DIESEL FUEL AND OIL LEVEL SENSOR

Product Features
- For fuel oil tanks
- Compact 3/4 NPT concentric tube design
- Accuracy 1% of span for constant dielectric of material
- Tube and inner probe SS316
- For use with metalic and non-metalic tanks
- OEM applications, low cost
- Continuous loop powered 4-20mA operation
- Non-interactive zero and span calibration

Applications
- Diesel fuels
- Hydraulic oils
- Vegetable oils
- Chemical holding tanks
- MEK and other solvants
- Many other, non-conductive liquids.

Description
The Intempco LTX20 series fuel capacitance level transmitter is designed to measure level of fuels and oils in metallic and non-metalic tanks. The probe measures level by measuring the change in capacitance as level changes in the tank. The micro-processor based electronics converts this capacitance change into a linear, highly accurate 4-20 mA signal.

The LTX20 includes a standard 4-20mA loop powered LTX transmitter, a concentric 0.75-inch diameter concentric shield with 0.188 - rigid sensor for ranges up to 10 feet. Probe material is SS316. The LTX20 is designed for tanks which have fitting connections of 3/4 NPT or larger and in applications where the liquid is relatively clean or non-clogging.

An excellent application for the LTX20 are stationary or mobile generators. This level sensor is shock resistant and very rugged. There are no moving parts. To isolate for ground loops, a non-conductive reducer (such as PVC) can be used between the tank and the 3/4”NPT fitting of the LTX20.
### Electrical Specifications

- **Supply Voltage:** 12 VDC - 36 VDC
- **Output:** 4 - 20 mA, loop powered
- **Maximum Loop Res.:** $(V_s - 10)/0.02$ (i.e. $700\Omega$ at 24VDC)
- **Calibration:** Via 4 push-button switches
- **Capacitance range:** 10 pF to 10000 pF, jumper selectable in 3 ranges
- **Accuracy:** ±1% of full span (constant dielectric)
- **Repeatability:** ±0.1% of span
- **Damping adjust:** 0 - 30 sec
- **Ambient Temperature:** -40 to 70 °C (-40 to 158 °F)

### Mechanical Specifications

- **Enclosures:**
  - **AH2:** Aluminum, lift cover type, NEMA 4
  - **SS2:** Stainless 316, NEMA 4X
  - **AX3:** Aluminum Epoxy Coated, Class I, Gps. B,C&D, Class II, Gps. E,F&G, Class III,
    CENELEC: EExd IIC, IP66
  - **CX3:** Aluminum Epoxy Coated, Class I, Class II, Div 2,Gps. C&G

- **Mounting Thread:** 3/4 NPT standard
- **Process Temperature:** 200°C max (392°F)-consult factory for higher temperatures
- **Pressure Limits:**
  - 100 psi (34 bar) @ 25°C (77 °F)
  - 14.5 psi (1 bar) @ 200°C (392 °F)
- **Probe & Tube mat’l:** Stainless 316, 3/4” (19 mm) O.D.

### Ordering Specifications

- **INTEMPICO MODEL:** LTX20
- **ENCLOSURE CODE:**
  - Explosion Proof: AX3
  - Explosion Proof: CX3
  - Aluminum Flip-cover: AH2
  - Stainless Steel: SS2
  - PVC (Pg9 Gland): PV9
  - PVC (1/2” NPT): PV2
- **PROCESS CONNECTION:** P(3/4)
- **PROBE LENGTH “L” (10 feet Max.):** (in inches)

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**Dimensions (xx) are in millimeters**