

# PSk2-7 CS-F20-5

# **Solar Surface Pump System**

# System Overview

Head max. 50 m Flow rate max. 33 m<sup>3</sup>/h

## **Technical Data**

### Controller PSk2-7

- High efficiency solar pump controller
- Hybrid power (solar / grid / generator) support with LORENTZ SmartSolution
- Inputs for water meter, pressure sensors, digital switches
- Simple configuration with LORENTZ PumpScanner Android™App
- Onboard data logging and system monitoring
- Inbuilt applications for constant pressure, constant flow and daily amount
- Integrated Sun Sensor
- Active temperature management
- Integrated MPPT (Maximum Power Point Tracking)

Power max. 8,0 kW Input voltage max. 850 V Optimum Vmp\*\* > 575 V Motor current max. 13 A Efficiency max. 98 % Ambient temp. -30...50 °C Enclosure class **IP66** 

#### Motor AC DRIVE CS-F 5.5kW

- · Highly efficient 3-phase AC motor
- Frequency: 25...50 Hz

Efficiency max. 78 % Motor speed 1.400...2.850 rpm Power factor 0,84 Insulation class F IPX4 Enclosure class

### Pump End PE CS-F20-5

- Premium materials
- Centrifugal pump

max. 77 % Efficiency

## Pump Unit PUk2-7 CS-F20-5 (Motor, Pump End)

Water temperature max. 70 °C\*\*\*\* Suction head acc. to COMPASS sizing

### **Standards**

 $\epsilon$ 

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

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

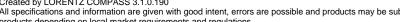
The logos shown reflect the approvals that have been granted for this product family. Products are ordered and supplied with the approvals specific to the market

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

\*\*\*\*Special solutions available for >70 °C, please consult your distributor



#### BERNT LORENTZ GmbH





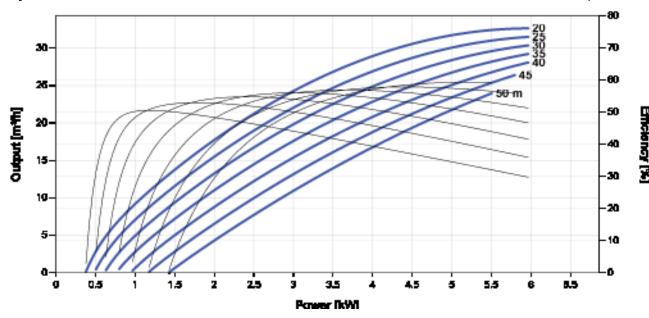


# PSk2-7 CS-F20-5

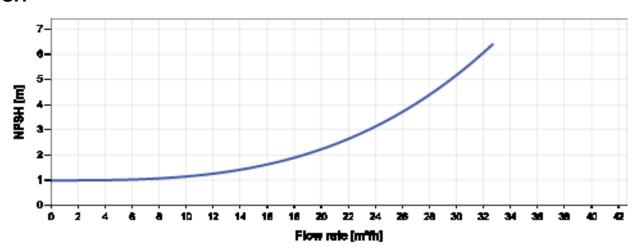
**Solar Surface Pump System** 



Vmp\* > 575 V



## **NPSH**



The NPSH (Net Positive Suction Head) is NOT the operating suction head. To calculate the operating suction head please refer to the installation manual.

 ${}^*\text{Vmp: MPP-voltage under Standard Test Conditions (STC): } 1000 \text{ W/m}{}^2 \text{ solar irradiance, } 25 \text{ }^\circ\text{C cell temperature}$ 







# PSk2-7 CS-F20-5

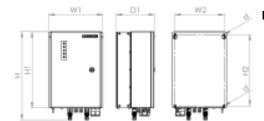
# **Solar Surface Pump System**

# **Dimensions and Weights**

#### Controller

H = 500 mmH1 = 450 mmH2 = 421 mm

W1 = 320 mm W2 = 290 mm D = 9,0 mmD1 = 226 mm



#### **Pump Unit**

A = 260 mm B = 208 mmC = 430 mm

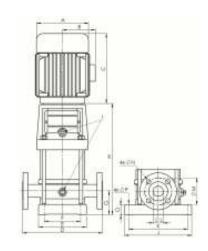
D = 300 mmE = 199 mmF = 130 mm

G = 90 mmH = 562 mmI = G1/2"

J = 247 mmK = 215 mmL = 50 mm

M = 125 mmN = 18 mm

O = 35 mmP = 14 mm



Net	weiaht

Controller	18 kg
Pump Unit	76 kg
Motor	59 kg
Pump End	17 kg