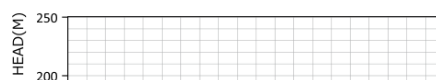


## 4" AC/DC PLASTIC IMPELLER SOLAR PUMP

### MATERIAL & FEATURES

- ▶ **Motor:** Permanent-magnet synchronous (PMSM) — up to 92% efficiency, 20–30% more energy-saving
- ▶ **Drive / MPPT:** Sensorless FOC sine-wave drive · MPPT >99% · LED display (V/A/W/RPM/error)
- ▶ **Wetted parts:** plastic impeller impeller · stainless steel body · stainless steel outlet
- ▶ **Power:** Solar DC or 220 V AC (90–240 V, 50/60 Hz) / generator — external transfer switch
- ▶ **Material grades:** SUS304 standard · SUS316 optional for coastal / brackish water
- ▶ **Key components:** 100% copper motor windings · NSK-grade sealed ball bearings · SUS304 shaft + engineering-plastic impellers · Silicon-carbide (SiC) mechanical seal
- ▶ **Ingress:** Motor IP68 (submersible motor) · Controller IP66 · Class F insulation · oil cooling
- ▶ **Protection:** Dry-run · over/under-voltage · overload · over-current · reverse · over-temp · soft-start
- ▶ **Cable:** PV-to-controller & motor cable 2.5 mm<sup>2</sup> by model (copper, sized for a ~50 m run; step up one size per additional ~50 m of drop).
- ▶ **Warranty:** 2 years
- ▶ **Standards:** CE · RoHS · CB · TUV · SGS · ISO 9001 · ISO 14001 · IEC 62253


**190 m**

MAX HEAD

**30 m<sup>3</sup>/h**

MAX FLOW

**600–2200 W**

POWER

**92%**

EFFICIENCY

**2 yr**

WARRANTY

### APPLICATIONS



Irrigation



Livestock



Village supply

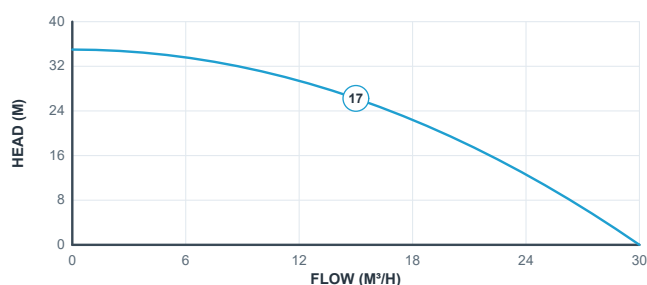
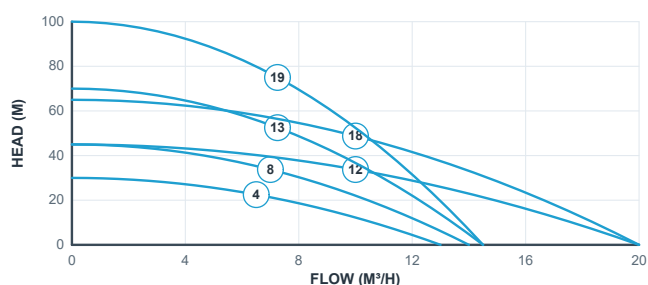
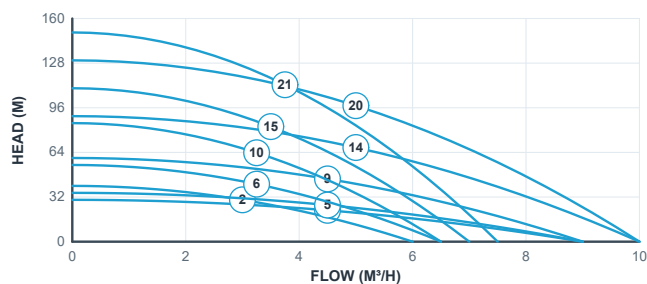
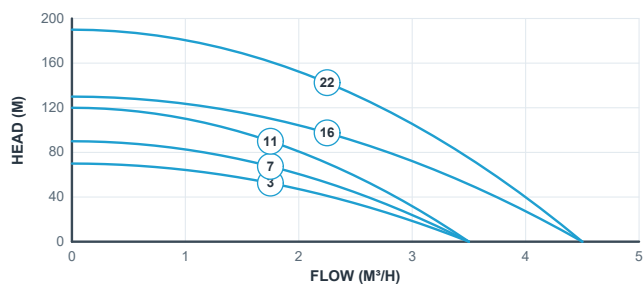


Off-grid



Industry

### PERFORMANCE CURVES (Q–H)



## 4" AC/DC PLASTIC IMPELLER SOLAR PUMP - SPECIFICATIONS

Model no.: size (") · type · max flow (m³/h) – max head (m) – system voltage (V) – power (W)

| NO. | MODEL                   | VOLT. (V) | INPUT Voc (V) | POWER (W) | MAX FLOW (M³/H) | MAX HEAD (M) | OUTLET (inch) | REC. PV     |
|-----|-------------------------|-----------|---------------|-----------|-----------------|--------------|---------------|-------------|
| 1   | 4PSC9.0-30-72-600-H     | 72        | 60~150        | 600       | 9               | 30           | 2"            | 3 × 300 Wp  |
| 2   | 4PSC6.0-40-72-600-H     | 72        | 60~150        | 600       | 6               | 40           | 1.5"          | 3 × 300 Wp  |
| 3   | 4PSC3.5-70-72-600-H     | 72        | 60~150        | 600       | 3.5             | 70           | 1.25"         | 3 × 300 Wp  |
| 4   | 4PSC13.0-30-96-750-H    | 96        | 60~200        | 750       | 13              | 30           | 2"            | 3 × 300 Wp  |
| 5   | 4PSC9.0-35-96-750-H     | 96        | 60~200        | 750       | 9               | 35           | 2"            | 3 × 300 Wp  |
| 6   | 4PSC6.5-55-96-750-H     | 96        | 60~200        | 750       | 6.5             | 55           | 1.5"          | 3 × 300 Wp  |
| 7   | 4PSC3.5-90-96-750-H     | 96        | 60~200        | 750       | 3.5             | 90           | 1.25"         | 3 × 300 Wp  |
| 8   | 4PSC14.0-45-144-1100-H  | 144       | 90~340        | 1100      | 14              | 45           | 2"            | 6 × 300 Wp  |
| 9   | 4PSC9.0-60-144-1100-H   | 144       | 90~340        | 1100      | 9               | 60           | 2"            | 6 × 300 Wp  |
| 10  | 4PSC6.5-85-144-1100-H   | 144       | 90~340        | 1100      | 6.5             | 85           | 1.5"          | 6 × 300 Wp  |
| 11  | 4PSC3.5-120-144-1100-H  | 144       | 90~340        | 1100      | 3.5             | 120          | 1.25"         | 6 × 300 Wp  |
| 12  | 4PSC20.0-45-192-1500-H  | 192       | 90~430        | 1500      | 20              | 45           | 2"            | 8 × 300 Wp  |
| 13  | 4PSC14.5-70-192-1500-H  | 192       | 90~430        | 1500      | 14.5            | 70           | 2"            | 8 × 300 Wp  |
| 14  | 4PSC10.0-90-192-1500-H  | 192       | 90~430        | 1500      | 10              | 90           | 2"            | 8 × 300 Wp  |
| 15  | 4PSC7.0-110-192-1500-H  | 192       | 90~430        | 1500      | 7               | 110          | 1.5"          | 8 × 300 Wp  |
| 16  | 4PSC4.5-130-192-1500-H  | 192       | 90~430        | 1500      | 4.5             | 130          | 1.25"         | 8 × 300 Wp  |
| 17  | 4PSC30.0-35-280-2200-H  | 280       | 100~490       | 2200      | 30              | 35           | 2"            | 10 × 300 Wp |
| 18  | 4PSC20.0-65-280-2200-H  | 280       | 100~490       | 2200      | 20              | 65           | 2"            | 10 × 300 Wp |
| 19  | 4PSC14.5-100-280-2200-H | 280       | 100~490       | 2200      | 14.5            | 100          | 2"            | 10 × 300 Wp |
| 20  | 4PSC10.0-130-280-2200-H | 280       | 100~490       | 2200      | 10              | 130          | 2"            | 10 × 300 Wp |
| 21  | 4PSC7.5-150-280-2200-H  | 280       | 100~490       | 2200      | 7.5             | 150          | 1.5"          | 10 × 300 Wp |
| 22  | 4PSC4.5-190-280-2200-H  | 280       | 100~490       | 2200      | 4.5             | 190          | 1.25"         | 10 × 300 Wp |

### OPERATING CONDITIONS

|                |                       |
|----------------|-----------------------|
| Liquid temp    | 0–40 °C               |
| Max. sand      | ≤ 0.05 % (≤ 500 g/m³) |
| pH value       | 5–9                   |
| Ambient        | -15 to 70 °C          |
| Max. immersion | 150 m                 |
| Duty           | S1 (continuous)       |

### DIMENSIONS & WEIGHT

|                |                    |
|----------------|--------------------|
| Pump outer Ø   | 98 mm              |
| Min. borehole  | 100 mm             |
| Net weight     | 10.8–20.9 kg       |
| Overall length | 840–1205 mm        |
| Controller     | 360 × 260 × 140 mm |
| Controller wt. | 7 kg               |

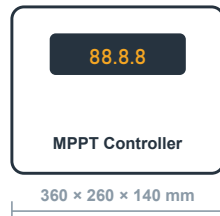
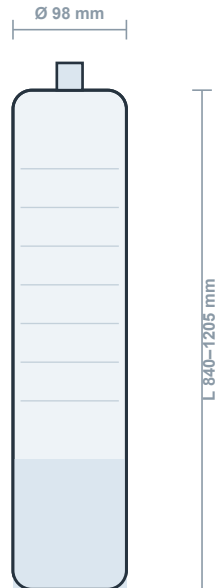
### MATERIALS & CERTIFICATION

|          |                                                                          |
|----------|--------------------------------------------------------------------------|
| Standard | SUS304 sleeve + engineering-plastic impeller & diffuser + SUS304 shaft   |
| Option   | SUS316 sleeve + plastic impeller (plastic is inherently corrosion-proof) |

|           |      |           |     |     |          |
|-----------|------|-----------|-----|-----|----------|
| CE        | RoHS | CB        | TUV | SGS | ISO 9001 |
| ISO 14001 | IP68 | IEC 62253 |     |     |          |

## 4" AC/DC PLASTIC IMPELLER SOLAR PUMP - DIMENSIONS & CONTROLLER

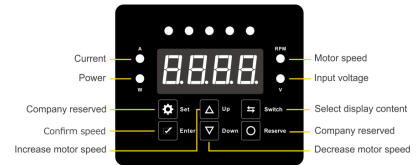
### DIMENSIONS & WEIGHT



### KEY DIMENSIONS

|                   |                    |
|-------------------|--------------------|
| Pump outer Ø      | 98 mm              |
| Min. borehole     | 100 mm             |
| Overall length    | 840–1205 mm        |
| Net weight        | 10.8–20.9 kg       |
| Controller size   | 360 × 260 × 140 mm |
| Controller weight | 7 kg               |

### CONTROLLER

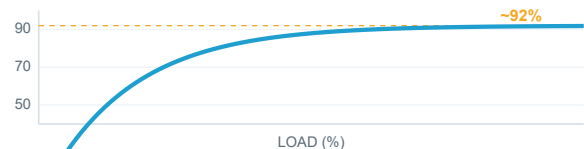


LED control panel — real-time monitoring & manual speed

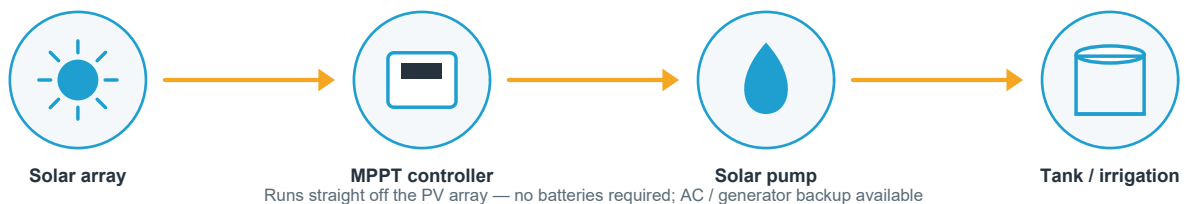
### CONTROLLER SPEC

|                 |                                       |
|-----------------|---------------------------------------|
| Drive           | Sensorless FOC, pure sine-wave output |
| MPPT efficiency | >99%                                  |
| Enclosure       | IP66                                  |
| Mount           | Both                                  |
| Display         | V / A / W / RPM / error               |
| Remote monitor  | Optional 4G / Wi-Fi module (add-on)   |

### MOTOR EFFICIENCY (typical)



### SYSTEM LAYOUT



### WHY AQUASOLAR



**FOC + MPPT >99%**  
Pure sine-wave drive — max water per day



**IP68 · SUS304**  
Submersible, corrosion-resistant build



**Dry-run protected**  
8 protections + soft start



**2-year warranty**  
Trusted in 70+ countries

### ABOUT AQUASOLAR

## POWERING WATER WITH SUNSHINE

Aquasolar is a professional solar water pump manufacturer since 2010, offering a full range of DC and AC/DC solar pumps for agricultural irrigation, livestock, off-grid homes and community water supply. Reliable products, complete solutions and dedicated service — trusted in 70+ countries worldwide.

**2010**  
SINCE

**70+**  
COUNTRIES

**600,000+**  
ANNUAL OUTPUT

**2 yr**  
WARRANTY

**24/7**  
SERVICE