

MiniFlash FP Vision

Flash Point Analyzer

ASTM D56, ASTM D93, ASTM D396, ASTM D975
ASTM D2880, ASTM D3699, ASTM D6450, ASTM D7094
EN ISO 2719, EN ISO 3679, EN ISO 3680
SHT 0768, ISO 13736, IP 170

MiniFlash FP Vision is uniquely designed flash point analyzer to determine the flash points of liquids and solids. The analyzer uses energy-controlled electric arc and measures instantaneous pressure increase inside a closed chamber. By heating the test chamber from the top, the analyzer prevents condensation of high volatile compounds and guarantees improved test results.

Continuously Closed Cup Design

Continuously closed cup design and small sample volume of only 1-2 ml offer maximum safety. No offensive fumes are released and little sample waste is registered. The fast thermoelectric cooling at the end of each flash point test plus the easy handling of the instrument also save expensive labor time. Unique design of the flash point analyzer ensures analysis for difficult applications as biodiesel or contaminated sample tests. The analyzer includes improved methods for simulation of EN ISO 3679 and EN ISO 3680. The touchscreen features graphical interface without the need for special training. Device offers hassle-free communication with USB, Ethernet, LIMS, PCs with unlimited storage capacity.

Principle

An aluminum cup with a capacity of 7 ml and containing 2 mL of sample is resting in the sample cup holder. For the test, the sample cup is lifted to the temperature controlled oven, forming the test-chamber with a metal to metal seal. A thermocouple is immersed into the sample to measure the temperature. The temperature of the oven is controlled by Peltier elements and an air cooled heat sink. The vapor is ignited by a high voltage arc inside the test-chamber. At the flash point, the pressure inside the sealed measuring chamber is increased significantly, which is detected by a built-in pressure transducer. A rotating magnet and a small magnet (8) inside the the sample cup provide stirring.



Specifications

Temperature range	FP Vision: • 0 to 120°C (32 to 248°F) without cooling • Down to -25°C (-13°F) with water cooling FPH Vision: • 10 to 400°C (50 to 752°F)
Temperature Stability	FP Vision: +/- 0.05°C (0.09 °F) FPH Vision: +/- 0.07 °C (0.13 °F)
Sample volume	1 ml (ASTM D6450) or 2 ml (ASTM D7094)
Fast Sample Throughput	Up to 16 samples/hour, depending on method
Interfaces	4x USB, 2x LAN, Remote Control Remote Control via COCKPITTM Software for Vision analyzers
Power requirements	110 - 240 VAC +/- 10% 50 - 60 Hz Built-in battery 98 Wh
Power Supply	100/110/120/230/240 VAC, 50/60 Hz, max. 180W
Dimensions	(WxHxD) 253 x 368 x 277 mm (10 x 14.5 x 10.9 inch)
Communication port	USB, RS 232
Power supply	Universal AC/DC provided
Weight	10.2-11.2kg (22.4-lb)

