

**CAPACITANCE LEVEL TRANSMITTER - CLTX****Description**

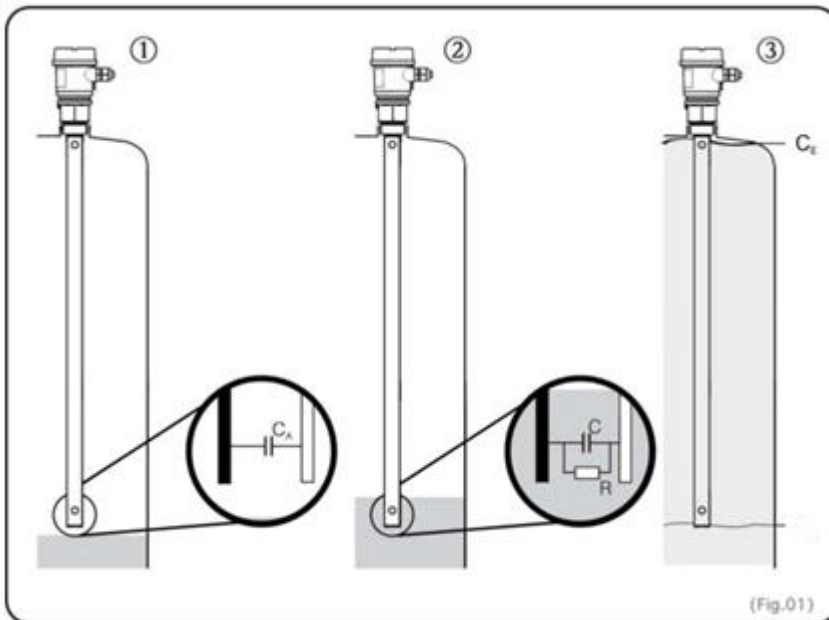
Capacitance Level Transmitters are used in liquids for continuous level measurement and is preconfigured from factory 0 %...100 % to probe length ordered.

The probe, medium and ground rod (counter electrode) form an electric capacitor. If the probe is in the air, a certain low initial capacitance is measured. When the tank is filled, the capacitance of the capacitor increases the more the probe is covered. As of a conductivity of 30 ps/cm, the measurement does not depend on the dc-value of the liquid. The electronic insert of the probe converts the capacitance measured to a current, in proportion to the level, in the range of 4-20 mA, thus making it possible to interpret the level.

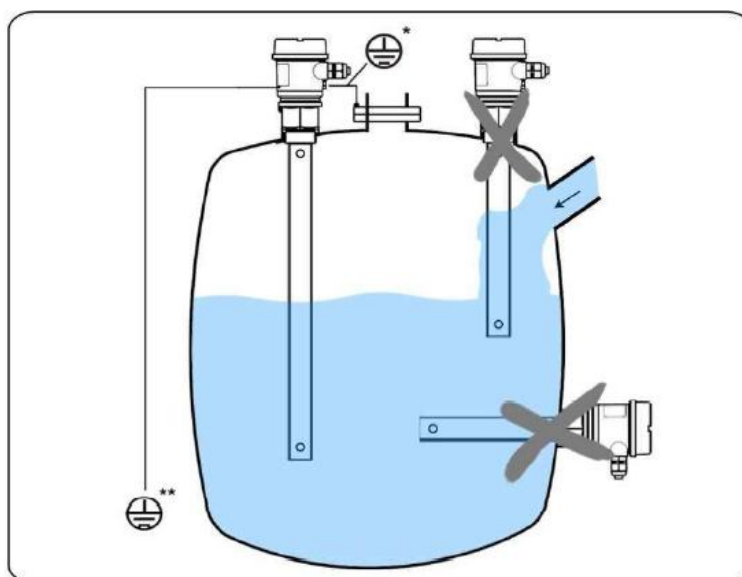
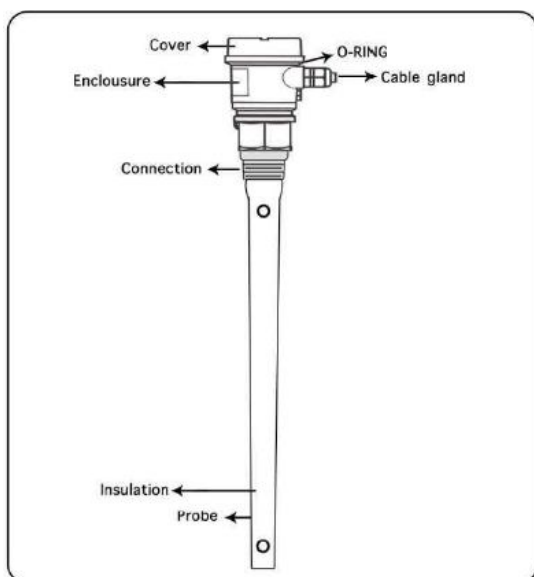
All input and output channels are safely galvanically isolated from one another.

CA : Initial Capacitance (Probe Exposed)

CE : Final Capacitance (Probe Covered) (Refer Figure)

**Features**

- Easy calibration (less liquid variation reqd.)
- Stable output
- Screw, flanged & adjustable flanged mountings
- Electronic inserts in full range
- Ingress protection : IP 68/65
- Flexible rope type available
- High temperature endurable probes
- Ex-proof (Ex d T6 IP-66 IIC) - Flameproof as per IS/IEC 60079-1:2007



## Specification

Probe Insertion Length	Rigid Rod : 50mm to 3,000mm Flexible Rope : 100mm to 20,000mm
Process Connection	NPT / BSP 1", 1¼", 1½", 2" etc Flanged : ANSI/JIS/DIN/ASA/custom
Wetted Parts	SS304, SS316, SS316L, PTFE, part ceramic
Electronics	Integral Electronics Two-wire Loop Powered
Supply	14-60 VDC
Output	4-20mA Loop powered, Error output 21mA
Loop Resistance	maximum 475 Ohm @ 24DC supply
Process Temp	-20°C ... 100°C (-4°F ... 212 °F) PTFE Insulation: -30 °C ... 250 °C (-22 °F ... 482 °F) Ceramic Insulation: -30 °C ... 600 °C (-22°F ... 1,112 °F) (extensions & heat sinks required)
Process Pressure	absolute / max. 15 bar (for ceramic insulation : 1 atm)

## Application

Lubrication oil, Hydraulic Oil , Diesel , Water ,Chemicals, Acids storage tank level measurement