

# CSIS SERIES

## CAPACITANCE TRANSMITTER FOR USE IN HAZARDOUS APPLICATIONS

### DESCRIPTION

The CSIS Intrinsically-Safe Capacitance Transmitter is designed to detect the fluid levels of liquids in hazardous applications without the risk of ignition from a mixture of flammable and combustible materials in the air when a spark or heat is present. All models are equipped with durable, stainless steel enclosures and 316 stainless steel sensing probes. Output signals are available in 4-20 mA and 1-5 VDC, depending on the application. A variety of mounting sizes and probe lengths are made to order. The CSIS has suggested entity parameters to operate the sensor and is strictly used for intrinsically-safe platforms.

### PRINCIPLE OF OPERATION

The metal probe rod and outer shield act as conductive plates that encompass the dielectric media within a tank. As the electric current passes from one plate to the next, the control board within the junction box serves as a transmitter. The PCB accepts input from the probe and relays an output signal. The measured output dictates the media level within the tank.

### KEY FEATURES

- Two-Part Assembly: Transmitter & Probe
- Advanced Operation & Tuning Modes
- CSA-Approved
- LED Power Indication Light
- One-Digit LED Display Mode Indicator
- No Calibration Required & No Moving Parts
- Intrinsically-Safe For Hazardous Locations
- Sensitivity Adjustment

### ENVIRONMENTAL

- Process Temperature:  
-20° to +185° F (-29° to +85° C)
- Process Pressure: 500 PSIG (34.5 bar)

### ELECTRICAL

- Input: 9 to 45 VDC
- Output: 4-20 mA or 1-5 VDC
- Response Time: < 1 Second (Average)
- Repeatability: +96%
- Linearity: 0.50%
- Resolution: 1024 pt. Over Span (Default)

### APPLICATIONS

-  Water & Wastewater
-  Ink Trays
-  Chemical Processing
-  Storage Tanks
-  Petroleum Products
-  Refrigeration Systems



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### DIMENSIONS

