**ITEM NO. : 24** 

ITEM : BOARD & FLOAT TYPE LEVEL INDICATOR CUM TRANSMITTER WITH EXTERNALLY ADJUSTABLE SWITCHES FLP / WP REFER OUR G. A. DRG. NO. RBFLITA-2-1012-AM-LS-FLP / WP

## PRINCIPLE OF OPERATION:

When the level builts up inside the tank the float moves up and counter weight (Level Indicator) moves down indicating the level inside the tank. The level Indicator which carries a magnet operates the magnetic switch which is kept inside the flameproof or weatherproof enclosure. When the level variation takes place, the indicator moves up or down. The indicator carries a magnet and when it comes in the proximity of the magnetic switch, the magnetic switch operates and a change over contact takes place. This is applicable to the unit which is having an external mounted magnetic switch.

## TRANSMITTER 4-20 mA OUTPUT:

The above movement of the indicator which is due to variation in liquid level inside the tank rotates the pulley and the counter weight, moves up or down to indicate the actual level inside the tank. The rotating pulley rotates a precision wire wound potentiometer and the resistance value varies due to this movement. The change in resistance value which is directly related to the measurement of level in mm, transmitted to the control room or local control panel as 4-20 mA output.

Here we are provided with local indication by the scale and also the remote transmission of the level variation as 4-20 mA to the control panel.

## **MATERIAL SPECIFICATIONS:**

Type Board & float type Level Indicator cum transmitter with switches

SS 316 / PP / PVC / PTFE etc, depending on service. 2. Float SS 316 / PP / PTFE etc., depending on service. 3. Indicator wire rope

4. Float dimensions 450 mm centre to centre distance

GI / SS epoxy painted (depending on service.) 5. Pipe

These are cast aluminium housings having Teflon pulleys into Inspection elbows 6.

which two bearings are housed to have a free rotation.

Galvanized alloysteel 7. Bolts & Nuts used for connecting the

board to 1" NB pipe

8. Indicator assembly (Counter weight) CI electroplated & stove enameled. The background

being black. The indicator painted red.

These are powder coated and screen printed to have better Boards ie. scales

readability and uniform thickness of lines and numerals.

Added to this they have very good aesthetic look also.

These boards are fabricated in single metre basis so that handling is easy at site. Added to it shipment does not get damaged during

transit. Assembly is quick.

10. Scale Graduation Scales are having the graduations @ every 10mm

equispaced with black marking & red numerals.

11. Connection to vessel 1 " BSP (F) screwed or flanged : To Mention

To mention Op.pressurekg/Cm2g/temp.° C /Sp.Gr. To mention

14. Tank height / Measuring range To Mention

#### DETAILS OF EXTERNALLY ADJUSTABLE W/P (OR) FLP SWITCHES:

1. No. of Alarms 1/2/3/4 Nos. (for HiHi, Hi, Lo & LoLo). These alarms

are adjustable throughout the range externally.

2. Type of switch Sealed magnetic switch

3. Contact Form & Rating 1 No. SPDT 230 VAC 5 A (SURGE) 60 W / VA for

each level sensing.

Switch differential Fixed 20 mm approx.

Cast aluminium W / P or FLP / 3/4" ET (F) Enclosure / cable entry

#### **DETAILS OF TRANSMITTER ELECTRONIC UNIT:**

Float operated Sensor type 1.

24 VDC or 230 / 110 VAC 50 Hz 1 Ø 2. Input supply

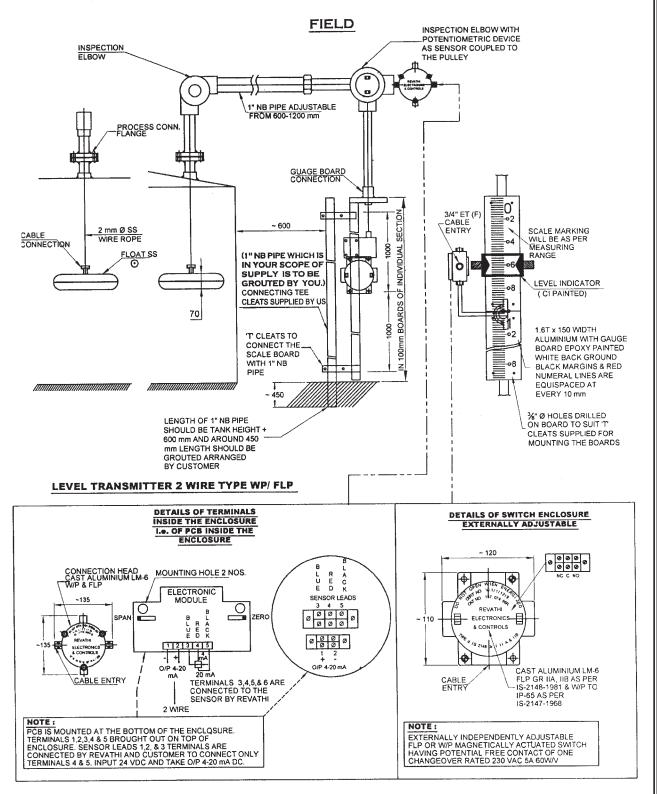
4 -20 mA 2/3 wire type 3. Output supply ± 0.5% of the total range 4. Accuracy

Will be 2 1/2 " Dial analogue meter 5. Indicator

Will be cast Aluminium WP (or) FLP / 3/4" ET (F) Enclosure / cable entry

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