



SlowPump Solar Direct Performance Chart



Total Lift in Feet	Total Lift in Meters
0-20	0-6
40	12
60	18
80	24
100	30
120	36
140	42
160	48
180	54
200	60
240	72
280	84
320	96
360	108
400	120
440	132
480	146
520	158
560	170

1322		
GPM	LPM	PV Watts
0.51	1.93	40
0.51	1.93	45
0.51	1.93	45
0.49	1.85	50
0.49	1.85	65
0.48	1.82	65
0.47	1.78	70
0.47	1.78	80
0.47	1.78	85
0.45	1.70	100
0.44	1.67	120
0.41	1.55	130
0.41	1.55	150
0.41	1.55	170
0.40	1.51	190
0.39	1.48	210
0.25	0.95	260
0.25	0.95	310
0.20	0.76	340

1308		
GPM	LPM	PV Watts
1.25	4.73	40
1.25	4.73	65
1.20	4.54	70
1.20	4.54	80
1.20	4.54	85
1.20	4.54	90
1.20	4.54	95
1.20	4.54	110
1.18	4.47	120
1.16	4.39	130
1.14	4.31	150
1.12	4.24	170
1.10	4.16	195
1.05	3.97	220
1.00	3.79	250

1303		
GPM	LPM	PV Watts
2.50	9.46	65
2.50	9.46	80
2.44	9.24	90
2.36	8.93	110
2.33	8.82	130
2.33	8.82	140
2.27	8.59	160
2.21	8.36	180
2.11	7.99	190
2.03	7.68	220
1.96	7.42	235

2507		
GPM	LPM	PV Watts
4.00	15.14	80
3.95	14.95	100
3.90	14.76	130
3.90	14.76	150
3.85	14.57	180
3.80	14.38	210
3.65	13.82	245

Motor
1/5 Horsepower

PV-Direct Voltage
12VDC, 24VDC, 48VDC

Inverted Voltage (AC)
115VAC

Total Lift in Feet	Total Lift in Meters
0-20	0-6
40	12
60	18
80	24
100	30
120	36
140	42
160	48
180	54
200	60
240	72
280	84
320	96
360	108
400	120
440	132
480	146
520	158
560	170



1408		
GPM	LPM	PV Watts
1.92	7.27	110
1.90	7.19	120
1.88	7.12	130
1.88	7.12	140
1.85	7.00	150
1.83	6.93	160
1.82	6.89	180
1.82	6.89	185
1.81	6.85	200
1.81	6.85	210
1.77	6.70	235
1.79	6.78	260
1.72	6.51	290
1.75	6.62	310
1.69	6.40	330
1.69	6.40	355
1.70	6.43	380
1.61	6.09	400
1.67	6.32	435

1403		
GPM	LPM	PV Watts
3.64	13.78	130
3.60	13.63	150
3.61	13.66	170
3.50	13.25	200
3.50	13.25	220
3.43	12.98	235
3.43	12.98	255
3.43	12.98	280
3.40	12.87	300
3.35	12.68	330
3.38	12.79	360
3.30	12.49	405
3.30	12.49	450
3.20	12.11	520
3.20	12.11	545
3.10	11.73	610

2607		
GPM	LPM	PV Watts
6.20	23.47	185
6.10	23.09	240
6.09	23.05	250
6.04	22.86	290
6.04	22.86	330
6.00	22.71	355
6.00	22.71	390
5.93	22.45	430
5.83	22.07	470
5.80	21.95	500
5.75	21.76	585
5.59	21.16	675

Motor
1/2 Horsepower

PV-Direct Voltage
24VDC, 48VDC

Inverted Voltage (AC)
115VAC

How to Use This Chart

- Step 1:** Identify the Total Lift / Total Dynamic Head ("TDH") for your application – Remember consideration for pipe friction loss and other aspects of Additional lift
- Step 2:** Choose SlowPump model based on desired output (GPM / LPM) and/or required solar power (PV Watts) at the TDH for your application
- Step 3:** Select the desired pump Voltage from the available options for that model
- Step 4:** Contact a Dankoff Solar Pumps authorized Dealer for precise system design and pricing

Key Notes:

- 1. Actual Performance may vary +/- 10% from specifications. Performance Data based on Target PV-Direct voltage of 15, 30, or 60 (the standard Vmp of 12V, 24V, and 48V configurations at STC).
- 2. PV Watts column is the recommended power after taking the Watts required at the pump and upsizing by 25% for de-ration, then rounding that number up to the nearest and most appropriate increment of 5. PV Watts column takes into consideration available modules in today's PV marketplace.
- 3. For battery-based applications, reference our *SlowPump Battery-Based Performance Chart*

Suction Capacity

- 20 Vertical feet (6 meters) at sea level – subtract 1ft. for every 1000ft. of altitude (1m for every 1000m). Pump should be installed as close to water source as possible to reduce suction lift.

Filtration Requirement

- This pump CANNOT tolerate dirt. Water MUST be filtered clear. Failure to use a Dankoff Solar Pumps filter unit, or use of a filtration unit other than what is sold by Dankoff Solar Pumps, **will void the warranty on the pump**. If water is very dirty, improve the source or consider using our dirt-tolerant pump models (Solar Force, SunCentric, and Solaram).

Solar-Direct Applications (“PV-Direct” or non-battery)

- Rated power of the PV array must meet Watts listed in **PV Watts** column in chart above
- **DSP 200 Controller**: Will increase system performance approximately 30% over the course of one year. Required to start and run in low light conditions.
 - **11069** – Replaces previous controllers (LCB 8 and LCB 16)
 - PV Input: 12VDC, 24VDC, 36VDC
 - Controller Output: 12VDC, 24VDC
 - Mounted in NEMA 3R Enclosure
 - 2-Year Warranty on workmanship. 1-Year Warranty on materials.

Accessories

- Dry Run Switch: Prevents pump damage if water source runs dry
 - **DRS1300** – **NEW design in 2013!** For all 1300 & 1400 model SlowPumps
 - **DRS2500** – **NEW design in 2013!** For all 2500 & 2600 model SlowPumps
- Foot Valve: Stops coarse debris. Lead-Free Bronze with Stainless Steel Screen
 - **11044** – 1 ¼ inch
 - **11045** – 2 inch
- Inline 10 inch Filter Kit
 - **11033** – Clear Canister Housing with 10 inch, 10 Micron spun fiber filter with mounting bracket and filter wrench *Soak filters for a minimum of 24 hours before installing, to remove air trapped within the filter. Reference *SlowPump Installation and Service Manual* for detailed information.
- 30 inch Intake Filter/Foot Valve Assembly
 - **11035** – Replaces Foot Valve and Inline 10 inch Filter with a single unit. May be lowered into a shallow well or stream. (1) Spare filter included
- Replacement Filters
 - 10 inch – Sold in 2-packs (**11034**) and cases of 40 total filters (**11042**)
 - 30 inch – Sold in 3-packs (**11036**) and cases of 30 total filters (**11047**)
- Check Valve: Prevents backflow. Lead-Free Bronze
 - **11017** – ¾ inch
 - **11025** – 1 inch

*Replacements parts are available for all components (Pump Heads, Motors, Motor Brushes....etc).

Mechanical Characteristics

- | | |
|---|---|
| <ul style="list-style-type: none">• 1300 Models<ul style="list-style-type: none">○ Dimensions: 5 ¾ x 17 3/8 inch (14.61 x 44.14 cm)○ Fittings: ½ inch Female○ Weight: 12 lbs (5.45 kg) | <ul style="list-style-type: none">• 2500 Models<ul style="list-style-type: none">○ Dimensions: 5 ¾ x 17 3/8 inch (14.61 x 44.14 cm)○ Fittings: ¾ inch Male○ Weight: 13 lbs (5.90 kg) |
| <ul style="list-style-type: none">• 1400 Models<ul style="list-style-type: none">○ Dimensions: 6 ½ x 18 ¾ inch (16.51 x 47.63 cm)○ Fittings: ½ inch Female○ Weight: 25 lbs (11.34 kg) | <ul style="list-style-type: none">• 2600 Models<ul style="list-style-type: none">○ Dimensions: 6 ½ x 18 ¾ inch (16.51 x 47.63 cm)○ Fittings: ¾ inch Male○ Weight: 29lbs (13.16 kg) |

*Weights and Dimensions for 115VAC model pumps not listed, reference *SlowPump Installation Manual*

Warranty: 1 Year against defects in materials and workmanship