

3"-4" DC SCREW 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:** steel + rubber impeller · 201 stainless steel body · 201 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 + steel/NBR progressive-cavity screw (sand-tolerant) · NBR stator — handles silty / sandy water
- ▶ **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


130 m

MAX HEAD

3.6 m³/h

MAX FLOW

180-750 W

POWER

92%

EFFICIENCY

2 yr

WARRANTY

APPLICATIONS



Irrigation



Livestock



Village supply

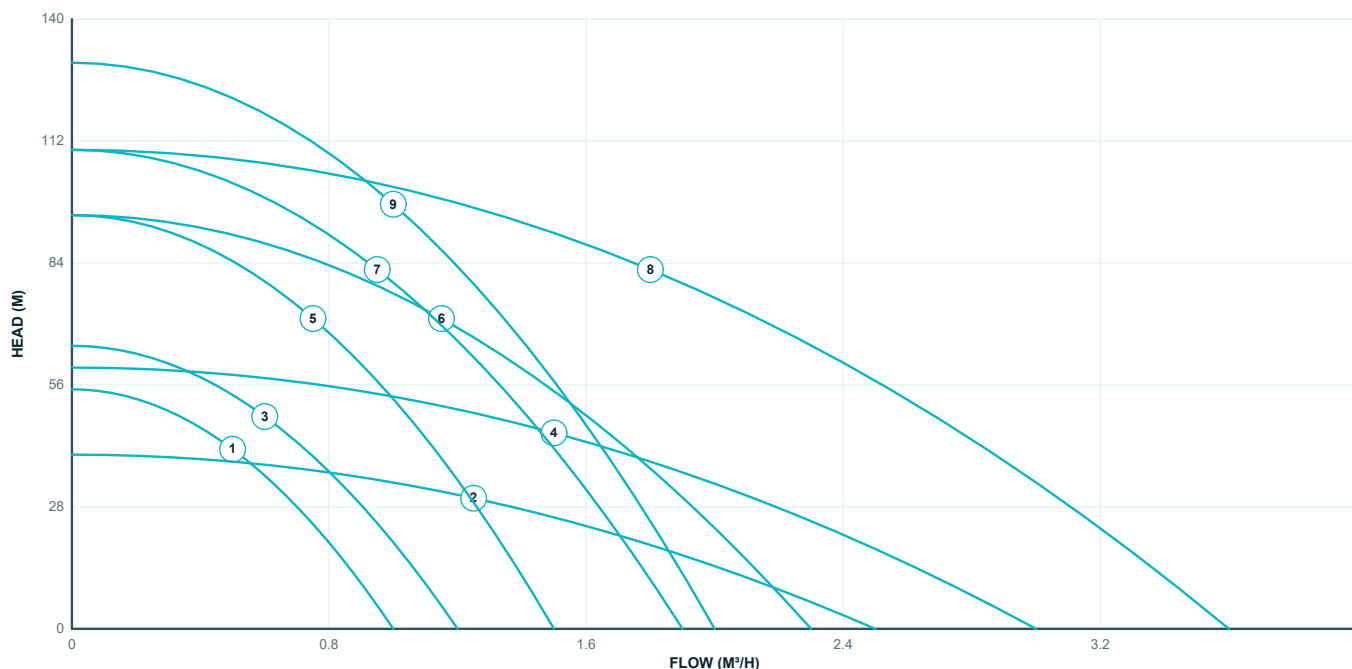


Off-grid



Industry

PERFORMANCE CURVES (Q-H)



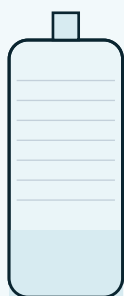
3"-4" DC SCREW SOLAR PUMP - SPECIFICATIONS

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	3PWSS1.0-55-24-180	24	11~55	180	1	55	0.75"	1 × 250 Wp
2	4PWSS2.5-40-24-250	24	11~55	250	2.5	40	1"	1 × 330 Wp
3	3PWSS1.2-65-24-250	24	11~55	250	1.2	65	0.75"	1 × 330 Wp
4	4PWSS3.0-60-48-400	48	45~150	400	3	60	1"	2 × 300 Wp
5	3PWSS1.5-95-48-400	48	45~150	400	1.5	95	0.75"	2 × 300 Wp
6	4PWSS2.3-95-72-600	72	60~150	600	2.3	95	1"	3 × 300 Wp
7	3PWSS1.9-110-72-600	72	60~150	600	1.9	110	0.75"	3 × 300 Wp
8	4PWSS3.6-110-96-750	96	60~200	750	3.6	110	1"	3 × 300 Wp
9	3PWSS2.0-130-96-750	96	60~200	750	2	130	0.75"	3 × 300 Wp

DIMENSIONS & WEIGHT

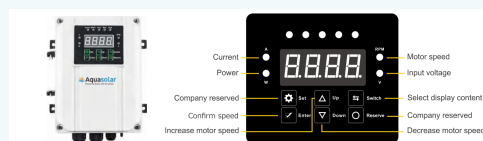
Ø 74/98 mm



L 710~890 mm

Pump outer Ø	74/98 mm
Min. borehole	76/100 mm
Overall length	710~890 mm
Net weight	5.8~11.7 kg
Controller size	250 × 175 × 110 mm
Controller wt.	2.5 kg

CONTROLLER



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

OPERATING CONDITIONS

Liquid temp	0~40 °C
Max. sand	≤ 0.25 % (sand-tolerant screw)
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 outer sleeve + steel/NBR progressive screw rotor + SUS304 shaft
Option	SUS316 sleeve, shaft & fittings

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

SYSTEM LAYOUT

