

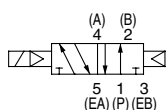
## Series SV Solenoid Valve Specifications



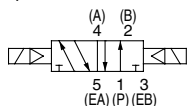
**Made to Order Specifications**  
(For details, refer to page 1-2-108.)

### JIS Symbol

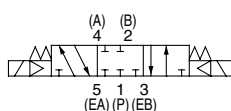
2 position single solenoid



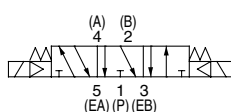
2 position double solenoid



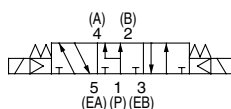
3 position closed center



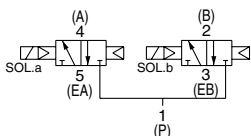
3 position exhaust center



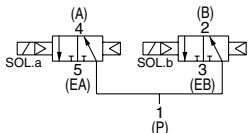
3 position pressure center



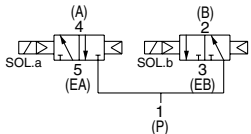
4 position dual 3 port valve: N.C./N.C.



4 position dual 3 port valve: N.O./N.O.



4 position dual 3 port valve: N.C./N.O.



Fluid	Air		
Internal pilot Operating pressure range (MPa)	2 position single	0.15 to 0.7	
	4 position dual 3 port valve	0.1 to 0.7	
	3 position	0.2 to 0.7	
External pilot Operating pressure range (MPa)	Operating pressure range	-100 kPa to 0.7	
	2 position single, double	0.25 to 0.7	
	3 position	0.25 to 0.7	
Ambient and fluid temperature (°C)	-10 to 50 (No freezing. Refer to page 1-7-4.)		
Max. operating frequency (Hz)	2 position single, double	5	
	4 position dual 3 port valve	3	
	3 position	3	
Manual override	Non-locking push type		
	Push-turn locking slotted type		
Pilot exhaust method	Internal pilot	Common exhaust type for main and pilot valve	
	External pilot	Pilot valve individual exhaust	
Lubrication	Not required		
Mounting orientation	Unrestricted		
Impact/Vibration resistance (ms <sup>2</sup> )	150/30		
Enclosure	IP67 (Based on IEC529)		
Coil rated voltage	24 VDC, 12 VDC		
Allowable voltage fluctuation	±10% of rated voltage		
Power consumption	0.6 (With indicator light: 0.65)		
Surge voltage suppressor	Zener diode		
Indicator light	LED		

**Note) Impact resistance:** No malfunction occurred when it is tested with a drop tester in the axial direction and at the right angles to the main valve and armature in both energized and de-energized states every once for each condition. (Values at the initial period)

**Vibration resistance:** No malfunction occurred in a one-sweep test between 45 and 2000 Hz. Test was performed at both energized and de-energized states in the axial direction and at the right angles to the main valve and armature. (Values at the initial period)

### Response Time

Type of actuation	Response time (ms) (at the pressure of 0.5 MPa)			
	SV1000	SV2000	SV3000	SV4000
2 position single	11 or less	25 or less	28 or less	40 or less
2 position double	10 or less	17 or less	26 or less	40 or less
3 position	18 or less	29 or less	32 or less	82 or less
4 position dual 3 port valve	15 or less	33 or less	—	—

**Note) Based on dynamic performance test, JIS B 8375-1981.**  
(Coil temperature: 20°C, at rated voltage)

### Weight

Series	Type of actuation	Weight (g)
SV1000	Single solenoid	66
	Double solenoid	71
	3 position	73
	4 position dual 3 port	71
SV2000	Single solenoid	74
	Double solenoid	78
	3 position	83
	4 position dual 3 port	78
SV3000	Single solenoid	99
	Double solenoid	102
	3 position	110
SV4000	Single solenoid	186
	Double solenoid	190
	3 position	211

**Note) Weight of solenoid valve only.**

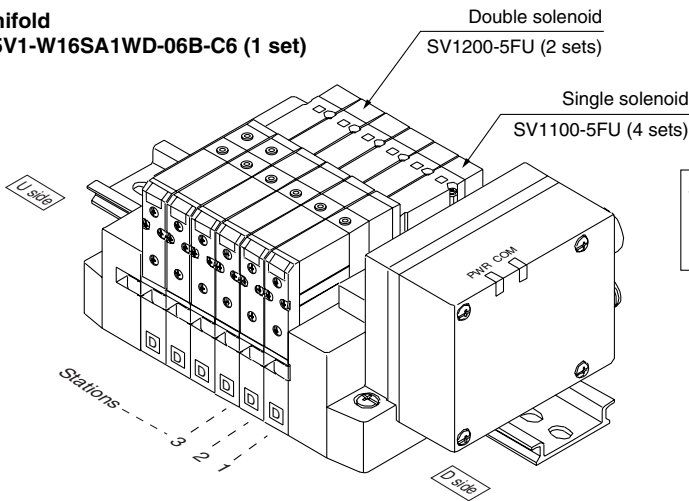
SV  
SZ  
SY  
SYJ  
SX

## How to Order Valve Manifold Assembly

### Ordering example (SV1000)

Manifold

SS5V1-W16SA1WD-06B-C6 (1 set)



SS5V1-W16SA1WD-06B-C6.....1 set (Manifold part no.)  
 \*SV1100-5FU.....4 sets (Single solenoid part no.)  
 \*SV1200-5FU.....2 sets (Double solenoid part no.)

**SV**

**SZ**

**SY**

**SYJ**

**SX**

## How to Order Solenoid Valves

**SV 1 1 0 0**       **5 F**            

#### Series

1	SV1000
2	SV2000
3	SV3000
4	SV4000

#### Type of actuation

1	2 position single solenoid
2	2 position double solenoid
3	3 position closed center
4	3 position exhaust center
5	3 position pressure center
A	4 position dual 3 port valve: N.C./N.C.
B	4 position dual 3 port valve: N.O./N.O.
C	4 position dual 3 port valve: N.C./N.O.

\* 4 position dual 3 port valves are applicable to Series SV1000 and SV2000 only.

#### Pilot type

Nil	Internal pilot
R	External pilot

\* External pilot specifications is not available for 4 position dual 3 port valves.

#### Back pressure check valve

Nil	None
K	Built-in

\* Built-in back pressure check valve type is applicable to series SV1000 only.

\* Back pressure check valve is not available for 3 position closed center and 3 position pressure

Note)

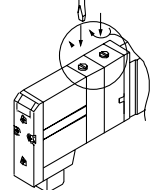
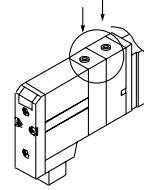


Note) Available with manifold block for station additions. Refer to pages 1-2-89 and 1-2-93.

#### Manual override

Nil: Non-locking push type

D: Push-turn locking slotted type



#### Light/Surge voltage suppressor

U	With light/surge voltage suppressor
R	With surge voltage suppressor

#### Rated voltage

5	24 VDC
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Refer to Precautions 2 on page 1-2-9.