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SENSORS / LIQUID/FLOW / 12" STANDARD ETAPE LIQUID LEVEL SENSOR WITH PLASTIC CASING



12" Standard eTape Liquid Level Sensor with Plastic Casing

PRODUCT ID: 2656

40 IN STOCK



DESCRIPTION TECHNICAL DETAILS







DESCRIPTION

This eTape Liquid Level Sensor is a solid-state sensor with a resistive output that varies with the level of the fluid. It does away with clunky mechanical floats, and easily interfaces with electronic control systems. What separates this from our other eTape Liquid Sensor is the hard plastic jacket that makes it less susceptible to damage.

The eTape sensor's envelope is compressed by the hydrostatic pressure of the fluid in which it is immersed. This results in a change in resistance that corresponds to the distance from the top of the sensor to the surface of the fluid. The sensor's resistive output is inversely proportional to the height of the liquid: the lower the liquid level, the higher the output resistance; the higher the liquid level, the lower the output resistance.

This is a very unique sensor, we haven't seen anything else that is affordable and accurate for measuring liquid level. This particular sensor is the 12" model. It comes with a 3-pin JST connector for power and ground in and analog out

Since the sensor is a resistive divider / analog out, it is easy to read it using a ed wire to 3 or 5V power, the black wire to ground, then read the analog divider output on white

Note: This product only comes with the plastic enclosed eTape Liquid Level Sensor. In our demo, we set it up with an Adafruit Metro, a TB6612 Stepper Motor Driver Breakout Board, and an Automotive Gauge Stepper Motor.

TECHNICAL DETAILS

Dimensions:

- 305mm x 29mm x 13mm / 12" x 1.14" x 0.51"
- Weight: 56g
- Sensor Output: $400-2000\Omega \pm 20\%$
- Ref. Resistance: $2000\Omega \pm 20\%$
- Actuation Depth: Nominal 25.4mm / 1"
- Resistance Gradient: $60\Omega/cm$ / 150Ω /inch
- Power Rating: 0.5 Watts
- Temperature Range: 15°F 150°F / -9°C 65°C
- Standard eTape Datasheet

Connect the black wire to ground, the red wire to +3 or +5V, then read the analog voltage off of the white wire.

Then look in the App Note for the conversion between resistance and liquid level.



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"Science, my lad, is made up of mistakes, but they are mistakes which it is useful to make, because they lead little by little to the truth" -Jules Verne

