

PR Pressure Reducing Valve



Description

The valve maintains a preset downstream pressure, regardless of upstream pressure or flow rate fluctuation. The main valve is controlled by either a 3-way pilot valve (allowing full opening when upstream pressure drops below the pressure set-point), or by a 2-way pilot valve (creating a minimal differential in open position).

Features

- Accurate, stable control from no-flow to full flow
- Simple and reliable design
- Exceptionally low losses at high flow
- WRAS Approval no. 04251

Purchase Specifications

The valve will be hydraulic, direct sealing diaphragm type, which allows inline maintenance. No stem, shaft or guide bearing will be located within the water passage.

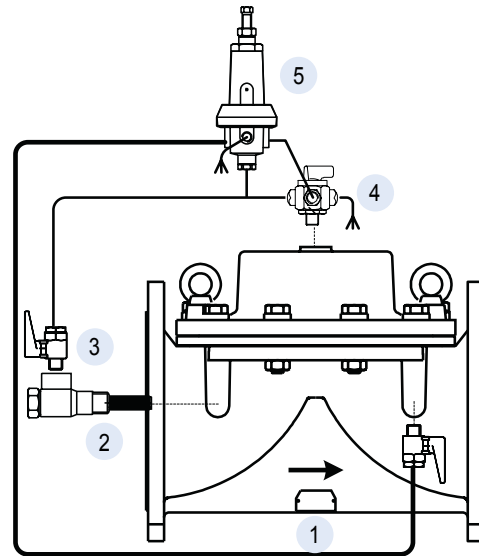
The valve will be activated by the line pressure or by an external hydraulic or pneumatic pressure. The valve will be operated by a pressure reducing pilot valve to achieve constant outlet pressure, regardless of upstream pressure or flow variations. The valve and the controls will be a Dorot Series 100 valve or similar in all aspects.

Quick Sizing

- Valve size same as line or one size smaller
- Maximum flow speed for continuous operation 5.5 m/sec (18 ft/sec)

Design Considerations

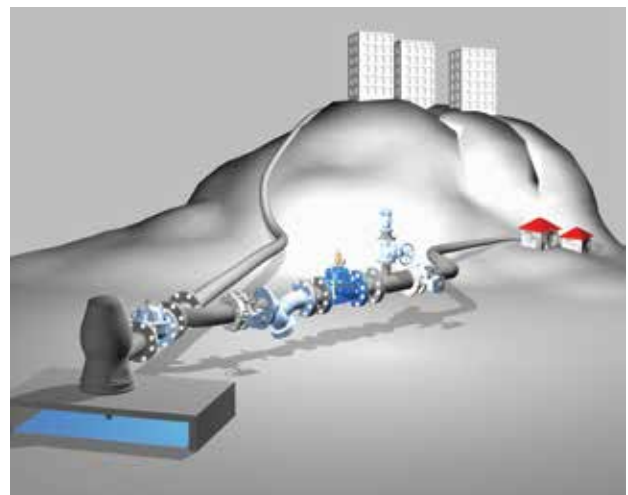
- The valve should be suited for the maximal flow and allowed headloss
- In case upstream pressure may drop to the required set pressure, select 3-way control pilot
- Large pressure differentials may cause cavitation damage. Consult Dorot for solutions if such conditions are expected



Optional Control System Components:

- 1 Main Valve
- 2 Self-flushing filter
- 3 Cock valve*
- 4 Manual over-ride selector valve*
- 5 3-way pilot valve (other types are optional)

* Optional component



Typical Application

Dorot Pressure Reducing Valve reduces varying supply pressure to a stabilized downstream pressure.