

Type YPR-2A Pressure Reducing Valve for Water

This is a direct operating pressure reducing valve for cold and hot water that can be used for small to large flows, with a small pressure fluctuation range. Used for construction facilities, this valve is employed for pressure control of each level's water supplied by an elevated water tank of a medium or high-rise building; as well as for pressure control of feed water from a directly-coupled pump and other boiler feed water.

■ Features

- Outstanding functions for controlling the pressure of water supplied by a building's elevated water tank to each floor.
- Easy to handle : small size and light weight.
- Two ways to install : horizontally or vertically.
- A constant pressure level with only a single adjustment.
- Wide flow range ability : an outstanding level of minimum adjustable flow & adjustable and stable in a wide flow range.
- All parts can be disassembled through the top of the valve : complete repairs even in limited spaces is possible.
- Built-in spring-type orifice that prevents a water hammering action.
- Linear flow pass-through method, which removes noise during operation.

■ Specifications

Applicable fluid	Water	
Primary pressure	Maximum 10 kgf/cm ² g	
Secondary pressure regulating range	Outer spring	0.5~3.5kgf/cm ² g
	Inner+outer spring	3~7kgf/cm ² g
Maximum pressure reduction ratio	10:1	
Minimum differential pressure in the inlet and outlet side of the valve	0.5kgf/cm ²	
Minimum adjustable flow	2~5 liters of water/min	
Fluid temperature	Maximum 5~80° C	
End connection	KS PT SCREW(15~25A), KS 10K FF FLANGE(32~150A)	
Materials	Body	GC200
	Disc, seat	NBR, BC6
Hydraulic test pressure	15 kgf/cm ² g	

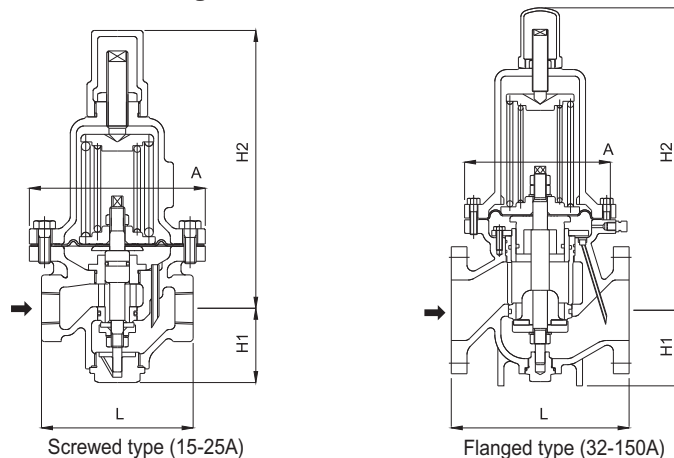
- ▶ Multi-step pressure reduction is needed when the cavitation index is 0.5 or lower.
- ▶ Strainer (over 40 Mesh) installation is required to ahead inlet when valve installing.

■ Dimensions

(mm)

Size	L	A	H1	H2	Cv	Weight (kg)
15(1/2")	100	116	50	184	2.1	3.7
20(3/4")	100	116	50	184	2.1	3.7
25(1")	120	142	68	224	3.5	6.9
32(1 1/4")	190	174	81	327	8.0	17.0
40(1 1/2")	190	174	81	327	8.0	17.0
50(2")	190	174	81	327	14	18.6
65(2 1/2")	250	228	100	374	22	36.3
80(3")	250	228	100	374	32	37.4
100(4")	290	250	125	490	48	67.0
150(6")	390	340	165	655	108	150

■ Dimensional drawing



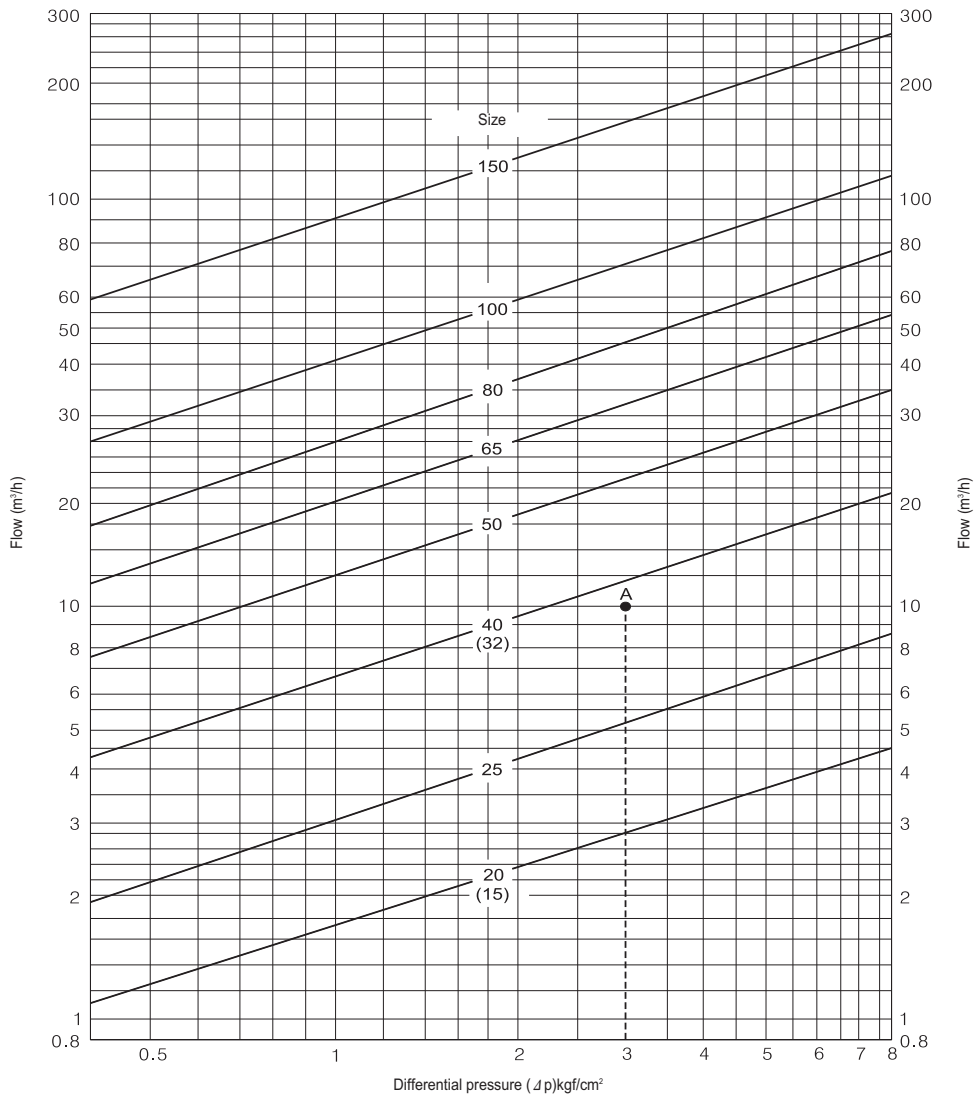
Screwed type



Flanged type

Type YPR-2A Pressure Reducing valve

■ Chart on selecting a size



How to select the size of a valve by the chart

Example) If the primary pressure is 5 kgf/cm²g, secondary pressure is 2 kgf/cm²g, and flow is 10 cm³/h,

- 1) The differential pressure ($\Delta P = P_1 - P_2$) between the primary pressure (5 kgf/cm²g) and secondary pressure (2 kgf/cm²g) is 3 kgf/cm².
- 2) Determine point "A" by vertically connecting the differential pressure (3 kgf/cm²) with the flow (10 cm³/h).
- 3) Now that "A" is in between a size of 25 and 40, a size of 40 should be selected.

■ Application Diagram (Example)

