

Booster Pump Control Valve



Description

The valve eliminates damaging surges caused by pump start-up and shut-off. The electrically activated valve gradually opens on pump start up, and slowly closes before the pump is switched off. The valve will automatically close drip tight in case of power failure. Optional Additions: Flow Rate Limitation, Extended Closure, Two Stage Operating, Pressure Reducing and Pressure Sustaining.

Features

- No slam operation
- Exceptionally low losses at high flow conditions
- Simple and reliable design
- Easy installation and maintenance

Purchase Specifications

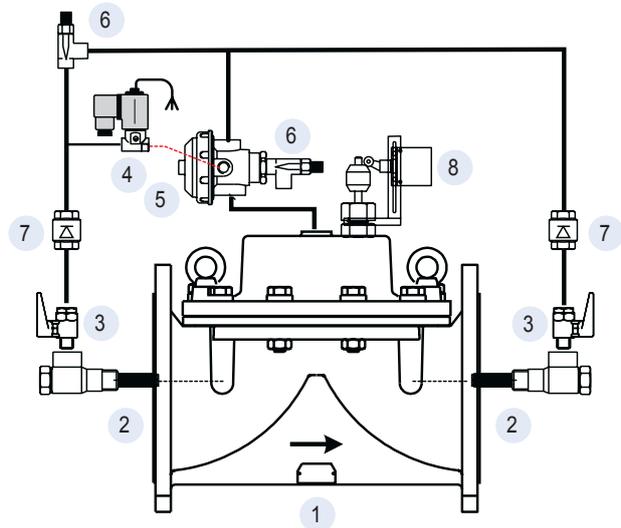
The valve will be hydraulic, direct sealing diaphragm type, which allows inline maintenance. No stem, shaft or guide bearing will be located within the water passage. The valve will be activated by the line pressure or by an external hydraulic or pneumatic pressure. The valve position will be controlled by an electric solenoid valve with adjustable open close speed control valves. 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

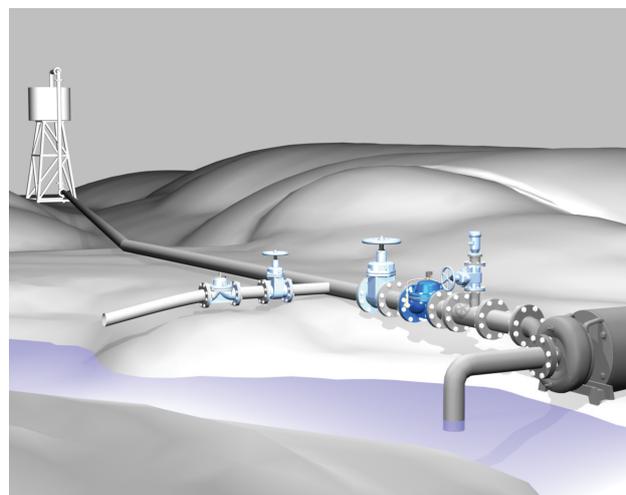
- The valve should be suited for the maximal flow
- Closure time is related to the pipe length and should be extended for longer pipe
- For power failure situations, add a fast reacting check valve in series and a surge anticipating valve to relief possible surges



Optional Control System Components:

- 1 Main Valve
- 2 Self-flushing filter
- 3 Cock valve*
- 4 3/2 Solenoid valve
- 5 Accelerator relay (optional for valves larger than 150mm/6")
- 6 Open/close speed adjustment needle valve
- 7 Check valve
- 8 Limit switch assembly

* Optional component



Typical Application

Dorot Booster Pump Control Valve preventing surges caused by pump start-up and shutoff and drainage of main pipe.