

# PRESSURE REDUCING VALVE

## GD-30 ▪ 30S

### Features

1. Sophisticated design, compact and lightweight.
2. Simple structure, great durability and easy maintenance.
3. Easy to install due to screwed connections.
4. Pressure adjustment is handle-operated without any tool.
5. Highly wear-resistance and durability of stainless steel made valve and valve seat.
6. A screen (60 mesh) is incorporated to protect the valve and valve seat from dirt.
7. Excellent workability accomplished by the external pressure type bellows of pressure sensing part.

### Specifications

Model	GD-30	GD-30S
Nominal size	15A-25A, 40A-50A	15A-25A
Application	Steam	
Inlet pressure	1.7 MPa or less	2.0 MPa or less
Reduced pressure	(A) 0.02-0.1 MPa	
	(B) 0.05-0.4 MPa	
	(C) 0.35-1.0 MPa	
Minimum differential pressure	0.05 MPa	
Maximum pressure reduction ratio	10:1	
Maximum temperature	210°C	220°C
Valve seat leakage	0.1% or less of rated flow rate	
Material	Body	Cast bronze
	Valve, valve seat	Stainless steel
	Bellows	Phosphor bronze
Connection	JIS Rc screwed	



GD-30

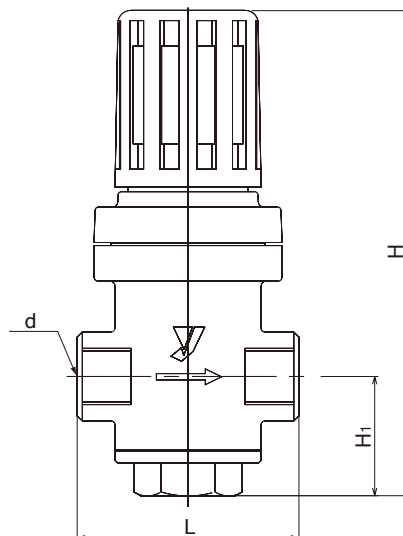


GD-30S

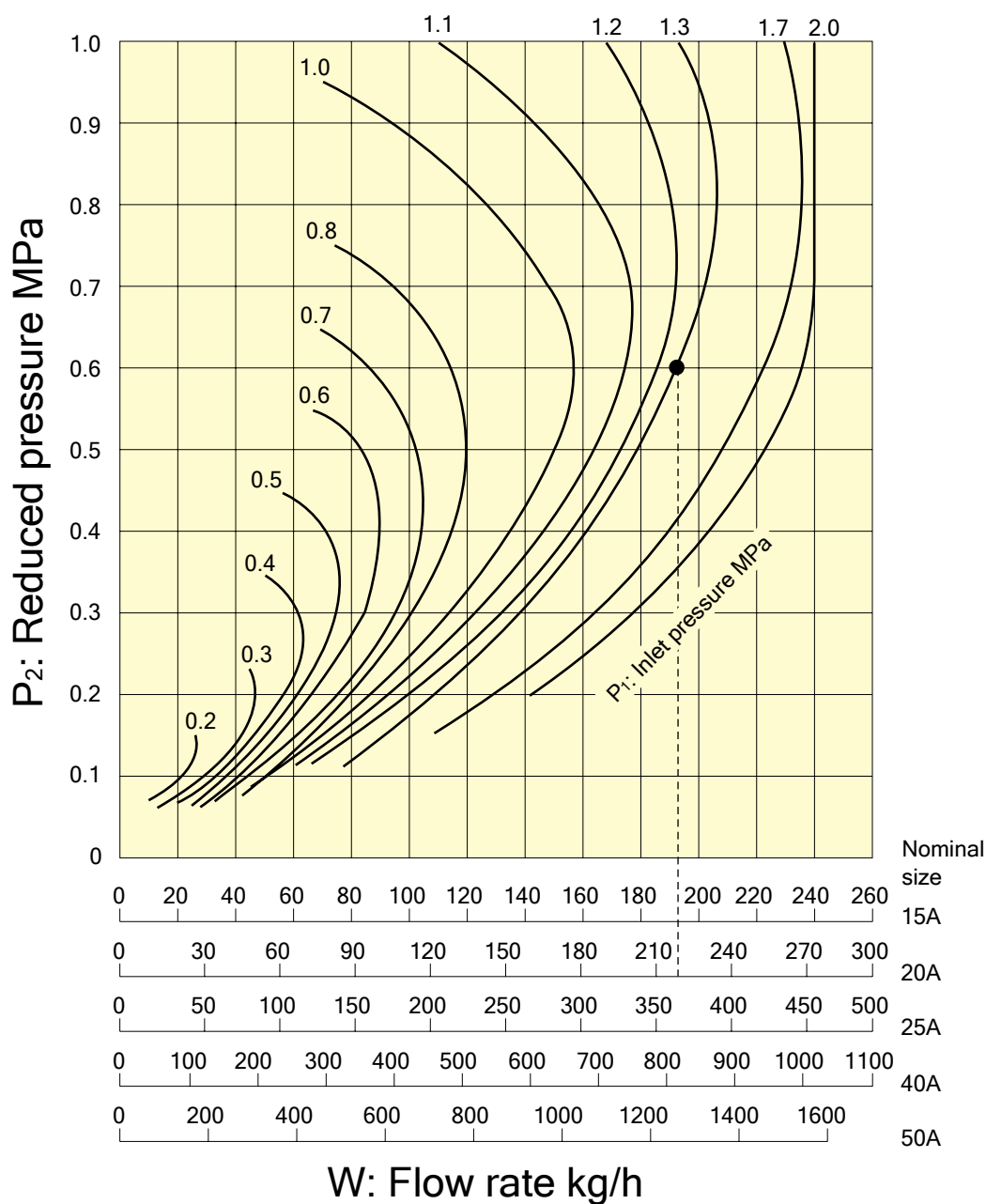
### Dimensions (mm) and Weights (kg)

Nominal size	d	L	H	H1	Weight
15A	Rc 1/2	80	191 (196)	47 (50.5)	1.9
20A	Rc 3/4	85	191 (196)	47 (50.5)	1.9
25A	Rc 1	95	191 (196)	47 (50.5)	2.0
40A	Rc 1-1/2	140	307	77	10.1
50A	Rc 2	150	307	77	10.4

· The values in parentheses are the dimensions of the GD-30S.



## Nominal Sizes Selection Chart (For Steam)



### [Example]

When selecting the nominal size of a pressure reducing valve whose inlet pressure ( $P_1$ ), reduced pressure ( $P_2$ ), and flow rate are 1.3 MPa, 0.6 MPa, and 200 kg/h, respectively, first find the intersection point of the inlet pressure of 1.3 MPa and the reduced pressure of 0.6 MPa. Trace down vertically from this intersection point to find the nominal size with a flow rate of 200 kg/h or over. In this case, the nominal size is 20A.

Note) The nominal sizes selection chart is based on measured data. As you can see, there is no specific relationship between the pressure difference and the flow rate in the chart above, and it is, therefore, impossible to calculate a fixed  $C_v$  value.

- Set the safety factor at 80 to 90%.