

# Flat-seat Valve, Pneumatically Operated

## Series GV400 (Big Port)

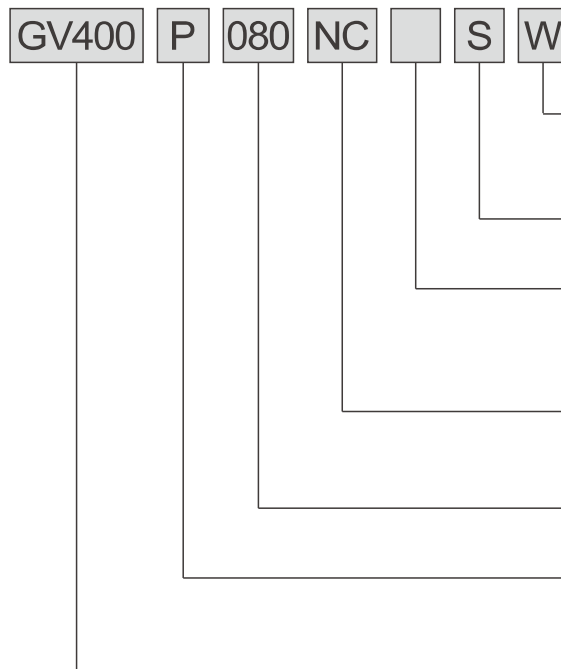
### 2/2-way Piston Controlled Flat-seat Valve Pneumatically Operated, for medium up to +180° C, Big Port with Weld & Flange ends DN 80-100

- Compact style 2/2-way piston controlled valve with flat-seat housing;
- Flange ends and Weld ends optional;
- Valve body material 304/316 optional;
- Upstream & downstream in flow direction optional

#### ◆ How to Order



GV400P080W



#### Connection

W	weld ends
F	Flange ends

#### Acting type

S	Single acting	D	Double acting
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#### Body Material

Blank	S.S 304	(standard)
4	S.S 316	
5	S.S 316L	

#### Control Function

NO	Normally open
NC	Normally closed (standard)

#### Port code

80	G3	100	G4'
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#### Actuator Material code

P	PA Actuator
S	S.S Actuator

#### Model

GV400	400 series Globe Control Valve
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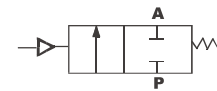
#### ◆ Specifications

Port Size	Upstream DN80-100	
Material of body	Casting S.S 304/316	
Material of Actuator	PA (S.S actuator is required)	
Sealing	PTFE (NBR, FPM EPDM be required)	
Ambient and fluid	Air, Water, Oil, (50CTS Bellow), steam, alcohol, fuel, saline solution, aqueous alkali, organic solvent	
Viscosity	Max. 600mm <sup>2</sup> /s	
Packing glands seal	PTFE	
Medium Temperature	-10 to +180°C with PTFE seal	
Ambient Temperature PA actuator Actuator size below 125mm	-10 to +60°C	
Installing		
Operating Medium	Neutral gas, Air	
Max. Pressure of Pilot Valve		
Actuator size 100mm	PA	10 bar
Actuator size 125mm	PA	7 bar

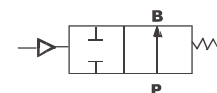
- ◆ Installation in any orientation but preferably with the actuator above

Symbol

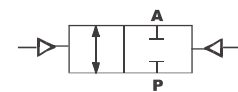
**Control function A**  
(closed by spring force in rest position)



**Control function B**  
(open in rest position)



**Control function I**  
(double-acting actuator)



- ◆ **GV400 Series Plunger Pilot angle seat valve is propelled by a piston actuator, either single acting or double acting.**  
**Applicable to different working temperature: 2/2 Way stainless steel valve with big flow capacity**  
**Actuator material adopts PA or S.S. (special conditions)**  
**V type seals ensure reliable and effective sealing**  
**Maintenance free, compatible with various accessories, direction indicating, stroke limiting or manual switching can be achieved conveniently.**

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## Installation of the valve (Notes)

Installation in any orientation but preferably with the actuator above.

Clean piping from contamination!

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Before attaching the valve housing, make sure the piping is aligned!

If the housing is to be welded on, make absolutely sure that the actuator is removed beforehand.

Devices with Approval DIN EN 161: According to DIN EN 161 "Automatic Shut-off Valves for Gas burners and Gas appliances", a dirt trap must be connected upstream of valve. The dirt trap must prevent the penetration of a 1 mm test mandrel. In order to maintain approval, also with stainless steel housing, the user is requested to install such a dirt trap upstream of the valve.

### Procedure:

1. Remove the pneumatic supply and the electrical connection (if a pilot valve is attached.)

#### Control function A:

Pressurize the lower control port of actuator with compressed air (6 bar), so that the valve disk is lifted from the valve seat and is not damaged.

#### Control function B and I:

No compressed air must be applied.

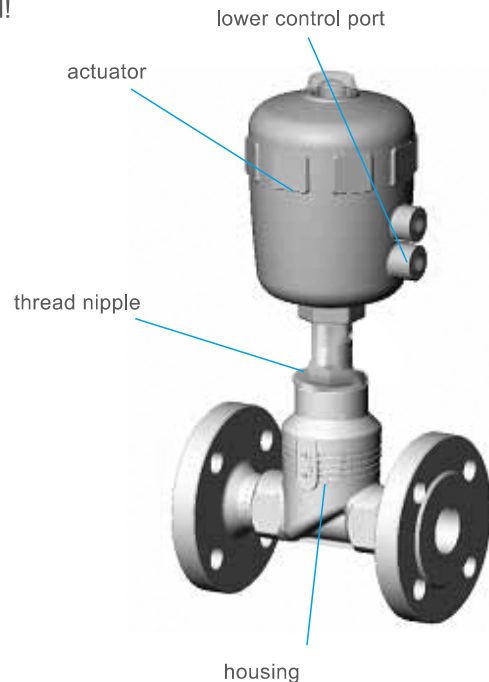
3. Remove the actuator in the open valve position by unscrewing the threaded nipple from the housing.
4. Before reinstalling the actuator (in the open valve position), grease the nipple thread with stainless steel lubricant.
5. Replace the graphite seal.

**ATTENTION!** For special 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 pneumatic connections to a pneumatic hose whose other end lies in a neutral atmosphere.



## Pneumatic Installation

**Control medium:** air

### a) 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.

### b) Connection via pilot valves

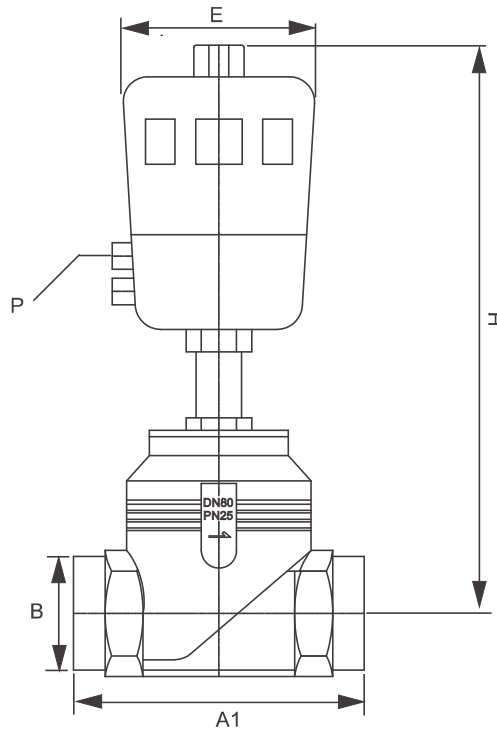
- Mount the solenoid valve Type 4M410-15 with NAMUR Adapter and banjo bolt on the actuator for double acting control functions.
- Mount the solenoid valve Type 3V1-06 with banjo bolt on the respective control port of the actuator.

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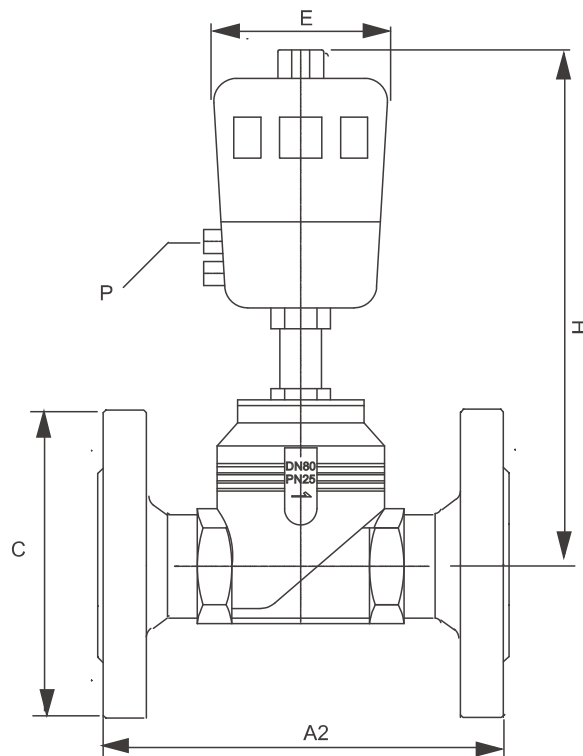
**FESCOLO**

◆ Dimensions [mm]

Weld Ends  
GV400P-W



Flange Ends  
GV400P-F



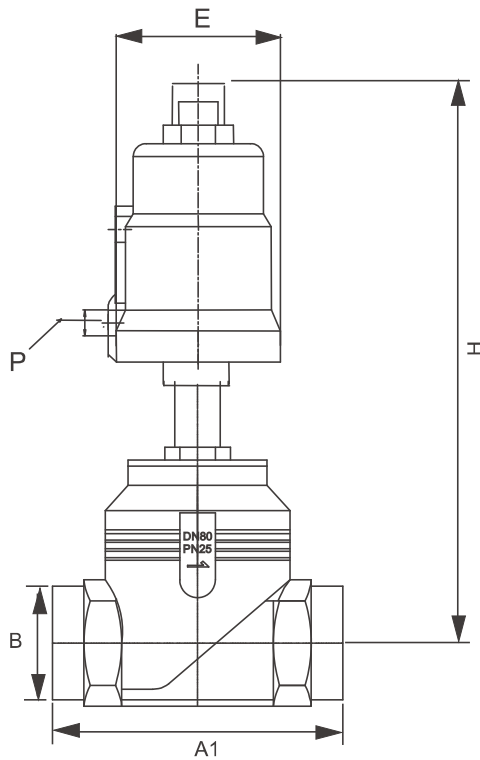
Model	port size	Actuator size (mm)	A1	A2	B	C	E	H	P
GV400P080W	3"	100(125 optional)	230		91		100:127,125:157	100:410,125:440	G1/4"
GV400P100W	4"	125	260		117		157	450	G1/4"
GV400P080F	3"	100(125 optional)		310		192	100:127,125:157	100:410,125:440	G1/4"
GV400P100F	4"	125		350		215	157	450	G1/4"

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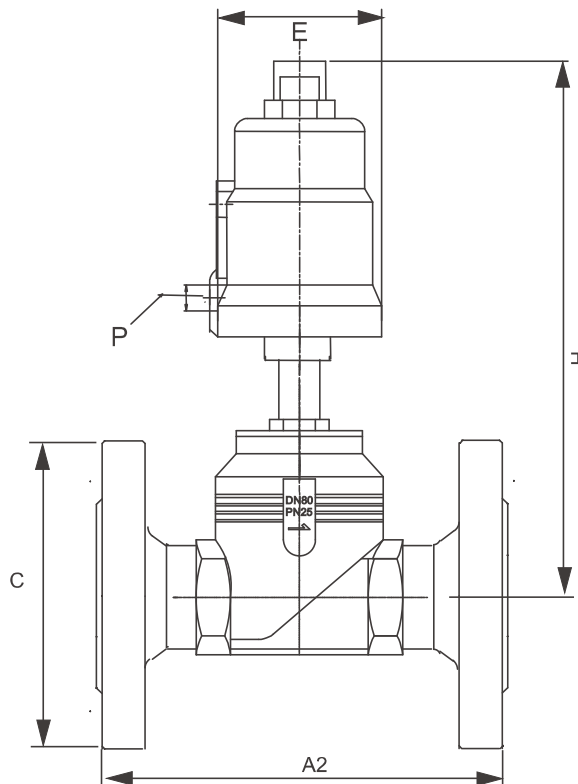
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### ◆ Dimensions [mm]

Weld Ends  
GV400P-W



Flange Ends  
GV400P-F



Model	port size	Actuator size (mm)	A1	A2	B	C	E	H	P
GV400S080W	3"	90(125 optional)	230		91		90: 94,125:135	90:355,125:365	G1/4"
GV400S100W	4"	125	260		117		135	365	G1/4"
GV400S080F	3"	90(125 optional)		310		192	90:94 ,125:135	90:355,125:365	G1/4"
GV400S100F	4"	125		350		215	135	365	G1/4"