTIONS



INTRODUCTION

This document provides installation instructions and wiring information for the Honeywell SV2 Series valves Pressure Modules. Other applicable publications are:

- 32-00018, SV2 Series Installation Instructions
- 32-00029, SV2 Series User Manual
- 32-00030, HMI Tool Installation Instructions
- 32-00031, HMI/PC Tool User Manual
- 32-00037, PC Tool Installation Instructions

SPECIFICATIONS

Dimensions:
Refer to Fig. 1.

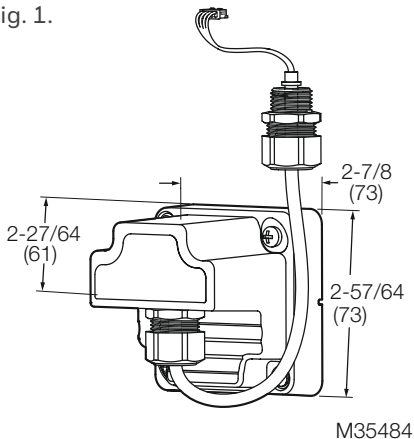


Fig. 1. Pressure Module Dimensions in in. (mm).

Environmental Ratings:

NEMA 1 / IP20 or NEMA 4 / IP66

Operating Temperature Range:

NEMA 1 / IP20: +5 °F to 145 °F / -15 °C to 63 °C
NEMA 4 / IP66: -40 °F to 145 °F / -40 °C to 63 °C

Approvals

The Pressure Module is certified as a component pressure sensing device to provide low gas pressure and high gas pressure limits as well as valve proving pressure measurement in conjunction with the SV2 Series valves only.

Contact Ratings:

Contact connections for the flame safeguard control interlock string are contained within the valve main electrical enclosure. Refer to document 32-00018 (SV2 Series safety shut-off valve Installation Instructions) for contact ratings and proper wiring.

Maximum Inlet Pressure:

Valve inlet pressure must not exceed Pressure Module model maximum pressure rating.

Maximum Withstand Pressure:

Equals 150% of Pressure Module model maximum pressure rating.

INSTALLATION

When Installing This Product...

Read these instructions and the appropriate product literature carefully. Failure to follow them could damage the product or cause a hazardous condition.

1. Installer must be a trained, experienced combustion service technician.
2. Check the ratings on the product to make sure the product is suitable for your application. Do not exceed the ratings on the Pressure Module.
3. After installation is complete, carry out a thorough checkout of product operation as laid out in this document and document 32-00018.



32-00017-09

Pressure Module Placement and Connection

Pressure Modules can be mounted in any of four (4) positions on the valve body and are keyed for specific mounting orientation. The seals of the Pressure Module cover the center and upper pressure access ports of each location.

Pressure Module cord lengths are long enough to fit all valve sizes if mounted on the same side as the electronics enclosure. On smaller valve sizes, the extra cord length may be placed inside the electronics enclosure.

V1 and V2 valve seat pressure port locations on both sides of the valve are shown in Fig. 2. Pressure Module placement and associated functionality can be found in Table 1. Available mounting locations and functions are valve model and intelligence level dependent.

NOTE: Accessing the Inlet (I) port of mounting locations A and C on V1 is not allowed.

Preparation

1. Take care that dirt does not enter the gas valve during handling.
2. Select the correct pressure access location (A/B/C/D) and correct pressure port to open. Refer to Table 1 and Fig. 2.

NOTE: The Pressure Module must be located on the same side as the valve electrical enclosure.

3. Remove the pressure access location cover plate (A/B/C/D) to reveal the mounting location.

Valve Model	Description	Functions (model dependent) ^{1,2}	Pressure Access Location	Pressure Port to Open
V2F	On/off	Low gas pressure, High gas pressure, VPS, Leak detection	A/C on V1	Middle (M)
			B/D on V2	Middle (M)
		Low gas pressure, High gas pressure	B/D on V2	Outlet (O)
V2V	Fuel/air premix with mixing unit	The Pressure Module cannot be used at this time with fuel/air Premix valves for low gas pressure, high gas pressure or VPS. It is suggested to use the C6907 pressure switches for those functions instead. Refer to Table 5 in the SV2 Series valves installation instructions, document 32-00018 or Table 10 in the SV2 Series valves user manual, document 32-00029.		

1. Pressure module must be mounted on the same side as the electronics enclosure.
2. During initial valve setup using the HMI or PC Tools, any functions using the Pressure Module must be setup before the valve will be operational.

Table 1. Pressure Module Placement.

Installation

WARNING

Explosion or Fire Hazard
Can cause severe injury, death, or property damage.

- Turn off gas supply before starting installation.
- Disconnect power supplies before beginning installation.
- More than one disconnect can be involved

WARNING

Electric Shock Hazard
Can cause serious personal injury or death.

- Disconnect power supply before beginning installation.
- More than one disconnection can be involved.

NOTE: BEFORE attempting field replacement of a commissioned PRESSMOD, the installer should disable the Hi-Gas and Lo-Gas Lockout Types and VPS to avoid lockout conditions. Perform the Verify Safety Parameters procedure to confirm the changes. Refer to the Programming and Setup section of this document.

1. Ensure that line voltage has been removed from the valve.
2. Remove the appropriate pressure port plug (O or M) from the side of the valve body as identified in Table 1 and Fig. 2 using the appropriate tool.
3. Inspect the O-ring provided on the Pressure Module to ensure that it is clean and fully seated in the oval groove.
4. Assemble the Pressure Module to the valve body by mating its two locating posts into the valve body locating holes. Refer to Fig. 2.
5. Attach the Pressure Module to the valve body using the two screws provided (M4x25). Verify the Pressure Module is flush against the casting to ensure the O-ring is compressed. The maximum tightening torque is 2 ± 0.2 Nm (18 ± 2 in-lbf).

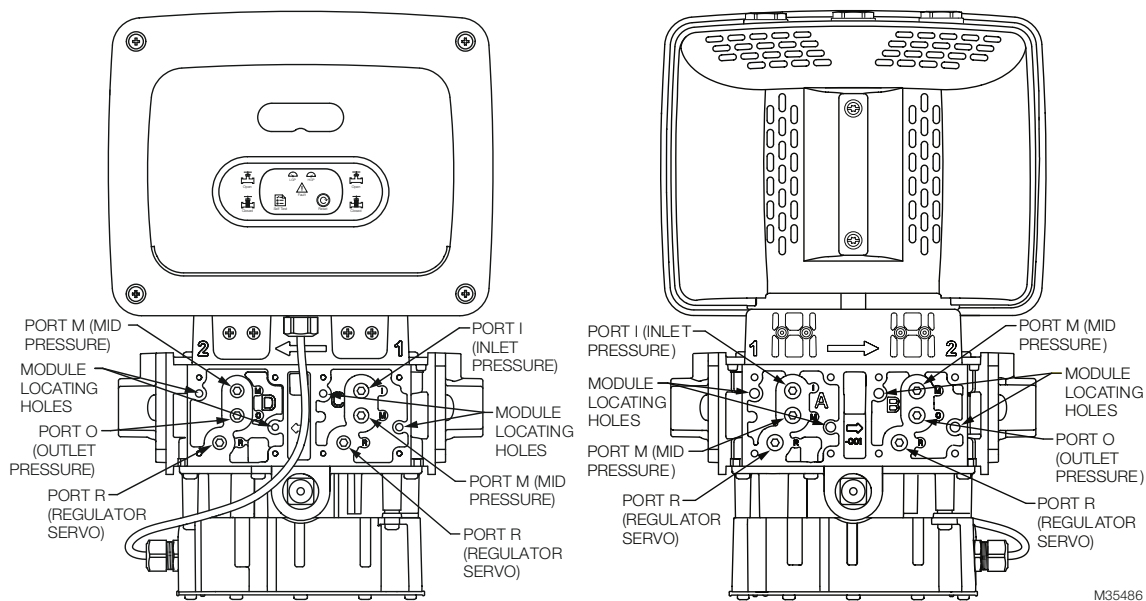


Fig. 2. Valve body and pressure ports.

Pressure Module Wiring

IMPORTANT

Connect Pressure Module wire terminating connector to the appropriate socket inside main valve electrical enclosure labeled 'PRESSURE'.

1. Remove the valve front electrical enclosure retaining screws with the appropriate tool to access customer wiring terminals.
2. For NEMA 4 / IP66 electrical enclosures, use the cable entry point just above the Pressure Module location or in the center of the electrical enclosure. Remove the liquid tight nut provided with the Pressure Module. Place the nut above the cable entry point you wish to use inside the valve electrical enclosure.
 - a. Thread the Pressure Module connector end through the hole and nut.
 - b. Insert terminating connector in the slot labeled 'PRESSURE'. Refer to Fig. 3.
 - c. Thread extra cable length inside electrical enclosure as desired. Insert Pressure Module threaded cord grip into hole and tighten, using nut. The maximum tightening torque is $3.95 \pm 0.25 \text{ Nm}$ ($35.5 \pm 2.5 \text{ in-lbf}$).
3. For NEMA 1 / IP20 valve electrical enclosures thread the Pressure Module connector end through the slot in the bottom center of the electrical enclosure.
 - a. Insert terminating connector in the slot labeled 'PRESSURE'. Refer to Fig. 3.
 - b. Thread extra cable length inside electrical enclosure as desired and dress the cable to one of the provided wire clips on the bottom of the electrical enclosure.
4. Replace the valve front electrical enclosure and tighten the screws if electrical wiring is complete. Maximum tightening torque $1.4 \pm 0.14 \text{ Nm}$ ($12.32 \pm 1.32 \text{ in-lbf}$).
5. Restore line voltage to the valve if wiring is complete.

Electrical Assembly

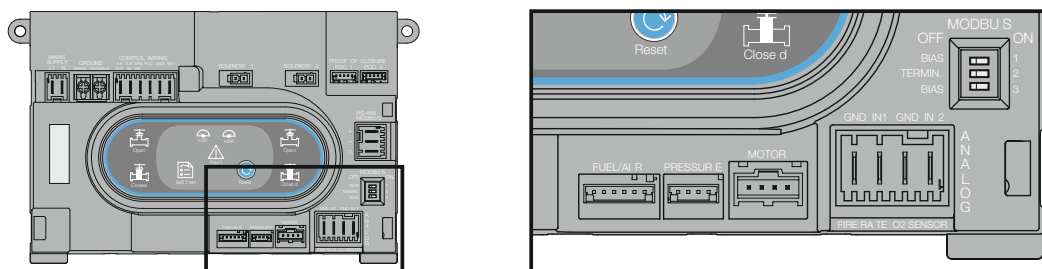


Fig. 3. Pressure Module Connection.

PROGRAMMING AND SETUP

IMPORTANT

For programmed valves, login with the Installer or OEM password via the HMI/PC Tool.

For un-programmed valves, log in with the default OEM password.

BEFORE installing replacement Pressure Module, disable the Hi-Gas / Lo-Gas Lockout types and VPS then perform the Verify Safety Parameters procedure.

To power the valve seats for the leak test, the user must Accept the new Pressure Module in the PRESSMOD tab in the Settings / Setup & Tests menus, leaving the Lo-Gas / Hi-Gas lockout type and VPS Disabled. Once the leak check is passed, the pressure limits and/or VPS must be setup and the Verify Safety Parameters procedure completed to make the valve operational.

Refer to the HMI / PC Tool User Manual, 32-00031, for full setup instructions.



Fig. 4. HMI.

PRESSURE MODULE LEAK CHECK

IMPORTANT

Leak check should be performed during the initial burner system startup or whenever the valve or Pressure Module are replaced. It is also recommended to include this test in the scheduled inspection and maintenance procedures.



WARNING

Explosion or Fire Hazard

Can cause severe injury, death, or property damage.

- **Do not put the system into service until you have satisfactorily completed the following Pressure Module leak test, all applicable tests as described in the valve checkout and operation section of the SV2 Series valve installation instructions (32-00018) and flame safeguard control manual as well as any other required by the burner manufacturer.**
- **All tests must be performed by a trained, experienced combustion service technician.**
- **Close all manual fuel shut-off valves as soon as trouble occurs. After the installation is complete, cycle the valve several times with the manual fuel shut-off cock closed. Make sure the valve and actuators function properly.**

1. Close the downstream manual gas valve(s).¹
 2. Open the upstream manual gas valve(s).
 3. Apply rich soap and water solution around the entire mating surface between the valve body and Pressure Module.
 4. Energize the valve train to apply pressure to the Pressure Module.
 5. If leak is found, de-energize the control system to remove power from the valve seats, close the upstream manual valve(s), remove Pressure Module from the valve and inspect/clean the O-ring and mating seal surface between the valve body and Pressure Module. Install the Pressure Module, tighten the mounting screws to max of 2 ± 0.2 Nm (18 ± 2 in-lbf) and verify the Pressure Module is flush and tight against valve body.
 6. Repeat leak check steps 1 to 5.
 7. When no leaks are found, put system into service after all applicable tests as described in the valve checkout and operation section of the SV2 Series valve installation instructions (32-00018) and flame safeguard control manual are completed as well as any other required by the burner manufacturer.
1. If downstream manual gas valve(s) not present, only open/power SV2 Series valve V1 and check for leaks. Recheck for leaks on complete system when operational.



Disposal and Recycling

Waste electrical products should not be disposed of with general waste.

Please recycle where these facilities exist. Check with your local authority for recycling advice.

For more information on this product and the entire SV2 Series product line, please refer to the SV2 Series User Guide located on our website at <https://combustion.honeywell.com/sv2>

For More Information

The Honeywell Thermal Solutions family of products includes Honeywell Combustion Safety, Eclipse, Exothermics, Hauck, Kromschroder and Maxon. To learn more about our products, visit ThermalSolutions.honeywell.com or contact your Honeywell Sales Engineer.

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