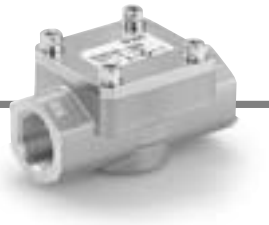
5.0 MPa Check Valve
Series VCHC40



How to Order

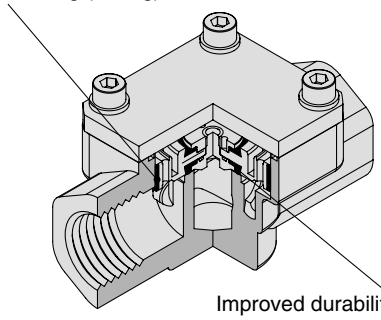
VCHC40 – 06 G

- **Port size**

06	3/4
10	1

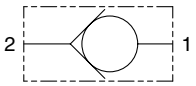
- **Thread type (Conforming to ISO1179-1 on the pneumatic/hydraulic G thread)**

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



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

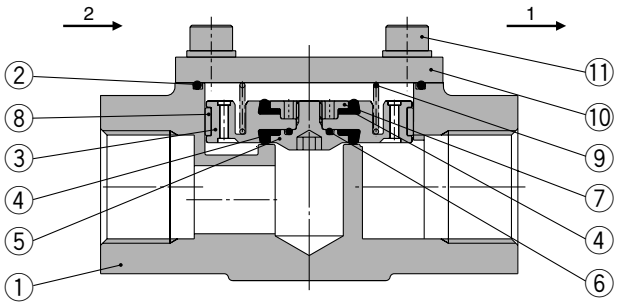
Symbol



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 $dm^3/(s \cdot bar)$ (140 mm^2)
	b	0.15
	Cv	7.4
Fluid		Air, Insert gas
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
Mass		1.02 kg

Construction

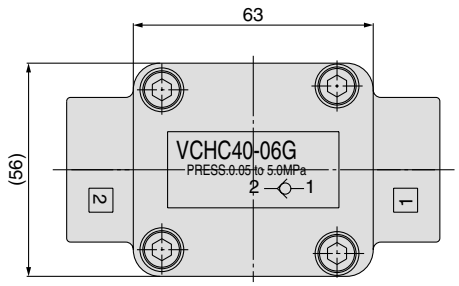


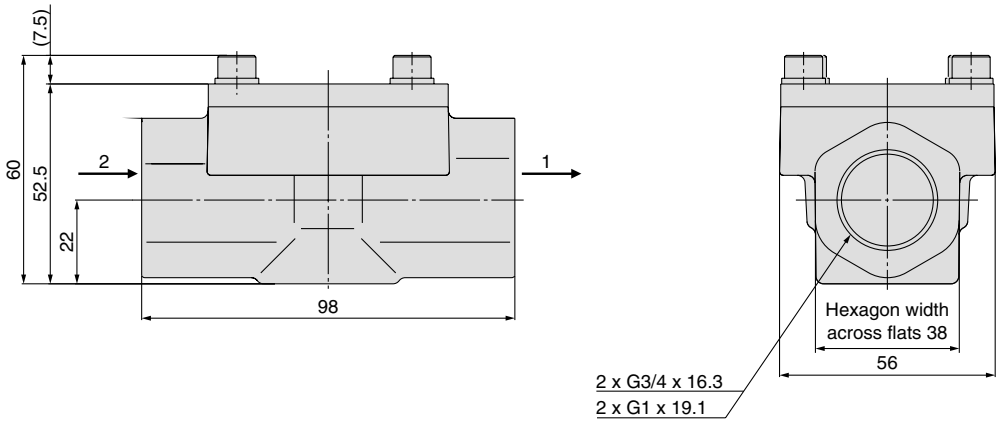
Component Parts

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





Series VCHC40
Specific Product Precautions

Be sure to read this before handling.
Refer to front matters 58 and 59 for Safety Instructions.

Selection

⚠Warning

1. Fluid

Corrosive gas

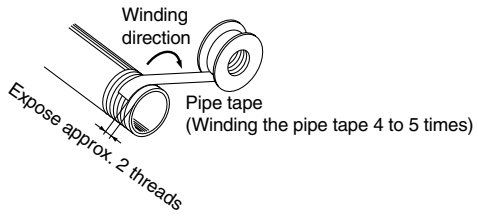
Do not use corrosive gas because it may cause corrosive stress cracks and other problems.

Piping

⚠Caution

1. Wrapping of pipe 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

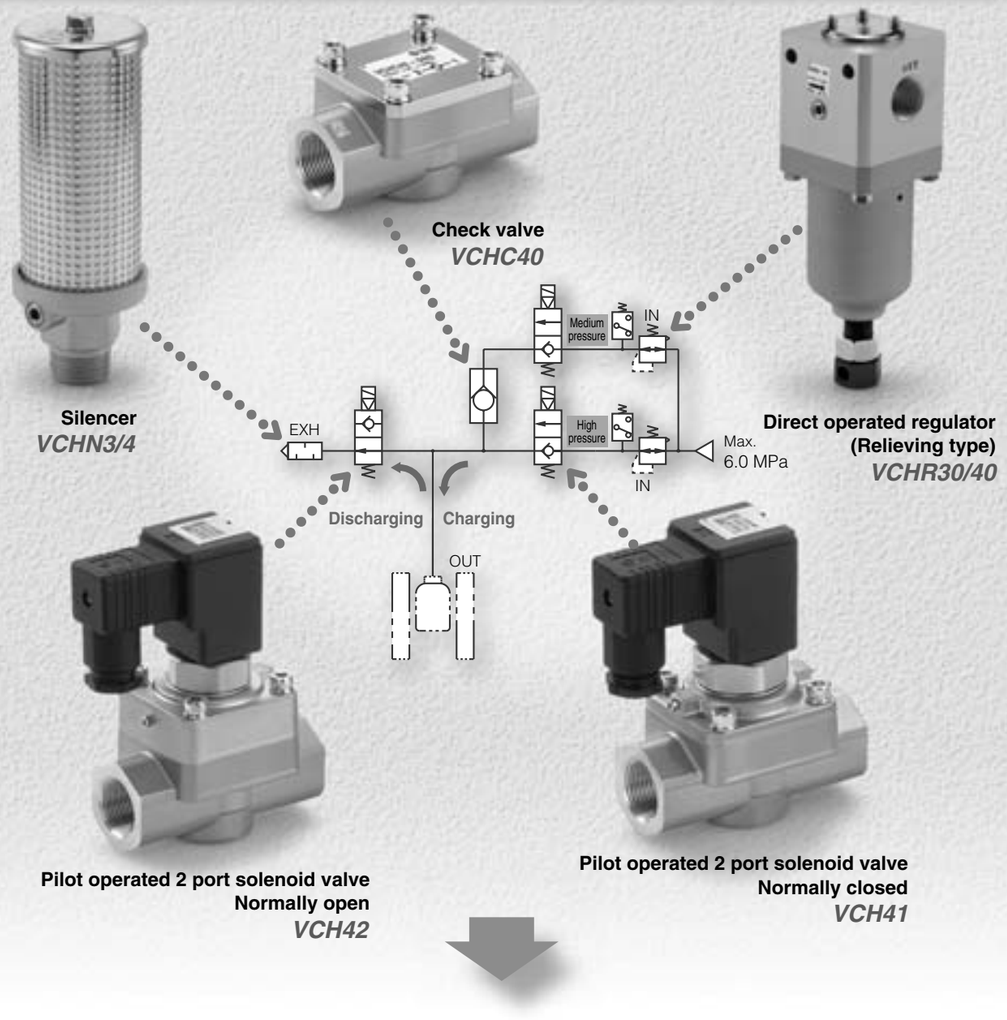
⚠Caution

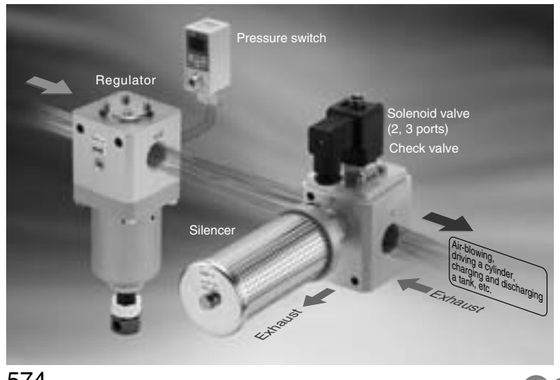
1. Storage

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.

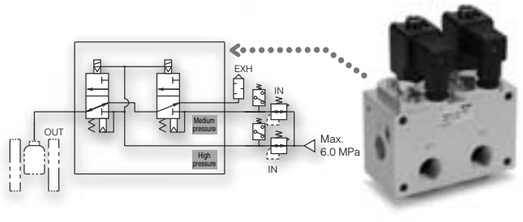
5.0 MPa Pneumatic

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



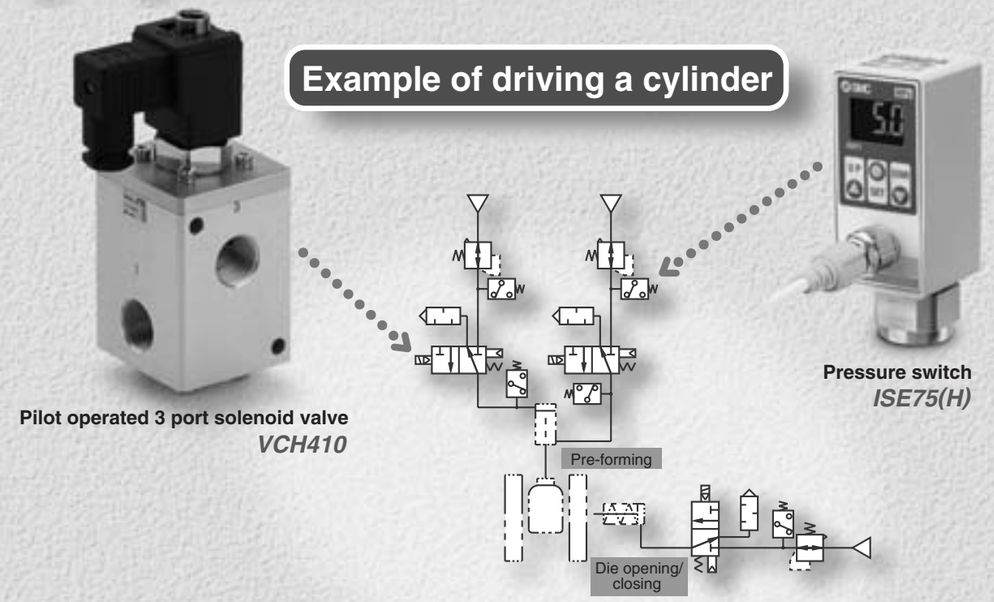


Made to Order/Manifold Unit



Equipment Variation

Example of driving a cylinder



	Description	Features	Maximum operating pressure (MPa)	Series	Port size 1/4	1/2	3/4	1	1 1/4	1 1/2	Page
	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.)**			●	●			Best Pneumatics No.⑦
				VCH42(N.O.)			●	●			
	Check valve		5.0	**VCHC40**			●	●			Best Pneumatics No.⑦
	Pilot operated 3 port solenoid valve		5.0	**VCH410**		●	●	●			Best Pneumatics No.⑦
	Direct operated regulator (Relieving type)		Inlet pressure 6.0 Set pressure 0.5 to 5.0	**VCHR30**			●	●			Best Pneumatics No.⑤
				VCHR40				●		●	
	Silencer	**Noise reduction 35 dB(A)** (At supply pressure 4.0 MPa, back pressure 2.0 MPa) **Clogging-reduction with double-layer construction**	5.0 (Relief valve release pressure: 1.8 MPa)	**VCHN3**			●	●			P.608
				VCHN4				●	●	●	
Related Equipment											
	Pressure switch	**2-color display Metal body** (Aluminum die-cast)	10.0 15.0	**ISE75(H)**	●						P.722

Made to Order

1 6.0 MPa pilot operated regulator (Air operated type) ····· Best Pneumatics No.⑦

2 22.0 MPa 2 port air operated valve ····· Best Pneumatics No.⑦