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.

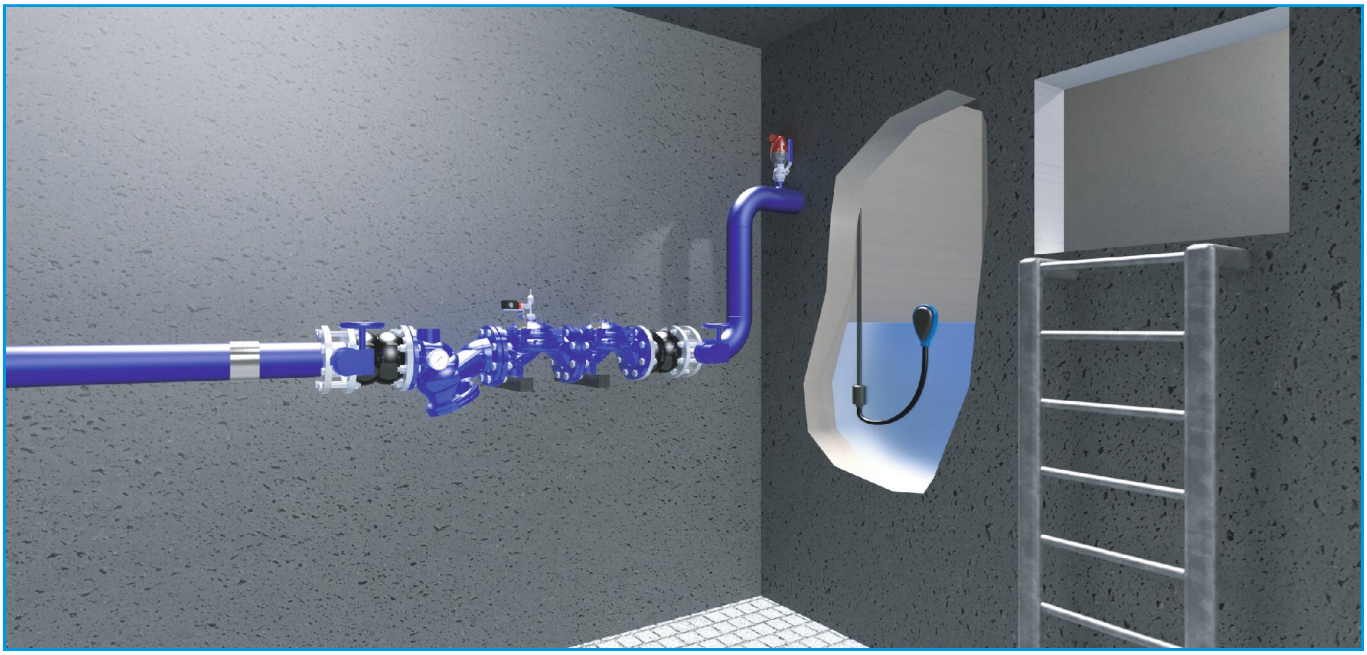
Features & Benefits

- 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

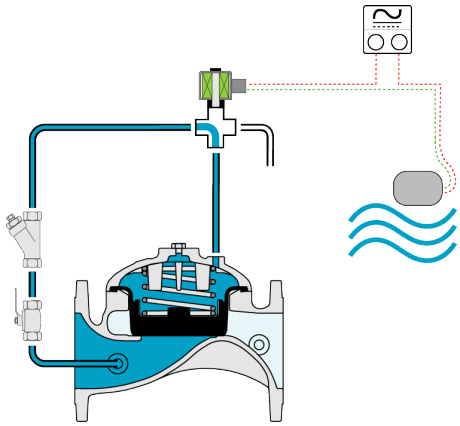
Typical Applications

- 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

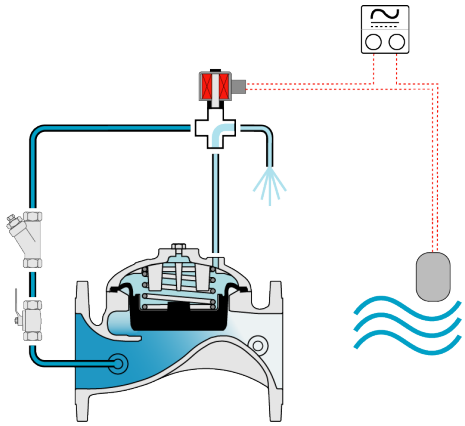
Typical Installation



All images in this catalog are for illustration only



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: 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

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 Temparture: 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 website.

October 2025