



Ultrasonic level meter

# MYSONIC

MUM3100

## Features

1. Measurement can be taken without contacting the object to be measured.
2. The effective measuring range is 0 – 1 m, so it can be used without worrying about the dead zone.
3. The output is 4 – 20 mA of the international standard signal, so it can be directly connected to typical industrial instrument.
4. The sensor head portion does not contain an electronic circuit, preventing it from getting affected by the environment.
5. The temperature sensor built in the sensor head portion automatically adjusts the temperature.
6. Zero and span adjustments can be correctly and easily set using the digital switches and volumes.

### Converter **MUM3100** Series Model/Code Table

Example)    MUM31 |    1 |    0   

Specification Code		Remarks
MUM31	0	
Power voltage	0	DC12~28V, 4~20mA
and *	1	DC12~28V, 1~5V
Output signal	7	AC100V, 4~20mA
	8	AC200V, 4~20mA

Items with \* mark are semi-standard goods and may take a while for delivery.

### Sensor **MUS30** Series Model/Code Table

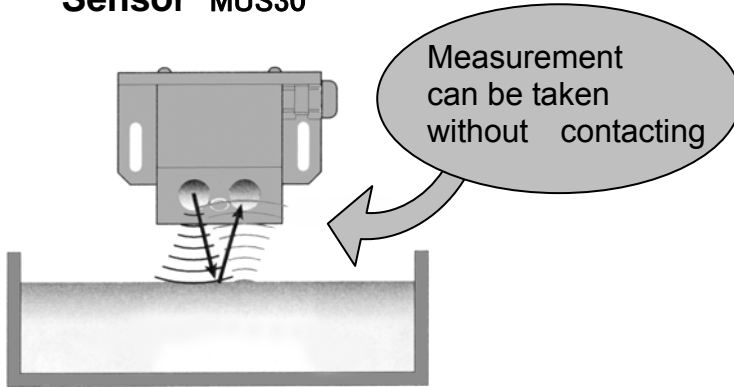
Example)    MUS30S |    G |    R |    10   

Specification Code		Remarks	
MUS30S			
ω - type *	Pullout	G	Ground
	opening	C	Metal connector
		X	Special
ω O	Pullout opening installation orientation	R	Right (viewed from the corner side)
		L	Left (viewed from the corner side)
	*	X	Location other than above
Length	Blank	6m	
		1~20	The length is indicated in meters

## Measurement principle

The ultrasound wave is emitted from the top, and the time it comes back from the reflecting surface is measured.

### Sensor MUS30



## Specifications

### Sensor MUS30

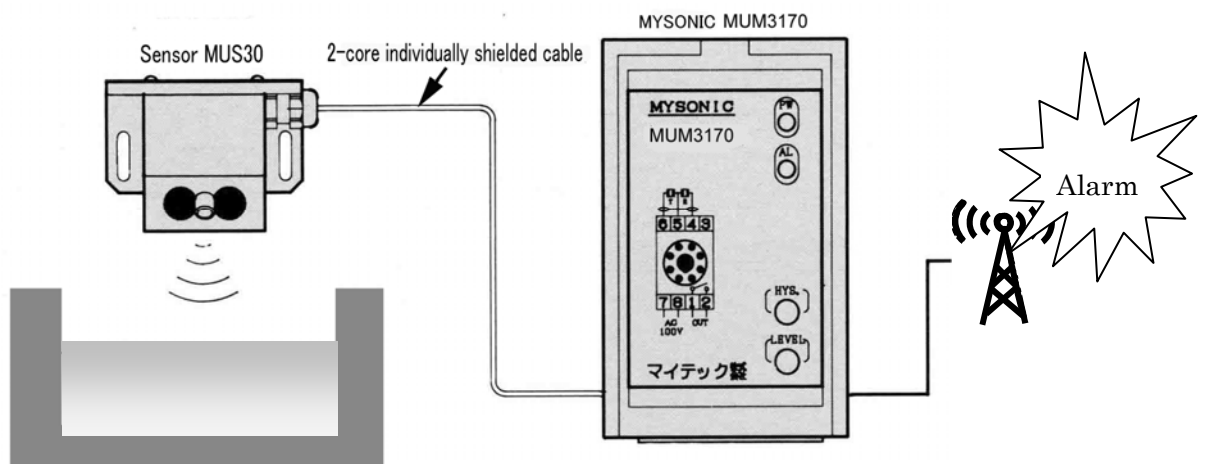
Type	MUS30S
Oscillator	Piezo element
Temperature sensor	Thermistor
Case material	Aluminum
Operating temperature	-20~+60°C
Installation	M4 screw fixing
Protective structure	IP33
Weight	Approx. 200 g

## Specifications

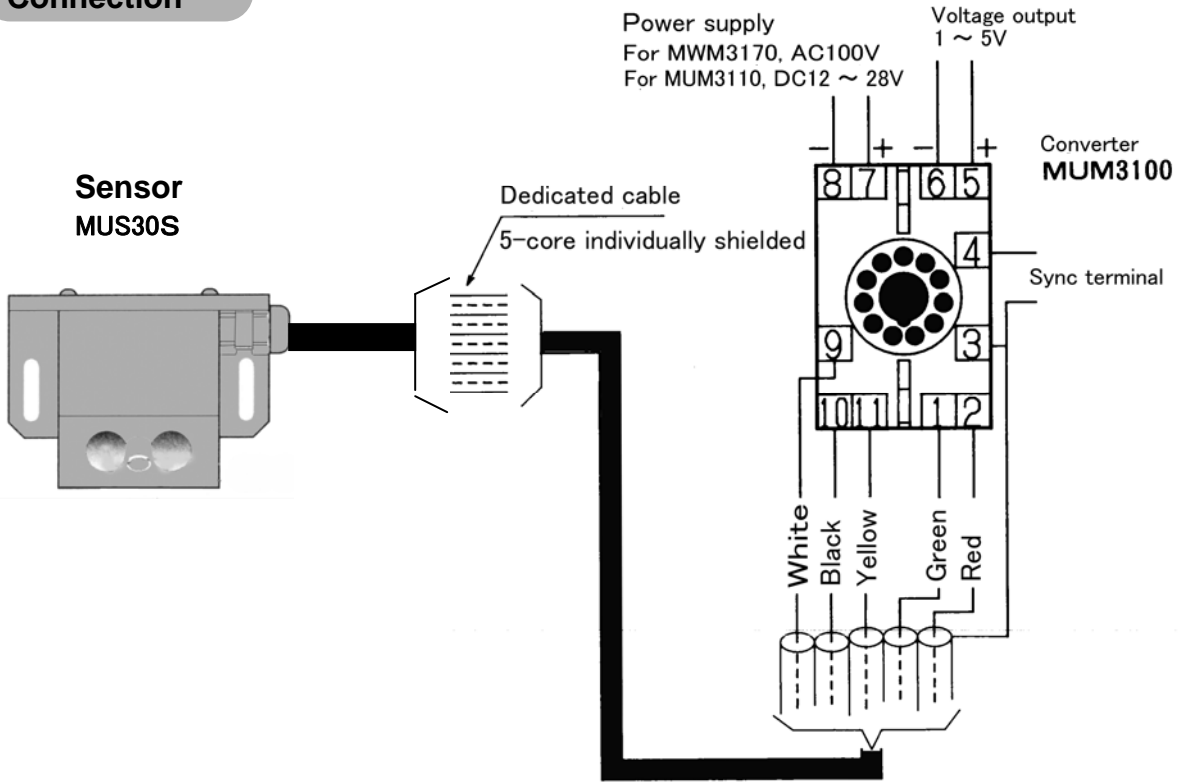
### Converter

Type	MUM3100	MUM3110	MUM3170	MUM3180
Measurement range	0~1m			
Output	4~20mA(600Ω)	1~5V	4~20mA	1~5V
Power supply	DC12~28V		AC100V	
Current consumption	6mA+Output current	6mA	Approx.1W	
Operating temperature	-20~+50°C			
Protective structure	IP30			
Weight	Approx. 300 g			

## Combination



## Connection

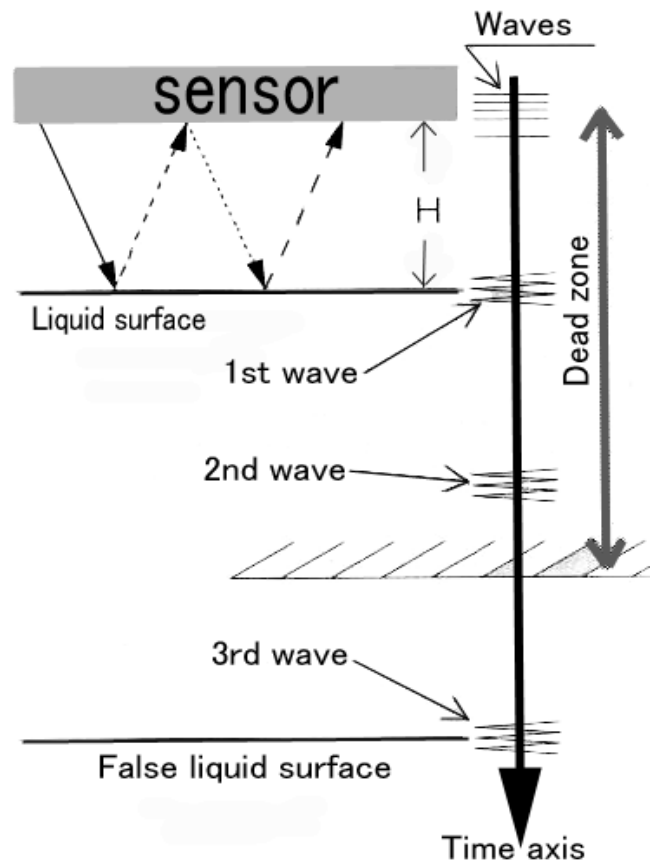


## Problems with conventional products

Malfunction which conventionally could not be prevented with a common ultrasonic level meter.

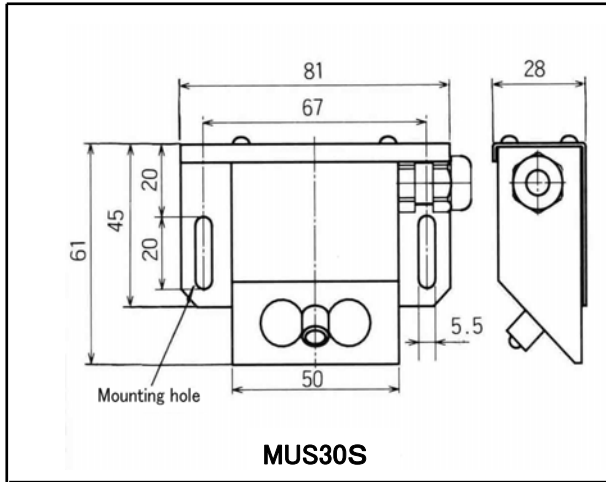
Not being affected by multiple echoes is a feature of this sensor, **MUS30**.

Due to this dead zone, the 1<sup>st</sup> wave cannot be detected, and the 3<sup>rd</sup> wave is detected, so a value 3 times larger than the actual distance is output.

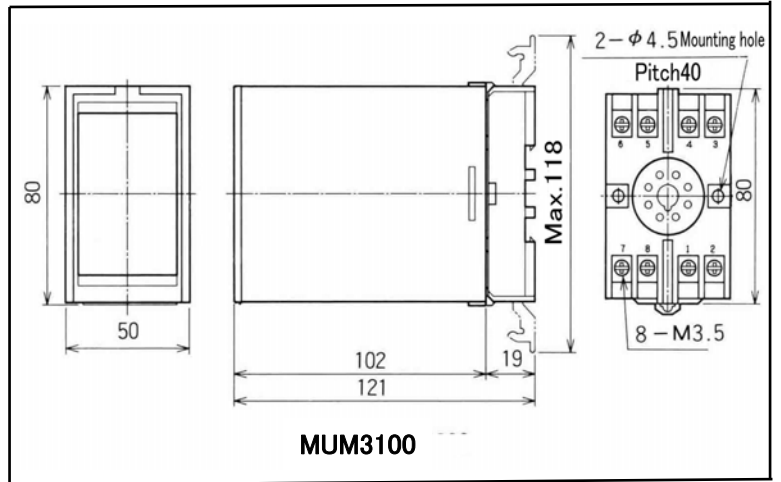


## Dimensions

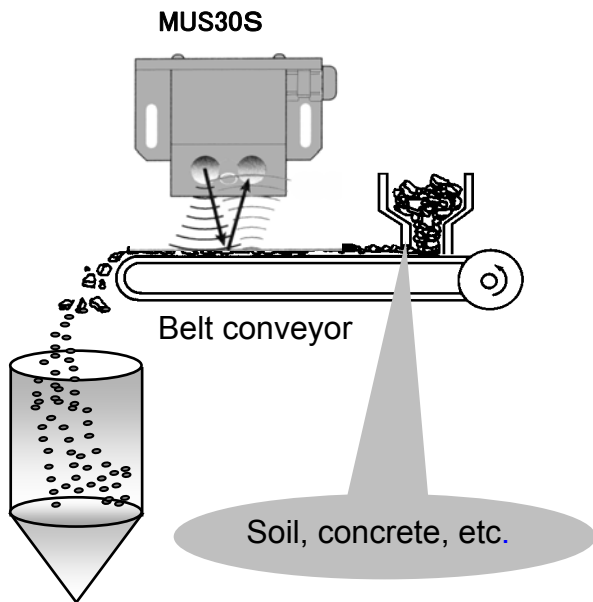
### 【Sensor】



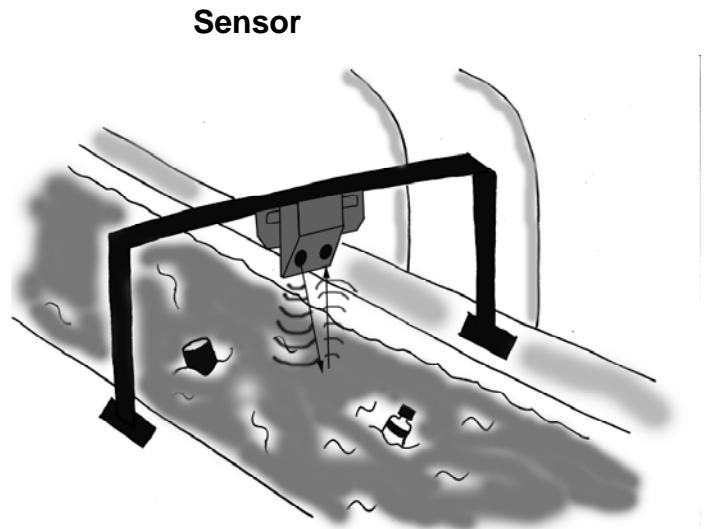
### 【Converter】



### 【Example】 Used for these applications



Conveyor scale



Measurement of highly corrosive substances such as sewage