The LV42 Series Large Float Level Switch is a mercury-free self counterweighted floating switch designed for the automation of pumps, specifically filling and draining of tanks, wells, and reservoirs. The LV42 Series body is free of any irregularities making it ideal for use in sewage water applications. The polypropylene body consists of a double airtight chamber with high-pressure melted polypropylene re-injection sealing to ensure a perfect seal against infiltration. Cable hangers are available to suit a variety of mounting applications. Featuring CE approval, high temperature durability, oil resistance, and drinking water suitability.

INSTALLATION
The basic operating principle of the LV42 Series is very simple. As fluid level rises the micro-switch located inside the LV42 Series is counter-balanced in such a way that it generates a flipping action in the position of the switch. When fluid level decreases the float starts in an inverted state then positions correctly. This change in position generates a signal that can be used to actuate a motor or signal an indicator alarm. To ensure the proper function of the LV42 Series, it is necessary to secure the electric cable inside the tank or well as illustrated in Figure 1. The length of the cable measured between the fixture point and the body of the LV42 Series should be a minimum of 6 in (15 cm). It is essential to ensure that there are no obstructions in the LV42 Series operational area before operation. During operation, adjustments to the LV42 Series cable must not be made under any circumstances, due to the fact that any unwanted cable connections made while the LV42 Series is immersed in water can lead to electric shock.

There is a hanging bracket accessory option available (LV49-9000), for wire arrangement. The bracket allows the cable of the LV42 Series to be held in place at the top of the tank.

Note: The LV42 Series is self counterweighted and can be used without the need of additional counterweight, clamp, or bracket. The previous are means to simplify installation and aid in organizing the use of multiple float switches.

ELECTRICAL CONNECTIONS
SPDT, single pole double throw allows for operation of both increasing and decreasing level, depending on the connections made between the terminals of the micro-switch and the cable. SPDT, a three-conductor cable (without ground option), has one lead that is common, one that is normally open (NO), and the other that is normally closed (NC), for the proper connections of these conductors please refer to the wiring diagrams in Figures 2 and 3.

SPECIFICATIONS
Service: Compatible liquids, slurries.
Wetted Materials:
   Housing: Polypropylene;
   Cable: PVC.
Operating Temperature: -4 to 122°F (-20 to 50°C).
Pressure Limits: 29 psi (2 bar).
Enclosure Rating: IP68.
Switch Type: SPDT.
Electrical Rating: 10 (3) A @ 250 VAC.
Mounting Orientation: Vertical.
Agency Approval: CE.
WIRING DIAGRAMS

3 x 1 CABLE

Figure 2-Double Function (Emptying (NO))

Figure 3-Double Function (Filling (NC))

For complete product documentation, video training, and technical support, go to www.flowline.com.
For phone support, call 562-598-3015 from 8am to 5pm PST, Mon - Fri.
(Please make sure you have the Part and Serial number available.)

Warranty
Flowline warrants to the original purchaser of its products that such products will be free from defects in material and workmanship under normal use and service in accordance with instructions furnished by Flowline for a period, which is equal to the shorter of one year from the date of purchase of such products or two years from the date of manufacture of such products. Flowline's obligation under this warranty is solely and exclusively limited to the repair or replacement, at Flowline's option, of the products or components, which Flowline's examination determines to its satisfaction to be defective in material or workmanship within the warranty period. Flowline must be notified pursuant to the instructions below of any claim under this warranty within thirty (30) days of any claimed lack of conformity of the product. Any product repaired or replaced under this warranty will be warranted only for the remainder of the original warranty period.

Returns
Products cannot be returned to Flowline without Flowline's prior authorization. To return a product that is thought to be defective, go to www.flowline.com, and submit a customer return (MRA) request form and follow the instructions therein. All warranty and non-warranty product returns to Flowline must be shipped prepaid and insured. Flowline will not be responsible for any products lost or damaged in shipment.

Limitations
This warranty does not apply to products which: 1) are beyond the warranty period or are products for which the original purchaser does not follow the warranty procedures outlined above; 2) have been subjected to electrical, mechanical or chemical damage due to improper, accidental or negligent use; 3) have been modified or altered; 4) anyone other than service personnel authorized by Flowline have attempted to repair; 5) have been involved in accidents or natural disasters; or 6) are damaged during return shipment to Flowline. Flowline reserves the right to unilaterally waive this warranty and dispose of any product returned to Flowline where: 1) there is evidence of a potentially hazardous material present with the product; or 2) the product has remained unclaimed at Flowline for more than 30 days after Flowline has dutifully requested disposition. This warranty contains the sole express warranty made by Flowline in connection with its products. ALL IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION, THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE EXPRESSLY DISCLAIMED. The remedies of repair or replacement as stated above are the exclusive remedies for the breach of this warranty. IN NO EVENT SHALL FLOWLINE BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND INCLUDING PERSONAL OR REAL PROPERTY OR FOR INJURY TO ANY PERSON. THIS WARRANTY CONSTITUTES THE FINAL, COMPLETE AND EXCLUSIVE STATEMENT OF WARRANTY TERMS AND NO PERSON IS AUTHORIZED TO MAKE ANY OTHER WARRANTIES OR REPRESENTATIONS ON BEHALF OF FLOWLINE.

This warranty will be interpreted pursuant to the laws of the State of California. If any portion of this warranty is held to be invalid or unenforceable for any reason, such finding will not invalidate any other provision of this warranty.