

# GD-25GJ, 25JC

GD-25GJ, 25JC achieves low-noise water supply as pressure reducing valves for individual water supply to complex housing. Reduced pressure can be kept highly stable against a variation of supply water pressure. Incorporated strainer and its compact and lightweight design ensure easy handling of piping.



## ■Features

1. Reduced noise. Can be used even late at night.
2. Re-adjustment is not required because setting pressure is adjusted to standard setting pressure.
3. Pressure balance structure can keep the reduced pressure at a constant level without being affected by inlet pressure.
4. Incorporated strainer prevents foreign substances such as dirt, scale and sand from flowing to the outlet side.
5. Strainer cap can be removed without tools. It is easy for maintenance and inspection without left the strainer in the valve box since the strainer and strainer cap is combined part.
6. Closed structure keeps fluid inside even if the diaphragm is damaged or broken.
7. Attached pressure gauge joint allows a pressure gauge to be installed while water is supplied so that the set pressure can be checked easily.
8. The GD-25JC incorporates check valve and the GD-25GJ-K(P) is provided with built-in pipe end core for lining steel piping.

## ■Specifications

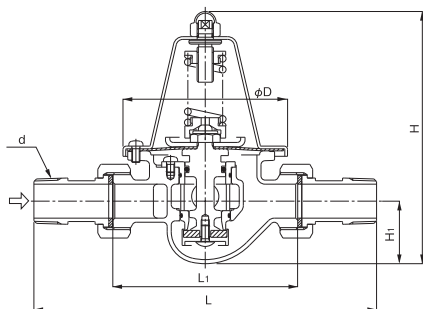
Nominal size	25A	
Application	City water	
Inlet pressure	1.0 MPa or less	
Reduced pressure	(A) 0.05-0.10 MPa (Standard setting: 0.09 MPa)	
	(B) 0.10-0.22 MPa (Standard setting: 0.20 MPa)	
	(C) 0.20-0.35 MPa (Standard setting: 0.25 MPa)	
Minimum differential pressure	0.02 MPa	
Maximum pressure reduction ratio	10:1	
Minimum adjustable flow rate	0.5 L/min	
Fluid temperature	5-90°C (5-60°C for GD-25JC)	
Rated flow rate	85 L/min (100 L/min when the differential pressure is 0.10 MPa or more)	
Material	Body	Cast bronze (NPb-treated)
	Valve seat	Cast bronze (NPb-treated)
	Spindle	Brass
	Valve disc	Synthetic Rubber
	Diaphragm	Synthetic Rubber
Connection	JIS R 1 screwed (union joint)	
Pressure gauge joint	JIS Rc 1/8 screwed	
Outlet withstand pressure	1.2 times the maximum working pressure of outlet side.	

- The strainer is 40 mesh.
- Available with pressure gauge (type A or type D) as option (for 0.5MPa).
- Connect pressure gauge (JIS R1/8) at sight.
- The accuracy of a pressure gauge is  $\pm 3\%$  F.S.
- The closing pressure of the check valve for the GD-25JC is 0.005 MPa or less.
- An incombustible material is used for heat insulating material.

### ■ Dimensions (mm) and Weights (kg)

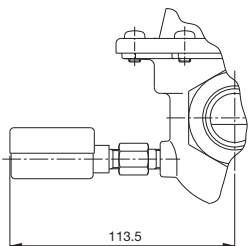
d	L	L <sub>1</sub>	H	H <sub>1</sub>	φD	Weight
R1	252	136	186	46	121	3.5

\* Weight for GD-25JC is slightly different.

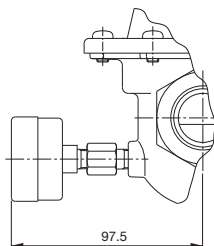


### ■ Dimensions of the Valve Equipped with the Optional Pressure Gauge

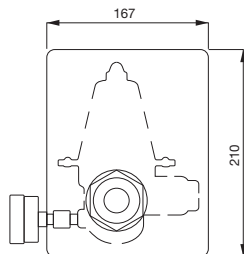
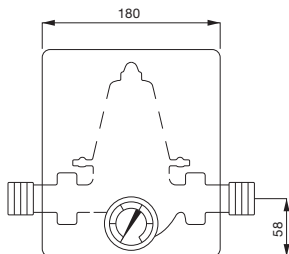
· Equipped with the pressure gauge Type A



· Equipped with the pressure gauge Type D

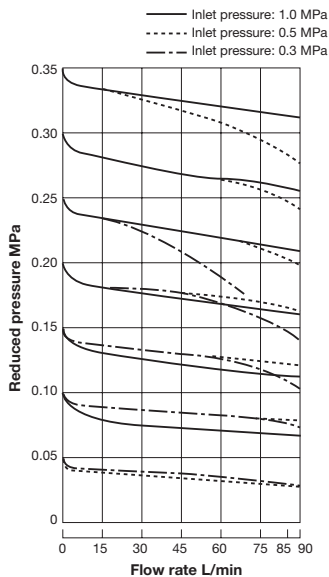


### ■ Dimensions of the Heat Insulating Material

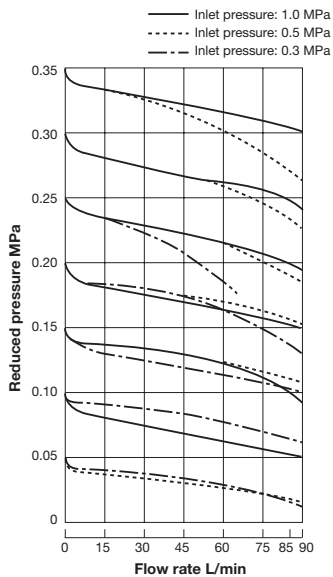


## Flow Rate Characteristic Chart

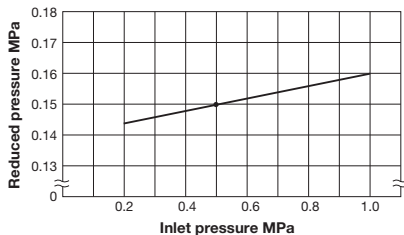
·GD-25GJ-GJ-K-GJ-L



·GD-25JC

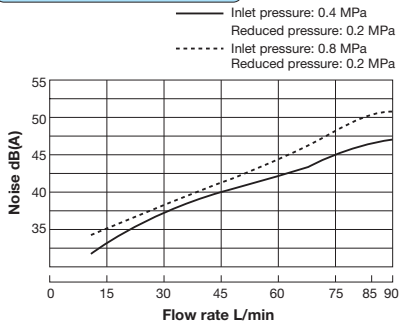


## Pressure Characteristic Chart



This chart shows variation in reduced pressure when the inlet pressure of 0.5 MPa is changed between 0.2 MPa and 1.0 MPa while the reduced pressure is set at 0.15 MPa.

## Noise Characteristic Chart



- Distance from the sample valve to the microphone: 15 cm
- Background noise: 30 dB (A)

## ■Notes on Installation

1. Parallel Installation or vertical installation to the piping is available.
2. Install after eliminating the dusts, scale, and sands from the piping.
3. Do not touch the adjusting screw unnecessarily because setting pressure is adjusted to standard setting pressure.
4. Please clean up the strainer regularly, because the water supply decrease as foreign substance accumulates inside the strainer.  
Especially foreign substance accumulates at the first plumbing, so check the strainer soon after start water supplying. Cleaning requires space of 135mm.
5. Caution on piping installation of a vinyl chloride tubing. If the adhesive agent for the vinyl chloride tubing flows in the product, synthetic rubber may be involved in, so please be careful when installing.
6. Use the polystyrene foam as insulation material.
7. The belt of packing box is instruction manual. Please use it as a belt of heat insulating material after piping.
8. There are two types of tube end anti-corrosion core: the vinyl chloride lining steel pipe and the polyethylene powder lining steel pipe for water supply. Please use according to the tube type since the inner diameter of steel pipe is different respectively.
9. Tube end anti-corrosion core has a risk of heat transformation by the high temperature. Please avoid high temperature due to work near fire or welding work.
10. Piping construction procedure (the pipe end anti-corrosion core)

### ① Check the tube

Make sure that it is a suitable tube type to the core. Please make sure use the qualified tube. In the condition of using out of qualification, it may lead to the malfunction of anticorrosive such as incomplete of air-tightness, deformation of core etc.

### ② Cutting the tube

Please cut it off at a right angle to the axis when cutting the tube. Please use automatic metal sawing machine or circular sawing machine to cut the tube.

Note) Please do not use high-speed grinding wheel cutting, pipe cutting, gas cutting and arc cutting. Please be sure to remove the oil adhering to the tube.

### ③ Chamfering of the tube

Please lightly chamfer the burr of the inner surface of the tube by using a chamfering tool such as a scraper.

### ④ Threading of the tube

Tap the screw according to JIS standard. Please check certainly at screw gauge because the screw such as out of the standard will cause damage to the core.

### ⑤ Application of the sealant

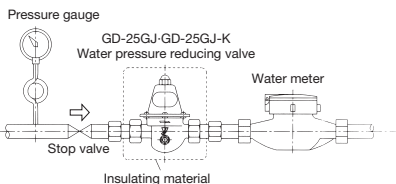
Please apply anti-corrosion sealant on the end and male thread.

### ⑥ Joint of the tube

Joint of the tubes, please refer to the number of thread and length of the below table as a reference. It can be installed horizontally or vertically as optional. Please install after getting rid of foreign matter such as sand and scale inside the pipe.

Nominal size	Standard threaded number of thread	Standard threaded length (mm)	Standard tightening torque (N·m)
15A	5.5	10	39.2
20A	6	11	58.8
25A	5.5	13	98.0
32A	6.5	15	117.6
40A	6.5	15	147.0
50A	8	18.5	196.0

### [Piping example]



## ■How to Adjust the Pressure

1. Screw the pressure gauge into the pressure gauge joint (Fig. 1).
2. Remove the cap. Checking the pressure gauge, turn the adjusting screw to adjust the reduced pressure to a desired level (Fig. 2).
- The reduced pressure decreases when the adjusting screw is turned clockwise.
- The reduced pressure increases when the adjusting screw is turned counterclockwise.
3. After reduced pressure adjustment, attach the cap.
4. Remove the pressure gauge.

