

LEVEL CONTROL VALVE

with Modulating Horizontal Float

Model 450-60

Hydraulically operated control valve that controls reservoir filling and reservoir level. Reservoir filling is accomplished in response to a hydraulically controlled modulating horizontal float that maintains a constant water level, regardless of fluctuating demand.

The BERMAD 400 Series valves have an advanced design with a full-bore seat and unobstructed flow path. Their one-piece elastomeric assembly ensures long life and reliable actuation in harsh conditions.



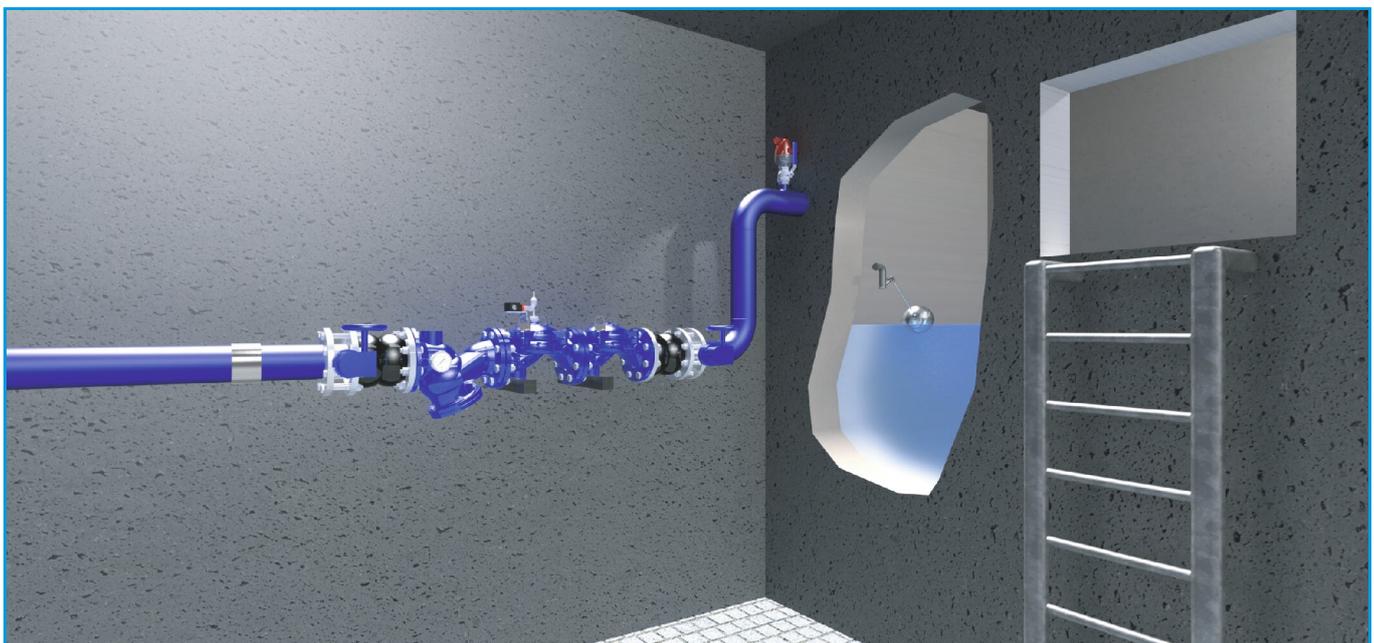
Features & Benefits

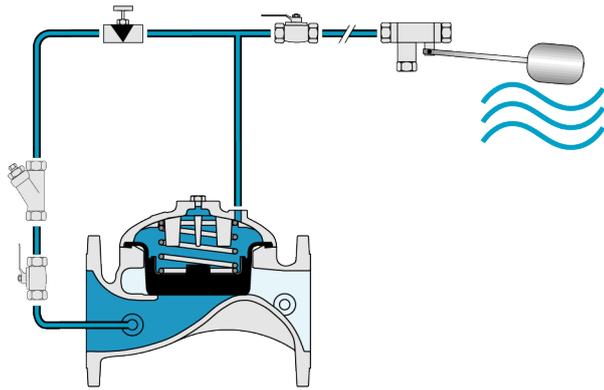
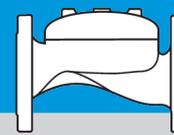
- Line pressure driven – Independent operation
- Modulating hydraulic float control
 - "Always Full", maximum reservoir volume usage
 - Drip tight sealing
- Flexible design - Easy addition of features
- Advanced globe hydro-efficient design
 - Unobstructed flow path
 - Single moving part
 - Non-turbulent flow
 - High flow capacity
- Fully supported & balanced diaphragm
 - Excellent low flow regulation performance
 - Progressively restrains valve closing
 - Prevents diaphragm distortion
- In-line serviceable
 - External installation
 - Easy maintenance
 - Minimal down time

Typical Applications

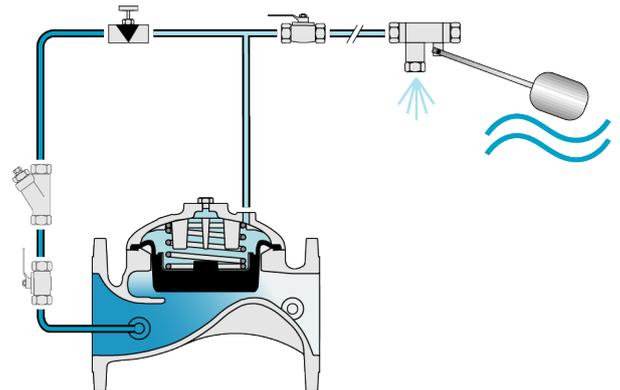
- Level control for small to medium water tanks
- "Always full" - Maximizing the use of reservoir volume
- Potable water, fire protection and grey water

Typical Installation





Closed



Open

This drawing refers to 1½ – 12"; 40-300 mm sized valves only. For other sizes please refer to the Model's IOM.

Main Valve

Size Range: 1½-12"; DN40-300

Pattern: Globe

Pressure Rating: 250 psi

End Connection: Flanged, Threaded, Grooved

Temperature Rating: 140°F

Optional higher temperature: Consult BERMAD

Standard Materials:

Body & Cover: Ductile Iron

Cover Bolts: Steel

Diaphragm: Reinforced EPDM with vulcanized radial seal disk

Spring: St. St. 302

Coating: Dark blue Fusion bonded epoxy

For other materials contact BERMAD

Control System

Standard Materials:

Accessories: Stainless Steel, Bronze & Brass

Tubing: Stainless Steel or Copper

Fittings: Stainless Steel or Brass

Float Pilot Standard Materials:

Body: Stainless Steel or Brass

Internals: Plastic

Float pilot temperature rating: Water up to 40°C; 105°F.

Notes

- Float pressure rating: 16bar; 230psi.
- Inlet Pressure, Outlet Pressure and Flow-rate are required for optimal sizing and cavitation analysis.
- Recommended continuous flow velocity: 0.1-6.0 m/sec; 0.3-20 ft/sec.
- Minimum operating pressure: 0.7 bar; 10 psi. For lower pressure requirements consult factory.
- See BERMAD float installation recommendation.

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