

# Making Solar Make Sense

### **Product Description**

The SolVelox<sub>TM</sub> provides a complete solar pump solution, with everything you need to connect solar collectors to your storage tank. The unit integrates two high-efficiency circulator pumps, a brazed plate counterflow heat exchanger and the electronics to drive it all. The SolVelox can be purchased to run either drainback or glycol based systems. This unparalleled flexibility within a single unit creates a pumping, heat exchange and control package that can be used in systems utilizing standard oil, gas, electric or indirect hot water tanks. The features of the SolVelox make it easy and cost effective to include a solar hot water system in any new home or home remodeling project.

#### Features & Benefits

- Officially America's most efficient system in its class - OG-300 Certified by the SRCC - Solar Rating and Certification Corp.
- Includes heat exchanger, dual-sided circulators and state-of-the-art digital control all in one space saving package
- Our highly efficient heat exchange process means the pumps run less, saving you even more
- Mounts directly to the side of a standard hot water tank, reducing tank costs wile increasing tank options
- Brazed plate heat exchanger
  - Stainless steel
  - · Counter-flow design
  - · Engineered particulate filter
  - Descaling ports
  - 50% more surface area
- Decreases installation time
- Reduces labor costs
- · Easy to maintain
- Scalability allows for a variety of residential and commercial applications.





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#### Operation

Cold water from the storage tank enters the SolVelox at port (A1) and exits at port (A2). The high-efficiency bronze circulator has been "flow-matched" to the unique requirements of your solar application. "Flow-matching" insures that the flow rate between the SolVelox's heat exchanger and the storage tank maximizes the heat exchange while minimizing the de-stratification of your storage tank. The heat exchanger is a counterflow style, so hot heat transfer fluid from the solar panels, or drainback tank, enters at port (B1) and exits at port (B2). A high efficiency circulator moves the water around the B (collector) side.





## Performance Data

Collector Side:					
Drainback	Flow Range: 0 – 11 GPM				
	Head Range: 0 – 32 Feet				
Glycol	Flow Range: 0 – 18 GPM				
	Head Range: 0 – 16.5 Feet				
Storage Side:					
Both models	Flow Range: 0 – 14 GPM				
	Head Range: 0 – 8 Feet				
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Minimum Fluid Temperature: 32°F (0°C)					
Maximum Working Proceuro: 195 nei					

Maximum Working Pressure: 125 psi Connection Sizes: 3/4" SWT

Model	Volt	Hz	Ph	Full Load Amps	HP	Ship Wt
SolVelox Glycol	120	60	1	1.28	2 @ 1/25	50 lb.
SolVelox Drainback	120	60	1	1.58	1 @ 1/25 1 @ 1/20	50 lb.

## **Sizing and Piping**

The SolVelox can handle transfer loads in excess of 240,000 BTUs per solar day making it suitable for larger hybrid space heating/domestic hot water systems. Your current method of piping virtually remains the same but the SolVelox has eliminated most of your connections. The drainback SolVelox includes pumps, heat exchanger, controls, sensors, shut off valves, drain port, clean out ports and descaling ports. The glycol system also includes high temperature check valve, additional fill port, pressure gauge, pressure relief valve, and air eliminator. Everything you need for fast, plug n' play connections.