

## DI Pressure Differential Sustaining Valve



### Description

The valve maintains a preset pressure differential between its upstream and downstream sides. The valve can control booster pump discharge, heating and cooling systems, bypass configurations, filters and other similar systems.

### 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 differential pilot valve so to maintain a minimal pressure differential, regardless of flow variations.

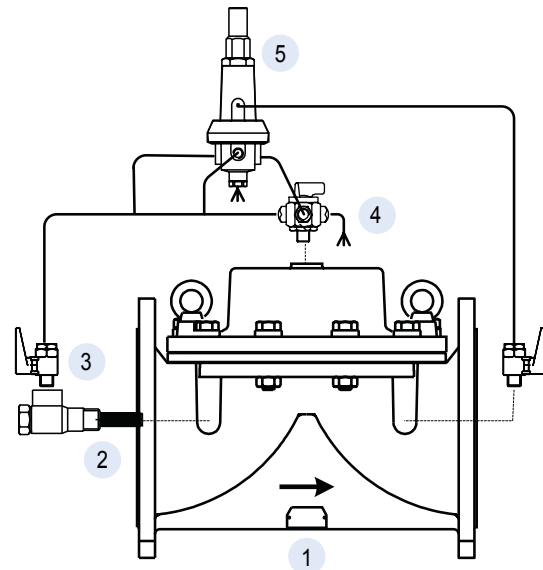
The valve and the controls will be a Dorot Series 100 valve or similar in all aspects.

### 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

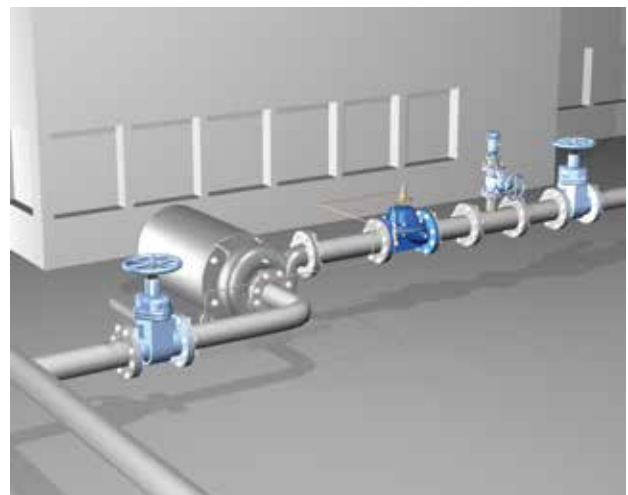
- The valve should be suited for the maximal flow and allowed headloss
- Check for possible cavitation conditions and consult Dorot in case such conditions are expected
- The connection points of the sensing tubes must be selected in locations free of turbulence and local interferences



### 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 Differential Sustaining Valve controls the flow at the discharge of a booster pump whose suction pressure varies.