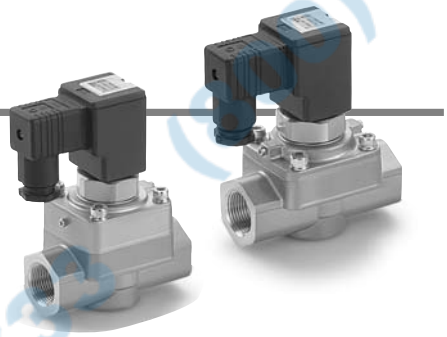
5.0 MPa Pilot Operated 2 Port Solenoid Valve

Series VCH40

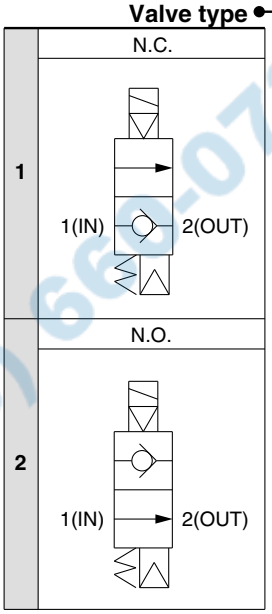
How to Order



VCH4 1 – 1 D – 06 G

Valve type

1	N.C.
2	N.O.



Voltage

1	100 VAC
2	200 VAC
3	110 VAC
4	220 VAC
5	24 VDC
6	12 VDC

∗ Consult with SMC for other voltages.
CE marking compliant products are only available with 50 VDC or less.

Thread type
(Conforming to ISO1179-1 on the pneumatic/hydraulic G thread)

Port size

06	3/4
10	1

Electrical entry

D	DIN connector
DL	DIN connector with light

∗ A surge voltage suppressor is integrated inside the coil as a standard feature.

Made to order specifications
(For details, refer to page 235)

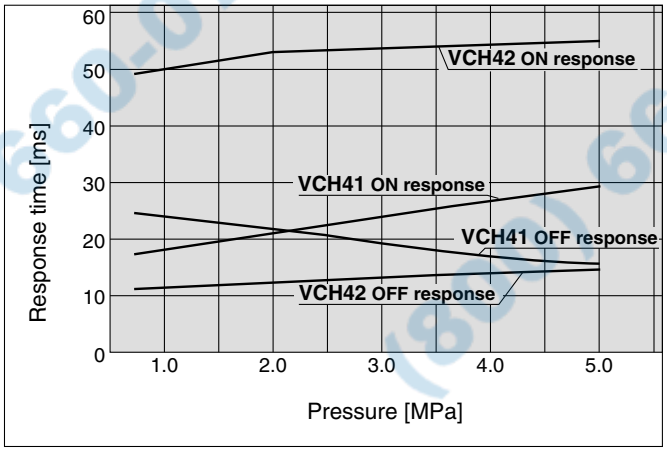
22.0 MPa 2 Port Air Operated Valve

Specifications

Model		VCH41 (N.C.)	VCH42 (N.O.)
Valve specification	Valve construction	Pilot operated, diaphragm poppet	
	Fluid	Air, Insert gas	
	Orifice	ø16	ø17.5
	Flow characteristics: C value (Effective area)	17 dm³/(s•bar) (85 mm²)	22 dm³/(s•bar) (110 mm²)
	Flow characteristics: b	0.08	0.11
	Flow characteristics: Cv	4.5	5.8
	Max. operating pressure	5.0 MPa	
	Operating pressure	0.5 to 5.0 MPa	
	Fluid temperature	–5 to 80°C	
	Ambient temperature	–5 to 80°C	
	Body material	Brass	
	Main seal material	Polyurethane elastomer	
	Enclosure	Drip proof (Equivalent to IP65)	
	Port size	G3/4, 1 (Conforming to ISO1179-1 on the pneumatic/hydraulic G thread)	
	Impact/Vibration resistance Note 1)	300/100 m/s² Note 2)	
	Mounting orientation	Unrestricted	
	Mass	1.67 kg	1.9 kg
Coil specification	Rated voltage	12 VDC, 24 VDC, 100 VAC, 200 VAC (50/60 Hz)	
	Allowable voltage fluctuation	±10% of rated voltage	
	Electrical entry	DIN connector	
	Coil insulation type	Class B	
	Power consumption Note 3)	5 W (DC), 13 VA (AC)	

Note 1) Impact resistance: No malfunction resulted in an impact test using a drop impact tester. The test was performed one time each in the axial and right angle directions of the main valve and armature, for both energized and de-energized states. (Value in the initial stage)
Vibration resistance: No malfunction resulted in 8.3 to 2000 Hz, a one-sweep test performed in the axial and right angle directions of the main valve and armature for both energized and de-energized states. (Value in the initial stage)
Note 2) Vibration resistance is 50 m/s² when a light/surge voltage suppressor is attached.
Note 3) No inrush voltages are generated in the AC solenoid because a full-wave rectifier is used.

Response Time



Note 1) DC solenoid without a light/surge voltage suppressor
Note 2) AC or DC solenoid with an indicator light: It will cause delays around 20 to 30 msec in the OFF response time.