



in-lab ppm water determination

aquamax **KF** Plus



Conform
to Standards
of ASTM,
EN, ISO

aquamax KF Plus

Description



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

The Aquamax KF Plus titrators are conform to standards for water determination:

DIN 51777, ASTM D 1364, ASTM D 1533, ASTM D 4377, ASTM E 203, IP 356, IP 471, ISO 10336, ISO 6296.

The Aquamax KF Plus is a truly versatile coulometric Karl Fischer Titrator featuring a robust measuring vessel design and 'press go' key pad.

The device is used to determine trace level water content in a liquid sample. The Aquamax KF Plus is suitable for a wide range of applications with sample dosing directly into the measuring cell.

Easy to use – simple to programme so that only a single button needs to be pressed for a titration, everything else is automatic.

Applications

- Hydrocarbons
- Mineral oils
- Jet fuels
- Lubricating oils
- Crude oils
- Diesel
- Motor oils
- Petroleum products
- Bio fuels
- Hydraulic oils
- Fuels
- Ionic liquids
- Insulating oils
- Bunker fuels
- Organic liquids
- Transformer oils
- Solvents



Low Drift Cell

Advantages

- Simple operation
- 10 user programmable methods
- Moisture range 1 ppm / 100 %
- Results in ppm, mg/kg, % and μg water
- Multi language display & print out
- Small footprint
- Integral printer
- Integral battery
- Fully portable
- Low drift cell design

Water check

The μg check button on the front panel allows the operator to simply press one button before injecting the 1 μL or 10 μL distilled water as required by the ASTM methods for these analyses.

This overrides the programmed calculation settings for a single run so that the display and print out report the result in micrograms water.

After running the 10,000 microgram check the coulometer reverts back to ordinary user mode.



Water check button for titration tests

Specifications

Titration method:	Coulometric Karl Fischer titration
Electrolysis Control:	Patented "ACE" control system GB2370641
Sample administration:	Manually with syringe
Sample amount:	0.01 - 10 mL
Measuring range:	Possible 1 μg - 200 mg water Typical 1 μg - 10 mg water
Moisture range:	1 ppm - 100 % water
Max. sensitivity:	0.1 μg
Drift compensation:	Automatically controlled
Precision:	10 - 100 μg \pm 3 μg ; 100 μg - 1 mg \pm 3 μg ; above 1 mg \pm 0.3 %
Data Entry:	15 key touchpad
Power supply:	18 V DC, 40 W
Display format:	μg , mg/kg, ppm, %
Dimensions:	290 x 255 x 130 mm
Weight:	3.0 kg

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 100 mL bottles, 8 x 5 mL 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.

We conducted extensive comparison trials of Aquamax KF Reagents against other leading brands with very positive results. Using water standards ranging from 10 µg water up to 10,000 µg water under controlled conditions we found Aquamax KF A and KF C to be equivalent in performance accuracy to the other brands but much faster in titration speed and with lower background drift values. Aquamax KF Reagents, performed much faster than other special oil reagents and at the 10,000 µg count level (as required by ASTM methods), gave a result of 10,004 µg which is within 0.04 %.



Ordering informations

Part No.	Product
90.18.0001	Aquamax KF Plus Coulometric Titrator
321.18.0001	Power Adaptor
332.18.0002	Titration Vessel LDC
332.18.0003	Detector Electrode LDC
332.18.0004	Generator Electrode & Frit LDC
321.18.0002	Electrode Lead 2 x
332.18.0006	Desiccant Tube LDC + Cap
325.18.0002	Pack Injection Septa (10 pcs./pkg.)
332.18.0008	Gas Tight 1.0 mL Syringe
303.18.0001	Molecular Sieve
325.18.0004	Stirrer Bar
301.18.0002	Thermal Paper Rolls (20 pcs./pkg.)
325.18.0016	Luer Needle 19 Gauge (Screw Fit)

Optional Extras

Part No.	Product
309.18.0001	Results Manager Software Package
303.18.0003	Aquamax KF Reagent Kit
332.18.0008	Gas Tight 1.0 mL Syringe
325.18.0016	Luer Needle 19 Gauge
332.18.0010	1.0 Microlitre Water Check Syringe
325.18.0002	Injection Septa (10 pcs./pkg.)
325.18.0004	Stirrer Bar
321.18.0002	Electrode Lead (single)
301.18.0002	Thermal Paper Rolls (20 pcs./pkg.)

We are here for you



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