# GV400 Series Big Port Glode Control Valve：

GV400P-025NC-D50

## 1.Ordering Code :

| GV400 | P | - | 080 | NC | - | D | 100 | - | W |
|---|---|---|---|---|---|---|---|---|---|

**Valve type**

GV400: 400 series globe control valve

**Actuator material code**

P: PA Actuator

S: Stainless steel actuator

**Nominal diameter**

080: G3　　100: G4

**Control function**

NC: Normally closed (standard type)

NO: Normally open

**Acting type**

S: Single acting

D: Double acting

**Actuator size**

90, 100, 125

**Material of valve body**

W: Weld ends

F:  Flange ends

## 2.Characteristics:

1) GV400 Series Plunger pilot angle seat valve is propelled by piston actuator, either single acting or double acting. Actuators are made of three different materials, applicable to different working temperature.
2) 2/2 ways stainless steel valve with big flow capacity, and V type seals ensure reliable and effective sealing.
3) Maintenance free, compatible with various accessories. Direction indicating, stroke limiting or manual switching can be achieved conveniently.
4) Flange ends and weld ends are optional.
5) Valve body material 304/316 optional.
6) Upstream & downsteam in flow direction optional.

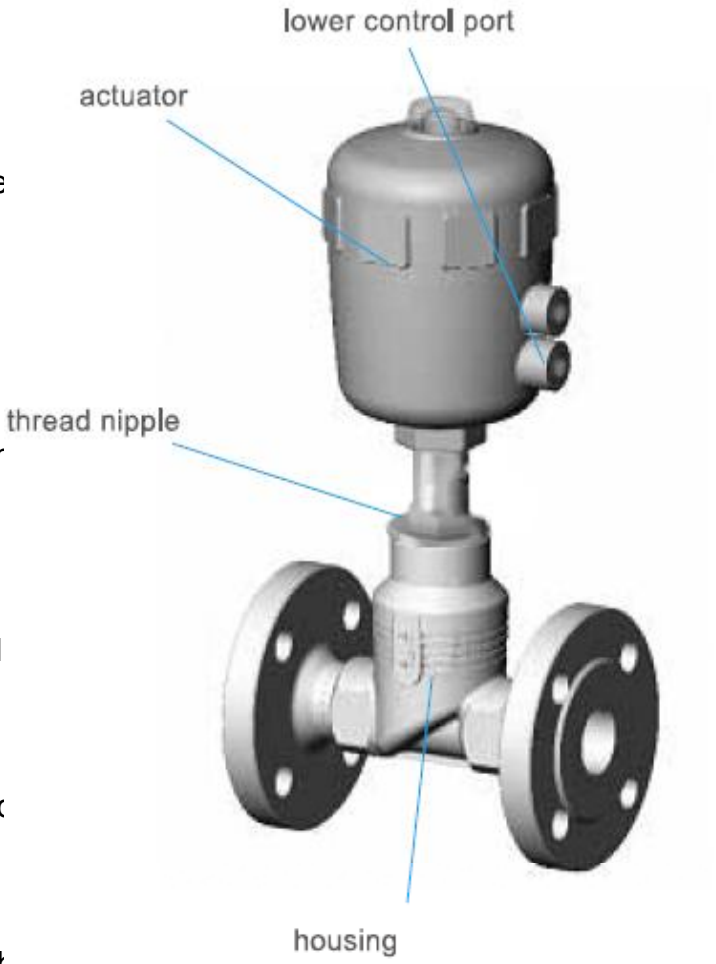
## 3.Specification:

| Port size | Upsteam DN80-100 G3~G4 |
|---|---|
| Material of body | Casting S.S. 304/316 |
| Material of Actuator | PA (S.S actuator is required) |
| Sealing | PTFE (NBR, FKM, EPDM be required) |
| Ambient and fluid | Air,water, oil(50CST below),steam,alcohol, fuel, saline solution,aqueous alkali,organic solvent |
| Viscosity | Max.600mm$^2$/s |
| Packing glands seal | PTFE |
| Medium Temperature | -10 to +180℃ with PTFE seal |
| Ambient Temperature<br>PA actuator<br>Actuator size below 125mm | -10 to +60℃ |
| Operating Medium | Neutral gas, Air |
| Max.pressure of pilot valve<br>Actuator size 100mm<br>Actuator size 125mm | <br>PA 10bar<br>PA 7bar |

* 1 kgf/cm2 = 1 bar = 0.1 Mpa = 100KPa = 14.5psi

## 4. Installation of the valve:

1) Installation in any orientation but preferably with the actuator above.
**Note: Clean piping from contamination!!!**
2) Before attaching the valve housing, make sure the piping is aligned!
3) If the housing is to be welded on, make absolute sure that the actuator is removed before hand.




Devices with Approval DIN EN 161: According to DIN EN 161"Automatic Shut-off Valves for Gas burners and Gas applicances", a dirt trap must be connected upstream of valve. In order to maintain approval, also with stainless steel housing, upstear of the valve.

## 5. Procedure:

1. Remove the pneumatic supply and the electrical connection(if a pilot valve is attached).
2. Control function A:
Pressurize the lower control port of actuator with compressed air(6bar), so that the valve disk is lifte from the valve seat and it not damaged.
Control function B and I:
No compressed air must be applied.
3. Remove the actuator in the open valve position b unscrewing the threaded nipple from the housing.
4. Before reinstalling the actuator( in the open valve position), grease the nipple thread with stainless steel lubricant.
5.Replace the graphite seal.
**ATTENTION!** For specical applications such as for oxygen and analysis,use only the approved lubricants
6. After tightening the threaded nipple, align the control ports by turning the actuator.
**ATTENTION!:** During this operation, the valve must be in the open position.
**NOTE:** For applications in aggressive media, we recommend attaching all free penuamtic connections to a pneumatic hose whose other end lies in a neutral atmostphere.

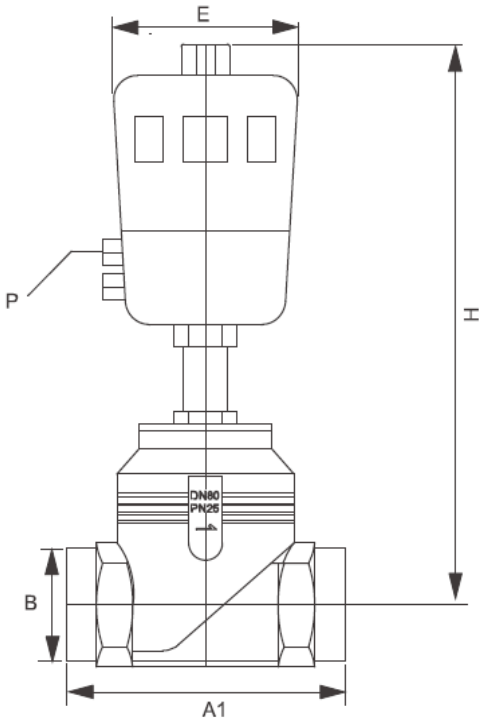
## 6. Pneuamtic installation:

Control medium: Air
**1) Direct connection to the piston control valve.**
with control function A, at the lower connection of actuator with G1/4 thread.
with control function B, at the upper connection of actuator with G1/4 thread.
with control function I, at the upper and lower connection of actuator with G1/4 thread.

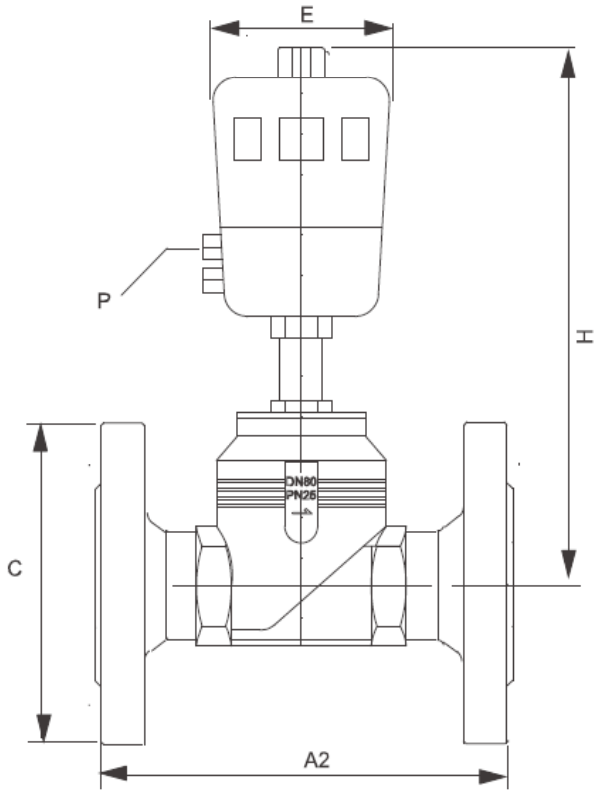
**2) Connection via pilot valves.**
Mount the solenoid valve Type 4M410-15 with NAMUR Adapter and banjo bolt on the actuator for double acting control functions.
Mount the solenoid valve Type 3V1-06 with banjo bolt on the respective control port of the actuator.

## 7. Overall and Dimension Sheet:

Weld Ends
GV400P-W

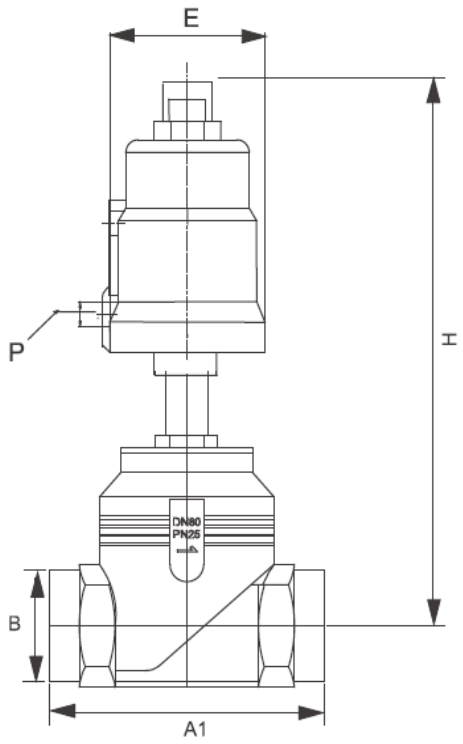



Flange Ends
GV400P-F

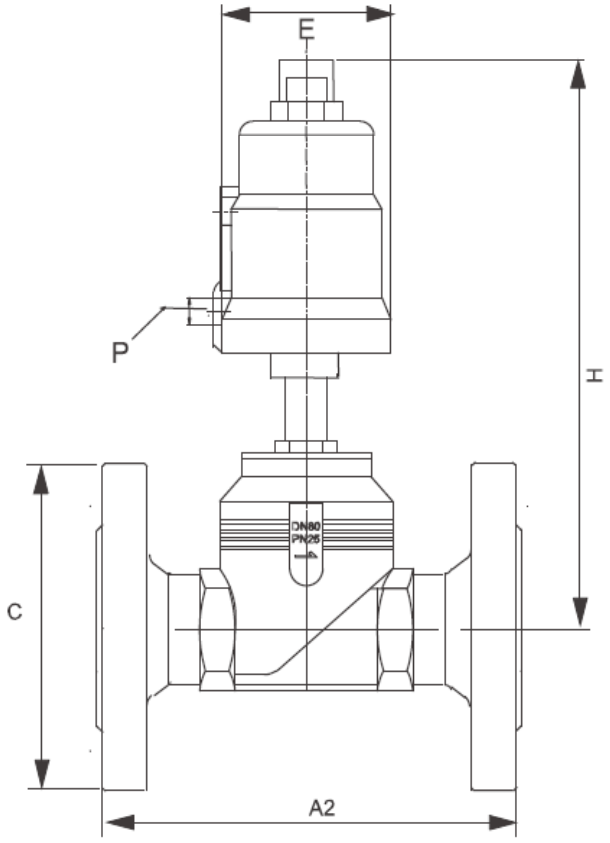



| Model | port size | Actuator size (mm) | A1 | A2 | B | C | E | H | P |
|---|---|---|---|---|---|---|---|---|---|
| GV400P080W | 3" | 100(125optional) | 230 | | 91 | | 100:127,125:157 | 100:410,125:440 | G1/4" |
| GV400P100W | 4" | 125 | 260 | | 117 | | 157 | 450 | G1/4" |
| GV400P080F | 3" | 100(125optional) | | 310 | | 192 | 100:127,125:157 | 100:410,125:440 | G1/4" |
| GV400P100F | 4" | 125 | | 350 | | 215 | 157 | 450 | G1/4" |

Weld Ends
GV400P-W




Flange Ends
GV400P-F

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| GV400S080W | 3" | 90(125optional) | 230 | | 91 | | 90: 94,125:135 | 90:355,125:365 | G1/4" |
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