

DOROT S300-REEL

Aquestia
Directing the Flow



Waterworks

Surge Anticipating Valve

Operation

The Dorot Series 300 Surge Anticipating Valve ('S300-REEL') is an automatic, solenoid controlled surge anticipating valve, activated by the pressure of the pipeline. The valve will maintain a drip tight closed position under normal operating conditions and will open fully when the solenoid is energized; the valve closes at a slow pace preventing secondary surges when the solenoid is de-energized. The valve will also open to relieve access pressure in the line.

S300 Features

Superb performance

- Regulates at a stable mode, regardless of valve-size, down to near-zero flow. Thus, eliminating the need for a special low flow plug-design (such as 'V-port') or a bypass valve.
- 'Floating', low-friction internal-trim design, guided by a unique LPT® device.

High reliability

- All control ports are fitted with SST sleeves for preventing corrosion-blockage.
- Pre-shaped reinforced diaphragm – for easier assembly and improved longevity.

Reduced periodic inspection / maintenance labor

- The control-trim is fitted with a self-flushing, inline control-filter.
- Easy in-situ adjustment and maintenance.

Versatility

- A standard and simple single-chamber valve design, provides smooth operation. Conversion to a double chamber is a patented option.

Standard Materials

- Body & Cover – Ductile Iron
Optional – Cast Steel, SST, N.A.B, S.Duplex
- Main Internal – SST (1.5"-6), Coated Steel (8"-32")
Optional – Cast Steel, SST, N.A.B, S.Duplex
- Elastomers – EPDM
Optional – NBR, Neoprene, Viton or others
- Coating – Polyester, Epoxy / Optional – Halar and others
- Control Trim – Brass, PA / Optional – SST316, Duplex

Purchase Specifications

- The valve will be hydraulic, pilot-operated globe type.
- Face-to-face length dimension meets ISO 5752 Standard.
- The stem will be guided at the top by a replaceable guide bearing and at the bottom by a stainless steel unique LPT® device.
- The valve will regulate any flow within the specified range without the need for a smaller bypass valve or throttling plug.
- All control ports will be corrosion free protected by stainless steel 316 inserts.

Design Considerations

- The valve should be suited for the maximal flow.
- Install a manual separation / throttling valve, upstream of the valve position.
- The valve sensor tube must be connected to the main line.

Quick Sizing

- Maximum recommended flow velocity for momentary operation 15 m / sec (50 ft. / sec).
- If the set pressure is >5 bar, a downstream orifice should be added - Please consult with Dorot Eng.

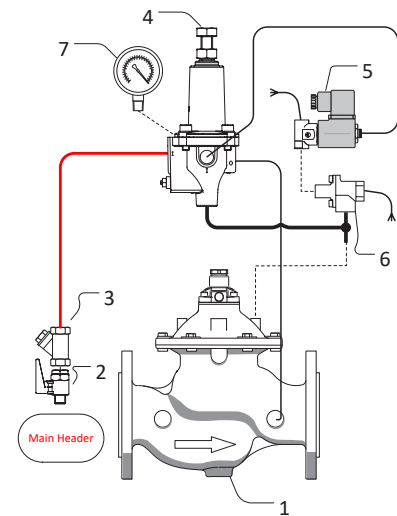
Pressure Rating

- Model 30, 30A for medium pressure (PN16 bar / 250 psi)
- Model 31, 31A for high pressure (PN25 bar / 360 psi)

Main Control System Components*

1. Main Valve
2. Ball Valve
3. Filter
4. 2W Pilot Valve
5. Solenoid Valve
6. Fast Acting Relay
7. Pressure Gauge

* Indicative drawing



Typical Installation

Typical applications include Pressure Sustaining Valve Model S300-REEL. The Dorot Surge Anticipating Valve prevents water-hammer surges caused by an unexpected pump shut-off.

