Solenoid valves
SV、SSV、SV-G、NSV series

Technical data

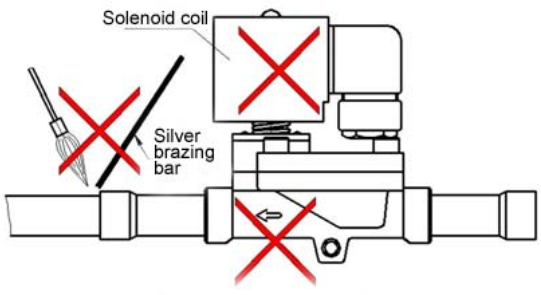
Ambient temperature: -20 ～ 50℃
Medium temperature: -25 ～ 120℃
Max. working pressure: 3MPa
Max. testing pressure: 3.5MPa
Available medium: R134a、R22、R407C、R404A/507、air、water and oil
Rated power:
A.C. : 24V,36V,110V,220V,380V
D.C. : 12V,24V,110V,220V

Ordering

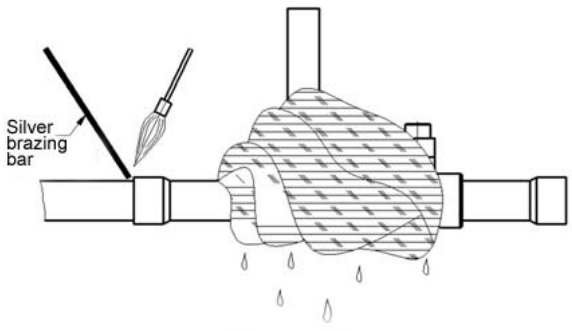
Explanation	Valve code	Port size	Connection form	Normal opened code	Rated power
Model	**SV**	**13**	**W**	**K**	**AC220V**
Explanation	SV: With diaphragms NSV: With pistons SSV: B-flow	Port size (mm)	Omit for flare SAE W: Solder ODF G: Internal thread F: Waist flange	Omit for normal closed valve K: Normal opened valve	Rated power (V)
Notes	The model SV13WK-AC220V is an example in the table.				

Usage

1. The valve must install in horizontal pipe line under vertical position. The flow direction must meet the arrow direction in valve body.
2. The coil input voltage must meet rated input voltage showed on the label. Departure coil from valve when energized in coil is not permitted in order to avoid damage the coil.
3. According to valve with manual function, it must turn manual bar to open the valve before doing system air tightness in order to avoid to damage diaphragm.
4. When brazing the valve with connect tube in system, follow points are very important:
   a. Before brazing, coil must be departure and use wet fabric cover the valve body to avoid to damage valve part because of high temperature when brazing.
   b. It must avoid the brazing flame face to valve body.
   c. It is better to adopt low temperature type silver brazing bar.



ERROR



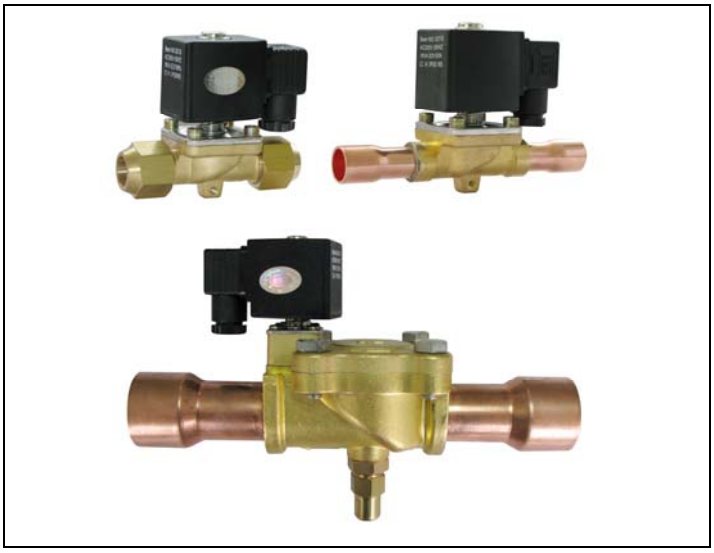
RIGHT

Solenoid valves (with diaphragms)
SV series

Introduction

SV series two ways normal closed solenoid valves with diaphragms can be widely used in refrigeration, pneumatic and hydraulic system, also in boiler and fire-fighting, etc.

Solenoid valves use full-closed magnetic coil and DIN international standard electric plug, so it is characterized by its good insulation, waterproof, moisture proof, anti-vibration and corrosion resistance.



Operating principle

While energized in coil, the electromagnetic power opens the small orifice. Then the pressure in upside of valve reduced, so the pressure difference between both side of diaphragm happen and lead to diaphragm lift to open the main orifice. While de-energized in the coil, plug stem will drop and close the small orifice because of spring force and its weight. The flow media enters into upside of diaphragm through throttle hole, then pressure in both side of diaphragm balances, then the diaphragm will drop and close the main orifice.

Type & data

Connection form	Model	Connection dimension (in.)	Kv value (m^3/h)	Opening diff. pressure (MPa)			Dimension (mm)		
				Min.	Max.				
					A.C.	D.C.	Length	Wide	Height
Flare SAE	SV6	5/16	0.4	0.005	2.1	1.7	85	45	97
	SV8	3/8	1				85	45	97
	SV10A	1/2	1.8				85	45	97
	SV13A	5/8	3				89	45	97
	SV16	3/4	4.5				118	60	120
	SV19	7/8	5				118	60	120
Solder ODF	SV6W	5/16	0.4				126	45	97
	SV8W	3/8	1				126	45	97
	SV10AW	1/2	1.8				126	45	97
	SV13AW	5/8	3				150	45	97
	SV16W	3/4	4.5				190	60	120
	SV19W	7/8	5				190	60	120
	SV25W	1-1/8	9.5	0.03			240	72	120
		1-3/8					250	72	120
	SV32W	1-3/8	15				260	86	130
		1-5/8					281	86	130

The Kv value is the water flow in m^3/h at a pressure drop across valve of 0.1MPa,ρ=1000 kg/m^3

Letters after the model: ”A” means improved type, ”W” means solder ODF,”F” means waist flange,”K” means normal opened valves.

SV25,32 series can be supplied with manual function, add letter “H” after the model.