

19 Fluoride Ion Monitor

KF-502

Solid Membrane Type, Fluoride Electrode Method.



KF-502
Auto-ISA System



Detector with
Jet air Cleaning Unit



Immersion type Detector



KF-502

Outline

This monitor gives continuous measurement of Free Fluoride Ion (F⁻) in the water using the ion electrode. It is used for controlling waste water from the semi-conductor plant or the hydrogen-Fluoride using plant and discharging water. In case the sample water contains calcium, aluminum or iron more than certain level, it may be influenced. This monitor cannot measure total fluoride.

Reliable Fluoride Ion Electrode Method

By using fluoride lanthanum solid film as Fluoride Ion induced membrane, measurement of from low to high density with good linearity is possible.

For better measurement, use it around neutral pH.

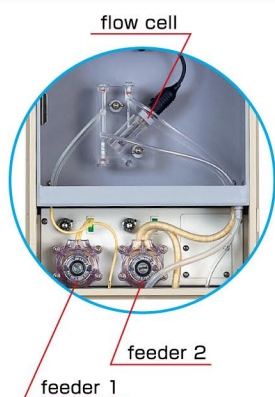
KF-502 Auto-ISA System (Ion Strength Automatic Adjustment System)

This Instrument has Fluoride Ion Monitor of Ion Activity Strength Auto-adjustment, and can make the precise and stable measurement of the underwater Fluoride Ion Density without being influenced by pH, or Ion, Activity strength, or, Flow Speed, etc.

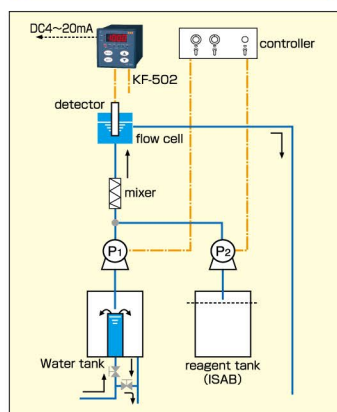
Outline of Measurement

Both Test Sample and ISAB Solution are fed by pump 1 and pump 2, and sent to test Flow cell, where Fluoride Ion Electrode is installed to measure Fluoride Ion Density.

Detector Part View



Measuring system Diagram



Specifications

Meter

Measuring Method	Ion Electrode Method
Display	LED red 3 · 1/2 digit
Measuring Range	0~1000mg/l (optional:0~2000mg/l)
Resolution	0.1mg/l (Less than 199.9mg/l) 1mg/l (at 200 ~ 1000 mg/l)
Accuracy	Within ± 2% (Full Scale)
Transmittal Output	DC 4 ~ 20mA (isolated type) 5 range (Manual change) 0~10 / 0~20 / 0~100 / 0~200 / 0~1000 mg/l
Alarm Point	High & Low limit each a contact (no-voltage) Contact point capacity: AC200V 1A max Hysteresis setting enabled
Hold output	Transmission output and contact point output by input of no voltage contact point signal from outside at maintenance time
Measured value shift	Shift range: within ± 10 mg/l
Power Supply	AC 85 ~ 240V free input 50 / 60 Hz
Std. component	Meter, Fluoride Ion Electrode, PP holder (1m) panel fixer, Fluoride Ion standard solution, ISAB, calibration containers, Beaker Instruction manual, guarantee card

Fluoride Ion Electrode

Product name	Liquid non-filling type Fluoride Ion Electrode
Model	MK-FYT
Measuring object	Free Fluoride Ion in Solution
Temperature	automatic temperature compensation
Measurement condition	pH : within 4 ~ 9 (Fixed as much as possible) Temperature : Within 0~40°C
Material	PP, TPX, Ceramics
Holder length	1.0m Standard.
Cable length	5m Standard.
Selectivity	Al ³⁺ , OH ⁻10 ⁻¹ Fe ³⁺1 Ca ²⁺10 ² NO ⁻ , CH ₃ COO ⁻10 ³ Cl ⁻ , Br ⁻ , I ⁻ , HCO ⁻10 ⁴