



Irrigation

Weir-type Diaphragm, 3-way Flow Control Globe Valve

DOROT S75 FR/M (3W), is a Weir-type diaphragm, automatic, pilot-operated flow control globe valve, with a selector valve for manual override. The valve limits the flow rate in the system to a preset value, regardless of any upstream or downstream pressure variations. The valve fully opens when flow rate drops below a preset point.

Features and Benefits

Durable, corrosion-resistant materials	High resistance to chemicals and fertilizers
Operates up to 12 bar (175 psi)	Able to handle demanding high-pressure systems
Full selection of features available: control functions, sizes, varied end connections	Simplifies installation and supports diverse applications
Asymmetric diaphragm with large flow cross section	Allows smoother operation; high flow capacity with very low head losses, for enhanced efficiency
Flat bonnet design with small control chamber for quick opening/closure	Enables more precise regulation, improved responsiveness and reduced downtime
Effective operation under high/low pressure conditions	Suitable for many diverse irrigation methods

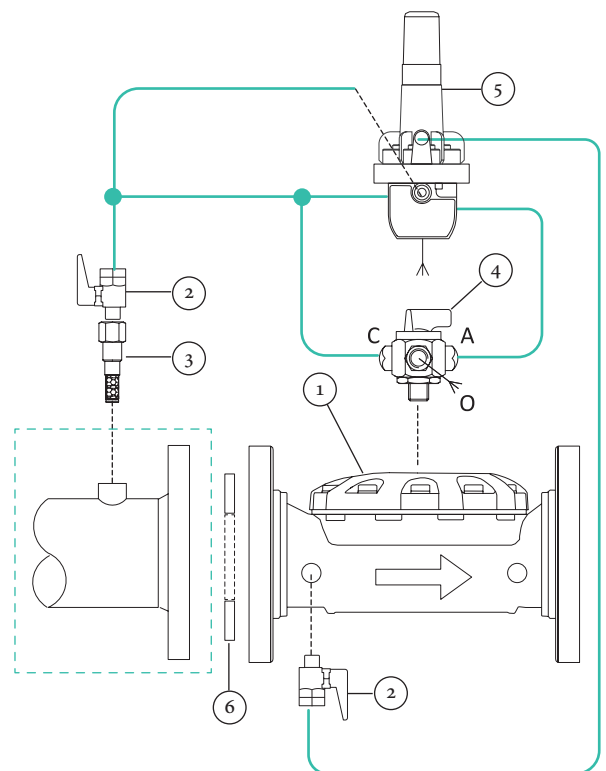
Technical Specifications

Size Range		3/4"-8"R / DN20-DN200R
Working Pressure		10 bar / 145 psi, 12 bar / 175 psi
Max. Water Temperature		60° C / 140° F
End Connections		Grooved ASME/ANSI AWWA 606
		Threaded BSP / NPT
		Flanged Universal
Construction Materials	Body & Cover	Glass Reinforced Polyamide, Polypropylene
	Spring	Stainless Steel 302
	Diaphragm	NR / EPDM
	Fittings & Control Trim Devices	Glass Reinforced Polyamide, Polypropylene
	Control Trim Tubes	Polyethylene

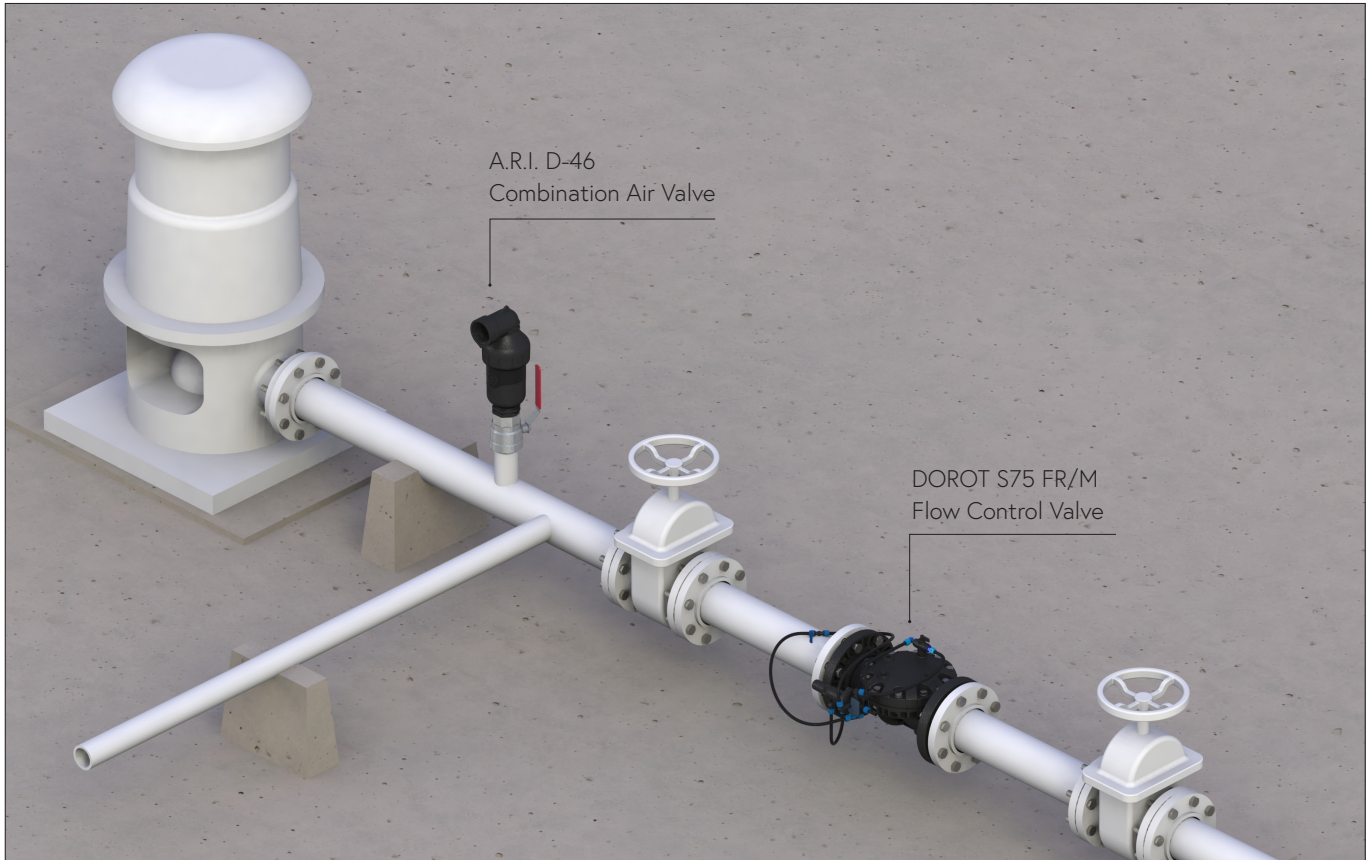
* Other options are available upon request.

Main Control System Components

No.	Component
1	Main Valve
2	Ball valve
3	Self-flushing filter
4	3-way Position Selector Valve
5	3-way Differential Reducing Pilot Valve
6	Orifice plate



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.
- Controlled by a pressure-reducing differential pilot valve, limiting flow through the valve regardless of pressure variation.

Design Considerations

- Select valve size based on expected maximum flow and acceptable head loss.
- An additional pressure loss of ~ 0.25 bar / 3.5 psi is created by the orifice plate at the set flow.
- A ½" pressure sensing port should be provided upstream of the valve.
- Large pressure differentials may cause cavitation – consult Aquestia for solutions.