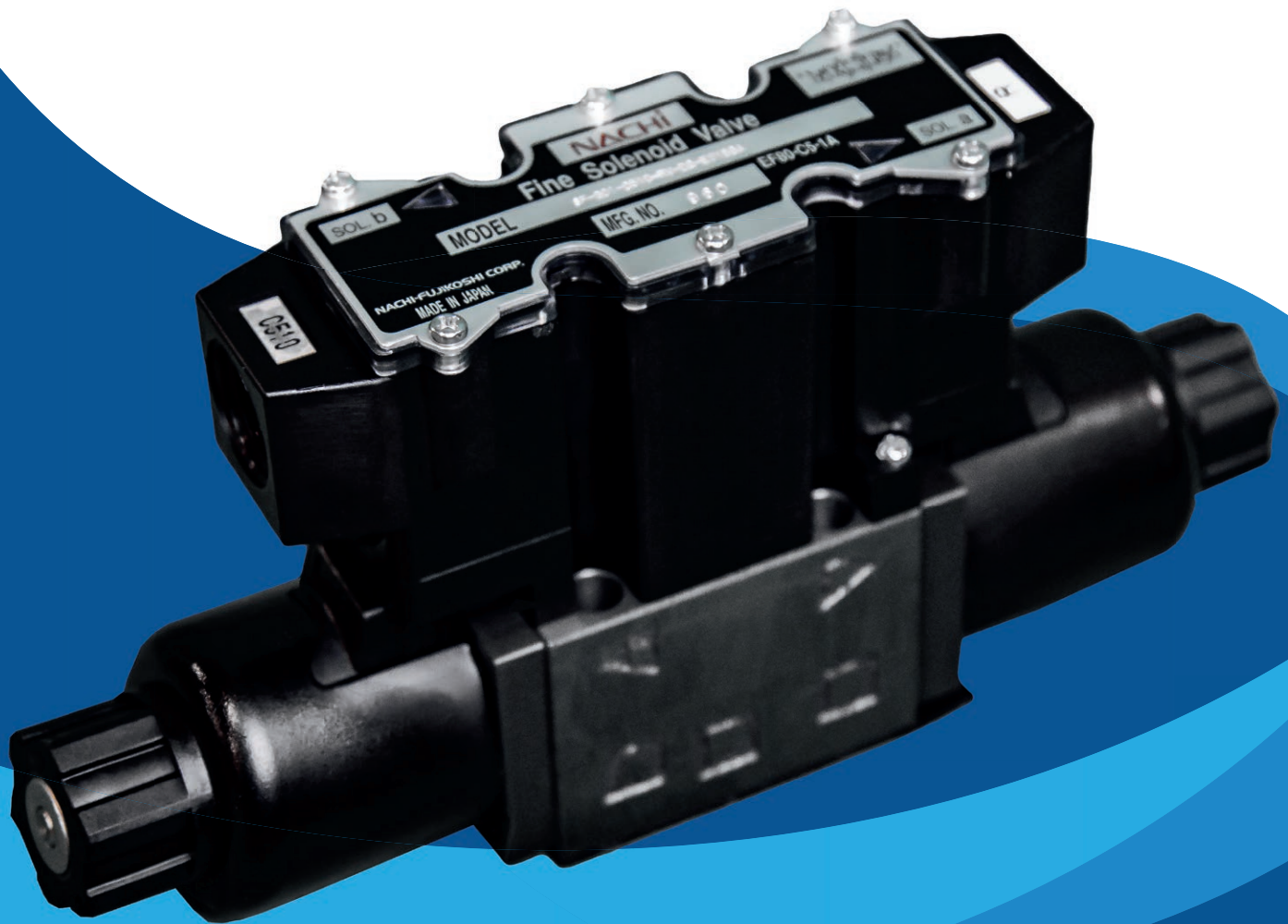


# NACHI

## SF Series Solenoid Valve



**Dual Speed Control**  
**Smooth Speed Adjustment**  
**Low Speed Startup and Stop**



## SF Series Solenoid Valve Features

- The function of two valves in one
  - A two-speed controller allows for continuous smooth flow and transition from high to low speed cylinder movement
  - Multiple flow speeds can be set at various points of actuation
- Allows for precise and refined movement of the cylinders and other hydraulic components

## Specifications

Model No.		SF-G01-C*-10	SF-G01-C*-20	SF-G01-C*-40
		DC Solenoid		
		D2		
Maximum Operating Pressure		3045 psi		
Maximum Flow Rate (gpm)		2.6	5.2	10.5
High Speed Flow Rate (gpm)		1.3 to 2.6	2.6 to 5.2	5.2 to 10.5
Low Speed Flow Rate (gpm)		.13 to 1.0	.52 to 2.1	1.0 to 4.2
Maximum Allowable Back Pressure (psi)		1000		
Acceleration / Deceleration Time Adjustment Range (SEC)		0.1 to 2		
Hysteresis		7%		
Repeatability		3%		
Power Supply Voltage (V)		D2: 24V DC regulated power supply		
Maximum Power Compensation (W)		36W		
Operating Environment	Dust Resistance/ Water Resistance Rank	IP63 (Dust Tight, Rain Proof)		
	Ambient Temperature	41 to 122° F		
	Operating Fluid	Temperature Range	41 to 140° F	
		Viscosity Range	15 to 300 centistokes	
	Filtration	25 microns or less		
Mounting Bolt	Size x Length	10-24 x 1 3/4		
	Tightening Torque	3.5 to 5 ft lbs.		

Operation	C510	C520	C540
Type	C6S10	C6S20	C6S40
Valve Maximum Operating Pressure	21 MPa		
Maximum Flow Rate	10L/min	20L/min	40L/min
Low Speed Flow Rate	0.5~4L/min	2~8L/min	4~16L/min

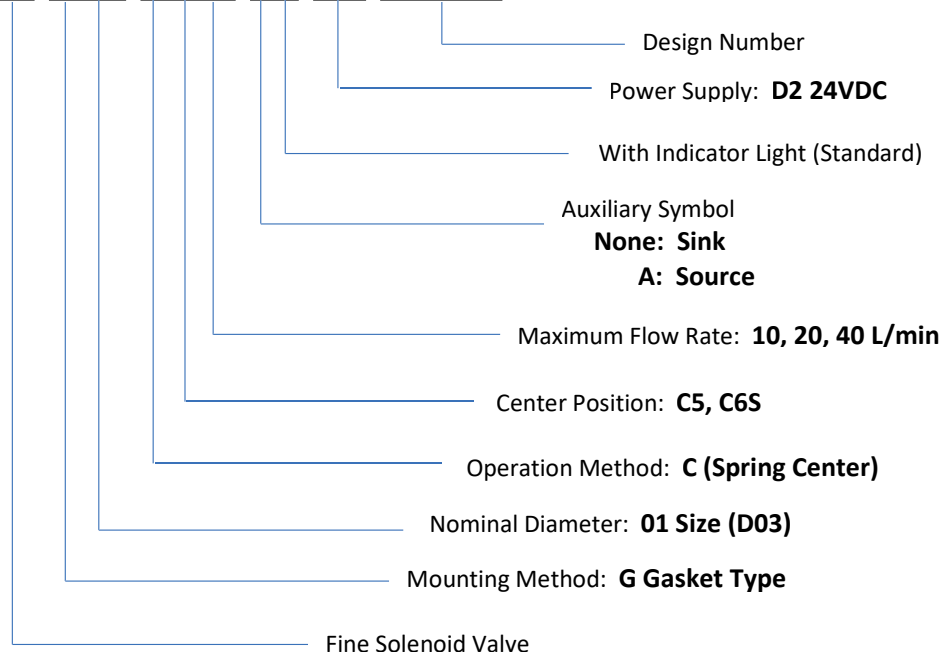
## Symbols

Spool Type	C5	C6S
JIS Symbol		

# SF Valve

## Explanation of Model Number

SF-G01-C\*\*\*-\*R-D2-5663A



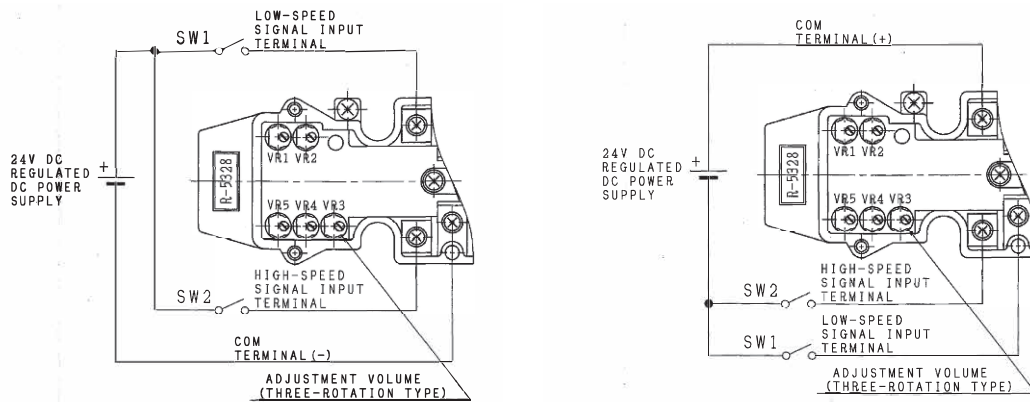
## Handling

1. High speed and low speed flow rates are obtained with a differential pressure (PA, PB) of 10 MPa. The flow rate depends on differential pressure.
2. Volume adjustment becomes sensitive P→A(B) and B(A)→T differential pressure is too great. Maintain the pressure differential so that it is no greater than 3.5 MPa.
3. Spool may not move if low speed flow rate is below the minimum usage. Use valve only within the allowable minimum low speed flow rate range.
4. Always keep operating oil clean. Allowable contamination is class NAS11 or less.
5. Dither frequency 80+ Hz; amplitude 200mA+-20ma
6. Compared to the standard model, the terminal box volume of this valve has changed to a three rotation type.
7. Mounting bolt: JIS B 1176 <5X45-12.9 (four) or No. 10-24UNCX1-3/4 four)
8. Tightening torque: 5-7N-m

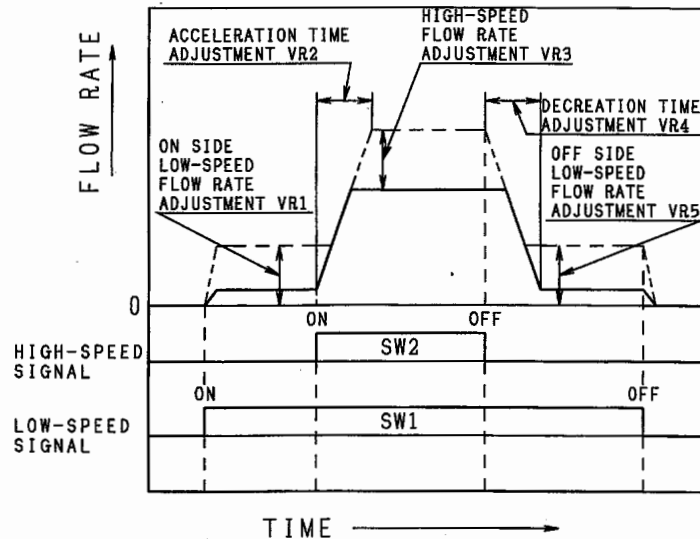
## Solenoid Specifications

Electric Power Source Indication	Power Source	Allowable Voltage Range
D2	DC24V	21.6~26.4V

# Electric Wiring Diagram



# Control Pattern



# Recommended Operating Conditions

Dustproof And Waterproof	:JIS C 0920 IP63 (IEC 60529)
Operating Temperature Range	:5~50°C
Operating Hydraulic Oil	:Petroleum Based Hydraulic Oil
Operating Hydraulic Oil Temperature Range	:5~60°C
Operating Viscosity	:.15~300mm <sup>2</sup> /s
Filtration	:25mm or less
Valve Mounting Surface	:Surface Flatness 0. 01, Surface Roughness 1. 6a
Gasket Surface Dimensions	:ISO 4401-03-02-0-05

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