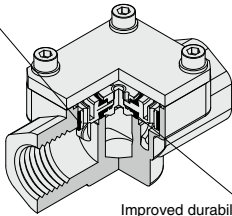


5.0 MPa Check Valve VCHC40 Series

How to Order



Using NSF-H1 certified grease for the guide ring (sliding) section



Improved durability in high-pressure environments by using a polyurethane elastomer poppet

Symbol



VCHC40 - 06 G

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

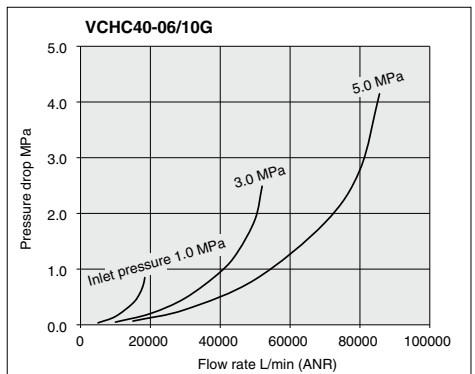
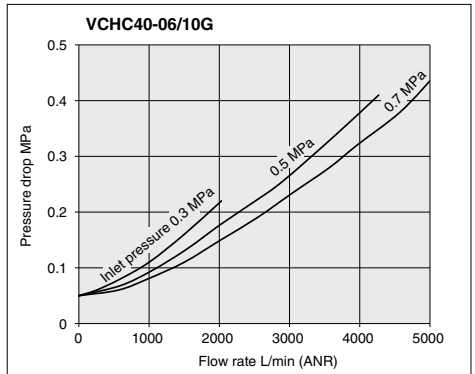
• Port size

06	3/4
10	1

Specifications

Model	VCHC40	
Operating pressure	0.05 to 5.0 MPa	
Cracking pressure	0.05 MPa	
Orifice diameter	ø16	
Flow characteristics	C value (Effective area)	28 dm ³ /(s·bar) (140 mm ²)
	b	0.15
	Cv	7.4
Fluid	Air	
Fluid temperature	5 to 80°C	
Ambient temperature	5 to 80°C	
Body material	Brass	
Seal material	Polyurethane elastomer	
Port size	G3/4, 1 (Conforming to ISO1179-1 on the pneumatic/hydraulic G thread)	
Mounting orientation	Unrestricted	
Weight	1.02 kg	

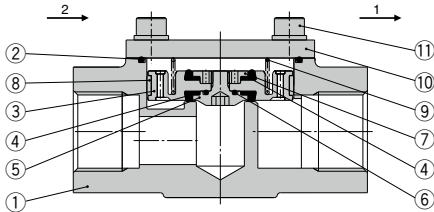
Flow Rate Characteristics



Note) The flow rate characteristics are representative values.

VCHC40 Series

Construction

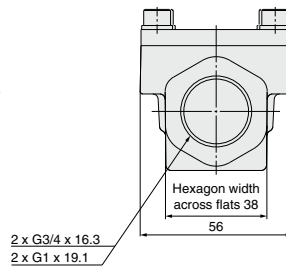
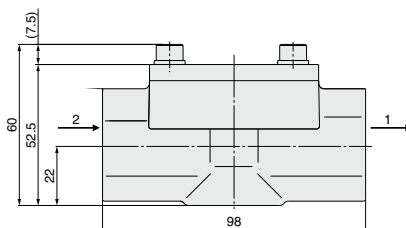
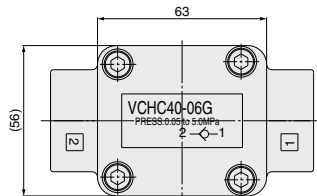


Component Parts

No.	Description	Material
1	Body	Brass
2	O-ring	NBR
3	Piston	Aluminum + Hard anodized
4	Poppet	Polyurethane elastomer
5	Set screw	Stainless steel
6	O-ring	NBR
7	Nut	Stainless steel
8	Guide ring	Resin
9	Spring	Stainless steel
10	Plate	Steel + Electroless nickel plated
11	Hexagon socket head cap screw (with SW)	Carbon steel

Dimensions

VCHC40





VCHC40 Series Specific Product Precautions

Be sure to read this before handling the products.
Refer to page 11 for safety instructions.

Selection

⚠ Warning

1. Fluid

Corrosive gas

Do not use corrosive gas because it may cause corrosive stress cracks and other problems.

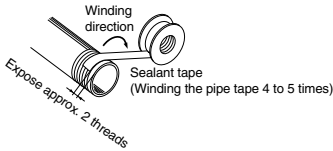
2. The minimum operating pressure is the pressure when the valve begins to open, and not the pressure when the valve is fully open.

Piping

⚠ Caution

1. Winding of sealant tape

Pipe tape is not necessary since this product uses a pneumatic and hydraulic purpose G thread which conforms to ISO 1179-1. When an R (taper) thread is used, leave 1 to 2 threads at the tip exposed before winding the piping thread around it 4 to 5 times.



Connecting a R thread

2. Always tighten threads with the proper tightening torque.

When attaching fittings to valves, tighten with the proper tightening torque shown below.

Tightening Torque for Piping

Connection threads	Proper tightening torque N · m
G, Rc 3/4	28 to 30
G, Rc 1	36 to 38

Operating Environment

⚠ Warning

1. Do not use in an explosive atmosphere.
2. In locations where there is contact with water, oil or spatter from soldering, etc., implement suitable protective measures.

Maintenance

⚠ Caution

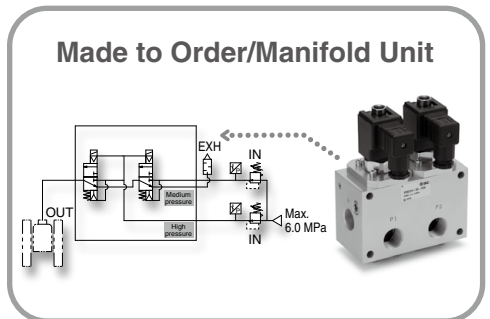
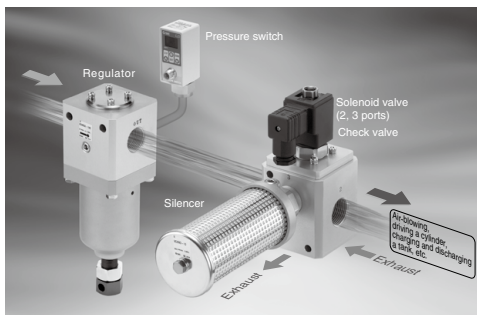
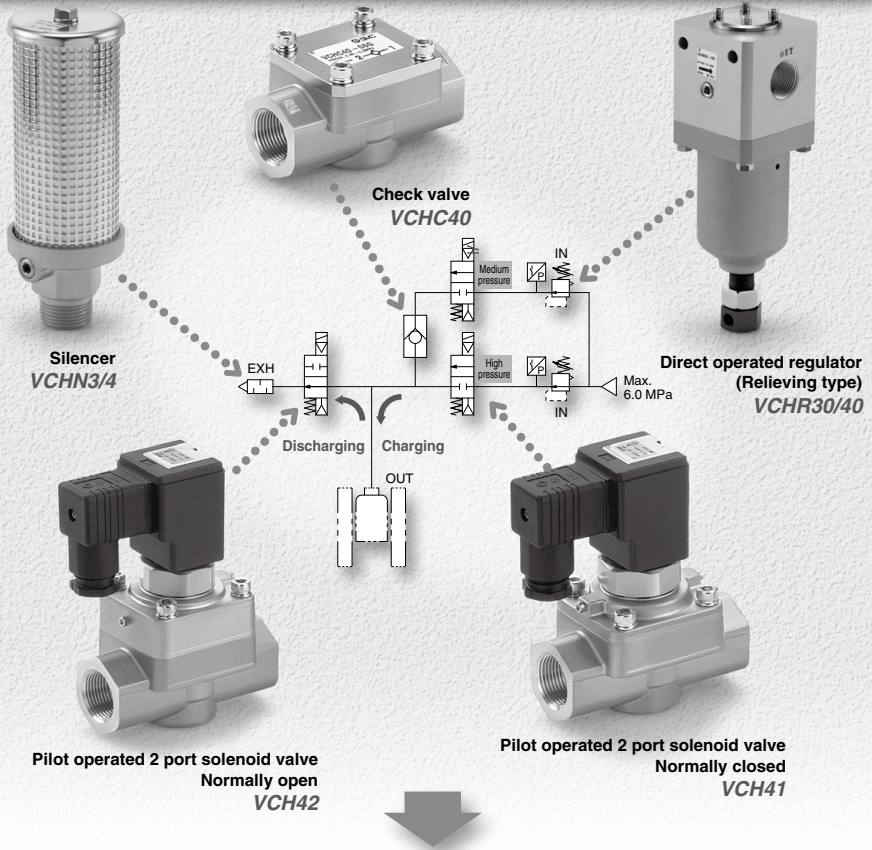
1. Storage

In the case of long term storage after use with water, etc., first thoroughly remove all moisture to prevent rust and deterioration of rubber materials.

5.0 MPa

Pneumatic

Applications included air-blowing, charging fluid into a vessel, or discharging (Blow-molding equipment, etc.)

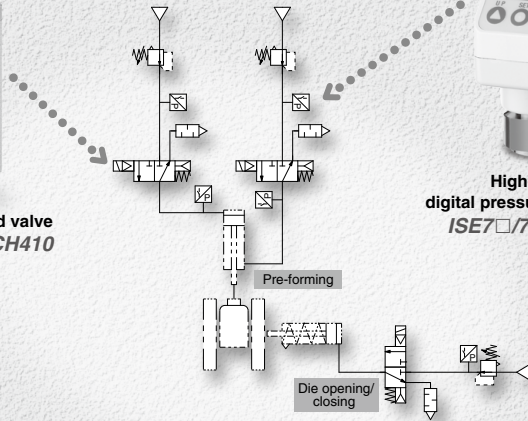


Equipment Variation



Pilot operated 3 port solenoid valve
VCH410

Example of driving a cylinder



High-precision digital pressure switch
ISE7□/7□G/79S

	Description	Features	Maximum operating pressure (MPa)	Series	Port size					Page	
					1/4	1/2	3/4	1	1 1/4		1 1/2
	Pilot operated 2 port solenoid valve	Service life: 10 million cycles Adopting a polyurethane elastomer poppet in a valve seat. Improved durability under a high pressure environment.	5.0	VCH41(N.C.)			●	●			Web Catalog
	VCH42(N.O.)					●	●				
	Check valve		5.0	VCHC40			●	●			Web Catalog
	Pilot operated 3 port solenoid valve		5.0	VCH410		●	●	●			Web Catalog
	Direct operated regulator (Relieving type)		Inlet pressure 6.0 Set pressure 0.5 to 5.0	VCHR30			●	●			Web Catalog
		VCHR40					●		●		
	Silencer	Noise reduction 35 dB(A) (At supply pressure 4.0 MPa) Clogging-reduction with double-layer construction	5.0 (Relief valve release pressure: 1.8 MPa)	VCHN3			●	●		Web Catalog	
				VCHN4				●	●		●

Related Equipment

	High-precision digital pressure switch	3-screen display Visualization of settings	5.0 10 16 50	ISE7□/7□G/79S	●						Web Catalog
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Made to Order

- 6.0 MPa pilot operated regulator (Air operated type) Web Catalog
- 22.0 MPa 2 port air operated valve Web Catalog