

Product information presented here reflects conditions at time of publication. Consult factory regarding discrepancies or inconsistencies.



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ZOELLER FLOATLESS WATER LEVEL SWITCH

10-4659, 10-4660 - 115 V / UP TO 1/2 HP - 15' (5 M) CORD

DESIGNED FOR EFFLUENT, SEWAGE AND DEWATERING APPLICATIONS

READ ALL INSTRUCTIONS BEFORE INSTALLING - ALL APPLICATIONS



▲ WARNING Make sure the pump electrical supply circuit is equipped with fuses or circuit breakers of proper capacity. A separate branch circuit is recommended, sized according to the National Electrical Code for the current shown on the pump name plate.



▲ WARNING FOR YOUR PROTECTION, ALWAYS DISCONNECT PUMP FROM ITS POWER SOURCE BEFORE HANDLING. Single phase pumps are supplied with a 3-prong grounded plug to help protect you against the possibility of electrical shock.



▲ WARNING DO NOT, UNDER ANY CIRCUMSTANCES, REMOVE THE GROUND PIN. The 3-prong plug must be inserted into a mating 3-prong grounded receptacle. If the installation does not have such a receptacle, it must be changed to the proper type, wired and grounded in accordance with the National Electrical Code and all applicable local codes and ordinances.



▲ CAUTION Zoeller 10-4659 and 10-4660 water level Floatless switches are designed for use with the appropriate voltage and horsepower, nonautomatic, single phase Zoeller pumps.



▲ CAUTION Maximum temperature must not exceed 122 °F (50 °C). NOTE: cULus code approval. NOTE: Consult factory for controlling units over 1/2 HP with variable level float switch.

FIGURE 1

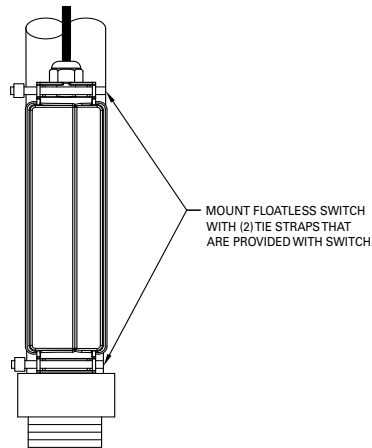
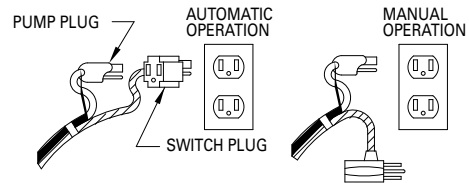


FIGURE 2



| PART NO. | SUMP | SEWAGE | MODEL NO. | VOLTAGE | PHASE |
|----------|------|--------|-----------|---------|-------|
| 10-4659 | X | | | | |
| 10-4660 | | X | | | |
| 53-0084 | X | | LN53 | 115V | 1 |
| 98-0069 | X | | LN98 | 115V | 1 |
| 267-0121 | | X | LN267 | 115V | 1 |

SK3180

INSTALLATION INSTRUCTIONS

1. Loop provided tie strap through switch as shown in Figure 1 and 3, leaving approximately 3" of slack for ease of installation.
2. Lower switch into pit.
3. Place the bottom of the switch against the discharge pipe. **OFF** level should be approximately 4" above the inlet of the pump. The **ON** level must be below the check valve, the inlet and lid of the pit.
4. Be certain the outward face of the switch has 2" minimum clearance from any foreign objects, including the wall of the pit, the discharge pipe, and the pump.
5. Securely fasten top and bottom of the switch to the discharge pipe by tightening the two tie straps.
6. Insert the piggyback plug from the switch into a standard grounded outlet of proper voltage. For installation using watertight junction box, reference Figure 4.
7. Securely tape or clamp both switch and pump cord to the discharge pipe, clear of switch range (refer to step 4).
8. Plug sump pump into the switch's piggyback plug. See Figure 2.
9. Clean basin free of debris after installation.
10. Check and test your installation. Fill basin with water and allow pump to cycle to ensure proper range and operation.

Note: The Floatless control switch needs a minimum of 2" clearance between all foreign objects in the basin / pit. The switch has a maximum run time of 2 minutes. Ensure your basin is appropriate before installing the Floatless switch.

OPERATION:

1. Allow the sump to fill until the water level reaches the **ON** point.
2. Sump pump will turn on within 3 seconds of the water level reaching the **ON** point.
3. The pump will remain on until the water level drops below the **OFF** point. The pump may remain on up to 1 second after passing the **OFF** point.
4. This will set the standard run time for the switch.
5. If the pump runs for longer than the standard run time, the standard run time will be incremented by 5 seconds on future cycles. This will repeat until the run time is long enough for the water to reach the off level or the run time is increased to two minutes.
6. If water is over the "ON" level the pump will run continuously until the water is below the "ON" level, at which point the switch will revert to standard operation.

FLOATLESS SWITCH MAINTENANCE

Warning: Unplug Floatless switch and pump from all electrical power BEFORE doing any service or maintenance.

- Inspect area around pump switch, wipe free of buildup and clear all foreign objects.
- Plug pump switch and pump back into receptacle after inspection. Check for proper operation.
- We recommend that you do this maintenance at least once a year. However, harsh environmental conditions may dictate the frequency of your actual maintenance schedule.

- Floatless pump switch contains NO serviceable parts. Do not disassemble pump switch. Doing so can result in death or electrical shock and voided warranty.
- If pump switch stops working, refer to troubleshooting instructions provided.
- If part is under warranty, contact factory or sale location.
- If part is not under warranty, the lawful disposal of unit is necessary.

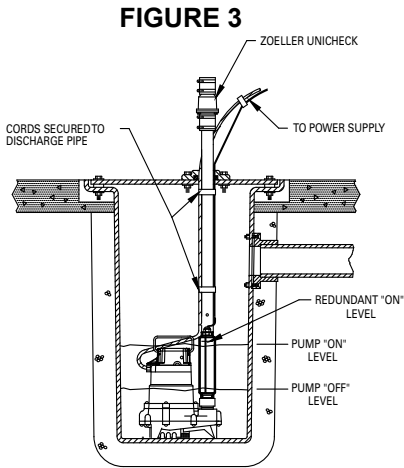
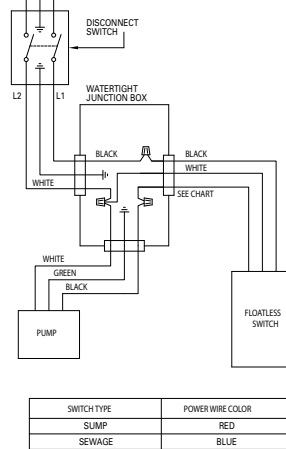


FIGURE 3

SK3180

FIGURE 4
For direct wire installations only



TROUBLESHOOTING FOR FLOATLESS WATER LEVEL SWITCH

| SYMPTOM | POSSIBLE ROOT CAUSE | POTENTIAL CORRECTIVE ACTION |
|---|---|---|
| A. Pump will not start or run. | Switch cord improperly plugged into receptacle | Properly insert plug into receptacle |
| | Pump cord improperly plugged into sump pump switch plug | Properly insert pump cord into sump pump switch piggyback plug |
| | Blown panel fuse or breaker | Replace with proper sized fuse or reset breaker |
| | GFCI receptacle tripped | Reset GFCI receptacle |
| | Low voltage | If voltage under 108 volts, contact qualified electrician |
| | Main power outage | The sump pump switch will not work without power |
| | Contamination built-up on sump pump switch exterior | See " Switch Maintenance" for proper cleaning instructions |
| | Improper mounting/ loose | See "Installation Instructions" |
| B. Pump starts and stops too often. | Damaged or defective sump pump switch | Contact Zoeller Product Support |
| | Significant in-flow of water | This is normal. Check pump specification to confirm adequate pumping capacity |
| | Sump pump switch mounted facing inlet pipe | Reinstall sump switch facing away from inlet pipe |
| | Defective check valve | Replace the check valve |
| | Excessive temperature | Let system cool down for 5 minutes |
| C. Pump will not shut off when water is not present at the lower limit. | Improper mounting/ loose | See "Installation Instructions" |
| | Damaged or defective sump pump switch | Contact Zoeller Product Support |
| | Contamination built-up on sump pump switch exterior | See "Switch Maintenance" for proper cleaning instructions |
| | Foreign conductive object near sensor | Remove foreign object |
| | Damaged or defective sump pump switch | Contact Zoeller Product Support |



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