

PSk2-40 CS-F85-40

Solar Surface Pump System

System Overview

Head max. 90 m Flow rate max. 125 m³/h

Technical Data

Controller PSk2-40

- 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. 37 kW
Input voltage	max. 850 V
Optimum Vmp**	> 575 V
Motor current	max. 65 A
Efficiency	max. 98 %
Ambient temp.	-3050 °C
Enclosure class	IP54

Motor AC DRIVE CS-F 30kW

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

 Motor speed
 1.400...2.850 rpm

 Power factor
 0,90

 Insulation class
 F

 Enclosure class
 IPX4

Pump End PE CS-F85-40

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



Pump Unit PUk2-40 CS-F85-40 (Motor, Pump End)

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

Standards

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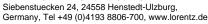
2006/42/EC, 2004/108/EC, 2006/95/EC

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





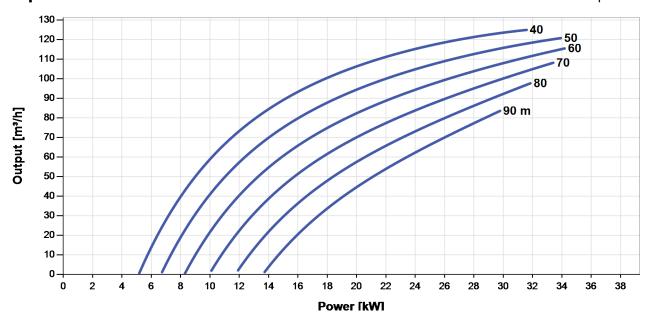
BERNT LORENTZ GmbH & Co. KG



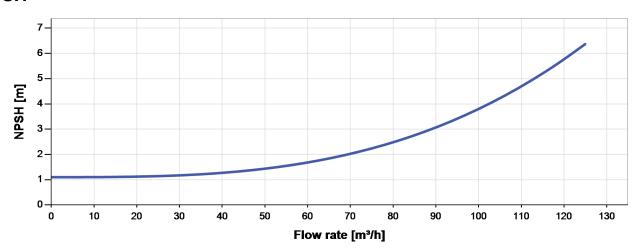
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Pump Chart Vmp* > 575 V



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.

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







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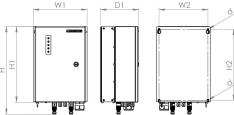
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Dimensions and Weights

Controller

H = 500 mmH1 = 450 mmH2 = 421 mmW1 = 320 mm

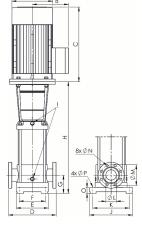




Pump Unit

A = 400 mm B = 310 mmC = 650 mmD = 380 mmE = 255 mmF = 199 mmG = 140 mmH = 957 mmI = G1/2"J = 348 mmK = 280 mmL = 100 mmM = 180 mm

N = 18 mmO = 40 mmP = 18 mm



Net weight

Controller	18 kg
Pump Unit	312 kg
Motor	220 kg
Pump End	92 kg