

# CAPACITANCE CONTINUOUS LEVEL INDICATOR LEV METER ILC.. Series



## SALIENT FEATURES

- The ILC series is designed to give Dependability, Durability and Strength to withstand the rigours of continuous use in difficult environment.
- Level measurement is displayed on a built-in 2½ Digit Digital Panel Meter having 0.5 inch high digits for better visibility.
- Standard output signal of 0-5 V DC and 0/4-20 mA DC proportional to 0-100% level change available for remote indicators and recorders.
- 'In Situ' range selection and calibration possible from evaluation unit. Probe head accessibility not required.
- Measuring system has no Moving Parts so does not suffer any Mechanical Wear and Tear and hence is Maintenance Free.
- Economical to Install, since ordinary 3-core cable is used for interconnection.
- Flame-proof probe suitable for hazardous areas as per IS-2148 for group IIA and IIB is available.

## APPLICATION

Suitable for continuous level measurement in conductive or non-conductive liquids, powdered or grained materials of homogeneous composition having stable

## USAGE

Lev meter ILC... series are successfully used in processing plants for Oil, Food, Water treatment, Diesel, Chemicals, etc. for continuous level indication.



## PRINCIPLE OF OPERATION

The measuring electrode and container wall (or grounding probe) form a capacitor with the material as the dielectric. A change in material level in the container causes a change in capacitance. The Electronic Insert converts this change to a proportional DC which is transmitted via the interconnecting cable to the evaluation unit wherein the signal after processing is displayed digitally.

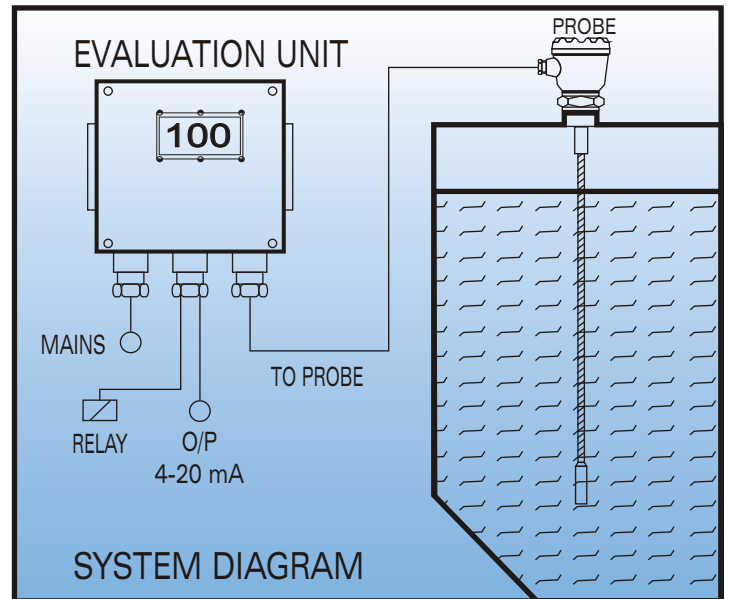
### TECHNICAL DATA : (ILC-122)

#### EVALUATION UNIT

<b>Housing</b>	: Cast aluminium, Weather-proof Stoving enamel painted, suitable for back panel/wall mounting.
<b>Cable Entries</b>	: 3 Nos. of 1/2" BSP
<b>Mains</b>	: 110 V or 230 V AC (-10 to +10%) 50 Hz (as specified in order).
<b>Power Consumption</b>	: 5 VA approx.
<b>Initial Capacitance</b>	: 30 pF to 280 pF in two
<b>Adjustment</b>	selectable ranges.
<b>Indication</b>	: 2 1/2 digit, 0.5 inch Red LED display; 2 inch display is also available in separate housing
<b>Operating Temperature</b>	: -20°C to +60°C
<b>Utilizable Capacitance Variation</b>	: 10 pF to 4500 pF in three selectable ranges.
<b>Accuracy</b>	: ± 2% of the F.S.D.
<b>Outputs</b>	: 0-100% digital display 0/4-20 mA into R <sub>L</sub> max. 400 Ohms and 0-5 V DC for R <sub>L</sub> > 25 K for remote indicators and recorders.
<b>Dimensions</b>	: 185 mm x 185 mm x 85 mm
<b>Weight</b>	: 2.3 Kg (approx.)

#### ELECTRONIC INSERT (LDC 112)

<b>Housing</b>	: Plastic with electronics potted in epoxy resin.
<b>Supply</b>	: 20 V DC max. 10 mA. derived from Evaluation Unit.
<b>Measuring Frequency</b>	: 33 KHz (approx.)
<b>Operating Temperature</b>	: -20°C to + 60°C.



### OTHER MODEL : ILC-822

Same as our ILC-122 Model with addition of Two-Point Switching.

**Relay Output** : One change-over contact per set point rated at 6A, 230 V 50Hz. For non-inductive load.

**Fail-Safe Mode** : High or Low field selectable.

#### PROBE

**Housing** : Cast Aluminium, SS, FRP-coated, HDPE.

**Mounting** : Flanged or Screwed as per requirement.

**Length** : 150mm to 3000 mm in Rod, Greater than 3000 mm in Rope.

**Insulation** : Part or full PVC, PTFE, Ceramic (Part only) depending on service temperature of 80 °C, 200 °C or 400 °C respectively.

Reference probe is required, when the tank is non-metallic.

Grounding tube is required, when the liquid is turbulent or tank shape is curved.

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