

SV2 Series Safety Shut-off Valves

V2F

INSTALLATION INSTRUCTIONS ADDENDUM



INTRODUCTION

CYBER SECURITY NOTICE

SV2 Series products contain electronics and software. Care should be taken by the installer / facility management to guard against unauthorized access to the valve and to the programming interface for parameter modification (if applicable).

Unauthorized access to change the valve wiring interface, replace parts, change device hardware or software should not be permitted. Failure to do so may pose a safety risk.

A tamper evident label has been placed inside the valve electrical enclosure to indicate if access has occurred. The label resides between the valve main electronics assembly and the electrical enclosure which houses it.

NOTE: The valve main electronics assembly is field replaceable and as such, this seal must be broken in order to replace it.

2 INSTALLATION AND MOUNTING

When Installing This Product...

1. Read these instructions and the appropriate product literature carefully. Failure to follow them could damage the product or cause a hazardous condition.
2. Installer must be a trained, experienced combustion service technician.

3. Check the ratings given in the instructions and on the product to make sure the product is suitable for your application. Do not exceed the valve ratings.
4. Disconnect the power supply before beginning installation to prevent electrical shock and equipment damage.
5. All wiring must comply with the National Electric Code (NEC) and any applicable local electrical codes, ordinances and regulations.
6. After installation is complete, carry out a thorough checkout of product operation as laid out in this document.

WARNING

**Explosion Hazard and Electrical Shock Hazard.
Can cause explosion, serious injury or death.**

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

IMPORTANT

- The valve must be installed so that the arrow on the valve points in the direction of the gas flow (gas pressure helps to close the valve).
- Make sure the O-ring seals (provided) are properly positioned and seated at the inlet and outlet flange connections.
- Do not remove the dust seal over the valve inlet and outlet until ready to connect piping.



! WARNING

Explosion Hazard and Electrical Shock Hazard.
Can cause explosion, serious injury or death.

- Do not take valve apart.
- Do not use tools to operate valve.
- Do not use valve if it has been flooded.
- Call serviceman if valve does not work properly.

IMPORTANT

- Disassembly of the valve in the field may cause permanent damage to the valve and void the factory warranty.
- Fasteners containing lacquer paint indicate non-field accessible areas.
- Accessory modules may be removed or replaced as necessary in the field.

! CAUTION

If valve has been dropped, do not use it.

- Dropping the valve may cause permanent damage to the valve.
- Replace entire valve and associated modules before use.

! NOTICE

DO NOT attempt to change valve electronics side orientation without consulting the valve user manual.

- Reference document 32-00029 for detailed instructions on this procedure.

C6097 Pressure Switch Placement and Connection



Fig. 1. C6097

! WARNING

Explosion Hazard.

Can cause explosion, serious injury or death.

- The M4x25 screws (bag assembly 32305434-001) shipped with the SV2 valve **MUST** be used to secure the flange mount C6097 to the valve body
- **DO NOT** use the 8-32 screws provided with the flange mount C6097 pressure switch
- Failure to follow this advice can result in gas leakage and explosion

C6097 Installation on SV2 Series Valve

! WARNING

Explosion Hazard and Electrical Shock Hazard.
Can cause explosion, serious injury or death.

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

3 WIRING

A. Wiring and Conduit Recommendations

! WARNING

Explosion Hazard and Electrical Shock Hazard.
Can cause explosion, serious injury or death.

- Disconnect the power supply making wiring connections to prevent electrical shock and equipment damage.
- More than one power supply disconnect can be involved.

IMPORTANT

- Use only flexible conduit with the SV2 Series valve NEMA 4 / IP66 enclosures.
- Wiring must comply with all applicable electrical codes, ordinances and regulations.
- Wiring must comply with NEC Class 1 (line voltage) wiring.
- Use lead wire which can withstand 90°C (194°F) ambient temperatures.
- Voltage and frequency of the power supply connected to this control must agree with those marked on the device.
- Loads connected to the VPS (valve proving system) Switch and/or POC (proof of closure) Switch, if used, must not exceed the ratings given in Table 6.
- Separate line and low voltage to avoid signal interference. If using conduit, run line voltage and low voltage wiring in separate conduit.

4 VALVE CHECKOUT AND OPERATION

WARNING

Explosion Hazard and Electrical Shock Hazard.
Can cause explosion, serious injury or death.

- Do not allow fuel to accumulate in the combustion chamber for longer than a few seconds without igniting. An explosive mixture can result.
- Do not put the system into service until you have satisfactorily completed the following Valve Seat Leak Test, all applicable tests described in the Checkout section of the flame safeguard control manual, and any other tests 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, perform the Valve Seat Leak Test before putting the valve into service.

A. Valve Connection and Accessory Leak Test

IMPORTANT

Leak check should be performed only by trained, experienced combustion service technician during the initial startup of the burner system, or whenever the valve is replaced. It is recommended that this test also be included in the scheduled inspection and maintenance procedures.

B. Valve Seat Leak Test (Refer to Fig. 21)

IMPORTANT

This is a test for checking the closure tightness of the gas shut-off valve. It should be performed only by trained, experienced combustion service technicians during the initial startup of the burner system or whenever the valve is replaced. It is recommended that this test should also be included in the scheduled inspection and maintenance procedures. Refer to Fig. 21.

WARNING

Electrical Shock Hazard and Explosion Hazard.
Can cause explosion, serious injury or death.

Remove the power from the system before beginning the valve leak test to prevent electrical shock. More than one disconnect may be involved. Power the system only when requested in the test procedure.

5 PROGRAMMING AND SETUP

IMPORTANT

- You *DO NOT* have to enable and utilize the intelligent valve features.
- Any intelligent features used do require completion of setup and verification during the initial valve setup using the HMI or PC tools before the valve will be operational.
- When using the Pressure Module, you *MUST* use both the low gas pressure and high gas pressure settings.

6 FINAL WIRING CHECK AND STATIC CHECKOUT

A. Test

CAUTION

- Cycle the valve several times with the manual fuel shut-off valve closed. Verify that the valve, accessory modules and control system function properly.
- Test each limit and interlock to ensure system operates correctly as defined in the applicable flame safeguard control manual instructions.
- Follow burner management system checkout guidelines. For 7800 SERIES, refer to the “Checkout and Test” document (Form #65-0229).
- Perform any other recommended manufacturer or other required tests.

Troubleshooting

WARNING

Electrical Shock Hazard.

Can cause severe injury, death or property damage.

Use extreme caution when troubleshooting; line voltage is present.

IMPORTANT

Do not replace the valve until all other sources of trouble have been eliminated.

Service Information

WARNING

Explosion Hazard and Electrical Shock Hazard.

Can cause severe injury, death or property damage.

- Turn off gas supply and disconnect all electrical power to the valve before servicing
- Only trained, experienced combustion service technicians should attempt to service or repair flame safeguard controls, burner assemblies or valve trains.
- Refer to SV2 Series User Manual, 32-00029, for advice on component field replacements.



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, Kromschröder and Maxon. To learn more about our products, visit ThermalSolutions.honeywell.com or contact your Honeywell Sales Engineer.

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