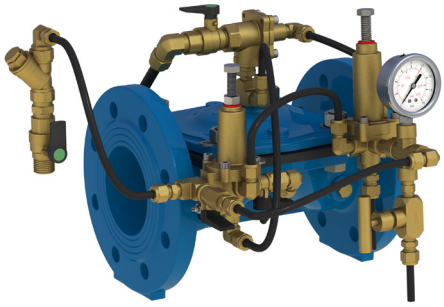
DOROT S100 RE (3W)

Aquestia
Directing the Flow



Irrigation

Weir-type Diaphragm, 3-way Surge-anticipating Globe Valve

DOROT S100 RE (3W), is a Weir-type Diaphragm, 3-way Surge-anticipating, Globe Valve. This automatic control valve is activated by the pressure of the pipeline. The valve protects the pumping system from water hammer caused by sudden pump shutoff (i.e. during power failure). Assembled on a T-junction of the main pipeline, the valve instantly opens when the pump stops (relieving any return high pressure wave), and slowly closes once pressure returns to a static level. The valve can also function as a pressure relief valve.

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

DOROT S100 RE (3W)

Aquestia
Directing the Flow

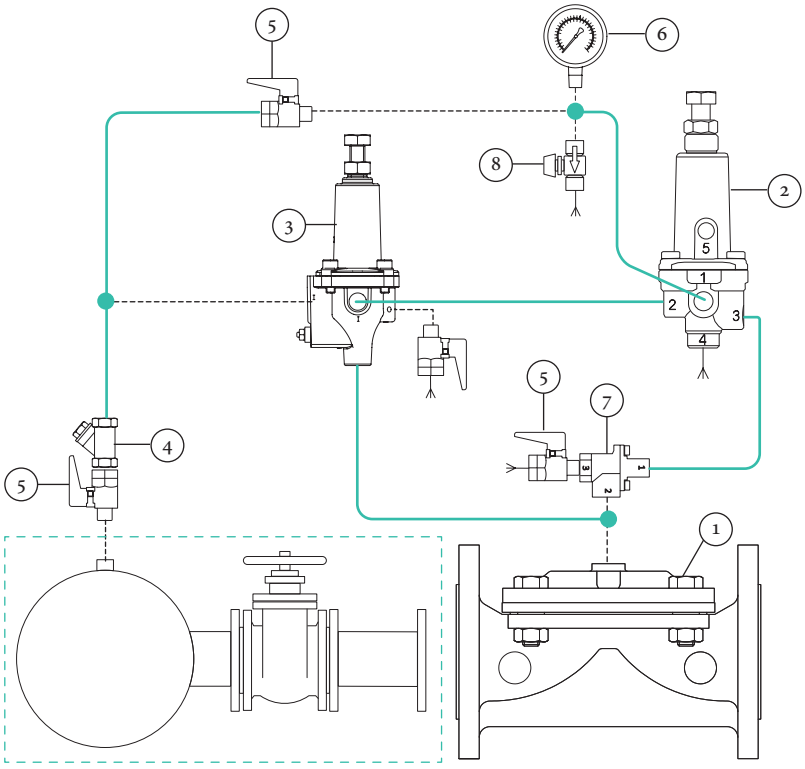
Technical Specifications

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

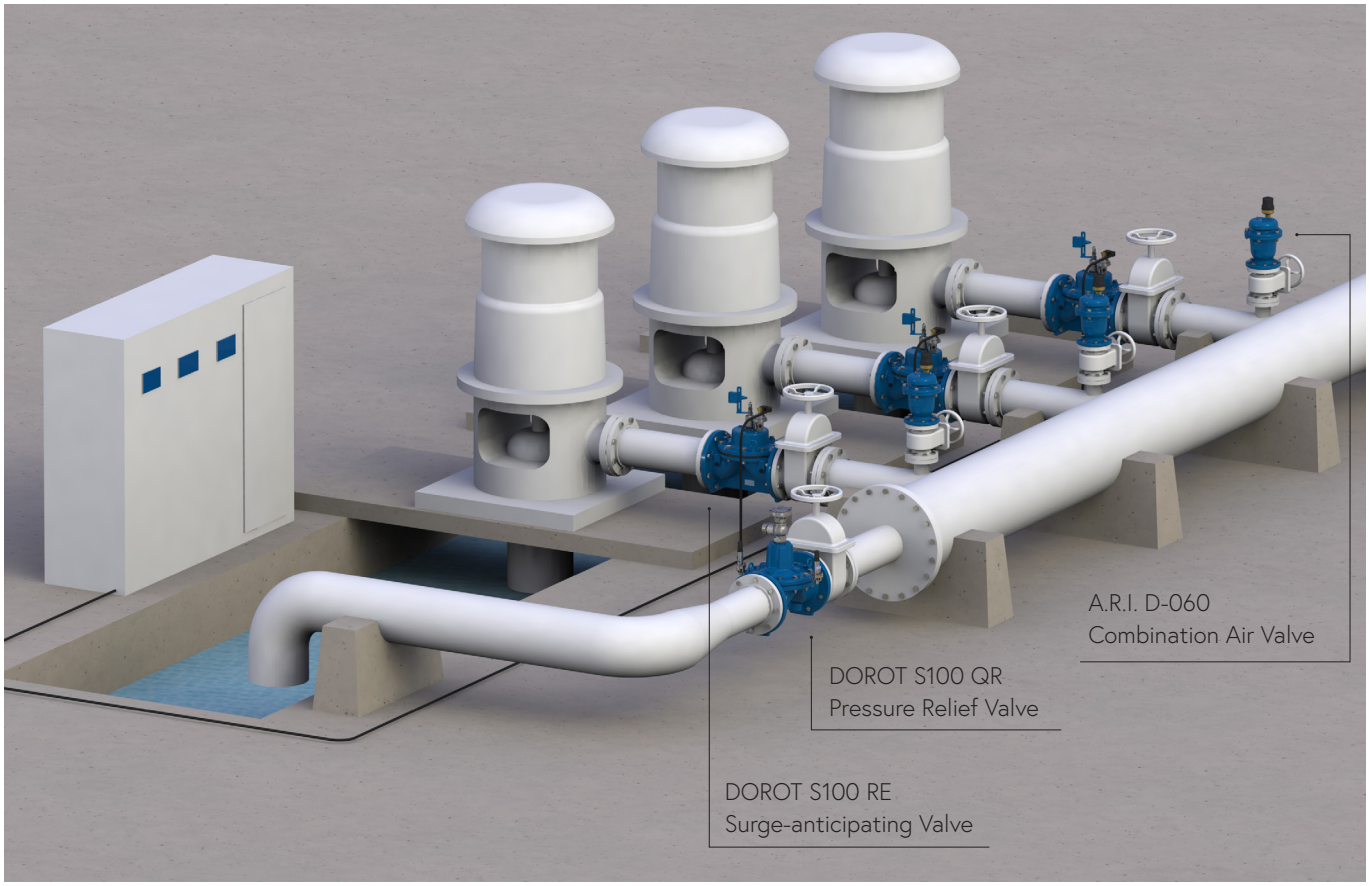
No.	Component
1	Main Valve
2	3-way Pilot Valve
3	2-way Pressure Sustaining Pilot Valve
4	Y-type Filter
5	Ball Valve
6	Pressure gauge
7	2/2-way Hydraulic Relay Valve
8	Needle Valve



DOROT S100 RE (3W)

Aquestia
Directing the Flow

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.
- The valve is operated by two pressure-relief pilot valves and a hydraulic relay."

Design Considerations

- Install a manual separation valve upstream of the quick relief valve for maintenance.
- Closure time is related to the pipe length and should be extended for longer pipes.
- The valve sensing line must be connected to the main line.

www.aquestia.com
info@aquestia.com