

MAJOR INSTRUMENTS

Conductivity Level Limit Switch



SALIENT FEATURES -No moving parts, so free from maintenance.

No special cable required for signal transmission, so Economical to Install.

Long cable connections permissible between probe and evaluation unit.

AC on probes for prevention of electrolytic deterioration of electrodes.

Low voltage on probe for operational safety.

Variety of control functions and installation systems available.

- Two -point action for automatic pump control.
- Two-point independent switching.
- Three-point switching, two points with pump control logic and one independent point with or without settable delay for probe covered or uncovered condition.
- Four-point switching with two pump control logic.
- Variety of probes available for various process conditions

APPLICATIONS

Switching off pumps when tank is full, to avoid overflow. For maintaining a constant level to avoid material wastage. For switching off pumps when running dry and indicating an empty tank to avoid wear and tear and production stoppage.

Levtester SLW... series of level switches are successfully used in processing plants for conductive liquids of conductivity not less than 25 μ Siemens in Food, Power, Chemicals, Sugar, Detergents, Steel, Minerals, Textiles, etc.

PRINCIPLE OF OPERATION:

A low AC voltage is applied between the probe electrode and the tank wall (or reference electrode in case of insulated tank). When the liquid comes in contact with the electrode tip, a conductive path is established between the sense electrode and the tank wall/reference electrode. This current is sensed, amplified and made to operate a relay whose contacts in turn can be used for annunciation/control.

TECHNICAL DATA:

Housing	Cast aluminum, Weatherproof Stoving enamel painted suitable for back
	panel/wall mounting.
Cable Entries	3 Nos. of 1/2 " BSP
Mains Supply	110 or 230 V AC (15 to + 10%) 50 Hz (as specified in order)
Relay Output	One set of potential free change over contacts rated at 6A 230 V AC,
	50Hz for non-inductive load
Power Consumption	5 VA approx
Fail-Safe Mode	High or Low field selectable.
Response Time	0.5 second
Switching Delay	0.5 to 20 seconds for probe covered and uncovered condition (on
	request)
Maximum Sensitivity	25μ Siemens
Operating mode	A) Single point switching. (B) Two-point switching with pump control
	logic
Indication	Red LED for Alarm, Green LED for Normal.
Operating Temp	20°C to + 60°C. Weight: 2 Kg. PROBE
Mounting	1½" BSP screwed (Flanged mounting on request)
Voltage	12 V AC (across probe & tank wall/ grounding electrode)