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承 认 书

SPECIFICATION FOR APPROVAL

客 户 _____
 CUSTOMER _____
 奥迪威产品编号 _____
 AUDIOWELL P/N _____
 品 名 _____ 规格型号 _____
 Name _____ Model _____
 数 量 _____ 日 期 _____
 QUANTITY _____ DATE _____

超声波传感器明细 ULTRASONIC SENSOR SPECIFICATIONS			
1. 产品型号	Model		
2. 产品简介	Introduction		
3. 产品应用	Application		
4. 外观尺寸	Dimensions		
5. 电性能明细	Specification		
6. 接口控制	Interface control		
7. 输出协议	Output protocol		
8. 使用示意图	How to install		
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客户签认 CUSTOMER APPROVAL	承认 APPD.		承认章 COMPANY CHOP
产品确认 PRODUCT VERIFY	制作 DWN.	审核 CHK.	核准 APPD.

注：承认书一式两份，请返回一份 PLEASE SENT ONE OF THE SAME TWO BACK

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1、 Model

Name: UM0008-001

Model: FA01L02-UM0008-001Z

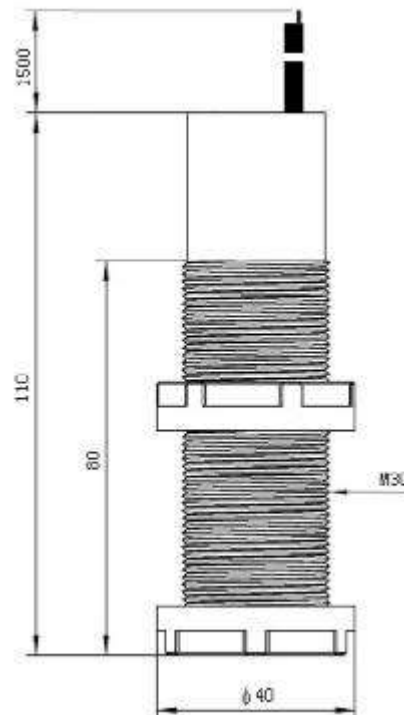
2、 Introduction

Using ultrasonic technology and incorporate design, the ultrasonic water level sensor detect the water level in a non-contact way, even slurry and other corrosive medium like waste water, hydrochloric acid and hydroxide could be detected. They can be applied to water supply and water disposal.

3、 Application

- ◆ **Water Supply and Water Disposal**
 - sluice and filtration Pool ;
- ◆ **Chemical and Medicine**
 - bank pot and material supply controlling system ;
- ◆ **Mining and Petroleum**
 - deposit ;
- ◆ **Food Manufacturing**
 - milk produce and alcohol produce、 drink produce ;
- ◆ **Agriculture and Transportation**
 - irrigation system and goods transit controlling ;
- ◆ **Industry Automatization**
 - assembly-line controlling and object orientation

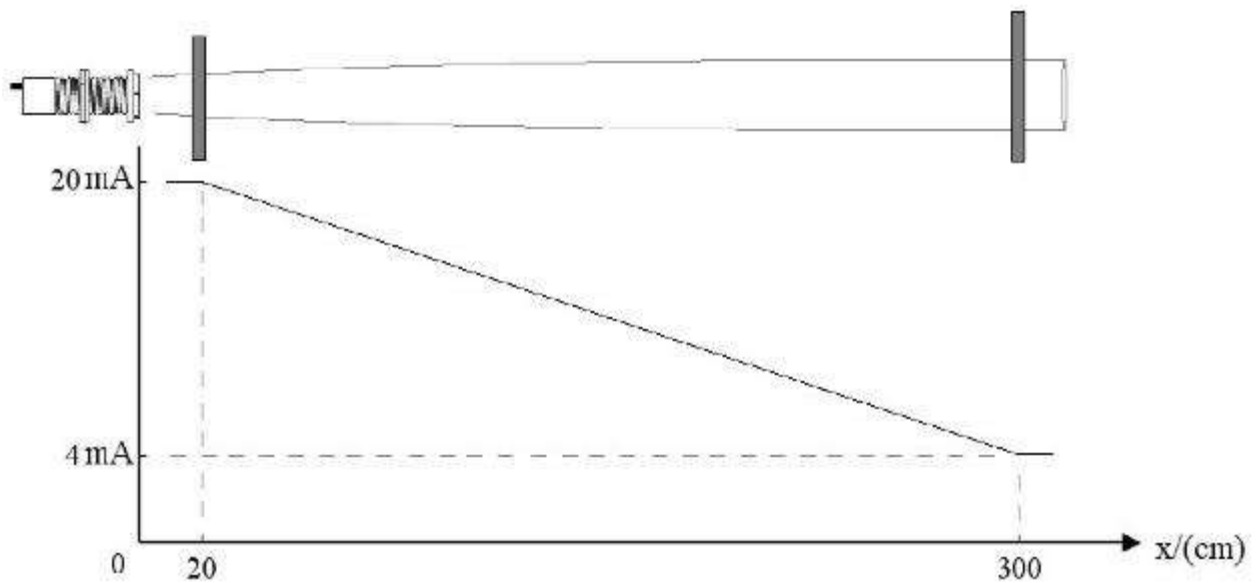
4、 Dimensions



5、Specification

Option	
Measuring Principle	Detect the distance by ultrasonic
Typical Application	Measure water level and object distance
Specification	
Frequency	40KHZ
Detect Range	20~300cm
Accuracy	±2cm
Display Accuracy	1cm
Response time	≥0.1s
Blind zone	20cm
Output	
Output current	20cm~300cm corresponding output 20~4mA
Rated operate condition	
Operation Enviornment	Indoor/outdoor
Condition temperature	-20℃~70℃
Relative Humidity	≤95%
Design	
Material	PVC
Length of cable	150±3cm
Power Supply	
Power	DC 24V
Current	≤20mA

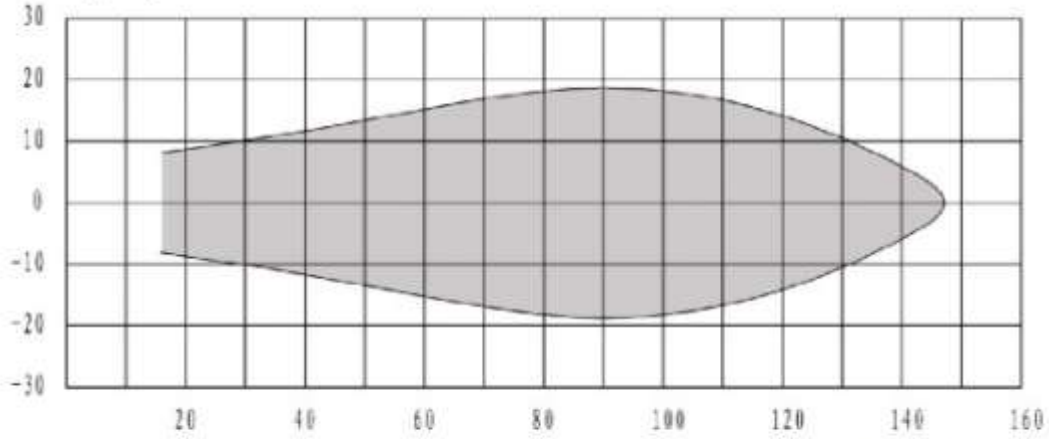
The curve of measuring distance and current:



Response Curve 1:

Measuring principle is in an open space

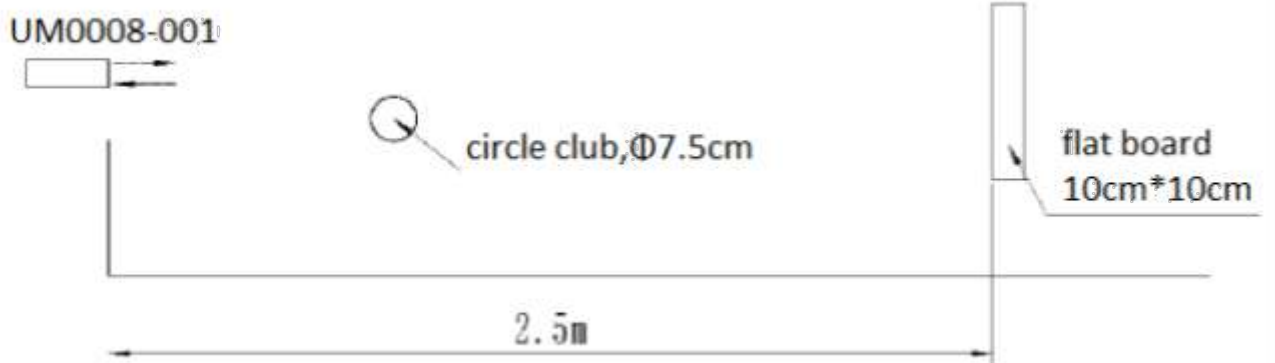
distance y(cm)

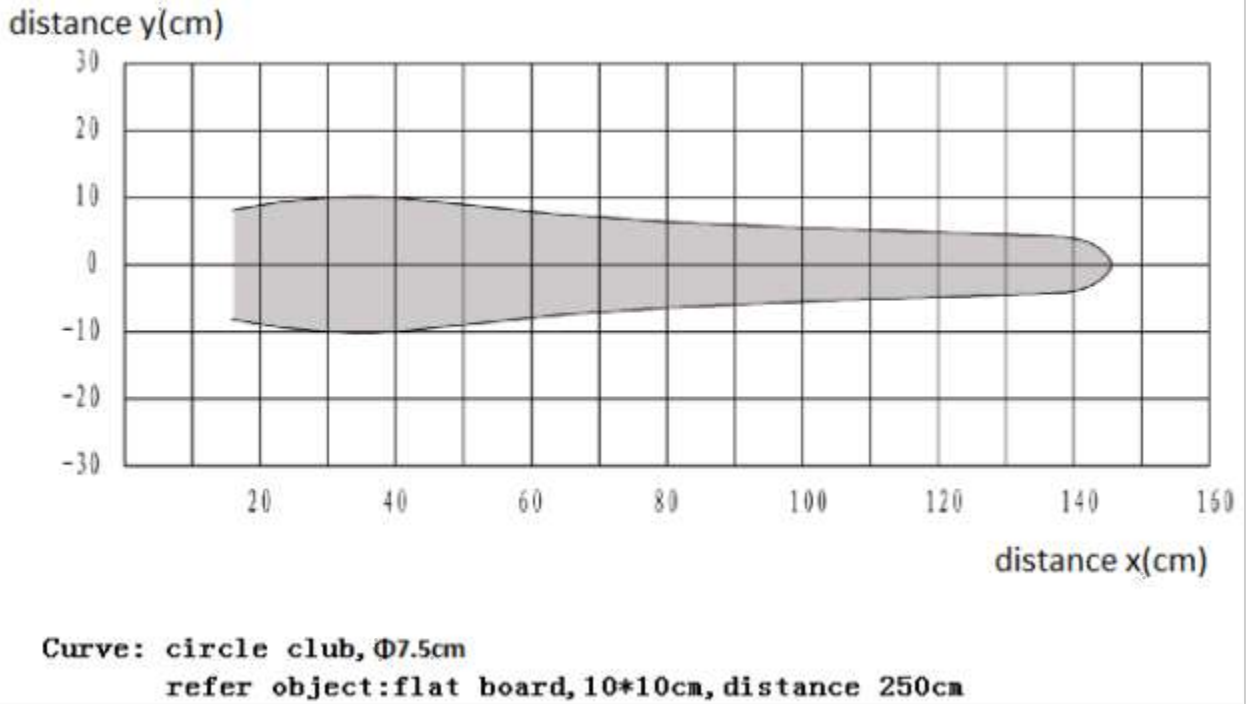


Curve: circle club, $\Phi 7.5\text{cm}$

Response Curve 2:

Measuring Principle



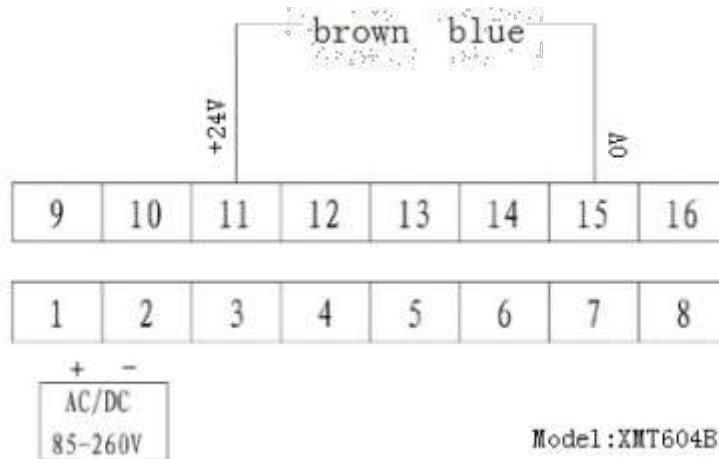


Remark: The curve shows that when a $\Phi 7.5\text{cm}$ round bar is placed under the dash area, the round bar can be measured. When the round bar is placed out of the dash area, what can be measured is a $10 \times 10\text{cm}$ flat plate at 2.5 meters or even nothing. If the bar is regarded as a barrier, the flat plate is regarded as liquid level. Then the dash area outside the curve could be regarded as a filtered space of the barrier.

6、Interface Control

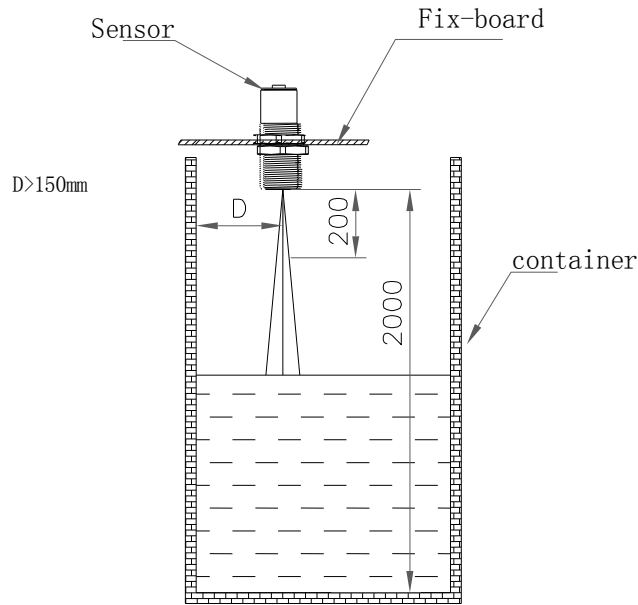
Colour	Function	Remark
blue	0V	- ($4 \sim 20\text{mA}$)
brown	DC +24V	+ ($4 \sim 20\text{mA}$)

example:



7、 How to install

For liquid detection, installation as follows(Unit, mm)



8、 Notice :

- 1、 The output current will be 20mA if wrongly tested;
- 2、 It is recommended to keep the open diameter of steel plate as 3.3cm-3.7cm when installation, and please make sure the rubber housing is assembled so as not cause resonance between sensor and steel plate, which may lead to failure of sensor.
- 3、 Ensure that the plane of sensor and the detect subject is at the same level. And keep it empty 20cm ahead of sensor and a circular radius of 15cm so as to avoid incorrect result.
- 4、 Normally, the time interval of data output is $250\text{ms} \pm 100\text{ms}$. But if it is tested in a complex environment or the liquid level changes suddenly, the time interval will be longer.
- 5、 Test is made under room temp., at the humidity of 50%. Deviation is possibly be caused if environment changes.

Accomplished by/Date		Approved by/Date	
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