Volumetric method

Karl Fischer Moisture Titrator

MKS-500

The MKS-500 is the simple and high quality Karl Fischer Moisture Titrator. Other than ordinary liquid sample, this new titrator can also perform moisture measurement of solid sample that can be dissolved in solvent as well as powder samples. When connected to the optional evaporator, water content of samples like plastic pellet or solid chemicals can also be measured.

MKS-500

Features

- Moisture measurement by simple and easy key operation.
- By the endpoint detection method of liquid resistance compensation, highly precise measurement of various samples is possible.
- Fully GLP/GMP conformed report can be printed out by the optional printer.
- Safety and EMC features conforming to CE marking declaration.
- MLC-500 Solvent exchanger is available.

Specification of MKS-500

Model name	MKS-500 Karl Fischer Moisture Titrator
Measurement method	Volumetric method
Measuring range	1) 0.1mg to 500mg H_2O , 10ppm to100% H_2O 2) 0.005mL to 100mL
Control method	Titration control, EP detection and concentration calculation by microcomputer
Endpoint detection	Two-pin platinum electrode detects liquid resistance compensated polarized potential
Endpoint wait time	1) 1 to 99 sec. programmable 2) Potential stat which maintains EP status can be set up.
Titration form	Normal titration
Special functions	1) Titration speed controlled by three steps 2) Automatic drift off by dehydrating titration vessel 3) Start time delayed 0 to 9999 sec.
Display	1) 16 digits×2 lines LSD with back light 2) Displays: (1) Measured water content (2) Processed data (3) Dialog messages
Method	4 (Direct, Indirect, Factor, Calib.)
Indication of endpoint	Electronic beep
Printer	Optional (recommended printer: IDP-100)
Calculation	1) Concentration, statistics (mean value, RSD, SD) 2) Recalculation 3) Factor calculation
Error messages	Erroneous key entry or settings on max. volume, abnormal polar potential or liquid resistance, etc.

Power burette	1) Burette cylinder with piston ····· 1 2) Automatic switching valve for suction/dose··· 1 3) Backlash mechanism 4) Dispense speed: 0.5mL/sec.
Solvent	1) Minimum 30mL (for S-type vessel) 2) Maximum 100mL (for S-type vessel)
External control	RS-232C out put 1) for Printer 2) for Electronic balance 3) for External computer
Ambient condition	5 to 35℃, less than 85%RH
Power	AC100 to 120V/200 to 240V, 50/60Hz, 35W
Dimension	Approx. 280(W)×450(D)×480(H)mm
Weight	Approx. 12.5kg
Standard components and parts	(1) MKS-500 Main unit····· 1 (2) Operation manual····· 1 (3) Power cord ····· 1 (4) Stirrer rotor····· 1 (5) Tube connector KF····· 1 (6) Anti-diffusion nozzle ····· 1 (7) MLC-500 Solvent exchanger····· 1
Standard accessories	(1) Grease ····· 1 (2) Drainbottle (polyethylene)····· 1 (3) Wrench (8mm) ····· 1 (4) Piston rod to pull out head ····· 1 (5) Ground wire ····· 1