

PS21k2 CS-F42-40

Solar Surface Pump System

System Overview

Head	max. 80 m
Flow rate	max. 63 m ³ /h

PS DataModule – Integrated Data Logger and advanced pump management features. Allows for simple system configuration, real-time and stored data plus provides Bluetooth communication to PumpScanner Android™ App and PS Communicator.*

Technical Data

Controller PS21k2

- Control inputs for dry running protection, remote control etc.
- Protected against overload and overtemperature
- 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

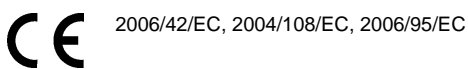
Pump End PE CS-F42-40

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

Pump Unit PU21k2 CS-F42-40 (Motor, Pump End)

Water temperature	max. 70 °C
Suction head	max. 3 m

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.



* PS DataModule is included in all PSk2 controllers and any PS controllers with –D in their description. –D variants should be ordered if there is a potential need to use the PS DataModule features in the future as this is not a retrofit option.

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

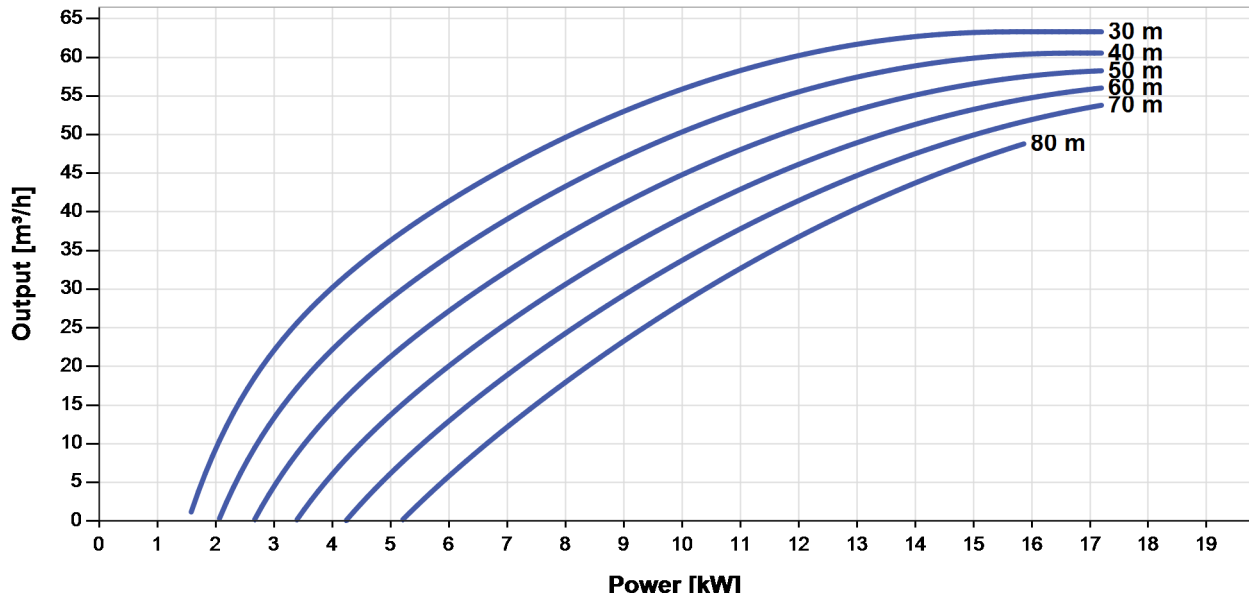


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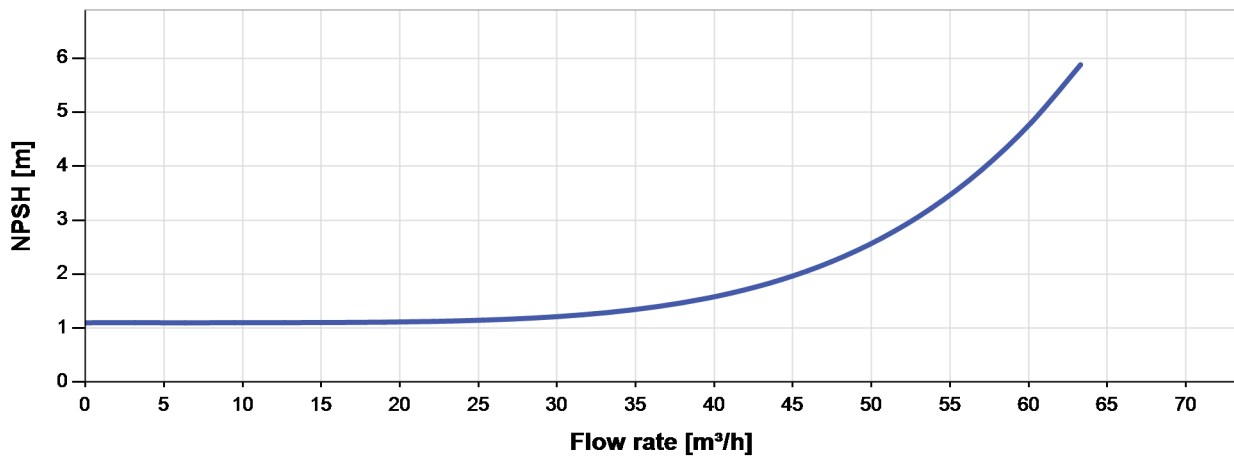
Solar Surface Pump System

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



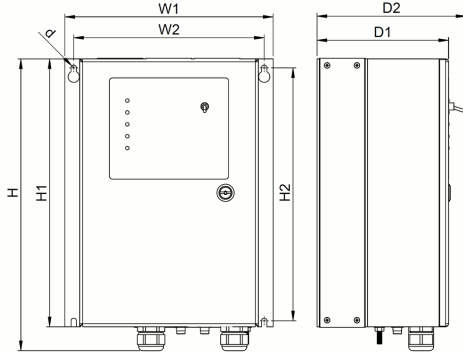
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Dimensions and Weights

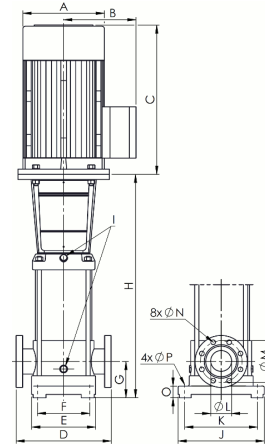
Controller

H = 500 mm
 H1 = 450 mm
 H2 = 425 mm
 W1 = 320 mm
 W2 = 290 mm
 D = 9.0 mm
 D1 = 220 mm
 D2 = 250 mm



Pump Unit

A = 330 mm
 B = 255 mm
 C = 490 mm
 D = 365 mm
 E = 245 mm
 F = 190 mm
 G = 140 mm
 H = 906 mm
 I = G1/2"
 J = 330 mm
 K = 266 mm
 L = 80 mm
 M = 160 mm
 N = 18 mm
 O = 45 mm
 P = 14 mm



	Net weight
Controller	17 kg
Pump Unit	197 kg
Motor	117 kg
Pump End	80 kg

