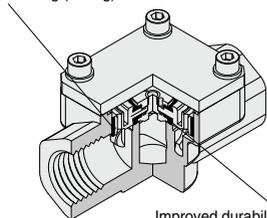


# 5.0 MPa Check Valve VCHC40 Series

## How to Order

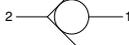


Using NSF-H1 certified grease for the guide ring (sliding) section



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

Symbol



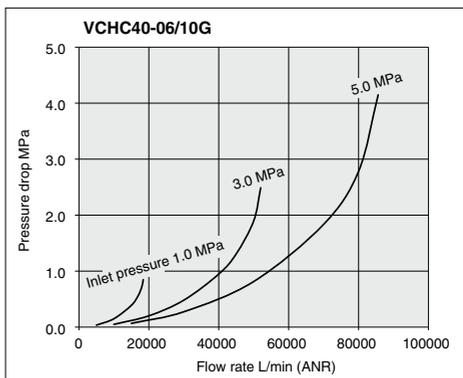
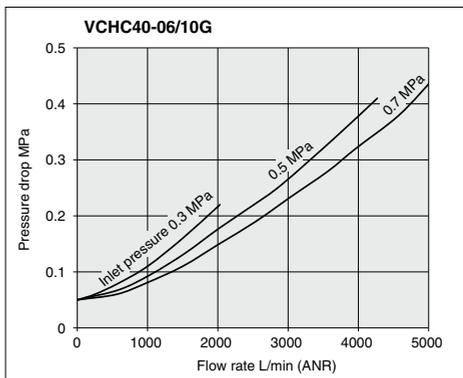
## VCHC40 - 06 G

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

• Port size

06	3/4
10	1

## Flow Rate Characteristics



(Note) The flow rate characteristics are representative values.

## Specifications

Model	VCHC40
Operating pressure	0.05 to 5.0 MPa
Cracking pressure	0.05 MPa
Orifice diameter	ø16
C value (Effective area)	28 dm <sup>3</sup> /(s·bar) (140 mm <sup>2</sup> )
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

AS-F

TMH

ASD

AS

AS-FE

KE

AS-FG

AS-FP

AS-FM

AS-D

AS-T

ASP

ASN

AQ

ASV

AK

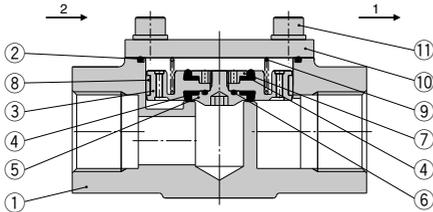
VCHC

ASR

ASQ

# VCHC40 Series

## Construction

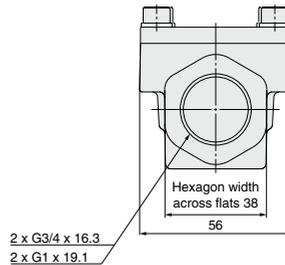
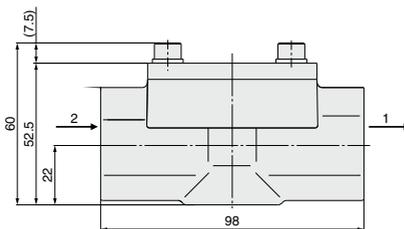
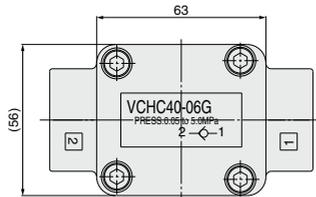


## Component Parts

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 back page 50 for Safety Instructions.

## Selection

### ⚠ Warning

#### 1. Fluid

Corrosive gas

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

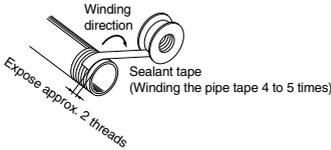
#### 2. The minimum operating pressure is the pressure when the valve begins to open, and not the pressure when the valve is fully open.

## 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.

AS-F

TMH

ASD

AS

AS-FE

KE

AS-FG

AS-FP

AS-FM

AS-D

AS-T

ASP

ASN

AQ

ASV

AK

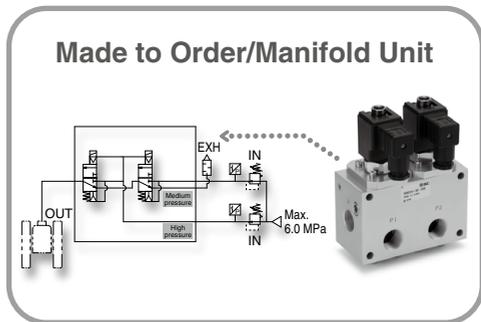
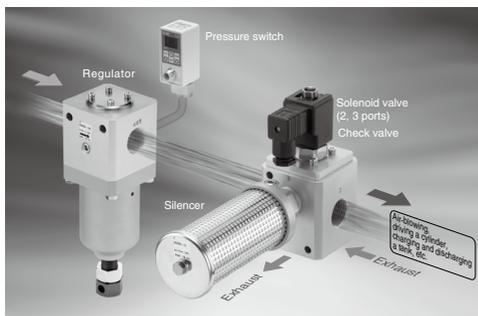
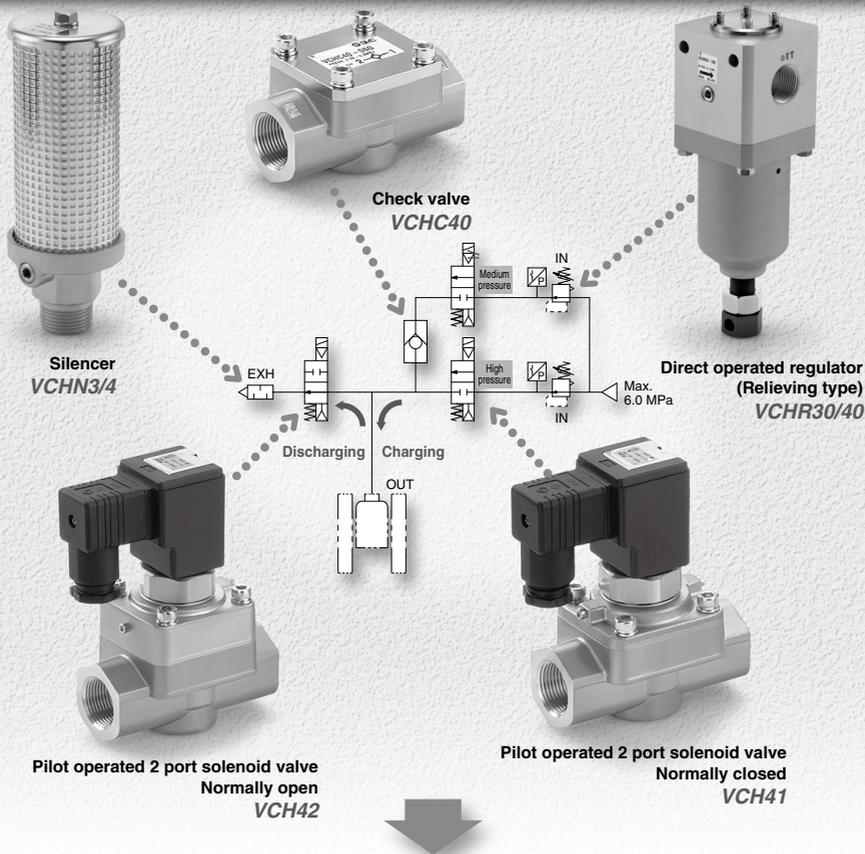
VCHC

ASR  
ASQ

# 5.0 MPa

# Pneumatic

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

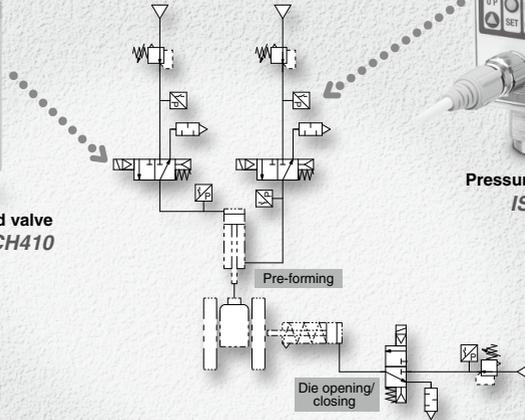


# Equipment Variation

## Example of driving a cylinder



Pilot operated 3 port solenoid valve  
VCH410



Pressure switch  
ISE75(H)

	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	<b>Service life: 10 million cycles</b> Adopting a polyurethane elastomer poppet in a valve seat. Improved durability under a high pressure environment.	5.0	VCH41(N.C.)			●	●			Best Pneumatics No.9	
				VCH42(N.O.)			●	●				
	Check valve		5.0	VCHC40				●	●			Best Pneumatics No.9
	Pilot operated 3 port solenoid valve		5.0	VCH410			●	●	●			Best Pneumatics No.9
	Direct operated regulator (Relieving type)		Inlet pressure 6.0 Set pressure 0.5 to 5.0	VCHR30				●	●			Web Catalog
				VCHR40					●	●		
	Silencer	<b>Noise reduction 35 dB(A)</b> (At supply pressure 4.0 MPa) <b>Clogging-reduction with double-layer construction</b>	5.0 (Relief valve release pressure: 1.8 MPa)	VCHN3			●	●			Web Catalog	
				VCHN4					●	●		●

### Related Equipment

	Pressure switch	<b>2-color display Metal body</b> (Aluminum die-cast)	10.0 15.0	ISE75(H)	●							Best Pneumatics No.8
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### Made to Order

- 6.0 MPa pilot operated regulator (Air operated type) ..... Best Pneumatics No.9
- 22.0 MPa 2 port air operated valve ..... Best Pneumatics No.9