BERMAD Buildings & Construction

Potable Water • Level Control



400 Series

Model 453-65

LEVEL CONTROL AND PRESSURE SUSTAINING VALVE

with Bi-Level Electrical Float

Model 453-65

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 preset 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 453-65 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 453-65

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

Typical Application

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

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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
- 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: 250 psi; PN16 Valve Pattern: Globe / 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

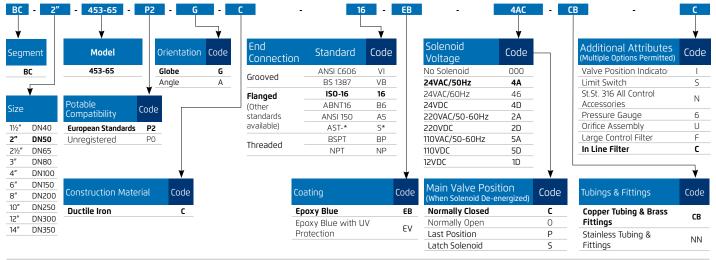
Tubing: Stainless Steel / Copper **Fittings:** Stainless Steel / Brass

Solenoid:

Body: Stainless Steel / Brass **Elastomers:** Synthetic Rubber **Enclosure:** Molded Epoxy

How To Order

Please Specify the requested valve in the following sequence:









PZH

Bulgarkontrola Bulgaria

ACS France GOST Russia

PZH Poland Manufactured and Tested According to AWWA C530-12 Requirements

^{*} For other optional material consult BERMAD.

^{**} Materials may vary according to sanitary standard.