Control Functions

PS Pressure Sustaining & Relief Valve



Description

The valve maintains upstream pressure, regardless of flow rate variations. The valve will be in the "closed" position if the upstream pressure drops below the set-point and will fully open when the upstream pressure exceeds the set-point.

Features

- · Accurate, stable control from no-flow to full flow
- · Simple and reliable design
- · Exceptionally low losses at high flow

Purchase Specifications

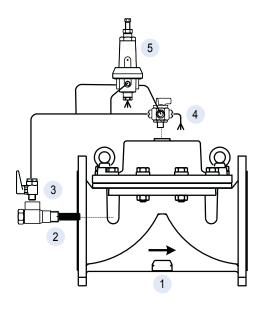
The valve will be hydraulic, direct sealing diaphragm type, which allows inline maintenance. No stem, shaft or guide bearing will be located within the water passage. The valve will be activated by the line pressure or by an external hydraulic or pneumatic pressure. The valve will be operated by a pressure sustaining pilot valve to maintain constant inlet pressure, regardless of 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)

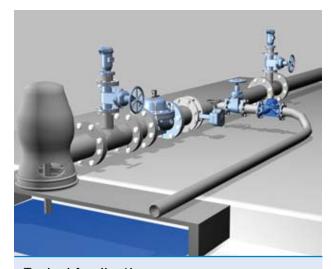
Design Considerations

- The valve should be suited for the maximal flow and allowed headloss
- Check for possible cavitation conditions and consult Dorot in case such conditions are expected



Optional Control System Components:

- 1 Main Valve
- 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 Relief Valve relieving pump surplus flow from the system, thus preventing high pressure at low demand conditions.

