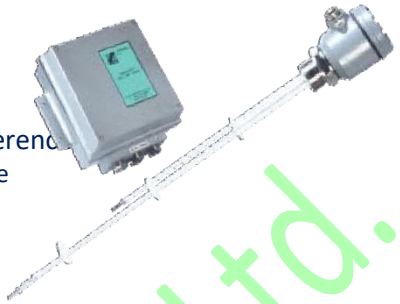
VIPL-CLS Conductivity Level Limit Switches

are based on the principle of measuring level through the electrical properties of the process material. As the name suggests, the switch senses the level of water or other liquids that have free ions, and are successfully used in processing plants for conductive liquids of conductivity not less than 25 Siemens.



Principle

A low AC voltage is applied between the probe electrode and the tank wall (or reference electrode in case of insulated tanks). 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.

Approvals CE Marking, RoHS Compliance

Features

- No moving parts, hence free from maintenance
- No special cable required for signal transmission
- Economical to install
- Allows long connectivity between probe and evaluation unit
- AC on probe prevents electrodes' electrolytic deterioration
- Low voltage on probe for operational safety
- Variety of probes for unique process conditions
- Variety of control functions, installation systems

Applications

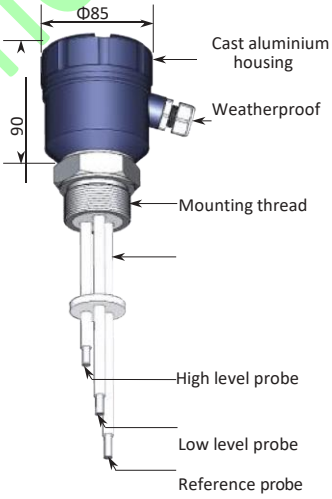
- Switch pumps off when tank is full, to avoid overflow
- Maintain a constant level to avoid material wastage
- Switch off pumps when running dry
- Identify empty tank to avoid wear tear, production stoppage

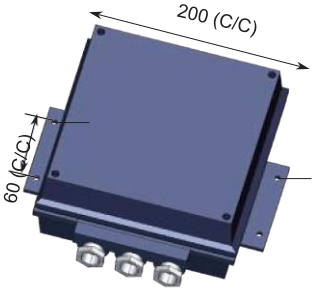
Why V.I.P.L Instruments

- VIPL Instruments ~ Synonymous with Level Measurement.
- Pioneers in this field with over 32 years of expertise.
- Understanding your problems, always ready with solutions.
- Masters in customization.
- Offering accelerated delivery, saving your inventory costs.

Parts

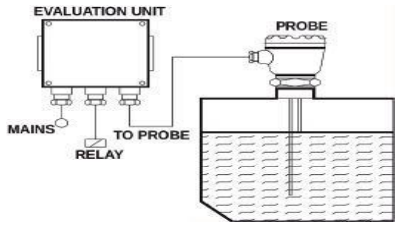
The parts of VIPL-CLS are explained in the Figure 1. All dimensions are in millimeters. Figure 2 describes the system diagram of VIPL-CLS.





EVALUATION UNIT

(Overal size : 215x195x85



Technical Specifications

Evaluation Unit

Housing: Cast aluminium, stoving enamel
Painted suitable for back panel / wall
Mounting in safe area
Protection: IP 65
Cable Entries: 3 * 1/2" NPT, DC gland brass nickel plated
Outputs in Models:
SLW 121: 1 * SPDT Relay rated at 6A at 230V AC for non-Inductive loads
SLW 821: 2 * SPDT Relay rated at 6A at 230V AC for non-Inductive loads
SLW 921: 3 * SPDT Relay rated at 6A at 230V AC for non-Inductive loads
Mains: 24 V DC
Fail safe Mode: Field selectable (High and Low)
Dimensions: 215 mm * 195 mm * 85 mm
Temperature: Operating: 20°C to 60°C
Power Consumption: 0.5 W (maximum)
Probe Type: PTFE Insulated Rod/ Rope probe SS 316
Housing: Pressure die cast aluminium weatherproof stoving Enamel painted
Cable Entries: 1 * 1/2" NPT, DC gland brass nickel plated
Probe Orientation: Top mounting
Probe Temperature: Standard: Up to 80°C
Insulation: Part PTFE (Tip up to 50mm)
Mounting Connection: Screwed 1 1/2" BSP, Slip on Flange 2" ASA, 10mm thick (with nut, bolt and Gasket)
Probe Length: As per requirement

Model Selection

VIPL-CLS SERIES

MODEL
121 SINGLE POINT SWITCH (1 RELAY)
221 SINGLE POINT SWITCH (2RELAYS IN PARALLEL)
321 SINGLE POINT SWITCH (WITH TIME DELAY)
421 PUMP CONTROL LOGIC (WITH ONE RELAY)

521 PUMP CONTROL LOGIC (WITH 2RELAYS IN PARALLEL)
621 (TWO POINT SWITCH (1RELAY FOR EACH SET POINT)
6P1 ONE PUMP CONTROL+SINGLE POINT SWITCH
6P2 TWO PUMP CONTROL (1RELAY FOR EACH POINT)
721 THREE POINT LEVEL SWITCH
7P1 ONE PUMP CONTROL+2POINT SWITCH
7P2 SINGLE POINT+TWO PUMP CONTROL
7P3 3PUMP CONTROL

ENCLOSURE
W WEATHER PROOF SQUARE
PF FLAMEPROOF PROBE HEADS ONLY

SERVICE TEMPERATURE
S STANDARD UPTO 80°C
H2 HIGH TEMPERATURE 150 250°C

POWER SUPPLY
230 V AC
110 V AC
24 V DC

PROBE TYPE
RD ROD PROBE
RP ROPE PROBE

PROBE MOUNTING ARRANGEMENT
T THREADED
F FLANGED
O OTHER

INSULATED MATERIAL
PV PVC
PT PTFE (TOTAL TEFLON)

WETTED PARTS
MS (PLATED) S4 SS 304
S6 SS 316SL SL SS 316L
HC HASTLE ALLOY C PC PTFE COATED

VIPL	121	W	S	A	RD	T	PV	MS