

4/5 Port Solenoid Valve





Improved pilot valve

Pilot valve cover is stronger using stainless steel. Mounting thread is also reinforced from size M1.7 to M2.

Flow Characteristics

Cawina	Flow characteristics			
Series	C [(dm³/s·bar)]	ar)] b		
SYJ3000	0.46	0.36	0.12	
SYJ5000	0.83	0.32	0.21	
SYJ7000	2.9	0.35	0.74	

Rubber Seal 5 Port Solenoid Valve

Series SYJ7000

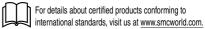


Body ported



Base mounted

Specifications



Fluid		Air	
Operating pressure range MPa	2 position single	0.15 to 0.7	
	2 position double	0.1 to 0.7	
	3 position	0.15 to 0.7	
Ambient and fluid temperat	ure (°C)	-10 to 50 (No freezing. Refer to back page 3.)	
Response time (ms) Note 1)	2 position single, double	30 or less	
(at 0.5 MPa)	3 position	60 or less	
Max. operating frequency (Hz)	2 position single, double	5	
	3 position	3	
Manual override (Manual operation)		Non-locking push type, Push-turn locking slotted type, Push-turn locking lever type	
Pilot exhaust method		Individual exhaust for the pilot valve, Common exhaust for the pilot and main valve	
Lubrication		Not required	
Mounting orientation		Unrestricted	
Shock/Vibration resistance (m/s²) Note 2)		150/30	
Enclosure		Dust proof (* DIN terminal, M8 connector conforms to IP65.)	

Based on IEC60529

Note 1) Based on dynamic performance test, JIS B 8375-1981. (Coil temperature: 20°C, at rated voltage, without surge suppressor)

Note 2) Impact resistance:

No malfunction occurred when it is tested 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. (Value in the initial state)

Vibration resistance: No malfunction occurred in one sweep test between 45 and 2000 Hz. Test was performed to axis and right angle directions of the main valve and armature when pilot signal is ON and OFF. (Value in the initial state)

Solenoid Specifications

JIS Symbol Body ported 2 position single (A)(B) 4 2 (B) 4 2 (B) 4 2 (B1)(P)(R2)	Base mounted 2 position single solenoid (B)(A) 2 4 D 3 1 5 (R2)(P)(R1)
2 position double (A)(B) 4 2 (B) 5 1 3 (R1)(P)(R2)	2 position double solenoid (B)(A) $2 4$ $2 3 1 5$ $(R2)(P)(R1)$
3 position closed center (A) (B) 4 2 (A) (B) 5 5 1 3 (R1) (P) (R2)	3 position closed center (B)(A) 2 4 (C)(A)(B)(A) 3 1 5 (R2)(P)(R1)
3 position exhaust center (A) (B) 4 2 5 1 3 (R1) (P) (R2)	3 position exhaust center (B)(A) 2 4 (B)(A) 3 1 5 (R2)(P)(R1)
3 position pressure center (A)(B) 4 2	3 position pressure center (B)(A) 2 4

4 7		
3 1 5 (R2)(P)(R1)		
3 position pressure cente		
3 1 5 (R2)(P)(R1)		

Electrical entry			Grommet (G), (H)	
			L plug connector (L)	
			M plug connector (M)	
-		DIN terminal (D)		
		M8 connector (W)		
		G, H, L, M, W	D	
DC		24, 12, 6, 5, 3	24, 12	
AC 5	50/60 Hz	100, 110, 200, 220		
Allowable voltage fluctuation		±10% of rated voltage *		
DC	Standard	0.35 (With light: 0.4 (DIN terminal with light: 0.45))		
	With power saving circuit	0.1 (With light only)		
AC	100 V	0.78 (With light: 0.81)	0.78 (With light: 0.87)	
	110 V	0.86 (With light: 0.89)	0.86 (With light: 0.97)	
	[115 V]	[0.94 (With light: 0.97)]	[0.94 (With light: 1.07)]	
	200 V	1.18 (With light: 1.22)	1.15 (With light: 1.30)	
	220 V	1.30 (With light: 1.34)	1.27 (With light: 1.46)	
	[230 V]	[1.42 (With light: 1.46)]	[1.39 (With light: 1.60)]	
Surge voltage suppressor		Diode (DIN terminal, Varistor when non-polar types)		
Indicator light			LED (Neon light when AC with DIN terminal)	
	AC S	AC 50/60 Hz DC Standard With power saving circuit 100 V 110 V [115 V] 200 V 220 V	L plug connector (L) M plug connector (M) DIN terminal (D) M8 connector (W) G, H, L, M, W DC 24, 12, 6, 5, 3 AC 50/60 Hz 100, 110, ±10% of rate 100 V 0.78 (With light: 0.4 (DIN	



* In common between 110 VAC and 115 VAC, and between 220 VAC and 230 VAC.

* In common between 110 VAC and 113 VAC, and between 220 VAC and 230 VAC.

* For 115 VAC and 230 VAC, the allowable voltage is –15% to +5% of rated voltage.

* S, Z and T type (with power saving circuit) should be used within the following allowable voltage fluctuation range due to a voltage drop caused by the internal circuit.

S and Z type: 24 VDC: –7% to +10%, 12 VDC: –4% to +10%

T type: 24 VDC: –8% to +10%, 12 VDC: –6% to +10%



Made to Order

(For details, refer to pages 79 through to 80.)