Solar X-Pump Block®

The Taco Solar X-Pump Block is a breakthrough in the design, control and installation of solar thermal systems. The patent pending design combines a variable speed solar differential control, heat source circulator, heat sink circulator and heat exchanger into a single unit. This combination delivers complete isolation between the heat creation source side of the system (collector) and the heat sink side of the system (storage tank, etc.). Just four pipe connections and your installation is complete.







Taco Catalog # 100-74 Supersedes: NEW Effective: 02/09/09 Printed in the USA

Submittal Data Information Solar X-Pump Block®

· Variable Speed Benefits:

• Brazed Plate Heat Exchanger:

Stainless Steel Easily Removable

• User Definable Output, Supports:

Collector Sink / Dump

Storage Tank Supplement

Greatly Decreases Installation Time

Minimizes Collector Stagnation

Displays Energy Collected in kW / Hours (When optional flow sensor is connected)

Bronze Casing for Open or Closed Systems

Booster Pump Function

• Only 4 Pipe Connections Required:

Supports Drain Back Applications
 Freeze Protection for Open Systems

Replaceable Cartridge Design

Supports I or 2 Storage Tank(s)

Maintenance Free, Wet-Rotor Circulators
Pump Operation / Control Override Switch

• Holiday Function:

• All-in-One Heat Exchanger, Dual Circulators

Matches Output of Collector

+20% increased Performance

Provides Complete Isolation

No Short Cycling of Circulator

and Variable Speed Solar Control Package

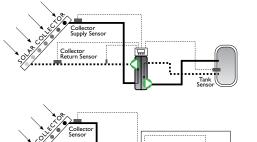
Features

Submittal Data # 101-136 Supersedes: New

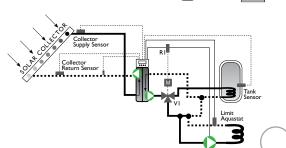
All-in-One Solution

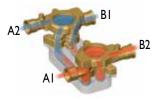
The Solar X-Pump Block (SXPB) is a complete solar thermal solution with an attached brazed plate, counterflow style heat exchanger for system isolation. Integral to the unit is a variable speed heat source circulator, constant speed heat sink circulator, heat exchanger, and the electronics to drive it all. The Solar SXPB

can be set up to maintain a setpoint differential between the solar collector and a primary and optional auxiliary storage tank, can support a booster pump as part of a drainback system, features an intelligent heat dump option, freeze protection, and conveniently displays the energy collected by the collector on its display. With just four pipe connections needed, the SXPB greatly reduces the time and space required for installation.



Effective: 02/09/09





Operation

Hot water from the solar collector enters the X-Pump Block's integral heat exchanger at port (A1) and exists at (A2). The variable speed circulator controls the speed of the water flowing through the A side of the heat exchanger to satisfy the heat transfer requirements between the A side of the heat exchanger and the B side while maintaining the proper delta T. The heat exchanger is a counterflow style, so potable water from storage tank enters at port (B1) and exits at port (B2). A constant speed circulator moves the potable water for the storage tank around the B side of the heat exchanger.

Large LCD Display 3 Strap-on Sensors included Performance Data

Flow Range: 0 – 7.5 GPM Head Range: 0 – 15.5 Feet

Maximum Storage

Tank Temperature: 185°F (85°C)

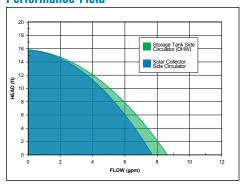
Maximum Working Pressure: 125 psi

Connection Sizes: 3/4" NPT



FOR INDOOR USE ONLY

Performance Field



Electrical & Weight Data

Model	Volts	Hz	Ph	Amps	RPM	HP	Ship Wt.	
SXPB-I	120	60	-	2	3250	2 @ 1/25	lbs.	Kg
Motor Type	Permanent Split Capacitor Impedance Protected						26.5	12.0



