

SV9510; SV9520 SmartValve® System



Dimensions, Approximate: 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.)

Body Pattern: Straight-through

Type of Gas: Natural

Capacity:

1/2 x 1/2 inlet x outlet: 150 ft³/hr (4.2 m³/hr) 1 in. PD;
20 ft³/hr (0.6 m³/hr) minimum; 200 ft³/hr (5.7 m³/hr) maximum

Electrical Ratings: 24 Vac

Frequency: 50 Hz; 60 Hz

Flame Failure Response Time (sec): 2 sec @ 5 µA

Flame Sense: Two Rod

Ignition Sequence: 17/27 sec

The SmartValve® System Controls combine gas flow control and electronic direct main burner ignition sequencing functions into a single unit. The ignition source is 120V hot surface igniter lighting the main burner flame. Provides all gas ignition safety functions by controlling gas flow, ignition source, and a 120 Vac combustion air blower. The control also monitors the appliance airflow proving switch circuit and limit string to assure proper appliance operation. The SmartValve System Controls provide prepurge, postpurge and timed trial for ignition with multiple ignition trials and auto reset from lockout. Diagnostic LED indicates system status.

- The control communicates directly with the ST9160 Electronic Fan Timer (EFT) in typical forced warm air furnace applications.
- It can directly interface with the appropriate power supplies and a system thermostat for additional appliance applications.
- When controlled directly by a thermostat, the control does not provide a postpurge function, as power to the control is removed when the thermostat call for heat ends.
- This system is suitable for a wide range of fan-assisted combustion, gas-fired appliances including furnaces, rooftop furnaces, boilers, unit heaters, infrared heaters, water heaters and commercial cooking appliances.

Ignition Sequence: 7/12 sec

Ignition System Type: Direct Hot Surface Ignition

Ignition Trials To Lockout: 4 trials

PrePurge: 15 seconds

Pressure Ratings: 1/2 psi (3.5 kPa)

Pressure Tapping: 1/8 in. - NPT

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

Includes: LP Conversion Kit

Approvals

CSA International: 112395

Product Number	Opening Characteristics (standard, step)	Inlet/Outlet Size (in.)	Pressure Regulator Setting		Ambient Temperature Range		Ignition Trial Time
			(psi)	(kPa)	(F)	(C)	
U SV9510K2539/U	Slow Opening	1/2 in. x 1/2 in. NPT	3.5 in. wc	0.87 kPa	-40 F to +175 F	-40 C to +79 C	9 sec
U SV9510M2511/U	Standard	1/2 in. x 1/2 in. NPT	3.5 in. wc	0.87 kPa	-40 F to +175 F	-40 C to +79 C	7 sec
U SV9520H8513/U	Fast-Slow Opening	1/2 in. x 1/2 in. NPT	3.5 in. wc	0.87 kPa	0 F to +175 F	-18 C to +79 C	7 sec
U SV9520M2536/U	Standard	1/2 in. x 1/2 in. NPT	3.5 in. wc	0.87 kPa	-40 F to +175 F	-40 C to +79 C	7 sec

U Universal Service Part