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Water
is Our
Business®

OWNER'S MANUAL

Submersible Utility Pumps

Series FP0S1300X, FP0S1600X,

FP0S1100X, FP0S1250X

NOTICE D'UTILISATION

Pompes utilité submersibles

Série FP0S1300X, FP0S1600X,

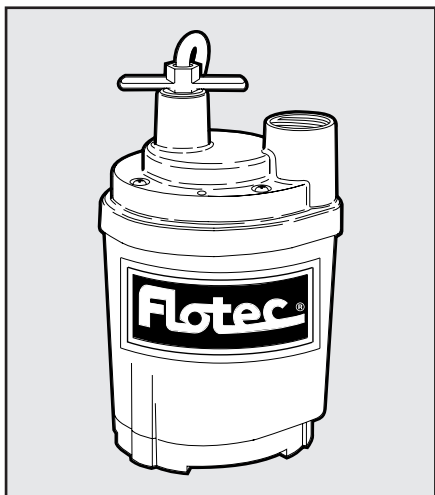
FP0S1100X, FP0S1250X

MANUAL DEL USUARIO

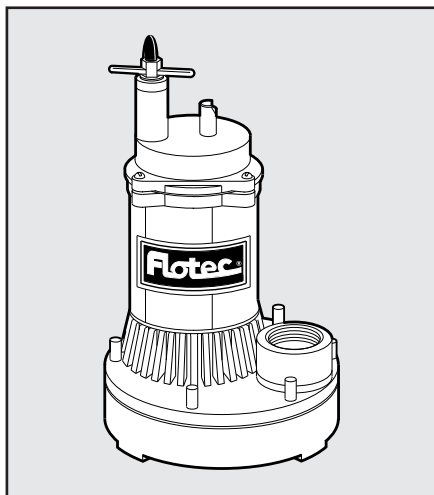
Bombas sumergibles de uso general

Serie FP0S1300X, FP0S1600X,

FP0S1100X, FP0S1250X



Series FP0S1300X/FP0S1600X



Series FP0S1100X/FP0S1250X

Installation/Operation/Parts

For further operating,
installation, or maintenance
assistance:

Call 1-800-365-6832

English Pages 2-3

Installation/Fonctionnement/Pièces

Pour plus de renseignements
concernant l'utilisation,
l'installation ou l'entretien,

Composer le 1 (800) 365-6832

Français Pages 4-5

Instalación/Operación/Piezas

Para mayor información sobre
el funcionamiento, instalación o
mantenimiento de la bomba:

Llame al 1-800-365-6832

Español.....Paginas 6-7

GENERAL SAFETY

Electrically powered sump pumps normally give many years of trouble-free service when correctly installed, maintained, and used. However, unusual circumstances (interruption of power to the pump, dirt/debris in the sump, flooding that exceeds the pump's capacity, electrical or mechanical failure in the pump, etc.) may prevent your pump from functioning normally. To prevent possible water damage due to flooding, consult your retailer about a secondary AC sump pump, a DC backup sump pump, and/or a high water alarm. See the "Troubleshooting Chart" in this manual for information about common sump pump problems and remedies. For more information, see your retailer or call Flotec customer service at 1-800-365-6832.

1. Know the pump application, limitations, and potential hazards.

⚠ WARNING Do not use in explosive atmospheres. Pump water only with this pump. Failure to follow this warning can result in personal injury and/or property damage.

⚠ CAUTION Risk of flooding. If a flexible discharge hose is used, make sure pump is secured in sump to prevent movement. Failure to secure pump may allow pump movement, switch interference and prevent pump from starting or stopping.

2. Make certain power source conforms to requirements of your equipment.
3. Disconnect power before servicing.
4. Release all pressure within system before servicing any component.
5. Drain all water from system before servicing.
6. Secure discharge line before starting pump. An unsecured discharge line will whip, possibly causing personal injury and/or property damage.
7. Check hoses for weak or worn condition before each use, making certain all connections are secure.
8. Periodically inspect pump and system components. Keep sump, pump and system free of debris and foreign objects. Perform routine maintenance as required.
9. Provide means of pressure relief on pumps whose discharge line can be shut-off or obstructed.
10. Personal Safety:
 - a. Wear safety glasses at all times when working with pumps.
 - b. Keep work area clean, uncluttered and properly lighted – replace all unused tools and equipment.
 - c. Keep visitors at a safe distance from the work area.
 - d. Make workshop child-proof – with padlocks, master switches, and by removing starter keys.
11. When wiring an electrically driven pump, follow all electrical and safety codes, as well as most recent National Electrical Code (NEC) and Occupational Safety and Health Act (OSHA).

⚠ WARNING Pump motor is equipped with an automatic resetting thermal protector and may restart unexpectedly.

12. **⚠ WARNING** Risk of electric shock. This equipment is only for use on 115 volt (single phase) and is equipped with an approved 3-conductor cord and 3-prong, grounding-type plug.

⚠ WARNING To reduce risk of electric shock, be certain that it is connected to properly grounded, grounding-type receptacle.

- Where a 2-prong wall receptacle is encountered, it must be replaced with properly grounded 3-prong receptacle installed in accordance with the National Electrical Code and local codes and ordinances.
13. All wiring should be performed by a qualified electrician.
 14. Protect electrical cord from sharp objects, hot surfaces, oil, and chemicals. Avoid kinking cord. Replace or repair damaged or worn cords immediately.
 15. Use wire of adequate size to minimize voltage drop at motor. Refer to most recent National Electrical Code.
 16. Do not touch an operating motor. Modern motors are designed to operate at high temperatures.
 17. Do not use in water where fish are present.

SPECIFICATIONS

Power supply required115V, 60 HZ.
 Liquid Temp. RangeMax. 77°F (25°C)
 Operation PositionVertical
 Individual Branch Circuit Required15 Amp
 Operating Depth Beginning min.....1/2"
 (water level) Ending max.....3/16"
 Discharge1" NPT (25 mm)
NOTICE: For models FP0S1100X and FP0S1250X, maintain minimum water level of 4" (127mm) to prevent overheating.

DESCRIPTION

The submersible pump is designed for water removal in home applications. Pump can be used for sump service and dewatering. Unit is constructed of hi-impact corrosion resistant plastic. Screened inlet prevents large solids from entering pump.

NOTICE: This unit is not designed for applications involving salt water or brine! Use with salt water or brine will void warranty.

PERFORMANCE

GPH (LPH) AT TOTAL FEET (M)						
3'(0.91)	5'(1.52)	10'(3.05)	15'(4.57)	16'(4.80)	20'(6.09)	22'(6.70)
FP0S1100X						
975 gal (3 690 L)	915 gal (3 460 L)	700 gal (2 650 L)	265 gal (1 000 L)	0 gal (0 L)	-	-
GPH (LPH) AT TOTAL FEET (M)						
3'(0.91)	5'(1.52)	10'(3.05)	15'(4.57)	18'(5.49)	20'(6.09)	22'(6.70)
FP0S1250X						
1140 gal (4 315 L)	1050 gal (3 975 L)	840 gal (3 180 L)	480 gal (1 817 L)	0 gal (0 L)	-	-
FP0S1300X						
1320 gal (4 996 L)	1250 gal (4 731 L)	930 gal (3 520 L)	660 gal (2 498 L)	630 gal (2 385 L)	0 gal (0 L)	-
FP0S1600X						
1600 gal (6 056 L)	1524 gal (5 768 L)	1260 gal (4 769 L)	924 gal (3 497 L)	648 gal (2 452 L)	372 gal (1 408 L)	0 gal (0 L)

INSTALLATION

⚠ WARNING Do not use power cord to lift motor. Always use handle.

1. Pump should be located and should rest on level solid foundation. Do not suspend pump by means of discharge pipe or power cord. Keep pump inlet screen clear.
2. Thread outlet pipe into pump body carefully to avoid stripping or crossing threads.
 - a. To install with garden hose, install adapter provided with pump. **NOTICE:** To keep friction as low as possible, hose must be 3/4" or larger. Keep hose as short as possible.
 - b. To install with rigid pipe, use plastic pipe. Wrap thread with Teflon tape or use Plasto Joint Stik*. Screw pipe into pump hand tight +1 - 1-1/2 turns.
3. Power Supply: Pump is designed for 115V., 60 HZ. operation and requires an individual branch circuit of 15 amperes or more capacity. It is supplied with a 3-wire cord set with grounding-type plug for use in a 3-wire, grounded outlet. 3 wire extension cord, of at least 14 AWG (2mm²) size is suggested, with larger sizes for runs over 25 ft (7M). For safety, pump should always be electrically grounded to a suitable electrical ground such as a grounded water pipe or a properly grounded metallic raceway, or ground wire system. Do not cut off the round grounding prong.

⚠ WARNING The pump motor is equipped with automatic resetting thermal protector and may restart unexpectedly. Protector tripping is indication of motor overloading as a result of operating pump at low heads (low discharge restriction), excessively high or low voltage, inadequate wiring, incorrect motor connections, or a defective motor or pump.

OPERATION

⚠ WARNING Risk of burns or death from electric shock. Do not handle pump or pump motor with wet hands or when standing on wet or damp surface, or in water. Disconnect power from pump before handling, servicing, or attempting to repair pump.

1. The pump must be standing in at least 1/2" (12.7mm) of water before starting it (one inch (25.4 mm) is better). The shaft seal is water lubricated and may be damaged if pump runs dry.
2. After starting, the pump will lower the water level to 3/16" (4.75 mm) before losing suction. It will not pick up water less than 3/16" deep when running and will not operate successfully if started in only 3/16" of water.
3. Do not leave pump unattended! If the pump has been operating satisfactorily and the discharge stream suddenly stops coming out of the hose, stop the pump immediately; do not allow it to run dry. A mop or squeegee will be needed to remove remaining water.
4. The motor is equipped with an automatically resetting thermal overload protector. If the motor gets too hot, the overload protector will stop the motor before it is damaged. When the motor has cooled sufficiently, the overload protector will reset itself and the motor will restart.

NOTICE: If the overload protector stops the pump repeatedly, disconnect the power from the pump and check it to find the problem. Low voltage, long extension cords, clogged impeller, too much back pressure in the discharge hose (as when pumping through 50' (15 M) of coiled hose), or running pump with no load, can all cause excessive cycling and overheating.

- For Model FPOS1300X, the water being pumped cools the motor, allowing the pump to run continuously at any depth of water above 3/16". However, if the motor overload stops the pump, allow it to cool for one hour before restarting. Motor will not restart before the overload has cooled.
- For Models FPOS1100X and FPOS1250X, do not try to run the pump continuously when the water level is below 4" (102mm) or about 1/3 of the way up the motor casing, as it will overheat. If the motor overheats and the overload stops the pump, allow it to cool

for one hour before restarting. Motor will not restart before the overload has cooled.

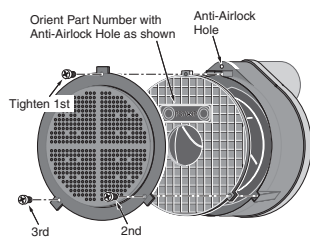
AIRLOCKS

When a pump airlocks, it runs but does not move any water. An airlock will cause the pump to overheat and fail. This pump has an anti-airlock hole in the bottom of the pump body. If you suspect an airlock, unplug the pump, clean out the anti-airlock hole with a paper clip or piece of wire, and restart the pump.

IMPORTANT: This hole allows the pump to start priming within 15 seconds in as little as 1/2" of water. NEVER restart pump in less than 1/2" of water. Leakage from the anti-airlock hole is normal.

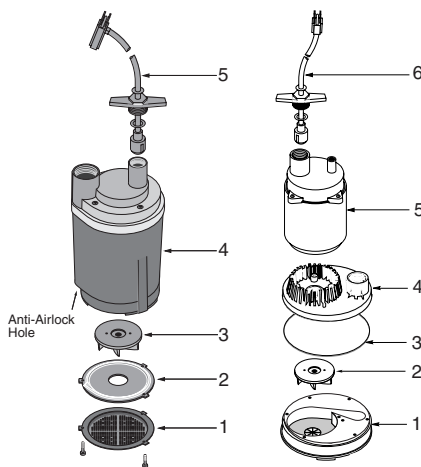
* Lake Chemical Co., Chicago, Illinois

Models FPOS1300X-08 FPOS1600X-08



Install shield and tighten screws in sequence as shown.

Models FPOS1100X FPOS1250X-08



Key	Part Description	Qty.	Part No.
1	Screen	1	PS8-5P
2	Shield	1	PS70-3P
3	Impeller - S1300X	1	PS5-24P
3	Impeller - S1600X	1	PS5-25P
4	Motor	1	**
5	Power Cord	1	PS117-54-TSU
•	Garden Hose Adapter	1	FT0013-43

** If motor fails, replace entire pump.

• Not Illustrated.

Key	Part Description	Qty.	Part No.
1	Lower Base Plate	1	FP0005797A
2	Impeller (FPOS1100X)	1	PS5-24PA
2	Impeller (FPOS1250X)	1	PS5-24P
3	Volute Gasket	1	U9-406
4	Upper Base Plate	1	FP0005796A
5	Motor	1	**
6	Power Cord	1	PS117-54-TSU
•	Garden Hose Adapter	1	FT0013-43

** If motor fails, replace entire pump.

• Not Illustrated.

TROUBLESHOOTING

SYMPTOM	POSSIBLE CAUSE(S)	CORRECTIVE ACTION
Pump won't start or run	Blown fuse Low line voltage Defective motor Impeller	If blown, replace with fuse of proper size If voltage under recommended minimum, check size of wiring from main switch on property. If OK, contact power company. Replace pump If impeller won't turn, for models FPOS1100X and FPOS1250X, remove housing; for model FPOS1300X, remove screen. Locate source of binding
Pump operates but delivers little or no water	Low line voltage Something caught in impeller Small diameter garden hose or long discharge line Check valve installed without vent hole Air lock Coils or bends in hose	Use only 14 gauge or larger extension cords. Use short extension cords when necessary Clean out impeller Use larger diameter garden hose or 1" flexible pipe. Eliminate any excess hose. Short hoses work best Drill a 1/16" - 1/8" (1.6 - 3.2 mm) dia. hole between pump discharge & check valve Turn off pump for a few seconds, clean out anti-airlock hole and restart pump Straighten hose

For parts or assistance, call Flotec Customer Service at 1-800-365-6832