

Non-contact Flexible Liquid Level Sensor

SEN0508

Product Overview

01-13-2023

For the most up-to-date information, visit www.mouser.com or the supplier's website.

Description

DFRobot Non-contact Flexible Liquid Level Sensor uses a flexible substrate with a light and thin design. With temperature-resistant and waterproof 3M adhesive tape on the back, the sensor can be easily attached on surfaces of any kind of non-conductive container whose thickness is less than 5mm. The sensor outputs digital high/low level (low when liquid detected) and adopts a 3-pin DuPont connector. This SEN0508 non-contact flexible liquid level sensor can be widely used in water tank detection, beverage machine, water pipe level detection, scientific experiment test tube level detection and other scenarios.



Features

- With light and thin design
- Can be attached on surfaces of the non-conductive container

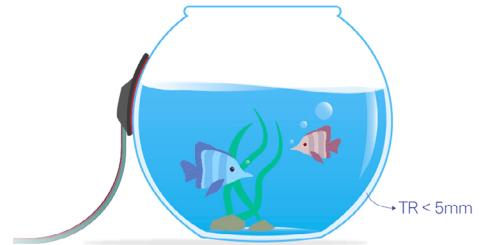
Applications

- Water tank detection
- Beverage machine
- Water pipe level detection
- Scientific experiment test tube level detection

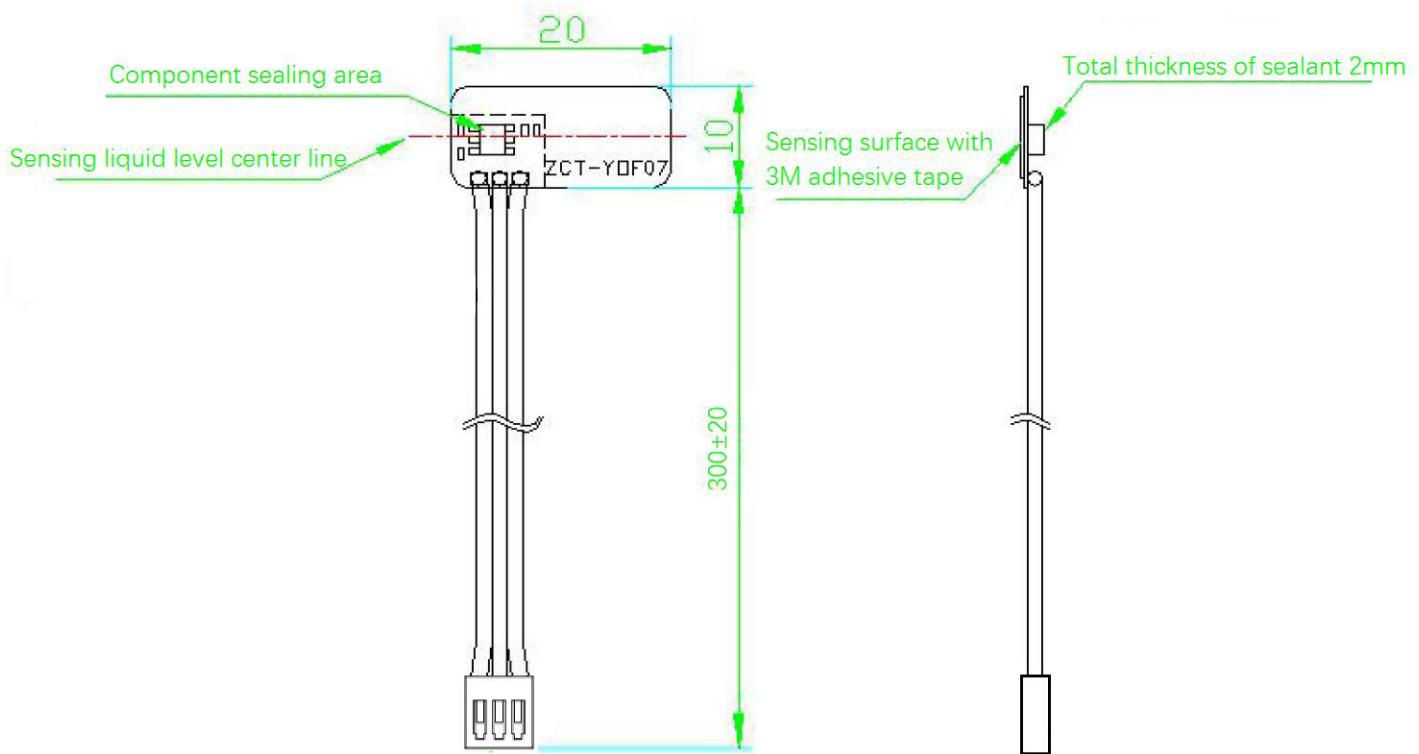


Working Principle

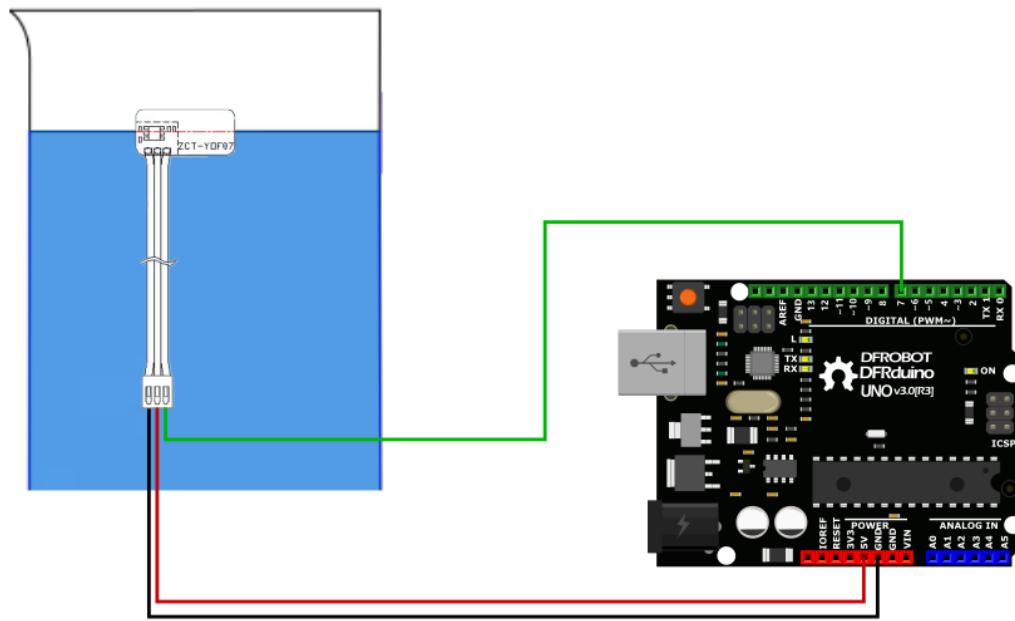
The intelligent liquid level sensor uses the sensing capacitance of water to detect the presence of liquid. When there is no liquid approaching the sensor, the sensor has a certain static capacitance due to the distributed capacitance. When the liquid level slowly rises close to the inductor, the parasitic capacitance of the liquid will be coupled to the static capacitor, causing the final capacitance of the inductor to become larger.



The changed capacitance signal is then input to the control IC for signal conversion, which will change. The capacitance is converted into the amount of change of an electrical signal, and then a certain algorithm detects and judges the degree of the change. When the amount of change exceeds a certain threshold, the liquid level is considered to reach the sensing point.



Connection Diagram



Mouser Part Number

[View Part](#)

To learn more, visit <https://www.mouser.com/new/dfrobot/dfrobot-liquid-level-sensor/>