

INTELEVTESTER MP-SLC... series INTELLIGENT CAPACITANCE LEVEL LIMIT SWITCH



SALIENT FEATURES

- **INTELLIGENT AND SELF CHECKING**

A microprocessor checks the complete system and itself before validating the signal.

A flashing green LED serves as a heartbeat to indicate a healthy system.

In the event of occurrence of a system fault such as incorrect wiring, open or short sensor connection, failure of probe insulation, improper grounding or electronic insert failure, the heartbeat stops, fault LED glows, display indicates "E---" and the relay contacts revert to their fail-safe condition.

- **HIGHLY RELIABLE**

Two-wire Pulse Frequency Modulation (PFM) is used for interference-free signal transmission between probe and evaluation unit.

Complete system is checked before each measurement.

Auto-compensation for temperature drift in the vicinity of pre-amplifier.

- **HIGH DEGREE OF PROGRAMMABILITY**

Features such as operating mode (independent/pump control), delayed switching for probe covered or uncovered condition, fail-safe high or low, switching sensitivity, switching delay in seconds and set point calibration are programmable via key pad. The programmed parameters are stored in a non-volatile memory indefinitely requiring no battery backup.

- **EASY CALIBRATION AND USER FRIENDLY**

All parameters are programmed via four keys and an interactive menu driven display leaving no chance for incorrect entry. If recalibration is required, the old data is displayed in the program mode which can be edited as desired.

- **AUTOMATIC SWITCH-POINT OPTIMIZATION**

APPLICATION

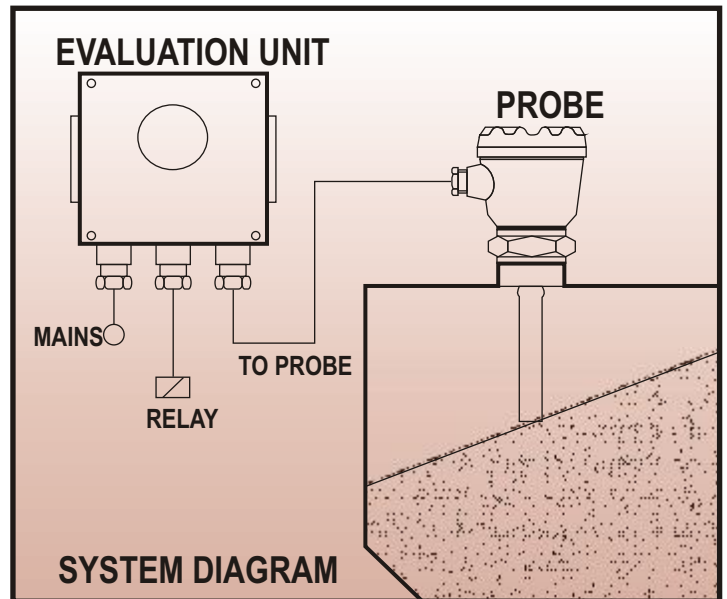
Level control of solids, liquids and slurries of Conducting/ Non-conducting material requiring extreme safety and high degree of reliability in industries such as cement, food, chemical and petrochemical, effluent treatment, cosmetics, power, plastic, material handling etc.



TECHNICAL DATA

EVALUATION UNIT

Housing	: Cast aluminium, Weather-proof, Stoving enamel painted, suitable for back panel/wall mounting.
Cable entries	: 3 Nos. of ½" BSP/NPT/NG20
Ambient Temperature	: -20 °C to +60 °C.
Mains	: 110/230 V AC (-10 to + 10%) 50 Hz (as specified in order).
Power Consumption	: 5 VA approx.
Indication (Switching)	: Red LED for each level alarm, red LED for fault alarm, flashing green LED as heartbeat for healthy condition.
Indication (calibration)	: LCD, one digit for mode field and two for data.
Response Time	: 0.2 sec. Typical.
Switching Delay	: Programmable upto 99 sec. For probe covered/uncovered condition for each set point.
Connection to Electronic Insert	: 2-core ordinary cable, having max. resistance of 25 ohms per core.
Initial capacitance	: 20 to 1200 pF.
Switching Hysterisis (Single-point operation)	: Approx. 0.5 pF at initial capacitance of 30 pF.
Switching Hysterisis (Two-point pump control)	: Programmable over entire setting range.
Build-up compensation	: Approx. 0-99 steps
Relay Output (Standard)	: One set of potential free change over contacts per channel rated at 6A 230V AC, 50Hz for non-inductive load.
Fail-Safe Mode	: High or Low field programmable for both channels.
Weight	: 2.5 Kg approx.
Overall Dimensions	: 180 x 180 x 85 mm.



ELECTRONIC INSERT

Housing	: Plastic with electronics potted in epoxy resin.
Operating Temperature	: -20 °C to +80 °C
Supply	: 12 V at 17 mA max. derived from evaluation unit.
PROBE	
Housing	: Cast Al. , SS, FRP-coated, HDPE
Mounting	: Flanged or Screwed as per requirement.
Length	: 150mm to 3000mm in Rod, Greater than 3000mm 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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