

FLASH POINT APPARATUS

INNOVATION WITH VALUE



Culture Instruments India LLP







ABEL FLASH POINT APPARATUS

COMPLIANCE

IP 170, IP33, IP113, BS2000 P-170, P-33, P113, ISO 1523,13736; NF M 07-011: NF T 66-009

DESCRIPTION AND CONSTRUCTION

This apparatus is used for determination of flash points of samples, whose flash points are below + 49°C. The apparatus Made of Copper, and consists of a brass cup and cover fitted with shutter mechanism. Test Flame arrangement, Hand operated stirrer, Thermometer socket, Water jacket electrically heated.

SPECIFICATIONS - VOLTAGE VARIAC

11012-02

: Copper jacketed Water bath Bath

Sample stirrer : Manual System Load : 1.0 Kw

Operating temperature : -5°C TO 70°C (low temperature by external circulation or ice mixtures- users scope)

Power Supply : 230V. 50Hz A.C. 1 Phase

Voltage Variac Control : Manually controlled heating rate

SPECIFICATIONS - DIGITAL 11012-03

System Load : 1.0 Kw

Operating temperature : -5°C TO 70°C (low temperature by external

circulation or ice mixtures- users scope)

Power Supply : 230V, 50Hz A.C. 1 Phase

: With 3 ½ digit LED display with Digital Module

> PID based programmable / profilable controller for precise and unattended temp. control

ACCESSORIES / SPARES

11012-10 Copper Jacketed Vessel 11012-11 Energy Control system

Voltage Variac Control System 11012-12

11012-13 Digital Control System

Reducing Socket cum Flame Regulator 11010-14

IP-75C Thermometer 11012-15 IP-74C Thermometer 11012-16

11012-17 Test Cup 11012-18 Lid Assembly Heater Coil 11012-19

11012-20 Refractory Heater Base NABL Calibration Certificate 11012-22

PRE-INSTALLATION (ON SITE REQUISITES)

- * 5A Power Point, Single phase
- * LPG Cylinder with Regulator
- * D M Water
- * Match stick OR Lighter
- * Test Sample









SPECIFICATION - AUTOMATIC

11012-04

Bath Temp. Range : -25°C to 60°C Bath : Dry block bath

Sample Volume : 60ml
No. of samples : 1 No.
Sample stirrer : Motorised
Ignition : Gas / Electric
Flash Detection : Thermal/Ionisation

System Load : 2.0 Kw

Testing temperature : -20°C TO 50°C

Display : 4 line Alphanumeric, Backlit LCD Screen

Power Supply : 230V, 50Hz AC. 1Ph

ACCESSORIES / SPARES

11010-14 Reducing Socket cum Flame Regulator

11012-15 IP-75C Thermometer 11012-16 IP-74C Thermometer

11012-17 Test Cup 11012-18 Lid Assembly

26000 Printer

11012-22 NABL Calibration Certificate



PRE-INSTALLATION (ON SITE REQUISITES)

- * 5A Power Point, Single phase
- * LPG Cylinder with Regulator
- * D M Water
- * Match stick OR Lighter
- * Test Sample



CLEVELAND (OPEN CUP)

COMPLIANCE

IS:1448, ASTMD92, IP-36, IP-403, BS2000 P-403, Bs4689, DIN51 376, ISO 2592

DESCRIPTION AND CONSTRUCTION

This apparatus is used for determination of flash points of liquid samples, whose flash points are above 40°C to 350°C in open test conditions.

Outer body made of mild steel powder coated,

Complete with Sample cup made of brass, electrical Heating system,

Control System, Flame regulator with reducing socket, thermometer holder.

ENERGY REGULATOR

11014-01

SPECIFICATIONS:

Operating temperature : 40°C TO 300°C

Power Supply : 230V, 50Hz A.C. 1 Phase

Flash Detection Accuracy : Manual Load : 600W



VOLTAGE VARIAC

11014-02

SPECIFICATIONS:

Operating temperature : 40°C TO 300°C

Power Supply : 230V, 50Hz A.C. 1 Phase

Voltage Variac Control : Manually controlled heating rate

Flash Detection Accuracy : Manual Load : 600W

DIGITAL 11014-03

SPECIFICATIONS:

Operating temperature : 40°C TO 300°C

Power Supply : 230V, 50Hz A.C. 1 Phase Controller : Microprocessor PID Controller

Resolution : 0.1°C Flash Detection Accuracy : Manual Load : 600W



ACCESSORIES & SPARES

11010-11	Energy Regulator
11010-12	Voltage Variac
11010-13	Digital Controller
11010-14	Reducing Socket cum Flame Regulator
11010-15	IP-28C Thermometer
11010-16	Test Cup
11010-17	Temperature Sensor (digital only)
11010-18	Thermometer Holder
11010-19	Heating Coil
11010-25	Calibration Certificate



AUTOMATIC MODEL

11010-04

For accurate and manual error free determination of flash points of fuels, lubricating oils, and homogenous liquids as per ASTM D92. Test parameters are set via keypad, with digital display of set and process temperature.

STANDARD FEATURES

- * Automatic Flash point detection
- * Automatic Barometric pressure correction
- * Automatic flash point search mode for unknown samples
- * User set-able heating and flashing profile
- * Automatic heating profile setting depending on initial sample temp. and expected flash point.
- * Automatic cutoff at 30°C beyond expected flash point or at max. temp. limit set by the user.
- * 16 x 4 Line Back Lit Alpha numeric display
- * In-bulit Numerical Key pad for settings & data entry
- * Audio visual indication of end of test and Alarms
- * Over temperature safety cutoff and alarm.
- * Last reading stored until report is printed or next test is initiated.
- * Serial Printer interface for Automatic printing of test report at a press of a button.
- * Ensures minimum power consumption by design thereby reducing operation cost.
- * Electrical ignition instead of gas (Optional)

SPECIFICATIONS:

Resolution : 0.1° C Controller Accuracy : 0.5° C Flash Detection Accuracy : $\pm 2^{\circ}$ C Load : 750w

ACCESSORIES / SPARES

11010-14	Reducing Socket cum Flame Regulator
11010-15	IP-28C Thermometer
11010-16	Test Cup
11010-17	Temperature Sensor
11010-18	Thermometer Holder
11010-19	Heating Coil
11010-20	Gas Ignition System
11010-21	Electrical Ignition System (automatic model only)

PRE-INSTALLATION (ON SITE REQUISITES)

Calibration Certificate

- * 5A Power Point, Single phase
- * LPG Cylinder with Regulator
- * Match stick OR Lighter
- * Test Sample

11010-25





PENSKY MARTEIN (CLOSED CUP)

COMPLIANCE

IS:1448, ASTM D93, D3934, D3941, D3278, D3828, IP 304, 404, BS3900, 6664, ISO-1516,1523,2719, DIN51 758.

DESCRIPTION AND CONSTRUCTION

This apparatus is used for determination of flash points of liquid samples, whose flash points are above 45°C to 350°C in closed test conditions. Outer body made of mild steel powder coated, Complete with cup made of brass, lid assembly and LPG regulator with Y-cock. There are four variants.

AUTOMATIC MODEL

For accurate and manual error free determination of flash points of fuels, lubricating oils, and homogenous liquids as per ASTMD93, method A & B. Test parameters are set via keypad, with digital display of set and process temperature.

MODELS

- 11011-01 Basic with Energy regulator control.
- 11011-02 Basic with Voltage Variac control.
- 11011-03 Semi-automatic with Gas ignition
- 11011-04 Automatic with Electrical/Gas ignition
- 11011-05 Auto-Prime with touch screen, with Electrical/Gas ignition







STANDARD FEATURES FOR AUTOMATIC

- * Automatic Flash point detection
- * Automatic Barometric pressure correction
- * Automatic flash point search mode for unknown samples.
- * User set-able heating and flashing profile
- * Automatic or user set-able stirrer speed setting and control
- * Automatic heating profile setting depending on initial sample temperature and expected flash point.
- * 16 x 4 Line Back Lit Alpha numeric display
- * Automatic cutoff at 30°C beyond expected flash point or at max. temperature limit set by the user.
- * 2 Preset test Modes as per ASTM Method A & B
- * In-bulit Numeric Key pad for settings
- * Audio visual indication of end of test and Alarms
- * Over temperature safety cutoff and alarm.
- * Last reading stored until report is printed or next test is initiated.
- * Serial Printer interface for Automatic printing of test report at a press of a button.
- * Ensures minimum power consumption by design thereby reducing operation cost.
- * Electrical ignition instead of gas (Optional)

ADDITIONAL FEATURES FOR AUTO-PRIME

- * 5" Colour Touch Screen Graphic User Interface
- * LAN Enabled system
- * Internal Storage of Reports and Results
- * Pre-loaded recipes for testing as per IP, ASTM, ISO methods a, b & c
- * Auto-diagnostic feature for self testing and fault detection
- * In-built memory to store up to 10,000 Reports
- * Over-head cooling arrangement.
- * Multi-point temperature Calibration facility for better linearity

SEMI AUTOMATIC MODEL

11011-03

- * This system offers almost all the features of an automated system like digital temperature control µ based with single point ramping.
- * Ramping Rate: 20°C to 100°C/Hr.
- * Variable speed stirrer to comply with both method A & B.
- * Automatic exposure of test sample to flame at a press of a button.
- * Temperature Range: 45 to 400°C
- * Stirrer speed adjustable from 30 to 250
- * Digital RPM Indicator (Optional)
- * Load 750 W

* Resolution : 0.1°C * Controller Accuracy : 0.5°C * Flash Detection : MANUAL

* Operation on 230V 50Hz, single phase. (Optional 110V 50 Hz, single phase.)





11011-03



VOLTAGE VARIAC MODEL

11011-02

Consisting of A brass test cup with lid assembly, motorised stirrer of fixed rpm and a heating system with voltage variac control. Temp. to be monitored by a glass thermometer

- * Temperature Range: 45°C to 400°C
- * Load 550 W
- * Operation on 230V, 50 Hz, single Phase

ENERGY REGULATOR MODEL

11011-01

Consisting of A brass test cup with lid assembly, manual stirrer and a heating system with energy regulator control. Temp. to be monitored by a glass thermometer

- * Temperature Range: 45 to 400°C
- * Load 550 W
- * Operation on 230V, 50 Hz, single Phase

ACCESSORIES / SPARES

- 11011-11 Energy Regulator
 11011-12 Voltage Variac
 11011-13 Digital Controller
 11011-14 Reducing socket cum Flame regulator
 11011-15 IP-15C Thermometer
 11011-16 Brass Test cup
- 11011-16 Brass Test cup 11011-17 Lid with Shutter 11011-18 Open Cup Lid
- 11011-19 Motorized Stirrer (02/03 Only)
- 11011-20 Heating Coil 11011-21 Gas Tubing 11011-22 Temperature
- 11011-22 Temperature Sensor xxxx-xx Portable digital barometer
- Spare electrical ignition coil. (Automatic Models)
- 11011-24 Lid with shutter for electrical ignition. (Automatic Models)
- Spare flash detector (Automatic Models)
- Fire extinguisher attachment (Prime Model only)
- 11011-27 Calibration Certification
- 11011-28 Flame Relighting Arrangement (Prime Model only)

PRE-INSTALLATION ON-SITE REQUISITES

- * 5A Power Point, Single phase
- * Standard Test Sample
- * LPG Cylinder With Regulator (11011-03 / 02 / 01)
- * Match Box or Lighter (11011-03 / 02 / 01)







11011-01



Dealers / Distributors / Channel Partner							

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