

## AUTOMATED PENSKY-MERTENS CLOSED CUP FLASH POINT TESTER

apm-8

All New



Model apm-8 is the automated Pensky-Martens Closed Cup flash point tester from Tanaka. Based on 45 years experience of manufacturing the automated flash point testers, innovative 8<sup>th</sup> generation series has been released. The theme of 8<sup>th</sup> generation is “Ergonomic, Versatile and Premium”.

- ERGONOMIC COLOR-COORDINATED DISPLAY FOR HIGH VISIBILITY FOR EVERYBODY (UNIVERSAL DESIGN) AND INTUITIVE SWITCH OPERATION.
- ENHANCED VERSATILITY INCLUDING USB PORT FOR OPTIONAL FLASH MEMORY OR KEYBOARD, PASSWORD PROTECTION AND DATA STRAGE.
- ALL-IN-ONE CHASSIS DESIGN: COMPACT, LIGHT-WEIGHT AND PREMIUM EXTERIOR DESIGN.
- CONFORMS TO STANDARD TEST METHOD  
(ISO 2719, ASTM D93, IP34)

### APPARATUS

CODE	PART NAME	REMARKS
APM-00-015	apm-8	Pensky-Martens Closed Cup Flash Point Tester

### STANDARD ACCESSORIES

CODE	PART NAME	Qty	REMARKS
APM-02-001	Test Cup Assembly	1	
320-00-035	Thermofuse	1	Pack of 5, with Insulation Tube.
210-02-161	Gas Hose φ9 x φ16, 1.5m with Hose Bands	1	
APM-04-431	Windscreen for apm-8	1	
—	apm-8 MANUALS	1	Manuals for apm-8.

### OPTIONAL ACCESSORIES

CODE	PART NAME	REMARKS
070-00-068	Printer, BS2-80TS	Prints out test data and instrument settings.
070-00-281	Mini USB Keyboard	Sample ID entering

### SUGGESTED SPARES for 2 YEARS

CODE	PART NAME	Qty	REMARKS
APM-02-001	Test Cup Assembly	1	Refer to Standard Accessories.
320-00-035	Thermofuse	1	Pack of 5, with Insulation Tube.
ABL-01-003	Electric Igniter, EI-8	2	
APM-04-031	Temperature Sensor for apm-8	1	
APM-03-032	Flash Detector for APM-7/apm-8	1	

We reserve the right of changes without prior notice.

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### SINGLE ACTION SETTING

The cup cover and the stirrer are permanently mounted on a swing-arm assembly, which allows an easy handling of the test cup cover. It makes free from handling the hot cup cover after completing a test. The swing arm assembly can be lifted up to vertical position for easier test cup cleaning.

### 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 method, and the completion of the test cycle is signaled by beeps. The test result is brightly shown on the color LCD module.

### INTERCHANGEABLE IGNITION SOURCE

apm-8 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 COVER

A FM4910 conforming cover insures the flame integrity. This material shall meet the numerical criterion of each index. (1)FPI(Fire Propagation Index) $\leq 6$  (2)SDI(Smoke Damage Index) $\leq 0.4$

### 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-232 port or USB memory.

### USB PORT

A USB port allows connecting USB keyboard for easy entering sample name and connecting USB flash memory for data copy to a PC or test conditions/parameters copy to the tester.



### PASSWORD PROTECTION

With setting up password by the administrator, the device is protected against inadvertent change of parameters by the operator.

### ALL-IN ONE DESIGN IN LIGHTWEIGHT

The all-in-one design is much lighter than old model, APM-7 by approximately 30%, which is world's smallest class in volume.

### SPECIFICATIONS

<b>TYPE</b>	All –in one, microprocessor controlled
<b>TEST STANDARDS</b>	ISO 2719, ASTM D93, IP34
<b>MEASURING RANGE</b>	Ambient to 370°C
<b>MEASUREMENT MODES</b>	ASTM D93 A-normal, ASTM D93 A-SPE (search), ASTM D93 B-normal, ASTM D93 B-SPE (search), ASTM D93 C-normal, ASTM D93 C-SPE (search) and User custom
<b>HEATER</b>	Band type heater:530W@115V or 500W@230V
<b>COOLING DEVICE</b>	Forced air cooling by fan
<b>DISPLAY</b>	5.7 inch (117 x 88mm) color LCD with LED back light
<b>STIRRING</b>	100, 250 rpm (selectable)
<b>TEMPERATURE SENSOR</b>	PT-100 in stainless steel sheath
<b>FLASH DETECTOR</b>	CRC Thermocouple
<b>IGNITION SOURCE</b>	Gas ignition with automatic lighting or electric ignition. Interchangeable
<b>BAROMETRIC CORRECTION</b>	Automatic correction by built-in barometric pressure sensor
<b>I/O PORT</b>	RS-232C = 1 channel (for PC or Optional Printer) USB=1 channel (for USB keyboard or USB Flash Memory)
<b>SAFETY SHUTDOWN</b>	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 cover is not set in place, (h)control computer runs away (no display) (i) Stirring motor stopped
<b>GAS SUPPLY (When Gas Ignition is used)</b>	LP gas or natural gas (Max. pressure:10kPa)
<b>POWER SUPPLY</b>	100/120VAC or 220/240 VAC, 50/60Hz
<b>POWER CONSUMPTION</b>	720W MAX.
<b>ELECTRICITY CONSUMPTION</b>	170Wh for 1 test (about 60 min), 64.26gCO <sub>2</sub> (@ 0.378kgCO <sub>2</sub> /1kWh)
<b>AMBIENT TEMP. RANGE</b>	10°C to 35°C
<b>DIMENSIONS &amp; WEIGHT</b>	230mm (W) × 470mm (D) × 390mm (H) 17kg