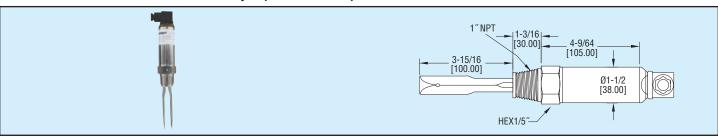


Model CTF

# Mini Tuning Fork Level Switch

## Compact, Cost Effective, DIN Connection



The Model CTF Mini Tuning Fork Level Switch is an ideal choice for level control for powders. The CTF incorporates a piezoelectric crystal that vibrates the fork at its natural frequency. When the fork comes in contact with a material, the vibration is dampened and the switch changes state. As the material is removed from the fork, the switch changes back to its normal state. The unit is not affected by vibration from conveying systems, motors, or the movement of material. Its compact size and DIN connection allow for application in places a larger tuning fork level switch may not be suitable, providing great versatility.

The Model CTF is easy to use with no calibration required, and no mechanical moving parts mean no routine maintenance. The CTF is not affected by the dielectric constant of the sensed material, making it superior to a comparable capacitance level switch for applications where the dielectric constant is low, more than one material is being used in the single vessel, and when material moisture content can change. The level switch is also great for applications when the bulk density is too low for a rotating paddle level switch, making it the ideal choice for low density bulk solids and liquids. Comes standard with a user friendly PNP/NPN configurable output.

#### **APPLICATIONS**

Lime, styrofoam, tobacco, dry cereals, sugar, animal feed, milk powder, flour, insulation, cement, paper shavings, plastic granules, sawdust, carbon black, light fibers, detergent powders, dyes, chalk, silica, sand, wood chips.

#### SPECIFICATIONS

**Service:** Dry powder compatible with wetted materials. Can detect bulk materials submerged in liquid.

**Sensitivity:** Min. bulk solid density: 4.4 lb/ft³ (70 g/l).

Wetted Materials: 304 SS and 316L

SS.

### **Temperature Limits:**

Ambient: -40 to 140°F (-40 to 60°C); Process: -40 to 212°F (-40 to 100°C). **Pressure Limit:** 600 psi (40 bar). **Power Requirement:** 12 to 55 VDC. Power Consumption: 10 mA @ 12 to

24 VDC; 0.5 W (max.).

Enclosure: Aluminum, painted.
Enclosure Rating: IP65.

Switch Type: 3-wire PNP/NPN output. Electrical Rating: 350 mA (max) @ 12

to 55 VDC.

Conduit Connection: Valve plug DIN

43650

Process Connections: 1" male NPT. Indication Lights: External red LED. Sensing Delay: Max. covered probe: 1 to 3 s.; Uncovered probe: 1 to 3 s.

Weight: 2.2 lb (1.0 kg).

Model CTF-01, Mini Tuning Fork Level Switch