



AESOP ENERGY OPTIONS

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Grundfos SQFlex Solar Pumps



4" CENTRIFUGAL PUMP

High flow in shallow water conditions. Stainless steel components give high wear resistance



1 HELICAL ROTOR PUMP: The helical rotor pump uses a few, simple components for effective pumping in high head and low flow conditions.

2 PUMP CASING: Stainless steel

3 BEARINGS: Powerful carbon/ceramic bearing system

4 MOTOR: Only one motor for the entire pump range with built-in unique features.

5 POWER TRANSMISSION: The unique Grundfos micro frequency converter ensures power transmission to the motor.

6 SYSTEM EFFICIENCY: Maximum Power Point Tracking (MPPT) means even and high system efficiency

7 COMMUNICATION: Two-way communication between interface box and pump eliminates the needs for additional wires.

8 ANY VOLTAGE: A wide voltage range enables the motor to operate at any voltage between 30V and 300V DC

The SQFlex system is more than just a pump. It's a total concept tailored to any individual requirements. By determining the water table depth and how much water is needed, the most efficient pump and solar energy system can be designed. The complete SQFlex pump range consists of 7 different pump sizes: 4 centrifugal and 3 helical rotor pumps.

SQFlex pumps have build-in protection features that protect the pump itself and in many cases the well. Among these features are:

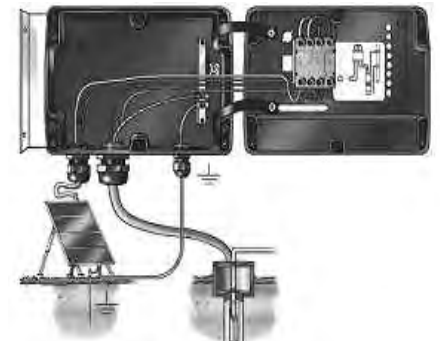
- Protection against dry-running, overloading and overheating
- Automatic restart when water returns to the well or when the motor temperature returns to the safety range
- Continuous load condition and voltage monitoring

Grundfos SQFlex Solar Pump Switch Boxes



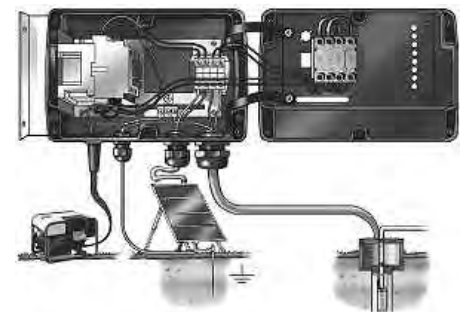
The **IO 100 SQFlex Switch Box** has been developed for the SQFlex water supply systems, exclusively powered by solar modules.

The IO 100 enables manual starting and stopping of the pump in a solar-powered SQFlex system. In addition, the IO 100 functions as a connection point for all necessary cables.



IO 101 SQFlex Switch Box

Switches off the voltage supply to the pump. Connect a back-up generator during periods of insufficient solar energy, an immediate requirement for water supply, or a need for water supply at night. The SQFlex water supply systems powered by solar modules can be connected to an external back-up diesel or gasoline driven generator via the IO 101.



The **CU 200 control unit** offers system monitoring and alarm indication. The following indications allow the operation of the pump to be monitored: Water reservoir is full (level switch), pump is running, and input power. In addition, the CU 200 shows the symbols of the energy supply options. The CU 200 SQFlex control unit offers: system monitoring on the basis of sensor signals, system control on the basis of sensor signals, and monitoring of operation and alarm indication.



SQFlex Water Level Switch



With a level switch inside the storage tank connected to the CU 200 control unit, the pump knows when the tank is full and shuts itself off. Float switch cable is 9ft long.