

Data Sheet For Solar DC Pool Pumps

Model	Description			
RSP-24	Solar DC SS Surface Pumps, Model : RSP-24, Rated Head:06 Mtr., 0.5 HP, Shut off head 10 Mtr.			
RSP-30	Solar DC SS Surface Pumps, Model : RSP-30, Rated Head:06 Mtr., 1.0 HP, Shut off head 13 Mtr.			
RSP-60	Solar DC SS Surface Pumps, Model : RSP-60, Rated Head:10 Mtr., 2.0 HP, Shut off head 16 Mtr.			
Model	RSP-24	RSP-30	RSP-60	<div>Motor : Permanent Magnet D.C Motor</div> <div>Water output figures are on a clear sunny day with 3 times tracking of SPV panel when solar radiation on horizontal surface is 7.15 KW/sq.m/day (i.e. coplanar with PV module)</div> <div>Stander Test Condition : AM=1.5, E=1000W/m², Cell Temperature : 25°C</div>
Rated head (mtr.)	06	06	10	
Discharge (M³/Hr.)	11.7	12.4	17.6	
Shut Off head (mtr.)	10	13	16	
Array Rating	450 Wp	900 Wp	1800 Wp	
Input Voltage (Vmp.)	> 30 V	> 30 V	> 60 V	
Input Max. Current	12 Adc	25 Adc		
Ambient Temperature Range	Up to 50° C			

Product Introduction

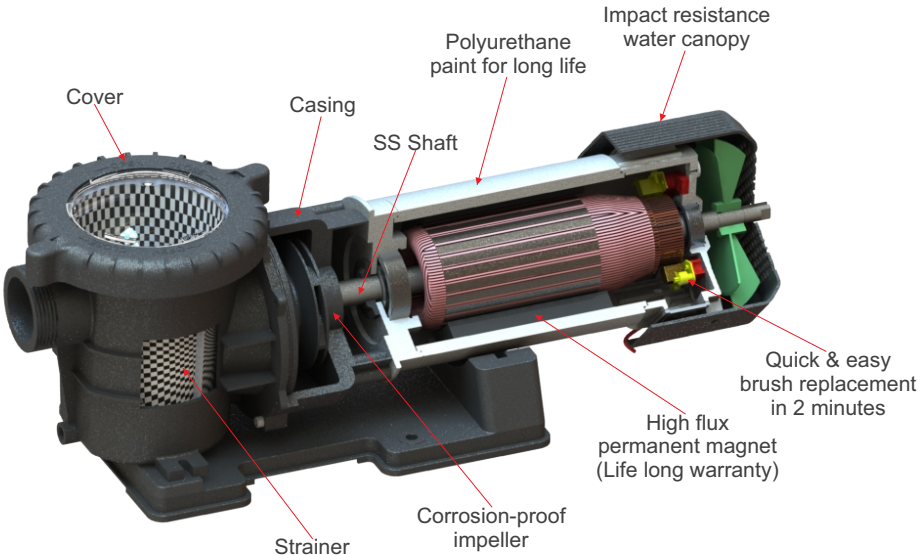
Rotosol RSP series of Pool pumps are designed for use in residential and commercial swimming pools and spas. The filtration requirements of most pools can be met by using these pumps which can be directly connected to the SPV array without the need for any controller or intermediate electronics. Use of high efficiency Permanent Magnet DC motors makes these pumps extremely efficient and simple to operate.



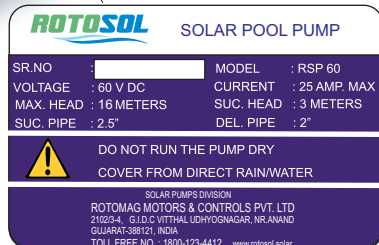
Application

- Residential and commercial swimming pools and spas

Features and benefits



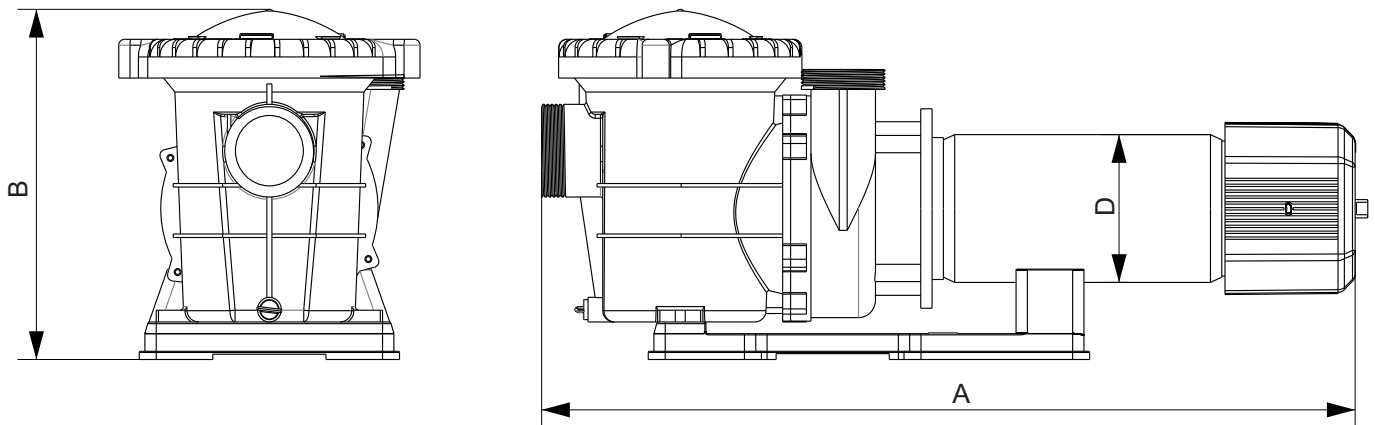
Specifications of Solar DC SSSurface Pumps



Label on Pump

Model	RSP-24	RSP-30	RSP-60
Voltage	30 VDC	30 VDC	60 VDC
Current	25 Amp	25 Amp	25 Amp
Max. Head	10 Mtr	13 Mtr	16 Mtr.
Suction Head	3 Mtr	3 Mtr	3 Mtr
Suction Pipe	1.5"	1.5"	2.5"
Delivery Pipe	1.5"	1.5"	2.5"

Dimensions of Solar DC SS Surface Pumps

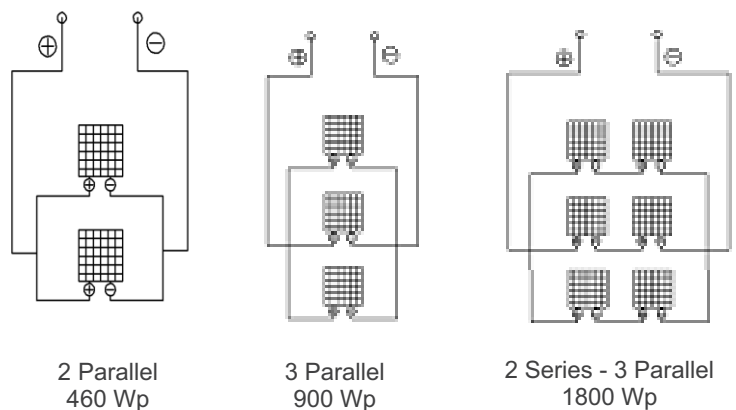


Model No.	Dimensional Details				Module Details		Performance Curves No.
	A	B	ØD	Pipe Size	Module Size	No. of Module	
RSP-24	632	276	126	1.5"X1.5"	230 Wp	2	0024
RSP-30	632	276	126	1.5"X1.5"	300 Wp	3	0030
RSP-60	720	300	126	2.5"X2.5"	300 Wp	3	0060

Preferred Solar PV Array

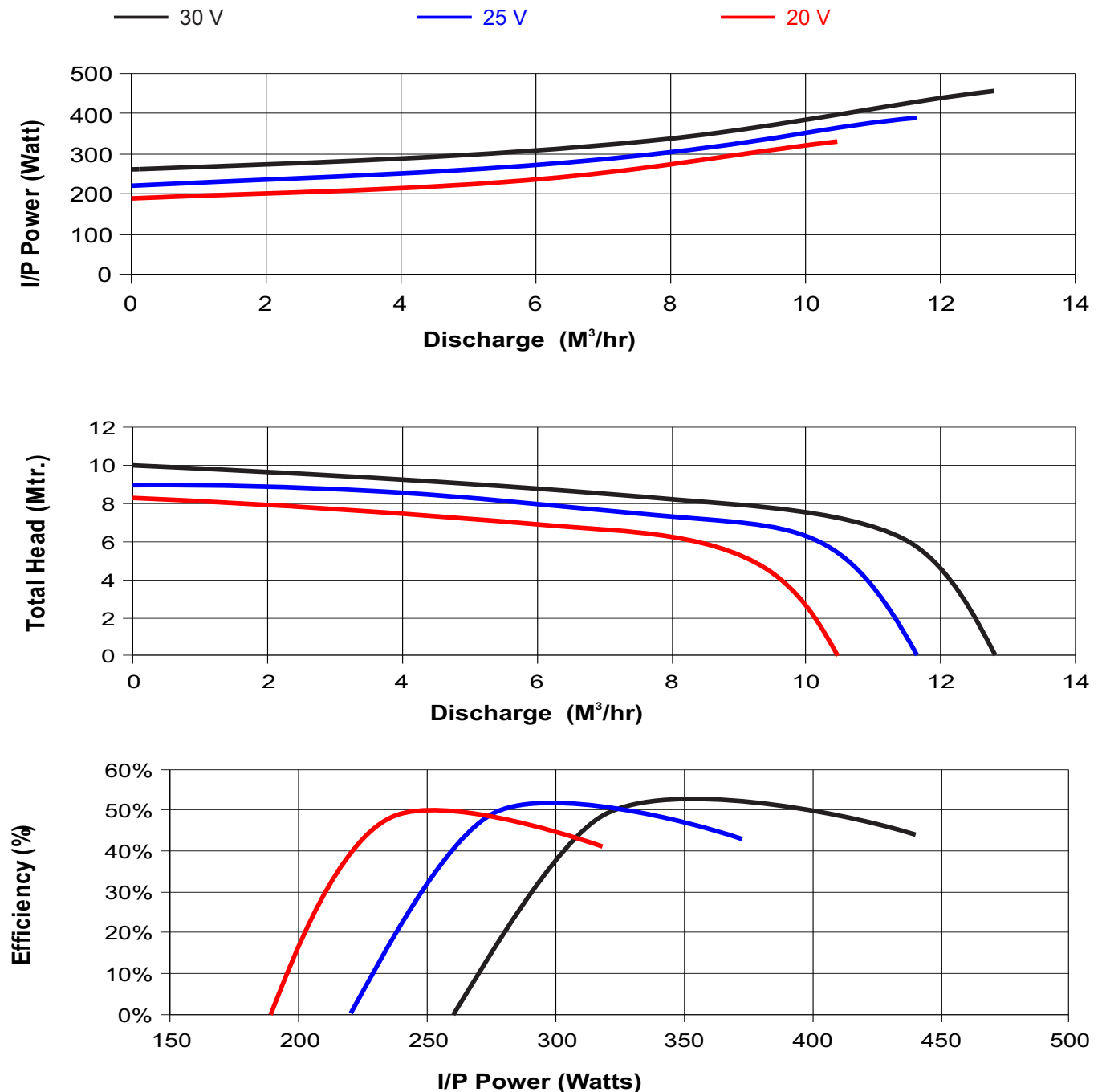
Panels Detail

Wattage Wp	300 W 72 cell	230 W 60 cell
Voltage at maximum power Vmax	38.88 V	32.40 V
Open circuit voltage Voc	44.56 V	38.31 V
Current at maximum power Imax	7.71 A	7.09 A
Short circuit current Isc	8.48 A	7.80 A



Performance characteristics of RSP-24 (No. :- 0024)

- ▶ Ambient Temperature 50°C.
- ▶ The water output shown is with continuous tracking, without tracking – water output may reduce by 10-25% depending on angle of incidence.
- ▶ The actual output of PV array may be lower up to 30% depending on heat, dust and other losses.
- ▶ Radiation measured on an inclined plane.



Explanation on above Charts:

These curves are at 3 meter suction (Including friction losses) tested as per IS-5120-1977

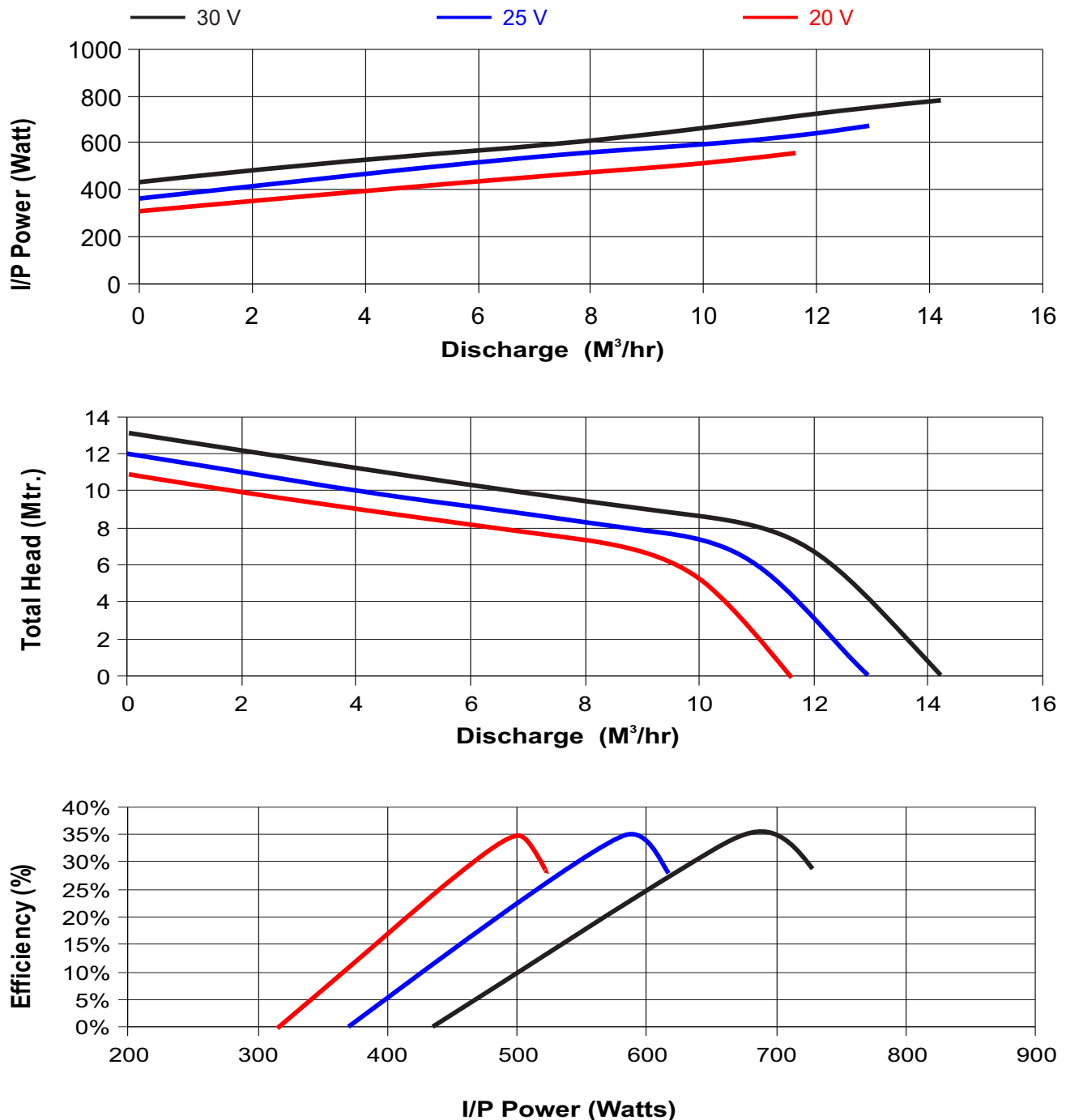
Solar Pumps Division

Rotomag Motors & Controls Pvt. Ltd.,

2102/03 GIDC Vithal Udyognagar, Near Anand-388 121 Gujarat Email: sales@rotomag.com • Phone: 09227110023/24/25

Performance characteristics of RSP-30 (No. :- 0030)

- ▶ Ambient Temperature 50°C.
- ▶ The water output shown is with continuous tracking, without tracking – water output may reduce by 10-25% depending on angle of incidence.
- ▶ The actual output of PV array may be lower up to 30% depending on heat, dust and other losses.
- ▶ Radiation measured on an inclined plane.



Explanation on above Charts:

These curves are at 3 meter suction (Including friction losses) tested as per IS-5120-1977

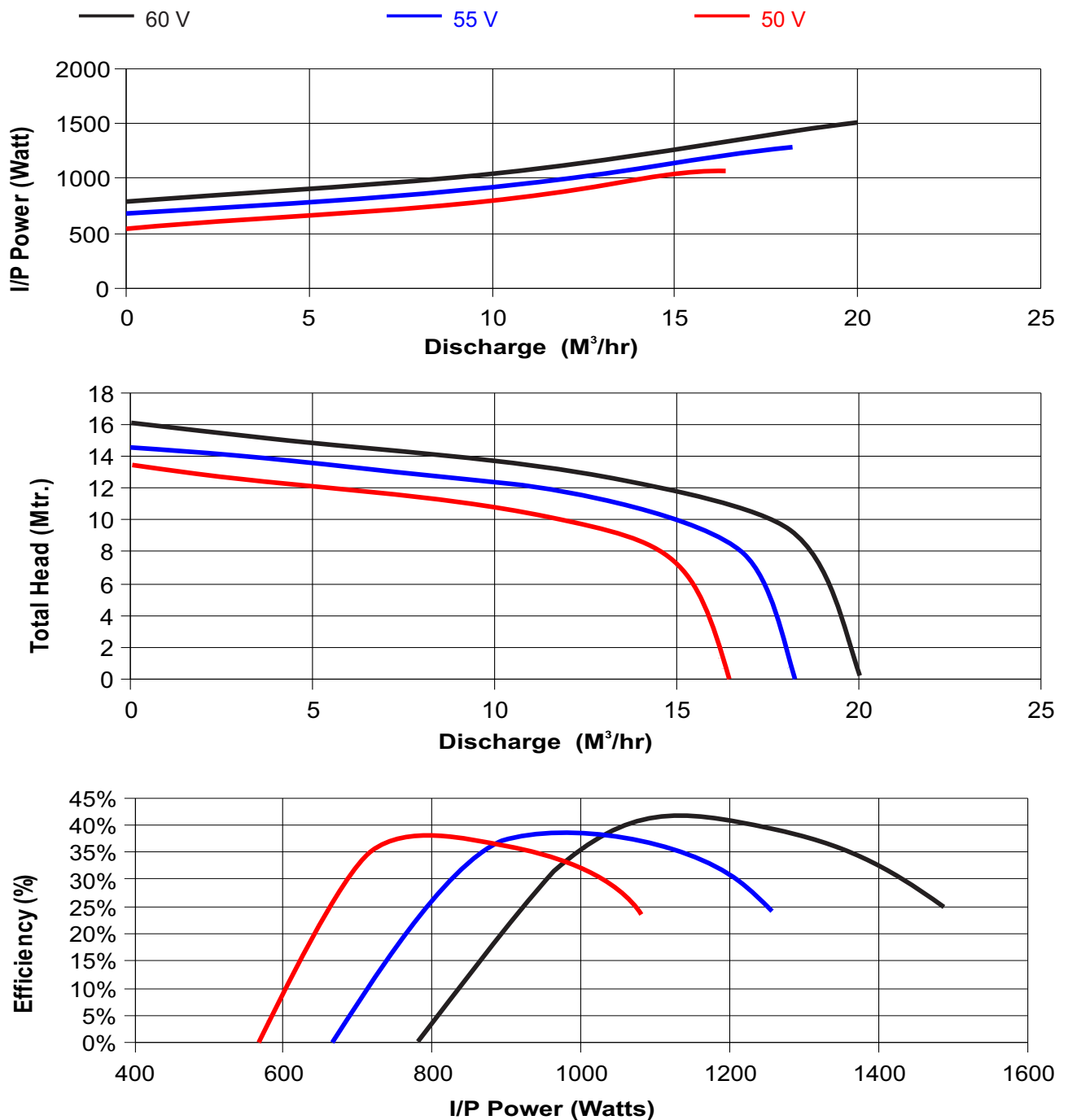
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Performance characteristics of RSP-60 (No. :- 0060)

- ▶ Ambient Temperature 50°C.
- ▶ The water output shown is with continuous tracking, without tracking – water output may reduce by 10-25% depending on angle of incidence.
- ▶ The actual output of PV array may be lower up to 30% depending on heat, dust and other losses.
- ▶ Radiation measured on an inclined plane.



Explanation on above Charts:

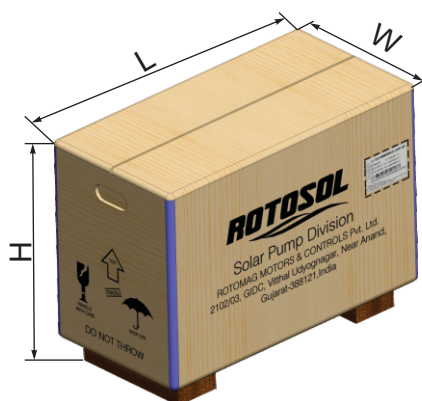
These curves are at 3 meter suction (Including friction losses) tested as per IS-5120-1977

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Pool Pumps Packing Dimensions & Weight



Model	L (mm)	W (mm)	H (mm)	Approx. packing weight (kgs)
RSP-24	700	350	450	18.4
RSP-30				
RSP-60	800	350	450	40.0

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