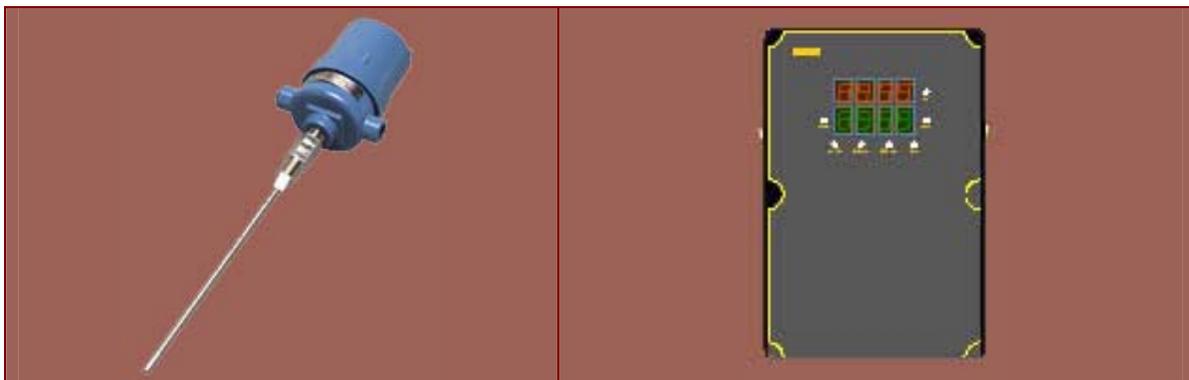


# CAPACITANCE TYPE LEVEL MONITORING INSTRUMENTS

The principle of detection involved is the Capacitance phenomenon, which is developed between the probe and the reference. The amount of capacitance developed in a vessel becomes dependent upon the amount of the probe, which is covered with media. As the media rises and falls in the tank, the amount of capacitance developed between the probe and the ground reference also rises and falls. This change in capacitance is detected by employing Radio Frequency (RF) and processed for level detection and monitoring.

## Features:

- ❖ No moving part.
- ❖ Easy installation and maintenance.
- ❖ Weatherproof/Flameproof enclosure as per requirement.
- ❖ Wide range of probes to suit application.
- ❖ Fail safe mode with On-Off delay available for alarm set point.
- ❖ Adjustable time delay.
- ❖ Process connection threaded or flanged.
- ❖ Remote indication and control possible.



## General Specification:

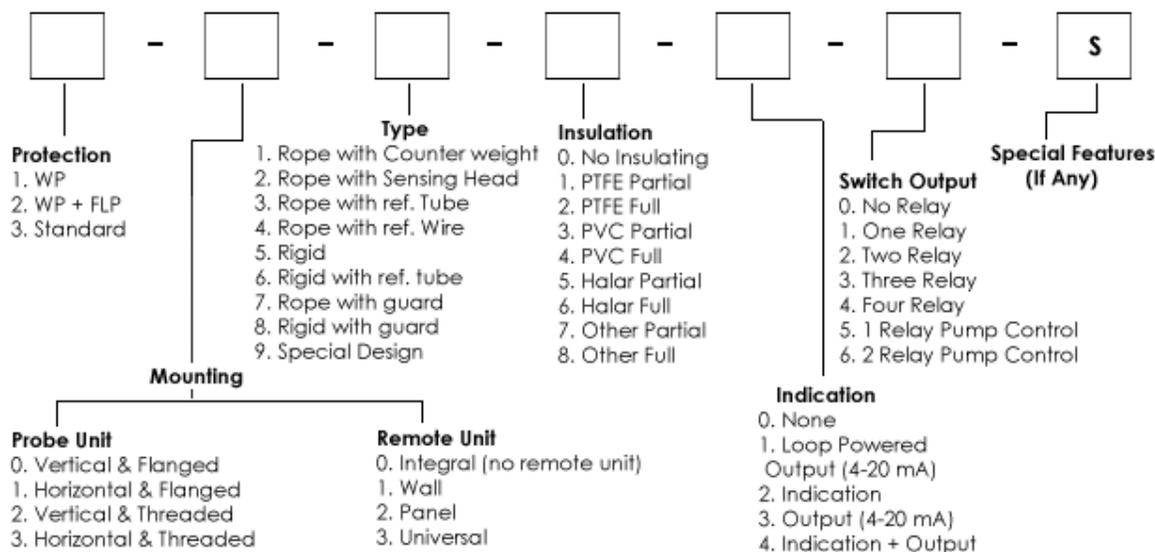
Material of Construction – Probe	: SS 316 / SS 304 etc.
Material of Construction - Housing	: Cast Aluminum / DMC / Fiber Glass / M.S. Powder Coated
Protection	: Weatherproof / Flameproof.
Cable entry	: ¾" ET, ½" NPT, etc.
Probe Type	: Rigid or flexible
Probe Insulation	: PTFE / PVC insulation full or partial
Supply	: 230V AC or 110V AC or 24V DC.
Time Delay (for alarm)	: 0 to 10 sec.
Process Connection	: Flanged / Threaded.
Mounting	: Horizontal / Vertical.
Indication	: LED for alarm and seven segment LED or LCD for Level Display.
Output	: Alarm – DPDT Relay for each alarm point. Transmitter – 4-20mA.

## Ranges Offered:

- 1) **Single Point Capacitance type Level Switch** – This is to be used where only a particular fixed level is to be monitored. Output is relay contact, which can be used to operate, pump, agitator etc. This is suitable for most solid/liquid and can be mounted horizontally / vertically as per requirement. For vertically mounted unit the alarm point can be adjusted anywhere throughout the probe length, if required.
- 2) **Multipoint Capacitance type Level Switch** – This switch is suitable when you need to control the level at various points (max up to 4 nos.) and can be used for most liquids. The output for each alarm points can be independent or latched. Latched version is suitable for starting & stopping of pumps at two different levels. The alarm point can be adjusted anywhere throughout the probe length.
- 3) **Capacitance type Level Transmitter** – The output of transmitter, which may be 4-20mA signal or 0-5VDC, can be used for remote indication or control application. This is suitable for most liquids and provides cost effective solution whenever you need to monitor the level continuously.
- 4) **Loop Powered Capacitance type Level Transmitter** – Whenever you want to reduce the cabling cost, loop powered transmitter is the best answer. The current signal (4 to 20mA) and the supply line (24 VDC) reside in the same two wire that is connected to transmitter.
- 5) **Capacitance type Level Indicator** – This can be used to judge the level position at any instance. This is suitable for most liquids and is available with 4-20mA outputs and alarms Set Point(s). The display can be seven segments LED or LCD.

All the above are available either in integral and Non-Integral version. Besides for hazardous area application CMRI / ERTL approved Flameproof enclosure is also available.

## MODEL NUMBER OF CAPACITANCE LEVEL INSTRUMENTS



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