

Ultrasonic Distance/Level Sensors TL100 Series



Model: TL101



Model: TL103

Profiles:

TL100 Ultrasonic Level Transmitter is developed based on 30 years of experience in industrial measurement and control specifically for low-cost, small installation space. It combines ultrasonic sensors, temperature sensors, ultrasonic servo circuit, transmission circuit and uses SMD components and ASIC which is developed together with the United States partner. All these features realize a concise and smart level transmitter. All gold-plated circuit boards, internal electromagnetic shielding and software digital filter are tested for (industrial) 48 hour under high and low temperature aging. It promises higher and long-term reliability. Shell is made of solid texture and good NLEPF acoustic characteristics of synthetic material. The body is shape sophisticated aesthetics, waterproof, dustproof, and can adapt to the most of working conditions on site. On liquid cans, the walls, or equipment arm movement, it's easy to install the TL101 ultrasonic transmitter. There is no need of such tools as gongs nails, as long as there is a M60×2.0 gongs hole. A very quick and easy installation, maintenance can be realized.

Specifications:

Power Supply: DC24V/300mA (TL101); 12VDC or 24Vdc/300mA (TL103, IP66, IP68 optional); .

TL101 Model Range: 5, 7, 10, 12, 15m optional

TL103 Model Range: 1, 2, 3, 5, 6, 8, 10, 12, 15 m; 20, 30, 50 m optional

Operating temperature: -10...60 °C (-20 to +70 by Customized)

Storage temperature: - 40 °C ~ 85 °C

Blind Area: $\leq 300 \sim 1200$ mm (according to different range and sensor)

Detection accuracy : 0.5%FS (at blind-fold drive away, 25 °C)

Output: ① Voltage: 1 ~ 5V/ 0~5V 3 wires

② current: 4 ~ 20mA 2 wires , 3 wires and 4 wires according to range.

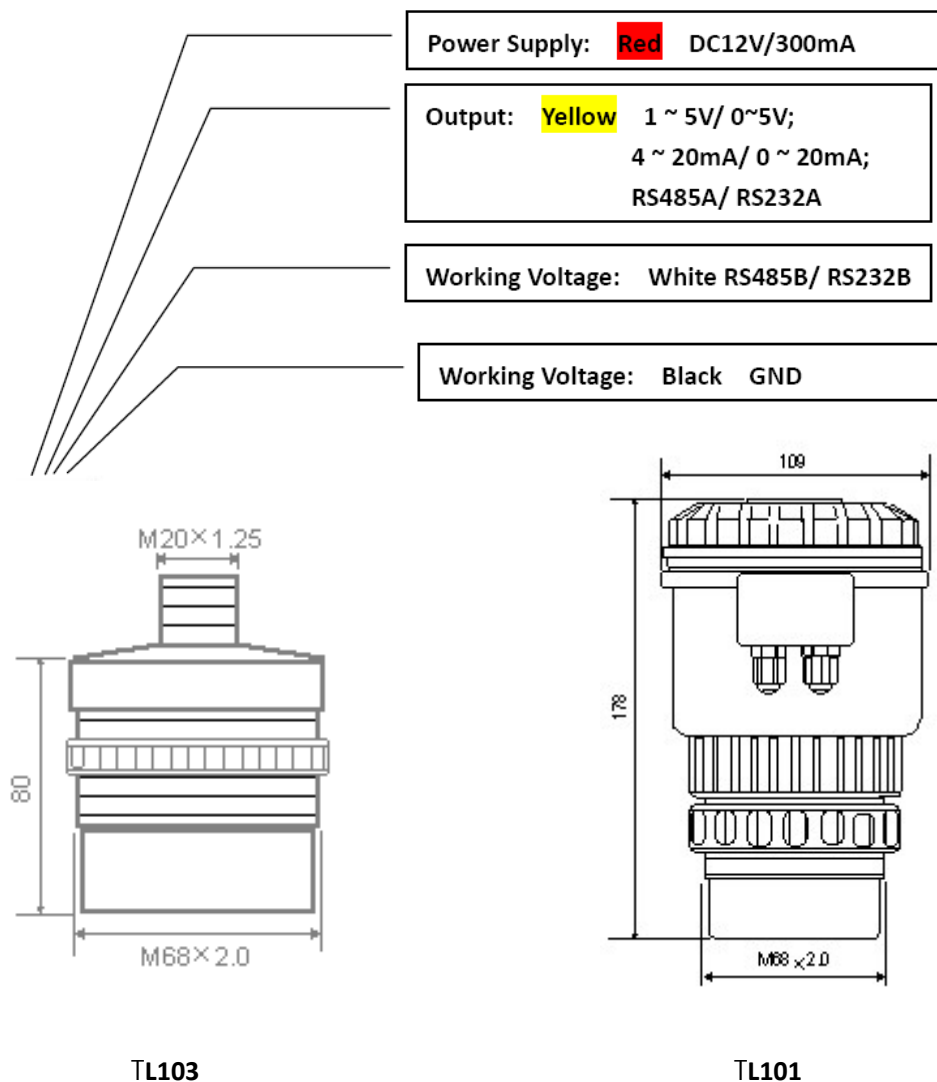
③ serial port: RS485/ RS232 just for TL101&TL103

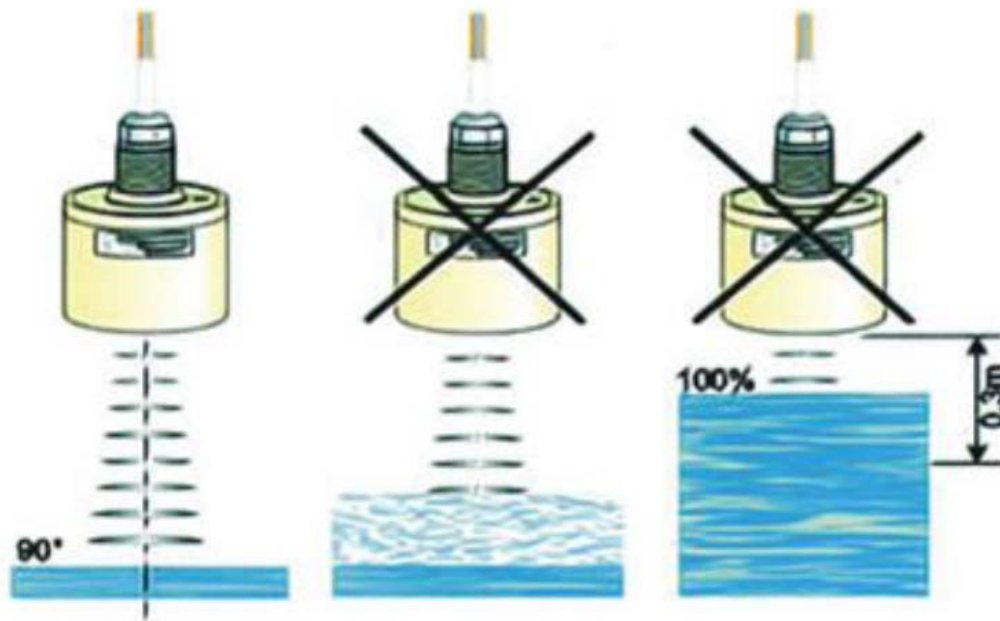
④ NPN Switch signal or Relay alarm output (1 OR 2 channels optional)

Protection class IP65 (default), IP66-IP68 (customized!)

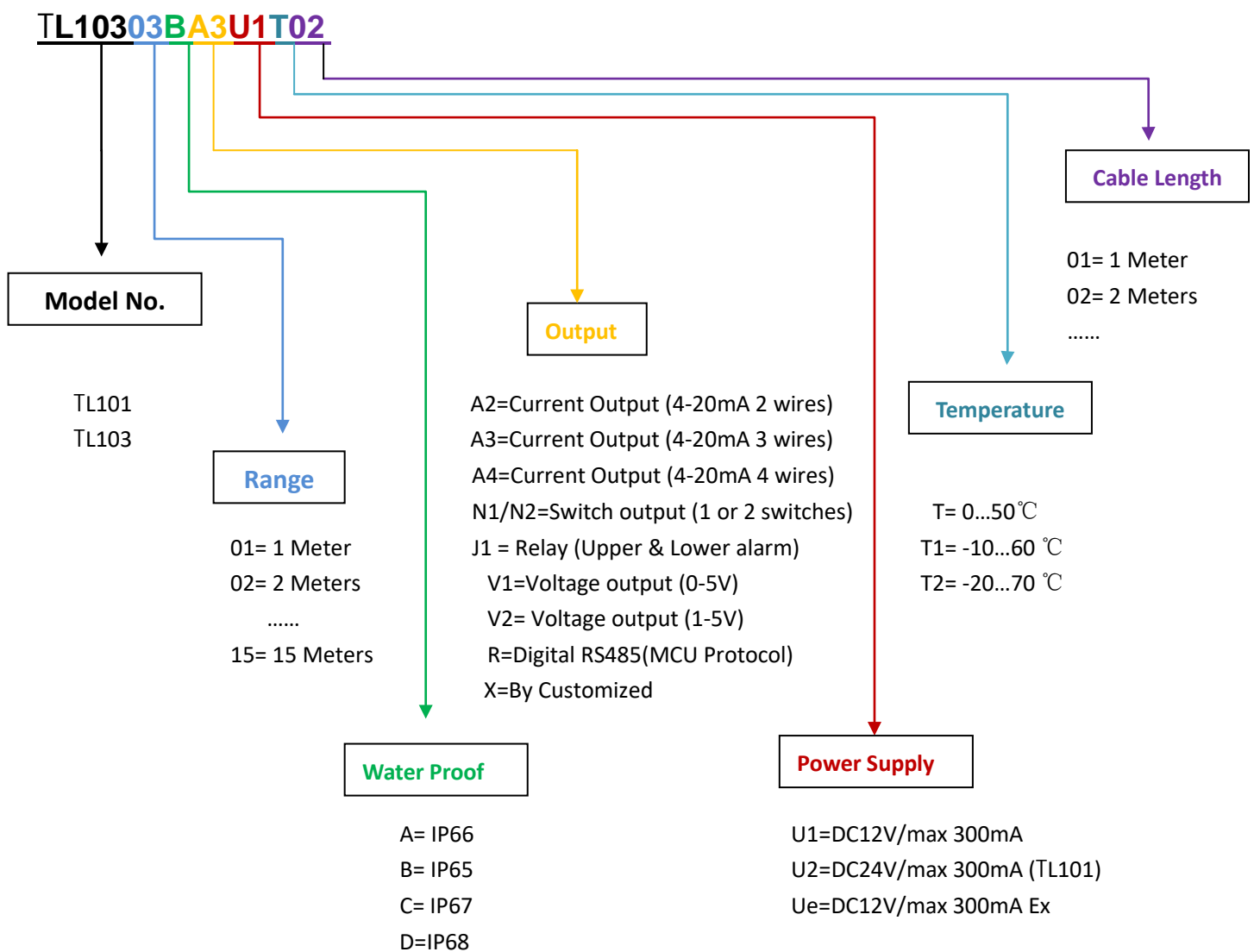
Installation mounting size: M68× 2.0 and M108*2.0 (TL103); M68*2.0 (TL101)

Ultrasonic Level Transmitter Dimensions:





Model Code Selection Table:



Application attentions:

1) Measuring range and Requirements of blind zone.

2) Media type to be measured (Liquid or solid, such as: Water, sewage, mud, gasoline, diesel oil, toluene, sulfur dioxide, ore, coal, cement, soybeans, wheat, corn, flour etc.)

If it is liquid: Is there liquid steam, mist, foam, wave, stirring, floating objects;

If it is solid: Is there a dust, granular or powder media is.

3) The minimum ~ maximum temperature and pressure of media.

4) Corrosion of media. If it is placed inside the jar, the jar needs to know the material, and if there is corrosion of the lining.

5) The need for anti-corrosion, explosion-proof, to split or an integrated one.

6) Working environment: exposure to the pond, cover the pond, lying tank, vertical tank, tank, pot is through atmospheric pressure and so on.