MAHALAXMI INSTRUMENTS

Solid Solutions to Liquid Level Problems !

SINCE 1992

Calibration For Capacitance Level Transmitter

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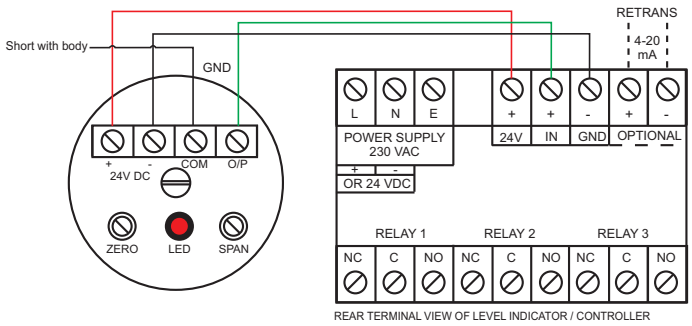
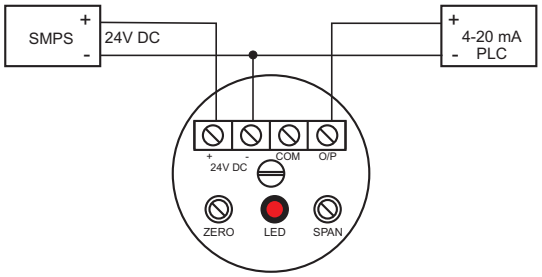
CONNECTION WIRING DIAGRAM WITH DIGITAL INDICATOR / CONTROLLERS



REAR TERMINAL VIEW OF LEVEL INDICATOR / CONTROLLER

3 WIRE CONNECTION TO PLC



1. As it is difficult to calibrate capacitance level transmitter (probe) of 2 metre & above in a tank by emptying & filling the tank, our 1st step is to arrange for a dummy tank of the same height.

2. A dummy tank means to arrange for a pipe (PP/PVC/SS/MS) of 40 -50mm I.D. with bottom end closed and length little more -40 to 50mm- (so that probe do not touch the bottom) than the height of the tank.

3. Now it is easy to fill & empty the pipe which will 5 Ltrs. of diesel or petrol or Water.

4. Our transmitter fitted in the probe assembly has 4 terminals 1) +24VDC 2) -24VDC 3) Common & 4) Output.

5. Connect 24 VDC supply to + & - of transmitter. The common of the transmitter is already con - nected with a wire to the body.. Now connect the output of the terminal to the positive of multi meter & negative of multi meter to terminal 2, which is –ve 24VDC.

6. Keep multimeter in DC mA mode.

7. Start the power supply & observe the LED in transmitter glow. Thi confirms the Power supply 24VDC is on.

8. The transmitter has 2 trim pots (zero & span) by which it can be calibrated for minimum and maximum values of 4mA and 20 mA

9. Observe reading in multi meter before calibrating . Keep the probe assembly inside the pipe just touching the diesel/ Petrol/ Water at lowest level (5 to 10nm) required to set 4mA by rotating the zero pot in the transmitter either in clockwise or anticlockwise direction depending whether the reading has to be increased or decreased.

10. Once the 4mA is set, we are ready to set 20mA by filling diesel/ Petrol/ Water in the pipe. The level in the pipe has to be filled till maximum level where we require 20mA. Mark this level so that every time the level in the pipe is same for 20mA calibration

11. Now observe the reading in multi meter & accordingly rotate the span trim pot to set 20mA.

12. This procedure is repeated (minimum 3 times & max 5 times) till 4mA & 20mA is set & we don't require to adjust the trim pots anymore.

13. This completes our calibration process.

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