



PUMPSTATION AND CONTROL FOR CLOSED LOOP GLYCOL SYSTEMS



Complete Package Includes Pump Station, Differential Controller and Two Probe Sensors

Combination Ball Valve & Check Valve With 45 Degree Bypass

3/4" Compression Fittings to Collector

145 PSI Pressure Relief Valve

Expansion Tank Connection 3/4" MBSP

0-145 PSI Pressure Gage

3/4" Purge Valve

3 Speed Cast Iron Pump

Air Separator & Manual Air Vent

3/4" Fill Valve

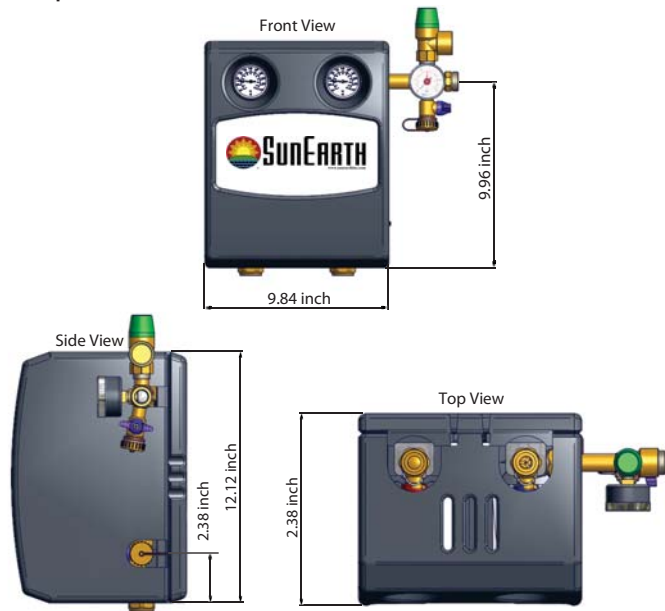
Balancing Valve

0.5 - 4 GPM Flow Meter

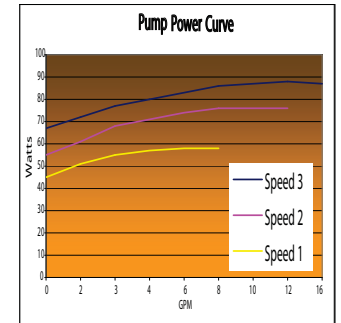
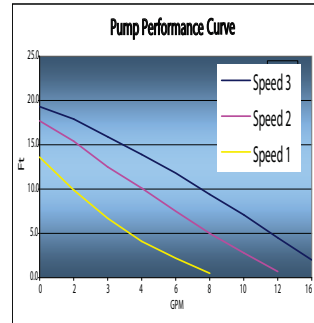
3/4" Compression Fittings to Tank

SUN EARTH INC. SOLARSTATION SPECIFICATIONS

Component Dimensions



TECHNICAL DATA			
Flow Range	0 - 17 gpm		
Head Range	0 - 19 ft		
Pump Motor	2 pole, single phase		
Maximum Liquid Pressure	145 psi		
Minimum Inlet Pressure	15.6 psi (at 230° F Fluid Temp)		
Maximum Fluid Temperature	230° F (at 104° F Ambient)		
Supply Voltage	115 V		
Pump Power	1/25 H.P.		
Maximum Inrush Current (LRA)			
Speed Setting	Description	Current	Power
Position 3	High Speed	0.75 A	87 W
Position 2	Medium	0.66 A	80 W
Position 1	Low Speed	0.55 A	60 W



Features and Components

Features

The SolarStation is a pre-engineered assembly of quality components in a neat compact enclosure with an advanced differential controller. A simple, labor saving, attractive solution for closed loop glycol solar systems.

Cast iron three speed pump (115V-60Hz). Adjustable three speed pump provides flow rates across the range of SRCC OG-300 certified Solaray closed loop glycol systems. Includes line cord for connection to differential controller.

SunEarth differential controller, supplied with every SolarStation. Easy to read backlit LCD displays system operating temperatures at up to three locations. Includes line cord from controller to 120V outlet, providing plug and play installation and operation.

Compact insulated enclosure made of expanded polypropylene foam, designed for professional finished appearance and superior durability. Custom molded enclosure allows easy access to all piping connections. Removable cover is form fitted around temperature gauges for convenient system performance monitoring.

Combination brass ball valves and check valves with integrated thermometers, (32°F - 248°F scale). Valves are color coded - blue handle for supply to

collectors, red handle for return from collectors. Spring check valve in supply and return ball valves. Check valves can be bypassed by turning the valve handle to the 45° position.

Balancing Valve and Flow Meter (0.5 - 4 gpm). Visual reading of system flow with balancing valve for quick and easy optimization of system flow rate.

Air separator with air vent. Air separator tube removes air from flow during pump operation. Air is separated from main flow during system activation and maintenance, and can be expelled by opening air vent. Removal of air from flow reduces potential for air locks in system.

Pressure relief valve with pressure gage and expansion tank connection. Pressure relief valve set to discharge at 145 psi. Pressure gage scale is 0 - 145 psi (0 - 10 bar). Expansion tank connection is 3/4" male BSP.

Fill and drain valves with 3/4" hose thread. Located upstream and downstream of the pump for filling, purging and draining the glycol loop.

Compression fittings for 3/4" Type L copper. Top two compression fittings to connect to collectors, bottom two to connect to heat exchanger in tank.

For additional information Please refer to the SunStation Installation Manual

Accessories (Sold Separately)

The following accessory components can be purchased from SunEarth in order to complete the control system and glycol closed loop of your Solaray solar system.

PS-ETHA **Expansion Tank Hose Adaptor**, 3/4" female BSP x 1/2" male NPT Required to convert BSP expansion tank connection to standard NPT fitting, for indirect connection between SunStation and expansion tank.

PS-ETCK **Expansion Tank Connection Kit**, 3/4" female BSP Connection with 18" SS Hose Single integrated component for direct connection from SunStation to expansion tank. Includes: 18" of 3/4" flexible stainless steel hose; expansion tank mounting bracket; expansion tank service check valve and threaded connections to SunStation and solar expansion tank.

SET-18 **Solar Expansion Tank, 4.8 Gallon** Designed for solar closed loop glycol systems. Rated to 150 psi maximum pressure and 240°F maximum temperature. Larger sizes also available.

GLYCOL-XX **Propylene Glycol, DOWFROST HD** High temperature heat transfer fluid. Sold in 1 gallon jugs; 4 gallon boxes; or 55 gallon drums.

SE18/2TC **Sensor Wire**, 18 Gage Two strand sensor wire, UV resistant insulation. Sold in 1,000 ft rolls.

Due to SunEarth's policy of continuous product improvement, specifications are subject to change without notice.

MANUFACTURED BY:



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