



ORIENTAL KOSHIN

## HIGH PERFORMANCE SUBMERSIBLE PUMP, OPERATION MANUAL

# PONSTAR

### 《PKS-CR MODEL》

Thank you for your purchase of our KOSHIN submersible pump.

Upon receipt, please check the followings.

- \* Model is exactly what you ordered.
- \* There is no damage in transit.
- \* Accessories are all supplied.

In case of trouble, please contact dealer referring to Mfg. No.

Be sure to read this manual  
before operation.

**KOSHIN LTD.**



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## USE

Water feeding and discharging for construction and civil works; Water supply and sewage works; Various kinds of industrial facilities; Housing and building facilities, Flower gardening; Irrigation of seeds and nursery stock fields; Horticulural facilities; Water sprinkling, feeding and discharging for fish farm (fresh water); Watering in gardens; Feeding and discharging for fountains

## INSTRUCTIONS FOR USE

1. Please check the type, aperture, output, frequency, and voltage indicated on the name plate attached to the upper part of the pump.  
Pay close attention, in particular, to frequency and voltage as inadequate frequency and voltage can cause lower pump performance and troubles.
2. Place to use  
The pump can be used at almost all places but avoid continuous short-water operation at a sandy place, as such may accelerate wear of the pump.  
Try to install the pump at a position where water can be collected most easily. When the pump is installed on soft muddy or sandy ground, lay wooden board or block under the body to prevent setting down.  
Strictly refrain from putting into any pond, bath, or swimming pool in which anybody is staying.
3. Hose piping  
When any hose is used for connection, keep the hose as straight as possible as excessively bent hose reduces water quantity. Refrain from placing the discharge port under water. Inverse flow may sometimes be resulted due to siphon effect when the operation is stopped.
4. Cabtire cable  
To transfer the pump or to install, hold the pump on the handle or a rope tied to the handle.  
If the cabtire cable is pulled instead of the rope, the core wires may sometimes be cut off. To extend the cable, use a cable of the same or larger size than the one attached to the pump. Strictly refrain from placing the joint between the main line and the extension in water.
5. Earth leakage breaker  
Be sure to ground the earthing wire before connecting the cabtire cable to the power source. The green wire is for earthing. Be sure to attach the leakage breaker to prevent any possible leakage trouble.

## 6. After use

If the pump is left as it is after used for water of high sand content or other special substances, the sand is accumulated in the pump and will affect the next operation. Before stopping operation, therefore, be sure to keep pumping supernatant water or clean water for some time to clean out the inside.

## 7. Thermal protector

The pump incorporates a thermal protector to protect the motor, and the motor is stopped automatically at a over-load operation due to any reason.

When the motor stops automatically, be sure to check after turning off the power source.

## MAINTENANCE AND INSPECTION

1. Periodically check the insulated condition with a megger tester. To be acceptable, the resistance between the earthing wire and the power cord should be 100M ohm and higher.
2. The shaft of the water-tight mechanism as the most critical part of the pump is sealed with liquid paraffin. The life changes greatly depending on the operating condition but the quantity should be checked periodically. Use 170cc of Kyoseki No. 2 or equivalent for the sealing. The liquid paraffin can be checked easily by removing the hexagon socket head bolt at a side of the pump body.

## TROUBLE-SHOOTING

No start at all or stops immediately after start.	Malconnection of power circuit	Correct the connection. Check the power circuit.
	The leakage circuit breaker is actuated.	Repair the point of leakage.
	The impeller is caught by foreign substance.	Remove the foreign substance.
	Motor is burnt.	Repair or replace.
	Voltage drop.	Raise the voltage to the rating.

Stops during operation	The protector is actuated.	Remove foreign substance if the impeller is clogged.
		Lower the liquid temperature if it is too high.

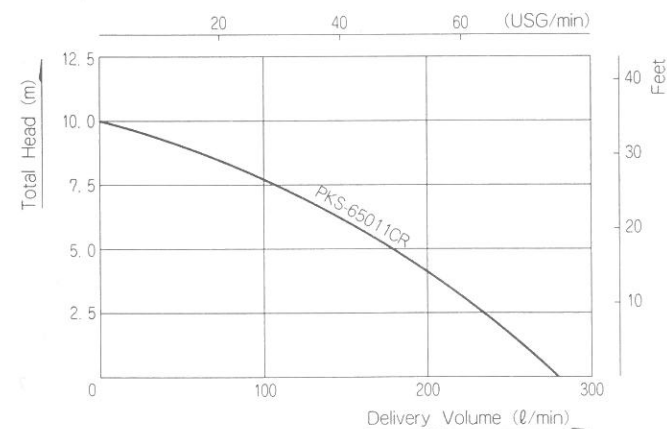
No pumping or lowered performance	Voltage drop	Raise the voltage to the rating.
	Inverse rotation	Correct to forward rotation.
	High delivery head	Lower the head.
	Discharge pipe is clogged.	Overhauling
	Impeller wear	Replacement
	Clogging of foreign matter in strainer pump	Overhauling.

## SPECIFICATION

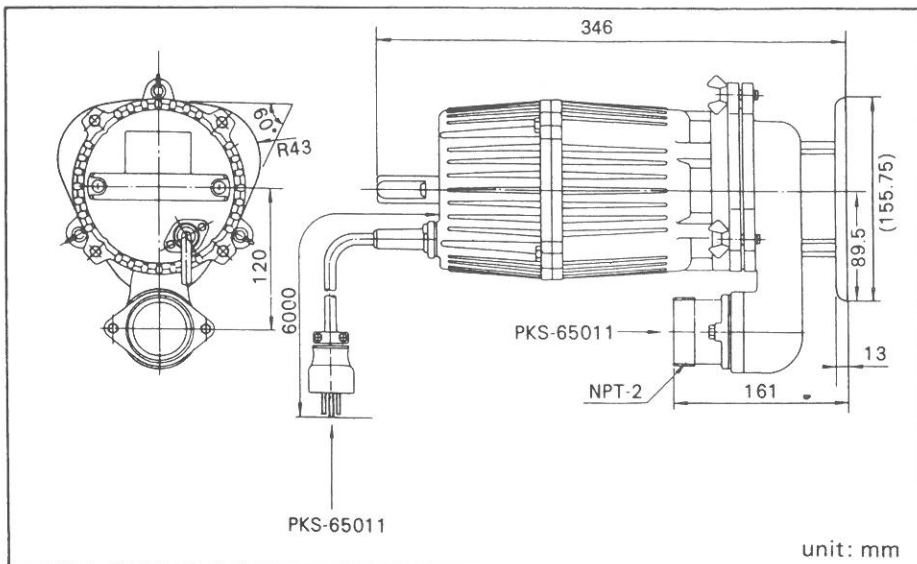
Model		PKS-65011CR (110V)
PUMP	Connection Dia.	50mm 2inch
	Total Head	10m 32.8ft.
	Delively Volume	280ℓ/min 79.3U.S.G/min
MOTOR	Frequency	60Hz
	Rated Current	6.5A
	Out Put	400W
	Consumption of Electric Power	660W
	Revolution	3200rpm
	Type	Induction Motor
	Power Cord	6m
Net Weight		16.3kg
Standard Accessory		1 Hose band 5m Rope

※Motive current sends about times as much as rated current.

## PERFORMANCE CURVE



## DIMENSION



※Caution

The pump is used a double mechanical seal.(See Fig.) Consulting the following table, assemble it.

MECHANICAL SEAL	MOTOR SIDE (Carbon)	PUMP SIDE (Carborundom)
Outside diameter	22.5mm	20.5mm
Internal diameter	18.5mm	15.0mm

