

# DD-100 SERIES

## Dual Diaphragm Redundant Positive Shut-Off Valve

### Overview

The DD-100 Dual Diaphragm Valve uses incoming water pressure to positively shut off the flow of water internally. Unlike traditional float and lever systems, there are no external arms or floats that can stick, bend, or fail.

### Key Advantages

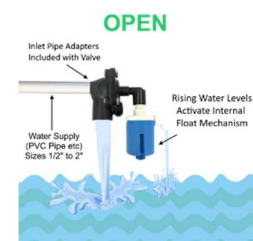
- Positive shut-off using line pressure on internal diaphragms
- Redundant design – two diaphragms for backup protection
- No water hammer – slow-closing action reduces pressure spikes
- Compact package for tanks and tight installations
- Chemical-resistant reinforced nylon body
- Stainless hardware – no rust or corrosion

### Applications

Ideal for water storage tanks, agricultural and livestock systems, industrial process tanks, and any application where a fail-safe, positive shut-off is required.

### Specifications

Body / Bonnet: Fiberglass-reinforced nylon  
Hardware: Stainless steel  
Diaphragm: Part #71-D (single-hole)  
Temperature Range: 34°F – 160°F  
Maximum Pressure: 80 PSI (water only)  
Inlet: 1" with  $\frac{3}{4}$ " and  $\frac{1}{2}$ " FNPT bushings  
Outlet: 90° elbow (included)



Normal Operation  
Valve Open Filling Tank



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### Included Components

- DD-100 Dual Diaphragm Valve Assembly
- 1" inlet with  $\frac{3}{4}$ " and  $\frac{1}{2}$ " FNPT adapter bushings
- 90° outlet elbow
- Installed diaphragm (Part #71-D)
- Stainless steel hardware
- Teflon tape



### Installation – Field Quick Steps

1. Select the correct inlet adapter.
2. Apply Teflon tape to all threaded connections.
3. Install the adapter into the DD-100 inlet port.
4. Attach the 90° outlet elbow.
5. Connect inlet to fresh water supply.
6. Mount or secure the valve in the tank or system.
7. Install an inline filter for dirty water sources.



Normal Operation – Valve  
Open Filling Tank

### Maintenance

- Verify system pressure and inspect for debris if shut-off degrades.
- Flush inlet and internal passages as needed.
- Replace diaphragm using Part #71-D if worn or damaged.

