## Type YPR-1S Pressure Reducing Valve For Steam

This pressure reducing valve, which is used for construction facilities and industrial steam lines, demonstrates stable control and subtle operations. It features an outstanding performance even with severe changes in the steam flow and primary pressure.


## - 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 $10 \mathrm{~kg} / \mathrm{cm}^{2} \mathrm{~g}$ |
| Secondary pressure regulating range | $0.35 \sim 5 \mathrm{kgf} / \mathrm{cm}^{2} \mathrm{~g}$ (for standard pressure) <br> $4 \sim 8 \mathrm{kgf} / \mathrm{cm}^{2} \mathrm{~g}$ (for medium pressure) |
| Maximum pressure reduction ratio | $10: 1$ |
| Minimum differential pressure in the <br> inlet and outlet side of the valve | $0.7 \mathrm{kgf} / \mathrm{cm}^{2}$ |
| Leakage allowance | $0.05 \%$ less of rated flow |
| Fluid temperature | $220^{\circ} \mathrm{C}$ below |
| End connection |  |
| Body | $\mathrm{KS} \mathrm{10K} \mathrm{RF} \mathrm{FLANGE}$ |
| Materials | GC200 |
| Hydraulic test pressure | $\mathrm{BC6}$ |
| Disc, seat |  |

- 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.
- Dimensions

| Size | L | H1 | H2 | d | Cv | Weight (kg) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15(1⁄2") | 152 | 63 | 230 | 1/4" | 1 | 8.0 |
| 20(3/4") | 152 | 63 | 230 | $1 / 4 \mathrm{l}$ | 2.5 | 8.0 |
| 25(1") | 170 | 71 | 255 | $1 / 4 \mathrm{l}$ | 4 | 12.5 |
| 32(11/4") | 200 | 81 | 265 | $1 / 4 \mathrm{l}$ | 6.5 | 16 |
| 40(11/2") | 200 | 81 | 265 | $1 / 4 \mathrm{l}$ | 9 | 16.5 |
| 50(2") | 215 | 86 | 270 | $1 / 4 \mathrm{l}$ | 16 | 21 |
| 65(21/2") | 245 | 110 | 285 | 3/8" | 25 | 29 |
| 80(3") | 285 | 130 | 295 | 3/8" | 36 | 39.5 |
| 100(4") | 320 | 148 | 308 | 3/8" | 64 | 68 |
| 125(5") | 380 | 173 | 368 | 3/8" | 100 | 83.3 |
| 150(6") | 420 | 189 | 378 | 3/8" | 144 | 101 |
| 200(8") | 500 | 229 | 451 | 3/8" | 256 | 183 |

Dimensional drawing


- Application Diagram (Example)



## Type YPR-1S 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 $6 \mathrm{kgf} / \mathrm{cm}^{2} \mathrm{~g}$, secondary pressure is $4 \mathrm{kgf} / \mathrm{cm}^{2} \mathrm{~g}$, and flow is $6,000 \mathrm{~kg} / \mathrm{h}$,

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