

## GP-2000 / GP-2000EN

### Features

1. Large-size diaphragm and external sensing method control reduced pressure more stably.
2. Since the Cv value is high, flow capability and control capability are significantly improved, one or two sizes smaller than the regular nominal size can be applied.
3. Spherical main valve offers great sealability and great reduction of valve seat leakage (compliant with ANSI Class IV).
4. Pressure management at low pressure (0.02 MPa or less) is possible.



Screwed type



Flanged type

### Specifications

Model		GP-2000		GP-2000EN	
Application		Steam			
Reduced pressure sensing method		External sensing *1			
Inlet pressure		0.1-2.0 MPa	0.1-1.0 MPa	0.1-2.0 MPa	0.1-2.0 MPa
Reduced pressure		0.02-0.15 MPa 0.1-1.4 MPa *2	0.02-0.15 MPa *2 0.1-0.85 MPa	0.02-0.15 MPa 0.1-1.4 MPa *2	0.02-0.15 MPa 0.1-1.4 MPa *2
		85% or less of inlet pressure (gauge pressure)			
Minimum differential pressure		0.05 MPa			
Maximum pressure reduction ratio		20:1			
Maximum temperature		220°C			
Valve seat leakage		0.01% or less of rated flow			
Material	Body	Ductile cast iron			
	Main valve	Stainless steel			
	Valve seat	Stainless steel			
	Pilot valve	Stainless steel			
	Pilot valve seat	Stainless steel			
	Diaphragm	Stainless steel			
Reduced pressure sensing pipe		Copper pipe $\phi$ 8-2 m			
Connection		JIS Rc screwed	JIS 20K RF flanged	JIS 10K FF flanged	EN PN25 flanged

\*1 External sensing is standard. Available with internal sensing type (nominal size: 15A to 100A) in different specifications. Note that Cv value of internal sensing type is lower than that of external sensing type.

\*2 Available with the GP-2000L, reduced pressure of 0.01 to 0.02 MPa, from 15A to 100A, inlet pressure of 0.1 to 0.5 MPa and maximum pressure reduction of 50:1.

- Available with external pilot type.
- Available with ASME flanged.

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

#### • Screwed type

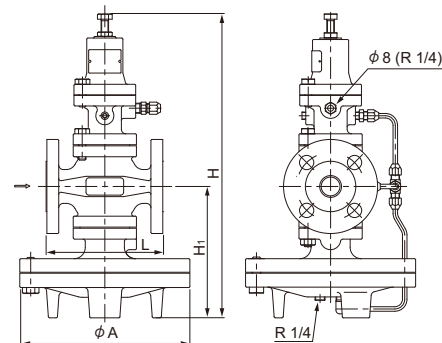
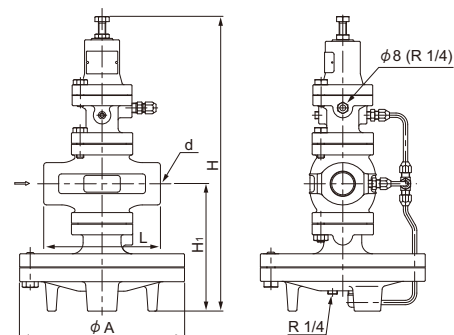
Nominal size	d	L	H1	H	A	Weight
15A	Rc 1/2	150	170	398	200	14.0
20A	Rc 3/4	150	170	398	200	14.0
25A	Rc 1	160	175	404	226	18.5
32A	Rc 1-1/4	180	192	434	226	21.5
40A	Rc 1-1/2	180	192	434	226	21.5
50A	Rc 2	230	216	498	276	33.0

- Available with NPT connection.

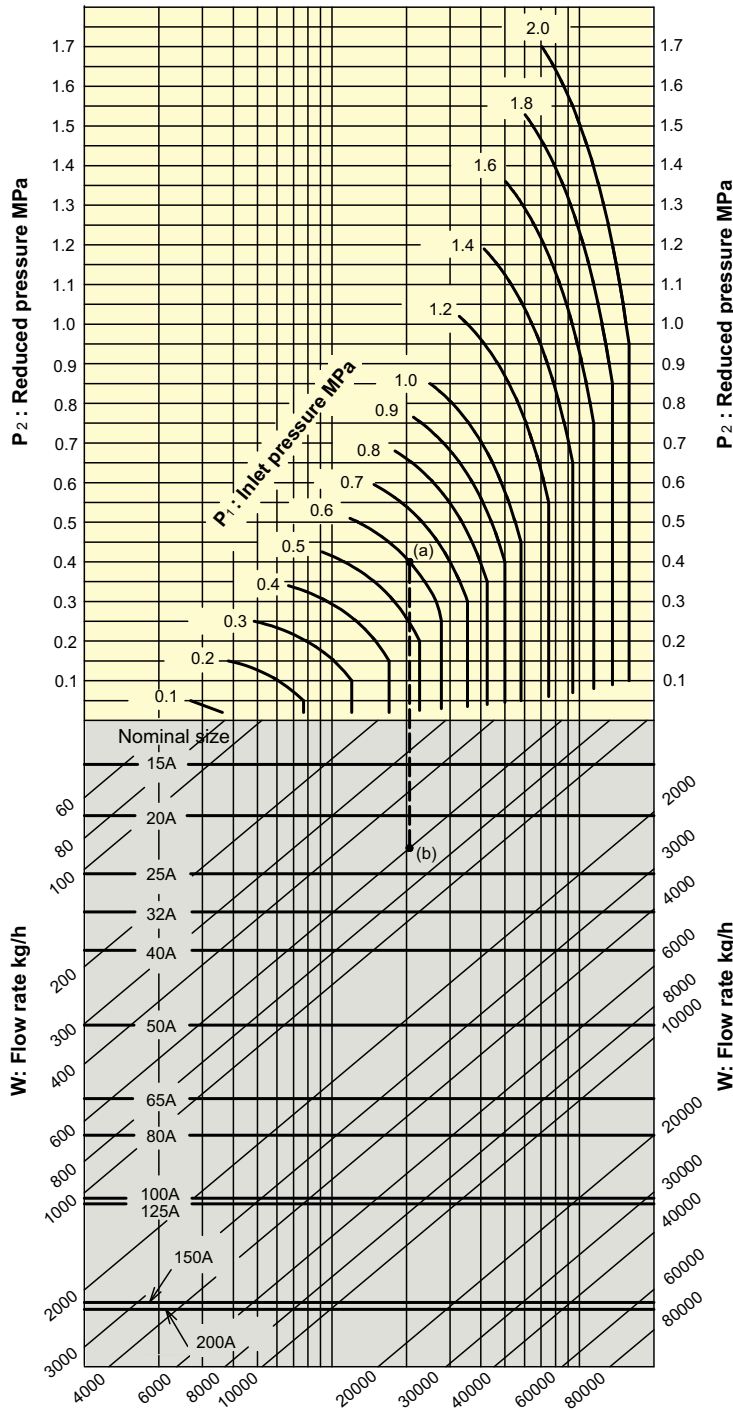
#### • JIS 20K RF flanged type

Nominal size	L	H1	H	A	Weight
15A	146 (150)	170	398	200	15.5 ( 15.7)
20A	146 (150)	170	398	200	16.0 ( 16.4)
25A	156 (160)	175	404	226	21.0 ( 20.8)
32A	176 (180)	192	434	226	24.0 ( 24.7)
40A	196 (200)	192	434	226	24.5 ( 25.6)
50A	222 (230)	216	498	276	36.0 ( 38.1)
65A	282 (290)	251	552	352	64.5 ( 66.7)
80A	302 (310)	264	575	352	71.5 ( 73.0)
100A	342 (350)	321	658	401	111.0 (114.3)
125A	400 (400)	321	658	401	115.0 (115.0)
150A	465 (480)	414	814	502	234.3 (234.0)
200A	469 ( — )	414	814	502	242.0 ( — )

- The above values in parentheses are the dimensions of EN flanged.



## Nominal Sizes Selection Chart (For Steam/External Sensing)

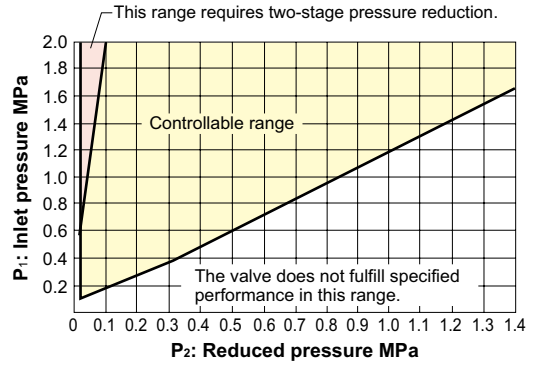


### [Example]

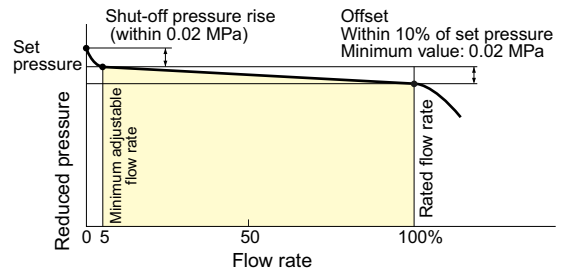
When selecting the nominal size of a pressure reducing valve whose inlet pressure (P<sub>1</sub>), reduced pressure (P<sub>2</sub>), and flow rate are 0.6 MPa, 0.4 MPa, and 600 kg/h, respectively, first find intersection point (a) of the inlet pressure of 0.6 MPa and the reduced pressure of 0.4 MPa. 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.

- Set the safety factor at 80 to 90%.

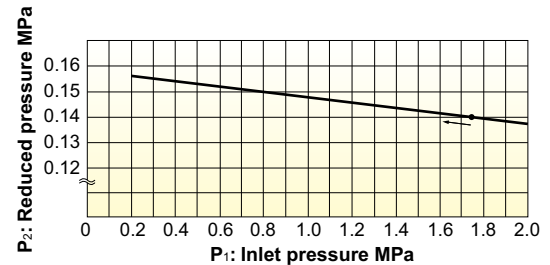
## Specifications Selection Chart



## Flow Characteristic Chart



## Pressure Characteristic Chart



This chart shows a variation in the reduced pressure when the inlet pressure of 1.75 MPa is changed between the range from 0.2 MPa to 2.0 MPa with the reduced pressure set at 0.14 MPa.

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