# **ABEL**

# IP 170 ISO 13736 DETERMINATION OF FLASH POINT - ABEL CLOSED CUP METHOD

For determination of the closed-cup flash point of combustible liquids having flash point between -30 and 70°C -(22 and 158°F)

Electrically heated by electronic regulator, mounted on a case painted with anti-acid epoxidic products. Calibrated brass crucible, cover with gas or electrical ignition device allowing to ignite the testing sample by a manual glide-opening. Motor stirrer, air bath and water bath are made in chromium-plated copper, internal cooling coil with external connection for possible cooling bath

## Technical specifications:

- Temperature: from ambient to 70°C (158°F) (up to -30°C (-22°F) with external unit)
- Power supply: 230V  $\pm 10\%$  50Hz
- Power: 300W
- Dimensions: 26x32x37 cm
- Weight: 7 kg

#### 820 ABEL

With gas ignition

## 820/IE ABEL

With electrical iginition

ACCESSORIES ON REQUEST	
10-0748	GAS CYLINDER 2 kg
1	Empty
10-0749	GAS REDUCER 30 mbar
10-0747	GAS TUBE, L=5 m
10-0821	STAINLESS STEEL TEST CUP
T-IP74C	THERMOMETER IP 74C
T-IP75C	THERMOMETER IP 75C

## **CONSUMABLES x 2 YEARS**

15-CAN/IE ELECTRIC IGNITOR x2

SPARE PARTS	
15-0750/S	TUBE, L=3 M.
15-0821	BRASS TEST CUP
15-0822	COVER WITH MOVEMENT
15-0828/CT	THERMOMETER COLLAR
15-0824/FM	STIRRER FLEXIBLE DRIVE
11-0820	HEATER
15-0755	GAS IGNITION
17-0003	TRASFORMER (for 820
17-0010	TRASFORMER (for 820/IE)
15-0004	BIPOLAR GREEN SWITCH
15-0005	BIPOLAR YELLOW SWITCH
15-0113	ELECTRONIC REGULATOR
12-0013	MOTOR STIRRER 30 RPM 24V



## **FLASH POINT**

Mounted on a case painted with anti-acid epoxidic products. Automatic temperature rise and fall, temperature control system with PID algorithm and SSR drive, both electric and gas ignition support automatically controlled, automatic opening system, peltier heat and cool system cooled with tap water circulation, Aluminum block with brass test cup and cover block, temperature reading and control by glass PT100 class A sensor, detection system by ionization with mV electrostatic charge/discharge system, RTOS with S.D.M. system software operator panel with 32bit CPU, Ethernet with remote control support using integrated VNC server and backup/network printer server, USB with memory device support, keyboard, mouse, external device, Bar code reader, printer with PCL support, additional 8Gb SD card with 500.000 test results guaranteed, long life electric igniter for about 10000 cycles, internal atmospheric absolute pressure sensor with 0.1kPa precision, automated calculated results, 10 usable test presets, predefined standards, custom standard with custom parameters, internal RTC, dual scale operation: Celsius/Fahrenheit, 3 selectable languages: English, French, Italian, operating range -30 to +75°C (-22 +167°F), Power consumption: 700W with 20A.

The automatic version, 820/AUT model, is supplied with a automatic sensor for flash point and atmospheric pressure sensor with  $\pm 0.1$  Kpa precision

## Technical specifications:

- Temperature: from -30°C (-22°F) to 70°C (158°F)

- Power supply: 230V ±10% 50Hz

- Power: 700W

- Dimensions: 33X46X57 cm

- Weight: 28 kg

### 820/SEM ABEL SEMI-AUTOMATIC

Without automatic flash point sensor and atmospheric pressure sensor  $% \left( 1\right) =\left( 1\right) \left( 1\right$ 

# 820/AUT ABEL AUTOMATIC

With automatic flash point sensor and atmospheric pressure sensor

Automatic apparatus with automatic temperature rise and fall, automatic detection and temperature control system with PID algorithm and SSR drive, both electric and gas ignition support automatically controlled, automatic opening system, peltier heat and cool system cooled with tap water circulation,

Aluminum block with brass test cup and cover block, temperature reading and control by glass PT100 class A sensor, detection system by ionization with mV electrostatic charge/ discharge system, RTOS with S.D.M. system software operator panel with 32bit CPU, Ethernet with remote control support using integrated VNC server and backup/network printer server, USB with memory device support, keyboard, mouse, external device, Bar code reader, printer with PCL support, additional 8Gb SD card with 500.000 test results guaranteed, long life electric igniter, internal atmospheric absolute pressure sensor with 0.1kPa precision, automated calculated results, 10 usable test presets, predefined standards, custom standard with custom parameters, internal RTC, dual scale operation: Celsius/ Fahrenheit, 3 selectable languages: English, French, Italian, operating range -30 to +75°C (-22 +167°F), Power consumption: 700W with 20A.

# **ACCESSORIES ON REQUEST**

10-0748 GAS CYLINDER 2 kg

Empty

10-0749 GAS REDUCER 30 mbar

10-0747 GAS TUBE, L=5 m

10-0821 STAINLESS STEEL TEST CUP 14-0007/C GLASS PT100 PROBE CERTIFIED

#### **CONSUMABLES x 2 YEARS**

15-CAN/AUT ELECTRIC IGNITOR x2

#### SPARE PARTS

15-0750/S TUBE L=3 m 15-0821 BRASS TES CUP

15-0821 BRASS IES CUP

15-0822/AUT COVER WITH MOVEMENT 15-0828/CS PROBE COLLAR (only for 820/SEM)

15-0824/FA STIRRER FLEXIBLE DRIVE

11-0820 HEATER

15-0755 GAS IGNITION

15-0750/AUT/ION THERMOCOUPLE (for 820/AUT)

15-0004 BIPOLAR GREEN SWITCH 14-0007 GLASS PT100 PROBE

12-0013 MOTOR STIRRER 30 RPM 24V