

BAYHAM

TRANSGAUGE CAPACITANCE LEVEL TRANSMITTER

Features:

- Suitable for Conductive and Non-conductive liquids.
- Easy to install
- Suitable for Tanks without Vents

Applications:

- Continuous Measurement of Liquid Level in Tanks and Vessels.

Function.

The Transgauge level transmitter measures liquid level by measuring the change in capacitance of a probe assembly depending on how much of it is submerged. The probe comprises an inner electrode and an outer earth tube. This arrangement makes the Transgauge suitable for both conductive and non-conductive fluids.

The wetted parts are stainless steel and PTFE, ensuring chemical compatibility with a wide variety of fluids.

The electronics are housed in a weatherproof ABS plastic enclosure with a 2 metre flying lead. An optional aluminium enclosure is available plus longer length leads.



Two electrical output signals are provided; a voltage output for connection to Bayham switch control modules or remote indicators, and a current output (4-20 mA) for connection to other systems such as a BMS or PLC. Output signal adjustment is achieved by turning zero and span controls located on the PCB. These signals can be calibrated to suit the maximum height of liquid in the tank.

Transgauge probes are manufactured to suit tank dimensions. No mechanical adjustment during installation is required. Flange mounting versions are available plus a variety of special variations including a low temperature version for refrigerants and side mounting versions with angled twin probes.

Technical Specifications

Sensor probe:	PTFE Covered Stainless Steel	Connection Details
Earth probe:	Stainless Steel	
Tank connection:	1" BSP male	
Minimum probe length:	300 mm	
Maximum probe length:	2500 mm	
Electrical Supply:	24 V DC	
Output Signals:	4-20 mA / 0-6 V DC Standard	
Temperature rating:	-10 to +50 °C.	
Heat sinks or insulation pieces can be fitted to extend temperature range.		

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TRANSGAUGE-LPS CAPACITANCE LEVEL TRANSMITTER

Features:

- Adjustable Integral Level Switches
- Suitable for Conductive and Non-conductive liquids.
- Easy to install and set-up
- For use in Vented Tanks

Applications:

- Continuous Measurement of Liquid Level in Tanks and Vessels.
- Initiation of Level Alarms and Pump On/Off Signals



Function.

The Transgauge LPS measures the level of liquid in a tank using capacitive techniques. There is no electrical contact with the liquid, other than an electrical earth connection. It produces a current output and a voltage output, which can be used to drive meters or any other monitoring instruments. It also gives high and low trip outputs that can be used to provide alarms or to control pumps or valves.

The operating modes allow the user to calibrate the probe to any required range (for most types of liquid), calibrate the voltage and current outputs for any required meter range, set high/low trip points and hysteresis, and to electronically damp the reading if required (to give a steady reading if the liquid is agitated).

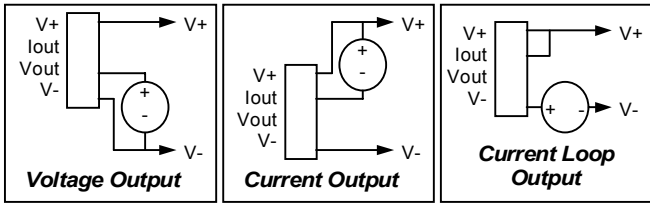
The probe consists of a stainless steel tube with a concentric Teflon-insulated wire. Breather holes at the top and bottom of the tube allow the liquid to flow freely into and out of it. The electronics are housed in a small head box, which also contains the electrical terminals and switches to configure the operating mode.

If the gauge is used in an inaccessible location (e.g. in a marine fuel tank) the electronics can be supplied in a separate control box, which can be fitted behind the dashboard.

TECHNICAL SPECIFICATION

Power requirements:	Voltage and/or current output only: 7.0...30.0VDC If using trip level outputs: 10.0...30.0VDC 40mA max + current output If using current loop output: 7.0...30.0VDC
Maximum Output Span:	0...10.00V 0...25.00mA
Trip outputs:	2 Volt-free contacts rated 240VAC 1A (Subject to health and safety regulations)
Maximum voltage on any terminal relative to case earth:	240VAC
Resolution:	Conductive liquid (e.g. water) 0.25mm Non-conductive liquid (e.g. oil) 1mm
Accuracy:	±0.25% of maximum output span
Fixing:	Thread: 1" BSP Parallel Flange: 125mm dia. 4x9mm holes on 101.6mm PCD
Dimensions:	Head Box: 67 x 98 x 35 mm, sealed to IP65

CONNECTION DETAILS



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