Tank Level Display (TLD) Description :



The TLD01 unit is housed in a rugged wall mount casing, the unit is very easy to install and calibrate. Once installed /calibrated the unit will continuously display the overhead/ underground tank Level on a two digit numeric display. The reading show tank level from 00 to 99, This Percentage Indicating when tank is empty or when it is completely full.

Operation:

The TLD unit uses a very sensitive pressure sensor to perform the operation. The pressure Sensor is digital and can with stand pressure level of over 30 story building. After Installation the unit it is required to set two pressure levels in its memory. One is the pressure level when the overhead tank is close to empty (liquid should be flowing in the pipe, completely empty tank will not give the correct result). The other is Tank closed to full. Once these two values are set in the unit it will start Displaying the Tank Level based on the pressure it is getting.

Installation:

To install you need a ½ Inch Pipe socket point coming from the over Head Tank. If no free point is available then a T connector can be installed on any connection that is being used so that the meter can share the same outlet. The unit can be installed on any floor. The unit has a standard ½ inch – to 4mm Pneumatic pipe Male Connector which will be screwed in ½ inch socket; plug in the 4mm Pneumatic pipe of Meter. After Installation the unit has to be configured so that it will display the correct level. The configuration involves the setting of the Tank Empty level and Tank Full level..

Settings:

1) Tank Low Level Setting:
For this you have to wait till the tank is nearly empty . Using a Match Stick the level can be saved by pressing the Concealed Switch marked as “Low” on the unit. The unit will give a Beep sound and save the Low value in its memory.

2) Tank Full Level Setting:
For this you have to wait when your overhead tank is full. Using a Match Stick the Full level can be saved by pressing the Concealed Switch marked as “Full” on the unit. The unit will give a Beep sound and save the High value in it memory.

It is important to understand that the unit will only give correct readings if the low and high settings are correct. If you find the read is incorrect then you have to do the calibration process again

The TLD is based on the pressure sensor so it is good to have some understanding of the sensor. The sensor gives a digital output based on the liquid pressure it receives through the pipe. The value can range from 0000 to maximum 9999. With empty tank the value can be 100 to 300 .The sensor value can be seen by pressing the ‘P’ button on the unit (single beep generated) since the display is two digit to display a value of say 1234 the display will first show 12 then after a delay it will show 34. It is also possible to view the Tank Low and Tank Full values saved in the memory. once you press the ‘P’ button the unit will display the Sensor Value ,if you press ‘P’ within 15 Sec the unit will show the Tank Empty (Two beeps sound) value and a second press will show Tank High Value (Three beeps)

Following example will make it more Clear.
Say:
Tank value 1234
Tank low Saved 780
Tank High Saved 3456

Press P (1 Beep) the display will show 12 … 34
Press P (within 15Sec) (2 Beeps) 07 … 80
Press P (" ") (3 Beeps) 34 … 56

Low Level Warning

The Unit start giving a warning beep Sound after every min if the tank level become less than 10.The beep will stop if either the Tank level become more then 15 or the 'P' button is pressed

Liquid Level Calculation:

The TLD unit uses the following method to perform the Level calculation.
P1 = Pressure value, PL=Tank Low value saved in memory PH=Tank Full pressure Saved in memory
PD=P1-PL
PR=PH-PL
Display Value =PD x 99 /PR