

Roto Pump

The Roto Pump is a rotary vane, positive displacement pump which delivers up to 200 gallons per hour. Each pump is quiet in operation and requires no lubrication or maintenance during its life span. All models are self priming and require filtration due to the carbon graphite vanes.



Roto Pumps are Serviceable

Both the pump and the motor can be rebuilt at our manufacturing facility by our technicians.

Dependability

Roto Pumps running on Solar direct system have been in operation for up to seven years before any service is needed. This relates to low maintenance cost and peace of mind that your cattle will always have water.

Well Applications

Roto Pumps are NOT submersible and must be located within 20 feet of water level. Optionally, with special fittings and machining the Roto Pump can be made to fit a 5" casing. This unit may also be used in deep wells where there is no danger of submersion.

Filtration

This pump cannot tolerate sand or abrasive silt therefore we have developed a double filter system. a pre-filter which is made of a fibrous material catches the fine sand and silt (filter is made so that it may be cleaned and reused) and a 150 mesh screen that filters the rest of the debris.

Warranty

Two Year System Warranty

Transfer Systems



The ability to transfer water is becoming a very important factor in today's beef production. High cost of drilling wells and digging dugouts is making the option to transfer water from existing waters sources more attractive. Water transfer systems are available in different models to accommodate a wide variety of different situations. The Roto Pump has the capability to pump water from virtually any source, lift over 100 feet, transfer over 1 mile and deliver 3000 gallons per day. The picture to the left is the pressure system needed to turn the system off and on as required. The bladder tank prevents the pump from cutting in and out because of wave action on the trough which in return makes pump last longer.

1985 the Kelln's Solar

Since

Roto Pump has set the standard for efficiency and reliability in Solar Water pumping where water demands is in the range of 500 to 2,500 gallons (3,000 US gallons) per day.

Roto Pumps are designed to draw water from shallow wells, deep wells, dugouts, rivers and cisterns and can push water as high as 450 vertical feet.

These pumps are excellent for livestock watering and trickle irrigation.

These Robust Roto Pumps are positive displacement, solid brass rotary vane pumps, coupled to a continuous duty permanent magnet DC ball bearing motor. The units are self priming, low flow (0.5 to 4 gallons per minute) and can operate solar direct or from batteries.

Vertical Lift (Ft)	Model 1304		Model 2507	
	IGPH	Watts	IGPH	Watts
20.0	91.2	40.0	206.4	70.0
40.0	88.8	60.0	201.6	100.0
60.0	87.2	70.0	195.2	130.0
80.0	85.6	90.0	187.2	160.0
100.0	84.0	100.0	180.0	200.0
120.0	82.4	120.0	172.8	230.0
140.0	80.8	136.0	185.6	260.0
160.0	79.2	150.0	181.6	280.0
180.0	77.6	170.0	178.4	320.0
200.0	76.0	180.0	175.2	360.0
240.0	72.8	210.0	168.0	420.0
280.0	71.2	260.0		
320.0	70.4	290.0		
360.0	69.8	330.0		
400.0	68.8	380.0		
440.0	68.0	420.0		

Specifications for Kelln Roto Pump

Performance measured at Array – Direct Voltage (8% higher than nominal). Battery powered system will produce slightly lower flows.

1/4 HP Roto Pump

Available in 12V or 24 Volt Models, with a max amp draw 16A (12V) 8A (24V) models.

1/2 HP Roto Pump

Available in 24V or 48V Models with a max amp draw 16A (24V) Models

Vertical Lift

Vertical lift is the Vertical distance in feet from the water source to the top of the storage tank or pipe outlet.

Flow Rate

Imperial gallons per hour (IGPH). To estimate gallons per day, multiply IGPH by Peak Sun Hour per day for your location. (Consult your dealer or a solar manual.)

As voltage varies, flow rate will vary proportionally. Amperage stays nearly constant. Use higher voltage models (24V) to reduce wire size and controller costs if possible.

This system will pump 1000 gallons on sunny days, less on cloudy days and not at all on rainy days. It is recommended that the system be checked every three

days as the lives of the cattle depend on an adequate supply of water.

This system may be operated with the addition of deep cycle batteries.

Situation

85 cow/calf pairs Solar Direct/
75 cow/calf pairs Battery Operated

- Casing Size – at least 5 inches
- Lift - 25ft (8m)
- recovery rate of well- 5 GPM

System

- 1 Kelln's Solar **Roto Pump**
- 2 42 watt Solar Panels
- 1 Solar Panel Stand,
- 1 Stainless steel filter/check valve
- 1 Regulator/Low Voltage Disconnect
Or LCB – Float switch
- 100' of 1/2" Hose

System Cost.....\$2195.00

