



### Product Description

Intelligent contactless level sensor/detector (Hereinafter referred to as Level Sensor/detector), adopts advanced signal processing technology and high speed signal processing chip, the container thickness will be less relevant to the level measuring, and to the level height of the sealed container, the real non-contact measurement is realized. The level sensor (detector) will be mounted in the high/low of the outer container (the high level and the low level), it will be unnecessary for drilling a hole to the non-metal container, the installation is very easy. This sensor is the most ideal level measuring sensor for various toxic material, strong acid, strong alkali and various liquid in the high pressure sealed container. There will be no special requirements for the liquid medium and vessel material, it's widely used.

### EFFECT SHOWS



Intelligent contactless level sensor/detector has four kinds of signal output interface, they are high and low level output interface, NPN output interface. PNP output interface, RS485 interface and they also have four model for the four outputs.

**They are(pls choose the model carefully when you order, or leave us a message about which output/model you need)**

**high and low level output interface-model: XKC-Y25-V**

**NPN output interface—model: XKC-Y25-NPN**

**PNP output interface —model: XKC-Y25-PNP**

**RS485 interface---model: XKC-Y25-RS485**

### **Product Features**

- 1: Non-contact liquid level sensors for non-metallic wall of the container without direct contact with the liquid, are not subject to corrosion acid and alkali and other corrosive liquids, or other debris from the scale effect.
- 2: Intelligent level adjustment and level memory function, level status display, multi-point serial connection; supports NPN Output, high-low level output, PNP output, RS485 signal output
- 3: Detection is accurate and stable, can detect boiling water level
- 4: Pure electronic circuit structure, non-mechanical work, life durability and stable performance.
- 5: High stability, high sensitivity, strong interference ability, free from external electromagnetic interference, there are special treatment for frequency interference and common mode interference, compatible with all 5 ~ 24V Power Adapter in the market.
- 6: Strong compatibility, penetrate various non-metallic containers, such as plastic, glass, ceramics and other containers, sensing distance up to over 10mm; liquid, powder, particulate matter can be detected.
- 7: Open collector output, wide voltage range (5V ~ 12V Or 12V ~ 24V), Suitable for connecting various circuits and product applications.

### **Working principle**

Intelligent non-contact level detector is using water detection capacitance to detect whether the liquid is present, when there's no liquid access to the detector, there's static capacitance due to distributed capacitance exist in the detector, when the level rise and close to detector, the stray capacitance of the liquid will couple to this static capacitance, make the final capacitance value of the detector become bigger, this changing capacitance signal input into IC to convert the signal, making the changing capacitance convert to some changing signal,

and then by a certain algorithm to detect and determine the extent of the amount of change, when the change exceeds a certain threshold level reaches the sensor point.

### Technical Parameters

Project Name	Parameters
Input voltage (In VCC)	DC 5~24V
Current consumption	200 uA
Output voltage (high)	5~24V
Output voltage (low)	0V
Output Current	1~100mA
Response time	500ms
Working temperature	0~100 °C
Induction thickness (sensitivity) range	0~20mm
Communications	RS485, serial port TTL level
Humidity	5%~100%
Container Material	Plastic, glass, ceramics and other containers
Protection grade	IP67

### High Low Level Or NPN Output Detector Wiring Method

1: Brown wire(VCC) Power +5V~24V (Power+)

2: Yellow wire(OUT) Signal output

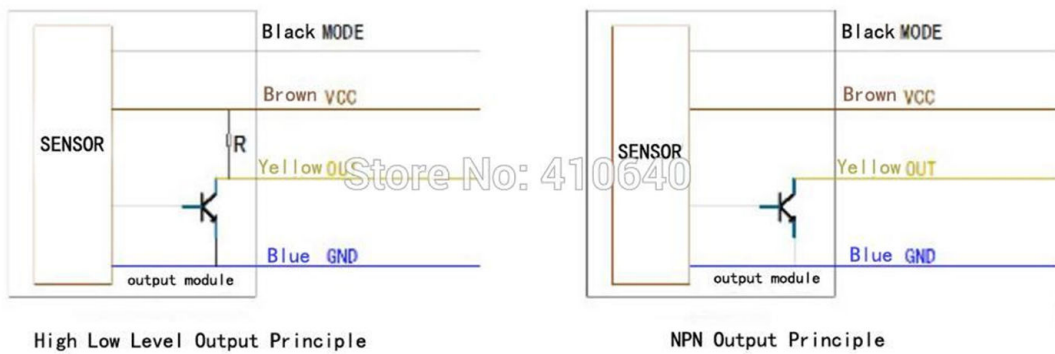
3: Black wire(M) Output level(positive output or negative output) control

1. When the black wire connect the high level, yellow wire is positive output signal wire, the output is high level when the object is sensed.(NPN closed)
2. When the black wire connect the low level, yellow wire is negative output signal wire, the output is low level when the object is sensed(NPN disconnect)

4: Blue wire(GND) Ground wire(connect Power-)

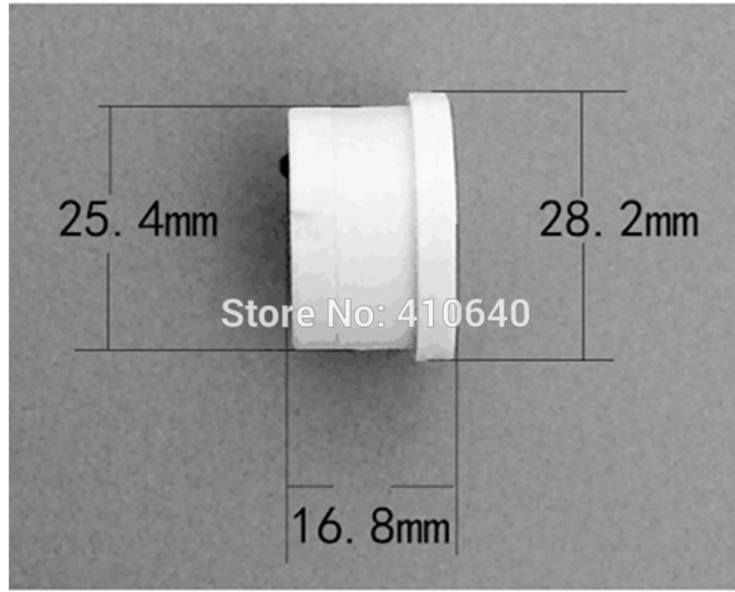


High Low Level Or NPN Output Detector Probe Wiring Drawing



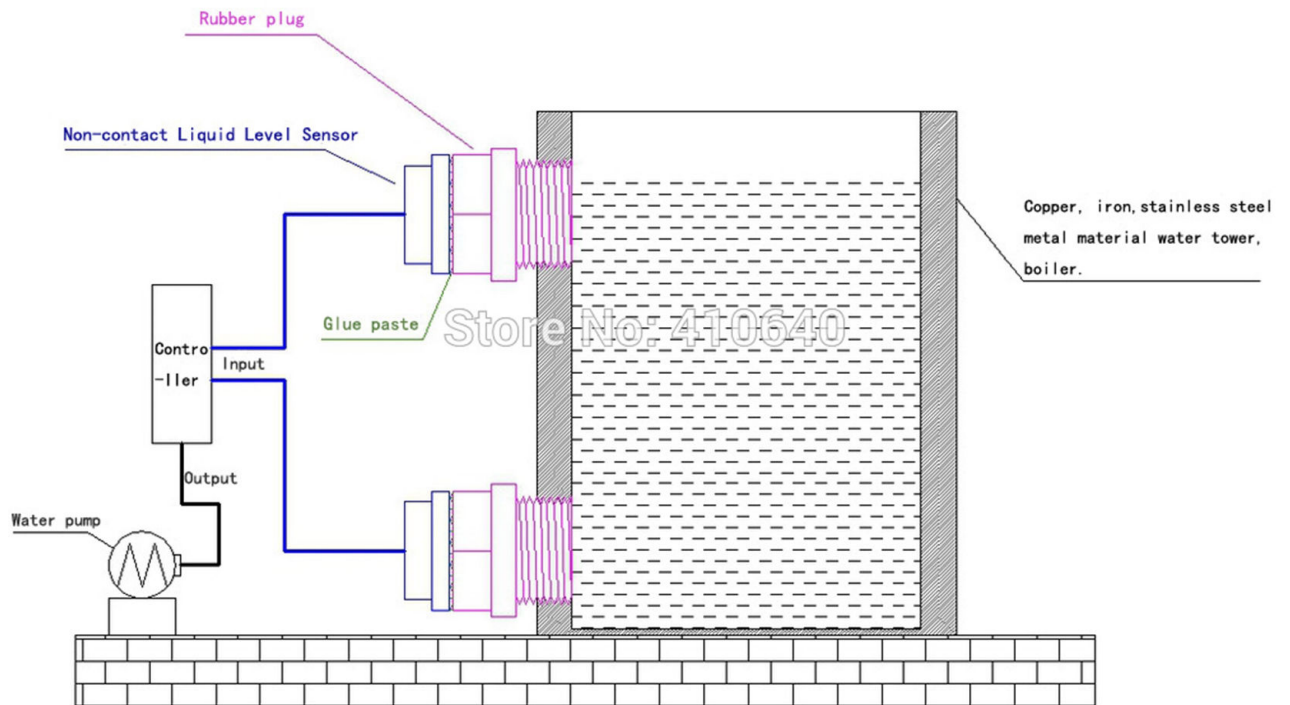
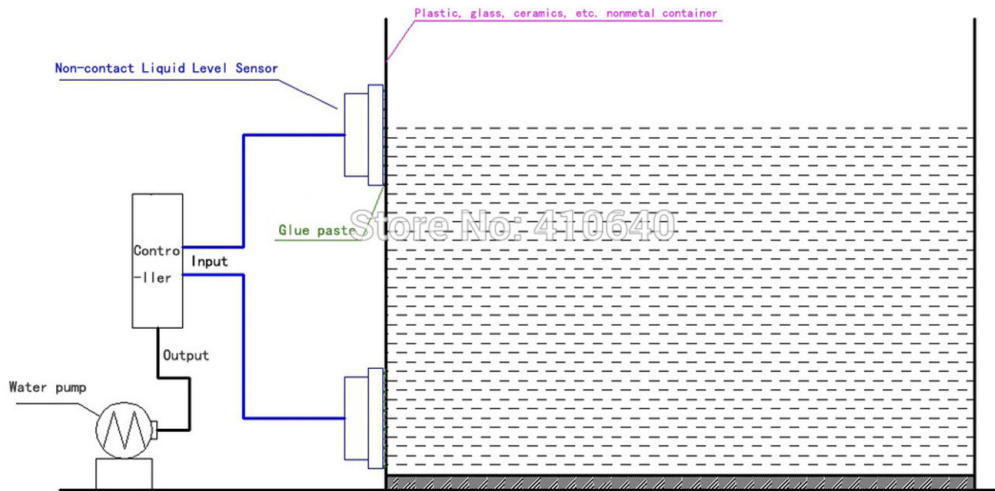
RS485 Communication Protocol Detector Wiring Method

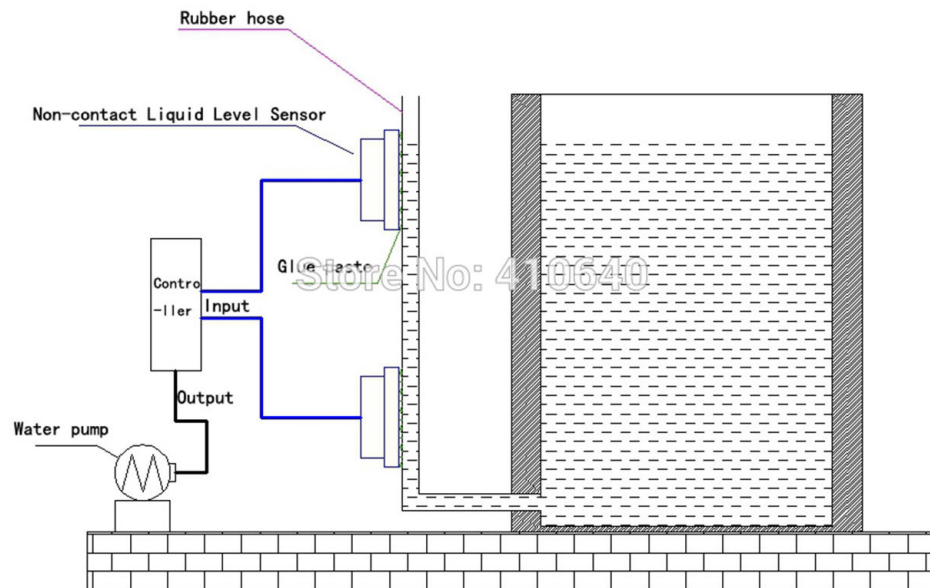
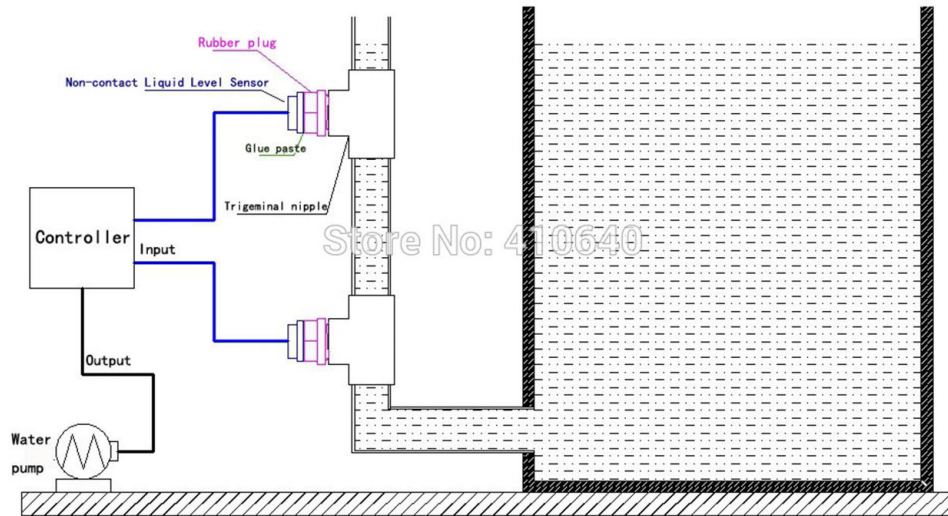


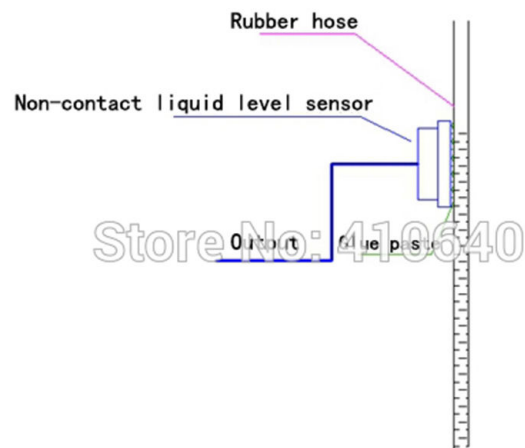


Detecting Probe Wire is 50CM Length

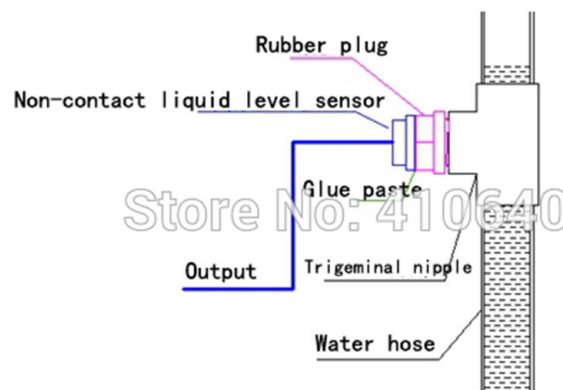
سنگاه الکترونیک ۷۲۴







Sensor Paste Directly To The Rubber Hose



Sensor Installed In The Trigeminal Joint Of The Iron Water Pipe