

**ULTRASONIC LEVEL METER**

# HD320

**Compact Two-Wire system**  
**Easy installation, Reasonable cost**

**Two-wire system**

In "Two-wire system", the electric power is supplied through the data line, so there is no need of power line connection.

**Compact one unit includes sensor and control circuit**

Housing material is chemical-resistant resin, PP.

**Rich information display by graphic LCD**

Easy and straight forward operation by Menu driven mode control and data image display

**Four display mode**

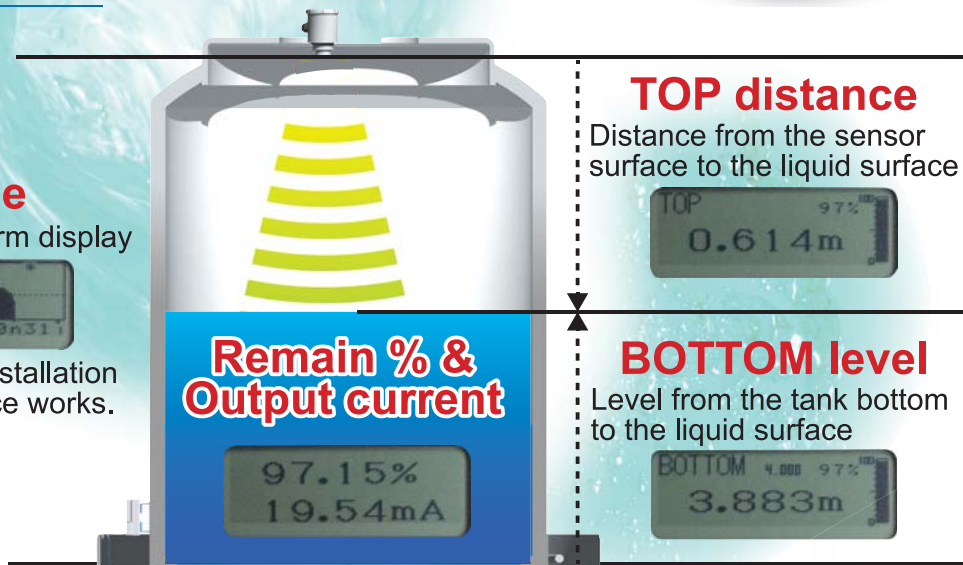
Display mode can be selected from 4 display modes.

**A-mode**

Refelected waveform display



Useful for the installation and maintenance works.



**Mask function**

Mask function eliminates interference caused by obstructive objects in a tank and enables correct measurement.

**Open channel flow measurement**

Measures integrating or instantaneous flow of triangular, rectangular (with or without end contraction) or parshall flume.

**Usage**

- Level control of liquid in a tank
- Level measurement of pond, lake or river
- Open channel flow measurement



■ Level measurement in a tank    ■ Level control of a river

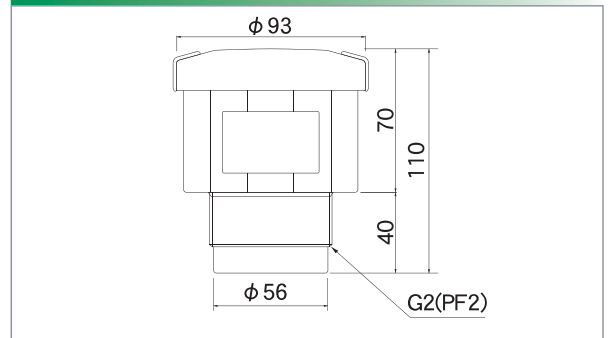
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## Specifications

Model		HD320
Channel		1 CH
Frequency		50 kHz
Measurement Object		Liquid
Measurement range		0.25 - 7.5 m
Resolution		1 mm
Accuracy		±0.25% F.S. (±1.88 cm)
Data update cycle		10 seconds
Sensor directive angle (beam angle)		14°(-6dB) / 10°(-3dB)
Power source	Voltage	24 V DC
	Power consumption	0.6 W
Display		Graphic LCD
Output	4-20 mA Current	Resolution: 12 bit (Max. load 500Ω 24V)
	Operation temperature	-20 to 70 deg C
Material		PP
Protection		IP65 level (without cap: IP20 level)
Dimension		dia. 93 x 110 mm
Cord length		10 m
Weight		350 g
Screw		G2

## Dimensions



## Notice for installation

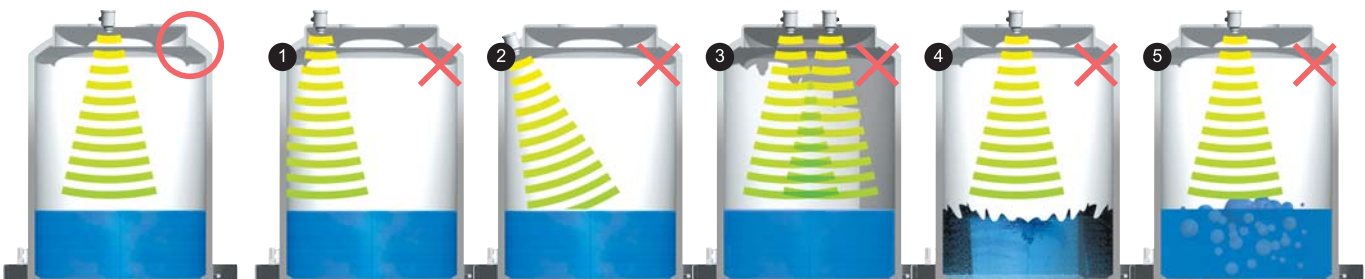
\* Do not install the unit inside of a tube like below image



\* Do not use metal nut or metal flange. It may cause error on measurement.

\* Please use nut or flange that made of plastic.

## Ultrasonic Level Meter - Notes on sensor installation



### • Avoid obstacles

Make sure that no obstacles are interfered within the directivity angle of the sensor of the ultrasonic level meter. (1)

### • Make sure the sensor position

Make sure the transmitting/receiving plane of the ultrasonic sensor is parallel to the object to be measured. Do not install a sensor in the center of a tank. (2, 4)

### • Do not install more than one sensor

Multiple ultrasonic sensors in a tank will interfere with another one. (3)

### • Avoid strong water movements or bubbles

Swirling water and bubbles might have bad effect on precise measurement. (4, 5)