

# OB-2000

Direct acting type   Pilot operated type   Heating   Cooling  
 Bellows   Diaphragm   Single valve   Double valve  
 Soft seat



OB-2000 Screwed type



OB-2000 Flanged type

## ■Features

1. Large capacity.
2. Excellent sealability ensured by the spherical valve.
3. Wide temperature adjusting range. The thermal bulb can be installed in any direction.
4. Since the body and the thermal bulb are easy to attach and detach, they can be replaced easily for thermal specification change.

## ■Specifications

Model		OB-2000
Application	Heating	Steam
	Heated	Cold and hot water, Oil, Non-dangerous fluids
Maximum Pressure	Body	2.0 MPa *1
	Thermal bulb	1.0 MPa
Minimum differential pressure		0.05 MPa
Max. temperature		220°C
Temperature adjusting range		-8 - 183°C
Valve seat leakage		0.01% or less of rated flow rate
Material	Body	Ductile cast iron
	Main valve, valve seat	Stainless steel
	Diaphragm	Stainless steel
	Pilot valve	Stainless steel
	Pilot valve seat	Stainless steel
	Thermal bulb	Copper pipe (nickel chrome plated) *2
Standard capillary length		2 m
Connection		JIS Rc screwed   JIS 10K FF, 20K RF flanged

\*1 Maximum pressure of JIS 10K FF flanged is 1.0 MPa.

· Available with thermal well (stainless steel made). Please refer to P.13-41.

· Available with capillary of 3 or 5 meter.

\*2 In the case of attached to spring chamber, the bush of thermal bulb will be unnecessary. Please refer to P.13-40.

· Available with NPT or BSPT screwed.

· Available with ASME or EN flanged.

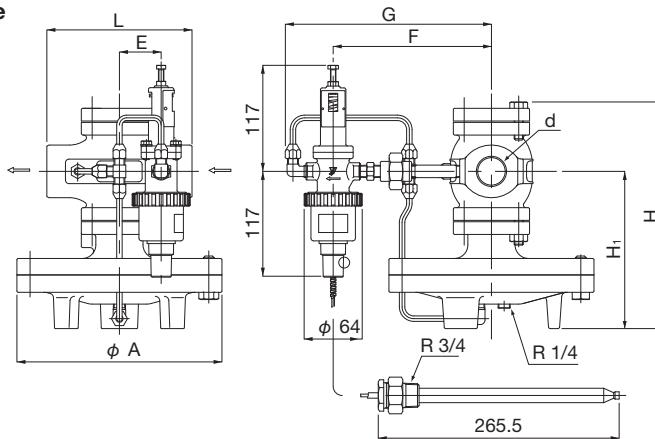
## ■Temperature Adjusting Range

Temperature adjusting range (°C)	Withstand temperature (°C)
-8 - 15	35
10-36	56
30-62	82
55-94	114
80-127	147
115-183	203

· The term "withstand temperature" means the temperature from pressure resistance of the bellows.

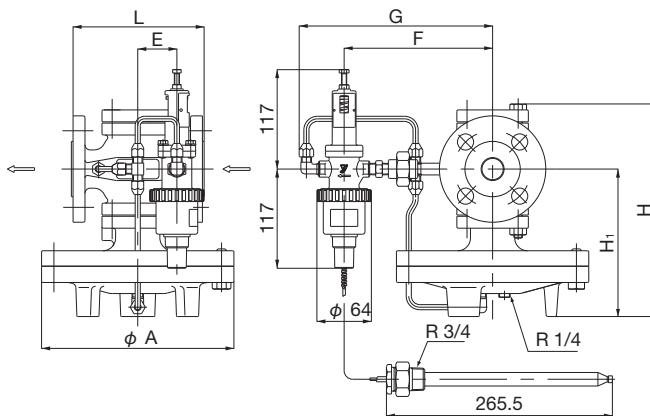
## ■Dimensions (mm) and Weights (kg)

## • OB-2000 Screwed type



Nominal size	$d$	$L$	$H_1$	$H$	$A$	$E$	$F$	$G$	Weight
15A	Rc 1/2	150	170	244	200	45	169	222	14.1
20A	Rc 3/4	150	170	244	200	45	169	222	14.1
25A	Rc 1	160	175	251	226	46	174	227	18.1
32A	Rc 1-1/4	180	192	282	226	55	182	235	21.6
40A	Rc 1-1/2	180	192	282	226	55	182	235	21.6
50A	Rc 2	230	216	319	276	60	189	242	32.7

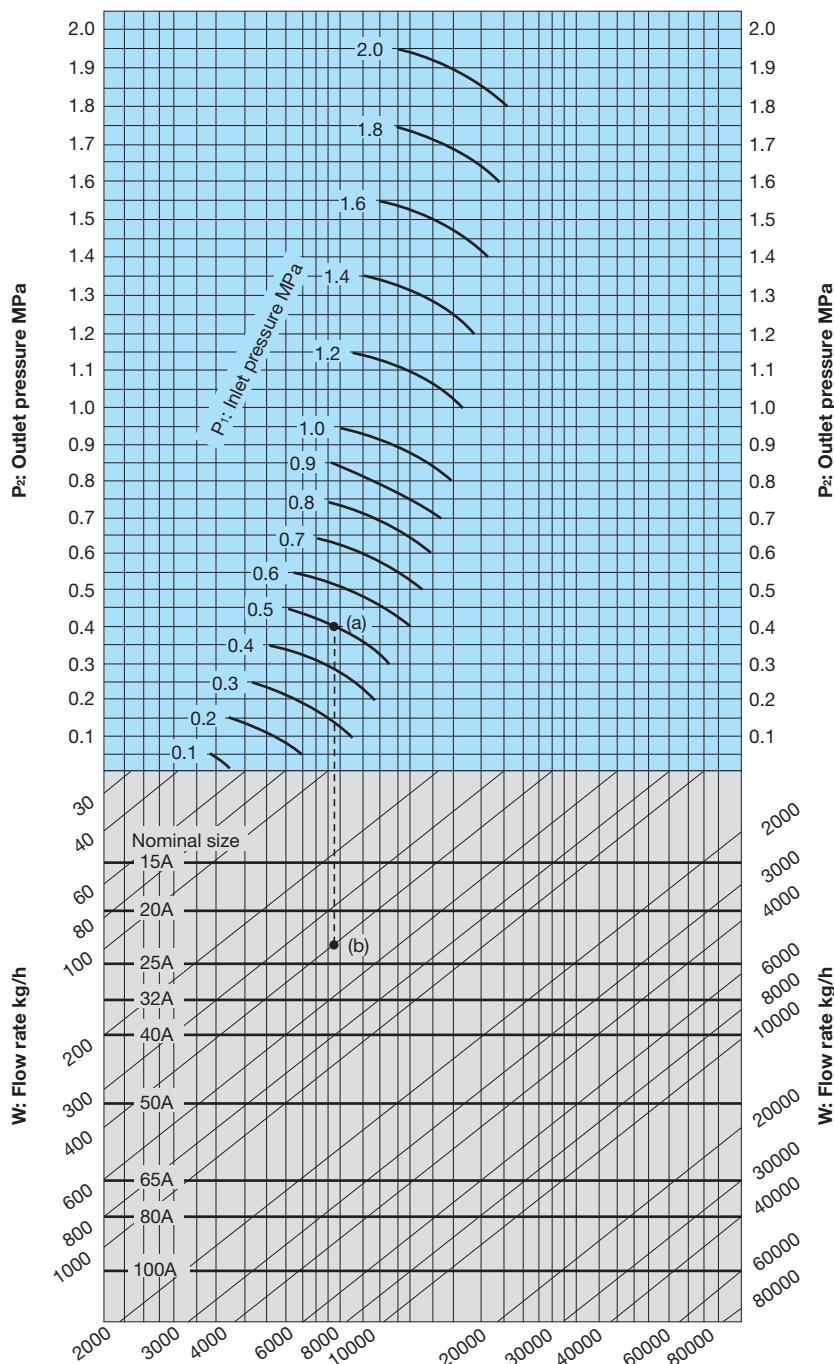
## • OB-2000 Flanged type



Nominal size	$L$	$H_1$	$H$	$A$	$E$	$F$	$G$	Weight
15A	146 (142)	170	244	200	45	169	222	15.6 ( 15.4)
20A	146 (142)	170	244	200	45	169	222	16.1 ( 15.9)
25A	156 (152)	175	251	226	46	174	227	21.1 ( 20.7)
32A	176 (172)	192	282	226	55	182	235	24.1 ( 23.7)
40A	196 (192)	192	282	226	55	182	235	24.6 ( 24.2)
50A	222 (218)	216	319	276	60	189	242	35.7 ( 35.5)
65A	282 (278)	251	373	352	75	206	259	63.3 ( 63.0)
80A	302 (294)	265	399	352	80	217	270	70.3 ( 68.1)
100A	342 (330)	321	488	401	105	234	287	110.0 (106.4)

The above values within parentheses are JIS 10K FF flanged.

## ■Nominal Size Selection Chart (For Steam)



### [Example]

When selecting the nominal size of a temperature regulator whose inlet pressure ( $P_1$ ), outlet pressure ( $P_2$ ), and steam flow rate are 0.5 MPa, 0.4 MPa, and 400 kg/h, respectively, first find intersection point (a) of the inlet pressure of 0.5 MPa and the outlet pressure of 0.4 MPa. Trace down vertically from this intersection point (a) to find intersection point (b) with the flow rate of 400 kg/h. Since this intersection point (b) lies between nominal sizes 20A and 25A, select the larger one, 25A.

\* Chart of the flow rate is a reference value.