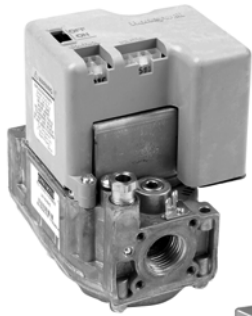


# SmartValve™ Control Systems

## SV9501; SV9502 SmartValve™ System



Standard Opening



Fast-Fast Opening



Slow Opening

The SmartValve™ System Controls provide easy field replacement of a wide range of SV9500, SV9501, SV9502 and SV9602 SmartValve™ System models. Gas appliance manufacturers use these models in many types of gas fired heating appliances including central furnaces, residential boilers, rooftop furnaces, commercial cooking appliances, and unit heaters. These controls provide intermittent pilot gas ignition sequencing, pilot flame sensing, and both pilot and main gas control functions in a single control. 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.
- Replaces SV9500, SV9501 and SV9502 controls as noted below.
- Ignition sequence includes timed trial for ignition.

**Body Pattern:** Straight-through  
**Maximum Capacity at 1 in. P.D.** 150 ft<sup>3</sup>/hr (20 ft<sup>3</sup>/hr)  
**Maximum Capacity:** 200 ft<sup>3</sup>/hr (5.7 m<sup>3</sup>/hr)  
**Minimum Capacity:** 20 ft<sup>3</sup>/hr (0.6 m<sup>3</sup>/hr)  
**Pilot Gas Outlet:** Yes  
**Electrical Ratings:** 24 Vac  
**Frequency:** 60 Hz/50 Hz  
**Flame Failure Response Time (sec):** 1.6 sec @ 3 μA  
**Flame Sense:** Electrode  
**Ignition Sequence:** Intermittent Pilot

**Ignition Source:** Pilot  
**Ignition System Type:** Intermittent Hot Surface Pilot Ignition  
**Ignition Trial Time (sec):** 90 sec  
**Ignition Trials To Lockout:** continuous retry  
**Pressure Ratings:** 1/2 psi (3.45 kPa)  
**Ambient Temperature Range:** -40 F to +175 F (-40 C to +79 C)  
**Typical Ignition Hardware:** Q3450

**Approvals:**  
**American Gas Association:** IAS Design Certified: C2030017

Product Number	Type of Gas	Opening Characteristics (standard, step)	Inlet/Outlet Size (in.)	Pressure Regulator Setting		PrePurge
				(psi)	(kPa)	
SV9501M2528	Natural	Standard Opening	1/2 in. NPT x 1/2 in. NPT	3.5 in. wc	0.87 kPa	None
SV9501M8129	Natural	Fast-Fast Opening	1/2 in. NPT x 1/2 in. NPT	3.4 in. wc	0.87 kPa	None
SV9502H2522	Natural	Slow Opening	1/2 in. NPT x 1/2 in. NPT	3.2 in. wc	0.80 kPa	15 seconds

# SmartValve™ Control Systems Selection Guide

		Specifications							Cross-Reference
Ignition/ Application	Universal Service Part	Gas Type	Opening Characteristics	Ambient Temperature Range	Natural to LP Conversion Kit (Included)	3/4 in. x 1/2 in. Reducer Bushings (Included)	Extension Harness (Included)	OEM Brands	Replaces
Intermittent HSI Pilot, General Application	SV9601M4571	Natural	Standard Opening	-40 to 175 F (-40 to 79C)	Yes	Two	No	—	SV9601M4167, SV9601M3003, SV9601M4225
	SV9501M2528								SV9501M2056, SV9501M2080, SV9501M2726, SV9501M2031, SV9501M2049, SV9501M2239, SV9501M2700, SV9501M2718, SV9501M2734, SV9501M2742, SV9501M2064
	SV9501M8129		Fast-Fast	0 to 175 F (-18 to 79)	None	None	Yes	—	SV9501M8103
	SV9502H2522		Slow Opening					Laars, Utica, Armstrong, Concord, AireEase	SV9501H3415, SV9501H2417, SV9501H2409, SV9502H1706, SV9502H2704, SV9501H3423, SV9501H2425
	SV9602P4816		Step Opening	-40 to 175 F (-40 to 79 C)	None	Two	Yes	Burnham, ICP, Heil, Tempstar, Arcoaire, Comfortmaker, KeepRite	SV9501P2004, SV9601P4107, SV9501P2053, SV9502P2101, SV9602P4105
	SV9602P4824							Burnham	SV9501P2087, SV9601P4172, SV9502P2127, SV9602P4121
	SV9602P4832							Burnham	SV9501P2020, SV9501P2046, SV9601P4149, SV9601P4164, SV9502P2119, SV9502P2135, SV9602P4113, SV9602P4139
	SV9602P4840							—	SV9601P4115

For a complete cross-reference, visit [www.customer.honeywell.com](http://www.customer.honeywell.com)