



Irrigation

Diaphragm-actuated, Rigid Seal, 3-way Pressure Differential Sustaining Globe Valve

DOROT S300 DI (3W), is a Diaphragm-actuated, Rigid Seal, 3-way Pressure Differential Sustaining, Globe Valve, with a selector valve for manual override. Activated by the pressure of the pipeline, the valve maintains a preset pressure differential between its upstream and downstream. The valve controls booster pump discharge, heating and cooling systems, bypass configurations, filters and other similar systems.

Features and Benefits

Superior seat design, guided by the unique LTP (Linear Throttling Plug)	Enables regulation to 'near-zero' flow as standard for all valve sizes
	Eliminates the need for an internal throttling device such as a U-port or V-port
	Provides high reliability and operational stability
Stainless Steel control port sleeves	Protects against corrosion and blockage, reducing time and cost on maintenance
Self-cleaning inline filter	Cuts down on frequency of inspections and maintenance, significantly reducing labor costs
Low cavitation index	Eliminates conditions leading to cavitation over a wide operating pressure range
No dynamic O-rings	Superior design reduces ongoing maintenance due to leakage or breakdowns
Simplified control system design	Enables smoother operation, more efficient maintenance and precise regulation

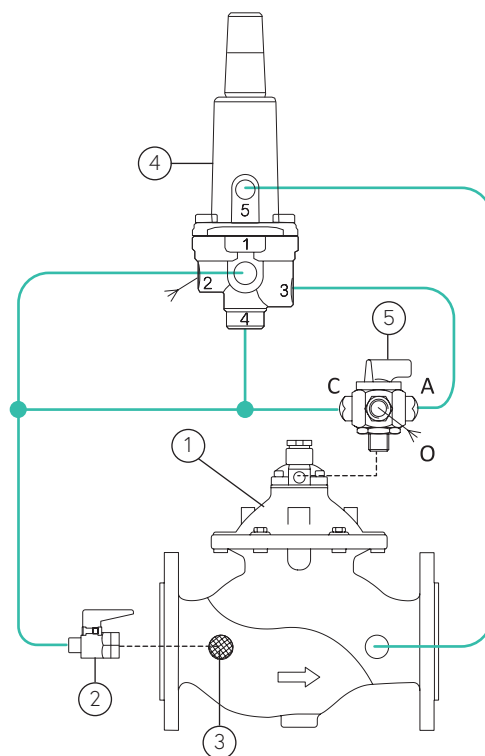
Technical Specifications

Size Range		1½"-40" / DN40- DN1000
Working Pressure		0.5-16 bar / 7-230 psi, 0.5-25 bar / 7-360 psi
Max. Water Temperature		80° C / 176° F
End Connections		Grooved ASME / ANSI AWWA 606
		Threaded BSP / NPT
		Flanged ISO 7005 / ANSI B16.42 / AS 4087
Construction Materials	Body & Cover	Ductile Iron / Cast Steel / Stainless Steel / Nickel-Aluminum-Bronze
	Main Valve Internals	Stainless Steel / Coated Steel
	Spring	Stainless Steel 302
	Diaphragm	EPDM
	Seal	EPDM
	Coating	UV-protected Epoxy
	Fittings & Control Trim Devices	Brass / Stainless Steel 316
	Control Trim Tubes	High Pressure Polypropylene / Copper / Stainless Steel 316

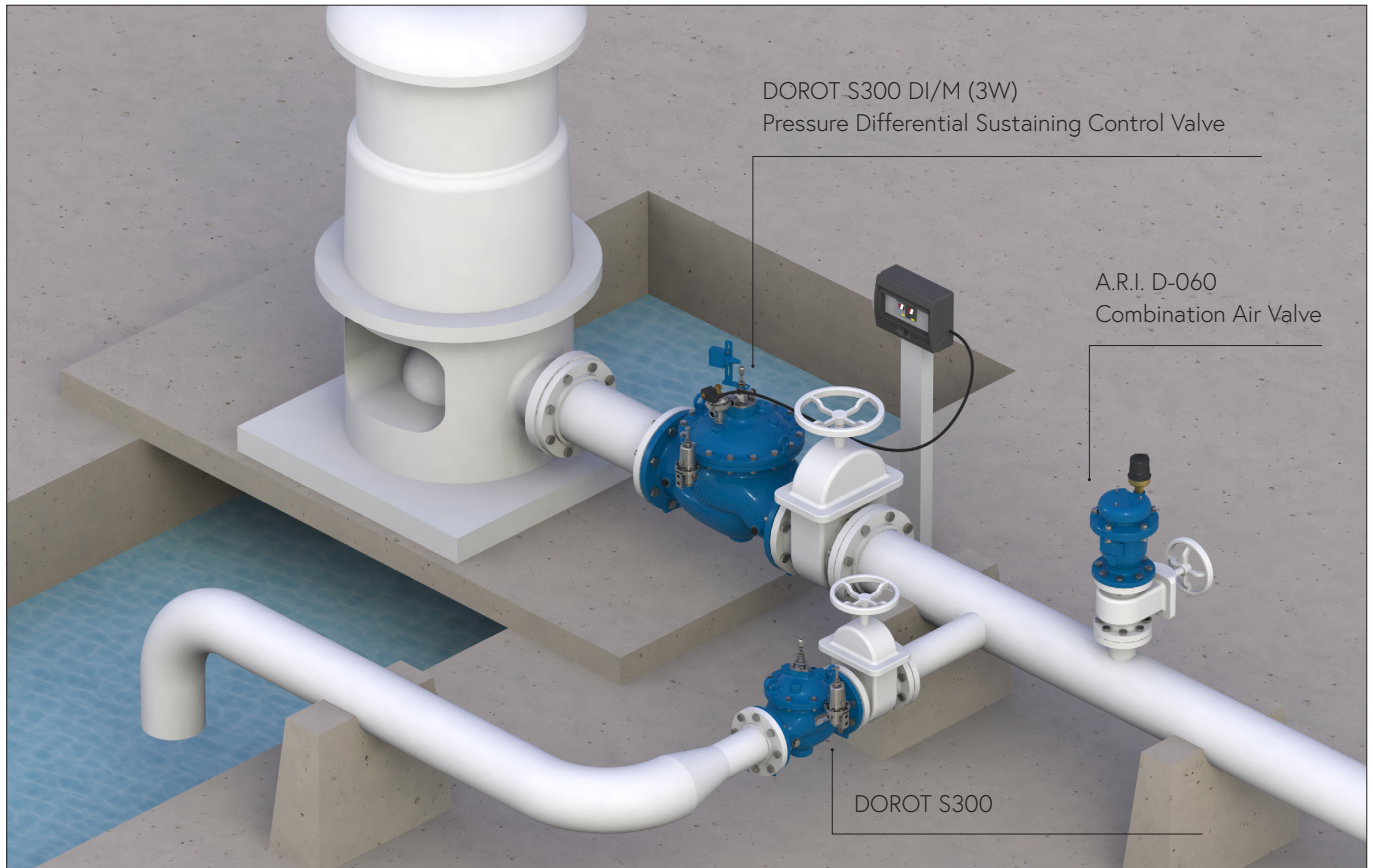
* Other options are available upon request.

Main Control System Components

No.	Component
1	Main Valve
2	Ball valve
3	Self-flushing filter
4	3-way Differential pressure sustaining Pilot Valve
5	3-way Position Selector Valve



Typical Installation



Purchase Specifications

- Hydraulic Globe Valve, Diaphragm-actuated, Rigid Seal, 3-way Pressure Differential Sustaining.
- Operated by line pressure or external hydraulic/pneumatic actuation.
- All control ports are corrosion-free, protected by Stainless Steel 316 inserts.
- Double Guiding System: Stem is guided at the top by a replaceable guide bearing, and at the bottom by the unique, Stainless Steel LTP Device (Linear Throttling Plug).
- Controlled by a pressure-sustaining differential pilot valve, maintaining a minimal pressure differential regardless of flow variations.

Design Considerations

- Select valve size based on expected maximum flow and acceptable head loss.
- Large pressure differentials may cause cavitation – consult Aquestia for solutions.
- The connection points of the sensing lines must be selected in locations free of turbulence and local flow interference.