



FLAGSHIP · BRUSHLESS SS SERIES

SOLAR WATER PUMP CATALOGUE

2026 EDITION

DC & AC/DC solar pumps · submersible / surface / pool · 150 W - 3,000 W

16

SERIES

209

MODELS

260 m

MAX HEAD

70+

COUNTRIES

600,000+

ANNUAL OUTPUT

CONTENTS

DC SOLAR PUMPS

03	2" DC Screw Solar Pump	8 models · 180-750 W
05	3"-4" DC Screw Solar Pump	9 models · 180-750 W
07	3" DC Plastic Impeller Solar Pump	12 models · 300-2200 W
09	3" DC Stainless Steel Impeller Solar Pump	7 models · 300-2200 W
11	4"-6" DC Brushless Stainless Steel Impeller Solar Pump	32 models · 300-3000 W
14	4" DC Plastic Impeller Solar Pump	30 models · 300-3000 W
17	DC Solar Submersible Pump (High-Flow)	4 models · 1100-2200 W
19	DC Solar Surface Pump	21 models · 150-3000 W
22	DC Solar Swimming Pool Pump	7 models · 200-2200 W

AC/DC HYBRID SOLAR PUMPS

24	3" AC/DC Stainless Steel Impeller Solar Pump	5 models · 600-2200 W
26	3" AC/DC Plastic Impeller Solar Pump	10 models · 600-2200 W
28	4"-6" AC/DC Stainless Steel Impeller Solar Pump	23 models · 600-2200 W
31	4" AC/DC Plastic Impeller Solar Pump	22 models · 600-2200 W
34	AC/DC Solar Submersible Pump (High-Flow)	4 models · 1100-2200 W
36	AC/DC Solar Surface Pump	10 models · 600-2200 W
38	AC/DC Solar Swimming Pool Pump	5 models · 600-2200 W

2" 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:** 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 + 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


140 m

MAX HEAD

1.7 m³/h

MAX FLOW

180–750 W

POWER

92%

EFFICIENCY

2 yr

WARRANTY

APPLICATIONS



Irrigation



Livestock



Village supply

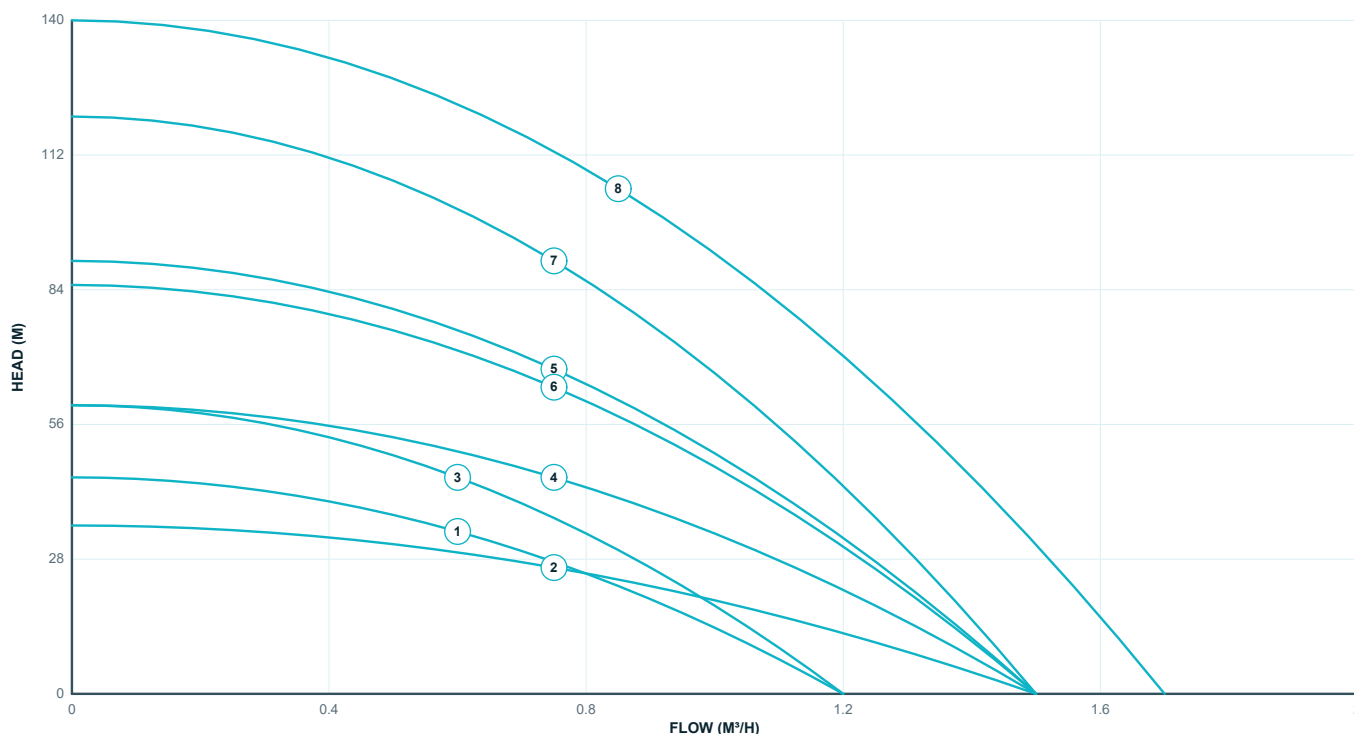


Off-grid



Industry

PERFORMANCE CURVES (Q-H)

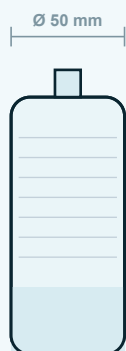


2" DC SCREW SOLAR PUMP - SPECIFICATIONS

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

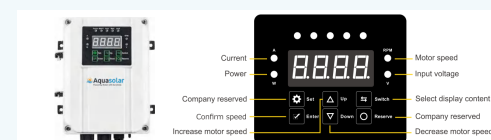
NO.	MODEL	VOLT. (V)	INPUT Voc (V)	POWER (W)	MAX FLOW (M³/H)	MAX HEAD (M)	OUTLET (inch)	REC. PV
1	2PWSS1.2-45-24-180	24	11~55	180	1.2	45	0.75"	1 × 250 Wp
2	2PSC1.5-35-24-250	24	11~55	250	1.5	35	0.75"	1 × 330 Wp
3	2PWSS1.2-60-24-250	24	11~55	250	1.2	60	0.75"	1 × 330 Wp
4	2PSC1.5-60-48-400	48	45~150	400	1.5	60	0.75"	2 × 300 Wp
5	2PWSS1.5-90-48-400	48	45~150	400	1.5	90	0.75"	2 × 300 Wp
6	2PSC1.5-85-72-600	72	60~150	600	1.5	85	0.75"	3 × 300 Wp
7	2PWSS1.5-120-72-600	72	60~150	600	1.5	120	0.75"	3 × 300 Wp
8	2PWSS1.7-140-96-750	96	60~200	750	1.7	140	0.75"	3 × 300 Wp

DIMENSIONS & WEIGHT



Pump outer Ø 50 mm
Min. borehole 52 mm
Overall length 545–620 mm
Net weight 4.3–6.9 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

SOLAR ARRAY CONNECTION

SYSTEM	Voc (V)	POWER	ARRAY
24 V	11~55	180–250 W	1 × 330 Wp
48 V	45~150	400 W	2 × 300 Wp
72 V	60~150	600 W	3 × 300 Wp
96 V	60~200	750 W	3 × 300 Wp

Array 1.3–1.5 × pump power · Voc within MPPT window.

CABLE & INSTALLATION

Run ≤ 50 m 2.5–4 mm² (per model)
Run 50–100 m one size up
Run > 100 m two sizes up
Cable type 3-core copper + earth

- ▶ Waterproof splice kit on the drop cable
- ▶ Stainless safety rope; ≥ 1 m above well bottom

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

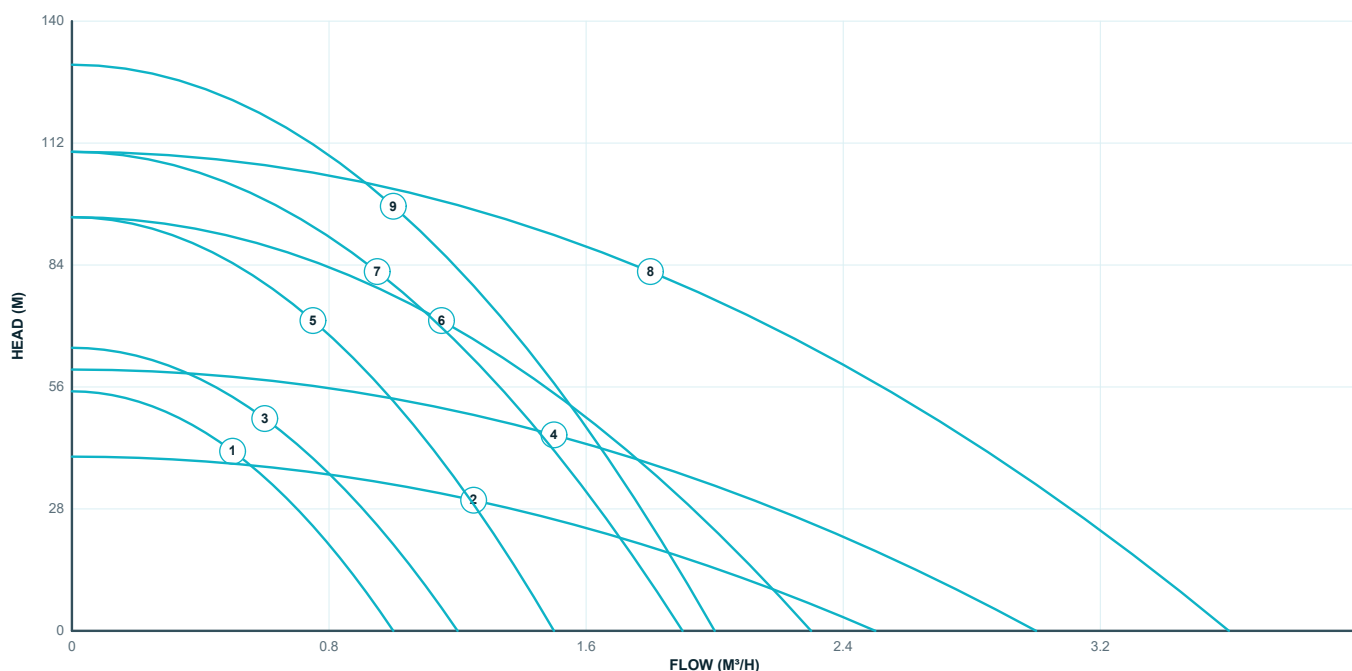


Off-grid



Industry

PERFORMANCE CURVES (Q-H)



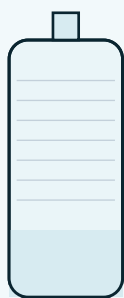
3"-4" DC SCREW SOLAR PUMP - SPECIFICATIONS

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

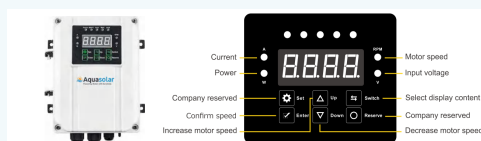
Ø 74/98 mm



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

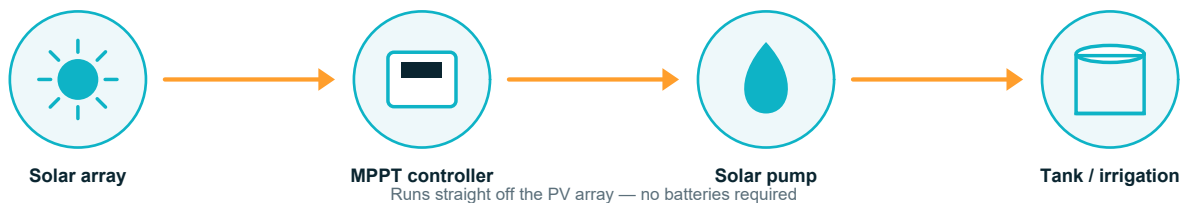
Motor	PM brushless (PMSM)
Efficiency	up to 92%
Drive	Sensorless FOC sine-wave
MPPT	>99%
Insulation	F (155 °C)
Duty	S1 (continuous)
Cooling	Oil cooling
Speed	Variable, MPPT-tracked

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



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

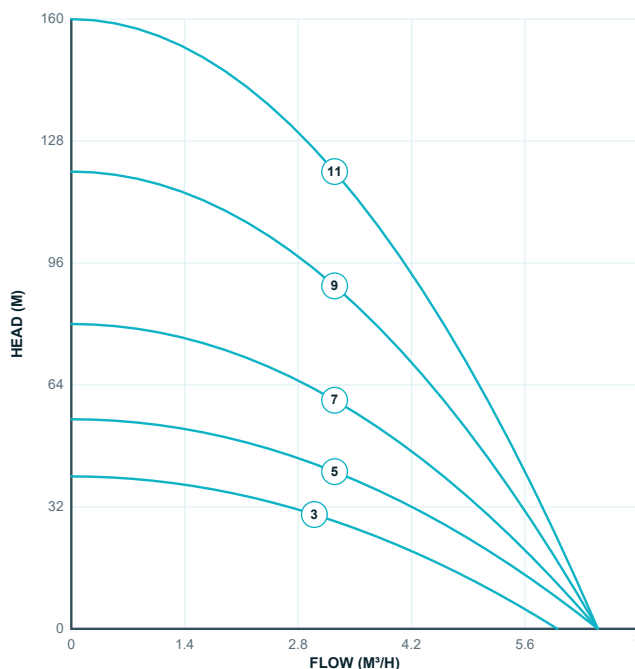
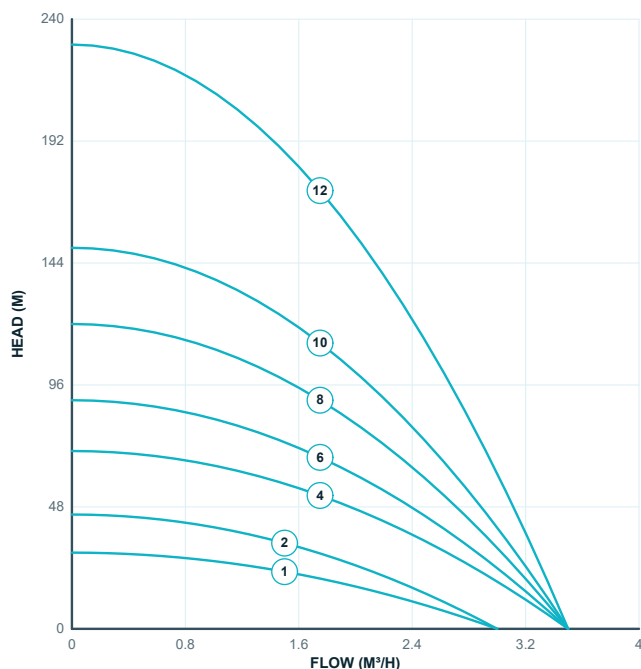


Off-grid



Industry

PERFORMANCE CURVES (Q-H)

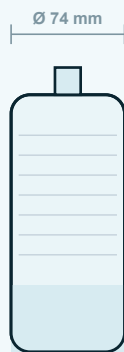


3" DC PLASTIC IMPELLER SOLAR PUMP - SPECIFICATIONS

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

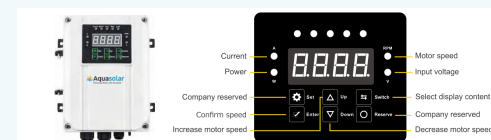
NO.	MODEL	VOLT. (V)	INPUT Voc (V)	POWER (W)	MAX FLOW (M³/H)	MAX HEAD (M)	OUTLET (inch)	REC. PV
1	3PSC3.0-30-24-300	24	11~55	300	3	30	1"	1 × 400 Wp
2	3PSC3.0-45-48-400	48	45~150	400	3	45	1"	2 × 300 Wp
3	3PSC6.0-40-72-600	72	60~150	600	6	40	1"	3 × 300 Wp
4	3PSC3.5-70-72-600	72	60~150	600	3.5	70	1"	3 × 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

3" DC STAINLESS STEEL 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:** 304 stainless steel impeller · stainless steel body · 304 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 & impellers (SUS316 optional) · 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:** 3 years
- ▶ **Standards:** CE · RoHS · CB · TUV · SGS · ISO 9001 · ISO 14001 · IEC 62253


200 m

MAX HEAD

4.5 m³/h

MAX FLOW

300–2200 W

POWER

92%

EFFICIENCY

3 yr

WARRANTY

APPLICATIONS



Irrigation



Livestock



Village supply

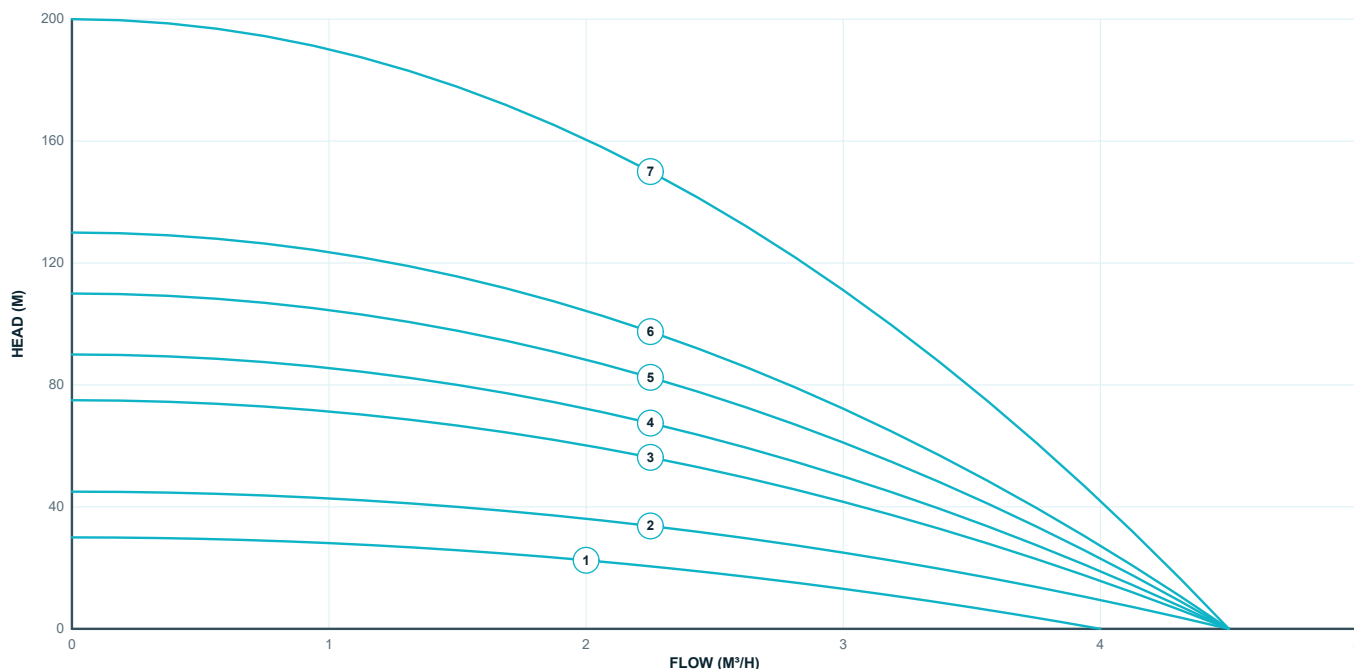


Off-grid



Industry

PERFORMANCE CURVES (Q-H)

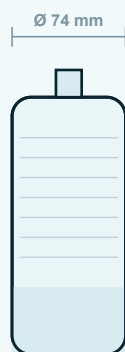


3" DC STAINLESS STEEL IMPELLER SOLAR PUMP - SPECIFICATIONS

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	3PPSS4-30-24-300	24	11~55	300	4	30	1.25"	1 × 400 Wp
2	3PPSS4.5-45-48-400	48	45~150	400	4.5	45	1.25"	2 × 300 Wp
3	3PPSS4.5-75-72-600	72	60~150	600	4.5	75	1.25"	3 × 300 Wp
4	3PPSS4.5-90-96-750	96	60~200	750	4.5	90	1.25"	3 × 300 Wp
5	3PPSS4.5-110-144-1100	144	90~340	1100	4.5	110	1.25"	6 × 300 Wp
6	3PPSS4.5-130-192-1500	192	90~430	1500	4.5	130	1.25"	8 × 300 Wp
7	3PPSS4.5-200-280-2200	280	100~490	2200	4.5	200	1.25"	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 impeller, diffuser, sleeve & shaft
Option	SUS316 wetted parts

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

SOLAR ARRAY CONNECTION

SYSTEM	Voc (V)	POWER	ARRAY
24 V	11~55	300 W	1 × 400 Wp
48 V	45~150	400 W	2 × 300 Wp
72 V	60~150	600 W	3 × 300 Wp
96 V	60~200	750 W	3 × 300 Wp
144 V	90~340	1100 W	6 × 300 Wp
192 V	90~430	1500 W	8 × 300 Wp

Array 1.3–1.5 × pump power · Voc within MPPT window.

CABLE & INSTALLATION

Run ≤ 50 m	2.5–4 mm² (per model)
Run 50–100 m	one size up
Run > 100 m	two sizes up
Cable type	3-core copper + earth
▶ Waterproof splice kit on the drop cable ▶ Stainless safety rope; ≥1 m above well bottom	

4"-6" DC BRUSHLESS STAINLESS STEEL 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:** 304 stainless steel impeller · stainless steel body · 304 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 & impellers (SUS316 optional) · 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:** 3 years
- ▶ **Standards:** CE · RoHS · CB · TUV · SGS · ISO 9001 · ISO 14001 · IEC 62253


260 m

MAX HEAD

40 m³/h

MAX FLOW

300–3000 W

POWER

92%

EFFICIENCY

3 yr

WARRANTY

APPLICATIONS



Irrigation



Livestock



Village supply

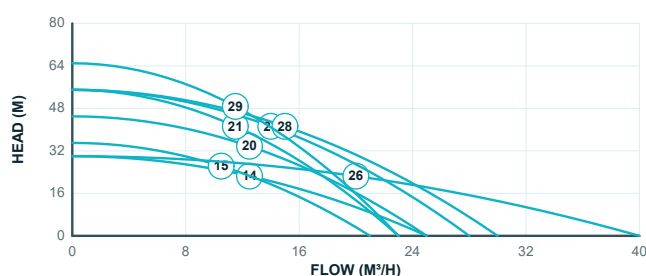
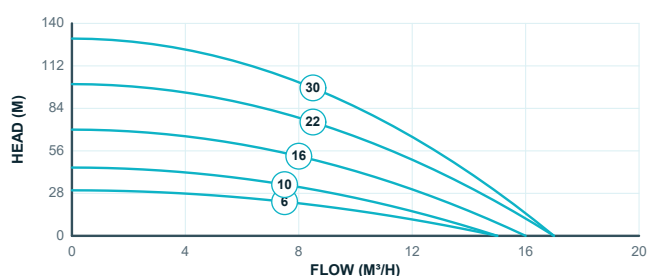
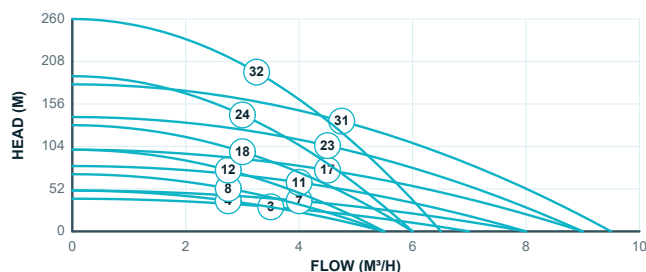
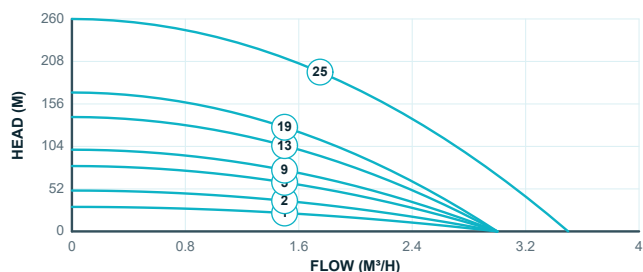


Off-grid



Industry

PERFORMANCE CURVES (Q-H)



4"-6" DC BRUSHLESS STAINLESS STEEL 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	4PPSS3.0-30-24-300	24	11~55	300	3	30	2"	1 × 400 Wp
2	4PPSS3.0-50-48-400	48	45~150	400	3	50	2"	2 × 300 Wp
3	4PPSS7.0-40-72-600	72	60~150	600	7	40	2"	3 × 300 Wp
4	4PPSS5.5-50-72-600	72	60~150	600	5.5	50	2"	3 × 300 Wp
5	4PPSS3.0-80-72-600	72	60~150	600	3	80	2"	3 × 300 Wp
6	4PPSS15.0-30-96-750	96	60~200	750	15	30	2"	3 × 300 Wp
7	4PPSS8.0-50-96-750	96	60~200	750	8	50	2"	3 × 300 Wp
8	4PPSS5.5-70-96-750	96	60~200	750	5.5	70	2"	3 × 300 Wp
9	4PPSS3.0-100-96-750	96	60~200	750	3	100	2"	3 × 300 Wp
10	4PPSS15.0-45-144-1100	144	90~340	1100	15	45	2"	6 × 300 Wp
11	4PPSS8.0-80-144-1100	144	90~340	1100	8	80	2"	6 × 300 Wp
12	4PPSS5.5-100-144-1100	144	90~340	1100	5.5	100	2"	6 × 300 Wp
13	4PPSS3.0-140-144-1100	144	90~340	1100	3	140	2"	6 × 300 Wp
14	6PPSS25.0-30-192-1500	192	90~430	1500	25	30	3"	8 × 300 Wp
15	4PPSS21.0-35-192-1500	192	90~430	1500	21	35	2"	8 × 300 Wp
16	4PPSS16.0-70-192-1500	192	90~430	1500	16	70	2"	8 × 300 Wp
17	4PPSS9.0-100-192-1500	192	90~430	1500	9	100	2"	8 × 300 Wp
18	4PPSS6.0-130-192-1500	192	90~430	1500	6	130	2"	8 × 300 Wp
19	4PPSS3.0-170-192-1500	192	90~430	1500	3	170	2"	8 × 300 Wp
20	6PPSS25.0-45-280-2200	280	100~490	2200	25	45	3"	10 × 300 Wp
21	4PPSS23.0-55-280-2200	280	100~490	2200	23	55	2"	10 × 300 Wp
22	4PPSS17.0-100-280-2200	280	100~490	2200	17	100	2"	10 × 300 Wp
23	4PPSS9.0-140-280-2200	280	100~490	2200	9	140	2"	10 × 300 Wp
24	4PPSS6.0-190-280-2200	280	100~490	2200	6	190	2"	10 × 300 Wp
25	4PPSS3.5-260-280-2200	280	100~490	2200	3.5	260	2"	10 × 300 Wp
26	6PPSS40.0-30-385-3000	385	280~780	3000	40	30	3"	13 × 300 Wp
27	4PPSS28.0-55-385-3000	385	280~780	3000	28	55	2"	13 × 300 Wp
28	6PPSS30.0-55-385-3000	385	280~780	3000	30	55	3"	13 × 300 Wp
29	4PPSS23.0-65-385-3000	385	280~780	3000	23	65	2"	13 × 300 Wp
30	4PPSS17.0-130-385-3000	385	280~780	3000	17	130	2"	13 × 300 Wp
31	4PPSS9.5-180-385-3000	385	280~780	3000	9.5	180	2"	13 × 300 Wp
32	4PPSS6.5-260-385-3000	385	280~780	3000	6.5	260	2"	13 × 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	98/144 mm
Min. borehole	100/150 mm
Net weight	8.9–42.1 kg
Overall length	770–1440 mm
Controller	360 × 260 × 140 mm
Controller wt.	7 kg

MATERIALS & CERTIFICATION

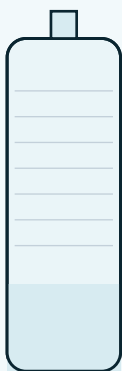
Standard	SUS304 impeller, diffuser, sleeve & shaft
Option	SUS316 wetted parts

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

4"-6" DC BRUSHLESS STAINLESS STEEL IMPELLER SOLAR PUMP - DIMENSIONS & CONTROLLER

DIMENSIONS & WEIGHT

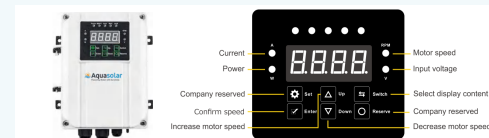
Ø 98/144 mm



L 770-1440 mm

Pump outer Ø	98/144 mm
Min. borehole	100/150 mm
Overall length	770-1440 mm
Net weight	8.9-42.1 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)

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

SOLAR ARRAY CONNECTION

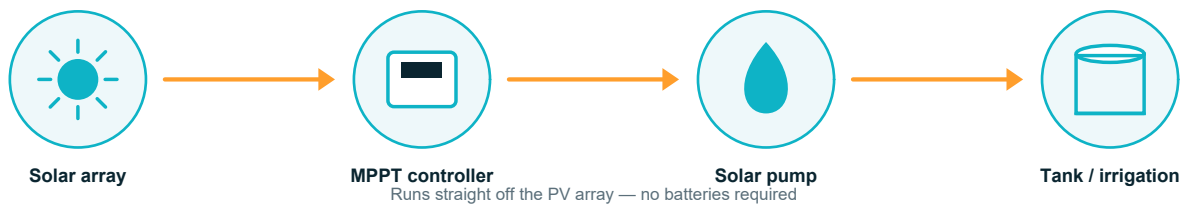
SYSTEM	Voc (V)	POWER	ARRAY
24 V	11~55	300 W	1 × 400 Wp
48 V	45~150	400 W	2 × 300 Wp
72 V	60~150	600 W	3 × 300 Wp
96 V	60~200	750 W	3 × 300 Wp
144 V	90~340	1100 W	6 × 300 Wp
192 V	90~430	1500 W	8 × 300 Wp

Array 1.3-1.5 × pump power · Voc within MPPT window.

CABLE & INSTALLATION

Run ≤ 50 m	2.5-4 mm² (per model)
Run 50-100 m	one size up
Run > 100 m	two sizes up
Cable type	3-core copper + earth
▶ Waterproof splice kit on the drop cable	
▶ Stainless safety rope; ≥1 m above well bottom	

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



3-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

4" 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
- ▶ **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


210 m

MAX HEAD

30 m³/h

MAX FLOW

300–3000 W

POWER

92%

EFFICIENCY

2 yr

WARRANTY

APPLICATIONS



Irrigation



Livestock



Village supply

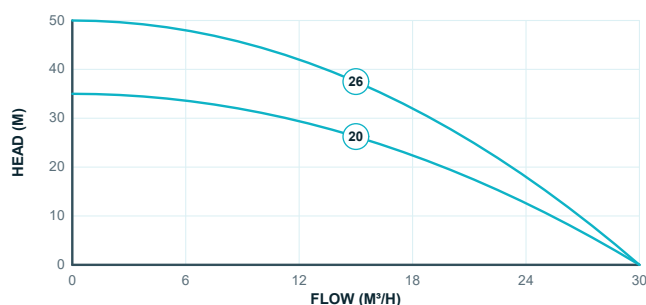
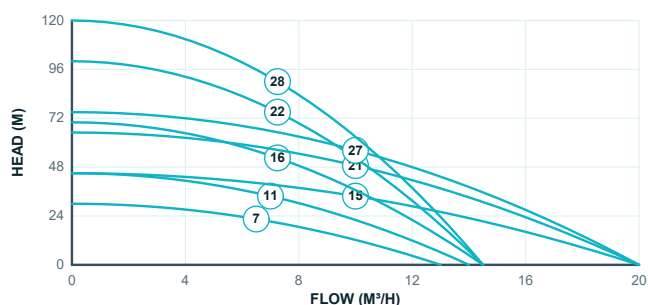
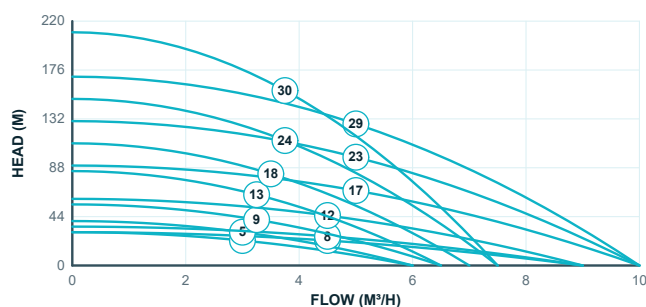
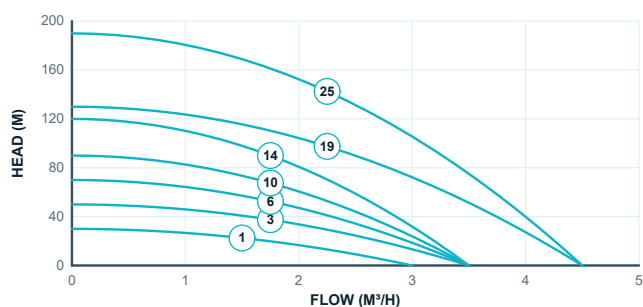


Off-grid



Industry

PERFORMANCE CURVES (Q-H)



4" 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	4PSC3.0-30-24-300	24	11~55	300	3	30	1.25"	1 × 400 Wp
2	4PSC6.0-30-48-400	48	45~150	400	6	30	1.5"	2 × 300 Wp
3	4PSC3.5-50-48-400	48	45~150	400	3.5	50	1.25"	2 × 300 Wp
4	4PSC9.0-30-72-600	72	60~150	600	9	30	2"	3 × 300 Wp
5	4PSC6.0-40-72-600	72	60~150	600	6	40	1.5"	3 × 300 Wp
6	4PSC3.5-70-72-600	72	60~150	600	3.5	70	1.25"	3 × 300 Wp
7	4PSC13.0-30-96-750	96	60~200	750	13	30	2"	3 × 300 Wp
8	4PSC9.0-35-96-750	96	60~200	750	9	35	2"	3 × 300 Wp
9	4PSC6.5-55-96-750	96	60~200	750	6.5	55	1.5"	3 × 300 Wp
10	4PSC3.5-90-96-750	96	60~200	750	3.5	90	1.25"	3 × 300 Wp
11	4PSC14.0-45-144-1100	144	90~340	1100	14	45	2"	6 × 300 Wp
12	4PSC9.0-60-144-1100	144	90~340	1100	9	60	2"	6 × 300 Wp
13	4PSC6.5-85-144-1100	144	90~340	1100	6.5	85	1.5"	6 × 300 Wp
14	4PSC3.5-120-144-1100	144	90~340	1100	3.5	120	1.25"	6 × 300 Wp
15	4PSC20.0-45-192-1500	192	90~430	1500	20	45	2"	8 × 300 Wp
16	4PSC14.5-70-192-1500	192	90~430	1500	14.5	70	2"	8 × 300 Wp
17	4PSC10.0-90-192-1500	192	90~430	1500	10	90	2"	8 × 300 Wp
18	4PSC7.0-110-192-1500	192	90~430	1500	7	110	1.5"	8 × 300 Wp
19	4PSC4.5-130-192-1500	192	90~430	1500	4.5	130	1.25"	8 × 300 Wp
20	4PSC30.0-35-280-2200	280	100~490	2200	30	35	2"	10 × 300 Wp
21	4PSC20.0-65-280-2200	280	100~490	2200	20	65	2"	10 × 300 Wp
22	4PSC14.5-100-280-2200	280	100~490	2200	14.5	100	2"	10 × 300 Wp
23	4PSC10.0-130-280-2200	280	100~490	2200	10	130	2"	10 × 300 Wp
24	4PSC7.5-150-280-2200	280	100~490	2200	7.5	150	1.5"	10 × 300 Wp
25	4PSC4.5-190-280-2200	280	100~490	2200	4.5	190	1.25"	10 × 300 Wp
26	4PSC30.0-50-385-3000	385	280~780	3000	30	50	2"	13 × 300 Wp
27	4PSC20.0-75-385-3000	385	280~780	3000	20	75	2"	13 × 300 Wp
28	4PSC14.5-120-385-3000	385	280~780	3000	14.5	120	2"	13 × 300 Wp
29	4PSC10.0-170-385-3000	385	280~780	3000	10	170	2"	13 × 300 Wp
30	4PSC7.5-210-385-3000	385	280~780	3000	7.5	210	1.5"	13 × 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	8.9–25.9 kg
Overall length	770–1390 mm
Controller	360 × 260 × 140 mm
Controller wt.	7 kg

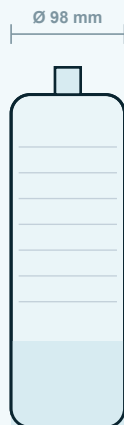
MATERIALS & CERTIFICATION

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			

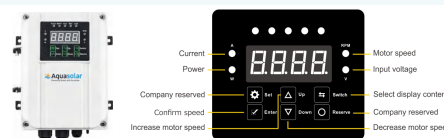
4" DC PLASTIC IMPELLER SOLAR PUMP - DIMENSIONS & CONTROLLER

DIMENSIONS & WEIGHT



Pump outer Ø	98 mm
Min. borehole	100 mm
Overall length	770–1390 mm
Net weight	8.9–25.9 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)

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

SOLAR ARRAY CONNECTION

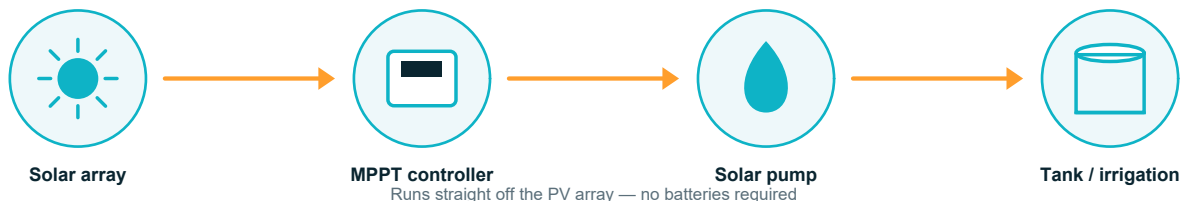
SYSTEM	Voc (V)	POWER	ARRAY
24 V	11~55	300 W	1 × 400 Wp
48 V	45~150	400 W	2 × 300 Wp
72 V	60~150	600 W	3 × 300 Wp
96 V	60~200	750 W	3 × 300 Wp
144 V	90~340	1100 W	6 × 300 Wp
192 V	90~430	1500 W	8 × 300 Wp

Array 1.3–1.5 × pump power · Voc within MPPT window.

CABLE & INSTALLATION

Run ≤ 50 m	2.5–4 mm² (per model)
Run 50–100 m	one size up
Run > 100 m	two sizes up
Cable type	3-core copper + earth
▶ Waterproof splice kit on the drop cable	
▶ Stainless safety rope; ≥1 m above well bottom	

SYSTEM LAYOUT



MPPT controller
Runs straight off the PV array — no batteries required

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

DC SOLAR SUBMERSIBLE PUMP (HIGH-FLOW)

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:** aluminium impeller · iron body · iron outlet
- ▶ **Material grades:** SUS304 standard · SUS316 optional for coastal / brackish water
- ▶ **Key components:** 100% copper motor windings · NSK-grade sealed ball bearings · SUS304 shaft & impellers (SUS316 optional) · 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 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


14 m

MAX HEAD

56 m³/h

MAX FLOW

1100–2200 W

POWER

92%

EFFICIENCY

2 yr

WARRANTY

APPLICATIONS



Irrigation



Livestock



Village supply

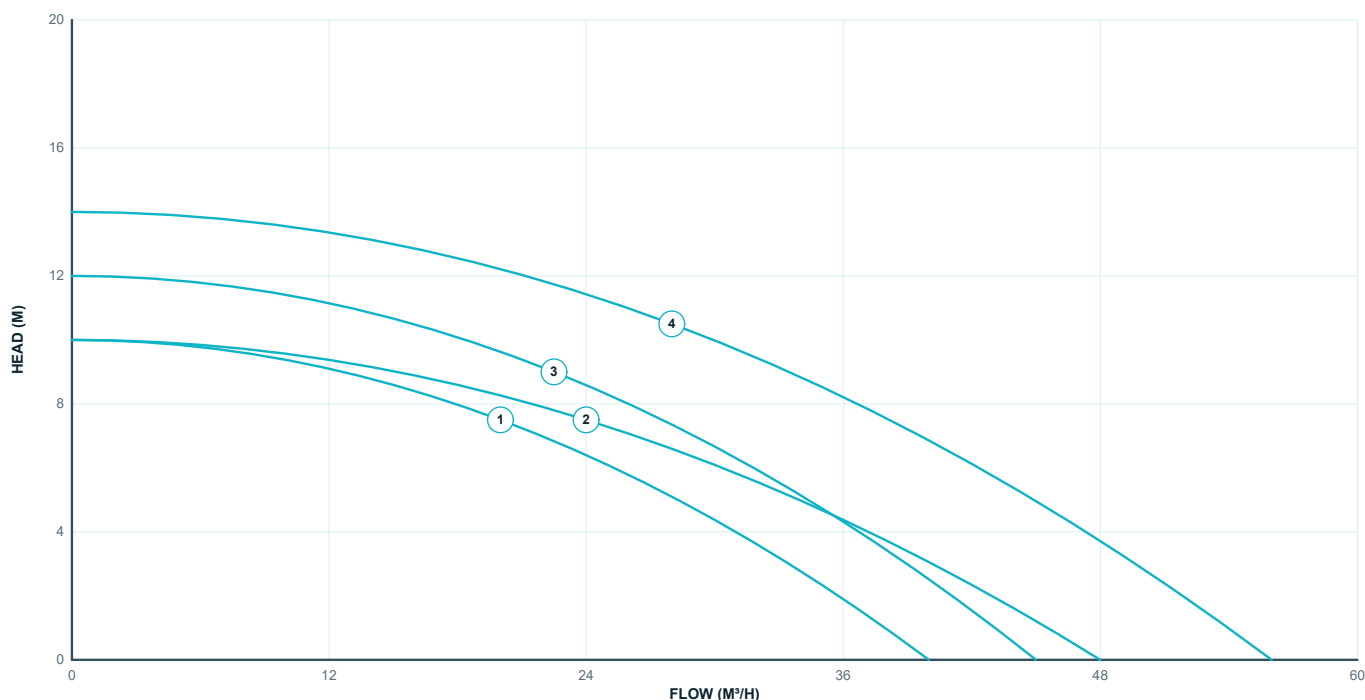


Off-grid



Industry

PERFORMANCE CURVES (Q-H)

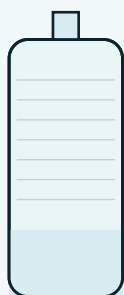


DC SOLAR SUBMERSIBLE PUMP (HIGH-FLOW) - SPECIFICATIONS

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	PSG40-10-144-1100	144	90~340	1100	40	10	3"	6 × 300 Wp
2	PSG48-10-192-1500	192	90~430	1500	48	10	4"	8 × 300 Wp
3	PSG45-12-192-1500	192	90~430	1500	45	12	3"	8 × 300 Wp
4	PSG56-14-280-2200	280	100~490	2200	56	14	4"	10 × 300 Wp

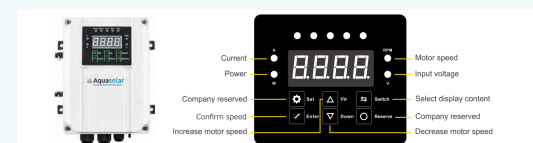
DIMENSIONS & WEIGHT



L 760~870 mm

Overall length 760~870 mm
Net weight 20.6~27.2 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 External
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 20 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 Cast-iron (HT200) body + SUS304 impeller + SUS304 shaft
Option SUS304 / bronze wetted parts



SOLAR ARRAY CONNECTION

SYSTEM	Voc (V)	POWER	ARRAY
144 V	90~340	1100 W	6 × 300 Wp
192 V	90~430	1500 W	8 × 300 Wp
280 V	100~490	2200 W	10 × 300 Wp

Array 1.3~1.5 × pump power · Voc within MPPT window.

CABLE & INSTALLATION

Run ≤ 50 m 2.5 mm² (per model)
Run 50~100 m one size up
Run > 100 m two sizes up
Cable type 3-core copper + earth
 ▶ Waterproof splice kit on the drop cable
 ▶ Stainless safety rope; ≥ 1 m above well bottom

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

DC SOLAR SURFACE 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:** brass/iron impeller · aluminium body · stainless steel/iron outlet
- ▶ **Material grades:** SUS304 standard · SUS316 optional for coastal / brackish water
- ▶ **Key components:** 100% copper motor windings · NSK-grade sealed ball bearings · SUS304 shaft + cast-iron / stainless hydraulics · Silicon-carbide / ceramic mechanical seal
- ▶ **Ingress:** Motor IP55 · Controller IP66 · Class F insulation · air 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


40 m

MAX HEAD

80 m³/h

MAX FLOW

150–3000 W

POWER

92%

EFFICIENCY

2 yr

WARRANTY

APPLICATIONS



Irrigation



Boosting

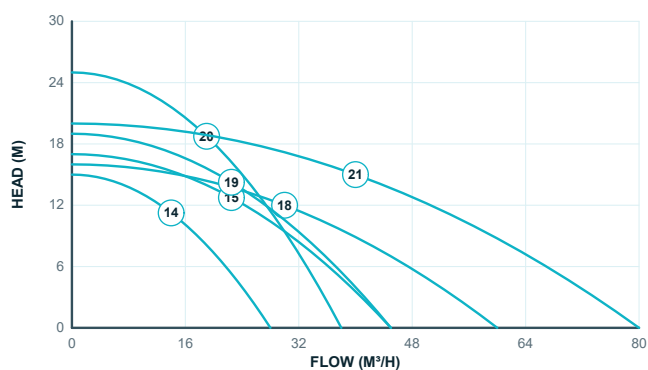
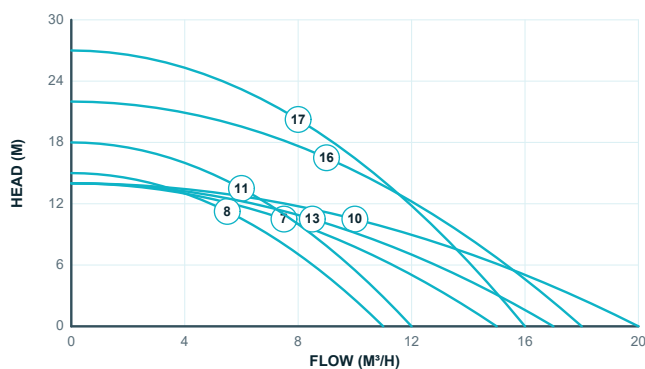
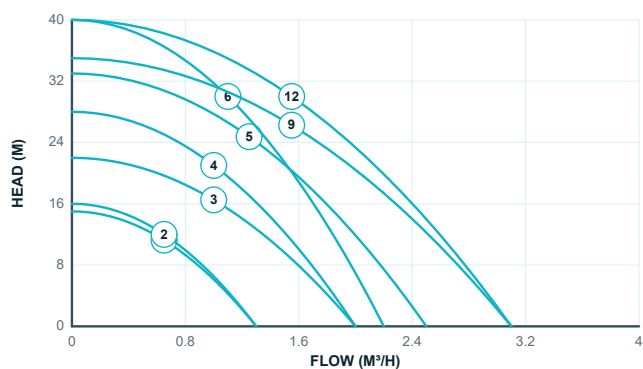


Rivers / tanks



Domestic

PERFORMANCE CURVES (Q-H)



DC SOLAR SURFACE 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 (M ³ /H)	MAX HEAD (M)	OUTLET (inch)	REC. PV
1	PSQB1.3-15-12-150-S	12	11~55	150	1.3	15	1.0"×1.0"	1 × 250 Wp
2	PSQB1.3-16-12-150	12	11~55	150	1.3	16	1.0"×1.0"	1 × 250 Wp
3	PSQB2.0-22-24-250-S	24	11~55	250	2	22	1.0"×1.0"	1 × 330 Wp
4	PSQB2.0-28-24-250	24	11~55	250	2	28	1.0"×1.0"	1 × 330 Wp
5	PSQB2.5-33-48-400-S	48	45~150	400	2.5	33	1.0"×1.0"	2 × 300 Wp
6	PSQB2.2-40-48-400	48	45~150	400	2.2	40	1.0"×1.0"	2 × 300 Wp
7	PHF15-14-72-600	72	60~150	600	15	14	1.5"×1.5"	3 × 300 Wp
8	PSZ11-15-72-600	72	60~150	600	11	15	1.5"×1.5"(PIPE)	3 × 300 Wp
9	PSGJ3.1-35-72-600	72	60~150	600	3.1	35	1.0"×1.0"	3 × 300 Wp
10	PHF20-14-96-750	96	60~200	750	20	14	2.0"×2.0"	3 × 300 Wp
11	PSZ12-18-96-750	96	60~200	750	12	18	2.0"×2.0"(PIPE)	3 × 300 Wp
12	PSGJ3.1-40-96-750	96	60~200	750	3.1	40	1.0"×1.0"	3 × 300 Wp
13	PZSU17-14-144-1100	144	90~340	1100	17	14	2.0"×2.0"	6 × 300 Wp
14	PHF28-15-144-1100	144	90~340	1100	28	15	2.0"×2.0"	6 × 300 Wp
15	PHF45-17-192-1500	192	90~430	1500	45	17	3.0"×3.0"	8 × 300 Wp
16	PZSU18-22-192-1500	192	90~430	1500	18	22	2.0"×2.0"	8 × 300 Wp
17	PSZ16-27-192-1500	192	90~430	1500	16	27	2.0"×2.0"	8 × 300 Wp
18	PHF60-16-280-2200	280	100~490	2200	60	16	4.0"×4.0"	10 × 300 Wp
19	PZSU45-19-280-2200	280	100~490	2200	45	19	3.0"×3.0"	10 × 300 Wp
20	PSZ38-25-280-2200	280	100~490	2200	38	25	3.0"×3.0"	10 × 300 Wp
21	PHF80-20-385-3000	385	280~780	3000	80	20	5.0"×5.0"	13 × 300 Wp

OPERATING CONDITIONS

Liquid temp	0–40 °C
Max. sand	≤ 0.05 % (≤ 500 g/m ³)
pH value	5–9
Ambient	-15 to 70 °C
Max. immersion	N/A
Duty	S1 (continuous)

DIMENSIONS & WEIGHT

Net weight	7–25.5 kg
Overall length	335–590 mm
Controller	360 × 260 × 140 mm
Controller wt.	7 kg

MATERIALS & CERTIFICATION

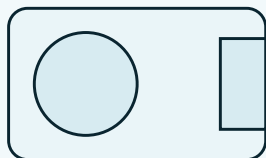
Standard	Cast-iron (HT200) body + SUS304 / brass impeller + SUS304 shaft
Option	SUS304 / SUS316 body & impeller

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

DC SOLAR SURFACE PUMP - DIMENSIONS & CONTROLLER

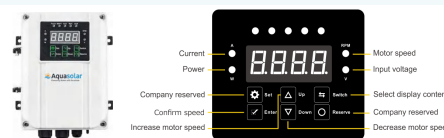
DIMENSIONS & WEIGHT

Overall length	335–590 mm
Net weight	7–25.5 kg
Controller size	360 × 260 × 140 mm
Controller wt.	7 kg



L 335–590 mm

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)

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	Air cooling
Speed	Variable, MPPT-tracked

SOLAR ARRAY CONNECTION

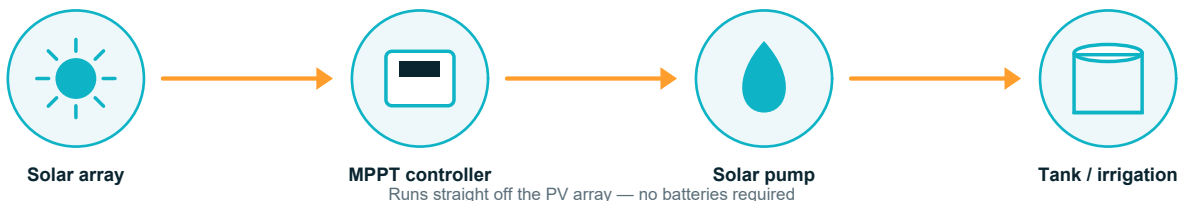
SYSTEM	Voc (V)	POWER	ARRAY
12 V	11~55	150 W	1 × 250 Wp
24 V	11~55	250 W	1 × 330 Wp
48 V	45~150	400 W	2 × 300 Wp
72 V	60~150	600 W	3 × 300 Wp
96 V	60~200	750 W	3 × 300 Wp
144 V	90~340	1100 W	6 × 300 Wp

Array 1.3–1.5 × pump power · Voc within MPPT window.

CABLE & INSTALLATION

Run ≤ 50 m	2.5–4 mm² (per model)
Run 50–100 m	one size up
Run > 100 m	two sizes up
Cable type	3-core copper + earth
▶ Foot valve + strainer; prime before first start	
▶ Shade the controller; keep vents clear	

SYSTEM LAYOUT



Runs straight off the PV array — no batteries required

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

DC SOLAR SWIMMING POOL 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 · aluminium body · plastic outlet
- ▶ **Material grades:** SUS304 standard · SUS316 optional for coastal / brackish water
- ▶ **Key components:** 100% copper motor windings · NSK-grade sealed ball bearings · Corrosion-proof engineering-plastic wet end · Ceramic-carbon mechanical seal
- ▶ **Ingress:** Motor IP55 · Controller IP66 · Class F insulation · water-cooled (plastic)
- ▶ **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


18 m

MAX HEAD

36 m³/h

MAX FLOW

200–2200 W

POWER

92%

EFFICIENCY

2 yr

WARRANTY

APPLICATIONS



Circulation

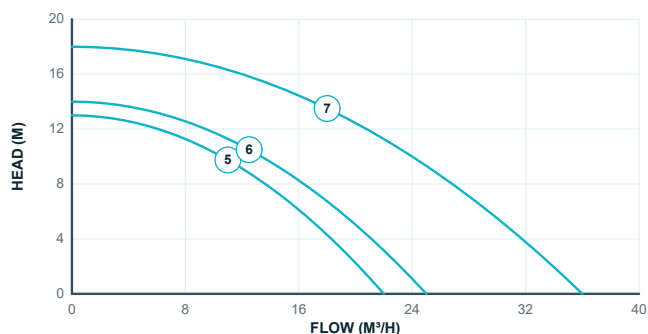
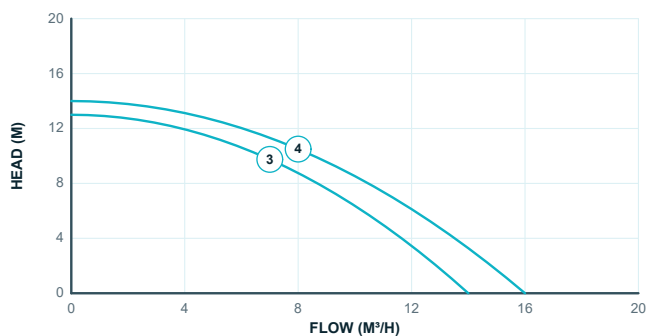
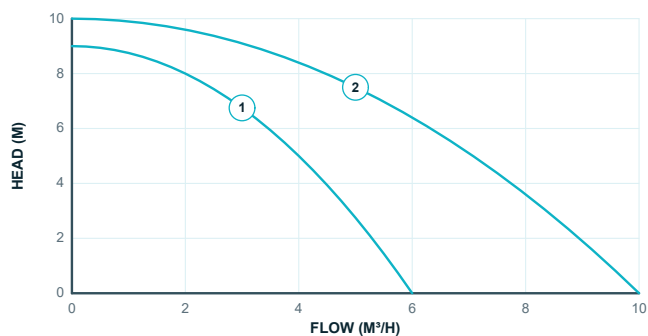


Filtration



Solar-powered

PERFORMANCE CURVES (Q-H)



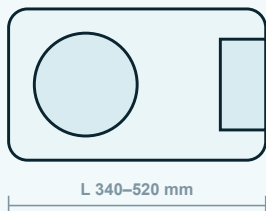
DC SOLAR SWIMMING POOL PUMP - SPECIFICATIONS

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

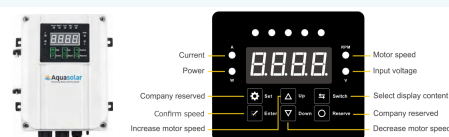
NO.	MODEL	VOLT. (V)	INPUT Voc (V)	POWER (W)	MAX FLOW (M³/H)	MAX HEAD (M)	OUTLET (inch)	REC. PV
1	PSP6-9-24-200	24	11~55	200	6	9	2"	2 × 150 Wp
2	PSP10-10-24-370	24	11~55	370	10	10	2"	≈500 Wp
3	PSP14-13-72-600	72	60~150	600	14	13	2"	3 × 300 Wp
4	PSP16-14-96-750	96	60~200	750	16	14	2"	3 × 300 Wp
5	PSP22-13-144-1100	144	90~340	1100	22	13	2"	6 × 300 Wp
6	PSP25-14-192-1500	192	90~430	1500	25	14	2"	8 × 300 Wp
7	PSP36-18-280-2200	280	100~490	2200	36	18	2"	10 × 300 Wp

DIMENSIONS & WEIGHT

Overall length	340–520 mm
Net weight	5.8–13.8 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	N/A
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	Water-cooled (plastic)
Speed	Variable, MPPT-tracked

MATERIALS & CERTIFICATION

Standard Reinforced engineering-plastic body & impeller + SUS304 shaft

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

SOLAR ARRAY CONNECTION

SYSTEM	Voc (V)	POWER	ARRAY
24 V	11~55	200–370 W	≈500 Wp
72 V	60~150	600 W	3 × 300 Wp
96 V	60~200	750 W	3 × 300 Wp
144 V	90~340	1100 W	6 × 300 Wp
192 V	90~430	1500 W	8 × 300 Wp
280 V	100~490	2200 W	10 × 300 Wp

Array 1.3–1.5 × pump power · Voc within MPPT window.

CABLE & INSTALLATION

Run ≤ 50 m	2.5–4 mm² (per model)
Run 50–100 m	one size up
Run > 100 m	two sizes up
Cable type	3-core copper + earth
▶ Install below water level where possible ▶ Keep the strainer basket clean	

3" AC/DC STAINLESS STEEL 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:** 304 stainless steel impeller · stainless steel body · 304 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 & impellers (SUS316 optional) · 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 mm² by model (copper, sized for a ~50 m run; step up one size per additional ~50 m of drop).
- ▶ **Warranty:** 3 years
- ▶ **Standards:** CE · RoHS · CB · TUV · SGS · ISO 9001 · ISO 14001 · IEC 62253


200 m

MAX HEAD

4.5 m³/h

MAX FLOW

600–2200 W

POWER

92%

EFFICIENCY

3 yr

WARRANTY

APPLICATIONS



Irrigation



Livestock



Village supply

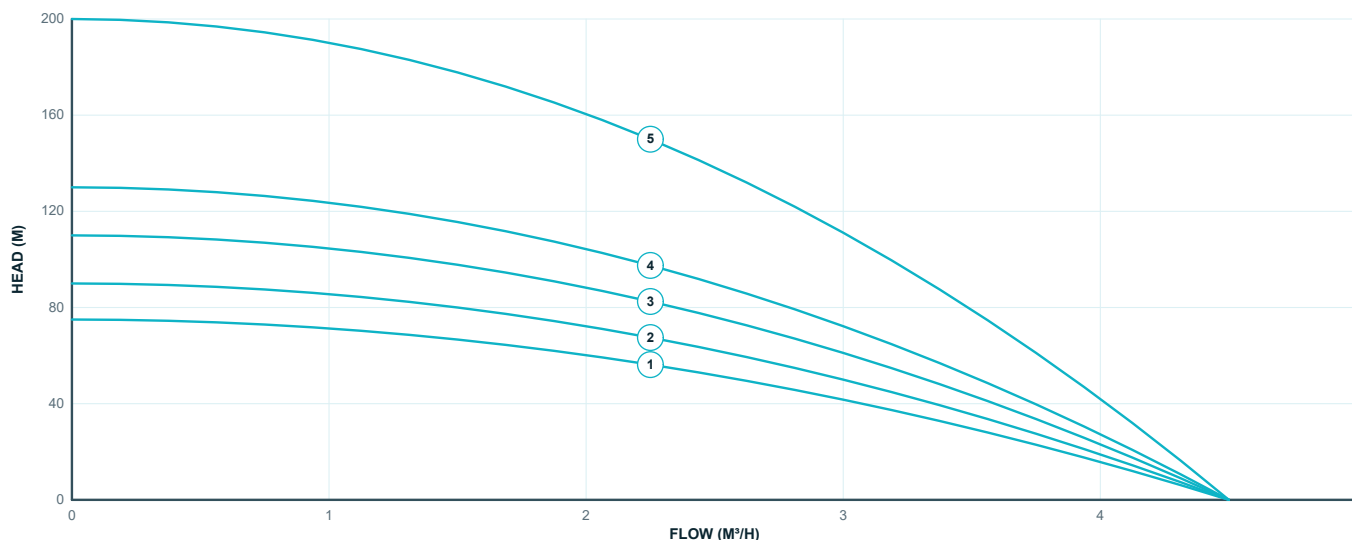


Off-grid



Industry

PERFORMANCE CURVES (Q-H)

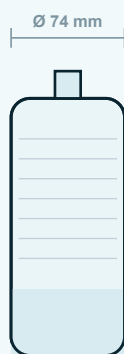


3" AC/DC STAINLESS STEEL IMPELLER SOLAR PUMP - SPECIFICATIONS

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

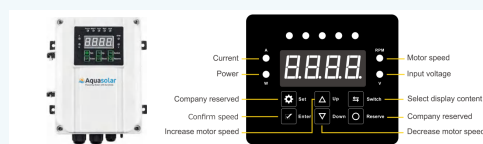
NO.	MODEL	VOLT. (V)	INPUT Voc (V)	POWER (W)	MAX FLOW (M³/H)	MAX HEAD (M)	OUTLET (inch)	REC. PV
1	3PPSS4.5-75-72-600-H	72	60~150	600	4.5	75	1.25"	3 × 300 Wp
2	3PPSS4.5-90-96-750-H	96	60~200	750	4.5	90	1.25"	3 × 300 Wp
3	3PPSS4.5-110-144-1100-H	144	90~340	1100	4.5	110	1.25"	6 × 300 Wp
4	3PPSS4.5-130-192-1500-H	192	90~430	1500	4.5	130	1.25"	8 × 300 Wp
5	3PPSS4.5-200-280-2200-H	280	100~490	2200	4.5	200	1.25"	10 × 300 Wp

DIMENSIONS & WEIGHT



Pump outer Ø 74 mm
Min. borehole 76 mm
Overall length 840~1355 mm
Net weight 7.5~14.2 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 impeller, diffuser, sleeve & shaft
Option SUS316 wetted parts



SOLAR ARRAY CONNECTION

SYSTEM	Voc (V)	POWER	ARRAY
72 V	60~150	600 W	3 × 300 Wp
96 V	60~200	750 W	3 × 300 Wp
144 V	90~340	1100 W	6 × 300 Wp
192 V	90~430	1500 W	8 × 300 Wp
280 V	100~490	2200 W	10 × 300 Wp

Array 1.3~1.5 × pump power · Voc within MPPT window.

CABLE & INSTALLATION

Run ≤ 50 m 2.5 mm² (per model)
Run 50~100 m one size up
Run > 100 m two sizes up
Cable type 3-core copper + earth
 ▶ Waterproof splice kit on the drop cable
 ▶ Stainless safety rope; ≥1 m above well bottom

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



3-year warranty
 Trusted in 70+ countries

3" 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:** stainless steel / engineered polymer impeller · 201 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 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

600–2200 W

POWER

92%

EFFICIENCY

2 yr

WARRANTY

APPLICATIONS



Irrigation



Livestock



Village supply

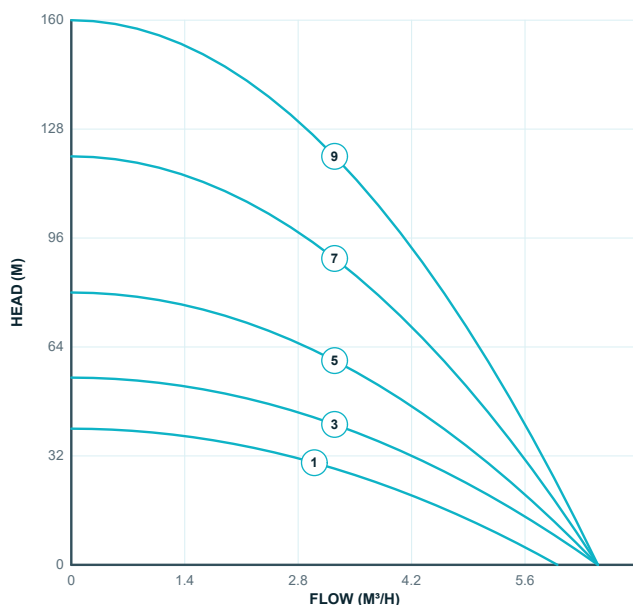
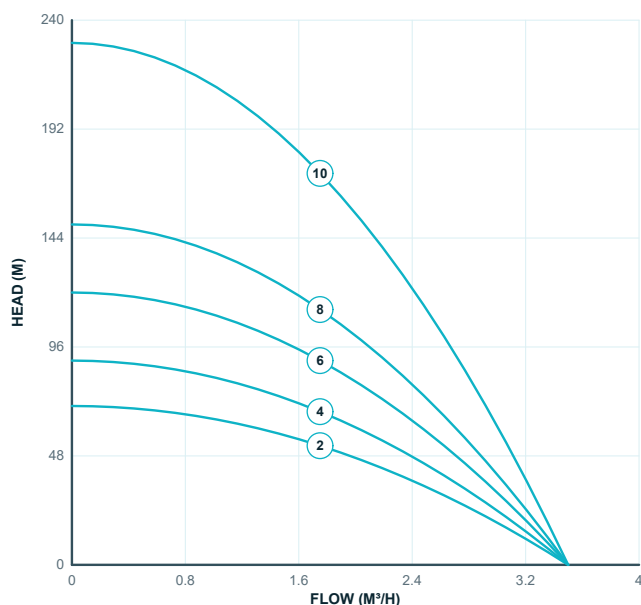


Off-grid



Industry

PERFORMANCE CURVES (Q-H)

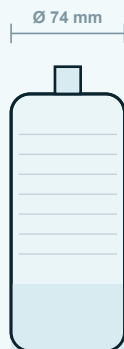


3" AC/DC PLASTIC IMPELLER SOLAR PUMP - SPECIFICATIONS

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

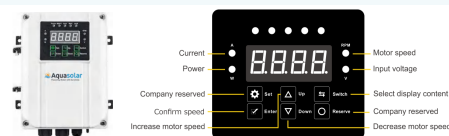
NO.	MODEL	VOLT. (V)	INPUT Voc (V)	POWER (W)	MAX FLOW (M³/H)	MAX HEAD (M)	OUTLET (inch)	REC. PV
1	3PSC6.0-40-72-600-H	72	60~150	600	6	40	1"	3 × 300 Wp
2	3PSC3.5-70-72-600-H	72	60~150	600	3.5	70	1"	3 × 300 Wp
3	3PSC6.5-55-96-750-H	96	60~200	750	6.5	55	1"	3 × 300 Wp
4	3PSC3.5-90-96-750-H	96	60~200	750	3.5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

DIMENSIONS & WEIGHT



Pump outer Ø	74 mm
Min. borehole	76 mm
Overall length	840–1355 mm
Net weight	7.5–14.2 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)

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

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

AQUASOLAR · POWERING WATER WITH SUNSHINE · SINCE 2010

70+ countries · 600,000+ pumps / year · CE · RoHS · CB · TUV · SGS · ISO 9001 · ISO 14001

4"-6" AC/DC STAINLESS STEEL 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:** 304 stainless steel impeller · stainless steel body · 304 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 & impellers (SUS316 optional) · 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 mm² by model (copper, sized for a ~50 m run; step up one size per additional ~50 m of drop).
- ▶ **Warranty:** 3 years
- ▶ **Standards:** CE · RoHS · CB · TUV · SGS · ISO 9001 · ISO 14001 · IEC 62253


260 m

MAX HEAD

25 m³/h

MAX FLOW

600–2200 W

POWER

92%

EFFICIENCY

3 yr

WARRANTY

APPLICATIONS



Irrigation



Livestock



Village supply

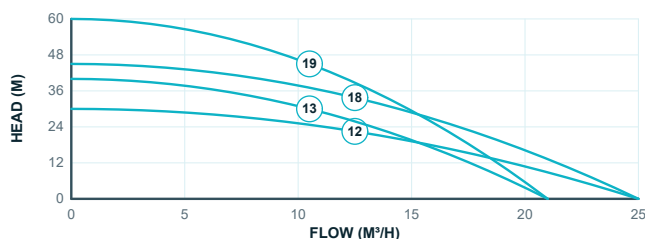
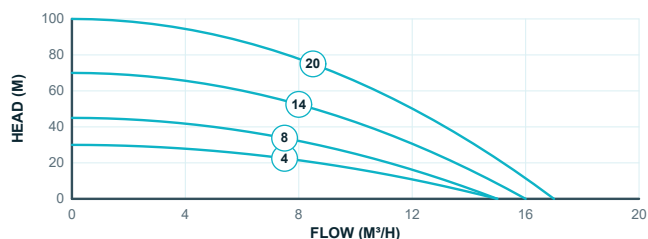
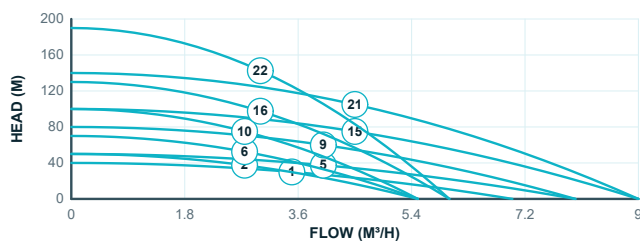
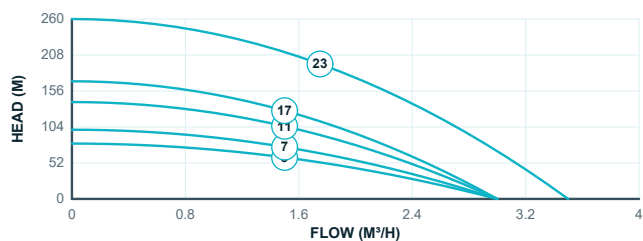


Off-grid



Industry

PERFORMANCE CURVES (Q-H)



4"-6" AC/DC STAINLESS STEEL 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	4PPSS7.0-40-72-600-H	72	60~150	600	7	40	1.5"	3 × 300 Wp
2	4PPSS5.5-50-72-600-H	72	60~150	600	5.5	50	1.25"	3 × 300 Wp
3	4PPSS3.0-80-72-600-H	72	60~150	600	3	80	1.25"	3 × 300 Wp
4	4PPSS15.0-30-96-750-H	96	60~200	750	15	30	2"	3 × 300 Wp
5	4PPSS8.0-50-96-750-H	96	60~200	750	8	50	1.5"	3 × 300 Wp
6	4PPSS5.5-70-96-750-H	96	60~200	750	5.5	70	1.25"	3 × 300 Wp
7	4PPSS3.0-100-96-750-H	96	60~200	750	3	100	1.25"	3 × 300 Wp
8	4PPSS15.0-45-144-1100-H	144	90~340	1100	15	45	2"	6 × 300 Wp
9	4PPSS8.0-80-144-1100-H	144	90~340	1100	8	80	1.5"	6 × 300 Wp
10	4PPSS5.5-100-144-1100-H	144	90~340	1100	5.5	100	1.25"	6 × 300 Wp
11	4PPSS3.0-140-144-1100-H	144	90~340	1100	3	140	1.25"	6 × 300 Wp
12	6PPSS25.0-30-192-1500-H	192	90~430	1500	25	30	3"	8 × 300 Wp
13	4PPSS21.0-40-192-1500-H	192	90~430	1500	21	40	2"	8 × 300 Wp
14	4PPSS16.0-70-192-1500-H	192	90~430	1500	16	70	2"	8 × 300 Wp
15	4PPSS9.0-100-192-1500-H	192	90~430	1500	9	100	1.5"	8 × 300 Wp
16	4PPSS6.0-130-192-1500-H	192	90~430	1500	6	130	1.25"	8 × 300 Wp
17	4PPSS3.0-170-192-1500-H	192	90~430	1500	3	170	1.25"	8 × 300 Wp
18	6PPSS25.0-45-280-2200-H	280	100~490	2200	25	45	3"	10 × 300 Wp
19	4PPSS21.0-60-280-2200-H	280	100~490	2200	21	60	2"	10 × 300 Wp
20	4PPSS17.0-100-280-2200-H	280	100~490	2200	17	100	2"	10 × 300 Wp
21	4PPSS9.0-140-280-2200-H	280	100~490	2200	9	140	1.5"	10 × 300 Wp
22	4PPSS6.0-190-280-2200-H	280	100~490	2200	6	190	1.25"	10 × 300 Wp
23	4PPSS3.5-260-280-2200-H	280	100~490	2200	3.5	260	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	98/144 mm
Min. borehole	100/150 mm
Net weight	10.8–35.1 kg
Overall length	840–1295 mm
Controller	360 × 260 × 140 mm
Controller wt.	7 kg

MATERIALS & CERTIFICATION

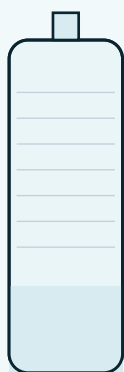
Standard	SUS304 impeller, diffuser, sleeve & shaft
Option	SUS316 wetted parts

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

4"-6" AC/DC STAINLESS STEEL IMPELLER SOLAR PUMP - DIMENSIONS & CONTROLLER

DIMENSIONS & WEIGHT

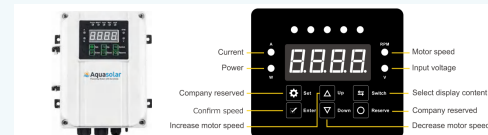
Ø 98/144 mm



L 840-1295 mm

Pump outer Ø	98/144 mm
Min. borehole	100/150 mm
Overall length	840-1295 mm
Net weight	10.8-35.1 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)

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

SOLAR ARRAY CONNECTION

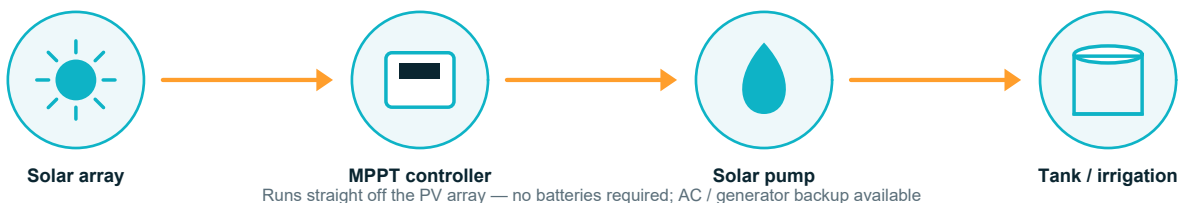
SYSTEM	Voc (V)	POWER	ARRAY
72 V	60~150	600 W	3 × 300 Wp
96 V	60~200	750 W	3 × 300 Wp
144 V	90~340	1100 W	6 × 300 Wp
192 V	90~430	1500 W	8 × 300 Wp
280 V	100~490	2200 W	10 × 300 Wp

Array 1.3-1.5 × pump power · Voc within MPPT window.

CABLE & INSTALLATION

Run ≤ 50 m	2.5 mm² (per model)
Run 50-100 m	one size up
Run > 100 m	two sizes up
Cable type	3-core copper + earth
▶ Waterproof splice kit on the drop cable	
▶ Stainless safety rope; ≥1 m above well bottom	

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



3-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

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 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


190 m

MAX HEAD

30 m³/h

MAX FLOW

600–2200 W

POWER

92%

EFFICIENCY

2 yr

WARRANTY

APPLICATIONS



Irrigation



Livestock



Village supply

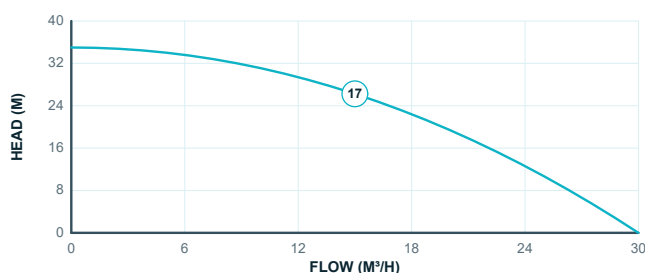
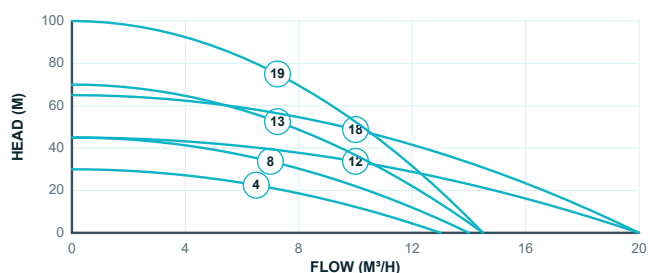
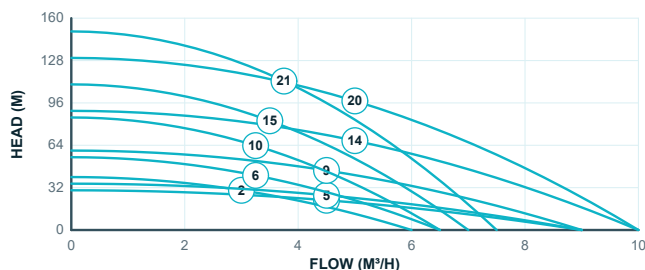
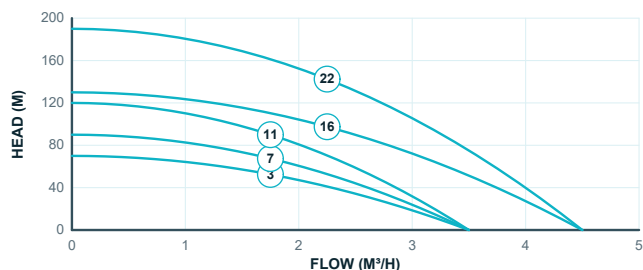


Off-grid



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

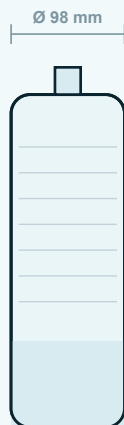
MATERIALS & CERTIFICATION

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			

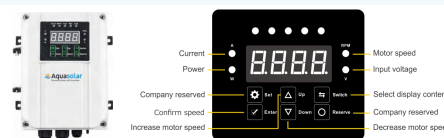
4" AC/DC PLASTIC IMPELLER SOLAR PUMP - DIMENSIONS & CONTROLLER

DIMENSIONS & WEIGHT



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 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)

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

SOLAR ARRAY CONNECTION

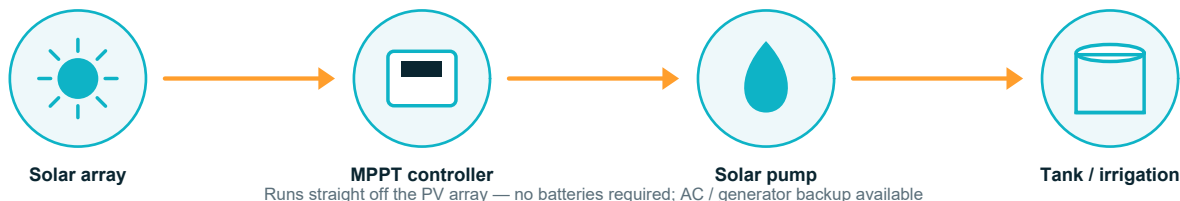
SYSTEM	Voc (V)	POWER	ARRAY
72 V	60~150	600 W	3 × 300 Wp
96 V	60~200	750 W	3 × 300 Wp
144 V	90~340	1100 W	6 × 300 Wp
192 V	90~430	1500 W	8 × 300 Wp
280 V	100~490	2200 W	10 × 300 Wp

Array 1.3–1.5 × pump power · Voc within MPPT window.

CABLE & INSTALLATION

Run ≤ 50 m	2.5 mm ² (per model)
Run 50–100 m	one size up
Run > 100 m	two sizes up
Cable type	3-core copper + earth
▶ Waterproof splice kit on the drop cable	
▶ Stainless safety rope; ≥1 m above well bottom	

SYSTEM LAYOUT



Runs straight off the PV array — no batteries required; AC / generator backup available

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

AC/DC SOLAR SUBMERSIBLE PUMP (HIGH-FLOW)

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:** aluminium impeller · iron body · iron 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 & impellers (SUS316 optional) · 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 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


14 m

MAX HEAD

56 m³/h

MAX FLOW

1100–2200 W

POWER

92%

EFFICIENCY

2 yr

WARRANTY

APPLICATIONS



Irrigation



Livestock



Village supply

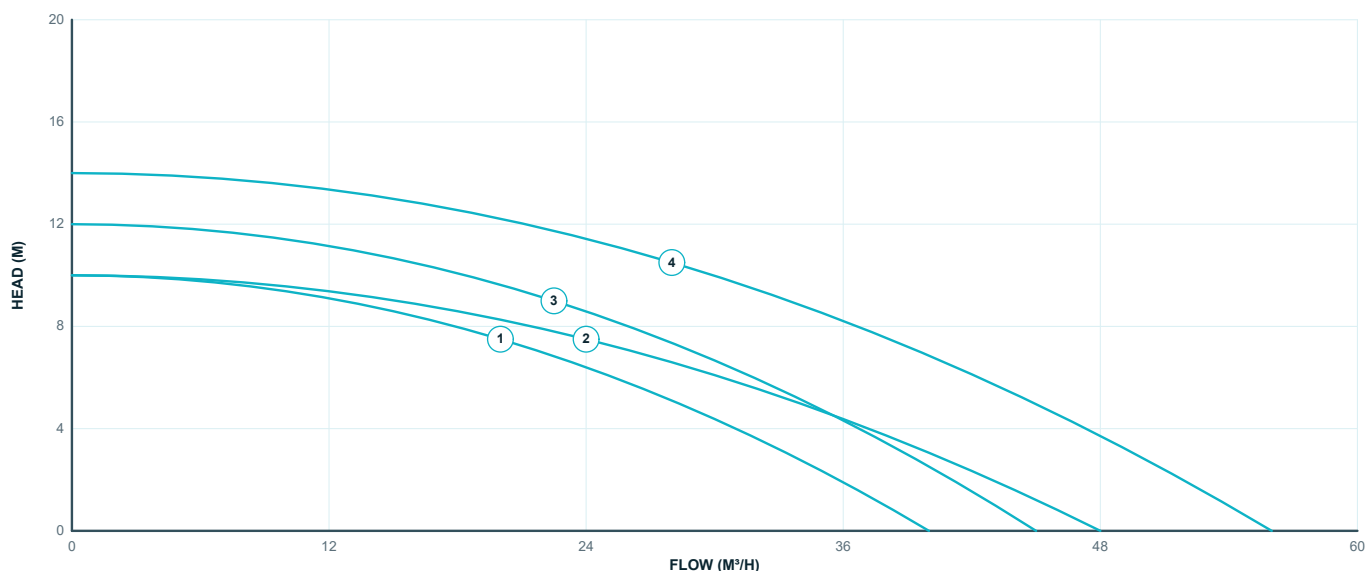


Off-grid



Industry

PERFORMANCE CURVES (Q-H)

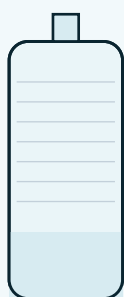


AC/DC SOLAR SUBMERSIBLE PUMP (HIGH-FLOW) - SPECIFICATIONS

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	PSG40-10-144-1100-H	144	90~340	1100	40	10	3"	6 × 300 Wp
2	PSG48-10-192-1500-H	192	90~430	1500	48	10	4"	8 × 300 Wp
3	PSG45-12-192-1500-H	192	90~430	1500	45	12	3"	8 × 300 Wp
4	PSG56-14-280-2200-H	280	100~490	2200	56	14	4"	10 × 300 Wp

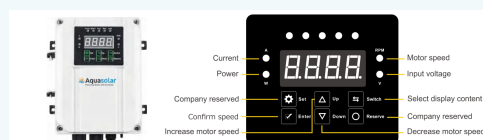
DIMENSIONS & WEIGHT



Overall length 760–870 mm
Net weight 20.6–27.2 kg
Controller size 360 × 260 × 140 mm
Controller wt. 7 kg

L 760–870 mm

CONTROLLER



Drive Sensorless FOC, pure sine-wave output
MPPT efficiency >99%
Enclosure IP66
Mount External
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 20 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 Cast-iron (HT200) body + SUS304 impeller + SUS304 shaft
Option SUS304 / bronze wetted parts

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

SOLAR ARRAY CONNECTION

SYSTEM	Voc (V)	POWER	ARRAY
144 V	90~340	1100 W	6 × 300 Wp
192 V	90~430	1500 W	8 × 300 Wp
280 V	100~490	2200 W	10 × 300 Wp

Array 1.3–1.5 × pump power · Voc within MPPT window.

CABLE & INSTALLATION

Run ≤ 50 m 2.5 mm² (per model)
Run 50–100 m one size up
Run > 100 m two sizes up
Cable type 3-core copper + earth
 ▶ Waterproof splice kit on the drop cable
 ▶ Stainless safety rope; ≥ 1 m above well bottom

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

AC/DC SOLAR SURFACE 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:** brass impeller · aluminium body · iron 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 + cast-iron / stainless hydraulics · Silicon-carbide / ceramic mechanical seal
- ▶ **Ingress:** Motor IP55 · Controller IP66 · Class F insulation · air cooling
- ▶ **Protection:** Dry-run · over/under-voltage · overload · over-current · reverse · over-temp · soft-start
- ▶ **Cable:** PV-to-controller & motor cable 2.5 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


40 m

MAX HEAD

60 m³/h

MAX FLOW

600–2200 W

POWER

92%

EFFICIENCY

2 yr

WARRANTY

APPLICATIONS



Irrigation



Boosting

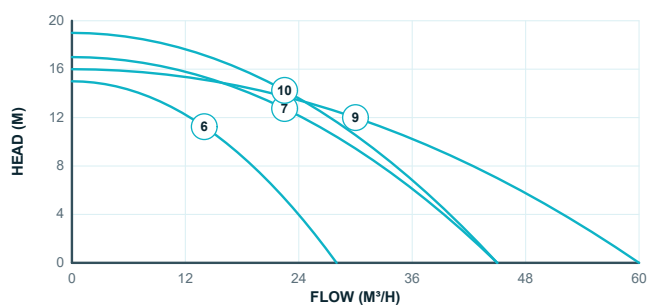
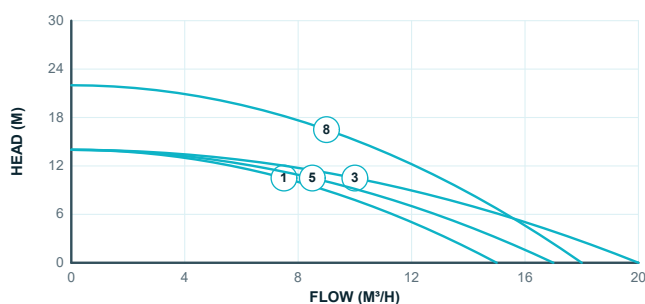
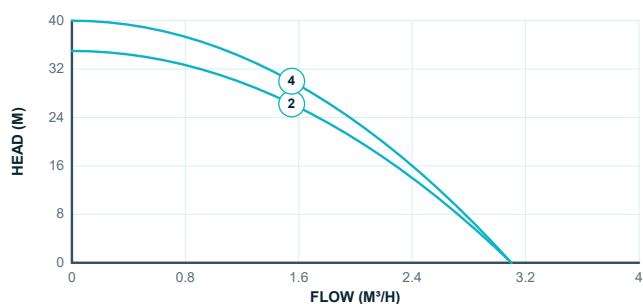


Rivers / tanks



Domestic

PERFORMANCE CURVES (Q-H)



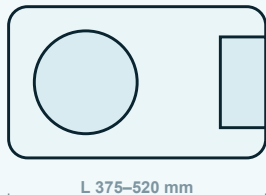
AC/DC SOLAR SURFACE PUMP - SPECIFICATIONS

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

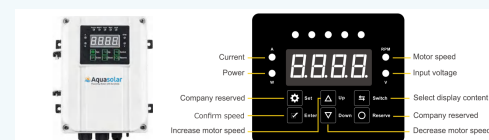
NO.	MODEL	VOLT. (V)	INPUT Voc (V)	POWER (W)	MAX FLOW (M³/H)	MAX HEAD (M)	OUTLET (inch)	REC. PV
1	PHF15-14-72-600-H	72	60~150	600	15	14	1.5"×1.5"	3 × 300 Wp
2	PSGJ3.1-35-72-600-H	72	60~150	600	3.1	35	1.0"×1.0"	3 × 300 Wp
3	PHF20-14-96-750-H	96	60~200	750	20	14	2.0"×2.0"	3 × 300 Wp
4	PSGJ3.1-40-96-750-H	96	60~200	750	3.1	40	1.0"×1.0"	3 × 300 Wp
5	PZSU17-14-144-1100-H	144	90~340	1100	17	14	2.0"×2.0"	6 × 300 Wp
6	PHF28-15-144-1100-H	144	90~340	1100	28	15	2.0"×2.0"	6 × 300 Wp
7	PHF45-17-192-1500-H	192	90~430	1500	45	17	3.0"×3.0"	8 × 300 Wp
8	PZSU18-22-192-1500-H	192	90~430	1500	18	22	2.0"×2.0"	8 × 300 Wp
9	PHF60-16-280-2200-H	280	100~490	2200	60	16	4.0"×4.0"	10 × 300 Wp
10	PZSU45-19-280-2200-H	280	100~490	2200	45	19	3.0"×3.0"	10 × 300 Wp

DIMENSIONS & WEIGHT

Overall length 375–520 mm
Net weight 9.9–20.3 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 N/A
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 Air cooling
Speed Variable, MPPT-tracked

MATERIALS & CERTIFICATION

Standard Cast-iron (HT200) body + SUS304 / brass impeller + SUS304 shaft
Option SUS304 / SUS316 body & impeller

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

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

AQUASOLAR · POWERING WATER WITH SUNSHINE · SINCE 2010

70+ countries · 600,000+ pumps / year · CE · RoHS · CB · TUV · SGS · ISO 9001 · ISO 14001

AC/DC SOLAR SWIMMING POOL 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 · aluminium body · plastic 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 · Corrosion-proof engineering-plastic wet end · Ceramic-carbon mechanical seal
- ▶ **Ingress:** Motor IP55 · Controller IP66 · Class F insulation · water-cooled (plastic)
- ▶ **Protection:** Dry-run · over/under-voltage · overload · over-current · reverse · over-temp · soft-start
- ▶ **Cable:** PV-to-controller & motor cable 2.5 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


18 m

MAX HEAD

36 m³/h

MAX FLOW

600-2200 W

POWER

92%

EFFICIENCY

2 yr

WARRANTY

APPLICATIONS



Circulation

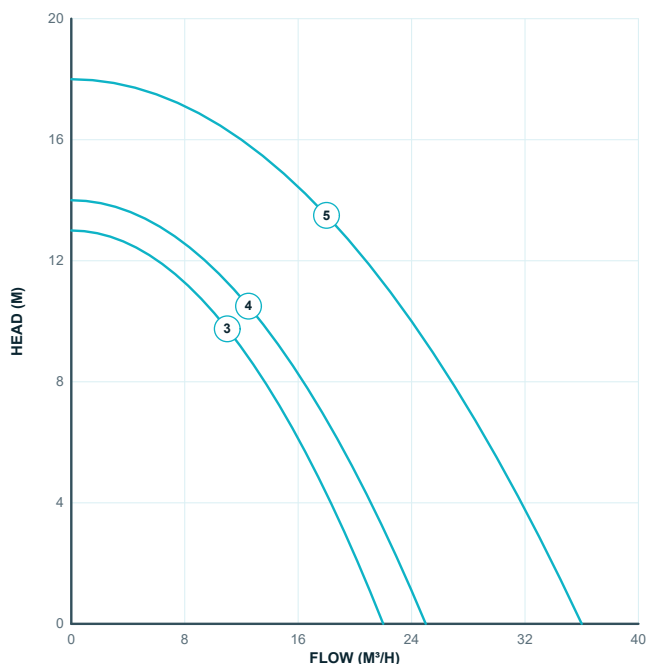
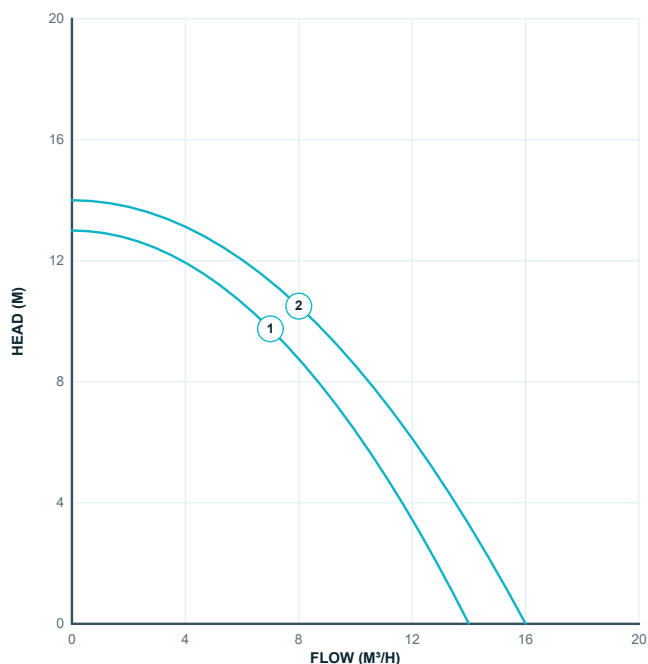


Filtration



Solar-powered

PERFORMANCE CURVES (Q-H)



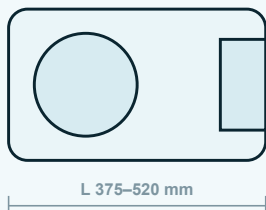
AC/DC SOLAR SWIMMING POOL PUMP - SPECIFICATIONS

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

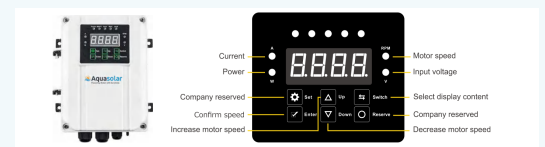
NO.	MODEL	VOLT. (V)	INPUT Voc (V)	POWER (W)	MAX FLOW (M³/H)	MAX HEAD (M)	OUTLET (inch)	REC. PV
1	PSP14-13-72-600-H	72	60~150	600	14	13	2"	3 × 300 Wp
2	PSP16-14-96-750-H	96	60~200	750	16	14	2"	3 × 300 Wp
3	PSP22-13-144-1100-H	144	90~340	1100	22	13	2"	6 × 300 Wp
4	PSP25-14-192-1500-H	192	90~430	1500	25	14	2"	8 × 300 Wp
5	PSP36-18-280-2200-H	280	100~490	2200	36	18	2"	10 × 300 Wp

DIMENSIONS & WEIGHT

Overall length 375–520 mm
Net weight 7.4–13.8 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 N/A
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 Water-cooled (plastic)
Speed Variable, MPPT-tracked

MATERIALS & CERTIFICATION

Standard Reinforced engineering-plastic body & impeller + SUS304 shaft



SOLAR ARRAY CONNECTION

SYSTEM	Voc (V)	POWER	ARRAY
72 V	60~150	600 W	3 × 300 Wp
96 V	60~200	750 W	3 × 300 Wp
144 V	90~340	1100 W	6 × 300 Wp
192 V	90~430	1500 W	8 × 300 Wp
280 V	100~490	2200 W	10 × 300 Wp

Array 1.3–1.5 × pump power · Voc within MPPT window.

CABLE & INSTALLATION

Run ≤ 50 m 2.5 mm² (per model)
Run 50–100 m one size up
Run > 100 m two sizes up
Cable type 3-core copper + earth
 ▶ Install below water level where possible
 ▶ Keep the strainer basket clean

WHY AQUASOLAR



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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



GET IN TOUCH

www.aquasolarpump.com

info@aquasolarpump.com

Tel / WhatsApp / WeChat: +86 186 1687 2899

Shanghai, China