

# PSk2-21 CS-F85-20

## Solar Surface Pump System

### System Overview

Head	max. 50 m
Flow rate	max. 120 m³/h

### Technical Data

#### Controller PSk2-21

- 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. 21 kW
Input voltage	max. 850 V
Optimum Vmp**	> 575 V
Motor current	max. 33 A
Efficiency	max. 98 %
Ambient temp.	-30...50 °C
Enclosure class	IP54

#### Motor AC DRIVE CS-F 15kW

- Highly efficient 3-phase AC motor
- Frequency: 25...51 Hz

Motor speed	1.400...2.905 rpm
Power factor	0,87
Insulation class	F
Enclosure class	IPX4

#### Pump End PE CS-F85-20

- Premium materials
- Optional: dry running protection
- Centrifugal pump

#### Pump Unit PUK2-21 CS-F85-20 (Motor, Pump End)

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

### 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

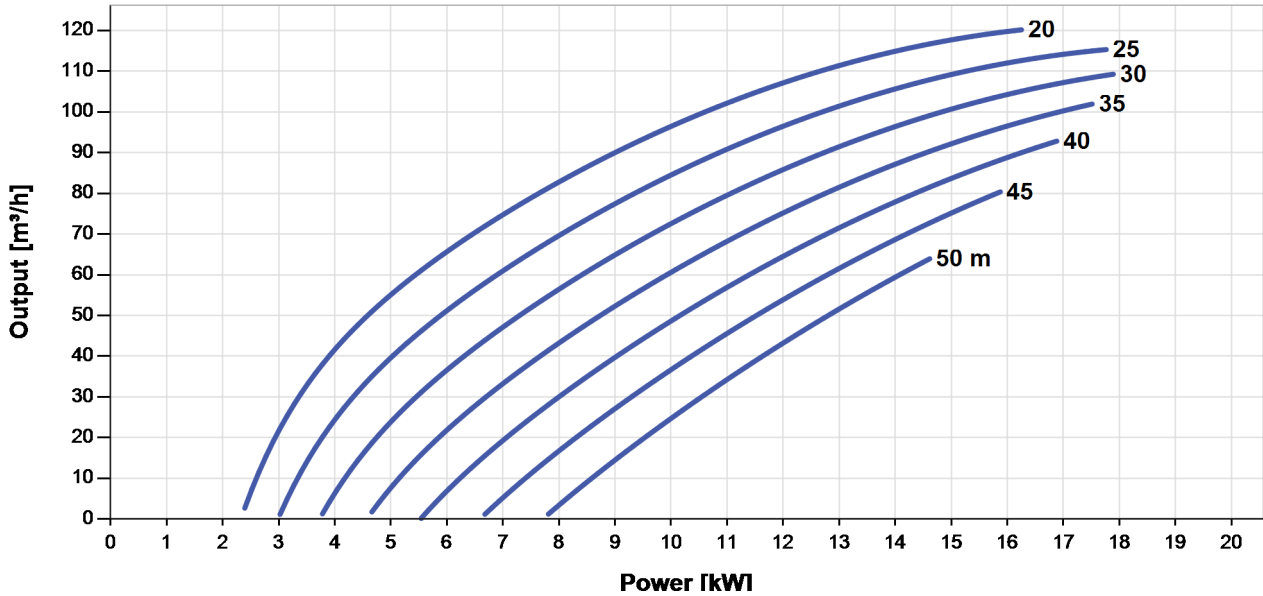


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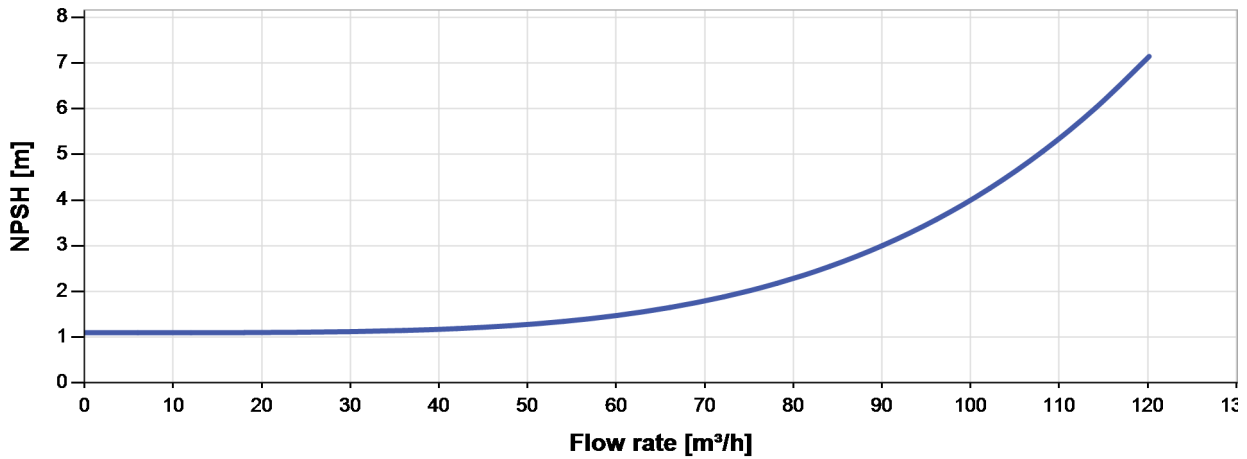
### Solar Surface Pump System

#### Pump Chart

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.

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



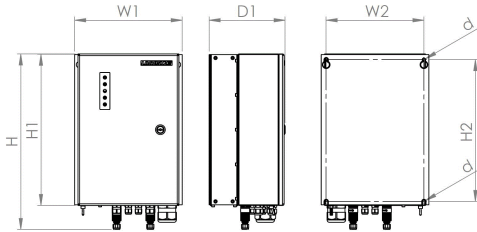
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## Solar Surface Pump System

### Dimensions and Weights

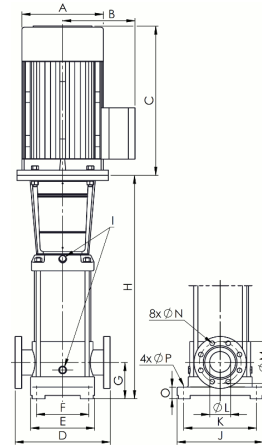
#### Controller

H = 500 mm  
 H1 = 450 mm  
 H2 = 421 mm  
 W1 = 320 mm  
 W2 = 290 mm  
 D = 9,0 mm  
 D1 = 226 mm



#### Pump Unit

A = 330 mm  
 B = 255 mm  
 C = 490 mm  
 D = 380 mm  
 E = 255 mm  
 F = 199 mm  
 G = 140 mm  
 H = 773 mm  
 I = G1/2"  
 J = 348 mm  
 K = 280 mm  
 L = 100 mm  
 M = 180 mm  
 N = 18 mm  
 O = 45 mm  
 P = 14 mm



	Net weight
Controller	18 kg
Pump Unit	192 kg
Motor	117 kg
Pump End	75 kg

