# DOROT S300-PS

Aquestia
Directing the Flow

Waterworks

## Pressure Sustaining Valve

## Operation

The Dorot Series 300 Pressure-Sustaining Valve ('30-PS') activates by the pressure of the pipeline. The valve maintains a steady, predetermined pressure in the network, upstream of its location. Should the upstream pressure exceed the required set-point, the valve opens, increasing network flow, thus reducing its upstream pressure. If upstream pressure falls below the required value, the valve closes drip-tight.

## 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 and allowed Headloss.
- For low pressure systems, consider a 3-way control pilot.
- Large pressure differentials may cause cavitation damage. Consult Dorot for solutions if such conditions are expected.

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## Quick Sizing

- Valve sized to be the same as line-size or one nominal-size smaller.
- Maximum recommended flow velocity for continuous operation 5.5 m / sec (18 ft. / sec).

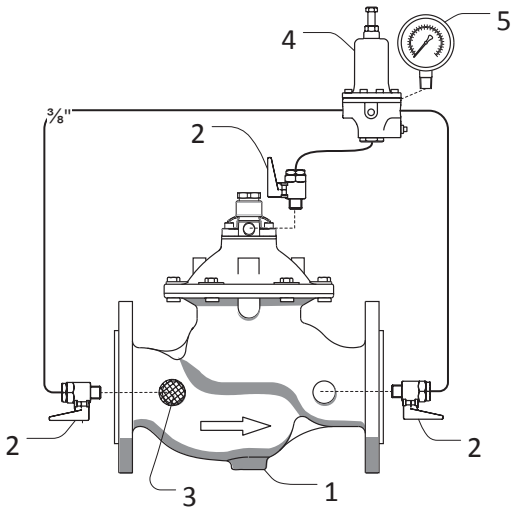
## Pressure Rating

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

## Main Control System Components*

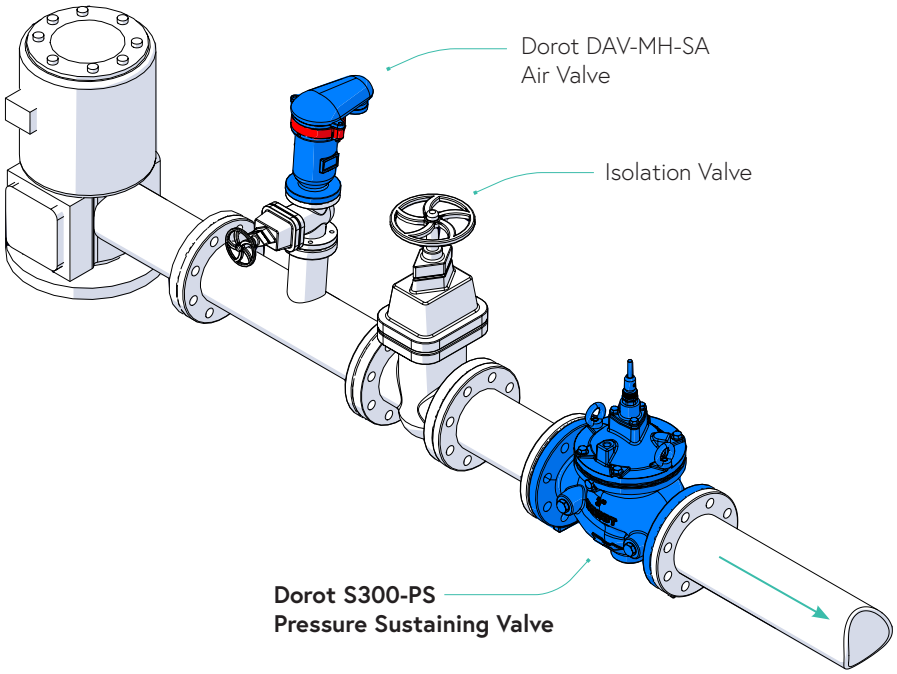
1. Main Valve
2. Ball Valve
3. Self-flushing Filter
4. 2W PS Pilot Valve
5. Pressure Gauge

* Indicative drawing




## Typical Installation

Typical applications include Pressure Sustaining Valve Model 30-PS. The valve will maintain a steady, predetermined pressure in the network, upstream of its location.



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