

PS2-1800 C-SJ5-12

Solar Submersible Pump System for 4" wells

System Overview

 $\begin{array}{ccc} \mbox{Head} & \mbox{max. 70 m} \\ \mbox{Flow rate} & \mbox{max. 7.6 m}^{3} \mbox{/h} \end{array}$

Technical Data

Controller PS2-1800

- Controlling and monitoring
- Control inputs for dry running protection, remote control etc.
- Protected against reverse polarity, overload and overtemperature
- Integrated MPPT (Maximum Power Point Tracking)
- Battery operation: Integrated low voltage disconnect
- Integrated Sun Sensor

 Power
 max. 1.8 kW

 Input voltage
 max. 200 V

 Optimum Vmp**
 > 102 V

 Motor current
 max. 14 A

 Efficiency
 max. 98 %

 Ambient temp.
 -40...50 °C

 Enclosure class
 IP68

Motor ECDRIVE 1200-C / ECDRIVE 1800-C

- · Maintenance-free brushless DC motor
- Water filled
- Premium materials, stainless steel: AISI 304/316
- No electronics in the motor

 Rated power
 1.7 kW

 Efficiency
 max. 92 %

 Motor speed
 900...3,300 rpm

 Insulation class
 F

 Enclosure class
 IP68

 Submersion
 max. 150 m

Pump End PE C-SJ5-12

- Non-return valve
- Premium materials, stainless steel: AISI 304
- Centrifugal pump

Efficiency max. 65 %

Pump Unit PU1800 C-SJ5-12 (Motor, Pump End)

Borehole diameter $$\rm min.~4,0~in$$ Water temperature $$\rm max.~50~^\circ C$$

Standards



2006/42/EC, 2004/108/EC, 2006/95/EC

IEC/EN 61702:1995, IEC/EN 62253 Ed.1

The logos shown reflect the approvals that have been granted for this product family. Products are ordered and supplied with the approvals specific to the market requirements.

**Vmp: MPP-voltage under Standard Test Conditions (STC): 1000 W/m² solar irradiance, 25 °C cell temperature





Siebenstuecken 24, 24558 Henstedt-Ulzburg, Germany, Tel +49 (0)4193 8806-700, www.lorentz.de







- 10

1.6

PS2-1800 C-SJ5-12

Solar Submersible Pump System for 4" wells

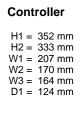
Pump Chart Vmp* > 102 V 80 20 - 70 30 6 60 50 Efficiency [%] -50 5-Output [m³/h] 60 ≥ 70 m 3-30 20 2

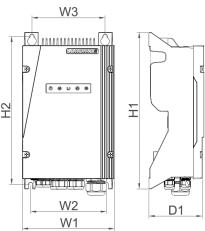
8.0

Power [kW]

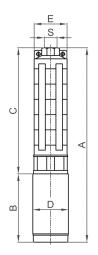
0.6

Dimensions and Weights





n n
ľ



1.2

1.4

	Net weight
Controller	6.0 kg
Pump Unit	14 kg
Motor	7.0 kg
Pump End	6.5 kg

^{*}Vmp: MPP-voltage under Standard Test Conditions (STC): 1000 W/m² solar irradiance, 25 °C cell temperature

BERNT LORENTZ GmbH

Siebenstuecken 24, 24558 Henstedt-Ulzburg, Germany, Tel +49 (0)4193 8806-700, www.lorentz.de



