

# GPR-2000

|             |                  |                  |                     |
|-------------|------------------|------------------|---------------------|
| Direct type | Pilot type       | Diaphragm        | Piston              |
| Bellows     | Internal sensing | External sensing | Stainless steel     |
| Nylon       | Low pressure     | DP regulating    | Pressure sustaining |

## ■ Features

1. Large capacity and distinguished performance.
2. Excellent sealability ensured by spherical valve.  
Distinguished durability of stainless steel made valve and valve seat.
3. Wide range pressure adjustment.



Screwed type



Flanged type

## ■ Specifications

| Application                     |                  | Steam  |                    |
|---------------------------------|------------------|--|--------------------|
| Primary pressure sensing method |                  | External sensing type *1                                       |                    |
| Pressure regulating range       |                  | 0.02-0.15 MPa *2   |                    |
|                                 |                  | 0.1-1.1 MPa  | 0.1-1.0 MPa        |
|                                 |                  | 1.0-1.4 MPa  | -                  |
| Minimum differential pressure   |                  | 15% of set pressure (gauge pressure) (Minimum value: 0.10 MPa) |                    |
| Fluid temperature               |                  | 220°C or less  |                    |
| Valve seat leakage              |                  | 0.01% of rated flow rate                                       |                    |
| Material                        | Body             | Ductile cast iron (FCD450)                                     |                    |
|                                 | Main valve       | Stainless steel  |                    |
|                                 | Valve seat       | Stainless steel  |                    |
|                                 | Pilot valve      | Stainless steel  |                    |
|                                 | Pilot valve seat | Stainless steel  |                    |
|                                 | Diaphragm        | Stainless steel  |                    |
| Connection                      |                  | JIS Rc screwed, JIS 20K RF flanged                             | JIS 10K FF flanged |

\*1 External sensing method is used for the product because of controllability (performance). Available with internal sensing type, but the Cv value is different.

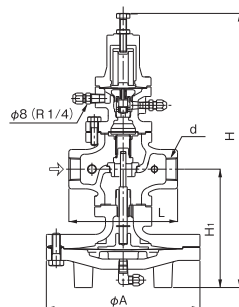
\*2 When the set pressure is between 0.02 MPa and 0.1 MPa, back pressure should not exist.

## ■ Dimensions (mm) and Weights (kg)

### • Screwed type

| Nominal size | d        | L   | H <sub>1</sub> | H   | A   | Weight |
|--------------|----------|-----|----------------|-----|-----|--------|
| 15A          | Rc 1/2   | 150 | 170            | 398 | 200 | 14.5   |
| 20A          | Rc 3/4   | 150 | 170            | 398 | 200 | 14.5   |
| 25A          | Rc 1     | 160 | 175            | 404 | 226 | 18.8   |
| 32A          | Rc 1-1/4 | 180 | 192            | 434 | 226 | 22.0   |
| 40A          | Rc 1-1/2 | 180 | 192            | 434 | 226 | 22.0   |
| 50A          | Rc 2     | 230 | 216            | 498 | 276 | 33.6   |

• Available with NPT connection.

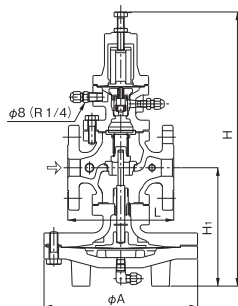


### • Flanged type

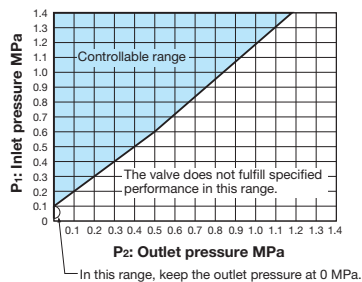
| Nominal size | L         | H <sub>1</sub> | H   | A   | Weight        |
|--------------|-----------|----------------|-----|-----|---------------|
| 15A          | 146 (142) | 170            | 398 | 200 | 16.0 (15.8)   |
| 20A          | 146 (142) | 170            | 398 | 200 | 16.5 (16.3)   |
| 25A          | 156 (152) | 175            | 404 | 226 | 21.5 (21.1)   |
| 32A          | 176 (172) | 192            | 434 | 226 | 24.5 (24.0)   |
| 40A          | 196 (192) | 192            | 434 | 226 | 25.0 (24.6)   |
| 50A          | 222 (218) | 216            | 498 | 276 | 36.6 (36.4)   |
| 65A          | 282 (278) | 251            | 552 | 352 | 64.9 (64.6)   |
| 80A          | 302 (294) | 264            | 575 | 352 | 72.1 (69.9)   |
| 100A         | 342 (330) | 321            | 658 | 401 | 111.6 (108.0) |

• The values in parentheses are the dimensions and weights of JIS 10K FF flanged.

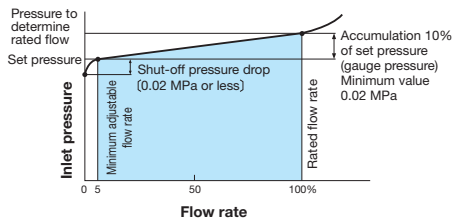
• Please contact us for flanged type other than the above.



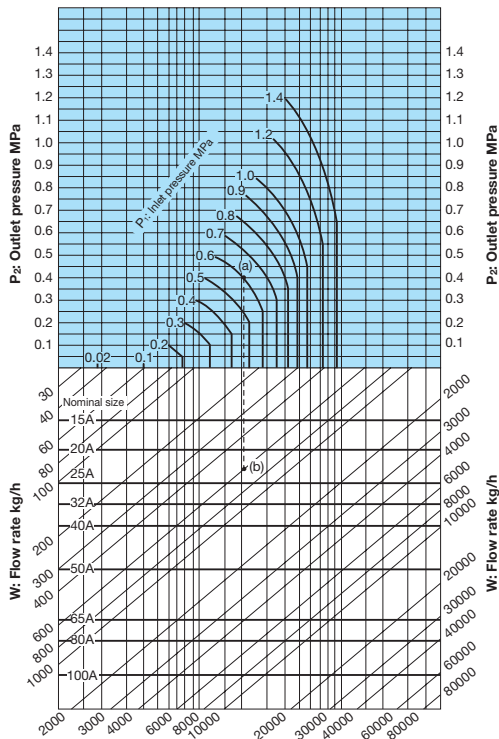
### Specifications Chart



### Flow Rate Characteristics Chart



### ■GPR-2000 Nominal Size Selection Chart (For Steam)



#### [Example]

When selecting the nominal size of a primary pressure regulating valve whose Inlet pressure (P<sub>1</sub>), outlet pressure (P<sub>2</sub>), and flow rate are 0.6 MPa, 0.4 MPa, and 600 kg/h, respectively, first find intersection point (a) of the Inlet pressure of 0.6 MPa and the outlet pressure of 0.4 MPa. Trace down vertically from this intersection point to find intersection point (b) with the flow rate of 600 kg/h. Since intersection point (b) lies between nominal sizes 20A and 25A, select the larger one, 25A.