

SmartValve System Controls

SV9501; SV9502; SV9601; SV9602 Intermittent Pilot SmartValve® System



Ignition System Type: Intermittent Hot Surface Pilot Ignition

Ignition Sequence: Intermittent Pilot

Flame Sense: Two-Rod

Electrical Ratings: 24 Vac

Frequency: 50 Hz; 60 Hz

Body Pattern: Straight-through

Pressure Tapping: 1/8 in. - NPT

Capacity:

1/2 x 1/2 inlet x outlet – At 1 in. wc p.d. - 150,000 BTUh:

20,000 BTUh minimum: 200,000 BTUh maximum Natural Gas

3/4 x 3/4 inlet x outlet – At 1 in. wc p.d. - 300,000 BTUh:

30,000 BTUh minimum: 415,000 BTUh maximum Natural Gas

Pressure Ratings (psi): 1/2 psi

Pressure Ratings (kPa): 3.5 kPa

Ignition Source: Pilot

Ignition Trials To Lockout: Continuous retry

The SmartValve® System Controls combine gas flow control and electronic intermittent pilot sequencing functions into a single unit. This product family offers several different intermittent pilot sequences for a wide range of applications. The specific application of the SmartValve System is the responsibility of the appliance manufacturer. They are directly compatible with the Q3450 or Q3480 Intermittent Pilot burners used with the original controls on the appliance.

- Suitable for a wide range of gas-fired appliances including residential furnaces, roof-top furnaces, residential boilers, unit heaters, infrared heaters, space heaters and commercial cooking units.
- Ignition sequence includes timed trial for ignition.

Ignition Trial Time (sec): 90 sec

Flame Failure Response Time (sec): 1.6 sec @ 3 µA

Typical Ignition Hardware: Q3450; Q3480

Mounting: 0 to 90 degrees in any direction from the upright position of the gas control knob, including vertically.

Approximate, Dimensions: 3.2 in. wide x 4.9 in. high x 4.1 in. long
(81 mm wide x 124 mm high x 104 mm long)

Approvals, CSA: CSA International: 112395

Accessories (For H and M models only):

393691/U – Single Stage Natural Gas to LP Conversion kit, including regulator spring, adjustment screw and cap screw

394588/U – Single Stage LP to Natural Gas Conversion kit, including regulator spring, adjustment screw and cap screw

| | Material Number | Opening Characteristics | Type of Gas | Inlet/Outlet Size (in.) | Pressure Regulator Setting (psi) | Pressure Regulator Setting (kPa) | Prepurge | Ambient Temperature Range | Includes |
|--------------------------|-----------------|-------------------------|---|----------------------------|---|---|------------|----------------------------------|---|
| U | SV9501M2528/U | Standard | Natural (LP with included conversion kit) | 1/2 in. NPT x 1/2 in. NPT | 3.5 in. WC | 0.87 kPa | None | -40°F to +175°F (-40°C to +79°C) | Natural to LP Conversion Kit Extension Harness |
| U | SV9501M8129/U | Fast-Fast | Natural (LP with included conversion kit) | 1/2 in. NPT x 1/2 in. NPT | 3.4 in. WC | 0.87 kPa | None | -40°F to +175°F (-40°C to +79°C) | Natural to LP Conversion Kit Extension Harness |
| U | SV9502H2522/U | Slow | Natural (LP with included conversion kit) | 1/2 in. NPT x 1/2 in. NPT | 3.2 in. WC | 0.80 kPa | 15 seconds | 0°F to 175°F (-18°C to +79°C) | Natural to LP Conversion Kit Extension Harness |
| U | SV9601M4571/U | Standard | Natural (LP with included conversion kit) | 3/4 in. NPT x 3/4 in. NPT. | 3.5 in. WC | 0.87 kPa | None | -40°F to +175°F (-40°C to +79°C) | Two 3/4 x 1/2 in. reducer bushings Natural to LP Conversion Kit |
| U | SV9602P4816/U | Step | Natural | 3/4 in. NPT x 3/4 in. NPT. | Full Rate: 3.5 in. WC; Step Setting: 0.7 in. WC non-adjustable | Full Rate: 0.87 kPa; Step Setting: 0.17 kPa | 30 seconds | -40°F to +175°F (-40°C to +79°C) | Two 3/4 x 1/2 in. reducer bushings Extension Harness |
| U | SV9602P4824/U | Step | Natural | 3/4 in. NPT x 3/4 in. NPT. | Full Rate: 3.5 in. WC; Step Setting: 2.5 in. WC non-adjustable | Full Rate: 0.87 kPa; Step Setting: 0.62 kPa | 30 seconds | -40°F to +175°F (-40°C to +79°C) | Two 3/4 x 1/2 in. reducer bushings Extension Harness |
| U | SV9602P4832/U | Step | LP | 3/4 in. NPT x 3/4 in. NPT. | Full Rate: 10.0 in. WC; Step Setting: 2.5 in. WC non-adjustable | Full Rate: 2.49 kPa; Step Setting: 0.62 kPa | 30 seconds | -40°F to +175°F (-40°C to +79°C) | Two 3/4 x 1/2 in. reducer bushings Extension Harness |
| U | SV9602P4840/U | Step | LP | 3/4 in. NPT x 3/4 in. NPT. | Full Rate: 10.0 in. WC; Step Setting: 1.4 in. WC non-adjustable | Full Rate: 2.49 kPa; Step Setting: 0.35 kPa | 30 seconds | -40°F to +175°F (-40°C to +79°C) | Two 3/4 x 1/2 in. reducer bushings Extension Harness |
| U Universal Service Part | | | | | | | | | |