

aquamax KF Plus

in-lab ppm water content

Product description

Aquamax KF Plus titrators have been specifically designed for the determination of water content, combining coulometry with the Karl Fischer method.

The versatile Aquamax KF Plus is suitable for a wide range of applications and offers many advantages including a tough measuring vessel, a 'press go' keypad and built-in printer.



Water check button and syringe

Water check

The µg check button allows the operator to simply press go, inject 1µl or maybe 10µl of distilled water (as required by some ASTM methods) and verify if the instrument and reagent are working with in their required specification. The µg check overrides the programmed calculation and displays/prints out a report of the verification check. The coulometer then automatically reverts back to the pre-programmed setting.

Tough measuring vessel

The unique LDC glassware design is by far the easiest to use and also the most robust. The electrode locking system allows the joints to seal completely, without the use of grease or PTFE sleeves, and provides improved baseline stability. Hassle free assembly and disassembly.



Single shot Karl Fischer Reagent

Aquamax KF Reagent A is a general coulometric KF analyte for use with generator electrodes which incorporate a frit or diaphragm to separate the anode and cathode chambers. Used in conjunction with Reagent C this formulation is supplied in a pack of 8 x 100ml bottles, 8 x 5ml cathode vials, all conveniently located in a single carton.

To conform to ASTM, API, EI, ISO (plus others) methodology for water content determination of oil and petroleum products, the anode reagent must be modified with xylene to improve sample solubility and miscibility.

Aquamax KF Reagent is pre-mixed with xylene, and other solubilizers to eliminate side reactions, so that the operator does not have to store or mix chemicals.



Features

- Simple operation
- 10 user programmable methods
- 1ppm / 100%
- Results in ppm, mg/kg, % & g water
- Multi language display & print out
- Small footprint
- Integral high speed printer
- Integral battery
- Fully portable
- Low drift cell design
- Results Manager software
- Automatically compensated errors (patented technique)

Results manager

Time	Tit	Volt	Volume	Conduct	Final	Rate
00:00:00	0.00	0.000	0.0000	10.13		
00:02:54	0.81	1.880	0.8200	10.13		
00:03:37	0.99	1.880	0.8200	10.82		
00:04:06	0.92	1.880	0.8200	10.93		

This is a windows application that allows you to view and print sets of results created by the Aquamax KF Titrator. It can download results directly from the instrument via a serial port connection, or open result files previously saved to disk. The Results Manager package contains all necessary cables, connections, installation cd and user manual.



For those who need to use the titrator outside of the laboratory, the removable flash drive (memory stick) will store all the results whilst you complete your on-site work. The USB flash drive can then be connected to a pc and results downloaded via Results Manager when returning to your work place.

Technical specifications of Aquamax KF Plus - Part No: 90.18.0001

Titration Method: Coulometric Karl Fischer titration

Electrolysis Control: Patented "ACE" control system GB2370641

End Point Detection: AC polarisation

End point indication: Visual display/print out/acoustic beep

Titration vessel: Low Drift Cell design, no grease or PTFE sleeves required

Measuring range: Possible $1\mu\text{g}$ - 200mg water
Typical $1\mu\text{g}$ - 10mg water

Moisture range: 1ppm - 100% water

Max. sensitivity: 0.1 μg

Max. titration speed: 2.24 mg per minute

Max. current: 400 ma

Drift compensation: Automatically controlled

Precision: 10-100 μg \pm 3 μg , 100 μg -1mg \pm 3 μg ,
above 1mg \pm 0.3%

Start delay time: 0-30 minutes, user selectable

End delay time: 0-30 minutes, user selectable

Calculation modes: Weight/weight, (W/w) (user programmable)
Weight/dilution ratio, (W/K)
Volume/density, (V/SG)
Volume/volume, (V/v)

Display format: μg , mg/kg, ppm, %

Print format: μg , mg/kg, ppm, %

Statistics: max, mean, min values up to 99 runs

Method storage: 10 user programmable methods

Sample ID number: User programmable

Stirrer speed: Microprocessor controlled

Languages: Multi languages – user selectable

Calendar/clock: Analysis time & date print out

Battery low indicator: Display & print out indication

Data outputs: USB and RS232 ports

Removable Data storage: Flash drive (memory stick)

Data Entry: 15 key touchpad

Display: 40 character alphanumeric backlit LCD

Printer: 42 character high speed thermal printer

Power supply: 90-264V AC, 47-63 Hz.

Dimensions: 290 x 255 x 130 mm

Weight: 3.0 k