

Automated Pensky-Martens Closed Cup Flash Point Tester***apm-8fc*****Ergonomic**

- Color coordinated display for high visibility and intuitive operation
- Universal design

Versatile

- USB port for USB flash drive, keyboard, or barcode reader
- Password protection
- Enhanced data storage

Robust

- Premium design and high quality finish suited for many years of reliable use

Safe

- Enhanced safety with fire containment system



Compact Design

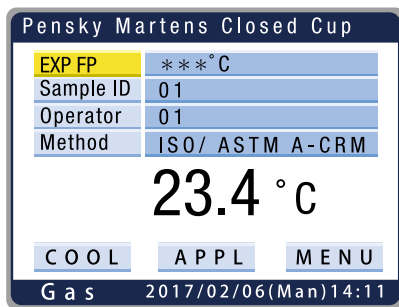
The all-in-one design is much lighter than the old model, APM-7, by approximately 30 % and consumes very little bench space.

Single Action Setting

Cup cover and stirrer are permanently mounted on a swing-arm assembly, which allows easy handling of the hot cup cover after completing a test. The swing arm assembly can be raised to upright position, ensuring easier cleaning of the test cover.

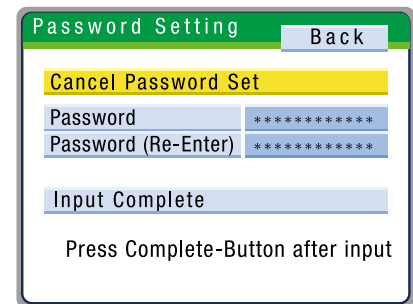
Easy Operation

Select a test mode and enter the expected flash point; while the instrument executes the test, you are free to do other lab work. The instrument follows the exact procedures prescribed in the test methods, and the completion of the test cycle is signaled by beeps. The test result is brightly shown on the color LCD module



Password Protection

By setting password by the administrator, the device is protected against inadvertent change of parameters by operators.



Data Handling

The unit is equipped to store up to 200 test results and export to an optional printer or to a LIMS through an RS-232C port or USB memory.

USB Port

A USB port allows connecting USB keyboard or USB barcode reader for easy entering of sample and operator names. By connecting USB flash memory, data can be exported to a PC, or test conditions/parameters can be copied to other instruments.



Interchangeable Ignition Source

apm-8fc is equipped with both gas and electric igniter as the ignition source. It only takes a few minutes to switch from gas to electric or vice versa.



Draft Protection Shield

A fire-resistant "FM4910" conforming cover insures the flame integrity. This material shall meet the numerical criterion of each index.

- (1) FPI (Fire Propagation Index) ≤ 6
- (2) SDI (Smoke Damage Index) ≤ 0.4

Fire Containment System

In case the sample accidentally catches fire, the instrument will automatically spray fire containment gas (N_2 or CO_2) to extinguish the fire.



Specifications

Model	Automated Pensky-Martens Closed Cup Flash Point Tester apm-8fc
Test Standard	ASTM D93 (Procedures A, B, & C), ISO 2719 (Procedures A, B, & C), ISO 15267, IP34, JIS K 2265-3
Measuring Range	Ambient to 370 °C (698 °F)
Test Modes	ISO/ASTM A-normal / SPE / CRM, ISO/ASTM B-normal / SPE, ISO/ASTM C-normal / SPE, ISO 15267, and User Custom modes (SPE: Search mode for unknown samples CRM: Mode for verifying instrument with CRM's)
Heater	Band heater : 530 W @115 V or 500 W @230 V
Cooling Device	Forced air cooling by fan
Display	5.7 inch (117 x 88 mm) color LCD with LED back light
Stirring	100 or 250 rpm (Freely selectable in Custom mode)
Temperature Sensor	PT-100 in stainless steel sheath
Flash Detector	CRC Thermocouple
Ignition Source	Gas ignition with automatic lighting or electric ignition. Interchangeable
Barometric Correction	Automatic correction by built-in barometric pressure sensor
I/O port	RS-232C : 1 channel (for PC or optional printer) USB : 1 channel (for USB keyboard, USB barcode reader, or USB flash memory)
Safety Features	Automatically shuts off and the problem is reported by buzzer and display, in case: (a) EFP + 20 °C or 370 °C is reached, (b) temperature sensor is found defective, (c) flash detector is found defective, (d) thermofuse is blown, (e) electric Igniter is blown, (f) built-in battery is found drained out, (g) test cup cover is not set in place, (h) stirring motor stopped, or way (no display) (i) control computer runs away (no display)
Gas Supply (When gas ignition is used)	LP gas or natural gas (Max. pressure :10 kPa / 1.45 psi)
Fire Containment System	In case sample catches fire, containment gas (N ₂ or CO ₂) is automatically blown to sample cup to contain the fire. (Containment gas must be prepared by user)
Power Supply	100/120 VAC or 220/240 VAC, 50/60Hz
Power Consumption	720 W MAX.
Electricity Consumption	170 Wh for 1 test (about 60 min), 64.26 g CO ₂ (@ 0.378 kg CO ₂ /1 kWh)
Ambient Temp. Range	10 °C to 35 °C
Size (W x D x H)	230 x 470 x 390 (mm)
Weight	19 kg



Apparatus

Code No.	Part name	Remarks
APM-00-016	apm-8fc	Pensky-Martens closed cup Flash point tester

Standard Accessories

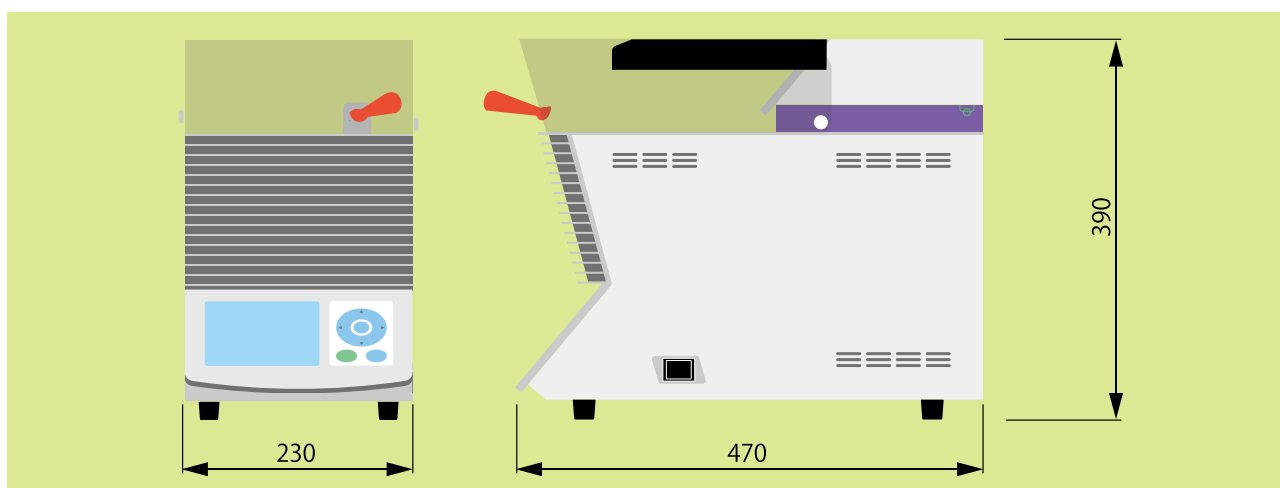
Code No.	Part name	Qty	Remarks
APM-02-001	Test cup assembly	1	
320-00-038	Thermofuse	1	Pack of 5, with insulation tube.
210-02-161	Gas hose $\phi 9 \times \phi 16$, 1.5 m with hose bands	1	
APM-04-431	Windscreen for apm-8fc	1	
MPC-02-032	AC power cord	1	3.0 m, For 100 to 120 V
MPM-02-033			2.5 m, For 220 to 240 V
	apm-8fc manuals		

Optional Accessories

Code No.	Part name	Qty	Remarks
070-00-068	Printer, BS2-80TS with connecting cable	1	Prints out test data and instrument settings.
070-00-093	Printing roll paper, W 80 x D 48 (2 rolls/pack)	1	for BS2-80TS, thermal paper
070-00-281	Mini USB Keyboard	1	for entering sample ID

Suggested Spares for 2 Years

Code No.	Part name	Qty	Remarks
APM-02-001	Test cup assembly	1	Refer to standard accessories.
320-00-038	Thermofuse	1	Pack of 5, with insulation tube.
ABL-01-003	Electric igniter, EI-8	2	
APM-04-031	Temperature sensor for apm-8fc	1	
APM-03-032	Flash detector for	1	



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