



OilLab 600 Pensky Martens



ASTM D93 procedures A, B, C
ASTM D3941 - ASTM E502
DIN EN 22719
EN 22719
IP 34
ISO 2719

Subject

Flash Point on petroleum products, gas oils, fuel oils, lubricants, biodiesel. Suitable for flash point detection on different substances, waste materials, solvents...

Measuring Pensky Martens Principle

The sample is heated and stirred at specified rates, using one of three defined procedures (A, B, or C). An ignition source is directed into the test cup at regular intervals with simultaneous interruption of the stirring, until a flash is detected.

Measuring Parameters

- Temperatures: in °C
- Measuring range: +35°C ... +370°C
- Resolution: 0.01 °C
- Accuracy: ± 0.1 °C
- Repeatability / Reproducibility: as per standards methods or better

Ignition system

Gas with flame exposure device and / or electric lighter with electrical ignitor

Measuring Temperature Devices

- Sample temperature is measured with a platinum resistance PT100 Class A with SS sheath and high temperature resistant silicone cable
- Bath temperature is measured with a PT100 sensor

Dual flash point detection system

- By ionisation ring
- By thermal sensor

Ionisation ring

- Barometric sensor
- Built-in sensor with automatic correction of results to a barometric pressure of 101.3 kPa automatically performed by the software at the end of analysis

Heating

- Electrical heater with heating rates as per procedures A, B, C

Cooling

- Built-in forced air fan

Test Cup

- Made of brass and provided with an high temperature resistant handle
- With sample level mark

Stirrer

- An electric motor drives a flexible transmission coil allowing the stirring of the product. Stirring speed as per selected procedures A, B, C

Shutter

- Automatic mechanism opening the shutter for the dip-in of the ignition device

Safety features

- Gas valve for closing the gas supply (max 30 mBar), at the end of the test
- Overheating protection with auto shut off during the test
- Auto fire detection by means of thermal fuse with acoustic alarm

Software Features

- All analytical parameters recorded
- Customizable analysis parameters and methods
- Customizable results report
- Printable graphs and results

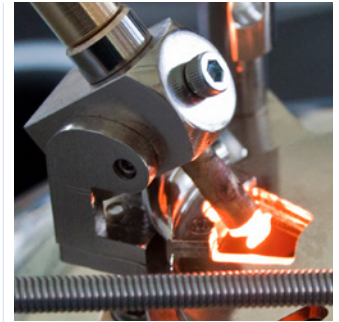
The software includes:

Analysis Menu

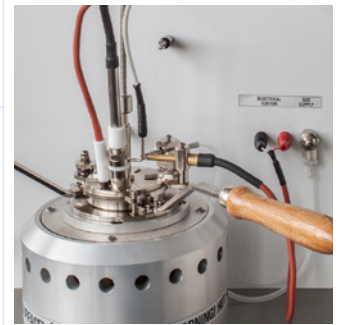
- Automatic execution of the analysis in accordance to the selected procedure (Standard method as per ASTM / IP / ISO / EN / DIN... norms of reference as well as customized procedures)
- Automatic handling of samples with unknown flash point
- Display in real time of all the analysis parameters and status
- Fields for introduction of operator and product name



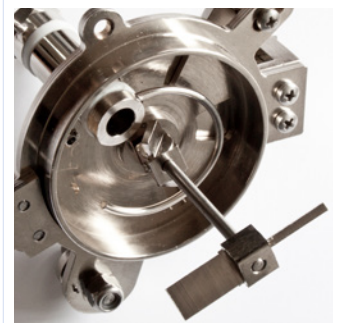
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Electric lighter with electrical ignitor.



Gas with flame exposure device.



Dual flash point detection system: by ionisation ring, by thermal sensor.



- Expected flash point temperature programmable
- Audible alarm and displayed messages at the end of the analysis and in case of errors and/or malfunctions
- Configuration menu with up to 20 preset samples and expected flash point
- Automatic barometric correction of results
- **Diagnostic Menu**
- Direct access to all analog, digital, inputs and outputs
- Selectable value displaying: °C / Volt
- **Calibration Menu**
- Automatic calibration of each temperature probe
- Up to 100 calibration points (standard with 5 and dynamic with up to 100 points)
- Programmable calibration frequency with selectable validity period and notice/lock-down at expiration date
- Last calibration date referred to each single probe displayed and relevant data printable
- Display of calibration diagram
- **Data Utilities**
- Archive viewer for files recall
- All analysis stored in Excel® compatible format
- LIMS compatible

Integrated Touch Screen Panel PC

- TFT/LCD 8"
- Resolution 1024 x 768, 16.2 M colours
- 2 USB ports for connection to an external printer and/or external PC
- Storage capacity for more than 60'000 analysis

Electrical Supply

- 220V ± 15% / 50 to 60 Hz
- 115V ± 15% / 60 Hz

Cord Cable:

- 3 conductors flexible cable with schuko plug

Ambient Temperature

- Max 35°C
- H.R. 80%

Dimensions

- width 48 cm
- depth 30 cm
- height 52 cm

Weight

- 27 Kg

Accessories

- LAB-600/05-23: heater collar
- LAB-600/06-21: gas valve
- LAB-600/07-01: electrical ignitor
- LAB-600/07-03: micro switch
- LAB-600/07-04: handle
- LAB-600/07-05: gas ignitor
- LAB-600/09-07: PT100 product
- LAB-600/08-13: detection / ionisation cable
- LAB-600/08-14: PT100 Bath
- LAB-600/09-04: gas reducer
- LAB-600/09-05: calibrated brass crucible
- LAB-600/09-06: calibrated brass crucible complete with movement
- LAB-600/09-07: cover cup movement only
- LAB-600/10-04: PCB fuses, box of 10
- LAB-600/10-05: main electronic board
- LAB-600/11-01: silicon tubing, 1 meter
- LAB-600/11-02: stirrer / flexible
- LAB-600/12-01: voltage transformer for ignitor
- LAB-600/20-01: support PT100 Teflon

Calibration Tools

- OilLab 80: calibration decade box – PT100 simulator
- OilLab 81: set of connectors and cables for cold range