

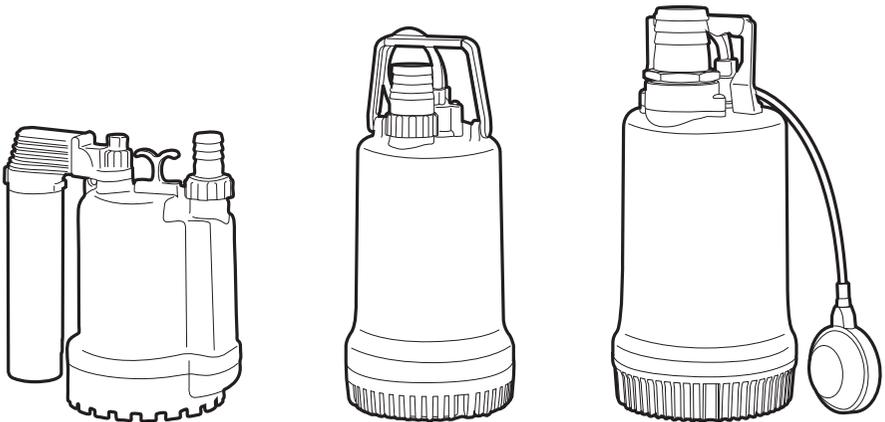


WALRUS

Submersible Pump

PW-A Series

Instruction Manual



ISO 9001 Certified

Walrus America Inc



EC Declaration of Conformity

Manufacturer:

Walrus Pump Co., Ltd.

Address:

No. 83 -14, Dapiantou, Sanjihh Township, Taipei County 252,
Taiwan

Declare that the machinery described:

Name : Submersible Pump

Model : PW Series

Conform to the following directive:

2006/42/EC—Machinery directive

2006/95/EC—Low voltage directive

2004/108/EC—EMC (Electromagnetic compatibility) directive

Refer to the following standards:

EN ISO 12100:2010

EN60335-1:2002

EN 809:1998

EN60335-2-41:2003

EN61000-6-2

EN61000-6-3

R&D department manager: Kao Tien-chuan

Manager:

Kao Tien chuan

Operation & Notices :

1. Before Operation

- a. Confirm if power supply, voltage, Hz comply with those indicated on the nameplate.
- b. Make sure that outlet, gasket, and outlet lid are securely tightened up; hose is properly connected and clipped on.
- c. Submerge entirely and place firmly the pump in the water. Pull the outlet to where it has the appropriate drainage. Keep the power connector dry, avoid tangled or pressed by object.
- d. Confirm that the pump is grounded and leak breaker is provided.
- e. Never start up the pump with anyone stay in the water while connecting pipelines in swimming pool, bathing pool or any similar place.

2. In Operation

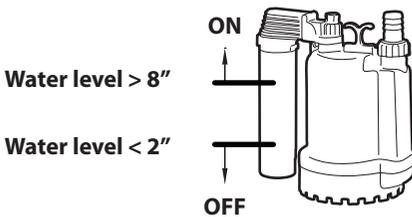
- a. After start up, check if discharge flow come out from the hose outlet.
- b. If motor runs normally but water outflow diminishes suddenly or the drain stops, please check if the water level is too low, hose runs too long or base strainer blocked. Troubleshoot and restart the pump.
- c. The motor will be cut off automatically when it is overloaded and attempt to restart after a few minutes.
- d. If water level is too low for the pump disconnect the power to avoid damage to the pump.

3. After Operation

- a. Clean the pump, and leave it dry before storage.

Level regulator

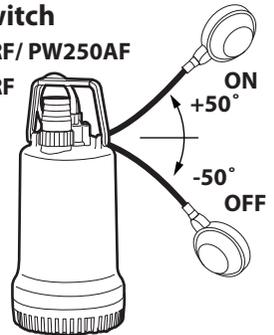
PW100AC / PW100ARC



Float ball level switch

PW100AF / PW100ARF / PW250AF

PW400AF / PW400ARF



Troubleshooting :

Failure	Cause	Remedy
Pump does not turn on.	1. Circuit breaker is not connected.	Connect it.
	2. Pump not plug in.	Plug in pump.
	3. Broken cable.	Replace it.
	4. No power supply.	Turn on the power source.
	5. Defective motor.	Repair or replace it.
	6. Impeller clogged.	Clean it and make sure it turns freely after cleaning.
Pump stop suddenly or slow down.	1. Impeller is clogged.	Clean it.
	2. Circuit breaker trip.	Reconnect circuit breaker.
	3. Motor failure.	Repair or replace it.
Pump runs normally, but does not deliver rated capacity.	1. Water level too low.	Stop the pump and unplug.
	2. Impeller clogged.	Clean or replace it.
	3. Discharge pipe runs too long.	Correct it in reference to rating table.
	4. Strainer blocked.	Clean it.

Specification :

Type	PW100A(R)(C)(F)	PW250A(F)	PW250AD	PW400A(R)(F)	PW400AD
Power(W)	100	250	250	400	400
Cycle(Hz)	60	60	60	60	60
Volt(V)	115 or 230	115 or 230	115 or 230	115 or 230	115 or 230
Phase	1	1	1	1	1
Pole(P)	2	2	2	2	2
Outlet (in.)	1"	1½"	1½"	2"	2"
Max. Head (ft)	21.3	29.5	29.5	32.8	32.8
Max.(GPM)	21.1	42.2	31.7	68.6	34.3
Min. Submerged depth (in.)	2.8 ±0.4	3.6 ±0.4	3.6 ±0.4	4.0 ±0.4	4.0 ±0.4

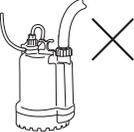
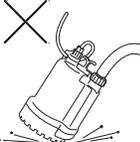
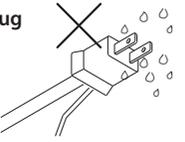
* The "R" type available to used in sea fish breeding.

** The "C" type equipped level regulator.

*** The "F" type equipped float ball level switch.

**** The "D" type low suction capability up 0.12" .

Attention :

<p>1.PW-A series is designed for pumping water instead of oil, sea water, hot water (Liquid temperature range: 4°C ~40°C (Without Icing up))</p> 	<p>2.Never start up the pump with anyone in the water.</p> 
<p>3.Make sure that the pump is always placed in the water, pumping without water is strictly prohibited.</p> 	<p>4. Make sure that the pump is grounded.</p> 
<p>5.Place cushion beneath the pump to avoid sucking in dirt when used in lake or river.</p> 	<p>6. Never carry or move the pump by its cable. Use the handle to lift or move the pump.</p> 
<p>7.Avoid falling the pump to the ground as it might broken the shell.</p> 	<p>8. Always keep the power plug dry.</p> 

9.PW100A, PW250A(D), PW400A(D) can be used for water only. For sea water application please chose PW100AR, PW400AR.

10.PW100AR, PW400AR are for sea water application but not suitable for chemical or other explosive liquid.

11.PW100A series have a small air vent hole in the impeller cavity to let out trapped air.

12. Make sure the liquids level must higher than the minimum submerged depth before pump operate.

Walrus America Inc

20220 Hempstead Road, Suite #30, Houston, TX 77065

Web: www.walrusamerica.com