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东莞市铱伦实业有限公司

Erlang Technology Co., LTD

样品承认书

Sample Confirmation

客户 TO.

LIVPURE

品 名 Article

TDS 传感器

规 格 Item

TDS-37

图 号 Drawn No.

2018091403

日 期 Date

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东莞市铱伦实业有限公司 Erlang Technology Co., LTD	
承办 Approved by	邹远华
审校 Revised by	
核准 Handled by	

客户承认章 Recognition Stamp of Customer	
承办 Approved by	
审校 Revised by	
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TDS-37传感器规格书

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1. 定义:

本产品通过测量水介质间的导电率从而间接反映出TDS值，判定水质纯净度。

This product indirectly reflects the TDS value by measuring the conductivity between the water medium, and determines the purity of water quality.

2. 使用范围:

本产品适用于检测水质等水处理设备

This product is suitable for testing water treatment equipment such as water quality.

3. 规格尺寸:

参照3/4规格图

4. 技术要求:

4-1 额定电压	5V DC/AC
Rated voltage	
4-2 推荐工作电流	$\leq 10 \mu A$
Recommended working current	
4-3 最大工作电流	$\leq 10mA$ (电流越大，使用 寿命越短) (The larger the current, the shorter the service life.)
Maximum working current	
4-4 电极间开路电阻	$\geq 5M\Omega$
Open circuit resistance between electrodes	
4-5 电极间短路电阻	$\leq 400m\Omega$ (电极直接接触) (Direct contact of electrodes.)
Short circuit resistance between electrodes	
4-6 电极到外壳电阻(绝缘电阻)	$\geq 5M\Omega$
Electrode to case resistance (insulation resistance)	
4-7 适用介质	水 (符合GB5749标准) Water (Conform to GB5749 standard)
Applicable medium	
4-8 使用温度范围	0-60°C (不结冰) 0-60°C (No ice)
Temperature range	
4-9 使用压力范围	0-0.8MPa
Pressure range	
4-10 电气强度	500V AC/min/50Hz, 无 闪络与击穿 No flashover and breakdown
Electrical strength	

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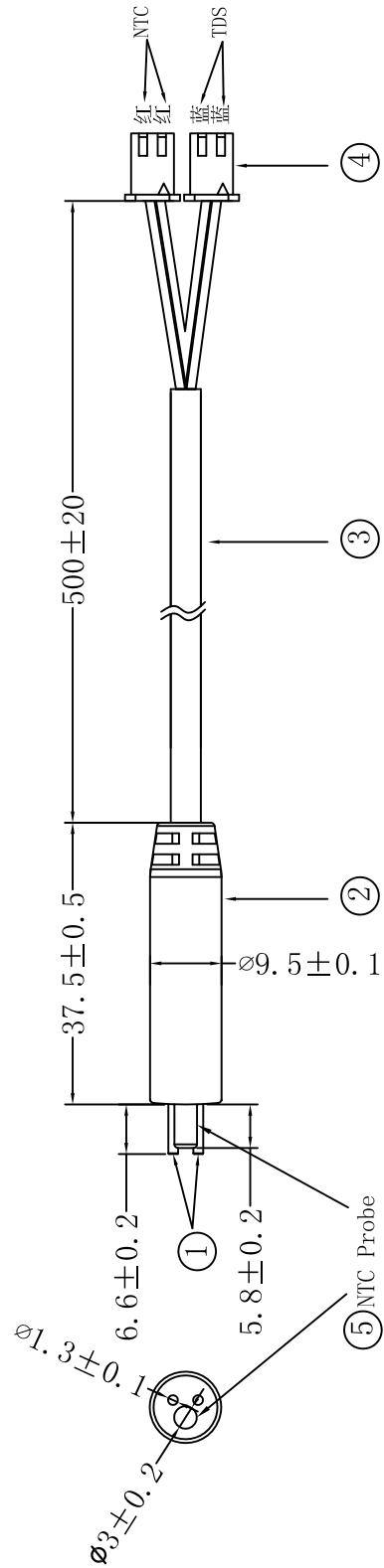
4-11	耐寒性能 Cold resistance	在温度 $-20\pm3^{\circ}\text{C}$ 下放置96h后，在常温下放置1h，性能满足要求 After placing 96 hours at temperature $-20\pm3^{\circ}\text{C}$ and placing 1H at room temperature meet the requirements.
4-12	耐热性能 Heat resistance	在温度 $80\pm3^{\circ}\text{C}$ 下放置96h后，在常温下放置1h，性能满足要求 After placing 96 hours at temperature $80\pm3^{\circ}\text{C}$ and placing 1h at room temperature meet the requirements.
4-13	恒定湿热试验 Constant humidity heat test	在温度 $40\pm3^{\circ}\text{C}$ 、相对湿度为 $93\pm3\text{RH}$ 的环境下放置96小时，待干燥后其电气性能仍符合要求 For 96 hours at a temperature of 40 ± 3 and a relative humidity of $93\pm3\text{RH}$, after drying, its electrical properties still meet the requirements.
4-14	盐雾试验 Salt spray test	在环境温度 $35\pm3^{\circ}\text{C}$ 用 $5\pm0.1\%$ 的盐水喷雾环境放置192h，试验结束后无生锈、明显腐蚀现象 At ambient temperature of $35\pm3^{\circ}\text{C}$ centigrade, $5\pm0.1\%$ salt water spray was applied to the environment for 192 hours, there is no rust and obvious corrosion after the test.
4-15	水力循环（耐水锤） Hydraulic cycle (Water resistant hammer)	可以承受 $0\text{--}1.04\text{MPa}$ 10万次水锤试验无变形、损坏，不得出现渗漏水现象 It can withstand $0\text{--}1.04\text{MPa}$ and 100 thousand water hammer test without deformation, damage, no leakage phenomenon.
4-16	密封性 Sealing property	可以承受 1.2MPa 静态水压不变形、不损坏，各连接部位无渗漏水现象 It can withstand static water pressure of 1.2MPa without deformation or damage, and there is no leakage phenomenon at all joints.
4-17	零压密封性 Zero pressure seal	在 $0\text{--}0.003\text{Mpa}$ 进水压力下，无渗透、无漏水现象 Under $0\text{--}0.003\text{Mpa}$ influent pressure, no leakage and no leakage.
4-18	爆破压力试验 Burst pressure test	进水水压升至 2.76MPa 时，塑料外壳无损坏、变形现象 When the inlet water pressure rises to 3.2MPa , the plastic case is not damaged or deformed
4-18	引出端强度 Terminal tensile strength	应能承受 $30\text{N}/10\text{s}$ 以上的拉力。 It should be able to withstand more than $30\text{N}/10\text{s}$ tension.
4-19	外观要求 Appearance requirements	探头表面平滑，无划伤、裂痕、凹陷、弯曲等不良，塑料外壳无污渍、损伤、缺料等不良 The probe surface is smooth, no scratches, cracks, depressions, bending and other bad, no stains, damage, material shortage and other bad plastic shell

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[规 格 尺 寸]



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[材 料]

6	PCB PCB	FR-4		
5	热敏电阻 thermistor	PX3-42H-\$S2	1	
4	P架 connector	XH2.5 2P 红色/蓝色 Red/Blue	2	
3	线材 wire	UL2464 24AWGx4c 黑色外被线 UL2464 24AWGx4c Black cable wire	1	
2	本体 Stem	PP材质 Materia PP	1	
1	探针 probes	本色钛材质 Ti material	2	
序号 No.	名称 Item	物料规格 Material Description	数量 Quality	备注 Remark

技术要求:

1. 外观要求:
 - a:探针采用钛材质, 表面平滑, 无裂痕、凹陷、弯曲等不良.
 - b:外壳表面无损伤、污渍、缺损等不良.
2. 热敏电阻要求: 标称阻值 $R_{25}=10K \pm 1\%$ $R_{25/85}=3435K \pm 1\%$.
3. 绝缘性能: 500VAC/1min/50Hz, 开关无闪络与击穿
4. 工作电压 $\leq 5V$ (此电压施加在探针两端的电压), 工作电流 $\leq 10mA$ (电流越小, 探针使用寿命越长).
5. 所有物料使用均需符合RoHS标准。

包装要求:依据公司自制定包装要求包装进行出货。

Technical requirement:

1. Appearance requirement:

a、The material of the TDS probe is Ti, the surface is smooth ,no cracks/sunken/bending and other adverse.

b、There is no damage/dirt/defect on Shell surface.

2. Thermistor requirements: nominal resistance $R_{25}=10K \pm 1\%$ $R_{25/85}=3435K \pm 1\%$

3. Insulation performance:500VDC, switch no flashover and breakdown.

4. Working voltage $\leq 5V$ (this voltage is applied across the pin's voltage) work current $\leq 10mA$ (the smaller current will be longer life)

5. All materials are comply with RoHS

RoHS

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