

February 21, 2013

New project

Solar pumping project

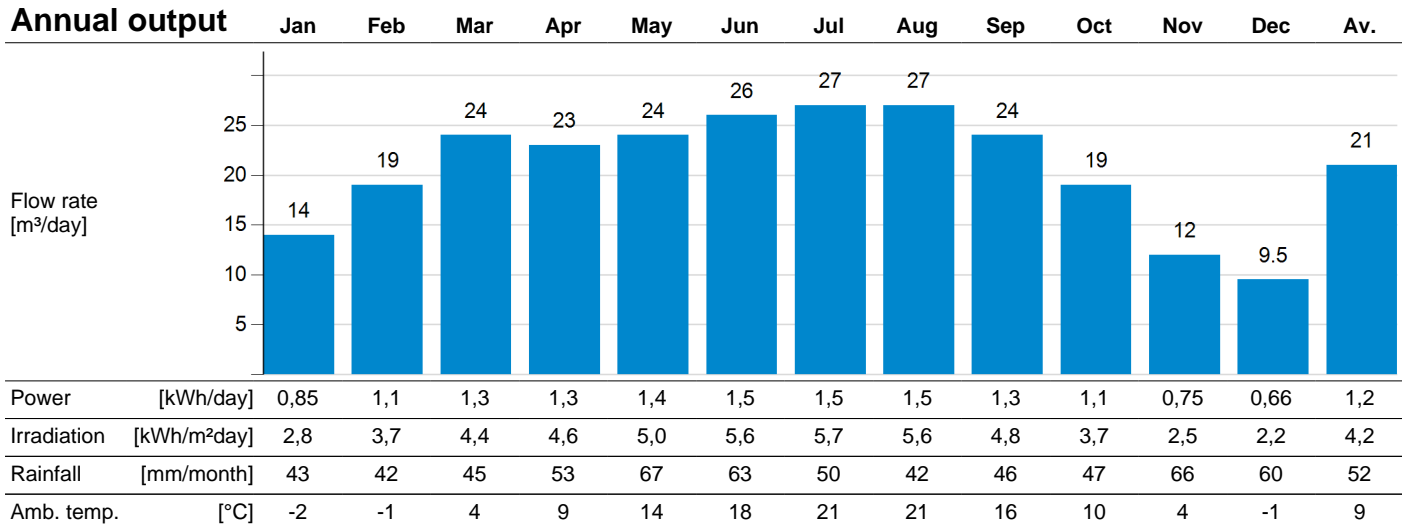
Project data

Solar data:	Skopje, Macedonia (42°N; 21°E; 3,7 kWh/m ² hor.)	Static head:	10 m	Cable length:	15 m
Required daily flow:	20 m ³ /day in annual average	Dirt loss:	5,0 %	Pipe length:	-

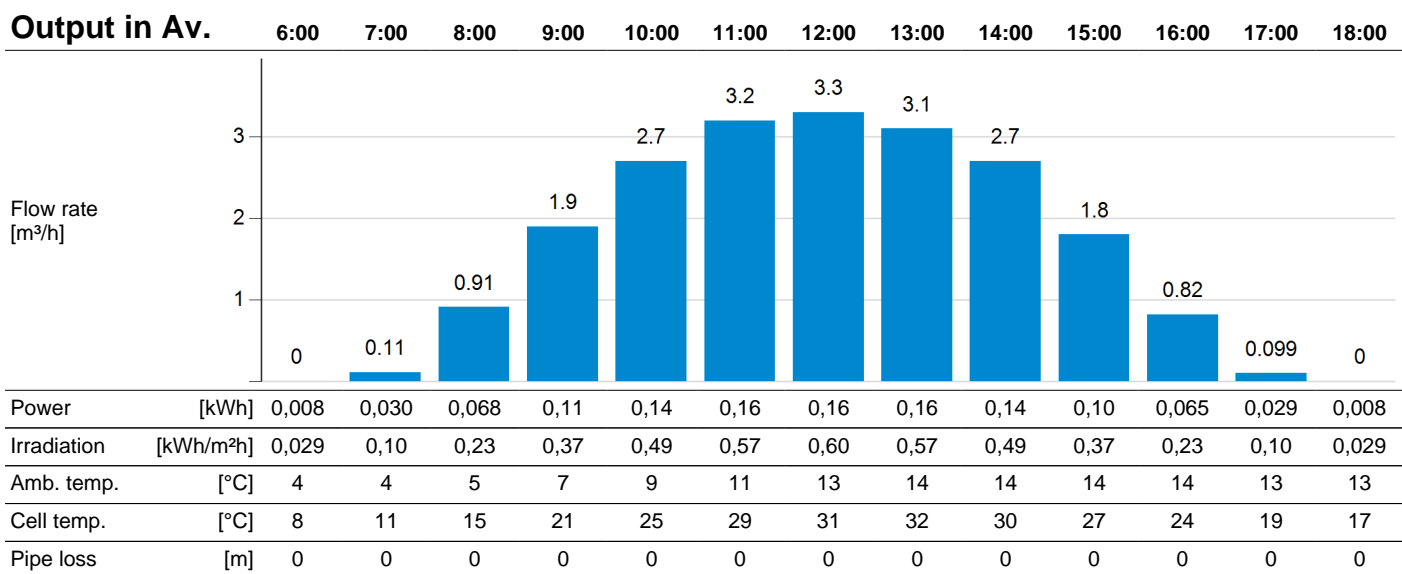
Products

Quantity	Details	Item #
PS600 C-SJ8-5	1 pc. Pump system incl. Controller, Motor, Pump end	1293
LC50-12M	6 pc. 300 Wp; 6 x 1 modules; 42 ° tilted fixed array	956
Motor cable	15 m 4mm ² 3-phase cable	-
Well probe sensor	1 pc. Dry running protection	1658
Cable splice kit	1 pc. Submersible Cable splice kit (2.5 ... 6 mm ²)	1660

Annual output



Output in Av.

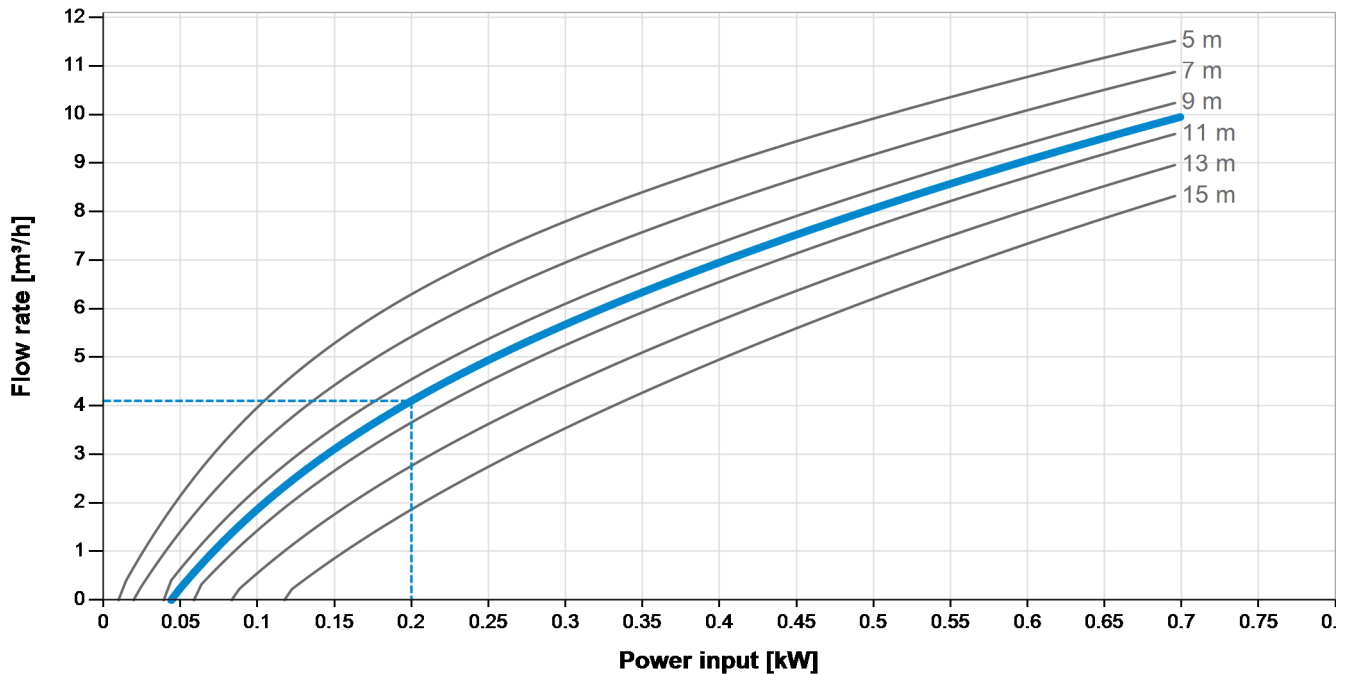


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System performance



			Min.	at 800 W/m², 20 °C	Max./STC*
PV generator	Cell temperature	[°C]		46	25
	Power loss (temp)	[%]		11	-
	Dirt loss	[%]		5,0	-
	Pmax	[Wp]		204	300
	Vmp	[V]		92	103
	Imp	[A]		2,2	3
	Voc	[V]		123	135
	Isc	[A]		2,5	3
	Pout	[W]		204	-
	Vout	[V]		92	-
	Iout	[A]		2,2	-
	Motor cable	Power loss (temp)	[%]	0,79	1,5
Pump system					
Motor power	[W]		44	200	699
Motor voltage	[V EC]		27	42	57
Motor current	[A]		1,6	4,8	12
Motor speed	[rpm]		1.745	1.970	2.715
Flow rate	[m³/h]		0	4,1	10,0
Efficiency	[%]		0	55	56

*STC: Standard Test Conditions for Photovoltaic Modules, 1000 W/m² inplane irradiation, 25° C cell temperature