



ABA 4

Abel Flash Point Tester

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The automatic Abel closed-cup tester measures the flash point, the lowest temperature at which the vapors of a sample ignite upon the application of an ignition source. The tester can also be used to detect the ability of a sample to yield flammable vapors when maintained at an equilibrium temperature by the flash/no flash method. ABA 4 is suitable for flash point applications of jet fuels, solvents, chemicals, etc.

Benefits at a Glance

- Two cooling systems with Peltier elements according to the new ISO 13736 standard: an economical air-cooled model and a low-temperature version with external water cooling
- The two ignition systems in each unit give you the flexibility to work with an electric or gas igniter: if the gas ignition is used, the electric igniter will automatically relight the gas flame during the test, if necessary
- The One-Twist swivel-around multi-function head guarantees the safe and easy one-hand connection of all sensors and actuators such as the shutter-release, stirrer, igniter and detector contacts
- An extended measuring range up to 110 °C enables you to go beyond the conventional scope of the Abel method

Convenient Operation

- Test initiation by pre-installed standard test methods and ability to customize methods by user-defined programs
- Outside flame sensors increase the system's safety, especially for work with samples that have no conventional flash point but burn outside the test cup (e.g. due to flame-inhibiting components)
- Splash-proof touch-key panel with large LCD
- A multi-detector combines the flash point detector and the temperature probe in a solid housing with a perfectly adjusted immersion depth
- A probe verification program checks the proper functioning of the temperature probe and allows a bias adjustment by using a special calibration kit (optional)

Customized User Flexibility

- PC-software FPPNet (optional) for convenient remote handling and test data storage



- Insulation hood (optional) to protect the cover and shutter assembly from icing during low-temperature flash point tests
- Abel-Pensky test insert (optional)
- Calibration set (optional)
- Stainless steel or small-volume sample cup (optional)

Standard Methods

Abel flash point:	ISO 13736, IP 170
Equilibrium flash point:	ISO 1523, IP 492, EN 924
Equilibrium flash/no flash:	ISO 1516, IP 491
Optional Abel-Pensky:	DIN 51755-1

Technical Specifications

Configuration	ABA 4 air-cooled	ABA 4 liquid-cooled
Application range (°C/°F selectable)	10 °C to 110 °C	-30 °C to 110 °C
Ignition	Gas and electric (interchangeable)	
Heating	According to method or user-defined	
Stirring	According to method or user-defined	
Cooling of Peltier elements	By built-in fan	With tap water or circulation cooler
Flash detection	Thermocouple	
Barometric pressure correction	Automatic correction	
Safety	Overheat protection, automatic shut-off	
Interfaces	2x RS232	
Gas supply	50 mbar of propane or butane	
Power supply	115 V/230 V, 50 Hz/60 Hz, 180 W	115 V/230 V, 50 Hz/60 Hz, 150 W
Dimensions	230 mm x 470 mm x 470 mm (W x D x H)	
Weight	8 kg	
Resolution	0.1 °C	

Your distributor: