



Solar-Powered Reservoir Circulator

"Quality Water, Naturally"

SB1250v12PW SPECIFICATIONS

Technology Description:	Floating, solar powered, circulator for potable water reservoirs. Day/night operation on solar only by utilizing a battery to store excess daytime power for nighttime operation.
Flow Rates:	<i>Flow rates at full speed (60 rpm) at 10 feet diameter</i>
Direct Flow Rate - Day	150 gallons per minute, 18.8 gpm/watt.
Induced Flow Rate - Day	1,100 gallons per minute.
Combined Flow Rate - Day	1,250 gallons per minute.
Combined Flow Rate - Night	1,250 gallons per minute with adequate battery power.
Minimum Access Opening / Machine Size/Weight:	Machine can be assembled through 26 inch by 26 inch opening. Assembled machine is 10 feet in diameter and weighs 400 pounds.
Materials of Construction:	316 stainless steel construction. Foam-filled high-density polyethylene (HDPE) floats. Thermoplastic rubber intake hose. HDPE strainer.
Drive System:	High torque, direct drive (no gearbox), axial airgap Lorentz force brushless D.C. motor.
Power Supply/Control System:	Photovoltaic (PV) Solar Panel, Battery and Electronic Controller are mounted on rack outside.
PV Solar Panels	1 X 80-watt PV solar panels. Battery storage for day/night operation.
Electronic Controller	Solid-state controller, mounted in weather-tight (NEMA 4X) enclosure with externally fused disconnect. SCADA output options.
Wiring	Corrosion-resistant, industrial cord with molded watertight connectors that are indexed to prevent improper wiring. Low voltage in reservoir, less than 36 VDC.
Rotating Assembly:	Removable assembly with easy access to impeller and impeller shaft.
Flotation System:	Three floats in triangular pattern with total float buoyancy of 600 pounds.
Fluid Intake Assembly:	Intake hose bolted to bottom of structural assembly.
Intake Hose	20 to 60 feet available in 8-inch diameter X 20 feet sections.
Intake Assembly at Bottom of Hose	Inverted bell shaped strainer with 2-inch holes.
Intake Depth Adjustment	No depth adjustment is necessary for fluctuations in water level. Weight and flotation of the 'J' bend of the hose keeps intake above bottom of reservoir at all operating depths. Strainer can be chained up higher if desired.
Minimum Water Depth:	At depths below 2 feet, the impeller will be out of the water and the machine will stop circulating water. No damage to machine if ran dry in shallow water.
Accessories Available:	(1) Supplemental Shore Power Kit, (2) Outputs to SCADA and (3) Chemical Injection Kit
Warranty:	25-year life. Minimal maintenance. Limited 2-year parts and 90-day labor warranty.

Subject to change without notice.

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