NRG GLOBAL

TECHNICAL DATA

Overall Length : 300mm to 5000mm

Measuring Error : ± 0.25 % of Span

Output Temperature

 $\pm 0.007\% / ^{\circ}C$ Co-efficient

Resolution : 5mm / 10mm

: - 40°C to 60°C **Ambient Temperature**

: - 40 °C to 120 °C Liquid Temp. Range

Liquid Min. Density : 0.8 gm/cc

Max. Pressure : 10 Kg/cm²

Protection Category : Weather Proof

> lp66 to IS:2147 (or)

Flame proof

Gr. IIA & IIB to IS:2148

Terminals : Max. 1.5mm²Flexible

: PG11 for Weather Proof Cable Entry

> : 3/4" ET for Flame Proof (Glands not Supplied)

: 1) 2 Wire, 4.... 20 mA **Current Output**

2) 3 Wire, 0-10VDC

Process Connection

: 1) Threaded

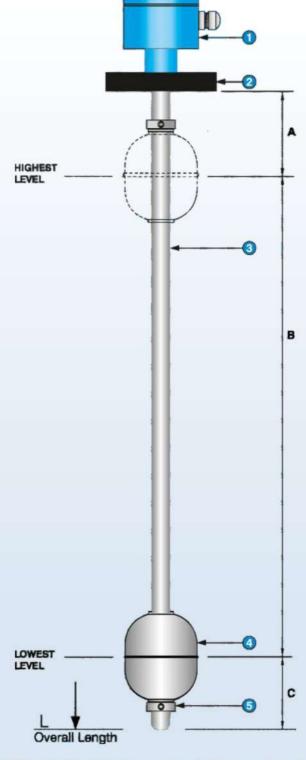
: 2) Flanged

3) Tri Clamp

4) Others

Excitation Voltage : 10 - 36 V DC

Loop Resistance : Max. 1200 OHMs



NOTE: Analog Output

: 4 mA @ Lowest Level : 20 mA @ Highest Level

A - Top Dead Band

B - Measuring Range

C - Bottom Dead Band

1 - Electronic Housing

2 - Mounting Flange

3 - Stem

4 - Float

5 - Float Retainer

NRG GLOBAL

Float Operated Liquid Level Transmitters

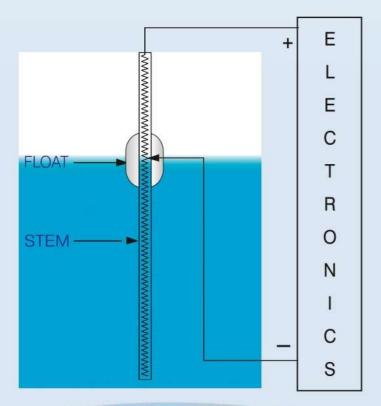
- # Length up to 5 metres
- # Alloys or Engineering Plastic Wetted parts
- # Analog Output
- # Field Calibration

CONSTRUCTION

Float Operated Liquid Level Transmitter consists of non magnetic sealed stem containing series of reed switches and resistors, float carrying magnet, mounting adaptor (or flange) and enclosure containing electronics.

OPERATING PRINCIPLE

Stem carrying series of reed switches and resistors forms a "Potentiometer "circuit which extends to the full indicating length of the transmitter. The reed switches are tapped at regular intervals and this tap off point is connected to electronics in enclosure. As the float travels through the indicating distance, the magnet located within it tap off the reed switches there by varying the resistance fed to the electronics(as shown in figure below), which in turn converts the change in resistance to industry standard analog output.



TYPICAL APPLICATIONS

Consider our transmitters for all your continuous liquid level monitoring needs like Water, diesel, lube oils and fuels, chemical and petrochemical liquids. Here are just few areas where transmitters can be used.

- # Utilities
- # Beverage Industry
- # Medical
- # Pharmaceuticals
- # Food Processing
- # Breweries, etc.

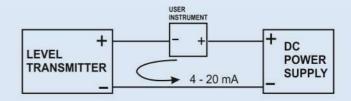
LIMITATIONS

Float Operated Liquid Level Transmitters doesnot work satisfactorily in highly contaminated liquids and liquids with high viscosity.

For Sensors with more than 3 metres, it is recommended to provide anchoring at the bottom. Also splash gaurd is recommended where high turbulance of liquid exists. Consult us for further details.

TYPICAL WIRING

A: 2 wire 4 - 20mA



B: 3 wire 0 - 10V DC

