

# 7. Level measurement of bubbles

Bubbles are hard to detect because they are lighter than liquids and also the electrical capacity is similar to air. However, bubbles that have conductive property can be measured safely by using an electrode.

## Measuring principles

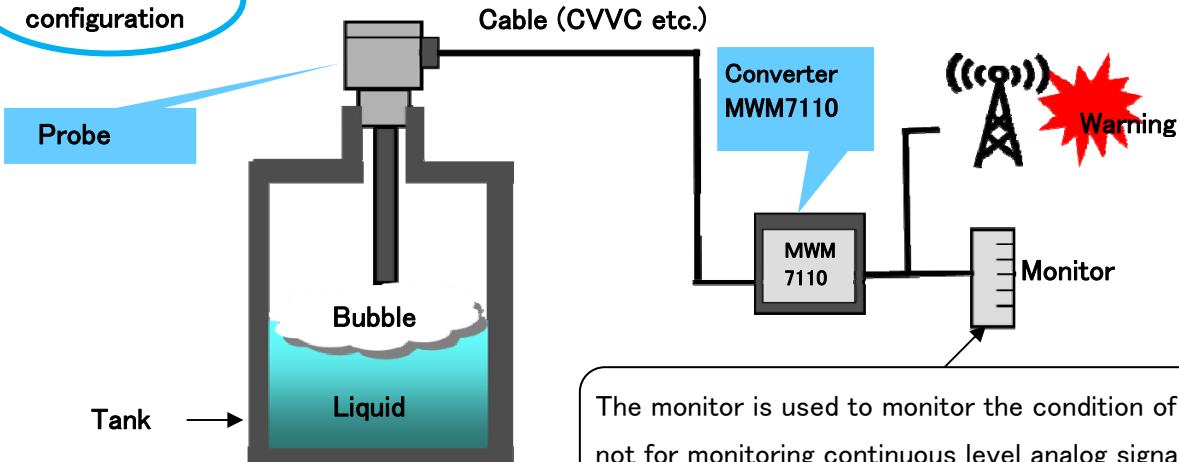
Uses the electrode as a bubble detecting sensor.

It detects a small current flow between a metallic container and an electrode.

Myseem MWM7000 series detects the current value which occurs when the electrode is contacting air, bubbles or liquids.

This bubble detection device requires a combination with the probe manufactured in accordance with the bubbles nature which tends to adhere. Only measure the level when the electrode is contacting bubbles. Therefore, many electrodes will be required to measure a number of level positions.

## Equipment configuration



The monitor is used to monitor the condition of electrodes and not for monitoring continuous level analog signals.

## How to use

Probe

Designed to minimize adhesion of bubbles.

Employed cable

Uses either all-purpose shielded cables (CVVS etc.) or special cables (teflon isolating cables etc.).

Converter

Myseem MWM7100 series are used, or in case of particular form, MCM2121/MYM3130 is used.

Detecting bubbles and the surface of liquid is enabled only by changing the sensitivity settings.

## Application samples

For bubbles in a form formation tank

For bubbles in the effluent treatment tank

For bubbles in the bio-related container