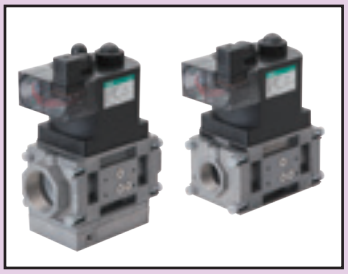


Intermediate pressure gas combination valve

GHV Series

- NC (Open when energized)
- City gas/LPG
- Port size: Rp1, Rp1¼, Rp1½, Rp2

RoHS

Features

■ Integrated structure/space-saving

Compact integration of two solenoid valves, including a governor function
Face to face 1/3 (50A, compared to CKD conventional products)

A single unit handles JIS B 8415 double cutoff, realizing space saving of equipment/systems.

■ Wiring and piping work-hour reduction (solenoid valve is simultaneous energizing type)

By integrating double cutoff, wiring and piping hours can be reduced by one machine worth.

■ Up to intermediate pressures (up to 50 kPa) allowed

■ Selectable variations

- Solenoid valve with built-in governor + solenoid valve
- Solenoid valve + solenoid valve
- Solenoid valve + solenoid valve (slow open)

■ Option

With closing confirmation switch (mounted to secondary side solenoid valve)

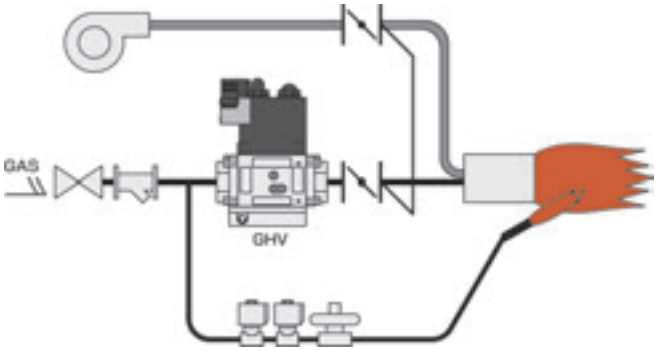
■ Port size change is easy

Port size can be changed by replacing the flange from 25A to 50A.

Applications

- Gas boilers
- Industrial furnaces
- Gas absorption water coolers/heaters
- Drying furnaces
- Hydrogen-related devices (only hydrogen gas option is used as the working fluid)

System example

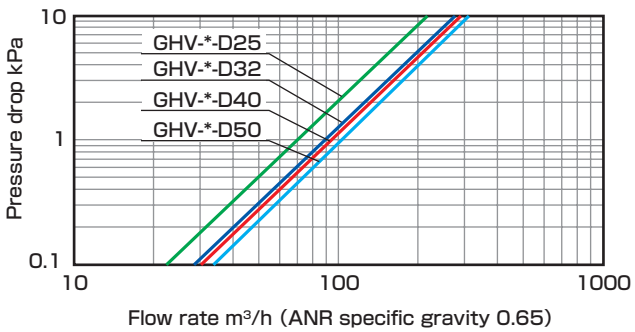


Specifications

Item		GHV-G				GHV-N				GHV-L			
		-D25	-D32	-D40	-D50	-D25	-D32	-D40	-D50	-D25	-D32	-D40	-D50
Working fluid		City gas/LPG (hydrogen gas * 1)											
Working pressure	kPa	0 to 50											
Secondary pressure	kPa	0.4 to 2.0				-							
Flow rate $^{\text{Specific gravity of city gas 0.65}}_{\Delta P = 0.25\ kPa}$	m³/h(ANR)	35	43.7	47.5	51	35	43.7	47.5	51	35	43.7	47.5	51
Rated voltage	V	100 AC$^{+10\%}_{-15\%}$ 200 AC$^{+10\%}_{-15\%}$											
Frequency	Hz	Common in 50 and 60											
Power consumption (apparent power)	VA	80											
Ambient temperature	°C	-15 to 70 (no freezing) *2								-15 to 60 (no freezing)			
Closing time	s	1.0 or less											
Frequency	cycles/min.	10 or less								1 or less			
Mounting orientation		Range of vertical direction with the coil on top to horizontal direction with the coil horizontal. (vertical piping installation available)											
Connection		Screw-in (Rp)											
Port size		1	1¼	1½	2	1	1¼	1½	2	1	1¼	1½	2
Weight	kg	6.1				5.5				5.8			
Proof pressure	kPa	75											
Opening time	s	-				1 or less				Approx. 10			
Start gas adjustment	%	-								0 to 70			
Re-energizing intermission time	s	-								5 or more			
Degree of protection		IP 54 or equiv.											

*1 : Only the option for hydrogen gas as the working fluid can be used.
*2 : When type with closing confirmation switch is selected, -15 to 60 (no freezing)

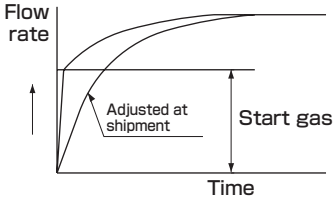
Flow characteristics



Reference: Conversion coefficient Converted flow rate = (flow rate in table) x (coefficient)

Gas	City gas (13A)	Propane	Butane	Hydrogen gas *1
Specific gravity (air = 1)	0.65	1.6	2.0	0.07
Coefficient	1.0	0.63	0.57	3.04

Opening characteristics (GHV-L)



CKD

How to order

GHV - G - D40 - E H2 - AC100V

Model No.

1 Variation of models

2 Port size

3 Option

4 Hydrogen compatible option

5 Voltage

Code	Description	
1 Variation		
G	Solenoid valve with built-in governor + solenoid valve	
N	Solenoid valve + solenoid valve	
L	Solenoid valve + solenoid valve (slow open)	
2 Port size		
D00	Without flange	
D25	Rp1	
D32	Rp1 1/4	
D40	Rp1 1/2	
D50	Rp2	
3 Option		
Blank	None	
E	With closing confirmation switch	
4 Hydrogen compatible option		
Blank	Standard	
H2	Working fluid: Hydrogen gas	
5 Voltage		
AC100V	100 VAC 50Hz/60Hz	
AC200V	200 VAC 50Hz/60Hz	

● Flange set

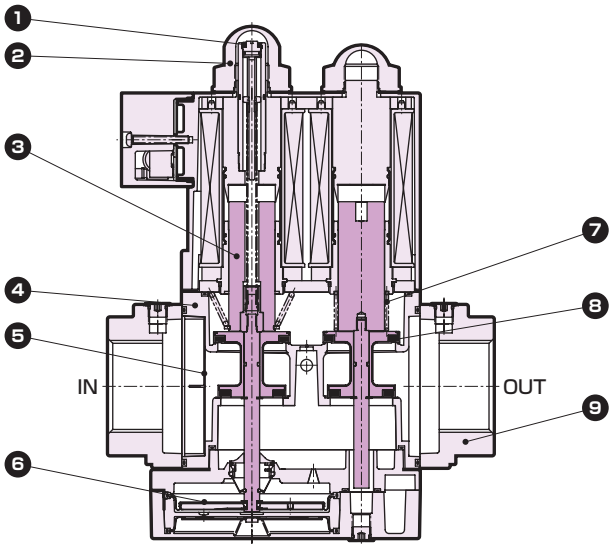
GHV - FLANGE - D40

Model No.

1 Port size

Code	Description
1 Port size	
D25	Rp1
D32	Rp1 1/4
D40	Rp1 1/2
D50	Rp2

Internal structure/material



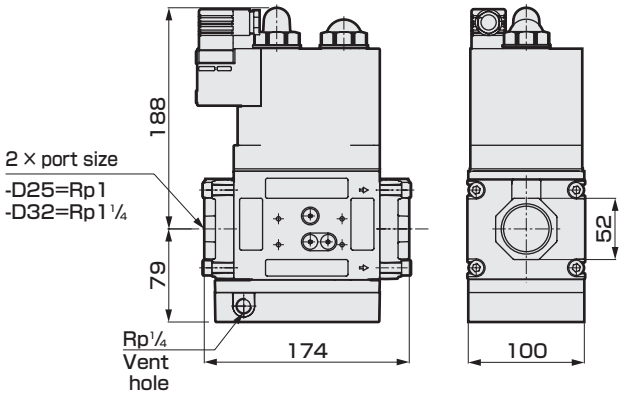
Cannot be disassembled

Part No.	Part name	Material
1	Pressure adjustment screw	Stainless steel
2	Governor cap	Resin
3	Plunger	Steel
4	Body	Aluminum die-casting
5	Strainer	Resin
6	Diaphragm	Nitrile rubber
7	Spring	Stainless steel, spring steel
8	Valve	Nitrile rubber/aluminum die-casting
9	Flange	Aluminum die-casting

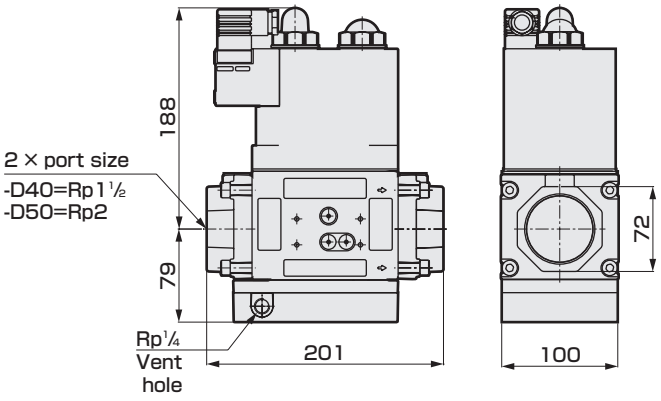
Dimensions

● Solenoid valve with built-in governor + solenoid valve

● GHV-G-D25/D32



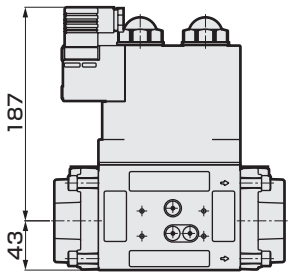
● GHV-G-D40/D50



Optional dimensions

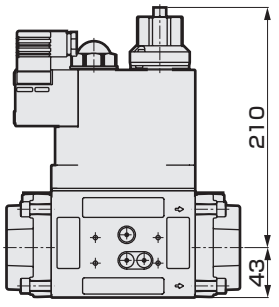
● Solenoid valve + solenoid valve

● GHV-N-D25 to D50



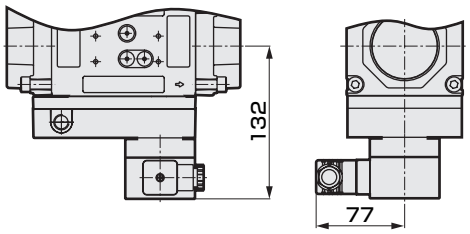
● Solenoid valve + solenoid valve (slow open)

● GHV-L-D25 to D50

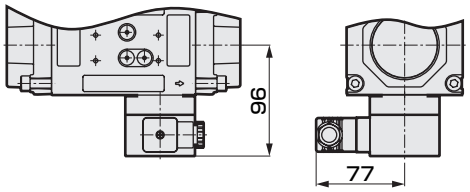


● Closing confirmation switch

● GHV-G-D25 to D50-E



● GHV-$^{N}_{L}$-D25 to D50-E



Pressure detection port layout drawing