

Intermediate pressure gas combination valve

# GHV Series

- NC (normally closed)
- City gas/LPG
- Port size: Rp1, Rp1<sup>1</sup>/<sub>4</sub>, Rp1<sup>1</sup>/<sub>2</sub>, Rp2



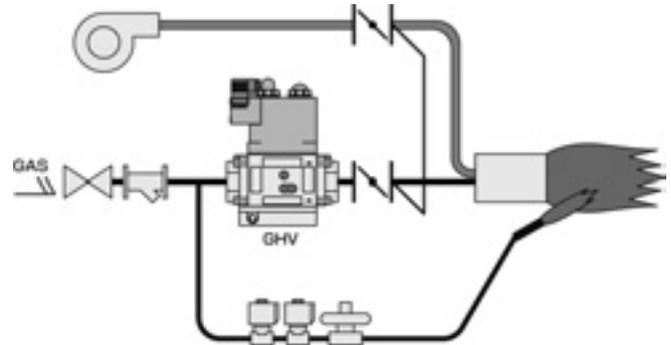
## Features

- 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)  
Supports JIS B 8415 double cutoff with a single unit, 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 pressure (up to 50kPa) 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
- ISO23551-1, ISO23551-2 compliant

## Applications

- Gas boilers
- Industrial furnaces
- Gas absorption water coolers/heaters
- Drying furnaces

## System example

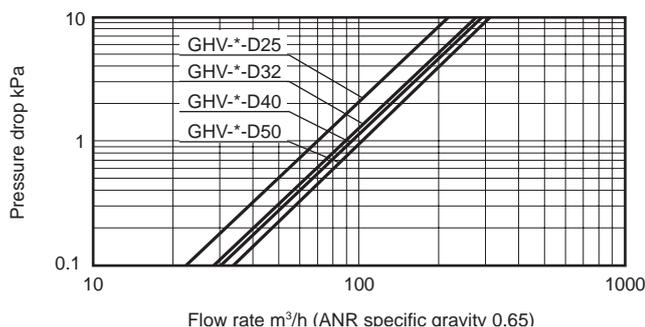


## Specifications

Item	GHV-G				GHV-N				GHV-L			
	-D25	-D32	-D40	-D50	-D25	-D32	-D40	-D50	-D25	-D32	-D40	-D50
Working fluid	City gas/LPG											
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 <sup>3</sup> /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 <sup>+10%</sup> / <sub>-15%</sub>				200 AC <sup>+10%</sup> / <sub>-15%</sub>			
Frequency Hz	Common to 50 and 60											
Power consumption (apparent power) VA	80											
Ambient temperature °C	-15 to 70 (no freezing) (*1)								-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 <sup>1</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>2</sub>	2	1	1 <sup>1</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>2</sub>	2	1	1 <sup>1</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>2</sub>	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 and over			
Degree of protection	IP 54 or equiv.											

\*1: When type with closing confirmation switch is selected, -15 to 60 (no freezing)

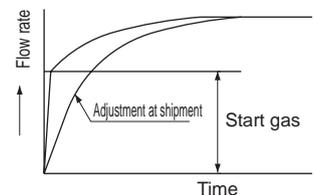
## Flow characteristics



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

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

## Opening characteristics (GHV-L)



## How to order

**GHV** - **G** - **D40** - **E** - **AC100V**

Model No.

**A** Variation

**B** Port size

**C** Option

**D** Voltage

Code	Description
<b>A Variation</b>	
<b>G</b>	Solenoid valve with built-in governor + solenoid valve
<b>N</b>	Solenoid valve + solenoid valve
<b>L</b>	Solenoid valve + solenoid valve (slow open)
<b>B Port size</b>	
<b>D00</b>	Without flange
<b>D25</b>	Rp1
<b>D32</b>	Rp1 <sup>1</sup> / <sub>4</sub>
<b>D40</b>	Rp1 <sup>1</sup> / <sub>2</sub>
<b>D50</b>	Rp2
<b>C Option</b>	
<b>Blank</b>	None
<b>E</b>	With closing confirmation switch
<b>D Voltage</b>	
<b>AC100V</b>	100 VAC 50 Hz/60 Hz
<b>AC200V</b>	200 VAC 50 Hz/60 Hz

## ● Flange set

**GHV** - **FLANGE** - **D40**

Model No.

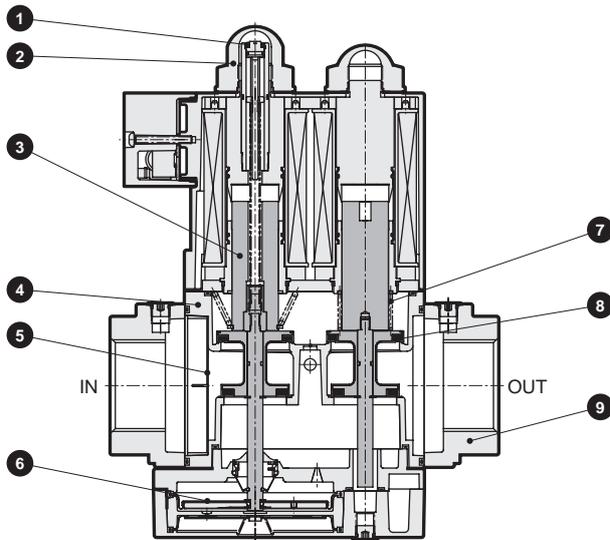
**A** Port size

Code	Description
<b>A Port size</b>	
<b>D25</b>	Rp1
<b>D32</b>	Rp1 <sup>1</sup> / <sub>4</sub>
<b>D40</b>	Rp1 <sup>1</sup> / <sub>2</sub>
<b>D50</b>	Rp2

- EXA
- FWD
- HNB/G
- USB/G
- FAB/G
- FGB/G
- FVB
- FWB/G
- FHB
- FLB
- AB
- AG
- AP/AD
- APK/ADK
- DryAir
- EX-XPLNprf
- XPLNprf
- HVB/HVL
- S<sup>◇</sup>B/NAB
- LAD/NAD
- Water-Rela
- NP/NAP/NVP
- SNP
- CHB/G
- MXB/G
- Other valves
- SWD/MWD
- DustColl
- CVE/CVSE
- CCH/CPE/D
- LifeSci
- Gas-Combus**
- Auto-Water
- Outdoor
- SpecFld
- Custom
- Ending

EXA  
FWD  
HNB/G  
USB/G  
FAB/G  
FGB/G  
FVB  
FWB/G  
FHB  
FLB  
AB  
AG  
AP/  
AD  
APK/  
ADK  
DryAir  
EX-  
XPLNprf  
XPLNprf  
HVB/  
HVL  
S◇B/  
NAB  
LAD/  
NAD  
Water-  
Rela  
NP/NAP/  
NVP  
SNP  
CHB/G  
MXB/G  
Other  
valves  
SWD/  
MWD  
DustColl  
CVE/  
CVSE  
CCH/  
CPE/D  
LifeSci  
Gas-  
Combus  
Auto-  
Water  
Outdoor  
SpecFld  
Custom  
Ending

## Internal structure and parts list



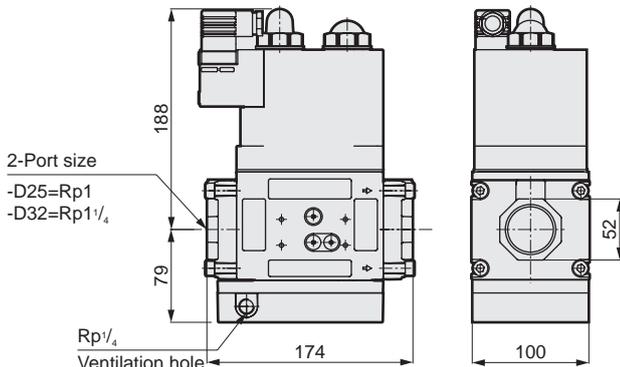
**Cannot be disassembled**

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

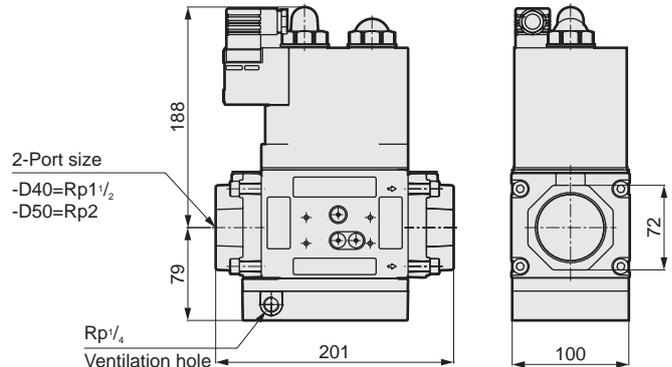
## Dimensions

### ● Solenoid valve with built-in governor + solenoid valve

● GHV-G-D25/D32

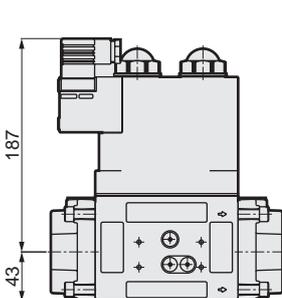


● GHV-G-D40/D50



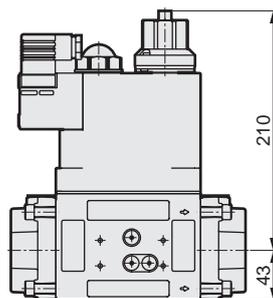
### ● Solenoid valve + solenoid valve

● GHV-N-D25 to D50



### ● Solenoid valve + solenoid valve (Slow open)

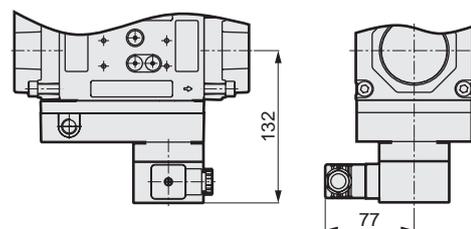
● GHV-L-D25 to D50



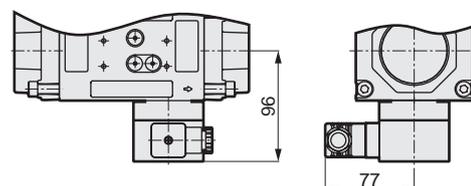
## Optional dimensions

### ● Closing confirmation switch

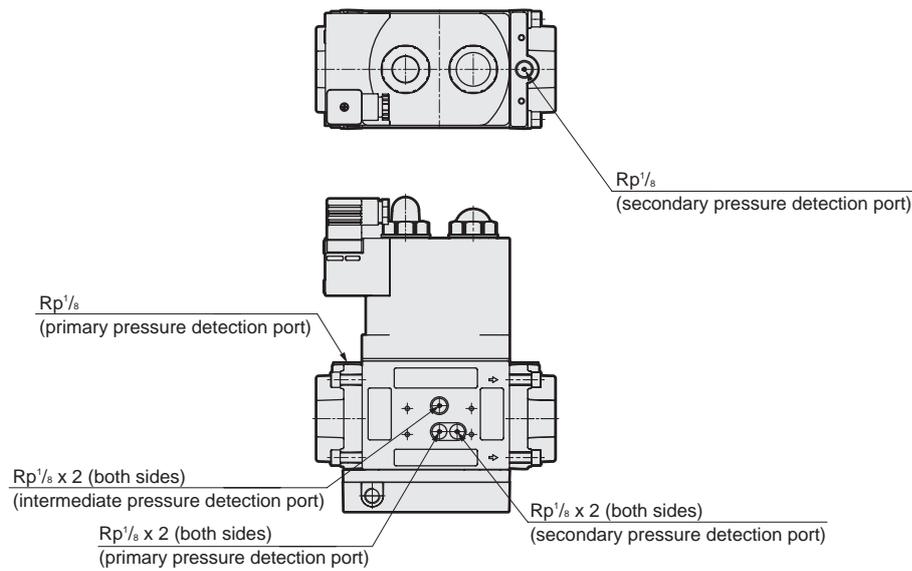
● GHV-G-D25 to D50-E



● GHV-N-D25 to D50-E



### Pressure detection port layout drawing



EXA
FWD
HNB/G
USB/G
FAB/G
FGB/G
FVB
FWB/G
FHB
FLB
AB
AG
AP/ AD
APK/ ADK
DryAir
EX- XPLNprf
XPLNprf
HVB/ HVL
S $\leftrightarrow$ B/ NAB
LAD/ NAD
Water- Rela
NP/NAP/ NVP
SNP
CHB/G
MXB/G
Other valves
SWD/ MWD
DustColl
CVE/ CVSE
CCH/ CPE/D
LifeSci
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