



Leo in the world

Asia

America

Europe

Oceania



**LEO GROUP PUMP(ZHEJIANG) CO.,LTD.**

Add: No.1,3rd Street, East Industry Center,317500  
Wenling City, Zhejiang P.R.China

Tel: 0086-576-89986360

Fax: 0086-576-89989898

Email:export@leogroup.cn

www.leogroup.cn



## Garden Submersible Pressure Pump

**LKS-902SE LKS-902SE-1 LKS-1102SE LKS-1102SE-1**



Please read the instruction carefully before use.

Observe the safety code in your country during operating.

It might cause personal injury and damage of machine, if you go against the safety code, and then all authorization will be invalid.

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.

Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

### Attention!

If the appliance or the supply cord is damaged, it must be repaired by manufacturer, its service agent or qualified person.



Never use the power cable to lift up the electric pump or hang the electric pump by any other operation with the power cable.



### Meaning of crossed –out wheeled dustbin:

Do not dispose of electrical appliances as unsorted municipal waste, use separate collection facilities.

Contact your local government for information regarding the collection systems available.

If electrical appliances are disposed of in landfills or dumps, hazardous substances can leak into the groundwater and get into the food chain, damaging your health and well-being.

When replacing old appliances with new ones, the retailer is legally obligated to take back your old appliance for disposals at least free of charge.

### WARNING:

- 1). The electric pump is allowed to use in the basement and underpass, only if all safety protections conform to the regulations;
- 2). You can move the electric pump with the carrying handle, and you can also tie the rope on the carrying handle to move it when using in narrow space like well.
- 3). Never allowed to run under no-load condition.
- 4). If the electric pump is damaged or changed maliciously, producers can't ensure that the electric pump could work normally.
- 5). There is an exhaust on the contact surface of the pump body and head cover. It's a normal phenomenon for an electric pump that a little water leaks from the hole during normal working.
- 6). The water quality might change due to the non-toxic oil in the sealing device. We can't avoid the leakage of the electric pump no matter how pure the water is.

## TROUBLESHOOTING

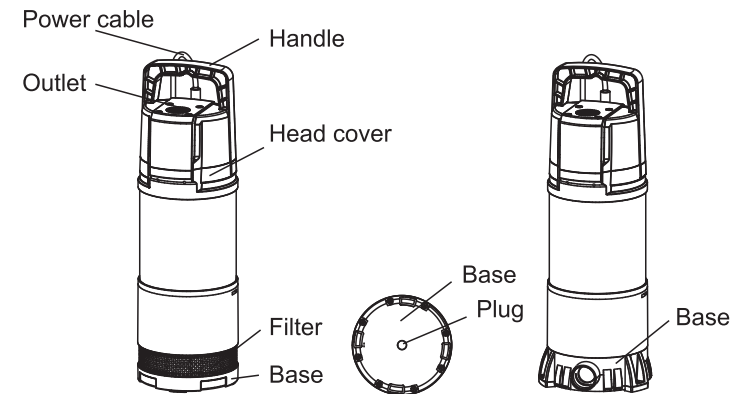
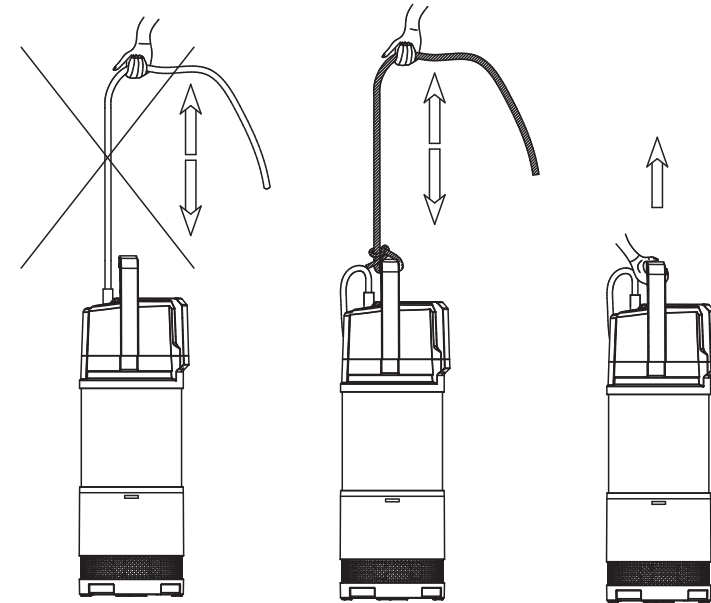
FAULT	POSSIBLE CAUSE	REMEDY
The pump works but it does not deliver water.	A. The suction grid is clogged. B. The impeller is clogged or damaged. C. The required head is higher than the pump characteristic.	A. Clean the filter. B. Remove the block or change the impeller.
The water supply shut off, the pump won't start when re-open the water supply.	A. Check if there's block of non-return valve.	Re-assemble the non-return valve to ensure no block.
The flow rate is inadequate.	A. The suction grid is clogged. B. The impeller or the discharging tube is clogged.	Clean the block.
The pump stops with the float switch on after working for a short time.	A. The pump stops automatically for the thermal protector turned on.	Check whether is the temperature or the density of the liquid too high to make the electromotor overheating.
The pump don't work and no noise.	A. Check whether the non-return valve is installed correctly, and if there's block. B. Check Whether power plug connection is good.	A. Ensure the non-return valve is installed correctly and no block.

If you have any problem, please contact the manufacturer.

**Attention!** All operation must be done according to the safe operation regulations.



Don't take any action on the electric pump unless the power is cut off. The pump must be grounding to avoid electric leakage, and provided with a leakage protector of which the protection current is less than 30mA.



## USE

The series of submersible pumps have been designed to pump impure water which contains no fiber. It's usually used at home by manual or automatic way, and it's also used to pump the liquid in the sewer, rainwater, the leakage from groove and so on. As its compact shape and well operability, the electric pump could be used for gardening or in other normal condition as a portable suction pump.

Never use this kind of electric pump in a swimming pool, a pond or a tank where is quite crowded or somewhere exists dangerous hydrocarbon (petrol, diesel, fuel oil, solvent and so on) which might cause accident.

## TECHNICAL PARAMETERS

Supply Power	Please refer to the nameplate
Input Power	Please refer to the nameplate
Max. Flow	Please refer to the nameplate
Max .Head	Please refer to the nameplate
Degree Of Motor Protection	Class F
Protection Class	IPX8
Ambient Temperature	-5°C to 40°C
Fluid Temperature	0°C to 35°C
MAX. Immersion Depth	12m
MAX. Dia. Of Particle	1mm
Outlet	G1

## SWITCH FUNCTION

There's pressure sensor and flow sensor with pump, can automatically control the pump start and stop.

- 1). Dry-running protection: Pump started after power on with 3s , if there is no water, the pump priming trials of 30s with pauses of 5S, if there is still no water, the pump priming trials of 20s with pauses of 5S, after 3 cycles, the pump stops. After 1h the pump trying to prime again, if also this trial fails, there will be 5h pause, afterwards, if lack of water persists, the pump will try to prime every 24h until it has picked up a prime.
- 2). Normal operation: If during the pump operation , the water supply shut off, the pump will stop after 10s; When re-open the water supply valve, the pump starts when pressure drops below set value.

Function of drawing off the water for LKS-902SE,LKS-1102SE(LKS-902SE-1,LKS-1102SE-1 don't have this function)

Take the plug down from the base to draw off the water.

## ATTENTION:

- 1). The electric pump shouldn't be turned on more than twenty times per minute in order to avoid the electric pump to be started repeatedly, which might reduce the service life of the electric pump.
- 2). The risk of frost: if the electric pump need to be placed under 0°C, it's necessary to ensure that there is no liquid left in the pump in order to avoid the part of the electric pump to be damaged.

- 3). The electric pump need to be washed by clean water after used under a condition of sediment, in order to avoid blocking or performance reduction caused by the sediment.

## INSTALLATION

- 1). If the electric pump works under a condition of a lot of impurity, it's suggested to place the electric pump at a certain height so as not to make the inlet of the pump blocked.
- 2). It's the best working state when the electric pump is completely under water.
- 3). It's necessary to ensure that the electric pump works at the place where the float switch can move freely.

## THE CONNECTION OF ELECTRIC PARTS

- 1). The connection and protection of electric parts must be done according to the native regulations, and there is working voltage signed on the nameplate, make sure that the power supply is conformed with the electromotor.
- 2). When the electric pump works at a place far from power source, the electric pump should work with bigger power cable, or the electric pump couldn't work in the normal state due to the voltage drop.
- 3). If the electric pump is used outdoors, the extension cable of the pump must be changed into the rubber cable for outdoors.
- 4). The thermal protector is provided for the electric pump. If the electric pump shuts down automatically due to the overload, the pump will start automatically after the electromotor cools down as long as the power source hasn't been cut off.
- 5). Never hurt or clip the power cable. Once the power cable is damaged or broken by accident, the electric pump should not be used again, and you should look for the person who is professional or authorized to repair or change it.  
Attention: the immersion depth of the electric pump is limited by the length of the power cable.
- 6). Never use the electric pump when people are in the water.
- 7). Make sure that the power plugs and socket are dry.

## MAINTENANCE AND CLEANING

The electric pump doesn't need any professional maintenance when working normally, but the removal must be done by the professional. Anyway, all repair and maintenance must be done after the power has been cut off.

Make sure that the inlet at the bottom of the pump has been well installed when turning on the pump in order to avoid the mechanical accident.

Repair and replacement

If the production breaks down and needs repair, please send it to the authorized repair center. The manufacturer won't be responsible for any results caused by the repair without authorization.