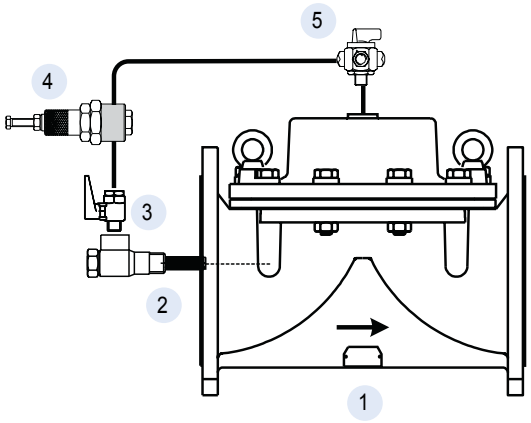
SP Surge Preventing Stepped-Closure Addition



Description

The device can be added to any control function and automatically adjusts the closing speed of a valve that is located at the end of a long pipeline. This ensures a moderate flow change pace that prevents pressure surges from evolving. Please consult DOROT for more details

Features

- Can be added to any fast closing control function
- Automatically self-adjusted closing pace
- Completely hydraulic – no electronic controllers, batteries or relays are used
- Simple and reliable design

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's closure pace will be controlled by a stepped closure control pilot that stops the closing procedure whenever surge waterhammer conditions evolve. 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)

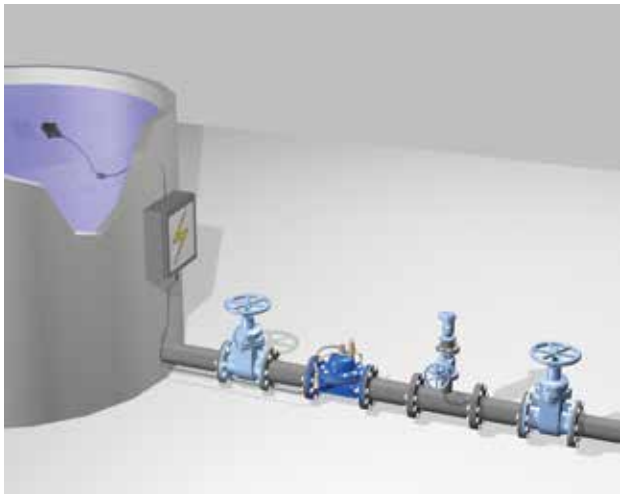
Design Considerations

- The valve should be suited for the maximal flow and allowed headloss
- Prefer selection low pressure diaphragms when the valve is expected to stay in open position for long periods
- Should be used whenever the supply pipe is longer than 2 km/ 1.2 mile and the flow speed exceeds 1.5 m/sec

Optional Control System Components:

1. Main Valve
2. Self-flushing filter
3. Cock valve*
4. Stepped closure adjusting pilot valve
5. 3-way selector valve*

* Optional component



Typical Application

Dorot stepped closure function prevents water-hammer surges caused by fast closing level control valve.