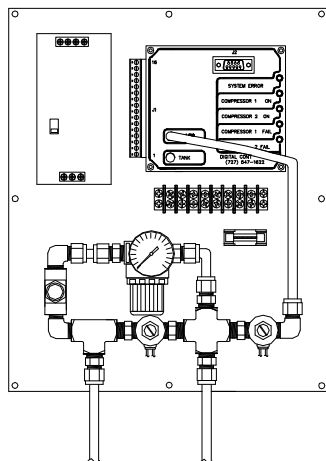




# Plant Air Bubbler Level Transmitter (BLT-P) Model Number: 12138-P (U.L. Listed)

Manufacturer of High Performance Instrumentation and Control Systems



### General Description:

The Plant Air Bubbler Level Transmitter (BLT) model 12138-P is an automatic bubbler type level measurement system. It operates by forcing existing plant air into a bubbler air tube at a constant rate with its opening placed near the bottom of the liquid. The pressure required to force air through the tube is proportional to the depth of the liquid. The BLT measures this pressure and generates a 4-20 mA signal which represents the depth. The unit includes a built-in purging cycle to keep the bubbler line clear from obstructions. The BLT also includes an RS-232 serial communications interface designed to support SCADA systems using a variety of Modbus based communication devices giving the system remote data acquisition, monitoring, and control capability.

### Applications:

- Wastewater Pump Station Levels
- Water and Wastewater Plant Tank Levels
- Liquid Level for Tank Monitoring
- Storm Water Levels
- Holding Pond Levels
- Groundwater and River Levels
- Landfill Liquids (Leachate) Levels
- Most Liquid Level Monitoring Applications Where Liquid is Vented to Atmosphere

### Features and Benefits:

- Automatic air tube purging cycle.
- Ranges of up to 230 feet available. Ranges can be calibrated in the field within the ordered range.
- 4-20 mA signal output proportional to level.
- System status indicators on front panel.
- System error relay output to detect errors from remote site.
- Pressure regulator - 0 -150 psig.
- Pressure gauge - 0 -150 psig.
- High accuracy pressure transducer -  $\pm 0.25\%$  (optional).
- External digital level display available.
- System available in an optional enclosure.
- Compact design allows for easy low cost installation.
- RS-232 serial port for SCADA communications support.
- Uses non-volatile memory allowing system to retain program software during power loss.
- Various specific gravities available to accurately measure most liquids.
- Proven software that allows for easy setup and reliability.
- Custom software available from factory.

### Specifications:

#### **Input Power:**

- 115 VAC (with power supply), 2 A max.

#### **Operating Temperature Range:**

- -30°C to +60°C (-22°F to +140°F)

#### **Accuracy:**

- $\pm 1\%$  of full scale over temp range (higher accuracy available)

#### **Ranges:**

- 0 to 30 ft. standard (up to 230 ft. available)

#### **Relay Outputs:**

- System Failure - SPDT Form C - 10 A at 125 VAC

#### **Discrete Outputs:**

- Purge Freeze - Open Drain FET, Non-isolated

#### **4-20 mA Current Loop Output:**

- Non-isolated transmitter
- Total compliance of 9 VDC

#### **Transient Protection:**

- Metal Oxide Varistor

#### **Interconnect:**

- Pluggable terminal blocks (screw type)
- DE-9 connector for RS-232 Bus

#### **Communications Protocol:**

- Modbus ASCII

#### **External Dimensions:**

- System Flat Plate - 10.9"H x 9.2"W x 4.0"D



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