



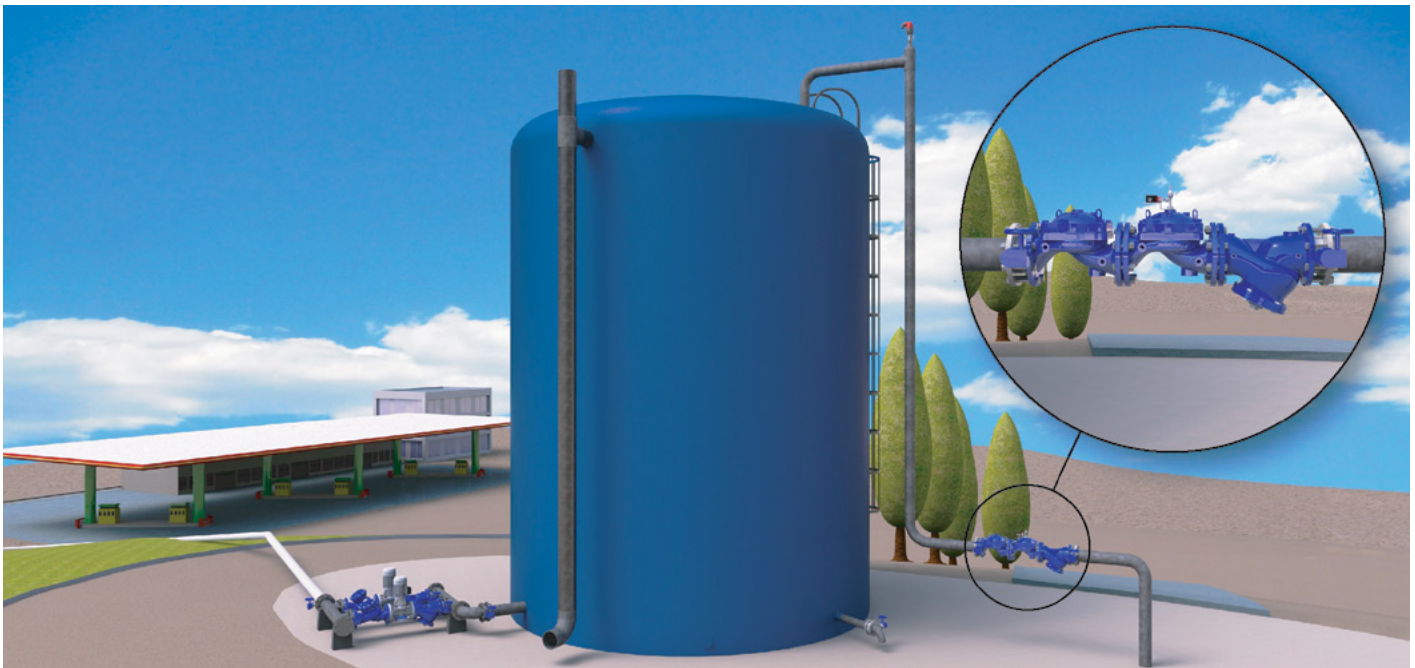
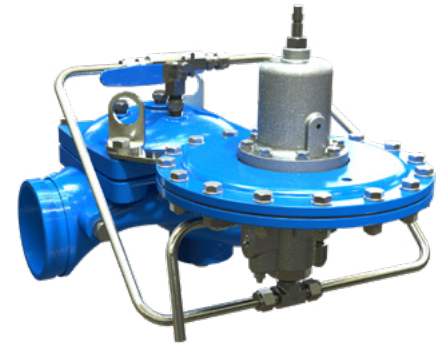
LEVEL CONTROL VALVE

with Altitude Pilot

Model BC-450-80-P

Hydraulically operated control valve that controls reservoir filling and reservoir level. The valve shuts off at a pre-set reservoir high level and fully opens in response to an approximately one meter (3 ft) level drop, as sensed by the 3-Way altitude pilot mounted on the main valve.

BERMAD 400 series valves are hydraulically operated, simple and reliable, globe valves with full bore hydrodynamic body providing an unobstructed flow path and superior performance. The valves balanced rolling-diaphragm assembly is vulcanized with a rugged radial seal disk construction, performing as the valves only moving part.



BERMAD BC-450-80-P maintains high and low water levels with high accuracy pilot valve that senses reservoir water level head from a sensing point at the bottom of the reservoir and controls the main filling valve accordingly. As backup another level control valve is

stationed upstream and calibrated to a slightly higher water level. The backup valve can be specified to operated hydraulically (BC-450-66-P) or electrically (BC-450-65-P).

Typical Application

- Level control in water reservoirs of buildings, including basement and roof-top reservoirs, pressure breaking tanks, emergency water storage, and so others
- In reservoirs, located few floors above the control valve, where hydraulic float cannot be used
- Where engineering considerations force the installation of narrow and tall reservoirs that therefore cannot be controlled by hydraulic float
- Priority and backup management of reservoirs



Features and Benefits

- High quality construction materials ensure reliable, long lasting operation
- Full bore valve port area and hydrodynamic body ensure unobstructed flow path; minimal pressure loss with low cavitation damage
- Fully supported and balanced rolling diaphragm - low actuation pressure and excellent low flow regulation performance
- Ensured operation after long standby periods
- Straightforward three major components design - easy and simple on-site inline maintenance with minimal down time
- Ensures uninterrupted supply to building occupants dependent on the reservoir system for their water needs
- Unique level sensing device; the valve performance does not be affected by the difference in altitude between the valve and the reservoir
- Hydraulically operated 3-way altitude pilot (no electricity needed); ensures full opening and closing in low pressure conditions
- Level sensing with no moving parts, no float needed - no waves effect and corrosion, enabling easy inspection, calibration and maintenance

Technical Data

General:

End connections:

- Grooved: 2", 3"-8"
- Flanged: 1½"-14"
- Threaded: 1½"-3"

Pressure Rating: 230 psi; PN16

Valve Pattern: Y (Oblique) / Angle

Working Temperature:

Cold Water up to 122°F; 50°C

Optional Higher Temperatures:

Available on request

Main Valve Materials:

Body, Cover and Partition:

- Standard: Ductile Iron
- Optional: Stainless Steel 316

Spring: Stainless Steel

Diaphragm Assembly:

- NR / EPDM with Reinforcing Vulcanized Radial Seal Disk:
- 1½"-6": Plastic
- 8"- 10": Iron
- 12"-14": Iron with St.St Upper Guide

Coating: Blue Fusion bonded epoxy

Control Trim Materials:

Control Accessories:

- Stainless Steel / Bronze & Brass
- NBR / EPDM

Tubing: Stainless Steel / Copper

Fittings: Stainless Steel / Brass

Standard water level above pilot ranges at 2-14m; 7-46 ft, for other options consult Bermad

* For other optional material consult BERMAD.
** Materials may vary according to sanitary standard.

How to Order

Please Specify the requested valve in the following sequence:

BERMAD Segment	Size ¹	Model	Approval Group	End Connections & Pressure Rating	Ordering code would be
BC	3"	450-80	P0	16	
Buildings & Constructions	Inch mm	Potable Water ²	Up to 250 psi / PN16		
	1½" 40	European Standards	Grooved	ANSI C606 VI	1. Larger sizes available on request 2. BERMAD complies with a wide range of international potable water standards. Please consult with BERMAD about compliance.
	2" 50	NSF 61/372		BS 1378 VB	
	2½" 65	Australia Standards	Flanged	ISO-16 16	
	3" 80	Unregistered		ABNT16 B6	
	4" 100			ANSI 150 A5	
	6" 150			AST-* S*	
	8" 200		Threaded	BSP BP	
	10" 250			NPT NP	
	12" 300				

