

vears

The Original SERVICE & LEADERSHIP Innovator in Solar Pool Heating

Patented Sun Tracking Tube and Curved Web Design Maximizes heat gain throughout the day.

Multi-Plate Construction

Allows for wind relief during extreme weather conditions as well as for thermal expansion and contraction.

Stainless Steel Mounting Hardware Greater strength and rust free with fewer mounting points for easy installation.

All Welded Construction For maximum strength and durability.

Direct Flow Design

Compatible with today's high flow, high efficiency pool filtration systems - available in low profile 1-1/2" manifold for residential pools or a 2" heavy duty commercial design.



Collector Cross Section showing heat trap design for better all day performance, even on windy days.

TECHNICAL DATA

DIMENSIONS

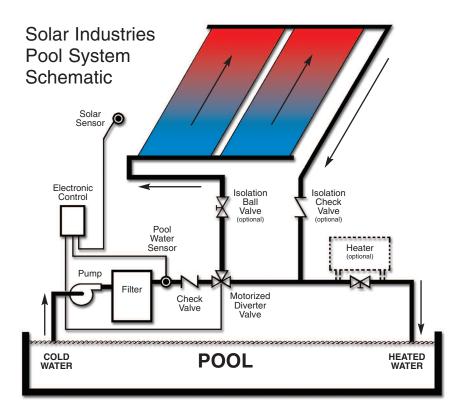
	Model 1500 Series			Mode	Model 2000 Series			
Model Number	<u>10001-5</u>	<u>10001-2</u>	<u>10001-1</u>	<u>10204-12</u>	<u>10204-10</u>	<u>10204-8</u>		
Nominal Size ft.	4x12	4x10	4x8	4x12	4x10	4x8		
Overall Collector Length	-in 144.0	120.0	96.0	144.0	120.0	96.0		
Collector Width-in	47.0	47.0	47.0	47.0	47.0	47.0		
Manifold Length-in	50.5	50.5	50.5	50.5	50.5	50.5		
Manifold O.Din	1.9	1.9	1.9	2.4	2.4	2.4		
Manifold I.Din	1.5	1.5	1.5	2.0	2.0	2.0		
Gross Collector Area-ft2	47.3	39.3	31.4	47.3	39.3	31.4		
Net Collector Area-ft2	47.3	39.3	31.4	47.3	39.3	31.4		
WEIGHTS								
Dry-lbs	21.3	17.1	14.3	22.3	18.1	15.3		
Wet-Ibs	48.0	41.6	35.1	54.0	47.6	41.1		
Wet lbs-ft2	1.0	1.0	1.1	1.1	1.2	1.3		
Fluid Capacity-gal	3.2	2.9	2.5	3.8	3.5	3.1		

FLUID FLOW RATES

	Mode	Model 1500 Series			Model 2000 Series		
Model Number	<u>10001-5</u>	<u>10001-2</u>	<u>10001-1</u>	<u>10204-12</u>	<u>10204-10</u>	<u>10204-8</u>	
Maximum-GPM	10.0	10.0	10.00	10.0	10.0	10.0	
Minimum-GPM	3.0	2.5	2.5	3.0	2.5	2.5	
Recommended-GPN	1 5.0	4.0	3.25	5.0	4.0	3.25	
Max. Collector with S	Single						
Feed @ Recommend	ded						
Flow Rate	10	12	12	12	14	14	

PRESSURES

Pressure Drop:	0.14 ft head (0.06PSI) pressure loss @ recommended flow rate 0.09 ft head (0.04PSI) pressure loss @ minimum flow rate
Max. Fluid Pressure:	Greater than 85 PSI @ 80°F
Recommended Max Operating Pressure:	35 PSI @ 140°F



THERMAL PERFORMANCE RATINGS

Thermal Performance Equation -n = 85.8 - 3.42 Incident Angle Modifier-Kqr = 1.0 - 0.03 (Rated in accordance with ASHRAE standard 96-80)

Florida Solar Energy Center Certification 4x12 - 47,700 (BTU's per std day) 4x10 - 39,800 (BTU's per std day) 4x8 - 31,800 (BTU's per std day)

Pressure Drop in Head/Feet with Multiple Solar Industries Collectors						
8 Collectors - 1-1/2 s - 1-1	0.6	0.9	1.6	/	/	/
10 Collectors Solution 12 Collectors OOSI 12 Collectors OV	/	1.3	1.8	3.1	/	/
12 Collectors	/	/	2.4	3.3	4.5	/
8 Collectors	0.3	0.5	1.0	/	/	/
10 Collectors	/	0.6	1.1	1.6	/	/
12 Collectors	/	/	1.3	1.8	2.5	/
ĭ 14 Collectors	/	/	/	1.8	2.6	3.0
	25 30 40 50 60 70 FLOW RATE (GPM)					





GUIDE SPECIFICATIONS

Contractor to supply and install _collectors, nominal size (4x12, 4x10, 4x8) with overall frontal area of (47.3, 39.3, 31.4) square feet each. Collectors shall be fabricated from a propylene copolymer with stabilizer combination providing long term resistance to heat and light. The weight of collector when filled with water shall be no more than 1.3 pounds per square foot of frontal area. The collectors shall be capable of withstanding an internal static pressure of 85 psi at operating temperature and shall be resistant to corrosion, freezing, and internal scale accumulation.

Collectors shall be capable of thermal performances of at least 85% efficiency when inlet fluid temperature equals ambient temperature and be capable of collecting solar energy when the inlet fluid temperature exceeds the ambient temperature by 60°F with 250 BTU per square foot per hour.

Pressure head loss of a single panel must not exceed 0.14 feet water at recommended flow rate.

Collector shall have multi-plate design to allow for moisture ventilation of the mounting surface and wind relief during adverse weather conditions.

Collector mounting shall consist of 18-8 chromium-nickel stainless steel mounting hardware with a minimum of two continuous transverse straps having black polypropylene coating. Transverse straps shall be fastened with 18-8 chromiumnickel stainless steel clamps and brackets.

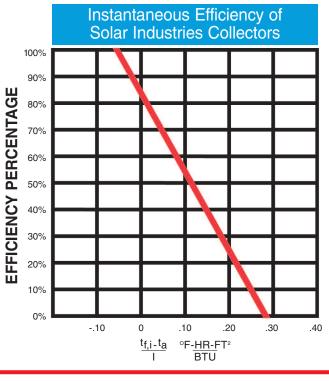
Water connections shall be made with hose sections made from EPDM (ethylenepropylene-diene-terpolymer) 70 durometer minimum hardness. Hose clamps shall be all stainless worm gear type with 18-8 chromium-nickel stainless band.

The collectors shall meet or exceed the minimum standards established by the Florida Solar Energy Center, other applicable nationally recognized standards, and shall be manufactured in the U.S.A.

CERTIFICATIONS, APPROVALS & TESTING

Solar Industries Solar Pool Heating Systems meet or exceed the criteria for approvals from the following accredited independent laloratories and agencies:

- International Association of Florida Solar Energy Center Plumbing and Mechanical Dade County Officials (IAPMO)
 - City of Los Angeles
- National Sanitation Foundation • DOE- Bright Way Program



www.solarindustries.com

Available through: