

CAPACITANCE LEVEL TRANSMITTER



ABOUT CPT

Capacitance level transmitter is a most reliable instrument where continuous level monitoring is required.

APPLICATION

- Chemical, petrochemical industry, refineries
- Pharmaceutical industry
- Pressure vessels, storage tanks
- Water & waste water treatment plants
- Viscous liquids, light slurries
- Cement, flour
- High temperature & high pressure liquids
- Hydrocarbons & solvents
- Food & beverage
- Powders & granules

FEATURES

- Simple & rugged construction
- Easy mounting with threaded or tri-cover flange mountings
- Continuous level monitoring
- Available in rod & rope type sensor options
- Suitable for corrosive environment
- Suitable for granules
- Weatherproof
- Exproof

CAPACITANCE LEVEL TRANSMITTER

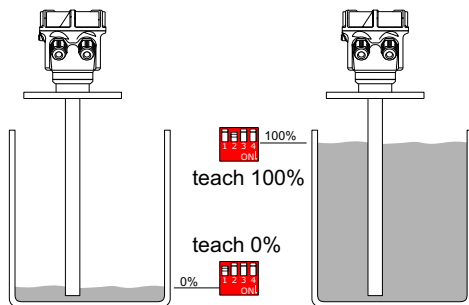
CONSTRUCTION & OPERATING PRINCIPLE

Capacitance level measurement systems take advantage of the dielectric constant in all materials to determine changes in level. A capacitor is no more than a pair of conductive electrodes, or plates, with fixed spacing and a dielectric (process material) between them.

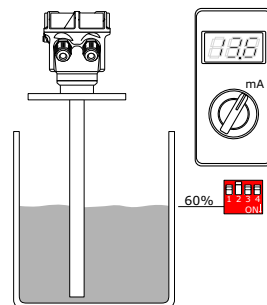
In this system, the probe element (a metal rod or cable) serves as the active plate, while the process vessel serves as a ground plate. As the level rises, the air is displaced by material (liquid or solid) having a different dielectric constant. A change in the value of the capacitor takes place because the dielectric between the plates has changed. The advanced electronic circuit converts this into analogue output. This analog output is fed to electronic indicator to show the reading of 4-20 mA.

- Fill to 100% and teach
- Fill to 0% and teach
- Calibration done

SIMPLE CALIBRATION

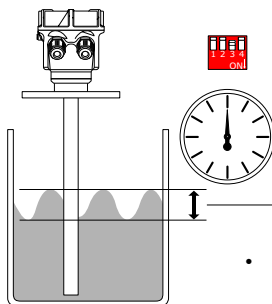


CALIBRATE/CORRECT AT ANY LEVEL



- 100% empty-filling of container is not required.
- Any level can be calibrated
- A calibration can also be corrected midway using this facility.

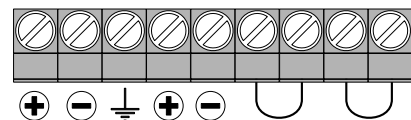
ADJUSTABLE DAMPING



- Liquid with turbulence surfaces output damping time can be set from 0 to 120 seconds.

MULTIPLE VOLTAGE OUTPUTS

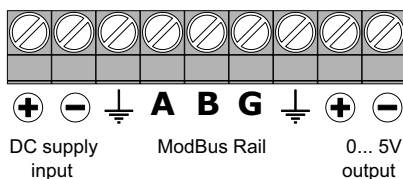
- Voltage output in 3/4 wire is available to suit most field voltage needs in field selectable configuration.



DC supply input	Voltage output 0/1... 5V 0/2... 10V	0% Voltage open=0V short=1V or 2V	100% Voltage open=10V short=5V
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MODBUS WITH 0... 5V OUTPUT

- MODBUS RTU option is available and supplied with complementary 0... 5V output



- MODBUS RTU address can be forced to default using onboard DIP switches.

CAT#688R0

ENQUIRIES

Instruments: sales@radix.co.in
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Gauges: gauges@radix.co.in
Automation: automation@radix.co.in
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