



The Dankoff Flowlight Booster Pump provides city water pressure anywhere. It has been a standard in home renewable energy systems since 1986 and is economical for domestic water supply, drip irrigation, and water purification.

A booster pump is far more cost effective than an elevated tank, providing pressure equivalent to over 100 feet (30 m) of elevation.

A Flowlight Booster Pump uses one third to one half the energy of a conventional AC pump and eliminates high starting surges.

It is more powerful, quieter, and much more durable than plastic RV/Marine pumps. Wearable parts are replaceable, and typically last 5 to 10 years. Overall life expectancy is 15 to 20 years.

Our complete instruction manual and easy installation kit make this pump simple for anyone to install and service, with no previous experience.



#### Choice of Voltage

- 12, 24 or 48 VDC
- 115 VAC (low surge motor reduces inverter and wiring)

#### Construction

- Rotary vane pump mechanism (pulsation-free)
- Solid forged brass pump body with carbon-graphite and stainless steel working parts
- NSF® approved for drinking water
- Handles sea water and dissolved minerals
- Survives most freezes
- Permanent magnet, ball bearing DC motor, thermally protected
- Clear flexible hoses and pressure relief valve included

#### Suction Capacity

- Low speed model 20 vertical feet (6 m) at sea level
- Standard model 10 Feet (3 m) at sea level
- Subtract 1 ft. for every 1,000 ft. altitude (1 m for every 1,000 m) for both versions.  
*Note: Suction capacity may be further limited by intake pipe friction*
- Excessive suction causes cavitation (vapor bubbles) creating noise and excessive wear. Intake piping should be 1" or larger
- Pump should be mounted as close to the water source as possible.

#### Choice of Capacity

- Standard Model for highest flow
- Low speed model (DC only) has higher pressure capacity, and is best when:
  - Suction lift is greater than 10 feet
  - Intake pipe is smaller than 1" size
  - Extra-quiet operation is desirable

#### Additional Needs

- Battery-based power system (12 or 24 V) or AC (minimum 300 W inverter)
- Pressure tank, captive air type, minimum size: 40 gallon (150 l); larger is better, to reduce cycling and increase reserve capacity; available locally
- Foot valve (if pump is placed higher than water source)

# Solar Surface Pump Technical Data

## Dankoff Solar Flowlight Booster Pump



### Filtration Requirement

This pump cannot tolerate dirt; water must be filtered clear

### Accessories

- Intake strainer/foot valve with fine monel metal screen, stops coarse debris
- Inline filter (10") uses standard drinking water cartridges
- Intake filter/foot valve (30") replaces Intake Strainer and Inline Filter with a single unit, best for lowering into a shallow well
- Spare filter cartridges (10 micron spun fiber)
- Easy Installation Kit includes: pressure switch, pressure gauge, check, drain and shut-off valves and tank tee (manifold)
- Dry run switch prevents battery drain and pump damage if water source runs dry

### Installation

- Pump may be mounted horizontally or vertically.
- Pump must not be submerged.
- It may be placed inside a 6" (120 cm) or larger well casing, suspended by rope.

### Dimensions

- Length 16.5" (42 cm)
- Weight 15 lbs (7 kg)
- Flexible hose ends have 3/4" or 1" male pipe thread

### Warranty

1 year against defects in materials and workmanship

| V = Voltage · Specify 12, 24, 48, 115 AC |                       |             |            |           |                                     |             |            |           |
|------------------------------------------|-----------------------|-------------|------------|-----------|-------------------------------------|-------------|------------|-----------|
|                                          | Standard Model 2920-V |             |            |           | Low Speed Model 2910-V <sup>1</sup> |             |            |           |
| Pressure PSI (kg/sq cm)                  | 30 (2.1)              | 40 (2.8)    | 50 (3.5)   | 65 (4.6)  | 30 (2.1)                            | 40 (2.8)    | 50 (3.5)   | 65 (4.6)  |
| Flow Rate GPM (lpm)                      | 4.5 (17)              | 4.3 (17)    | 4.3 (16)   | 4.1 (15)  | 3.4 (13)                            | 3.3 (12)    | 3.1 (12)   | 2.7 (10)  |
| Watt-Hrs.<br>Per Gallon (per ltr) Pumped | 0.6 (0.16)            | 0.67 (0.18) | 0.75 (0.2) | 1.1 (0.3) | 0.6 (0.16)                          | 0.67 (0.18) | 0.75 (0.2) | 1.1 (0.3) |
| Current Draw:                            |                       |             |            |           |                                     |             |            |           |
| AMPS 12V                                 | 13                    | 15          | 16         | 22        | 10                                  | 11          | 12         | 15        |
| AMPS 24V                                 | 6.5                   | 7.5         | 8          | 11        | 5                                   | 5.5         | 6          | 7.5       |
| AMPS 115V AC                             | 1.7                   | 2           | 2.1        | 2.9       | AC data not yet available           |             |            |           |

<sup>1</sup> Higher Suction Lift Capacity - See Text

Dependable water solutions since 1983

Subject to technical changes

**DANKOFF SOLAR**

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