

ULTRASONIC LEVEL SENSOR

PR-UE3003



GENERAL FEATURES

- Ultrasonic working principle
- 0-50°C wide automatic temperature compensation
- Advanced algorithm adopted, not affected by low temperature
- Small blind area
- 2.5m, 5m, 10m, 15m wide measuring ranges
- Non-contact and up to 0.25%F.S accuracy customized
- Reverse polarity protection, surge lightning protection, anti-obstacle interference supported
- Short response time, power-off self-recovery function
- Economical and maintenance free design
- IP67 high protection class, IP68 can be customized

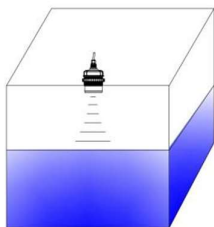
PR-UE3003 is an ultrasonic level(distance) sensor that adopts non-contact measurement mode, with high reliability, maintenance-free features. It does not easily receive disturbance from environmental electromagnetic fields, and meets the transmission requirements in most closed or open containers.

The communication protocol used is Modbus-RTU, and the serial port supports 1200, 2400, 4800, 9600, 19200, 38400, 57600, 11 5200 baud rates.

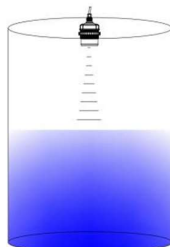
PR-UE3003 owns high precision class. No matter 4-20mA, 0-5V, or RS485, it is all 0.25%-0.5%F.S, the blind area is small, and it owns complete protection and receives little interference from obstacles. Its response is fast, and reading is stable. Meanwhile, we support OEM service.

APPLICATIONS

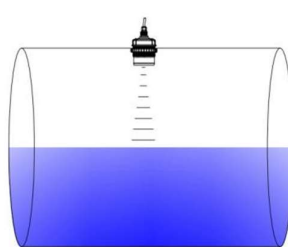
- Water, oil, diesel level measurement, pump control in tank etc.
- Treatment plants
- Food industry
- Chemical industry
- Rivers, channels, lakes...



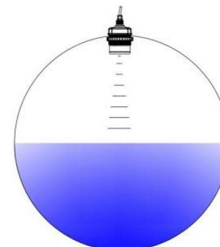
For rectangular tanks



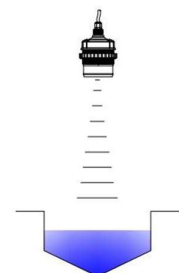
For cylinder tanks



For horizontal cylinder tanks



For cube tanks

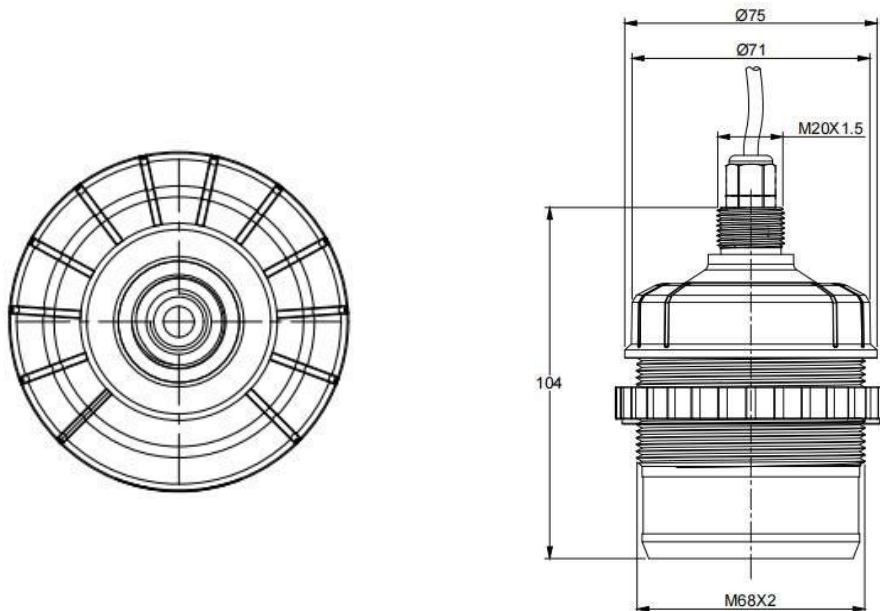


For flumes

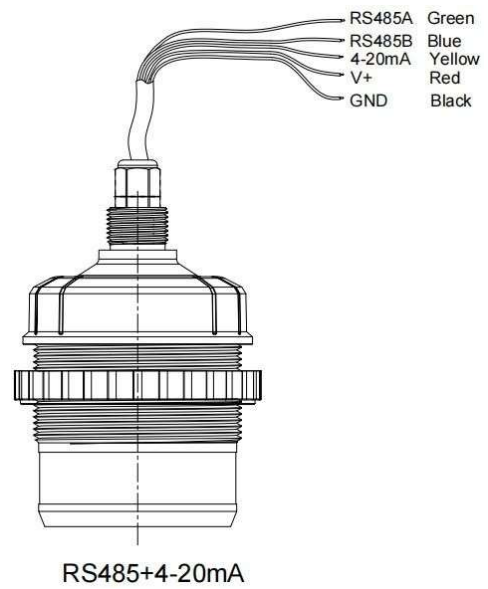
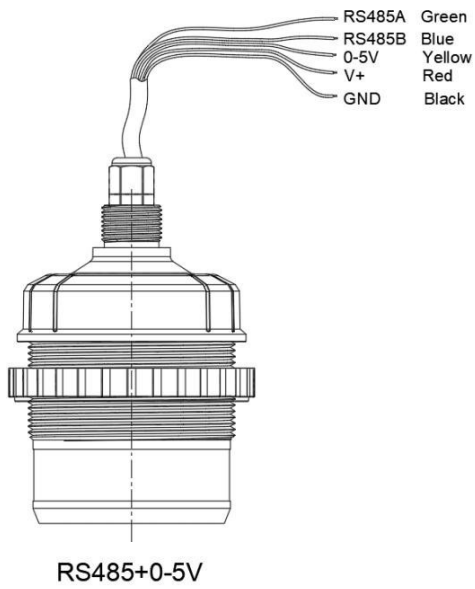
TECHNICAL SPECIFICATIONS

Measuring range	2.5m, 5m, 10m, 15m, others on request
Blind area	4-20mA(2.5m/5m):≤150mm 0-5V(2.5m/5m):≤200mm 4-20mA/0-5V(10m):≤300mm 4-20mA/0-5V(15m):≤500mm
Accuracy	0.5%F.S (typical), 0.25%F.S (by customized)
Beam angle	12°
Measuring mode	Distance mode(default), or level mode optional
Output signal	RS485+4~20mA; RS485+0~5V
Power supply	10~30VDC(24VDC recommended, 5~30VDC by customized)
Working temperature	-10~50℃(-40~80℃ by customized)
Working current	≤100mA
Installation mode	Nut clamping fixed installation, screw-in installation, M68×2
Response time	0.1s~10s(adjustable)
Product material	Polypropylene + glass fiber
IP rating	IP67 typical, IP68 by customized

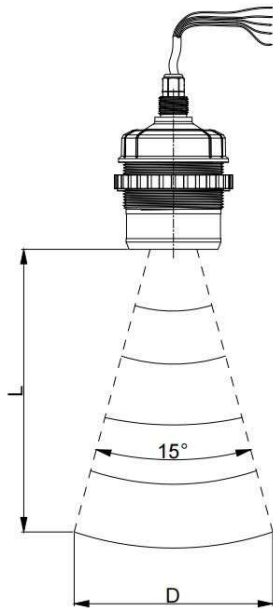
DIMENSIONS



ELECTRICAL CONNECTIONS

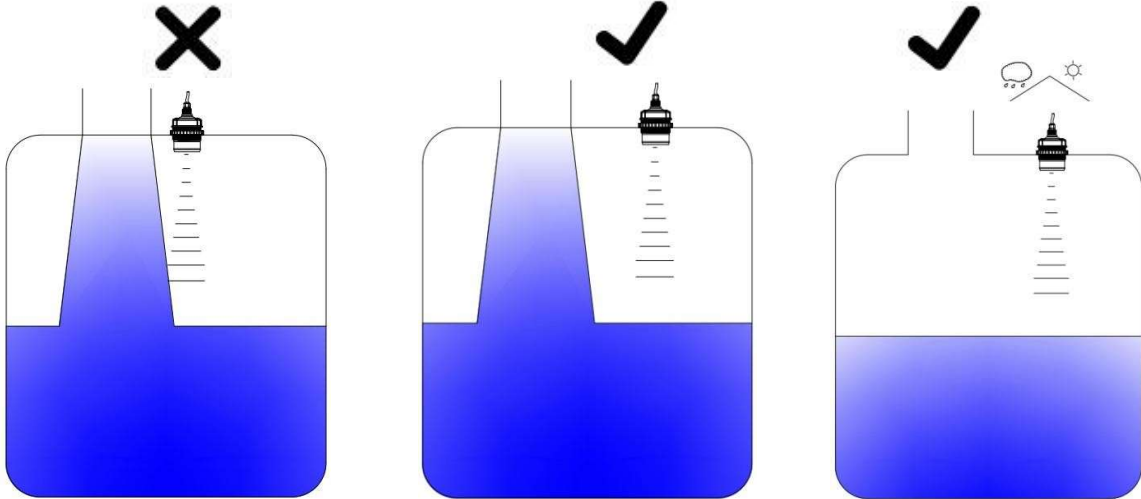


MECHANICAL MOUNTING

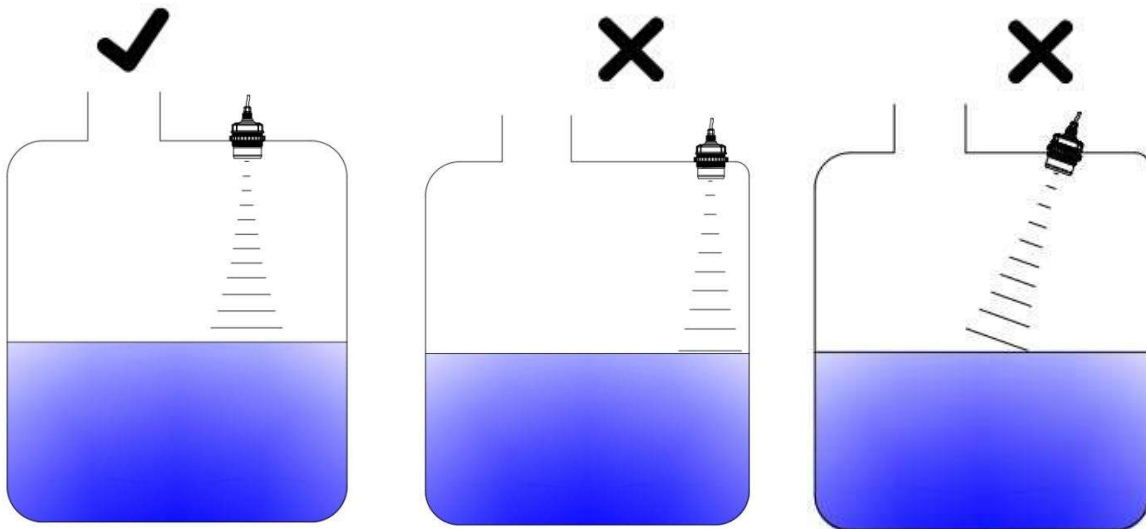


L	D
1m	30cm
2m	60cm
3m	90cm
4m	120cm
5m	150cm
6m	180cm
7m	210cm
8m	240cm
9m	270cm

MOUNTING WARNINGS



- For level measurement, the sensor must not be installed near the tank input.
- It is recommended that the sensor be protected against sun and rain.



- The sensor must be installed perpendicular to the surface to be measured and should not be placed close to the side surface.

HOW TO ORDER

Model No.

Accuracy

1=0.5%F.S(typical)

2=0.25%F.S(By customized)

Cable length

0=no cable

1=Cable 1m

X=Cable x m

PR-UE3003

X

X

X

X

Measuring range

1=2.5m

2=5m

3=10m

4=15m

X=By customized

Signal output

1=RS485+4~20mA

2=RS485+0~5V

X=By customized