

CAPACITANCE LEVEL TRANSMITTERS

DESCRIPTION

Flowtel FLCLT-10 are capacitance type level transmitters. The probe is based on properties of capacitor. Vessel wall & probe forms two electrodes. If vessel is of non conductive material, the probe will be double rod type. The distance between electrode & surface area of electrodes remain unchanged. The variable is the depth of the material being measured which represents the dielectric constant between two electrodes. Air & vacuum have relative dielectric constant as 1 & that of liquids, it is greater than 1. The capacitance of the capacitor therefore depends on how much material lies between the probe & vessel wall i.e. whether the probe is covered with or free from material. The capacitor changes with change in level of the material & provides corresponding 4-20 mA DC continuous output.

TECHNICAL SPECIFICATIONS

- Probe Length : As per requirement (max 3 mtr.)
- Type of Output : 4 to 20 mA DC, 2 wire
- Accuracy : $\pm 2\%$ F.S.
- Linearity : $\pm 2\%$
- Process Temperature : 250°C max
- Probe MOC : 30 kg/cm^2 max
- Power Supply : SS 316 with Teflon coating
- Power Consumption : 24 V DC, External
- Response Time : $< 6\text{ VA}$
- Temperature Coefficient : $< 1000\text{ mSec}$
- Process Connections : Flame-proof, [P-65, IIA, IIB, CMRI Certified]
- Mounting : Flanged/ Threaded
- Operating Conditions : Top of the tank
- Optional : Temperature $0\text{ to }55^{\circ}\text{C}$ / Humidity 5 to 95% non condensing
- Local Display : 8 x 1 LCD

