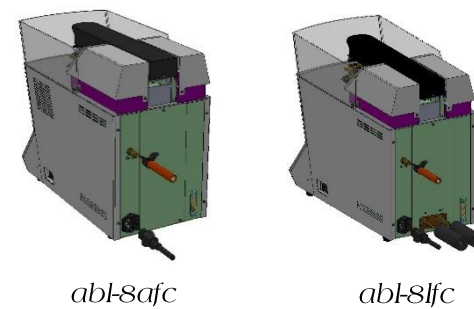
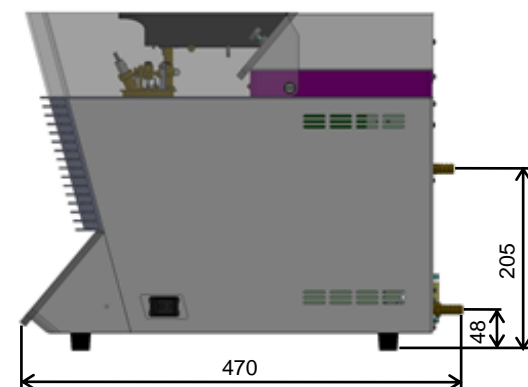
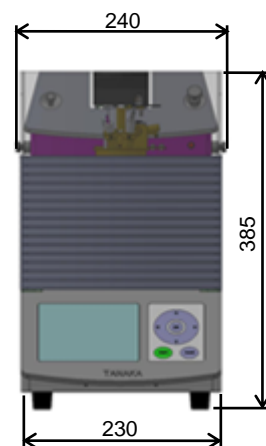


Standard Accessories

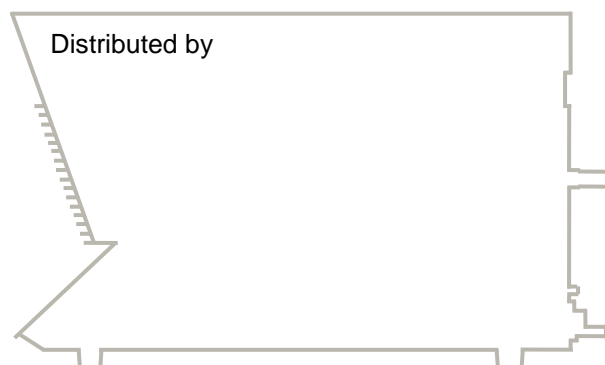
Code No.	Part Name	Qty	Code No.	Part Name	Qty
1000909	Test Cup	1	1000454	Insulated Tubing, 2 m <i>8lfc</i>	2
1000711	Thermofuse (Pack of 5, with insulation tube)	1	1000363	Hose Band, SNP-8 <i>8lfc</i>	4
			1001401	Thermal Insulation Lid	1
1000449	Gas Hose φ9 x φ16 x 1.5m	1	1001507	AC Power Cord, 3.0m for 100 to 120 V	1
			1006151	AC Power Cord, 2.5m for 220 to 240 V	1
1000361	Gas Hose Band	2		USB Stick (Instruction & Maintenance Manual)	1
1000907	Windscreen for abl-8, atg-8, asc-8	1			

Optional Accessories

Code No.	Part Name	Remarks
1006018	Printer NEX-C200R01 100V	Print out test data and instrument settings
1006019	Printer NEX-C200R05 200V	
1000262	Mini USB Keyboard	For entering Sample/Operator ID



Weight : 16 kg



TANAKA
Petroleum Testing & Beyond

Tanaka Scientific Limited
7-10-3, Ayase, Adachi-ku, Tokyo, 120-005 JAPAN
TEL: 03-3620-1711 FAX: 03-3620-1713
URL: www.tanaka-sci.com

202201

Automated Abel Closed Cup Flash Point Tester

abl-8 Series

abl-8afc (Metal Block Bath Air-cooled Type)

abl-8lfc (Metal Block Bath Liquid-cooled Type)



- Easy Operation with Minimal Key Strokes
- Robust and Compact Design
- Color Coordinated Display
- USB Keyboard (Option)
- Adoption of Fire Containment System

Single Action Setting

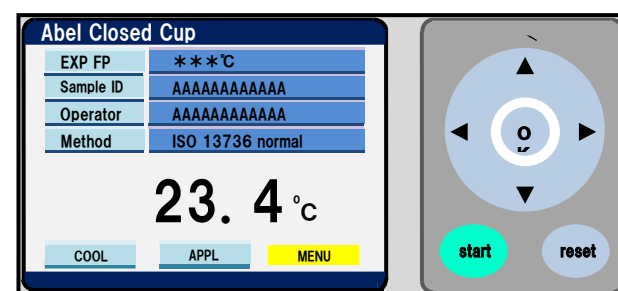
The cup cover is permanently mounted on a swing-arm assembly, which allows an easy handling of the test cup cover. Due to this design, the hot cup cover right after completion of a test can also be lifted with ease. The swing arm assembly can be raised to a vertical position, ensuring easier cleaning of the test cover.

2 Types of Baths

Heating / Cooling is done by energy efficient Peltier modules attached to a metal block bath. Air-cooled model abl-8afc and liquid-cooled model abl-8lfc are available for different temperature ranges (Model abl-8lfc requires an optional chiller).

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.



Data Handling

The unit is designed 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.

Interchangeable Ignition Source

abl-8 series 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.



Gas Ignition



Electric Ignition

USB Port

A USB port allows connecting USB keyboard for easy entering of sample and operator ID. USB flash memory can be utilized to export data to a PC or to save/copy/upload test parameters.



Connection of USB Keyboard



Connection of USB Stick

Password Protection

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



Password Entry

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

Specifications

Product	Able Closed Cup Flash Point Tester	
Model	<i>abl-8afc</i>	<i>abl-8lfc</i>
Test Methods	ISO 13736, IP 170, ISO 1516, ISO 1523	
Measuring Range	+10°C to +110°C	-30°C to +80°C at cooling medium of 10°C 0°C ~ +110°C at cooling medium of 40°C
Test Mode	(1) ISO 13736 normal (2) ISO 13736 SPE (search) (3) ISO 13736 Rapid	(4) ISO 1516 (5) ISO 1523 (6) User Custom
Bath	Metal Block Bath Air-cooled Type	Metal Block Bath Liquid-cooled Type (With an optional chiller)
Sample Heating / Cooling	By Peltier Device	
Display	5.7 inch (117 x 88 mm) color LCD with LED back light	
Stirring	30 rpm	
Temperature Sensor	PT-100 in stainless steel sheath	
Flash Detection	CRC Thermocouple	
Ignition Source	Gas ignition with automatic lighting or electric ignition (Interchangeable)	
Barometric Correction	Built-in barometric pressure sensor	
I/O Port	RS-232C = 1 channel (for PC or Optional Printer) USB=1 channel (for USB keyboard or USB Flash Memory)	
Safety Functions	Automatically shuts off and the problem is reported by buzzer and display in case: (a) EFP+10°C or 70°C (ISO13736) or 110°C (ISO1516, ISO1523) is reached (b) Temperature sensor for sample 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) Control computer runs away (no display)	
Gas Supply	LP gas or natural gas (Max. pressure: 10 kPa)	
Power Consumption	AC 100 to 240 V, 300 VA (max), 50/60 Hz	
Power Consumption	30 Wh for 1 test (about 30 min), 11.34 gCO ₂ (@ 0.378 kgCO ₂ /kWh)	
Dimension (W x D x H)	230 x 470 x 385 (mm)	
Weight	16 kg	

Circulator Requirements for abl-8lfc (Please procure locally)

Type	Circulator with heating/cooling capacities. Open bath type.
Temperature range	-5°C to +40°C or wider
Pump capacity	Pressure: 0.2 bar minimum Flow rate: 2L/min minimum
Cooling capacity	250 W@10°C minimum
Heater capacity	500W minimum
Bath volume	3L minimum

Note: Specifications and appearance are subject to change for product improvement without prior notice.