01

for Water

YPR –2A/2AK (KC marked), ST Type Pressure Reducing Valve

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.

Flanged type

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 1.0MPa	
Secondary pressure regulating range	Outer spring	0.05~0.35MPa	
	Inner+outer spring	0.3~0.69MPa	
Maximum pressure reduction ratio		10:1	
Minimum differential pressure in the inlet and outlet side of the valve		0.05MPa	
Minimum adjustable flow		wate 2~5 ℓ/min	
Fluid temperature		Maximum 5~80℃	
End connection	size	15~25A	32~150A
	Inlet	KS PT SCREW	KS 10K FF FLANGE
	Outlet	KS PT SCREW	KS 10K FF FLANGE
Materials	Body	GC200	
	Disc, seat	NBR, CAC406	
	Diaphragm	NBR	
Hydraulic test pressure		1.5MPa	

▶ 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.
▶ KC marked products are order made

Screwed type

Dimensions

Size	L	A	H1	H2	Cv	Weight (kg)
15(½")	100	116	50	184	2.9	3.2
20(¾")	100	116	50	184	3.5	3.3
25(1")	120	142	68	224	6.2	6.4
32(1¼")	190	174	81	327	12.8	17.5
40(1½")	190	174	81	327	13.7	17.7
50(2")	190	174	81	327	13.8	18.8
65(2½")	250	228	100	374	40.2	37.6
80(3")	250	228	100	374	41.9	37.8
100(4")	290	250	125	490	64.7	65.5
150(6")	390	340	165	655	109.5	155.6

YPR–ST

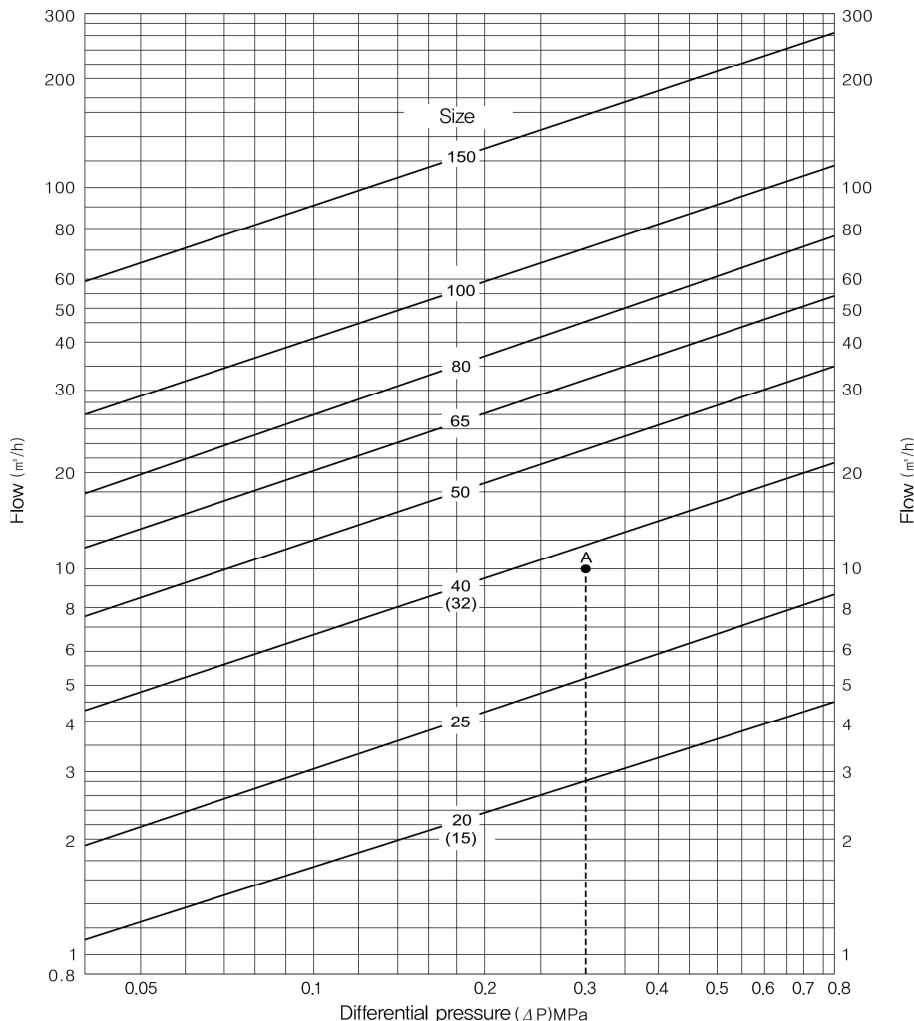## Dimensional drawing
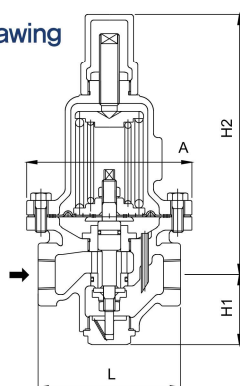
Screwed type
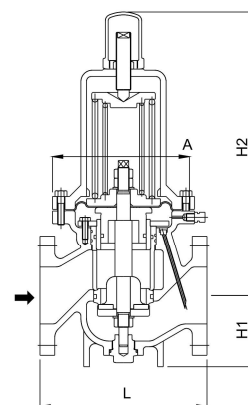
Flanged type

YPR –2A Type Pressure Reducing Valve

Chart on selecting a size

01

How to select the of a valve by the chart

Example) If the primary pressure is 5 kgf/cm^{2}g, secondary pressure is 2 kgf/cm^{2}g, and flow is 10 cm^3/h,

1) The differential pressure ($\Delta P = P_1 - P_2$) between the primary pressure (5 kgf/cm^{2}g) and secondary pressure (2 kgf/cm^{2}g) is 3 kgf/cm^2.

2) Determine point "A" by vertically connecting the differential pressure (3 kgf/cm^2) with the flow (10 cm^3/h).

3) Now that "A" is in between a size of 25 and 40, a size of 40 should be selected.

Application Diagram [Example]