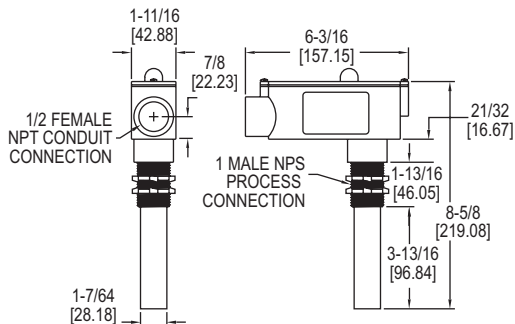


**Dwyer****MODEL CLS1**

# CAPACITANCE LEVEL SWITCH

## For Solids, Liquids or Slurries, Fail-Safe Protection, <1 pF Sensitivity



The **Model CLS1 Capacitance Level Switch** provides reliable point level measurement of solids, liquids and slurries in metallic or non-metallic tanks and vessels. It detects the presence or absence of material in contact with the probe by sensing a change in the capacitance.

### FEATURES/BENEFITS

- Electronics provide highly sensitive measurement detection (requires less than a 1 picofarad shift from ambient)
- State of the art technology ignores material build-up on the vessel sidewall or along the probe assembly
- One time calibration is simple with a single multi-turn potentiometer
- Red LED on housing indicates sensor status
- Adjustable 1-30 second time delay and a 5 A, SPDT fail-safe relay output
- Added installation flexibility with vertically or horizontally mounting

### APPLICATIONS

- High or low level detection
- Bins
- Silos
- Tanks
- Hoppers
- Chutes

### SPECIFICATIONS

**Service:** Solids, liquids, or slurries.  
**Wetted Material:** CPVC.  
**Temperature Limits:** Process: -40 to 240°F (-40 to 116°C); Ambient: -40 to 185°F (-40 to 85°C).  
**Enclosure Rating:** NEMA 4X (IP66), PVC, dust tight, water resistant.  
**Switch Type:** SPDT.  
**Electrical Rating:** 5 A @ 250 VAC.  
**Power Requirements:** 120 VAC, 1.5 VA.  
**Conduit Connection:** 3/4" female NPT.  
**Process Connection:** 1" male NPS.  
**Mounting Orientation:** Vertical or horizontal.  
**Sensitivity:** Adjustable to < 1 pF.  
**Fail-Safe:** Switch selectable, high/low.  
**Time Delay:** Adjustable 1 to 30 s.  
**Weight:** 2.0 lb (0.91 kg).

### MODEL CHART

| Model | Description              |
|-------|--------------------------|
| CLS1  | Capacitance level switch |