

HELICAL ROTOR SOLAR PUMPS

VSONERA02/01H



The NERA solar pumps range with encapsulated inverter, offers a compact and reliable solution in pumping applications using photovoltaic energy.

NERA pumps are powered by DC with a wide range of operating voltage (70 - 190 VDC).

A special software algorithm allows for adjusting the hydraulic performance to each source and to the available power while maximizing the pumped water. The built-in electronics inside the motor avoids the use of shielded cables and output filters, and is directly cooled by the water flow. The operating temperature of the electronic components is low as to ensure considerably longer life than an on-surface inverter affected by high temperature, humidity, dust and solar radiation.

NERA pumps are the ideal solution for any application in remote locations without surveillance and is climatically adverse.



APPLICATION

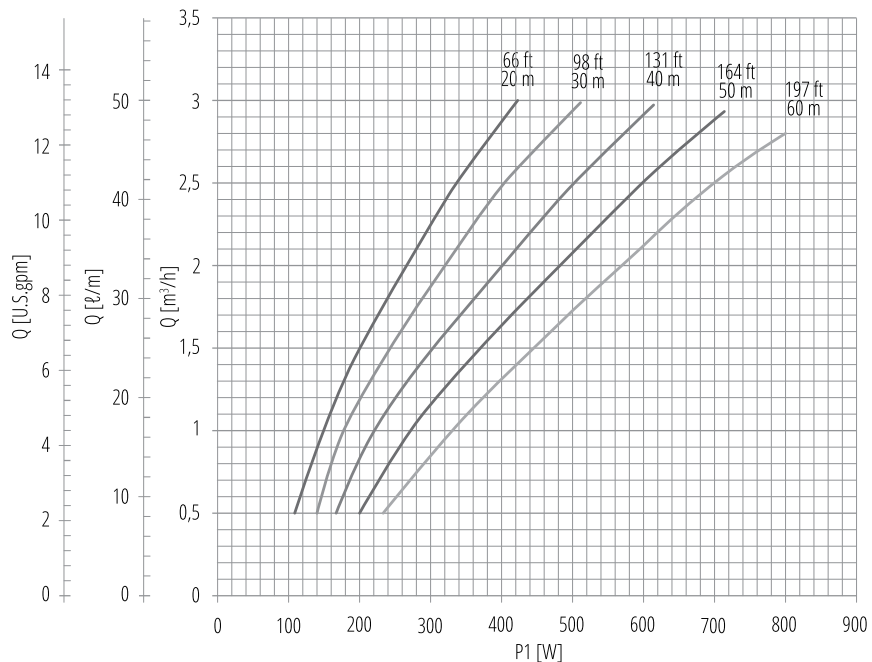
- Potable water supply from deep wells
- Agricultural irrigation, livestock watering, etc.
- Municipal & Industrial water supply

OPERATING CONDITIONS

- Max temperature: 35 °C (92 °F)
- Min cooling speed: 0.2 m/s
- Sand content: Max. 50 g/m³
- Max immersion depth: 150 m

MATERIALS

- Diffusers - AISI 304
- Discharge Head - AISI 304
- Impeller - AISI 304



MODEL	INPUT VOLTAGE	MAX. INPUT CURRENT	RATED INPUT POWER	LENGTH	DELIVERY	MAX. DIAMETER	WEIGHT
	[V]	[A]	[W]	[mm]		[mm]	[kg]
VSONERA02/01H	90 - 340 VDC	16 (225 VDC)	1	3600	981	1 ½"	21.4

ELECTRIC DIAPHRAGM PUMP

302FL40

Ideal for camping, boating, cattle and game spraying. Self priming and for intermittent use only.

GENERAL SPECIFICATIONS

- Permanent magnet and intermittent duty
- Built-in pressure switch automatically starts and stops pump when faucets are opened and closed
- Self-priming so pump can be located above water tank
- Runs dry for extended periods of time without damage
- Built-in thermal protector
- Size: 13.2" L x 4.9" W x 4.1" H (335 x 12 x 105 mm)
- Weight (DC): N.W 4.22 lb (1.90 kg) G.W 5.11 lb (2.30 kg)
- Weight (AC): N.W 5.44 lb (2.45 kg) G.W 6.44 lb (2.90 kg)
- Pump Design: 4 Chamber Diaphragm
- Port Size: 3/8" (9.5 mm) Hose Barb

OPERATING PARAMETERS

- Max Liquid Temperature: 60°C (140°F)
- Pressure max: 40 PSI (2.8 Bar)
- Voltage: 12 V, 24 V DC, 115 V, 220 V AC
- Open Flow: 4.47 GPM (17 l/min)

MATERIAL

- Diaphragm Material - Santoprene
- Check Valve - EPDM or Viton
- Body Material: - Polypropylene
- Spring Material - Stainless Steel



CODE	VOLT	FLOW	PRESSURE	AMPS
	DC / AC	gpm(lpm)	Psi(bar)	A
302FL40	12	4.47(17.0)	40(2.76)	9.2
302FL40D	Diaphragm			