# Pressure Reducing Valve

# GD-45P·45

# **Features**

- 1. Compact and lightweight.
- 2. Simple structure and easy maintenance.
- 3. Applicable to inlet pressure of up to 2.0 MPa.
- 4. A screen (60 mesh) is incorporated to protect the valve and valve seat from dirt.
- 5. Excellent workability accomplished by the external pressure type bellows of pressure sensing part.
- 6. Pressure adjustment is handle-operated without any tool (GD-45P).



**GD-45P** 



GD-45

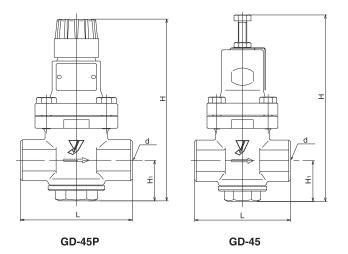
# **Specifications**

Model		GD-45P·45				
Application		Steam				
Inlet pressure		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		220°C				
Valve seat leakage		0.1% or less of rated flow rate				
Material	Body	Ductile cast iron				
	Valve, valve seat	Stainless steel				
	Bellows	Phosphor bronze				
Connection		JIS Rc screwed				

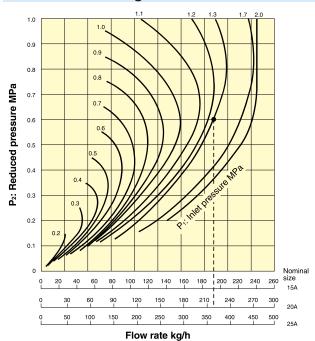
# Dimensions (mm) and Weights (kg)

Nominal size	d	L	H1	Н	Weight
15A	Rc 1/2	111	47	213 (216)	3.2
20A	Rc 3/4	111	47	213 (216)	3.2
25A	Rc 1	111	47	213 (216)	3.2

• The above values in parentheses are the dimensions of the GD-45.



# **Chart for Selecting Nominal Sizes**



### [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.

• Set the safety factor at 80 to 90%.