



### Ultrasonic proximity switch

- TTL export (receive all the time).
- Small blind spots
- Double angle
- Transceiver split

#### Technical parameters

Detection range: 40~1000mm  
 Blind spots: 0~40mm  
 Standard detection plate: 300×300mm  
 Angle: X=75° Y=45°  
 Sensor frequency: About 58KHz  
 Response delay: 100ms  
 Operating voltage: 5-12V DC, 10%Vpp  
 Protection circuit: Anti-reverse connection protection, instantaneous overvoltage protection  
 No-load current: ≤28mA

#### lose

Output method: Numerical amountTTL232 interface

Resolution: 10mm  
 Repeatability: 1% full-scale value  
 Temperature drift: 0.17%/°C  
 Linearity: <2%

#### Characteristics

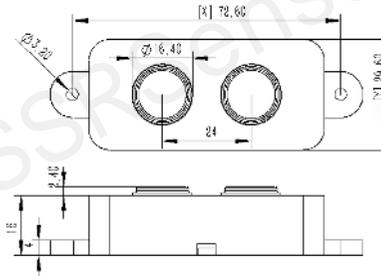
Operating Temperature: -20° C~+70° C(253~343K)  
 Storage temperature: -40°C~+85°C(233~358K)  
 Electromagnetic compatibility: GB/T17626.2-2006 , GB/T17626.4-2008  
 Protection level: IP65  
 Connection: VC, four-core cable  
 Shell material: plastic, transducer aluminum  
 Weight/Line Length: 80g/1m

#### Electrical connections

White line: TX  
 Black line: RX  
 Blue wire: negative power supply  
 Brown wire: power positive

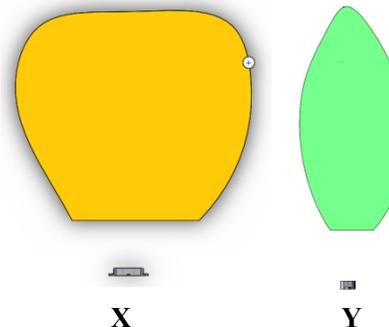
#### Dimensions

Cut-out size recommendations:  
 The diameter of the opening hole is 16.4mm  
 The thickness of the case is 2.4mm



#### Response characteristic

**Note:** This proximity switch detection area is non-rotationally symmetrical, please pay attention to the angle when installing



Target: 300\*300 flat plate The longest distance is about 1000mm Unit: mm

Note: Deviations may be present and are for reference only

#### Instructions for Use Agreement

Product working baud rate: 115200

Data format: hexadecimal

#### How it works

Automatically returns data after power-up, without sending instructions

#### Specific data schematic

fra	ID	distance	distance	The top 4 digits	Fram
me	number	/cm	/0.1mm	and checksums	e
hea				are low	end
der					
A5	01	0x	0x	0x	0A

For example: Return data "A5 01 19 02 C1 0A", 19 conversion distance = 25cm, 02 conversion distance = 0.2mm, that is, target distance = 25.02cm

Nearest Output Value: 250mm

Maximum output value: 1100mm

#### Installation

Since ultrasonic sensors are directional, attention needs to be paid to the installation position. It is recommended that the installation position is perpendicular to the DUT for better relative accuracy.

#### Notes:

- 1) Please do not input voltage other than the normal working voltage to avoid close switch burnout failure.
- 2) Please avoid pulling the proximity switch exit wire too hard to prevent damaging the electrical connection of the proximity switch.
- 3) It is forbidden to cover the surface of the sensor probe to avoid affecting the detection range of the sensor
- 4) Use a sticker to fix the sensor
- 5) The sensor should avoid strong mechanical vibration when used, and the working environment should not have strong electromagnetic interference and rapid air circulation
- 6) Please do not disassemble the sensor without permission, if the sensor does not work normally, please contact the after-sales service in time to solve it, and the company will not be responsible for all the consequences caused by disassembling without permission