PRESSURE REDUCING VALVE

01

YPR–1S Type Pressure Reducing Valve For Steam

Install a water separator at the inlet of the pressure reducing valve to prevent flow of water coming in and to ensure removal of condensation water
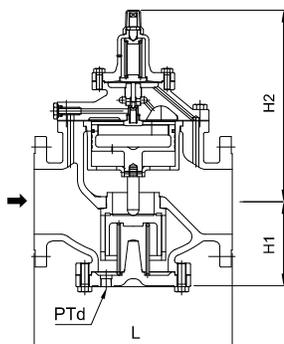
Features

• Pilot–type pressure reducing valve for steam features a precise adjustment function.
• With only a single adjustment, a constant pressure level is maintained, thereby ensuring safety.
• Convenient piping construction, thanks to its simple structure and solidity.
• Superb performance even in places where primary steam pressure changes are severe.
• Pressure at a constant level, regardless of changes in the secondary flow.

Specifications

Applicable fluid		Steam
Primary pressure		Maximum 1.0MPa
Secondary pressure regulating range		0.03~0.5MPa (for standard pressure) 0.4~0.8MPa (for medium pressure)
Maximum pressure reduction ratio		10:1
Minimum differential pressure in the inlet and outlet side of the valve		0.07MPa
Leakage allowance		0.01% less of rated flow (ANSI b16.104 class IV)
Fluid temperature		220℃ below
End connection		KS 10K RF FLANGE
Materials	Body	GC200
	Disc, seat	CAC406 / STS
	Diaphragm	STS
Hydraulic test pressure		1.5MPa

▶ Strainer (over 80 Mesh) installation is required to ahead inlet when valve installing.
▶ Install a water separator at the inlet of the pressure reducing valve to ensure the removal of condensate.
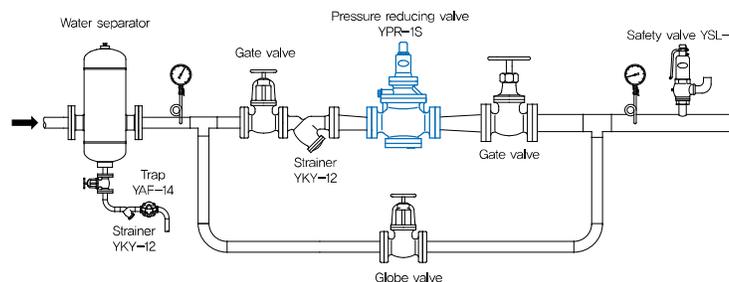
Dimensional drawing

Dimensions   (mm)

| Size	L	H1	H2	d	Cv	Weight (kg)
15(½")	152	64	230	¼"	1	7.7
20(¾")	152	64	230	¼"	2.5	7.7
25(1")	170	71	255	¼"	4	10.8
32(1¼")	200	81	265	¼"	6.5	15
40(1½")	200	81	265	¼"	9	15.8
50(2")	215	86	270	¼"	16	18.8
65(2½")	245	110	285	⅜"	25	25.9
80(3")	285	130	295	⅜"	36	35.3
100(4")	320	148	308	⅜"	64	49.6
125(5")	380	173	368	⅜"	100	90.3
150(6")	420	189	378	⅜"	144	98.6
200(8")	500	229	451	⅜"	256	190.8

Application Diagram (Example)

Remove the plug from the lower pressure relief valve and use the disk trap.

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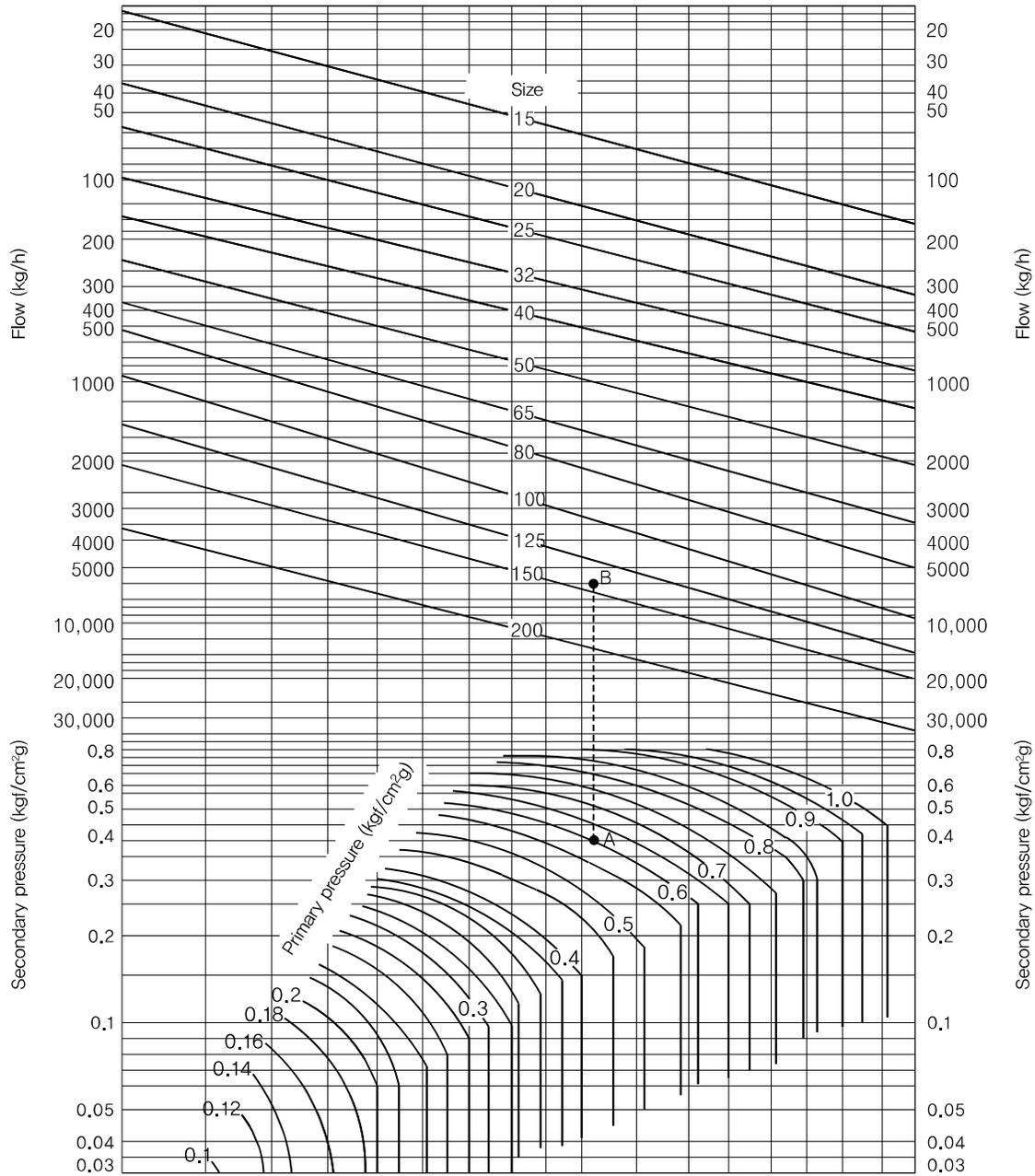
How to select the size of a valve by the chart

Example) If the primary pressure is 6 kgf/cm^{2}g, secondary pressure is 4 kgf/cm^{2}g, and flow is 6,000 kg/h,

1) Determine "A," the point of intersection between the primary pressure (6 kgf/cm^{2}g) and secondary pressure (4 kgf/cm^{2}g). Go down vertically from "A" to make intersection "B" with the flow (6,000 kg/h).

2) This "B" is what determines the size of the valve. It is in between a size of 125 and 150, and therefore a size of 150 should be selected.