DOROT S100 PS/M (3W)

Aquestia
Directing the Flow

Irrigation

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

DOROT S300 PS/M (3W), is a Diaphragm-actuated, Rigid Seal, 3-way Automatic Pilot-controlled, back-pressure sustaining/relief, globe valve, with manual override. The valve maintains a steady, preset pressure in the network, upstream of its location. Should upstream pressure exceed preset values, the valve opens to minimize losses. Should upstream pressure fall below preset values, the valve closes drip-tight.

Features and Benefits

Wide range of sizes and patterns	Allows compatibility across different systems for more versatile installation
Flexible reinforced diaphragm design (no bearings, guides, or internal seals)	Significantly reduces maintenance while enhancing reliability; to ensure exceptionally low losses at high flow rates
Low pressure diaphragm mechanism	Enables precise and efficient operation of hydraulic control valves at minimal pressures
Regulates at a stable mode, down to near-zero flow	Ensures consistent performance without the need for specialized low-flow adjustments, such as a V-port or bypass valve
Self-cleaning inline filter	Cuts down on frequency of inspections and maintenance, significantly reducing labor costs
Simple control system design	Facilitates smooth operation, efficient maintenance and precise regulation

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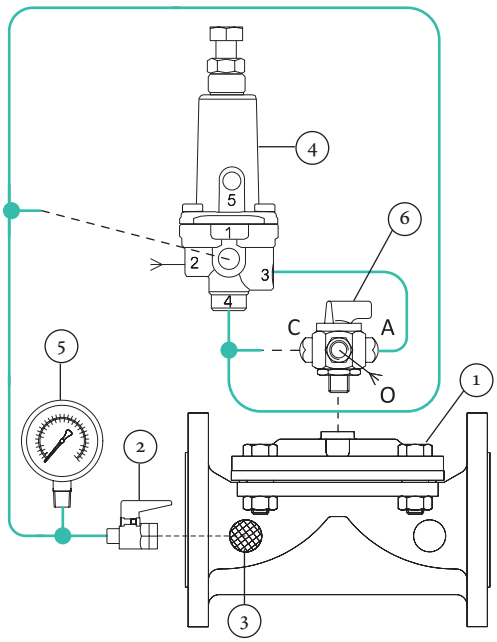
Technical Specifications

Size Range		¾" - 24" / DN20 - DN600
Working Pressure		16 bar / 230 psi
Max. Water Temperature		80° C / 176° F
End Connections		Grooved ASME / ANSI AWWA 606
		Threaded BSP / NPT
		Flanged ISO 7005 / ANSI B16.1 / ANSI B16.42 / AS 4087
Construction Materials	Body & Cover	Cast Iron / Ductile Iron / Cast Steel / Stainless Steel / Nickel-Aluminum-Bronze
	Spring	Stainless Steel 302
	Diaphragm	NR / NBR / EPDM / Neoprene
	Coating	Polyester / 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 Pressure Sustaining Pilot Valve
5	Pressure Gauge
6	3-way Position Selector Valve



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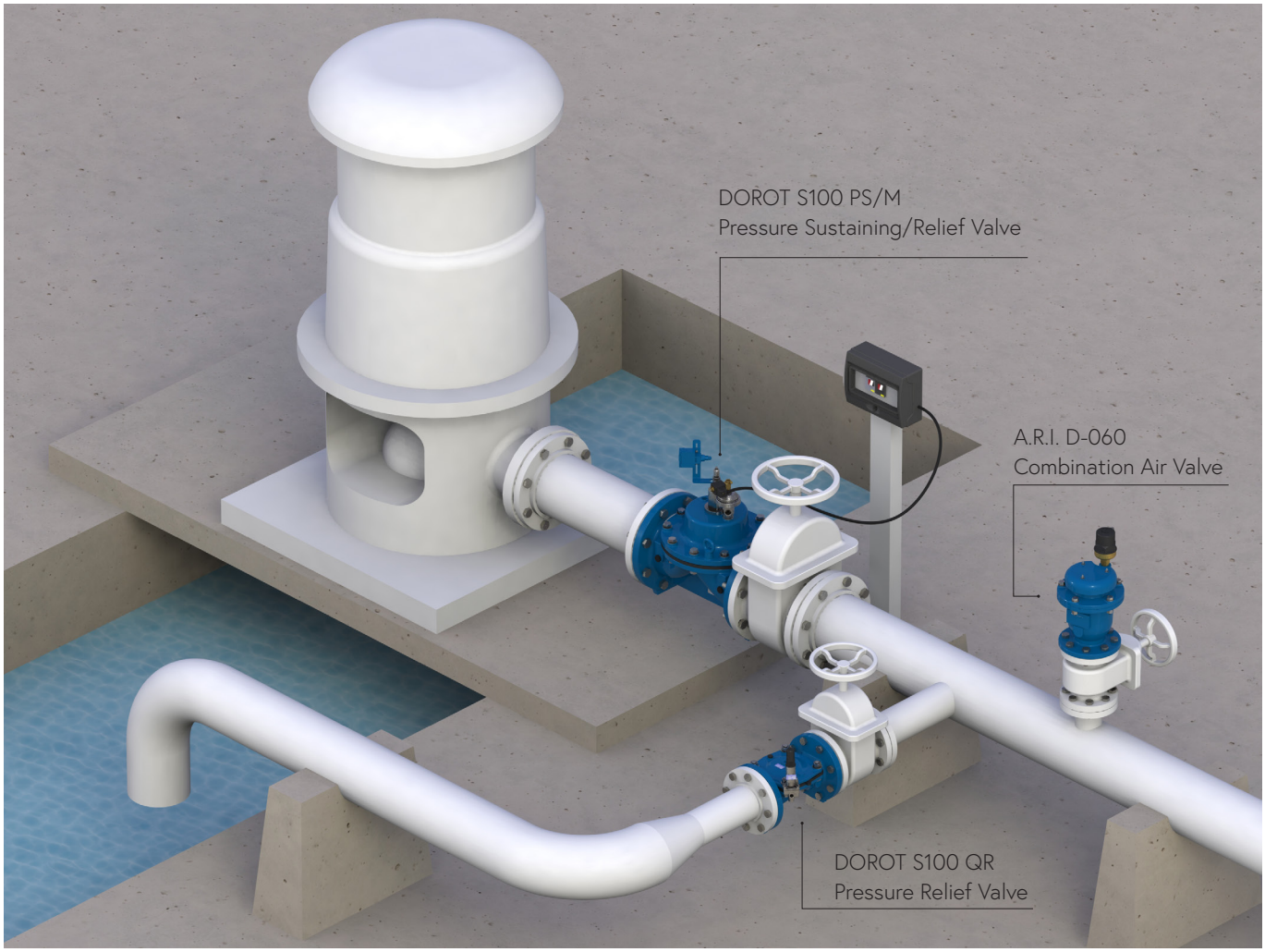
Typical Installation



Purchase Specifications

- Hydraulic globe valve with Weir-type diaphragm, pilot-operated.
- No stem, shaft, or guide bearing inside the water passage.
- Operated by line pressure or external hydraulic/pneumatic actuation.
- Maintains accurate regulation across the full flow range.
- Controlled by a pressure-sustaining pilot valve, ensuring a constant upstream pressure 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.

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