

Cleanness by Purpose

# Bellows Valve

***Compact and Light-weight  
Bellows Seal Valve (1 MPa)***

***GCV series***



***IHARA SCIENCE CORPORATION***

# GCV Bellows Seal Glove Valve (1 MPa)

## [Features]

**GCV Series Bellows Seal Glove Valve** is a light and compact bellows valve with excellent cost effectiveness, developed to contribute to the energy conservation and resource conservation, which is becoming a major assignment in recent days. With the basic performance equal to the conventional CVL series, it was made compact by reviewing each part. The switching indicator was also modified, making it easier to check if the valve is opened or closed.

- High sealing performance and durability are realized by equipping with a metallic bellows seal
- Equipped with a switching indicator making it possible to check if the valve is opened or closed with a glance
- No impurities by precision cleaning of the parts contacting the fluid
- Assembly and packaging in the clean room

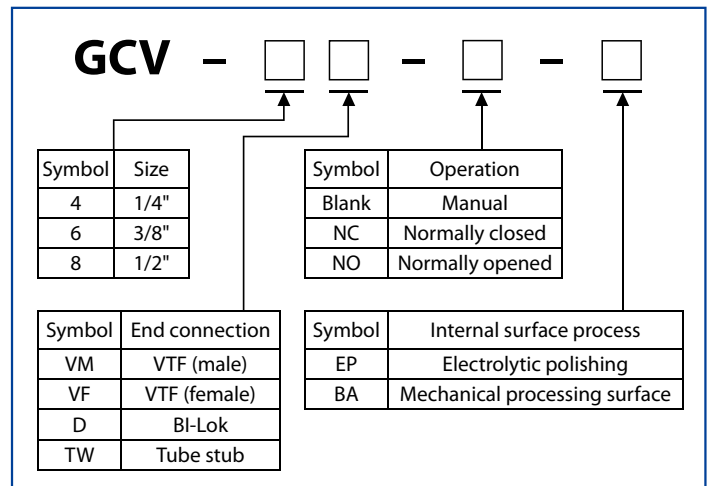
## Specification

Nominal size	1/4"	3/8"	1/2"
Operating pressure	Vac. to 1 MPa		
Operating temperature	-10 to +80 °C		
Cv value (*1)	0.35	0.85	
End connections (*2)	VTF (Metal gasket sealing type)		
	BI-Lok (Double ferrule type)		
	Tube stub		

(\*1)  
In case of VTF (male) connection. It will be different depending on the connection and/or the size.

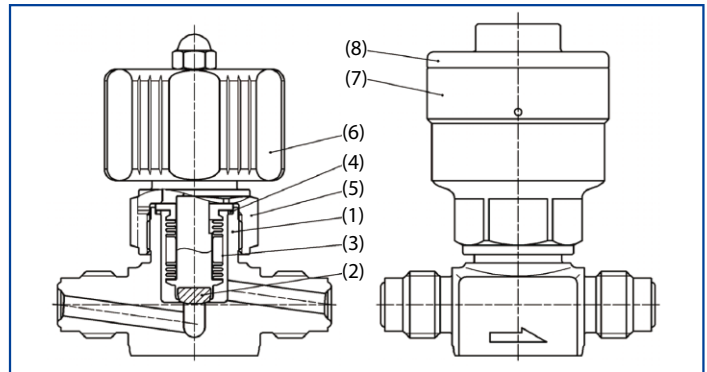
(\*2)  
Other connections are available as options. Please contact our Sales Department.

## Parts Number Structure



## Primary Materials

	Parts name	Material
(1)	Body	316L SS
(2)	Disc	PCTFE
(3)	Bellows	316L SS
(4)	Gasket	316L SS (PFA coating)
(5)	Bonnet	304 SS
(6)	Handle	ADC12
(7)	Bonnet	304 SS
(8)	Cover	A5056

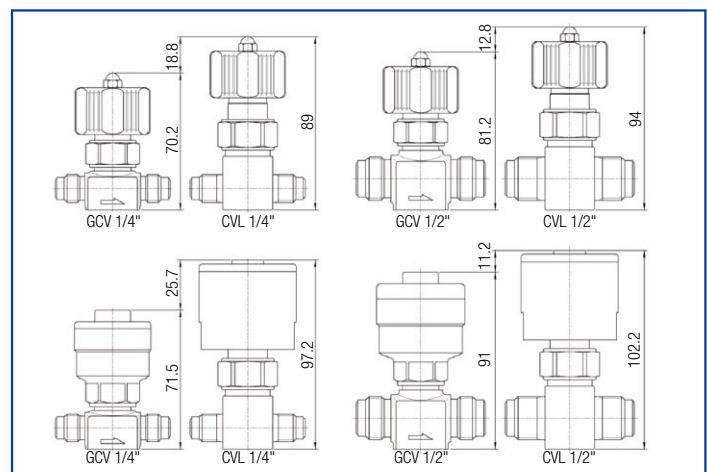


## Comparison with the Conventional Model

	Manual	New model GCV	CVL	Difference
Overall height	1/4"	70.2 mm	89 mm	-18.8 mm
	1/2"	81.2 mm	94 mm	-12.8 mm
Weight	1/4"	220 g	290 g	-70 g
	1/2"	320 g	380 g	-60 g

	Automatic	New model GCV	CVL	Difference
Overall height	1/4"	71.5 mm	97.2 mm	-25.7 mm
	1/2"	91 mm	102.2 mm	-11.2 mm
Weight	1/4"	270 g	420 g	-150 g
	1/2"	430 g	510 g	-80 g

(Weight is for the VTF male connection)



## Measurement Table (Manual)

<p>Bottom mount is common for all types</p>		<b>VTF (Male)</b> (mm)				
		Model	Size	L	H	h
		GCV-4VM	1/4"	58	59.2	11
		GCV-8VM	1/2"	65	65.2	16
		<b>VTF (Female)</b> (mm)				
		Model	Size	L	H	h
		GCV-4VF	1/4"	70.6	59.2	11
		GCV-8VF	1/2"	82	65.2	16
		<b>BI-Lok</b> (mm)				
		Model	Size	L	H	h
		GCV-4D	1/4"	64	59.2	11
		GCV-6D	3/8"	77	65.2	16
	GCV-8D	1/2"	82.6	65.2	16	
	<b>Tube stub</b> (mm)					
	Model	Size	L	H	h	
	GCV-4TW	1/4"	100	59.2	11	
	GCV-6TW	3/8"	110	65.2	16	
	GCV-8TW	1/2"	110	65.2	16	

## Measurement Table (Pneumatic actuation)

	<b>VTF (Male)</b> (mm)					
	Model	Size	L	H	h	W
	GCV-4VM-NC/NO	1/4"	58	60.5	11	38.5
	GCV-8VM-NC/NO	1/2"	65	75	16	44.5
	<p>Bottom mount is common for all types</p>					

## Measurement Table (Pneumatic actuation)

	<b>VTF (Female)</b> (mm)					
	Model	Size	L	H	h	W
	GCV-4VF-NC/NO	1/4"	70.6	60.5	11	38.5
	GCV-8VF-NC/NO	1/2"	82	75	16	44.5
	<b>BI-Lok</b> (mm)					
	Model	Size	L	H	h	W
	GCV-4D-NC/NO	1/4"	64	60.5	11	38.5
	GCV-6D-NC/NO	3/8"	77	75	16	44.5
	<b>Tube stub</b> (mm)					
	Model	Size	L	H	h	W
	GCV-4TW-NC/NO	1/4"	100	60.5	11	38.5
	GCV-TWD-NC/NO	3/8"	110	75	16	44.5

ISO9001 / ISO14001 Certified Office  
 Certified office for high-pressure gas facility testing and manufacturing,  
 certified office for N valves and N-II fittings  
 TÜV Rheinland Japan Ltd. Certified Plant



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CAUTION: Improper selection or handling of fittings, valves or related accessories may cause damage to operators or systems. Select appropriate fittings, valves or related accessories after careful consideration of the compatibility with the system being used and the operating conditions based on judgments made regarding the responsibility and limitations of both the system architects and the users. Furthermore, make sure to perform proper installation, operation, and maintenance. Read the instruction manual carefully before use, and fully understand the contents. If you do not have the instruction manual or if you have any questions, please contact your nearest sales office.