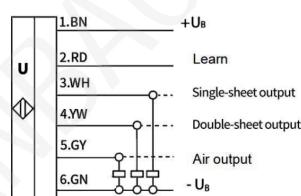
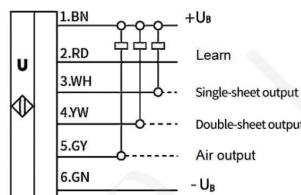



[www.lanbaosensor.com](http://www.lanbaosensor.com)

## Precautions

- Please do not supply voltages other than the normal operating voltage to avoid burnout of the sensor.
- Please avoid pulling on the lead wires to prevent damage to the electrical connections of the sensor.
- Do not cover the surface of the sensor probe to avoid affecting the detection range of the sensor.
- Please use the supplied mounting nut to secure the sensor in place and avoid using other non-standard clamping devices to ensure good sensitivity.
- Strong mechanical vibration should be avoided when the sensor is used, and the working environment should not have strong electromagnetic interference and rapid air circulation.
- Please do not disassemble the sensor without permission. If the sensor does not work properly, please contact the after-sales service in time to solve. The company will not bear all the consequences caused by the disassembly without permission.

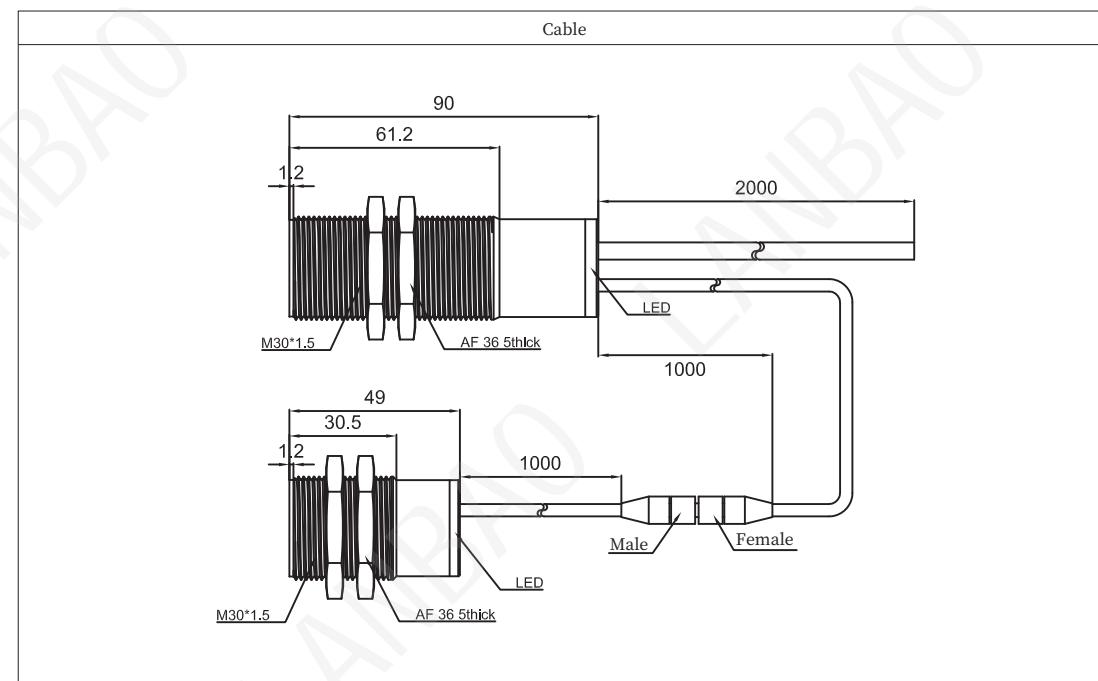
## Wiring diagram



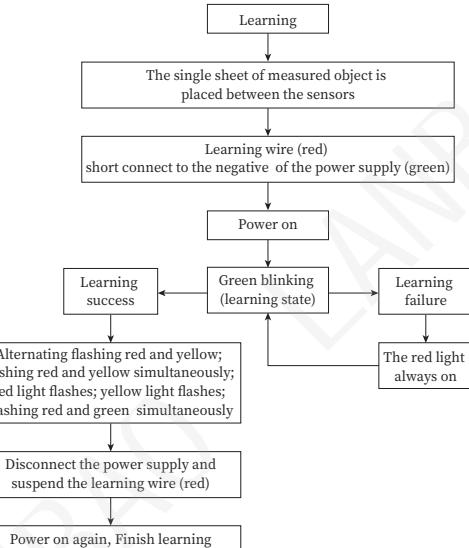
## Technical specifications

Model	NPN	UR30-DC40D3NO	UR30-DC40D3NC
	PNP	UR30-DC40D3PO	UR30-DC40D3PC
Sensing range	20-40mm		
Detection	Non-contact type		
Calibration mode	With calibration mode		
Impedance	>4kΩ		
Voltage drop	<2V		
Response time	Single sheet: 17ms; air: 17ms; double sheet: 52ms		
Oscillator frequency	About 112KHz		
Rated operational current	≤200mA		
Supply voltage	18...30VDC		
No-load current	≤50mA		
Angle	±8°		
Teach-in wire	Learn and calibrate single sheet of different materials		
Output	3 switching modes, air, single sheet and multiple sheets		
Circuit protection	Reverse protection, instantaneous over voltage protection, short circuit protection, overload protection		
Operating state	Single sheet: green light; Double sheet: red light; Air: yellow light		
Learning state	Learning: The green light is blinking; Learning success: Alternating flashing red and yellow (thin material); Flashing red and green simultaneously (thick material); Flashing red and yellow simultaneously; The red light flashes; The yellow light flashes; Learning failure: Red light on (about 2s)		
Ambient temperature	-25°C...70°C (253-343K)		
Storage temperature	-40°C...85°C (233-358K)		
Material	Nickel plated copper, glass beads mixed with epoxy resin		
Protection degree	IP67		
Connection	2m PVC cable		

## Dimensions

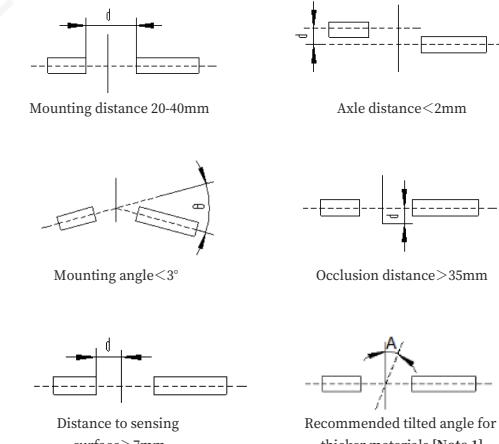


## Learning method



## Mounting

Since ultrasonic sensors are directional, the mounting position needs to be taken care of. It is recommended that the two probes be mounted in a position where their center axes coincide in order to obtain a higher sensitivity.



[Note 1] Corrugated paper < 35°, solar cell pole piece about 30°, thin metal piece about 27°, chip about 11°, the actual best mounting angle need to learn to confirm repeatedly.

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This specification doesn't relate to patent responsibility. Moreover, our company is always devoting to improving product quality, and reserves the right to improve products by changing pattern or size without prior notice. We have considered all the notes when compiling this specification, but for the wrong or clipped parts, and any loss caused by using this manual information, we bear no responsibility.

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