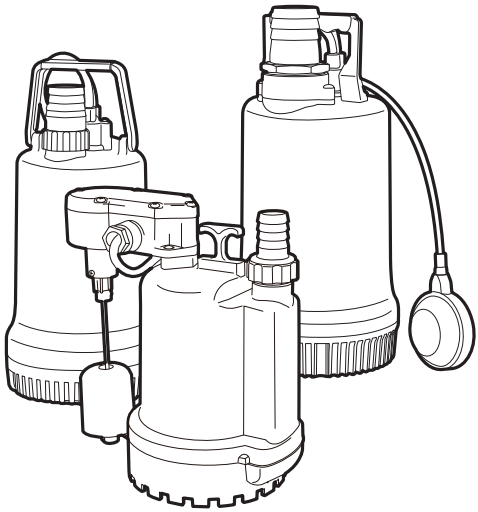
WALRUS PUMP

PW Series

Instruction Manual

Submersible Pump



Model : PW100E / PW100A(R, C, F, D) / PW250A(F, D) / PW400A(R, F, D) / PW800A(R)

To ensure safe and proper use, please read this instruction before operation.

ISO 9001 Certified **WALRUS PUMP CO., LTD.** CE

EC Declaration of Conformity

Manufacturer:

Walrus Pump Co., Ltd.

Address:

No.83-14, Dapiantou, Sanzhi Dist., New Taipei City 252, Taiwan

Declare that the machinery described:

Name : Submersible Pump

Model : PW Series

Conform to the following directive:

2006/42/EC—Machinery directive

2014/35/EU—Low voltage directive

2014/30/EU—EMC (Electromagnetic compatibility) directive

Refer to the following standards:

EN ISO 12100-1:2010

ISO14121-1:2007

EN60335-1:2012 EN 809:1998+A1

EN60335-2-41:2003+A2

EN61000-6-1 EN61000-6-3

R&D department manager: Chen, Wei-Chu.

Manager: Chen, Wei-Chu.

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.

e. The pump must not be used when people are staying in the water.

f. The PW100E submersible pump is designed for short-term water draining purposes and should not be used in continuous or prolonged operation, such as in garden landscaping fountains. It should not be operated continuously for more than 8 hours. If prolonged use is required, please choose the PW100A model. After completing your water pumping task, it is crucial to promptly turn off the power and avoid running the pump without water.

3. After Operation

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

4. the pump must be supplied through a residual current device (RCD) having a rated residual operating current not exceeding 30 mA.

5. pollution of the liquid could occur due to leakage of lubricants.

6. a protective device (e.g. circuit breaker) is to be installed in the fixed wiring and its characteristics are to be specified acc. to the pump rating.

7. Please unplug the pump before any maintenance and clean.

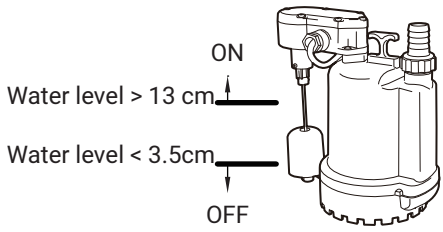
8. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

Noise level:

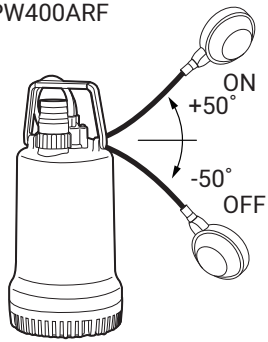
The sound pressure level of the POND series pumps is below 70 dB(A) since they are operating under the water; uncertainty is 3 dB(A).

Level regulator

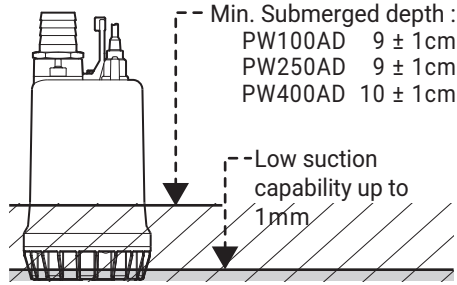
PW100AC / PW100ARC



Float ball level switch
PW100AF / PW100ARF/ PW250AF
PW400AF / PW400ARF



Low suction Pump
PW100AD / PW250AD / PW400AD



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 souce.
	5. Defective motor.	Repair or replace it.
	6. Impeller colgged.	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	Output (W)	Cycie (Hz)	Volt (V)	Phase	Pole (P)	Outlet Inch (mm)	Max. Head (m)	Max. (L/min)	Min. Submerged Depth (cm)
PW100E	100	50	220 - 240	1	2	1"(25)	6.0	70	7 ± 1
		60	110 or 220				6.5	80	
PW100A(R)(C)(F)	100	50	220 - 240	1	2	1"(25)	6.5	80	7 ± 1
		60	110 or 220						
PW100AD	100	50	220 - 240	1	2	1"(25)	6.5	70	9 ± 1
		60	110 or 220					80	
PW250A(F)	250	50	220 - 240	1	2	1½"(40)	9	160	9 ± 1
		60	110 or 220						
PW250AD	250	50	220 - 240	1	2	1½"(40)	9	120	9 ± 1
		60	110 or 220						
PW400A(R)(F)	400	50	220 - 240	1	2	2"(50)	10	260	10 ± 1
		60	110 or 220						
PW400AD	400	50	220 - 240	1	2	2"(50)	10	130	10 ± 1
		60	110 or 220						
PW800A(R)	800	50	220 - 240	1	2	2"(50)	14	440	12 ± 1
		60	110 or 220						

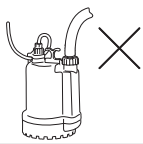
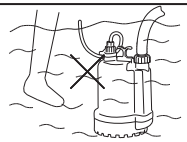
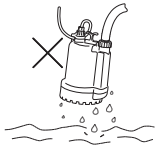
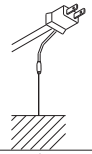
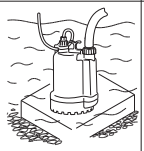
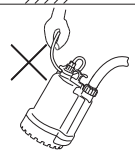
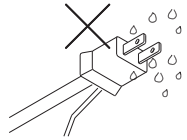
* The “R” type available to used in sea fish breeding.

** The “C” type equipped level regulator.

*** The “F” type equipped float ball level switch.

**** The “D” type low suction capability up to 1 mm.

Attention :

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

9. PW100E, PW100A(D), PW250A(D), PW400A(D), PW800A can be used for water only. For sea water application please chose PW100AR, PW400AR, PW800AR.
10. PW100AR, PW400AR, PW800AR are for sea water application but not suitable for chemical or other explosive liquid.
11. PW100 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
PUMP

walruspump.com

WALRUS PUMP CO., LTD.

CW70D0001D000EW0R12-18