

Solenoid valves

SV、SSV、SV-G、NSV series

Technical data

Ambient temperature: -20 ~ 50°C

Medium temperature: -25 ~ 120°C

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

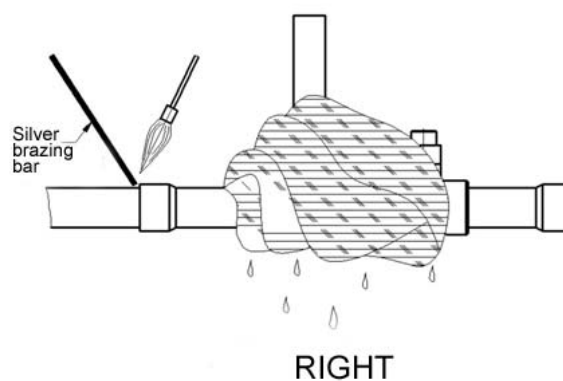
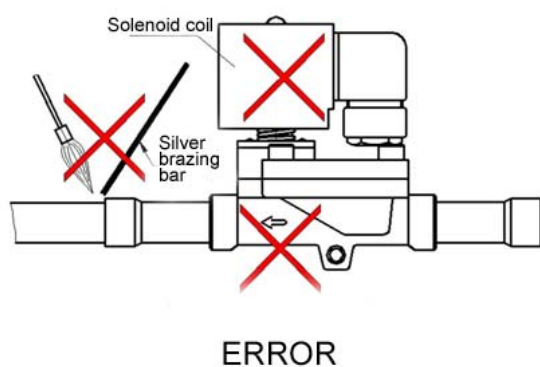
D.C. : 12V,24V,110V,220V

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.



Solenoid valves (with pistons)

NSV series

Introduction

NSV series solenoid valves with pistons are widely used in refrigeration, pneumatic and hydraulic system as automatic controls, are also used 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 piston happen and lead to piston 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 piston through throttle hole, then pressure in both side of piston balances, then the piston 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.		Length	Wide	Height
					A.C.	D.C.			
Flare SAE	NSV6	5/16	0.4	0.005	2.1	1.7	76	38	95
	NSV8	3/8	1				87	38	95
	NSV10	1/2	1.8				76	38	95
Solder ODF	NSV6W	5/16	0.4				125	38	95
	NSV8W	3/8	1				136	38	95
	NSV10W	1/2	1.8				136	38	95

The Kv value is the water flow in m³/h at a pressure drop across valve of 0.1MPa, $\rho=1000 \text{ kg/m}^3$

Letters after the model: "W" means solder ODF

Dimension

