



LEVEL

TEMPERATURE CONDUCTIVITY

## **INSTRUCTION MANUAL**

# **CABLE FLOAT** LEVEL SWITCH











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### Warning

Read all warning sand instructions before performing installation or maintenance. Safety glasses and gloves should be wornat all times when working with or examining water gauge glass and connections.

### Danger

I m proper installation or maintenance of gauge glass and connections can cause immediateor delayed breakage resulting in bodily injury and or property damage.

### **Installation**

Only properly trained personnel should install and maintain water gauge and connections. Remember to wear safety gloves and glasses during installation. Before installing, make sure all parts are free of chips and debris.

The Cable Float Switch is packed in separate pieces for protection duringshipment. It is easy to assemble by following the guide lines in this manual. Uponun packing, in spectall components for damage. Check the NK Instrument name plate in the Gauge Housingi Chamber to verify that the specification softhe Reflex Level Gauge are correct for the operating conditions. Contact NK Instruments if you have any questions or encounter any problems.

The number of different types of Welded Pad Liquid Level Gauge installations is in finite to a dequately detail in an installation manual. It is there for the user's responsibility to as sure that the knowledge able installation personnel plan and carry out installation in the safe manner. The following procedures are some of the installation guide lines that should be employed

#### 1. CAUTION

- · Keep proper distance between installation position and in let of water pump to prevent
- There should be a proper distance between installation position and in let of water to prevent direct water impact. If it can't be avoided, please install pipe shield or plate
- · The float action length must be shorter than the distance between wall and cable, if not, it will cause wrong action.
- The lowest float level must be higher than the lowest water level of pump.

#### 2. MOUNTING PROCEDURE

The Cable Float Level Switch may be mounted by using cableties included with the unit, or by the optional cable weight which must be purchased separately.

Note: There commended method of carrying the Cable Float Level Switch is by the cable. The unique moving ballast in the unit may cause it to unexpectedly flip out of the individual's hands.

CONTACT DETAILS

B-501/504, 5th floor, Raunak Arcade, Near THC Hospital, Gokhale Road, Naupada, Thane(w) 400602. Maharashtra INDIA • Telefax Nos.: 91-22-25301330 / 31 / 32 • Gtalk: nkinstruments2006 Skype: nitinkelkarskype







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#### 3. CABLE TIEMETHOD (STANDARD)

A pipe or other structure must be available in the tank to which the plastic cable tie may be affixed. Position the adjustable strain relief on the cable to allow one half of the distance of the differential band between theend of this strain relief and the end of the strain relief on the float. Secure the cable to the structure with one cable tie at the mid point of the strain relief. Secure the second cable tie to the structure at the top end of the adjustable strain relief, leaving approximately two inches (51mm) of free strain relief to wards the float. Proceed to wire the unit.

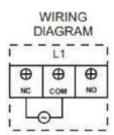
**NOTE:** Be sure that nothing in the tank prevents the full extension of the cable in either direction.

#### 4. CABLE WEIGHT METHOD (OPTIONAL)

When an anchoring structure in the tank is not available, the cable weight method should be used. Position the adjustable strain relief on the cable to allow one half the distances of the desired differential band between the mid-point of the adjustable strain relief on the float. Remove one of the screws in the clamp at the top of the weight. Loosen the second screw. Position the weight at the midpoint of the adjustable strain relief. Tighten both screws to secure the weight to the cable. Be sure the cable cannot be pulled through the adjustable strain relief. Lower the unit in the tank until the cable weight is positioned at the midpoint of the desired differential band. Secure the cable at the top of the tank. DO NOT secure the cable to any sharp object which could cut the cable. Proceed to wire the unit.

#### 5. WIRING PROCEDURE

The Cable Float Level Switch may be wired for fill or empty pump control functions or as a high or low level alarm. Wire according to the terminal connection drawing below.



#### NOTE:

- 1.The unused wire (third wire) must be electrically insulated.
- 2.Do not fasten electrical cable on to rough or sharpsur faces.
- 3.Use only one quipment with thermal over load protection.
- 4. Consult local codes for proper application.

FOR EMPTY PUMP CONTROL OR HIGH ALARM FUNCTIONS

Connect the NC and COM wires.

FOR FILL PUMP CONTROL OR LOW ALARM FUNCTIONS

Connect the NO and COM wires.

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### **Product Warranty**

NK Instruments, warrant sits products as designed and manufactured by NK Instruments to be free of defects in material and workmanship for a period of one year after the date of installation or eighteenmonths after the date of manufacture, which ever Is earliest. NK Instruments will, at its option, replace or repair any products which fail during the warranty period due to defective material or workmanship.

Prior to submitting any claim for warranty service, the owner must submit proof of purchase to NK Instruments and obtain written authorization to return the product. There after, the product shall be returned to NK Instruments with freight prepaid. This warranty shall not apply if the product has been disassembled, tampered with, repaired or altered out side of the NK Instruments factory, or if it has been subjected to misuse, neglector accident.

NK Instruments responsibility here underis limited to repairing or replacing the product at its expense. NK Instruments shall not beliable for loss, damage, or expenses directly or in directly related to the installation or use of its products, or from any other cause or for Con sequential damages. It is expressly under stood that NK Instruments is not responsible for damage or in jury caused too their products, building, property or persons, by reason of the installation or use of its products.

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This document and the warranty contained here in may not be modified and no other warranty, expressed or implied, shall be made by or on be half of NK Instruments unless modified or madein writing and signed by the Proprietor of NK Instruments.

### Warning

Read all warnings and instructions before performing installation or maintenance. Safety glasses and gloves should be wornat all times when working with or examining water gauge glass and connections

### Danger

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### **USE And Care**

DO NOT's

DO NOT use glass if it contains any scratches, chips, or any other visible signs of damage.

DO NOT reuse any glass packing.

DO NOT subject gauge glass to bending or torsional stresses.

DO NOT over tighten glass packing nuts.

DO NOT allow glass to touch any metal parts.

DO NOT exceed the recommended pressure of the gauge or gauge glass.

DO NOT clean the gauge or gauge glass while pressurized or in operation.

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### DO's

DO verify proper gauge has been supplied.

DO examine gauge and packing carefully for damage before installation.

DO install protective guard sandutilize automatic ball checks where necessary to help prevent in jury in case of glass breakage.

DO inspect the gauge daily, keep maintenance records, and conduct routine replacements.

DO protect glass from sudden changes in temperature suchas drafts, waters pray, etc.

### Maintenance

Examine the gauge regularly for any signs of clouding, scratching, erosion, or corrosion. This will help establish the routine inspection and routine replacement schedules.

### Inspection

Examine the sur face of the gauge for scratches, corrosion, chips, cracks, surface flaws, or nicks.

### Storing

Keep the gauge in original packaging until ready to install.