

Solaram™ Surface Pump



8000 Series

This powerful pump pushes extremely high vertical lift through long pipelines, from shallow water sources. It provides as much as 5400 Gallons per day (20,000 ltrs.) pushing as high as 960 Feet (292m) using solar-electric power.

Solaram is . . .

Ultra-Efficient: Uses less power than ANY other pump in its range. Starts pumping in low light conditions

Economical: Reduces power system cost by 25-75% compared to centrifugal or AC pumps

Rugged and Reliable: Proven design with a 20-year life expectancy

Simple to Maintain

Dirt Tolerant

Dry Run Tolerant

Easy to Install

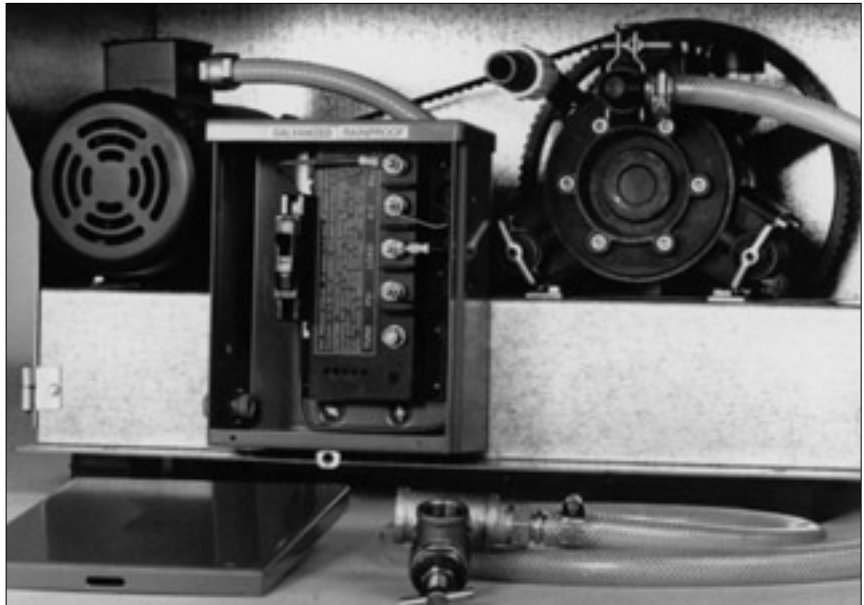


Photo shows Solaram pump with Linear Current Booster (accessory) mounted in junction box on pump base

Solaram Surface Pump draws water from a shallow well, spring, pond, river or tank. It can push water uphill and over long distances for home, village, irrigation or livestock uses. It can use power directly from a photovoltaic array, to fill a storage tank.

Other Dankoff Solar Pumps™

for lift and pressurizing of surface water:

Solar Slowpump™

Flowlight® Booster Pump

SolarForce™ Piston Pump

SunCentric™

for deep wells:

SunRise® Submersible

TSP 1000™ Submersible

"We have four Solaram pumps working in Panama, one of them for six years. Another in the Sierra Tarahumara of Mexico is in its eighth year. Enough time has passed and water pumped for us to enthusiastically endorse the product."

Ed Crocker, Technical Director
Waterlines, Santa Fe, NM

Dankoff Solar Products, Inc. Solar Pump Manufacturing Since 1983



8000 Series

Solaram™ Surface Pump Performance Chart

Model Numbers: First 2 digits _____
 Second 2 digits _____

TOTAL LIFT		__ __ 21			__ __ 22			__ __ 23			__ __ 41			__ __ 42			__ __ 43			Model #
Feet	Meters	GPM	LPM	Watts	GPM	LPM	Watts	GPM	LPM	Watts	GPM	LPM	Watts	GPM	LPM	Watts	GPM	LPM	Watts	Volts
0-80	24	3.0	11.4	170	3.7	14.0	207	4.6	17.4	285	6.2	23.5	258	7.5	28.4	339	9.4	35.6	465	← 81__ 24V
120	37	2.9	11.0	197	3.7	14.0	238	4.5	17.1	319	6.0	22.7	305	7.3	27.7	396	9.1	34.5	539	
160	49	2.9	11.0	225	3.6	13.6	268	4.5	17.1	352	5.8	22.0	354	7.2	27.3	453	8.9	33.7	619	
200	61	2.9	11.0	247	3.6	13.6	296	4.5	17.1	388	5.7	21.6	400	7.1	26.9	513	8.9	33.7	693	
240	73	2.8	10.6	265	3.6	13.6	327	4.5	17.1	427	5.6	21.2	453	7.0	26.5	572	8.6	32.6	724	← 82__ 24V
280	85	2.8	10.6	286	3.6	13.6	356	4.4	16.7	466	5.5	20.8	499	6.9	26.2	628	8.4	31.8	801	
320	98	2.8	10.6	315	3.5	13.3	388	4.4	16.7	496	5.4	20.5	548	6.8	25.8	686	8.3	31.5	869	
360	110	2.8	10.6	342	3.5	13.3	416	4.4	16.7	536	5.4	20.5	592	6.6	25.0	733	8.2	31.1	927	
400	122	2.7	10.2	363	3.4	12.9	450	4.4	16.7	572	5.3	20.1	649	6.5	24.6	782	8.7	33.0	1122	← 83__ 180V
480	146	2.7	10.2	416	3.4	12.9	505	4.3	16.3	649	5.3	20.1	717	6.5	24.6	900	8.5	32.2	1265	
560	171	2.7	10.2	456	3.3	12.5	570	4.3	16.3	693	5.2	19.7	800	6.5	24.6	1045	8.4	31.8	1397	
640	195	2.7	10.2	502	3.3	12.5	623	4.2	15.9	774	5.1	19.3	893	6.5	24.6	1116	8.2	31.1	1540	
720	220	2.6	9.9	551	3.2	12.1	690	4.1	15.5	856	5.1	19.3	1031	6.4	24.3	1287	8.1	30.7	1683	← 84__ 180V
800	244	2.6	9.9	589	3.2	12.1	715	4.1	15.5	931	5.1	19.3	1114	6.4	24.3	1408	8.0	30.3	1815	
880	268	2.6	9.9	647	3.2	12.1	774	4.0	15.2	1082	5.1	19.3	1206	6.3	23.9	1529	8.0	30.3	1958	
960	293	2.6	9.9	705	3.1	11.7	838	4.0	15.2	1190	5.0	18.9	1289	6.1	23.1	1650	8.0	30.3	2145	

Performance may vary ± 10 %

Reading the Chart

Use the chart to determine a 4-digit model number. Make note of the voltage indicated.

- Total Lift = Vertical Distance from surface of the water source to the pipe outlet or top of storage tank, plus pipeline friction loss
- GPM = U.S. Gallons per Minute
- LPM = Liters per Minute

Suction Capacity

25 vertical feet (7.6m) at sea level. Subtract 1 foot for every 1000 ft. elevation (1m for every 1000m). Suction capacity may be further limited by intake pipe friction or gasses in water. For best reliability, place the pump as close to the water source as possible.

Construction

- Multiple diaphragm industrial design
- Cast aluminum pump body
- Neoprene diaphragms backed by pistons
- Non-toxic oil-filled crankcase
- Massive ball bearings
- Permanent Magnet DC Motor
- Gear (timing) belt drive
- Pressure relief valve include
- Flexible intake/outlet hoses included

Power System Requirements

- Solar (PV) Array: Chart indicates power (watts) required at the pump. For solar array-direct (non-battery) systems, the rated power of the **PV array must exceed the pump watts by 25% or more.**
- 180V Models: Use a multiple of 10 modules in series.
- Linear Current Booster (pump controller) is required to facilitate starting and to prevent stalling in low-light conditions.
 - 81__ and 82__ models use LCB20M-50V.
 - 83__, 84__ and 85__ models use LCB6HV.
- Solar Tracker: Optional, to increase daily yield (typically 30%).

Maintenance

Preventive maintenance must be done on an annual basis for pumps that are used all-day, year-round in a dry climate (1000 peak running hours). With less intensive duty, maintenance interval may be reduced to every 2 or 3 years. This consists of replacing the diaphragms and the oil. Detailed instructions are included. Motor brushes typically last for 10 years of intensive duty.

Accessories

- 1 1/4" Foot Valve FV-8000 (if pump is placed higher than water source)
- Float Switch FS-FT/RC for remote shut-off of the pump when tank fills
- Diaphragm and Oil Kit: Supplies for regular preventive maintenance
- Long-Term Parts Kit: Three Diaphragm and Oil Kits, plus a gearbelt and a motor brush set

Fittings

- Intake: 1-1/4" male pipe thread
- Outlet: 1 inch female pipe thread

Dimensions

- 28 X 16 X 16.5 in. High (71 X 41 X 42 cm)
- Weight, max. 150 lbs (68 kg) (Shipped in 2 parcels)

Warranty

- 1 year against defects in materials and workmanship

Available From:

