

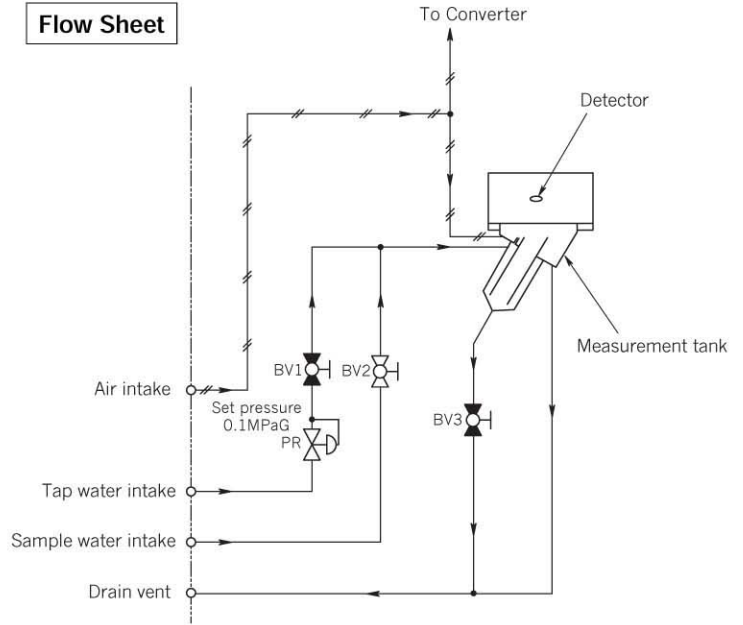


### Operation Principle

Sample water passes through the sample water adjustment valve and it is defoamed in a defoaming tank inside the double-structured measurement tank. Some of the sample water will be discharged there, but sufficient defoamed sample water at the bottom will inflow into the measuring tank. The structure of this tank, the overflow type, makes it possible to obtain a stable water surface with little waves.

The oil content of the sample water will emit fluorescence when ultraviolet ray is radiated from an excitation light source to the surface. The detection part detects the emission amount, and the indication converter converts the density after photoelectric transfer.

### Flow Sheet



### Notes

#### ■ Points to be noted

This device detects materials, such as crude oil, which emit fluorescence when ultraviolet ray is radiated. However, ingredients of these organic materials are not constant depending on places of origins, and therefore they cannot be treated as standard materials. To solve this problem, this device uses Uranine solvent, a chemical material that has constant fluorescence intensity.

Strictly speaking, the device is Uranine Conversion Oil Content Meter. Users must use this device by assuming that there is a constant correlation between measuring targets.

#### ■ Effect of Interfering Substance

There are some materials, such as turbidity and fluorescence detergent, which cause errors when measuring oil content in water.

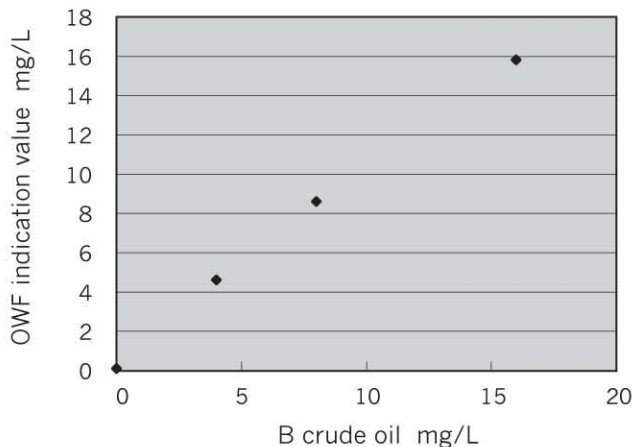
Theoretically speaking, if the wave length of the fluorescence material is same as the wave length that is used for measurement, the result includes plus errors. In case of turbidity components, minus errors will be generated.

If these materials are included in measuring target, please contact us.

#### ■ Option : Air curtain

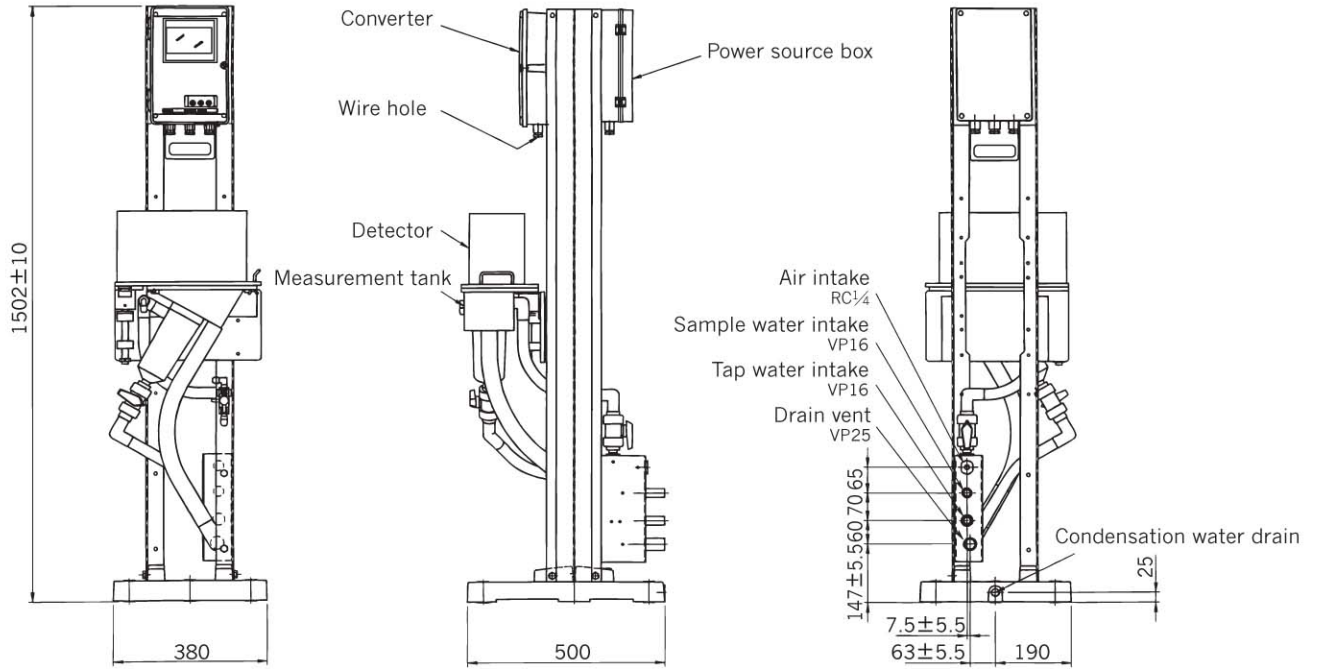
Some measurement errors may be identified if condensation occurs due to a difference between the water and air temperatures. In such a case, you can use an air curtain that is an option part.

### Correlation Data



**External Size**

Unit : mm



**External Connection Terminals**

