

Level Control Valve with Modulating Horizontal Float

- Reservoir filling
 - Low volume reservoirs
 - Large surface area reservoirs

The Model 750-60 Level Control Valve with Modulating Horizontal Float is a hydraulically controlled, diaphragm actuated control valve that controls reservoir filling to maintain constant water level, regardless of fluctuating demand.



Features and Benefits

- **Line pressure driven** – Independent operation
- **Modulating hydraulic float control**
 - “Always Full” reservoir
- **Double chamber**
 - Full powered closing
 - Non-slam closing characteristic
 - Protected diaphragm
- **External installation**
 - Easy access to valve and float
 - Less wear and tear
- **Balanced seal disk** – High flow capacity
- **In-line serviceable** – Easy maintenance
- **Flexible design** – Easy addition of features

Major Additional Features

- Pressure sustaining – **753-60**
- Flow control – **757-60-U**
- Electric float backup – **750-60-65**

See relevant BERMAD publications.



Operation

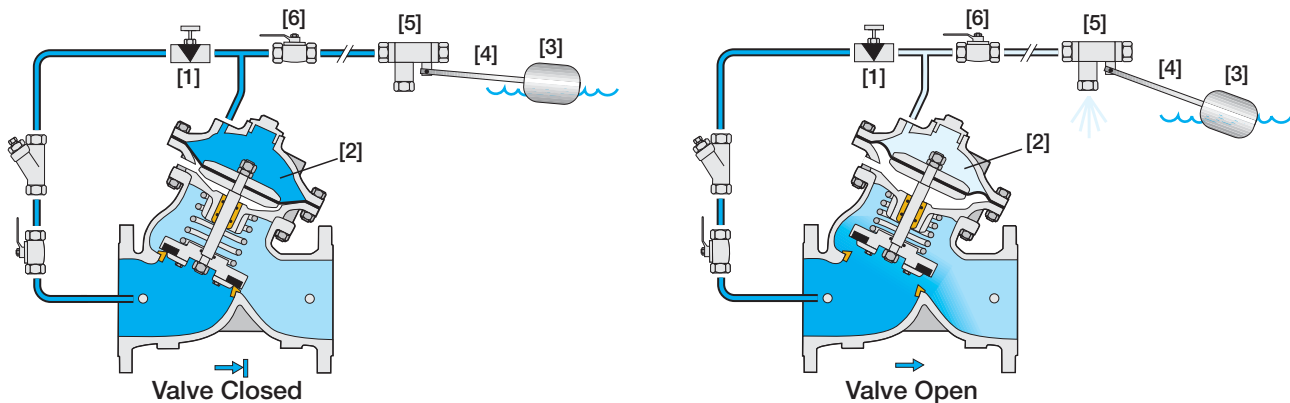
The Model 750-60 is a float controlled valve equipped with a 2-Way, horizontal float pilot assembly.

The needle valve [1] continuously allows flow from valve inlet into the upper control chamber [2]. The float [3] is attached to the float pilot arm [4]. The location of the float assembly & the position of the float determines the level setting.

Should level rise towards setting, the float pilot [5] throttles, pressure in the upper control chamber accumulates causing the main valve to throttle closed, reducing filling rate, and eventually closing drip tight.

Should level fall, the float pilot releases pressure from the upper control chamber causing the main valve to modulate open.

The needle valve controls the closing speed. The cock valve [6] enables manual closing.



Engineer Specifications

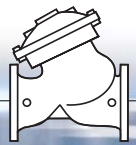
The Level Control Valve shall control reservoir filling to maintain constant water level regardless of fluctuating demand.

Main Valve: The main valve shall be a center guided, diaphragm actuated globe valve of either oblique (Y) or angle pattern design. The body shall have a replaceable, raised, stainless steel seat ring. The valve shall have an unobstructed flow path, with no stem guides, bearings, or supporting ribs. The body and cover shall be ductile iron. All external bolts, nuts, and studs shall be Duplex® coated. All valve components shall be accessible and serviceable without removing the valve from the pipeline.

Actuator: The actuator assembly shall be double chambered with an inherent separating partition between the lower surface of the diaphragm and the main valve. The entire actuator assembly (seal disk to top cover) shall be removable from the valve as an integral unit. The stainless steel valve shaft shall be center guided by a bearing in the separating partition. The replaceable radial seal disk shall include a resilient seal and shall be capable of accepting a V-Port Throttling Plug by bolting.

Control System: The control system shall consist of a 2-Way, horizontal float pilot assembly, a needle valve, isolating cock valves, and a filter. All fittings shall be forged brass or stainless steel. The assembled valve shall be hydraulically tested.

Quality Assurance: The valve manufacturer shall be certified according to the ISO 9001 Quality Assurance Standard. The main valve shall be certified as a complete drinking water valve according to NSF, WRAS, and other recognized standards.



Typical Applications

Infrastructure Installation

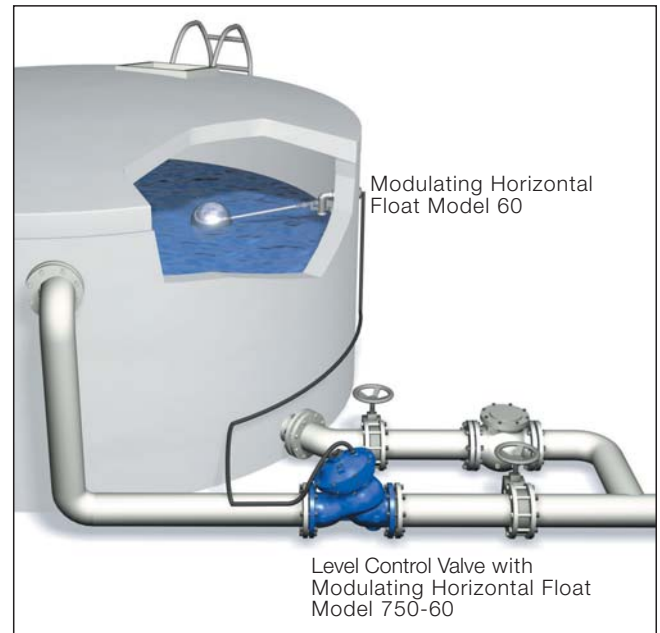
Ordinary mechanical level control valves present various problems:

- Valves are often at inaccessible locations
- Float and arm assemblies are heavy and cumbersome
- Relatively low maximum pressure
- Tendency for mechanical devices to leak
- Increased valve corrosion due to humid environment inside the tank
- Difficult maintenance

The Model 750-60 overcomes these difficulties by separating the mechanical float from the hydraulic valve itself.

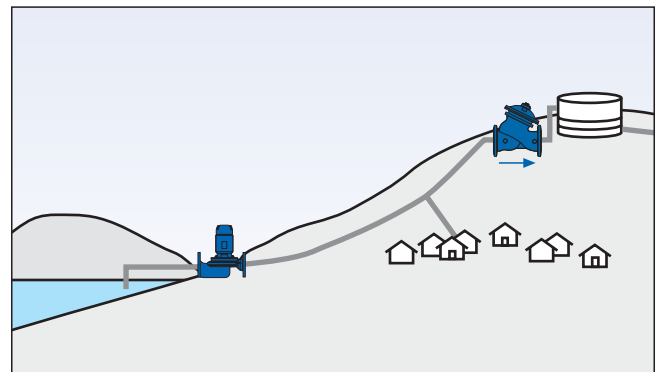
Consider replacing the “60” horizontal float assembly with the “67” vertical float assembly for:

- Heavy-duty service
- Easy level setting
- Resistance to aggressive or corrosive fluids



Pumping to Uphill Reservoir

In a reservoir system, where a **pump provides pressure**, consumers are prioritized over reservoir filling by installing the **Model 753-60** Level Control and Pressure Sustaining Valve.



Gravity Filling a Downhill Reservoir

Where a **reservoir provides pressure** to consumers and fills a low lying reservoir, the consumers should be prioritized over filling the lower reservoir.

Defining the pressure set point for the standard level control and pressure sustaining valve is usually impossible, as there is only a very small potential differential pressure to operate the valve.

The solution: Rather than controlling the pressure during filling, control the filling flow ensuring sufficient pressure for consumers.

Install the **Model 757-60-U** Level and Flow Control Valve.

