



Pressure Sustaining Valve

Description

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.

Where to use it

- In pressure management applications in water supply systems used in mining
- In treatment plants (AWTP, EWTP, etc.)
- In pump stations for pump and cavitation protection
- In piping lines to prioritize one zone over another and preventing line emptying

Features and Benefits

Superb performance	<ul style="list-style-type: none"> • 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 'U/V-port'). • 'Floating', low-friction internal-trim design, guided by a unique LPT® device.
Reduced periodic inspection / maintenance labor	<ul style="list-style-type: none"> • The control-trim is fitted with a HIGH-CAPACITY control-filter suitable for industrial applications. • Easy in-situ adjustment and maintenance.
High reliability	<ul style="list-style-type: none"> • All control ports are fitted with SST sleeves for preventing corrosion-blockage. • High Kv (Cv) control loop accessories for clogging prevention. • Pre-shaped reinforced diaphragm – for easier assembly and improved longevity.
Versatility	<ul style="list-style-type: none"> • A standard and simple single-chamber valve design, provides smooth operation. • Conversion to a double chamber is a simple and economical option.

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Technical Specifications

Size Range	1½"/40mm - 40"/1000mm – Flanged 1½"/40mm - 6"/150mm - Grooved 1½"/ 40mm - 2"/50mm – Threaded
Working Pressure	Maximum: 16 bar (250 psi) / 25 bar (360 psi) Minimum: 0.3 bar (5 psi)
Testing Pressure	1.5 times maximum working pressure
Materials	Body: Ductile Iron (standard); Cast Steel, Stainless Steel, Super Duplex (optional) Elastomers: EPDM (standard), Viton (optional)

Upon ordering, please specify size, working pressure, thread/flange standard and type of fluid

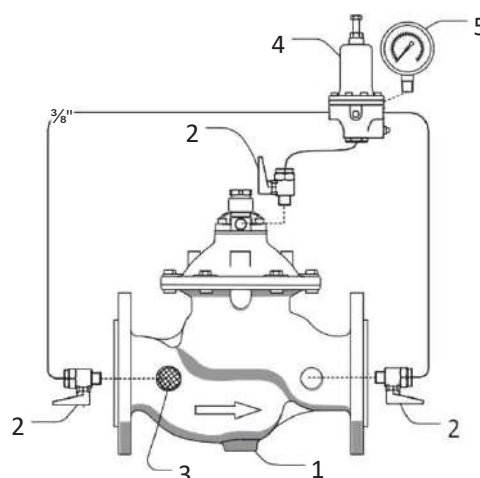
Quick Sizing

- 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)

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

