



Intermediate pressure gas combination valve

GHV Series

- NC (Open when energized)
- City gas/LPG
- Port size: Rp1, Rp1¹/₄, Rp1¹/₂, Rp2



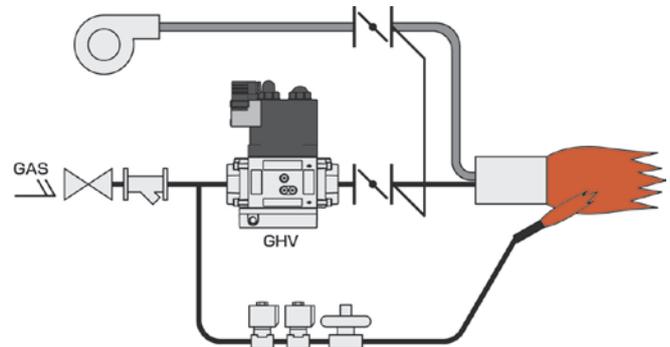
Features

- 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



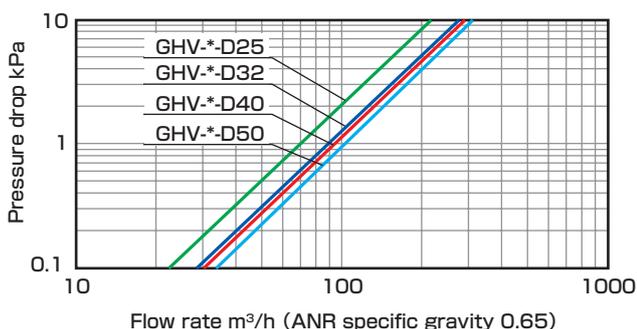
Specifications

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 <small>Specific gravity of city gas 0.65 ΔP=0.25 kPa</small> m ³ /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	1 ¹ / ₄	1 ¹ / ₂	2	1	1 ¹ / ₄	1 ¹ / ₂	2	1	1 ¹ / ₄	1 ¹ / ₂	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)

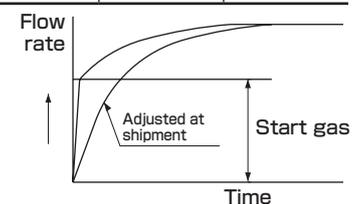
Flow characteristics



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)



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

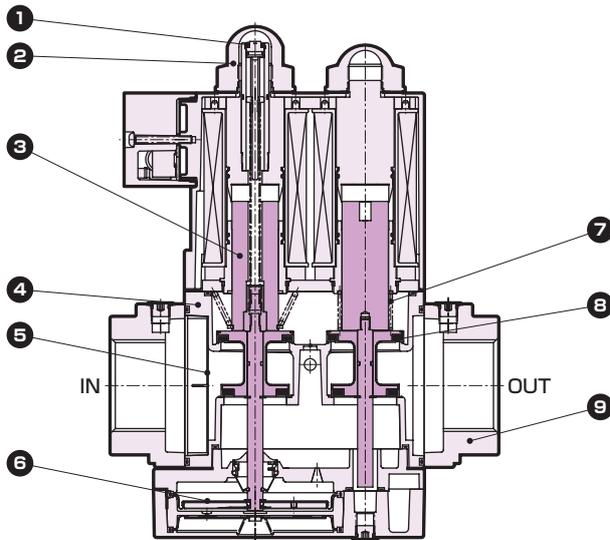
GHV - FLANGE - D40

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



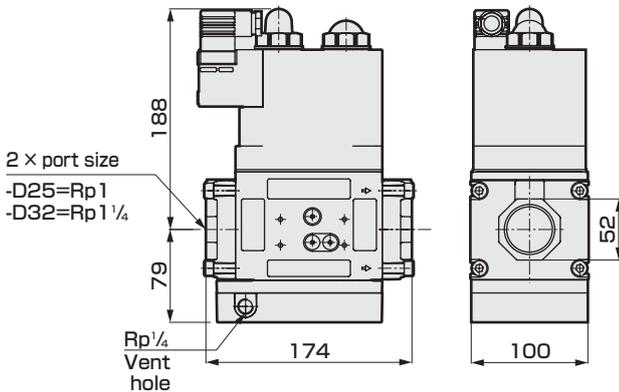
Cannot be disassembled

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

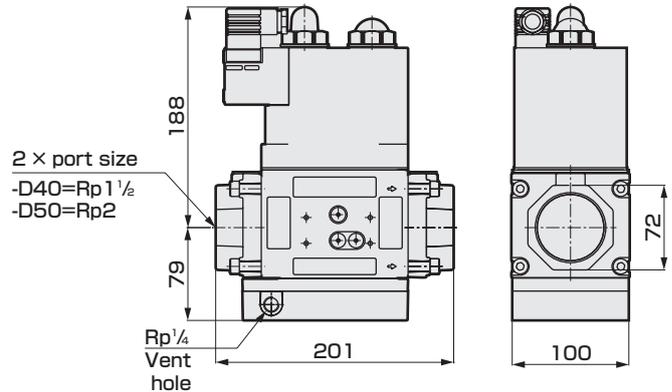
Dimensions

● Solenoid valve with built-in governor + solenoid valve

- GHV-G-D25/D32

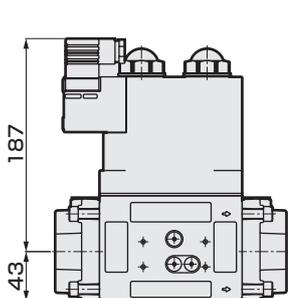


- GHV-G-D40/D50



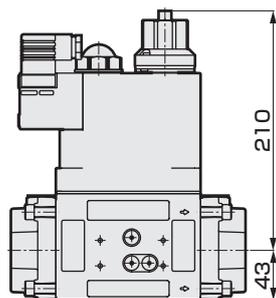
● Solenoid valve + solenoid valve

- GHV-N-D25 to D50



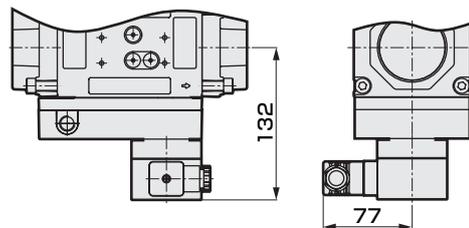
● Solenoid valve + solenoid valve (slow open)

- GHV-L-D25 to D50

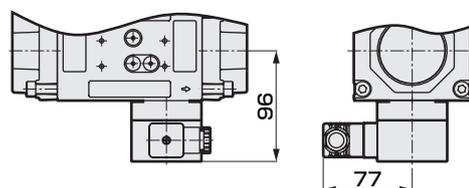


● Closing confirmation switch

- GHV-G-D25 to D50-E



- GHV-N-D25 to D50-E



Pressure detection port layout drawing

