HYDROTECHNIK UK
TEST ENGINEERING LTD

Standard and Explosion-proof ultrasonic level sensors for continuous measurement

Ultrasonic Level Sensor

- 5m, 10m, 15m, 20m ranges available
  Supports customisation of larger ranges
- Explosion-proof certified, high explosion-proof level (Ex d IIC T6 Gb) option
- IP66/IP67 protection level
- Temperature compensation, high accuracy
- RS-485 communication interface
- Advanced echo processing method avoids false echoes
- PVDF material probe suitable for corrosive liquid and environment
- CE certified
- Low maintenance cost

Ultrasonic level sensors adopt non-contact measurement technology which can be reliably applied to continuous liquid level measurement in various open tanks.
The time difference between the emission and reception of sound waves is used to calculate the liquid level height.

DISCOVER MORE AT HYDROTECHNIK.CO.UK/LEVEL

Pump protection

Tank depth monitoring

Reservoir level monitoring

DESCRIPTION

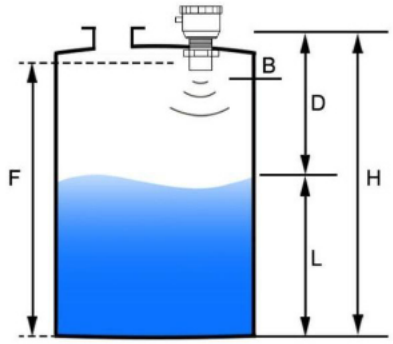
Ultrasonic Level Sensors are available in standard or explosion-proof configurations.

The standard model is suitable for continuous level measurement of various tanks and pools in non-flammable and explosive gas environment. It is suitable for installation in large pools, tanks, drains, storage tanks, tanks, etc.

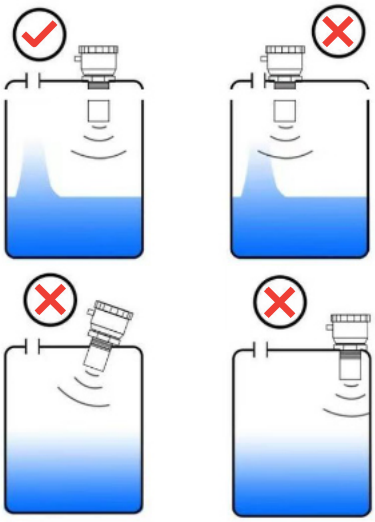
With an accuracy of ±0.25% and with all input and outputs protected against lightning and short circuit, the standard model is widely used in various occasions such as sewage treatment, chemical industry, thermal power plants, ships, etc. for continuous level measurement.

The instrument is safe, clean, high-precision, long life, stable and reliable, easy to install and maintain, etc and is suitable for various applications such as acid, alkali, salt, anti-corrosion and high-temperature.

INSTALLATION



- B: Blind Area
- D: Empty Distance
- L: Level
- H: Mounting Height
- F: Level Fullness
- L = H - D



- The reference plane for measurement is the lower edge of the sensor.
- The upper limit of the level must not enter the measurement blind zone.
- When measuring the material level, the inlet must be avoided.
- When installed outdoors, protection from long-term rain is advised.

EXPLOSION-PROOF MODEL

As well as the standard model, a safety / die-cast aluminium alloy waterproof and explosion-proof model is available.

The explosion-proof grade of the instrument achieves the Atex Ex d IIC T6 Gb rating.

TECHNICAL DATA

Measuring ranges	5m, 10m, 15m (and 20m for explosion-proof model)
Transducer material	General: ABS
	Anti-corrosion: PVDF
Blind Area	≤0.3m (5m/10m)
	≤0.6m (15m)
Resolution	0.5% of the set range of earth
Beam angle	6°(5m range)
	8°(10m range)
	10°(15m range)
Error	≤1%
Display	LCD display
Input Rated Voltage	85~264 VAC 50/60Hz
	18~30 VDC
Output Type	2-wire system 4…20mA
	4-wire system 4…20mA
	Optional: RS-485/relay output
Relay contact capacity	4A 250V AC/30V DC
Ambient temperature	-20…60°C
Process temperature	-20…60°C or -20…80°C
Process pressure	Atmospheric pressure
Cable Interface	M20x1.5
Process connection	Thread
	Flange
Protection class	IP65/IP66/IP67 (Ex d IIC T6 Gb for explosion proof model)

ORDERING CODE

HTTE-ULS-AA-BB-CCC-DDD-E-FF

*Replace **AA** with the code for required range*
05 = 5 meters
10 = 10 meters
15 = 15 meters

*Replace **BB** with the code for the required input voltage*
AC = 85~264 VAC 50/60Hz
DC = 18~30 VDC

*Replace **CCC** with the required output signal*
I22 = 2-wire 4…20mA
I24 = 4-wire 4…20mA

Replace ***DDD*** with the code for the required output type
420 = 4…20mA only
485 = 4…20mA and RS-485

*Replace **E** with the number of relays required*
0 = No relays
1 = One relay
2 = Two relays

*Replace **FF** with the required process temperature*
60 = -20…60°C
80 = -20…80°C

ORDERING EXAMPLE

HTTE-ULS-10-DC-I24-420-1-60

HTTE-ULS Ultrasonic Level Sensor with a 10 meter range, 18~30 VDC input voltage, 4…20mA 4-wire output signal, no RS-485 output, one relay, and -20…60°C process temperature.