

3" 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:** stainless steel / engineered polymer impeller · 201 stainless steel body · brass/stainless steel outlet
- ▶ **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 2.5–4 mm² 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


230 m

MAX HEAD

6.5 m³/h

MAX FLOW

300–2200 W

POWER

92%

EFFICIENCY

2 yr

WARRANTY

APPLICATIONS



Irrigation



Livestock



Village supply

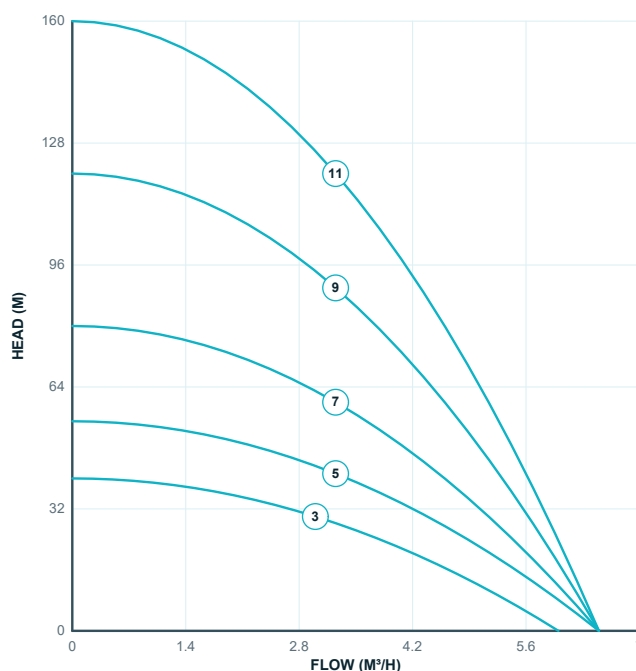
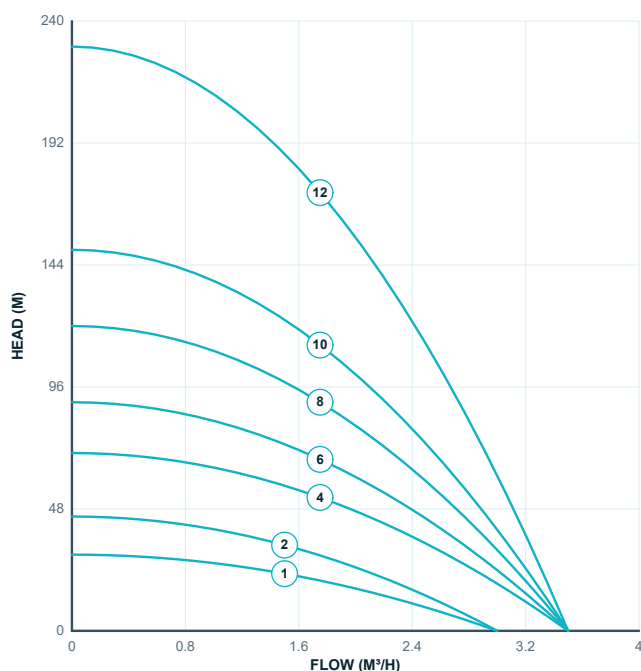


Off-grid



Industry

PERFORMANCE CURVES (Q-H)

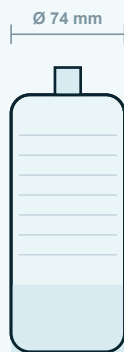


3" DC PLASTIC IMPELLER SOLAR PUMP - SPECIFICATIONS

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

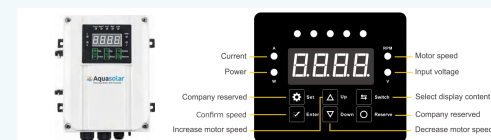
NO.	MODEL	VOLT. (V)	INPUT Voc (V)	POWER (W)	MAX FLOW (M³/H)	MAX HEAD (M)	OUTLET (inch)	REC. PV
1	3PSC3.0-30-24-300	24	11~55	300	3	30	1"	1 × 400 Wp
2	3PSC3.0-45-48-400	48	45~150	400	3	45	1"	2 × 300 Wp
3	3PSC6.0-40-72-600	72	60~150	600	6	40	1"	3 × 300 Wp
4	3PSC3.5-70-72-600	72	60~150	600	3.5	70	1"	3 × 300 Wp
5	3PSC6.5-55-96-750	96	60~200	750	6.5	55	1"	3 × 300 Wp
6	3PSC3.5-90-96-750	96	60~200	750	3.5	90	1"	3 × 300 Wp
7	3PSC6.5-80-144-1100	144	90~340	1100	6.5	80	1"	6 × 300 Wp
8	3PSC3.5-120-144-1100	144	90~340	1100	3.5	120	1"	6 × 300 Wp
9	3PSC6.5-120-192-1500	192	90~430	1500	6.5	120	1"	8 × 300 Wp
10	3PSC3.5-150-192-1500	192	90~430	1500	3.5	150	1"	8 × 300 Wp
11	3PSC6.5-160-280-2200	280	100~490	2200	6.5	160	1"	10 × 300 Wp
12	3PSC3.5-230-280-2200	280	100~490	2200	3.5	230	1"	10 × 300 Wp

DIMENSIONS & WEIGHT



Pump outer Ø 74 mm
Min. borehole 76 mm
Overall length 745–1355 mm
Net weight 6.3–14.2 kg
Controller size 360 × 260 × 140 mm
Controller wt. 7 kg

CONTROLLER



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 (add-on)

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)

MOTOR & DRIVE

Motor PM brushless (PMSM)
Efficiency up to 92%
Drive Sensorless FOC sine-wave
MPPT >99%
Insulation F (155 °C)
Duty S1 (continuous)
Cooling Oil cooling
Speed Variable, MPPT-tracked

MATERIALS & CERTIFICATION

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



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