

Excessive Flow Shut-off Valve



Description

The valve closes drip tight when the flow rate exceeds the normal value (due to pipe rupture).

The valve will manually re-set open after fixing the break.

Features

- Hydraulic burst protection. No electronic controllers are used
- Simple and reliable design
- Low losses

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.

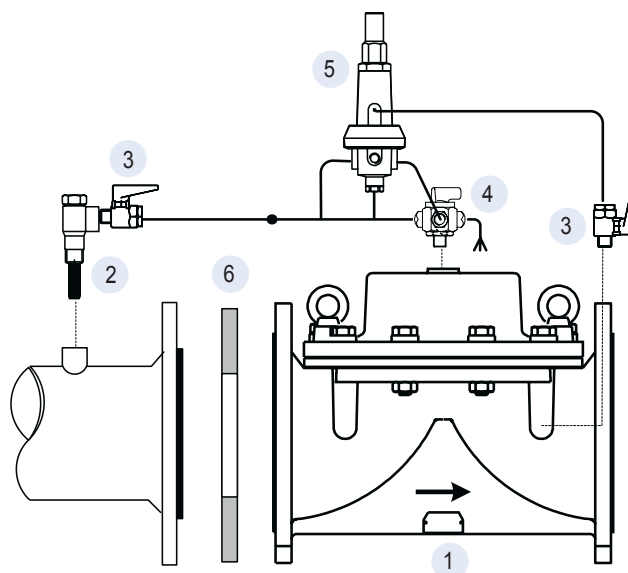
The valve will be activated by the line pressure or by an external hydraulic or pneumatic pressure. The valve will be operated by a pressure reducing differential pilot valve for closing when the flow through the main valve exceeds the safe level, regardless of pressure variations. The valve and the 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

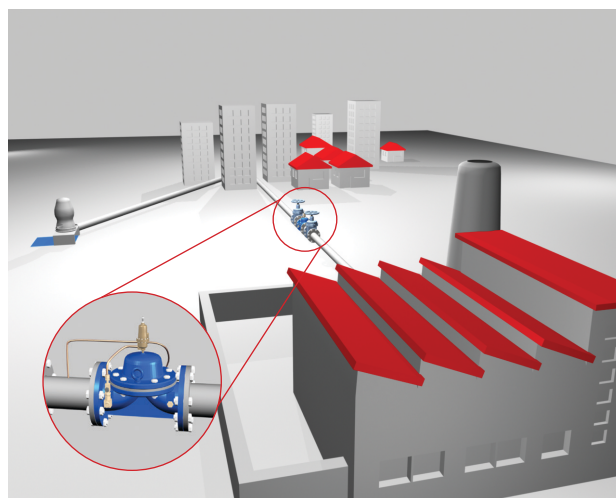
- A 1/2" pressure sensing port should be provided, upstream of the valve
- The valve is adjusted to close when the flow rate exceeds the maximal design flow by 10%-20%
- An additional pressure loss of about 2 mwc is created by the orifice plate (at the normal flow)



Optional Control System Components:

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

* Optional component



Typical Application

Dorot excessive flow shutoff valve installed to prevent flood damages caused by pipe rupture.