

SPECIFICATION

Methods	ASTM D93 (A,B,C), ISO 2719 (A,B,C), EN ISO 2719 (A,B,C), IP 34 (A,B,C)
Heating	automatic heating at a constant rate in the range 0.5...12 C/min
Temperature measurement	glass Pt100 temperature sensor range -50...+450 °C, resolution 0.1 °C
Mixer	Automatic programmable, range 0...300 rpm
Ignition system	electric or gas with a programmable interval 0.5...5 °C electric - with automatic compensation for spiral aging
Barometric pressure	built-in barometric pressure sensor for automatic flash point correction
Flash detection	low mass thermocouple
Custom functions	7 inch color touch screen storage for up to 2000 experiments the ability to transfer data to LIMS keyboard and mouse connectivity
Fire extinguishing system	built-in fire sensors built-in fire extinguishing system with gas supply around the test crucible
Preliminary test	check for light compounds in the sample
Preventive measures	multi-level access system and reminders for safe use
Operation conditions	air temperature: 10...+35 °C air humidity: 10...80 % relative air humidity at 35 °C
Energy consumption	maximum power consumption 600 W
Dimensions WxDxH	(240 x 480 x 370) mm
Weight	15 kg
Connections	1 × Ethernet, 4 × USB, Wi-Fi
Accessories	printer, glass sample temperature sensor

Due to the constant developments in the analyzers construction, technical characteristics may change without prior notice.

DISTRIBUTOR

MANUFACTURER



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Automatic Pensky-Martens Closed Cup Flash Point Tester

GOST R EN ISO 2719
GOST ISO 2719
GOST 6356
GOST R 54279
ASTM D93 (A, B, C)



FRESH SOLUTIONS FOR YOUR LAB

- Automatic fire-extinguishing system
- Built-in barometric pressure sensor for automatic flash point correction
- Automatic lifting mechanism for the cup cover installation
- Torch flame ignition and maintenance system
- Color display, touch screen operation
- Experimental data and more than 2000 user programs can be stored in the internal memory
- Remote update of integrated software, data export to LIMS via Ethernet
- Built-in fan to cool down the test cup and surrounding environment at the end of the test
- Calculation of the flash point mean value

Determination of the flash point of petroleum products

The PMA-A1 is a compact and self-contained Pensky-Martens Closed Cup Flash Point Analyzer. It contains all the components for determining the flash point according to standard test methods such as: ASTM D 93 (A, B, C), EN ISO 2719 (A and B), GOST 6356, GOST ISO 2719, GOST R 54279, as well as customizable methods.

The PMA-A1 uses electronic flash point detection and allows the use of both gas and electrical ignition systems for the analyzed sample.



Flash point range

The automatic sample heating system allows you to determine the flash point in the ranges from +40°C up to +360°C (standardized range), and from ambient temperature to +405°C (technical range).

Built-in automatic fire extinguishing system

An automatic fire extinguishing system is built into the device. The automatically (through thermocouples) or manually controlled fire extinguishing system allows inert gas to be supplied around the test crucible throughout the entire area of possible fire. This is done by using an annular nozzle encasing the test area connected to an external inert gas supply.

Pensky-Martens Flash Point Tester	
User: Admin	Sample temperature, °C: 24.9
Sample name: Sample	Heater temperature, °C: 26.4
Method: ASTM D93 A	Атмосферное давление, кПа: 100.7
Estimated temperature, °C: 53.0	Air temperature, °C: 25.7
	Flash sensor, °C: 28.3

Buttons: Test parameters, Settings, Results, Start

Automatic lifting mechanism for the cup cover installation

The special cup cover mechanism with a safe automatic drive moves smoothly for convenient operation. The automatic drive works smoothly and does not pose a threat to human health.

Built-in fan for cooling after test completion

The test crucible can be cooled very fast after analysis due to the design of the device, which increases labor productivity. There are optional accessories that cool the crucible even faster.

Built-in barometric pressure sensor for automatic result adjustment

The device has a built-in atmospheric pressure sensor and allows automatic correction for atmospheric pressure.

Method editor	
Method name: ASTM D93	
Heating speed 1, °C/min: 0.5	Measurement interval 1, °C: 1
Stirrer speed, rpm: 50	Measurement interval 2, °C: 1
Degrees before the expected flash point, °C: 10.0	
Degrees before the expected flash point, °C: 5.0	

Buttons: Back, Save

Instrument calibration

All required parameters and sensors are calibrated in this device:

- Pt100 temperature sensor calibration
- dynamic, against ASTM certified thermometer (9C or 10C) or alternative, including correction using up to 25 calibration points (user defined)
- calibration of the heater block temperature sensor using an external thermometer
- calibration of the barometric pressure sensor with an external barometer.

