DSKP Intelligent Inverter Features
For AC/DC Submersible Borehole Pump

Cost Saving

- Easy installation & Low installation cost
- Easy operation & Low maintenance cost
- High efficiency with **MPPT** function
- Save grid electricity cost

High Compatibility

- Compatible with both AC and DC input
- Compatible with popular solar arrays
- Compatible with AC power of generator

High Reliability

- Soft start to prevent water hammer and increase system life
- LCD screen showing running status
- Fault self diagnosis and display
- Multiple potection
- 2 Float switch available

4 Operation Mode

- Only DC mode
- Only AC mode
- Auto mode (Automaticlly switch to AC when DC power is poor)
- Hybrid mode (AC and DC Coordinate)

Technical Data

ITEMS		DSKP-110-0.75G	DSKP-150-1.1G	DSKP-150-1.3G	DSKP-200-1.3G	DSKP-200-1.5G	DSKP-300-2.2G	DSKP-500-4G	DSKP-500-5.5G	DSKP-500-7.5G
Input Parameters										
DC Input Voltage		90~430V DC						300~750V DC		
MPPT Voltage Range		90~365V DC						300~650V DC		
AC Input Voltage		80~280V / 45~65Hz /1 Phase						230~500V / 45~65Hz /3 Phase		
DC Input Voltage At Hybrid Mode		DC: 90~320V						DC: 300~560V		
Max. Current		17 A	17 A	17 A	17 A	17 A	17 A	15 A	17 A	20 A
Peak current		25 A	25 A	25 A	25 A	25 A	25 A	20 A	25 A	28 A
Output Parameters										
Max. Output Power	DC Mode	1.1 kW	1.7 kW	1.7 kW	2.0 kW	2.0 kW	2.85 kW	5.2 kW	7.15 kW	9.75 kW
	AC Mode	1.1 kW	1.7 kW	1.7 kW	2.0 kW	2.0 kW	2.2 kW	4 kW	5.5 kW	7.5 kW
	Hybrid Mode	1.1 kW	1.7 kW	1.7 kW	2.0 kW	2.0 kW	2.2 kW	4 kW	5.5 kW	7.5 kW
Rated Output Voltage		3~Phase, 90V~220V						3~Phase, 220V~380V		
Max. Current		12 A	12 A	12 A	12 A	12 A	12 A	12 A	15 A	20 A
Rated Current		10 A	10 A	10 A	10 A	10 A	10 A	10 A	13 A	17 A
Speed Range		500~4000 rpm								
Other Parameters										
Protect Functions		① Dry–run protect ② Over/Low voltage protect ③ Lighting protect ④ Over/short circuit protect ⑤ Surge protection ⑥ Over temperature protect (Overtemperature frequency reduction) ⑦ Output phase lose protect								
Other Functions		① AC/DC Complementary Mode ② Compatible with Synchronous Asynchronous motor ③ Internal temperature display ④ Frequency reduction temperature setting ⑤ Impeller cleaning function ⑥ Fault record query ⑦ Current setting of dry running protection ⑧ Float switch status display ⑨ GPRS Remote monitor function optional								
Protecion Class		IP55								
Standby Power		< 5W								
Installation Method		Wall Mounted								
Package Info. (L*W*H)		400x300x200 mm								
Package Info. (GW)		5.9 kg						6.0 kg	6.1 kg	6.2 kg

DSKP Intelligent Inverter Features
For AC/DC Surface Pump

Cost Saving

- Easy installation & Low installation cost
- Easy operation & Low maintenance cost
- High efficiency with **MPPT** function
- Save grid electricity cost

High Compatibility

- Compatible with both AC and DC input
- Compatible with popular solar arrays
- Compatible with AC power of generator

High Reliability

- Soft start to prevent water hammer and increase system life
- LCD screen showing running status
- Fault self diagnosis and display
- Multiple potection
- 2 Float switch available

4 Operation Mode

- Only DC mode
- Only AC mode
- Auto mode (Automaticlly switch to AC when DC power is poor)
- Hybrid mode (AC and DC Coordinate)

Technical Data

ITEMS		DSKP/L-110-0.75G	DSKP/L-110-0.9G	DSKP/L-150-1.1G	DSKP/L-150-1.2G	DSKP/L-200-1.5G
Input Parameters						
DC Input Voltage		90~430V DC				
MPPT Voltage Range		90~365V DC				
AC Input Voltage		80~280V / 45~65Hz /1 Phase				
DC Input Voltage At Hybrid Mode		DC: 90~320V				
Max. Current		17 A	17 A	17 A	17 A	17 A
Peak current		25 A	25 A	25 A	25 A	25 A
Output Parameters						
Max. Output Power	DC Mode	0.8 kW	1.2 kW	1.3 kW	1.3 kW	1.6 kW
	AC Mode	0.8 kW	1.2 kW	1.3 kW	1.3 kW	1.6 kW
	Hybrid Mode	0.8 kW	1.2 kW	1.3 kW	1.3 kW	1.6 kW
Rated Output Voltage		3~Phase, 90V~220V				
Max. Current		12 A	12 A	12 A	12 A	12 A
Rated Current		10 A	10 A	10 A	10 A	10 A
Speed Range		500~3600 rpm				
Other Parameters						
Protect Functions		① Dry–run protect ② Over/Low voltage protect ③ Lighting protect ④ Over/short circuit protect ⑤ Surge protection ⑥ Over temperature protect (Overtemperature frequency reduction) ⑦ Output phase lose protect				
Other Functions		① AC/DC Complementary Mode ② Compatible with Synchronous Asynchronous motor ③ Internal temperature display ④ Frequency reduction temperature setting ⑤ Impeller cleaning function ⑥ Fault record query ⑦ Current setting of dry running protection ⑧ Float switch status display ⑨ GPRS Remote monitor function optional				
Protecion Class		IP55				
Standby Power		< 5W				
Installation Method		Wall Mounted				
Package Info. (L*W*H)		400x300x200 mm				
Package Info. (GW)		5.9 kg				

Applications

- Agriculture irrigation, livestock feeding, Domestic water lifting
- Clear water supply from wells or reservoirs
- Off grid solar pumping system

Pump Features

- With MPPT AC/DC Controller
- Plastic Impeller and diffuser
- AISI304 oil chamber & outlet
- NSK Bearing
- High efficiency PMSM brushless motor
  (PMSM: Permanent Magnet Synchronous Motor)

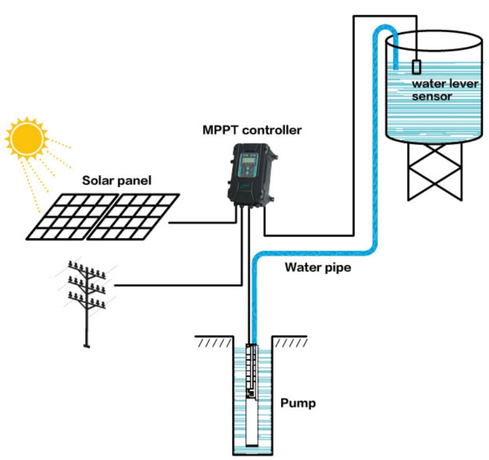
MPPT AC/DC Controller

- Can be used for both AC and DC power supply
- Protection class: IP55
- Ambient temperature: -15 ~ 60℃
- LED Displays working conditions & Fault code
- Auto Start & Stop
- Soft start & VFD function

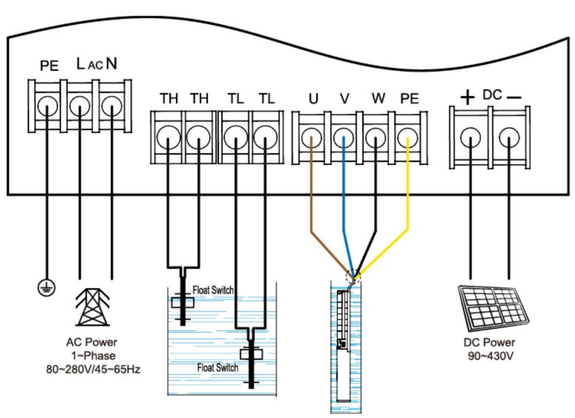
Identification Codes

3 LPY 3.5 - 95 - 110 - 750 P

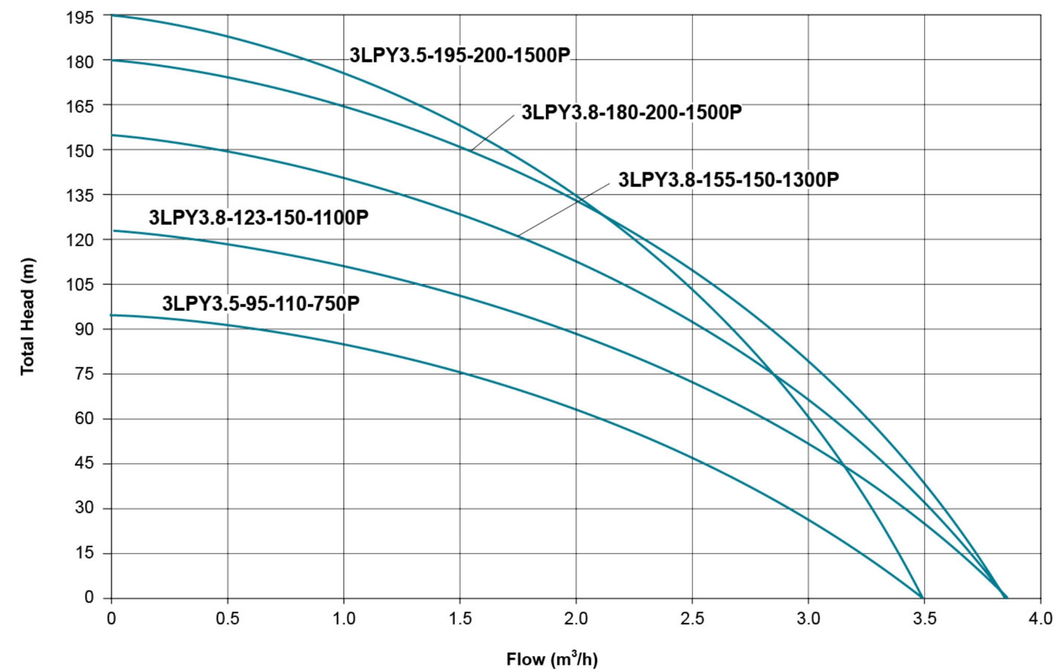
- P — Plastic Impeller
- 750 — Rated Power (W)
- 110 — Motor Voltage
- 95 — Max. Head (m)
- 3.5 — Max. Flow (m^3/h)
- LPY — LEO Hybrid AD/DC Solar Pump
- 3 — 3 Inch



Wiring Diagram



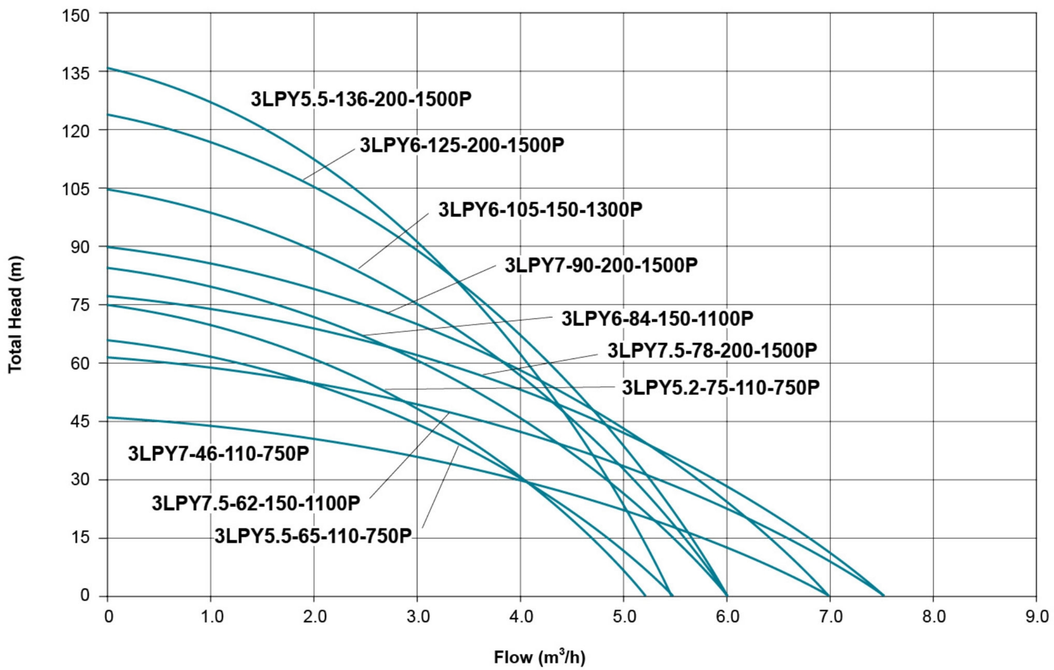
3"Hybrid AC/DC Solar Pump with Plastic Impeller



Technical Data

Model	Power (W)	AC Voltage (V)	DC Voltage (V)	Max. Flow (m^3/h)	Max. Head (m)	Outlet (inch)	Cable (m)	Recommended Solar Panel	
								Open Circuit Voltage(VOC)	Power
3LPY3.5-95-110-750P	750	80-280	90-430	3.5	95	1¼"	2	<430	≥1.3*Pump Power
3LPY3.8-123-150-1100P	1100	80-280	90-430	3.8	123	1¼"	2	<430	≥1.3*Pump Power
3LPY3.8-155-150-1300P	1300	80-280	90-430	3.8	155	1¼"	2	<430	≥1.3*Pump Power
3LPY3.8-180-200-1500P	1500	80-280	90-430	3.8	180	1¼"	2	<430	≥1.3*Pump Power
3LPY3.5-195-200-1500P	1500	80-280	90-430	3.5	195	1¼"	2	<430	≥1.3*Pump Power

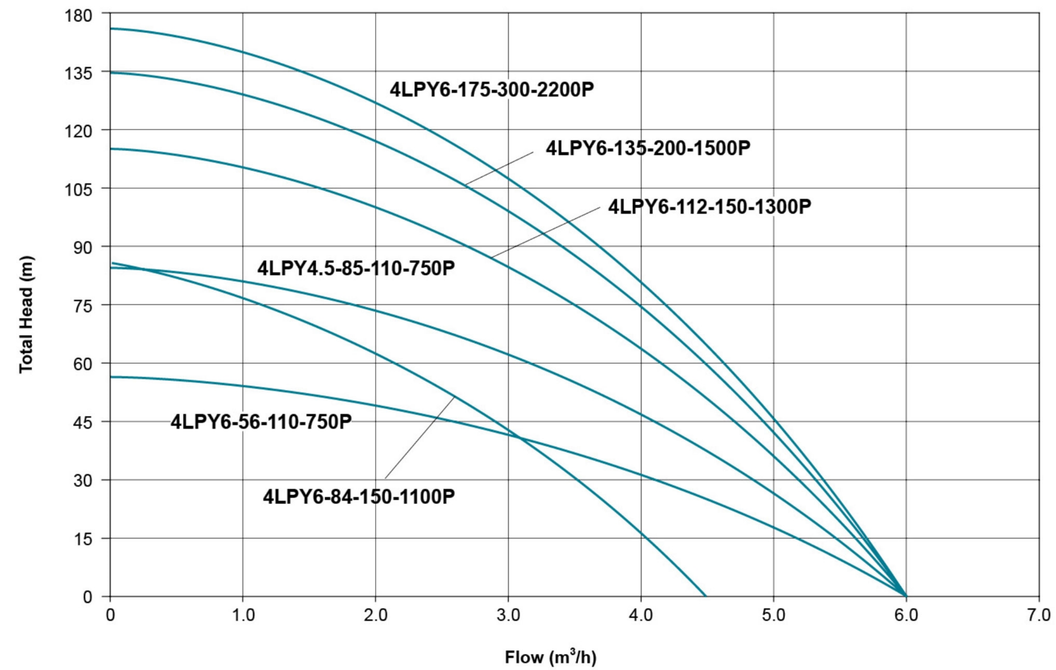
3"Hybrid AC/DC Solar Pump with Plastic Impeller



Technical Data

Model	Power (W)	AC Voltage (V)	DC Voltage (V)	Max. Flow (m^3/h)	Max. Head (m)	Outlet (inch)	Cable (m)	Recommended Solar Panel	
								Open Circuit Voltage(VOC)	Power
3LPY5.2-75-110-750P	750	80-280	90-430	5.2	75	1½"	2	<430	≥1.3*Pump Power
3LPY5.5-65-110-750P	750	80-280	90-430	5.5	65	1½"	2	<430	≥1.3*Pump Power
3LPY6-84-150-1100P	1100	80-280	90-430	6	84	1½"	2	<430	≥1.3*Pump Power
3LPY6-105-150-1300P	1300	80-280	90-430	6	105	1½"	2	<430	≥1.3*Pump Power
3LPY6-125-200-1500P	1500	80-280	90-430	6	125	1½"	2	<430	≥1.3*Pump Power
3LPY5.5-136-200-1500P	1500	80-280	90-430	5.5	136	1½"	2	<430	≥1.3*Pump Power
3LPY7-46-110-750P	750	80-280	90-430	7	46	1½"	2	<430	≥1.3*Pump Power
3LPY7.5-62-150-1100P	1100	80-280	90-430	7.5	62	1½"	2	<430	≥1.3*Pump Power
3LPY7.5-78-200-1500P	1500	80-280	90-430	7.5	78	1½"	2	<430	≥1.3*Pump Power
3LPY7-90-200-1500P	1500	80-280	90-430	7	90	1½"	2	<430	≥1.3*Pump Power

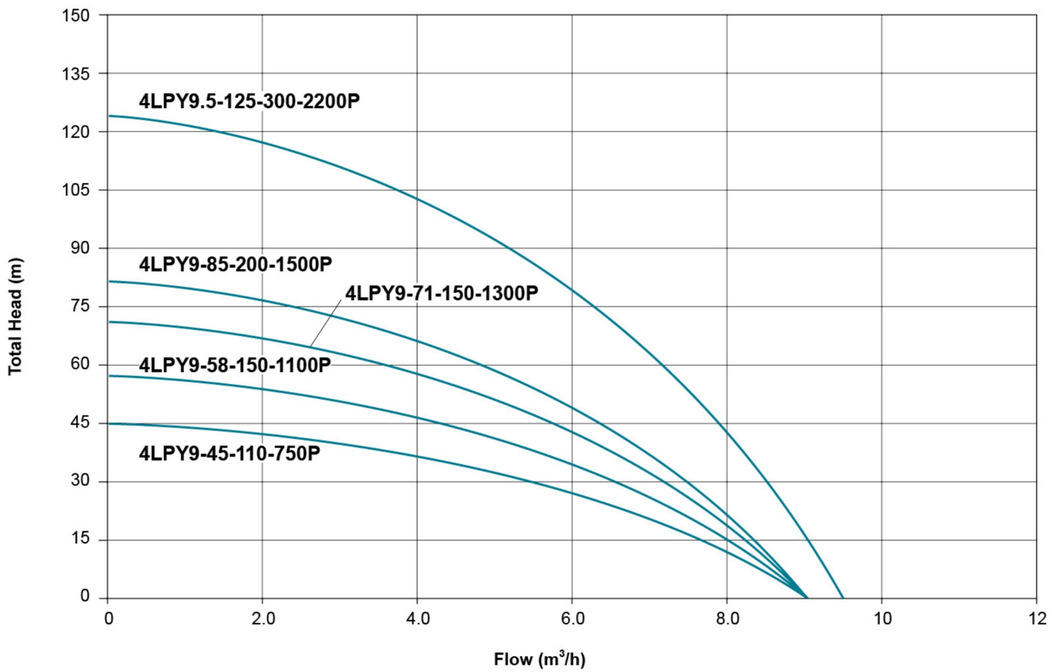
4"Hybrid AC/DC Solar Pump with Plastic Impeller



Technical Data

Model	Power (W)	AC Voltage (V)	DC Voltage (V)	Max. Flow (m^3/h)	Max. Head (m)	Outlet (inch)	Cable (m)	Recommended Solar Panel	
								Open Circuit Voltage(VOC)	Power
4LPY4.5-85-110-750P	750	80-280	90-430	4.5	85	1¼"	2	<430	≥1.3*Pump Power
4LPY6-56-110-750P	750	80-280	90-430	6	56	1¼"	2	<430	≥1.3*Pump Power
4LPY6-84-150-1100P	1100	80-280	90-430	6	84	1¼"	2	<430	≥1.3*Pump Power
4LPY6-112-150-1300P	1300	80-280	90-430	6	112	1¼"	2	<430	≥1.3*Pump Power
4LPY6-135-200-1500P	1500	80-280	90-430	6	135	1¼"	2	<430	≥1.3*Pump Power
4LPY6-175-300-2200P	2200	80-280	90-430	6	175	1¼"	2	<430	≥1.3*Pump Power

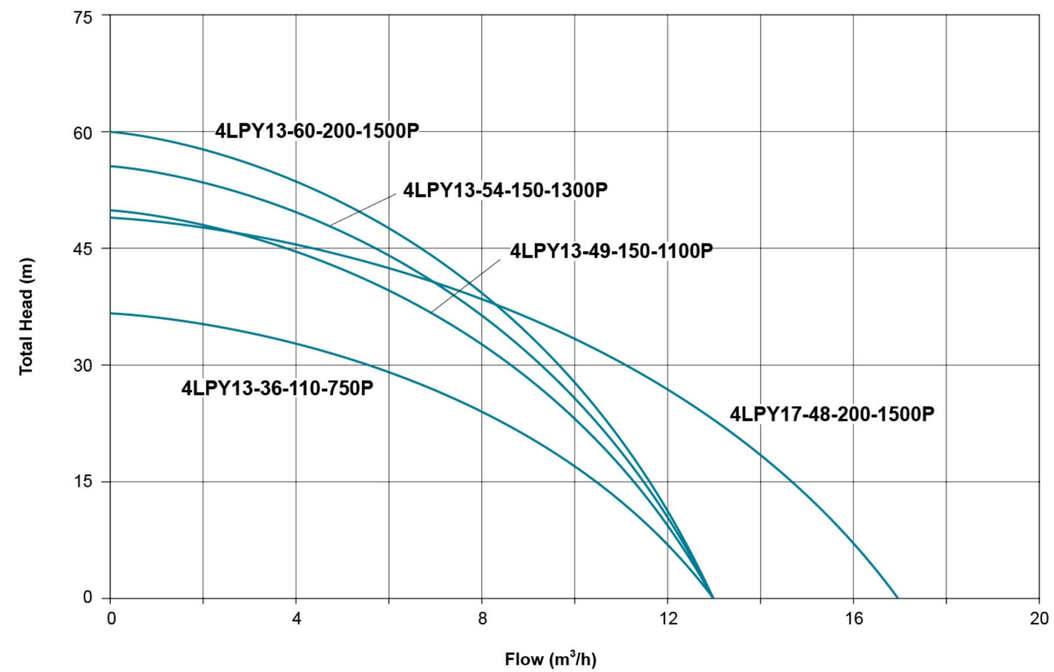
4"Hybrid AC/DC Solar Pump with Plastic Impeller



Technical Data

Model	Power (W)	AC Voltage (V)	DC Voltage (V)	Max. Flow (m^3/h)	Max. Head (m)	Outlet (inch)	Cable (m)	Recommended Solar Panel	
								Open Circuit Voltage(VOC)	Power
4LPY9-45-110-750P	750	80-280	90-430	9	45	2"	2	<430	≥1.3*Pump Power
4LPY9-58-150-1100P	1100	80-280	90-430	9	58	2"	2	<430	≥1.3*Pump Power
4LPY9-71-150-1300P	1300	80-280	90-430	9	71	2"	2	<430	≥1.3*Pump Power
4LPY9-85-200-1500P	1500	80-280	90-430	9	85	2"	2	<430	≥1.3*Pump Power
4LPY9.5-125-300-2200P	2200	80-280	90-430	9.5	125	2"	2	<430	≥1.3*Pump Power

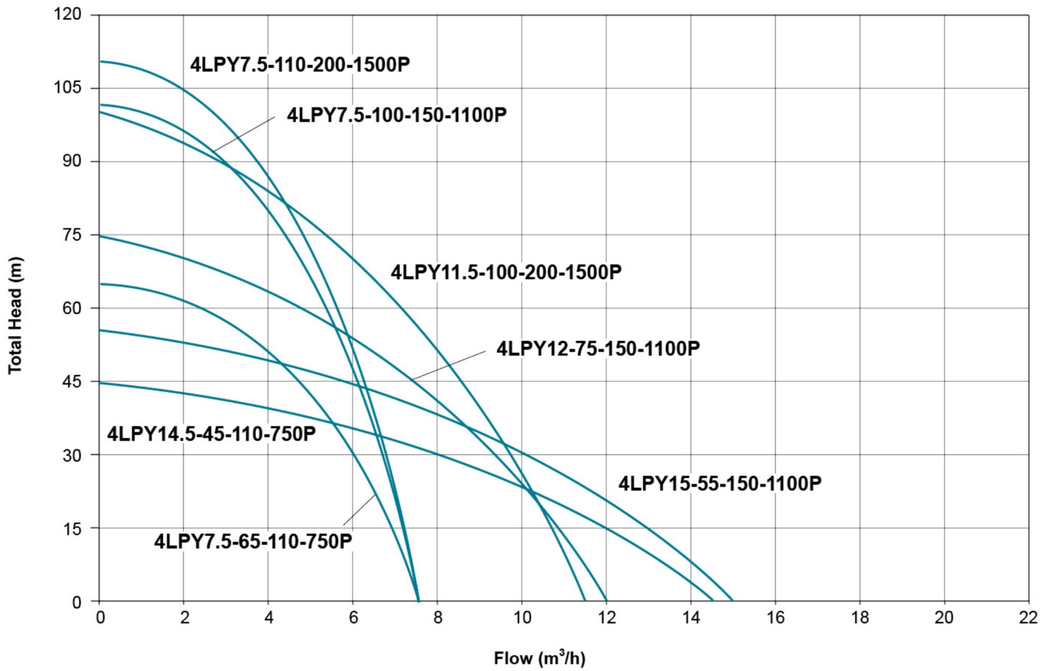
4"Hybrid AC/DC Solar Pump with Plastic Impeller



Technical Data

Model	Power (W)	AC Voltage (V)	DC Voltage (V)	Max. Flow (m^3/h)	Max. Head (m)	Outlet (inch)	Cable (m)	Recommended Solar Panel	
								Open Circuit Voltage(VOC)	Power
4LPY13-36-110-750P	750	80-280	90-430	13	36	2"	2	<430	≥1.3*Pump Power
4LPY13-49-150-1100P	1100	80-280	90-430	13	49	2"	2	<430	≥1.3*Pump Power
4LPY13-54-150-1300P	1300	80-280	90-430	13	54	2"	2	<430	≥1.3*Pump Power
4LPY13-60-200-1500P	1500	80-280	90-430	13	60	2"	2	<430	≥1.3*Pump Power
4LPY17-48-200-1500P	1500	80-280	90-430	17	48	2"	2	<430	≥1.3*Pump Power

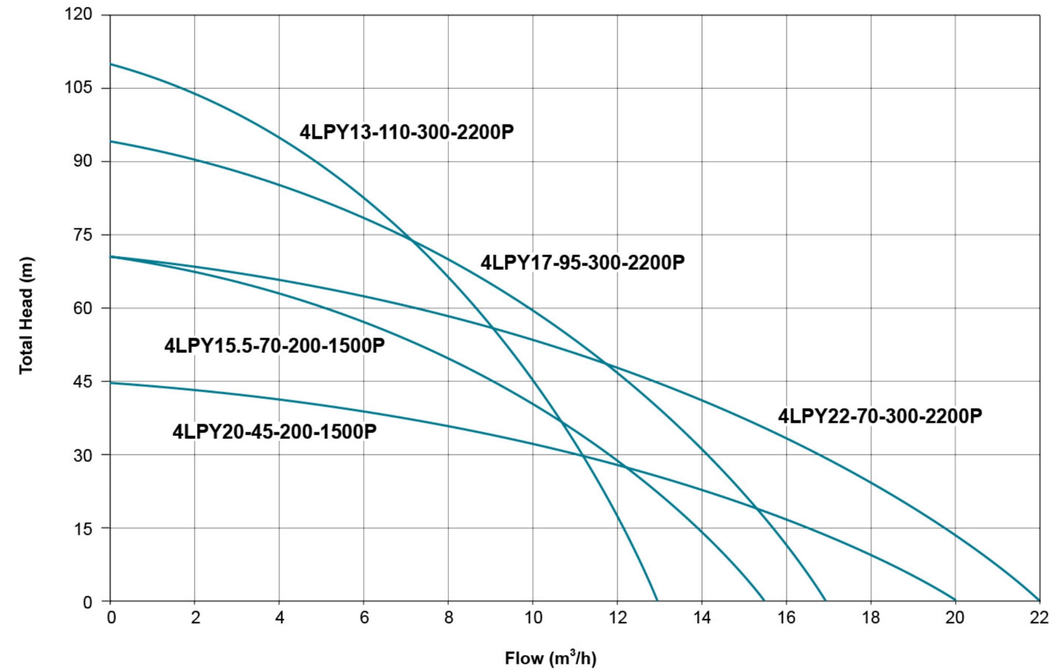
4"Hybrid AC/DC Solar Pump with Plastic Impeller



Technical Data

Model	Power (W)	AC Voltage (V)	DC Voltage (V)	Max. Flow (m^3/h)	Max. Head (m)	Outlet (inch)	Cable (m)	Recommended Solar Panel	
								Open Circuit Voltage(VOC)	Power
4LPY7.5-65-110-750P	750	80-280	90-430	7.5	65	2"	2	<430	≥1.3*Pump Power
4LPY7.5-100-150-1100P	1100	80-280	90-430	7.5	100	2"	2	<430	≥1.3*Pump Power
4LPY7.5-110-200-1500P	1500	80-280	90-430	7.5	110	2"	2	<430	≥1.3*Pump Power
4LPY12-75-150-1100P	1100	80-280	90-430	12	75	2"	2	<430	≥1.3*Pump Power
4LPY11.5-100-200-1500P	1500	80-280	90-430	11.5	100	2"	2	<430	≥1.3*Pump Power
4LPY14.5-45-110-750P	750	80-280	90-430	14.5	45	2"	2	<430	≥1.3*Pump Power
4LPY15-55-150-1100P	1100	80-280	90-430	15	55	2"	2	<430	≥1.3*Pump Power

4"Hybrid AC/DC Solar Pump with Plastic Impeller



Technical Data

Model	Power (W)	AC Voltage (V)	DC Voltage (V)	Max. Flow (m^3/h)	Max. Head (m)	Outlet (inch)	Cable (m)	Recommended Solar Panel	
								Open Circuit Voltage(VOC)	Power
4LPY13-110-300-2200P	2200	80-280	90-430	13	110	2"	2	<430	≥1.3*Pump Power
4LPY15.5-70-200-1500P	1500	80-280	90-430	15.5	70	2"	2	<430	≥1.3*Pump Power
4LPY17-95-300-2200P	2200	80-280	90-430	17	95	2"	2	<430	≥1.3*Pump Power
4LPY20-45-200-1500P	1500	80-280	90-430	20	45	2"	2	<430	≥1.3*Pump Power
4LPY22-70-300-2200P	2200	80-280	90-430	22	70	2"	2	<430	≥1.3*Pump Power