

GD-24 water pressure reducing valve can be used as a pressure control unit in water supply systems of general residential housing, high-rise buildings, industrial plant, and factory equipment. It can also be used to provide stable water pressure in high-rise apartment units, and for hilly districts where each house requires an individual water supply system. Trouble free flow control solutions are achieved through the use of a stainless steel valve seat and a suspensory fitting in the drive mechanism.

## Features

- (1) The use of a suspensory fitting in this direct-acting type pressure reducing valve eliminates sliding parts, such as O-rings, etc., and provides longer service life.
- (2) Bronze body construction prevents rusty water problems.
- (3) A stainless steel valve seat reduces wear and increases durability.
- (4) A sealed construction prevents external leakage even if the diaphragm should break.
- (5) The valve can be mounted in any position (facing up or down).

## Specification

Model	GD-24	GD-24B
Application	Hot or cold water	Hot, cold, or sea water
Connection	JIS Rc (PT Screwed)	
Inlet pressure	0.2~1.6 MPa {2.0~16 kgf/cm <sup>2</sup> G}	
Outlet pressure	0.05~0.55 MPa {0.5~5.5 kgf/cm <sup>2</sup> G}	
Min. differential pressure	0.05 MPa {0.5 kgf/cm <sup>2</sup> }	
Temperature	5~80 °C*	
Material	Body	Bronze
	Valve	Brass
	Valve disc	Urethane rubber
	Seat	Stainless steel
	Diaphragm	NBR
	Cap	Brass
	Plug	Stainless steel



## Options

Suffix:

G - D-type 1.0MPa {10kgf/cm<sup>2</sup>G} pressure gauge (R 1/8)

S - Strainer (SY-24, 60 mesh as a standard)

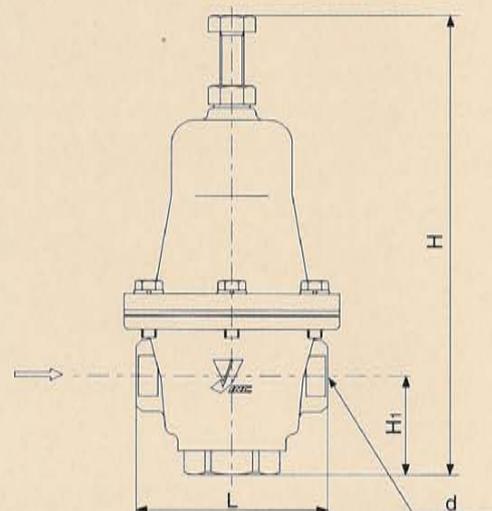
GS - Gauge and strainer

Other

\*Diaphragm: Viton (FKM) for hot water, Max. temperature 90°C (194 °F)

## Dimensions & Weight

Size	d	L	H	H <sub>1</sub>	Weight(kg)
15A	Rc 1/2	80	193	42	1.8
20A	Rc 3/4	90	210	45	2.4
25A	Rc 1	100	230	50	3.3
32A	Rc 1 1/4	120	265	60	4.7
40A	Rc 1 1/2	150	315	62	8.2
50A	Rc 2	185	365	73	14.3



## Formula for nominal size selection

### Cv value calculation formula

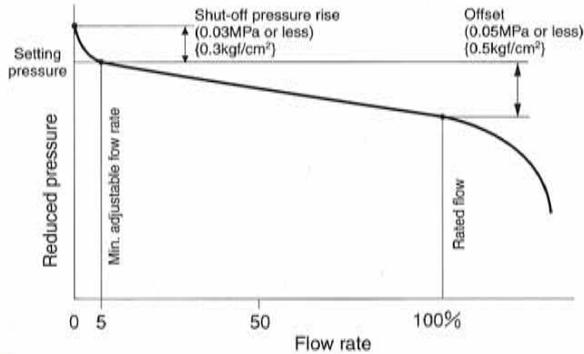
$$C_v = \frac{0.365V \sqrt{G}}{\sqrt{\Delta P}}$$

P1 : Inlet pressure [MPa · A]  
 P2 : Reduced pressure [MPa · A]  
 $\Delta P$  : P1 - P2 [MPa]  
 G : Specific gravity (relative to water)  
 V : Maximum flow rate [m<sup>3</sup>/h]  
 Cv : Cv value of the nominal size

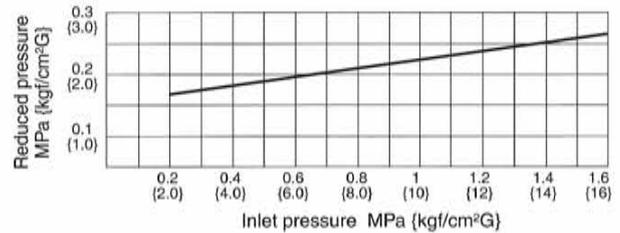
### Cv value

15A	20A	25A	32A	40A	50A
1.5	1.9	3.0	4.0	7.0	10.0

## Flow rate characteristics chart



## Pressure characteristics chart



## Nominal size selection chart

