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04-08 043036802

HIGH PERFORMANCE SUBMERSIBLE PUMP, OPERATION MANUAL

PONSTAR

《PXL SERIES》

Thank you for your purchase of our

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.

KOSHIN LTD.

Be sure to read this manual before operation

USE

Suitable for disposal of residual water from construction site, roof tank of building, swimming pool, fish farm, underground water and narrow access like manhole.

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. Always place pump on flat ground for effective operation
   Mininum water level for operation is 30mm. When used at lower level, prime before operation.
   Keep away from children. Not suitable for chemical, seawater, acid or alkaline.
3. **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.
4. 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.
5. 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 supernatent water or clean water for some time to clean out the inside.
6. 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.

WARNING

Ensure that no one is in the water when pump is operating.

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 230cc 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 lower side of the pump body.

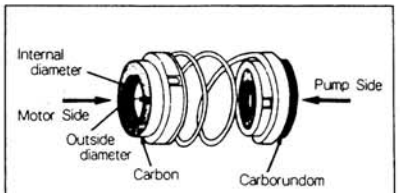
TROUBLE-SHOOTING

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.

CAUTION

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

MECANICAL SEAL	MOTOR SIDE (Carbon)	PUM SIDE (Carborumdom)
Outside diameter	22.5㎜	20.5㎜
Internal diameter	18.5㎜	15.0㎜

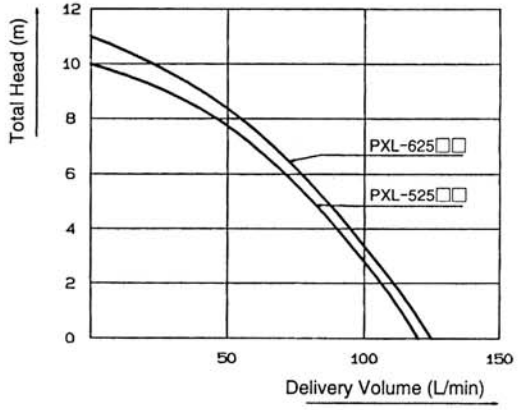


Double Mechanical Seal

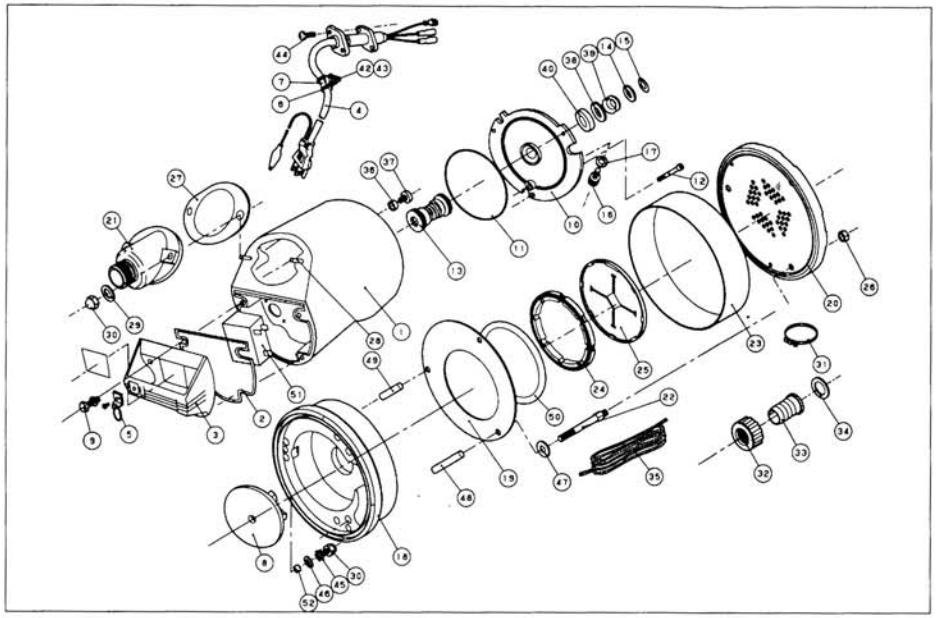
SPECIFICATION

	Model	PXL-52511	PXL-52522	PXL-62511
PUMP	Connection Dia	25 m/m (1")		
	Total Head	32.8 ft (10m)		36.1 ft (11m)
	Delivery Volume	31.68 U.S.G./min (120L/min.)		33.0 U.S.G./min (125L/min.)
MOTOR	Voltage	AC-110V	AC-220V	AC-110V
	Frequecy	50 Hz		60 Hz
	Read Curent	6.0 A	2.9 A	6.8 A
	Consumption of Electric Power	590 W	540 W	680 W
	Revolution	2900 rpm		3400 rpm
	Power Cord	16.4 ft (5m)		
Gross Weight		11.8 kg		
Standard Accessory		Rope 5m Hose Band Coupling	Coupling Packing Nipple	

PERFORMANCE CURVE



PARTS LIST



No	PARTS No	PARTS NAME		QTY	No	PARTS No	PARTS NAME		QTY
1	0438071	PX-5022 400W Motor		1	27	0430283	PX-50 Delivery Packing	NBR	1
1	0438074	PX-5011 400W Motor		1	28	0430290	PX-50 Stud Bolt	M8×36×11/21	2
2	0430284	PX-50 Head Packing	NBR	1	29	846005008	Washer	ϕ8 SUS	3
3	0430268	PX-50 Hande	ADC	1	30	835305008	Nut	M8 SUS	3
4	0438065	PX-50 Power Card	VCT 1.25-3C	1	31	940019032	Hose Band	ϕ32	1
5	0438066	PX-50 Chain	SUS	1	32	0340781	SM-25 Coupling	ABS	1
6	0390031	PS-40 Cord Supporter	CR	1	33	0340782	SM-25 Nipple	ABS	1
7	0260018	BL-3224 Cord Band	SUS	1	34	0340065	SM-25 Coupling Packing	CR	1
8	0430285	PX-50 50Hz Impeller	PU	1	35	0390101	PS-40 Rope	5m	1
8	0430280	PX-50 60Hz Impeller	PU	1	36	0340142	SM Seal Ring	NBR	1
9	743605031	Bolt	M6×18 SUS	4	37	0340153	+ Screw	M6×8 SUS	1
10	0430271	PX-50 Front Cover	ADC	1	38	0430301	PX-50 Thrust Washer	SUS	1
11	889955125	O-Ring	G125 NBR	1	39	895154014	Oil Seal	VR14A	1
12	734505037	Socket Bolt	M5×20 SUS	3	40	0430299	PX-50 Thrust Packing	CR	1
13	0390003	PS-40 Mechanical Seal	DE560	1	41	707820074	+ Screw	M4×6 SWRM	1
14	0430300	PX-50 Impeller Washer	SUS	1	42	703305100	+ Screw	M5×10 SUS	2
15	0390025	PS-40 Impeller Adjusting Washer	SUS	0~2	43	827305005	Nut	M5 SUS	1
16	0390037	PS-40 Socket Bolt	M10×12 SUS	1	44	703305102	+ Screw	M5×14 SUS	2
17	854255010	Seal Washer	ϕ10	1	45	845305008	Toothed Washer	8B SUS	1
18	0430334	PX-L Casing	PVC+NBR	1	46	746505008	Washer	ϕ8 SUS	1
19	0430329	PX-L Suction	T=2.0 SUS	1	47	854255008	Seal Washer	ϕ8 SUS	3
20	0430241	PX-L Strainer	SUS+NBR	1	48	0430361	PX-L Long Pipe	SUS	2
21	0430350	Delivery Frange	ADC	1	49	0430362	PX-L Short Pipe	SUS	1
22	0430242	Stud Bolt	SUS	3	50	0430360	PX-L Plate Packing	NBR	1
23	0430236	Strainer Stand	SPCC T=2.5	1	51	0430326	Condenser	AC-220V	1
24	0430239	Seal Ring	NBR	1	51	0430320	Condenser	AC-110V	1
25	0430331	One Way Check Valve	NBR	1	52	0430441	PX-50 Impeller Bush	SUS	1
26	827405008	Nut	M8 SUS	3					

DIMENSION

UNIT : mm

