无接触式柔性液位传感器规格书
Non-contact flexible liquid level sensor
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规 格 承 认 书

Specifications

Type　　产品类型：无接触式柔性液位传感器

Model　　产品型号：ZCT-YOF07

Customer　客户名称：

Signed by Client　客户签名	
Confirmed　确认	
Checked　审核	
Approved　批准	

Signed by Manufacturer　生产商签名	
Prepared　制定	
Checked　审核	
Approved　批准	

一、简介Introduction

　　非接触式柔性电容液位传感器，旨在解决
现有液位检测采用浮球式干簧管、霍尔传感、
金属探头等检测装置存在的结构复杂，与水箱
液体直接接触，容器需要开孔，长期浸泡液体中，
造成水垢，难于清洗，无法贴合弧面等应用问题。

　　Non-contact flexible capacitive liquid level sensor, designed to solve
Existing liquid level detection adopts floating ball reed switch, Hall sensor,
Metal probes and other detection devices have a complex structure,
and the water tankThe liquid is in direct contact, soaked in the liquid for a long time,
It causes scale, is difficult to clean, and cannot be applied to curved surfaces.

二、特点Features

1）非接触感应，不接触液体；
　　Non-contact sensing, no contact with liquid;

2）采用柔性基材，弯曲贴合，集成封装，无安装孔；
　　Flexible material, curved surface fit, integrated package, No mounting holes；

3）自带背胶，稳定性好，轻量化，小型化，低成本；
　　With 3M adhesive, good stability, light weight, miniaturization, low cost；

4）出厂标定参数，适合单层/多层产品壁厚；
　　Factory set parameters, Suitable for single-layer / multi-layer product wall thickness；
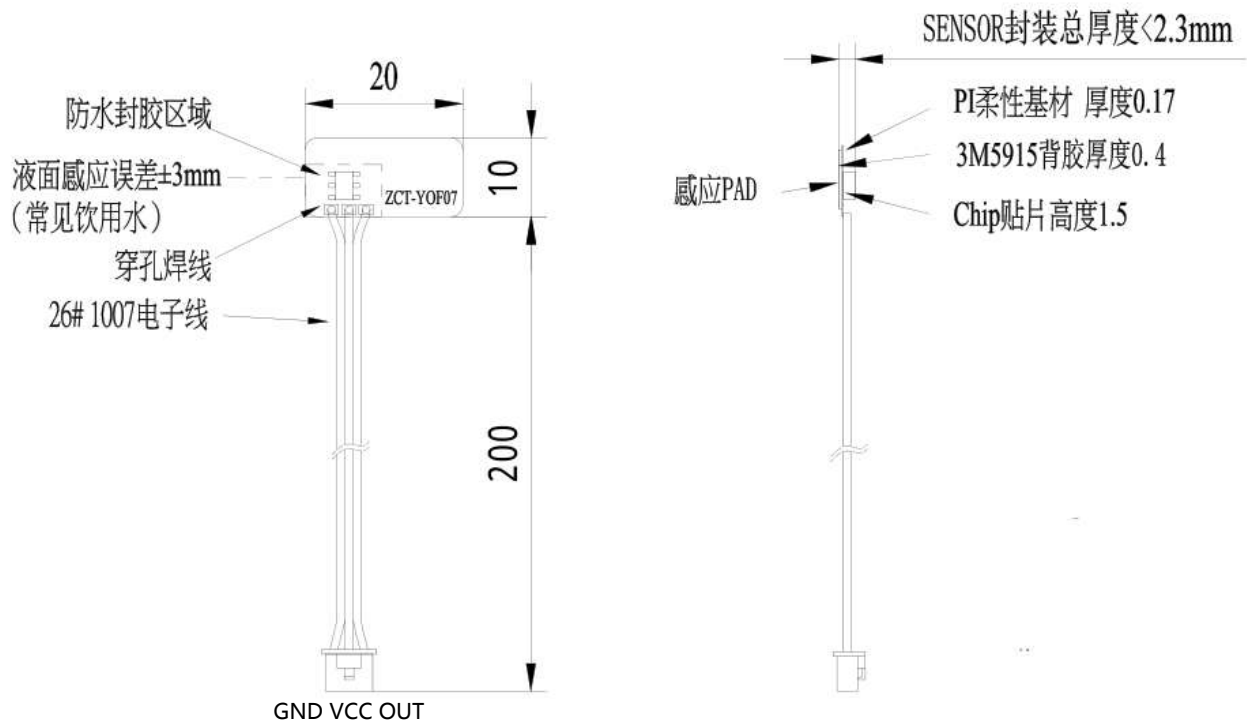
5）符合 Rohs ,Reach, IEC61249-2-21, UL94V-0

三、应用Application

1） 液位信号采集：防干烧，防溢报警，液体实时监测;
　　 Liquid level signal acquisition: anti-dry burning, anti-overflow alarm, liquid level monitoring;

2） 液体传感：蒸馏，矿物质，冰，纯水，酒，油，奶，果浆，胶，墨等；
　　 Special liquid sensing: distillation, minerals, ice, pure water, wine, oil, milk, juice, glue, ink, etc;

3） 各类电器：饮水机，咖啡机，制冰机，空调扇，香薰机，加湿器，除湿机，
　　 蒸汽产品，果蔬清洗机，扫地机器人等含液体产品；
　　　 Various electrical appliances：Water dispenser, coffee maker, ice maker, air conditioning fan, aromatherapy
　　　 machine, humidifier, dehumidifier, Steam clean, fruit and vegetable washing machine, Sweeping robot，
　　　 and other contains liquid products；

4） 物联网：智慧医院（消毒监控），智慧农植（农药喷洒），智慧城市（雨水感应）；
　　　 IOT: Smart hospital (Monitor sanitizer), smart farming (Spray pesticides), smart city (Rain sensor)；

5） 其他应用：other apps.

四、 参数Parameter

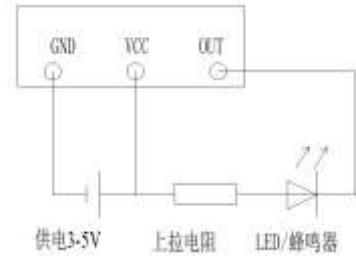|	
电压Voltage	5v（2.5~5.0VDC）
电流Current	5v 285uA　3.3v 230 uA
迟滞Response	±0.25%FS
输出Output	High level
感应距离 Distance	Standard: 3mm, 5mm, 7mm Max10mm
间隔介质Spacer medium	塑料Plastic 玻璃Glass 陶瓷Ceramic
液面误差 Deviation	19-39℃±2mm　Max±3mm
防护等级Protection level	IP64
工作温度 Work temp	-20~85℃
材料耐温Withstand temp	背胶Adhesive 120度，基材Substrate 120度，芯片Chip 85度，封胶Glue120度
电磁测试ESD test	H.B.M3000V　M.M300V　C.D.M1000V
闩锁测试Latch-up test	Input test 25mA-100mA　Voltage18V
重量weight	2g

五、 外型尺寸Dimension

六，接线与安装说明
Wiring and installation instructions

1.接线说明Wiring Notes

序号	项目Pin	定义definition	线材Wire
1	GND	Ground	26# 1007
2	VCC	3-5v DC	26# 1007
3	OUTPUT	Analog level	26# 1007

GND   VCC   OUT

供电3-5V   上拉电阻   LED/蜂鸣器

备注：当传感器检测到液体/物体时，输出低电平信号。

当检测到无液体/物体离开时，输出高电平信号，直到满液位/物体就位之后恢复低电平输出。

Note: When the sensor detects liquid, it outputs a low-level signal.

When the sensor detects that there is no liquid, it outputs a high level signal until the liquid is filled, low level signal is restored.

2.安装说明Installation Notes

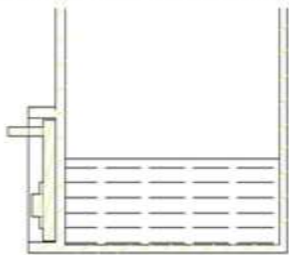| Installation outside of the container (Side or bottom)	Installation inside of the container, or internal raised	Multi-point liquid level detection on the outside of the container	No contact induction in mobile water tank, two layers of plastic

容器外壁非接触液位感应

非接触封装于容器内

多点&连续液位监测

两层绝缘胶壳感应液位（移动水箱）

七，注意事项Matters need attention

---避免将传感器置于小于感应距离的2倍距离，并紧贴被测物体；

---为保障传感器不受损伤，不可带电操作；

---端子接反，超出额定值，将造成电子元件损坏；

---产品存放与运输，请远离化学污染源；

---请参照规格书技术标准执行。

-Avoid placing the sensor at a distance less than twice the sensing distance and sticking closely to the measured object;
-In order to protect the sensor from damage, it is not allowed to operate with electricity;
- Reverse connection of the terminals, exceeding the rated value, will cause damage to electronic components;
-Store and transport the product, please keep away from the source of chemical pollution;
-Please refer to the technical standards of the specification for implementation..