

# PS Helical Rotor Solar Pump Systems

## Submersible Pump Systems for 4" and 6" Wells



LORENTZ PS helical rotor pumps are high quality products designed for drinking water supply, livestock watering and smaller irrigation applications. PS helical rotor pump systems deliver water economically, cleanly and reliably, anywhere.

The LORENTZ PS range of DC powered helical rotor pumps have been designed specifically to pump water efficiently using solar power. The helical rotor pump is simple, efficient and reliable, pumping water with very low levels of solar power from up to 450m below the ground.

Each system consists of a pump, pump motor and a controller. This modular concept keeps all electronics above ground providing simple servicing, ease of access and a low cost of ownership.

### Benefits

- Long life expectancy and proven in service record
- Designed for use in remote and harsh conditions
- Smart modular design for simple and cost effective servicing and repair
- Water filled motors for reliability and to avoid oil contamination
- Fast and simple installation
- Cost effective spare parts philosophy
- Very strong ROI against diesel powered pumping
- Large range of pumps to closely match each application and optimise efficiency

### Features

- Engineered in Germany
- Water temperature specific variants to provide the most efficient outputs
- High quality non corrodible materials used throughout
- Cast stainless steel components
- Solar direct connect with AC connection options
- MPPT technology to maximise power use from PV modules
- ECDRIVE DC brushless motors, designed for solar, with over 90 % efficiency
- Optional data logger

pump system		PS200 HR	PS600 HR	PS1800 HR	PS4000 HR
max. total dynamic head (TDH)	[m]	50	180	250	450
max. flow rate	[m <sup>3</sup> /h]	2.6	2.6	3.9	2.5
solar operation:					
max. power voltage (Vmp)*	[VDC]	> 34	> 68	> 102	> 238
open circuit voltage (Voc)	[VDC]	max. 100	max. 150	max. 200	max. 375
nominal voltage	[VDC]	24–48	48–72	72–96	168–192
battery operation:					
nominal voltage	[VDC]	24 and 48	48	96	n.a.

\* ) PV modules at standard test condition: AM = 1.5, E = 1,000W/m<sup>2</sup>, cell temperature: 25 °C

To find out more visit [www.lorentz.de](http://www.lorentz.de)

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All specifications and information are given with good intent, errors are possible and products may be subject to change without notice. Pictures may differ from actual products depending on local market requirements and regulations. A pump system consists of a controller, motor and pump end. Multiple pumps/ pump ends are shown to represent the wide range of pumps (over 70) that LORENTZ has.



**Sun. Water. Life.**