



# Surge Anticipating Valve

## Description

The Dorot Series 300 Surge Anticipating Valve ('S300-RE') is an automatic controlled valve, activated by the pressure of the pipeline. The valve protects the pumping system from water hammer, caused by sudden pump shut-off (case of power failure, for example). The valve, assembled on a T-junction of the main pipeline, instantly opens when the pump stops, relieving the returning high pressure wave. The valve slowly closes once the pressure returns to the static level. The valve also functions as a pressure relieve valve.

## Where to use it

- In pumping systems (RAFF ponds, PLS ponds, Seepage, Boosters, etc.)
- In treatment plants (AWTP, EWTP, etc.)
- In dewatering applications / underground mining
- In recovery water applications

## Features and Benefits

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

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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

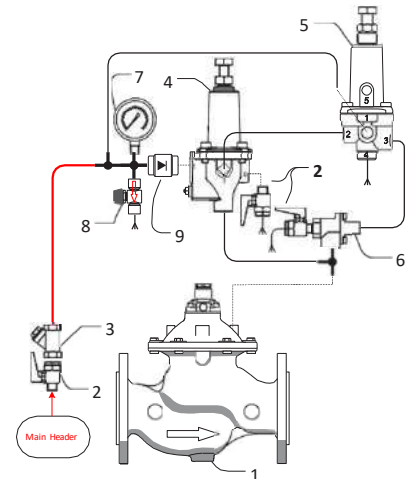
## Quick Sizing

- 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.

## Main Control System Components\*

1. Main Valve
2. Ball Valve
3. Filter
4. 2W Pilot Valve
5. 3W Pilot Valve
6. Fast Acting Relay
7. Pressure Gauge
8. Needle Valve
9. Check Valve

\* Indicative drawing



## Typical Installation

