

Automated Kjeldahl Analysis Simple, Accurate and Reliable



A distillation unit that adapts to your requirements

The KjelFlex K-360 combines flexibility, high user comfort and maximum security. You can use the instrument as simple distillation unit or expand it with the DL22 F&B titrator to an automated analytical system.



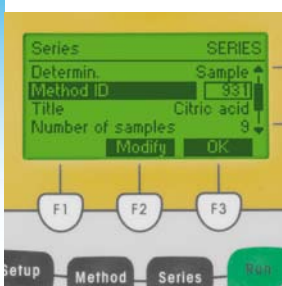
Easy and secure access to application flexibility

Simply edit five method parameters, save it as method and work exactly according to the official methods such as AOAC, EPA, DIN etc. The clever design of the KjelFlex K-360 secures the integrity of your results thanks to the absence of carry over.



Predefined methods for titration

The DL22 F&B titrator is a specialized titrator for the food and beverage industry. It includes the methods most commonly used in these industries, with pre-defined parameters making life as easy as possible. When you select control parameters for the titration, you only need to select from 3 predefined choices.



Intuitive and programmable interface

The interface of the DL22 F&B titrator is very intuitive, and by simply pressing the RUN button twice you can start the method you ran last. Methods can be assigned to the F1 to F3 softkeys so that they are very easy to find and start.



BUCHI Distillation Unit KjelFlex K-360 and the METTLER TOLEDO DL22 F&B titrator

The KjelFlex K-360 and DL22 F&B form an efficient analytical system that features straightforward user guidance and installation.

The whole Kjeldahl analysis process is easily automated: distillation, titration and sample aspiration, in a few minutes you obtain your result.

Result accuracy and precision is ensured by optimized control parameters for both distillation and subsequent titration, errors are minimized and result reliability is strongly increased.

Functions and specifications of the BUCHI KjelFlex K-360

Features	Automatic drain of sample tube and receiving vessel	Distillation method parameter	Volumes of water, sodium hydroxide and boric acid. Optional: strong acids	
	Functional parts accessible from the front through the service door		Delay and distillation time	
	Automatic dosage of boric acid, sodium hydroxide and water		Steam power (30–100%)	
	Regulation of steam power		Aspiration of sample and/or distillate receiver	
	Memory capacity 50 methods and 500 results (consumption of titration solution)		Recovery rate	≥ 99.5%
	Sensors on sample tube, service door, cooling water		Repeatability (RSD)	≤ +/- 1%
Analysis	Password protection against unauthorised access can be enabled	Detection limit	≥ 0.1 mg nitrogen	
	Determination of nitrogen and proteins according to Kjeldahl	Automation	METTLER TOLEDO DL22 F&B titrator	
	Determination of nitrogen in fertilizers according to Devarda	Optional equipment	Level sensor for water, sodium hydroxide, boric acid and waste tank	
	Optional: Non-Kjeldahl applications such as SO ₂ , phenol, alcohol, volatile acids and formaldehyde		Acid-resistant pump for non-Kjeldahl applications	
	TKN determination			

Order Information

Order Information		Order no.
Unit	Distillation unit KjelFlex K-360, 230V 50/60Hz incl. titration set (receiving vessel with holder, stirrer) with:	
	- plastic splash protection cover	43606
	- glass splash protection cover	43607
	- plastic splash protection cover and acid-resistant pump	43608
	- plastic glass protection cover and acid-resistant pump	43609
Accessories	Cable for METTLER TOLEDO DL22 F&B titrator	43616
	Indicator according to Sher, 100 mL	3512
	Set of 300 mL sample tubes (set of 4)	37377

Functions and specifications of the METTLER TOLEDO DL22 F&B

Analysis	Acid/base	Display and user interface	Online curve	
	Precipitation (Cl, Br, ...)		Alphanumeric entry with special characters, subscripts and superscripts	
	Redox		Programmable softkeys for rapid method start	
	Complexometric		Documentation	GLP-conforming printout
	Photometric			Printout of titration curves
	pH measurements		Dispensing	Interchangeable burettes 1, 5, 10, 20 mL
	Ion selective measurements			Maximum number of steps per burette volume 1/10000
	Filling time 20 s			
Methods and databases	Predefined METTLER TOLEDO Methods	Auxiliary functions	Manual titration and dispensing, stirring, pH value and temperature measurement, direct access to results, reports and setup information	
	Memory for own methods		Technical specifications	Signal resolution ± 0.1 mV
	Selection lists for titrants and sensors			Voltage range ± 2000 mV
Control and evaluation	End point titration (EP) with dynamic and incremental addition of titrant	Automation	BUCHI Distillation Unit KjelFlex K-360	
	Equivalence point titration (EQP) with dynamic and incremental addition of titrant		METTLER TOLEDO Rondolino automatic titration stand	
	Predefined, selectable parameters (Fast, Normal, Cautious for titrant addition)			
	Equilibrium or time increment controlled measurement value transfer			
	Steepest jump			
	Predefined formulas for the most important calculations			
	Statistics for up to 100 samples			



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