

# LEVEL CONTROL VALVE

with Bi-Level Vertical Float

**Model: WW-450-66**

The Model WW-450-66 Level Control Valve with Bi-Level Vertical Float is a hydraulically controlled, diaphragm actuated, double chambered control valve. The valve is hydraulically powered to fully open at pre-set reservoir low level, and to shut off at pre-set high level regardless of valve differential pressure.

- Reservoir filling
  - Low noise generation
  - Energy cost critical systems
  - Systems with poor water quality

## Features and Benefits

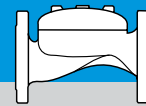
- Line pressure driven – Independent operation
- Bi-Level hydraulic float control
  - On/off service
  - Low cavitation damage
  - Suitable for low quality water
  - Inherent reservoir refreshing
- Flexible design – Easy addition of features
- Advanced globe or angle hydro-efficient design
  - Unobstructed flow path
  - Single moving part
  - Non-turbulent flow
  - High flow capacity
- Fully supported & balanced diaphragm
  - Low actuation pressure
  - Progressively restrains valve closing
  - Prevents diaphragm distortion
- External installation
  - Easy access to valve and float
  - Easy Level Setting
  - Less wear and tear
- In-line serviceable
  - Easy maintenance
  - Minimal down time



## Major Additional Features

- Pressure sustaining – WW-453-66
- Electric float backup – WW-450-66-65
- Flow control – WW-457-66-U
- Closing surge prevention – WW-450-66-49

See relevant BERMAD publications.



## Operation

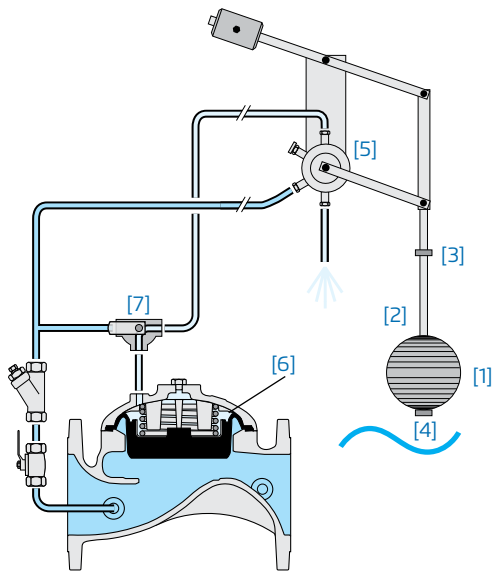
The Model WW-450-66-B is a float controlled valve equipped with a 4-Way, "last position", bi-level float pilot assembly. The float [1] slides along the rod [2]. When the float reaches either the adjustable high [3] or low [4] level stoppers, it either pulls the rod assembly down or pushes it up, switching the float pilot [5] position. When the float is between the adjustable stoppers, the main valve remains in its last position.

At high level, the float pilot applies pressure to the control chamber [6], shutting off the main valve.

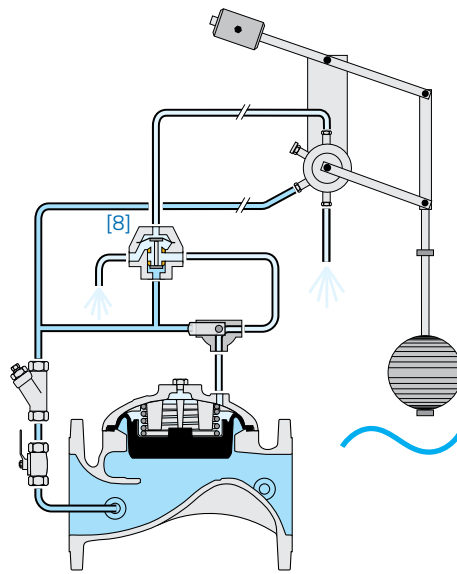
At low level, the float applies vents the control chamber, opening the main valve.

The 3-way Cock Valve [7] enables manual closing of the main Valve.

For 8" (DN200) valves and larger, an accelerator [8] quickens valve response.



Size Range 1½-6"

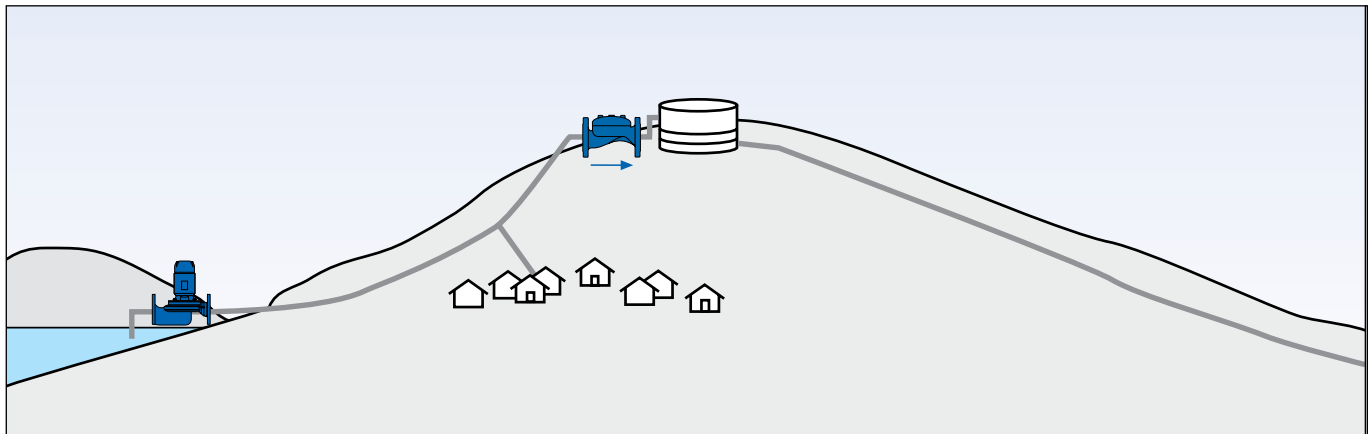


Size Range 8-6"

## Typical Applications

Reservoirs vary in their characteristics – location, elevation, filling & emptying, flow & pressure, surface area, etc. These various characteristics require various level control valve solutions.

The Model WW-450-65 is the ideal solution for level control in reservoirs – shallow and deep, low and high elevation, rooftop and basement, in water towers, and wherever electric power is available.



For detailed Engineering & Specification data, IOM and CAD Drawings, visit the Model Page on the [BERMAD](http://www.bermad.com) website.