

LEVEL CONTROL VALVE

with Bi-Level Electric Float

Model 450-65

Hydraulically operated control valve that controls reservoir filling and reservoir level. Reservoir filling is in response to a Bi-level electric float switch signal opening at a pre-set low level and shutting off at a preset high level.

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.



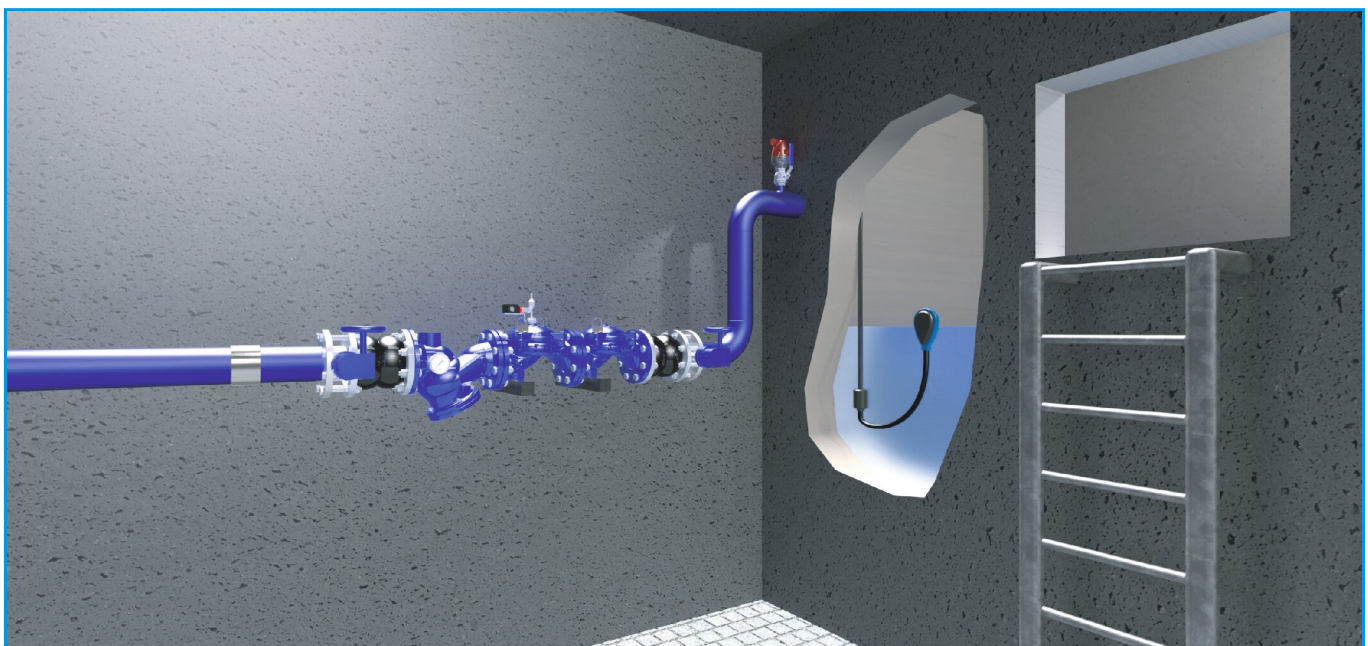
Features & Benefits

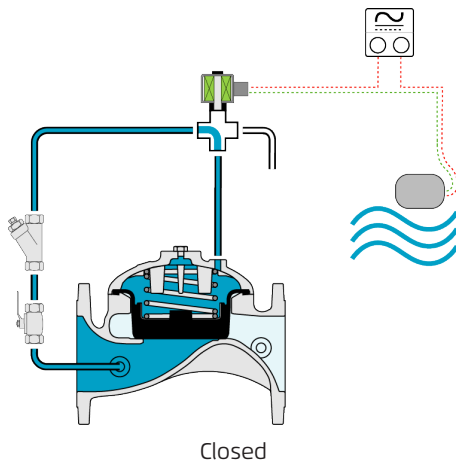
- Line pressure driven – Independent operation
- Bi-Level electric float control
 - On/Off service
 - Suited to various float switches
 - Inherent water refreshment
 - Minimizes noise and cavitation damage
 - Drip tight sealing
- Solenoid controlled
 - Low power consumption
 - Wide ranges of voltages
 - Normally Open, Normally Closed or Latch
- Advanced globe hydro-efficient design
 - Unobstructed flow path
 - High flow capacity
- Fully supported & balanced diaphragm
 - Excellent low flow regulation performance
 - Progressively restrains valve closing
- In-line serviceable
 - External installation

Typical Applications

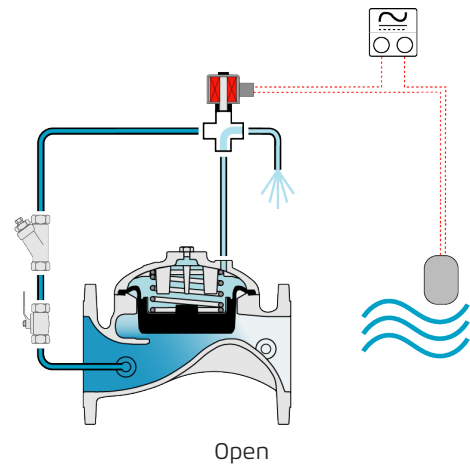
- Level control for water reservoirs
- Bi-Level control for water refreshment and silent operation
- Potable water, fire protection and grey water
- Serves as a safety valve in tank filling systems

Typical Installation





Closed



Open

This drawing refers to 1½ – 8"; 40-200 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: 16 bar

End Connection: Flanged, Threaded, Grooved

Temperature Rating: 60°C

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

Solenoid standard materials:

Body: Brass or Stainless Steel

Elastomers: NBR or FPM

Enclosure: Molded Epoxy

Solenoid Electrical Data:

Voltages:

(AC): 24, 110-120, 220-240, (50-60Hz)

(DC): 12, 24, 110, 220

Power Consumption:

(AC): 30VA, inrush; 15VA (8W), holding or 70VA, inrush; 40VA (17.1W), holding

(DC): 8-11.6W

Values may vary according to specific solenoid model.
For more details check solenoid product page.

Float Switch:

Max Current: 16A @ 250 V

Fluid Specific Weight: 0.95-1.1

Working Temperature: Water up to 65°C (140°F)

Dimensions:

Cable Length - 10 m; 32.8 ft

Length - 103.5 mm; 4" Width - 78 mm; 3"

Notes

- Inlet Pressure, Outlet Pressure and Flow-rate are required for optimal sizing.
- Recommended maximum flow velocity: 6.0 m/sec; 20 ft/sec.
- Minimum operating pressure: 0.7 bar; 10 psi. For lower pressure requirements consult factory.

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