



LEVEL CONTROL AND PRESSURE SUSTAINING VALVE

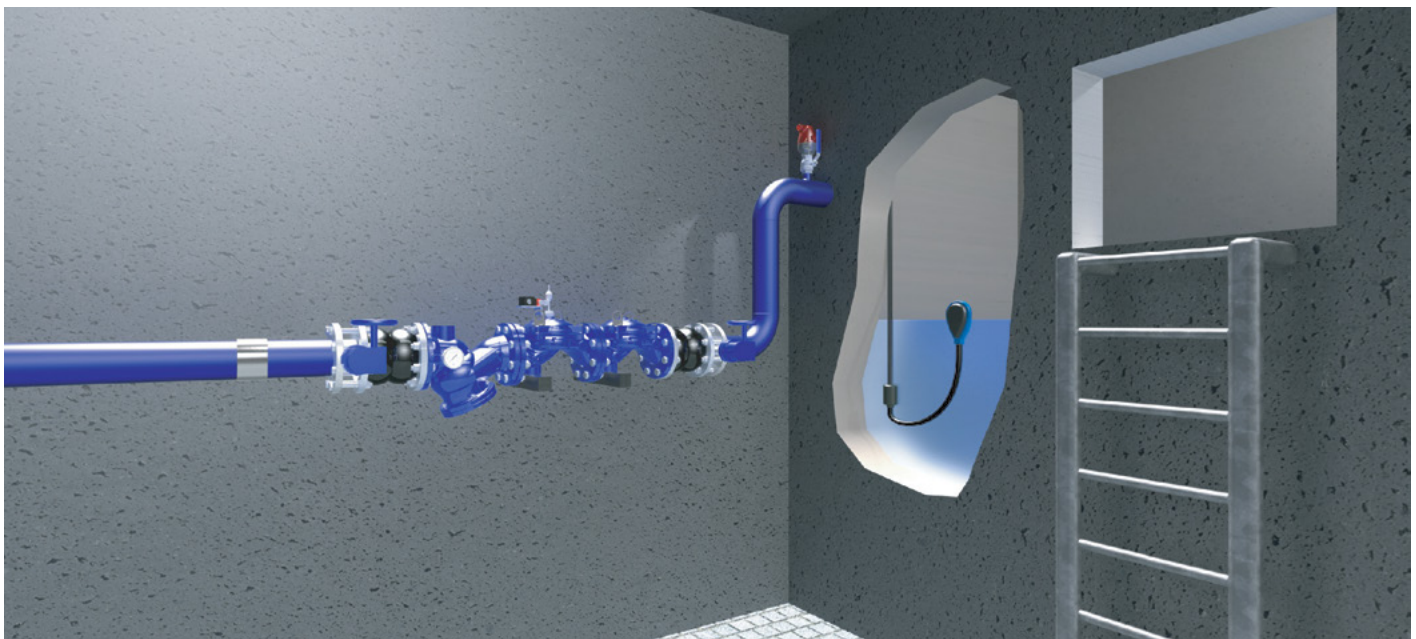
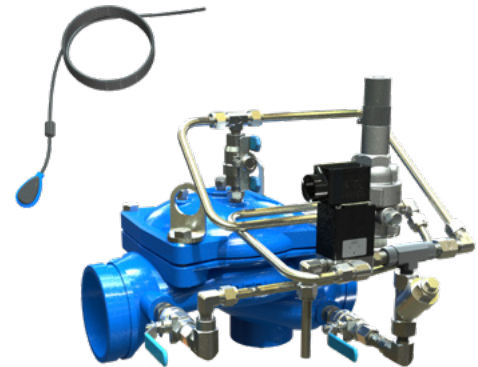
with Bi-Level Electrical Float

Model BC-453-65-P

Hydraulically operated, level control and pressure sustaining control valve that controls reservoir filling and reservoir level. During filling the valve sustains minimum upstream pressure regardless of fluctuating flow or 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 pre-set high level.

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.



Water Reservoir Level Control System, featuring the BC-453-65-P as an electric controlled backup valve to an hydraulically controlled level control valve. In case of main level control valve malfunction the Electric Float will sense the rise in water level and signal the BC-453-65-P to

shut off, until water level decrease to a pre-set level. the BC-453-65-P will also maintain pre-set upstream pressure, preventing pressure drop at reservoir filling.

Typical Application

- Level and pressure sustaining control of reservoir filling systems in buildings, including basement, roof-top, pressure breaking and emergency tanks, where the supply line also feeds additional high priority users.
- Electrical emergency override in hydraulic level control systems
- Duty cycle and valve prioritizing management in multi-branch systems



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
- Line Pressure Driven - Independent operation, no external power needed aside of the solenoid low voltage control
- Electrical operation; low voltage and low current NO and NC solenoids
- Accurate and reliable level control and pressure sustaining capabilities prevent reservoir overflows and cut-offs, while maintaining minimum upstream pressure
- Ensures uninterrupted supply to building occupants dependent on the reservoir system for their water needs
- Suitable for water reservoirs operating under moderate operation conditions

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

Solenoid:

- Body:** Stainless Steel / Brass
- Elastomers:** NBR or FPM
- Enclosure:** Molded Epoxy

* 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	Solenoid				
BC	3"	453-65	P0	16	4AC				
Buildings & Constructions	Inch mm	Potable Water ²		Up to 250 psi / PN16	Solenoid Configuration				
	1½" 40	European Standards	P1	Grooved	ANSI C606 VI	24V ⁴	Normally Closed ³	AC 50Hz	4AC
	2" 50	NSF 61/372	P2	Flanged	BS 1378 VB			AC 60Hz	46C
	2½" 65	Australia Standards	P3		ISO-16	16	DC	4DC	
3" 80	Unregistered	P0	ABNT16	B6	Normally Open ³	AC 50Hz	4A0		
4" 100			ANSI 150	A5		AC 60Hz	460		
6" 150			AST-*	S*		DC	4D0		
8" 200									
10" 250				Threaded	BSP BP				
12" 300					NPT NP				

Ordering code would be

BC-3"-453-65-P0-16-4AC

- Larger sizes available on request
- BERMAD complies with a wide range of international potable water standards. Please consult with BERMAD about compliance.
- Valve Position when Solenoid is De-Energized
- Other voltage available.



Bulgarkontrola
Bulgaria



ACS
France



GOST
Russia



PZH
Poland

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