## **BERMAD** Buildings & Construction

Potable Water • Level Control

400 Series

Model BC-453-66-P

# LEVEL CONTROL AND PRESSURE SUSTAINING VALVE

## with Bi-Level Vertical Float

## Model BC-453-66-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 hydraulically controlled Bi-level vertical float that opens at a pre-set reservoir low level and shuts off at a pre-set high level, regardless of valve differential pressure.

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-453-66-P that control high and low water level in the reservoir in addition to sustaining up stream pressure to prioritize other consumers over reservoir filling. As backup, another level control valve is stationed

## **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.

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).

- Priority and backup management of reservoirs
- Out of tank installation; level control in limited access or remote sites



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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
- Accurate and reliable level control and pressure sustaining

capabilities - preventing reservoir overflows and cut-offs while maintaining minimum upstream pressure

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- Specially designed for emergency water reservoirs where long standby periods are expected
- 3-way float control provides powered closing under low pressure conditions
- Out-of-tank installation minimizes wave effects and corrosion, enables 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: Avaliable 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

\* 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	Model	Approval Group		End Connections & Pressure Rating			Ordering code would be	
BC	3″	453-66	PO		16			BC-3"-453-66-P0-16	
	•			•			▼		
Buildings & Constructions	Inch m	m	Potable Water <sup>2</sup>		Up to 2	250 psi / PN1	16		
	1½" 4	)	European Standards	P1	Grooved	ANSI C606	VI		1. Larger sizes available on request
	2" 5	)	NSF 61/372	P2		ISO-6182-12	VB		2. BERMAD complies with a wide range of international potable water standards.Please consult with BERMAD about compliance
	21⁄2" 6	5	Australia Standards	P3		ISO-16	16		
	3″ 8	D	Unregistered	PO		ABNT16	B6		
	4″ 10	0			Flangeo	ANSI 150	A5		
	6″ 15	D				AST-*	S*		
	8" 20	0				BSP	BP		
	10" 25	0			Inreaded	NPT	NP		
	12" 30	0							



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