

Dankoff Solar Slowpump

Dankoff Solar Slowpump was the world's first commercially available low power solar pump. It was developed by Windy Dankoff in 1983, in response to those who said "that's impossible". Thousands of Slowpumps have installed worldwide by farmers, homeowners, missionaries, health workers and government agencies. Some of our oldest Slowpumps are still in daily service.

Slowpump is not submersible, but can draw water from shallow wells, springs, cisterns, tanks, ponds, rivers and streams, and push it as high as 137m vertically and through kilometres of pipeline. Slow pumping minimizes the size and cost of the solar array, wire and piping.

Slowpump is less expensive than submersible DC pumps, and made in much wider range of sizes. Wearing parts typically last 5 to 10 years. Overall life expectancy is 15 to 20 years.

Construction and Features

- Rotary vane mechanism (positive displacement) made of forged brass, carbon-graphite and stainless steel
- Approved for drinking water
- Handles sea water, dissolved minerals
- Survives most freezes
- Permanent magnet, DC motor
- Can pump oil, syrups

Suction Capacity

6m at sea level - subtract 1m for every 1 000m).
Pump should be placed as low as possible.

Filtration Requirement

This pump cannot tolerate dirt. Water must be filtered clear. If water is very dirty, improve the source or consider a different pump.



PV-Direct (non-battery) Requirements

The rated power of the PV array must exceed watts by 20% or more.

A linear current booster (controller) is required to start and run in low light.

Solar Tracker (optional) will increase daily yield (40-50% in summer)

Fittings

1300/1400 Series: 1/2" female

2500/2600 Series: 3/4" male

Dimensions (1300/2500 Series)

14 x 39 cm

Weight 7kg

Warranty

1 year against defects in material and workmanship



Technical data

Total Lift	MODELS													
	1322		1310		1308		1304		1303		2505		2507	
Meters	LPM	Watts	LPM	Watts	LPM	Watts	LPM	Watts	LPM	Watts	LPM	Watts	LPM	Watts
6	1.9	27	3.4	29	4.7	30	6.6	37	9.4	48	12.3	55	15.1	57
12	1.9	32	3.4	41	4.7	48	6.6	53	9.4	60	12.2	69	14.9	78
18	1.9	36	3.3	46	4.5	54	6.3	64	9.0	78	11.9	90	14.7	102
24	1.8	40	3.3	51	4.5	60	6.3	73	8.7	93	11.7	106	14.7	120
30	1.8	45	3.3	57	4.5	66	6.3	82	8.7	105	11.6	124	14.5	144
36	1.8	50	3.3	61	4.5	70	6.1	90	8.5	121	11.4	142	14.3	165
42	1.7	56	3.3	66	4.5	75	6.0	100	8.3	138	11.0	166	13.8	195
48	1.7	62	3.2	74	4.5	84	6.0	112	8.3	153	10.7	187		
54	1.7	66	3.2	82	4.4	93	5.9	122	8.1	165	10.4	205		
60	1.7	74	3.2	89	4.3	101	5.9	133	8.1	180				
72	1.6	90	3.1	105	4.3	117	5.8	152	8.1	204				
84	1.5	102	3.0	120	4.2	135	5.7	175						
96	1.5	120	2.9	138	4.1	153	5.6	196						
108	1.5	134	2.8	154	3.9	171								
120	1.5	150	2.7	176	3.7	198								
132	1.4	168	2.6	202										

Total Lift	MODELS									
	1408		1404		1403		2605		2607	
Meters	LPM	Watts	LPM	Watts	LPM	Watts	LPM	Watts	LPM	Watts
48									16.2	283
54							12.6	280	16.0	305
60							12.6	296	15.8	338
72					9.6	266	12.4	331	15.3	396
84					9.4	302	12.3	373	15.1	444
96			6.2	255	9.4	338	12.1	410		
108			6.1	280	9.4	374	11.9	450		
120			6.2	312	9.4	406				
132	4.1	269	6.2	342	9.4	451				

- Performance at 15 or 30 V (PV-direct voltage)
- For battery, subtract 20% from Flow & Watts
- 24 V pump may be run at 12 volts to yield ½ flow at ½ watts
- Actual performance may vary 10% from specifications