

**34200-0 MULTIFLASH - ABEL CLOSED CUP MODULE**

IP 170; IP 304 (obs) Part 2; IP 492; BS 2000 Part 170; BS 3900 Parts A8 and A9; BS 6664 Parts 1 & 2; EN ISO 13736; ISO 1523

- Equilibrium tests
- Non-Equilibrium tests
- Flash/No-Flash tests
- Flexible automated search mode
- Ambient to 93°C (5°C to 93°C with optional cryostat)
- Gas or electric ignition

The Abel Closed Cup Module comprises a Test Area, DIPS pod (Dipping, Ignition, Pilot, Stirrer), flash detector, sample temperature probe, outer and inner bath temperature probes and all necessary cables to interconnect with the 34000-0 Universal Base Unit.

The Test Area consists of an outer liquid filled bath surrounding an inner liquid filled bath and a removeable sample cup and lid. The outer bath is heated by the hotplate within the 34000-0 Universal Base Unit, has a port for a temperature probe and connections for a 34008-0 Cooling Boost Module, allowing circulation of cooling fluid via a cryostat for sub-ambient tests. The inner bath also has provision for a temperature probe. The lid of the sample cup is equipped with a stirrer, sliding shutter, and ports for the flash detector and sample temperature probe.

The DIPS pod contains a stirrer drive, shutter actuator and ignitor dipping mechanism with a coaxial gas jet/electric hot wire ignitor.

The outer bath, inner bath and sample temperature probes are class A PRTs, and flash detection is by a thermocouple.

Safety features include an initial dip to check that the sample is below its flash point at the start of the test and PRT checks to ensure that the correct probes are connected and are immersed in bath liquids or sample. When in search mode, the software limits the maximum temperature to 50°C above "expected flash". An over-temperature cut-out is mounted on the base flange of the outer bath.

**SUPPLIED WITH:** DIPS pod, Test Area, Ignitor, Flash Detector, Inner and Outer Bath PRTs, Sample PRT, interconnection leads, instruction manual.

*Note: 34000-0 Universal Base Unit and 34008-0 Cooling Boost Module are required for operation. Sub-ambient tests down to 5°C require a 34006-0 Cryostat.*

SPECIFICATIONS	
<b>Method:</b>	Abel Closed Cup
<b>Tests:</b>	Equilibrium Non-Equilibrium Flash/No Flash
<b>Temperature Range:</b>	Ambient to 93°C (5°C to 93°C with optional cryostat)
<b>Barometric Correction:</b>	Automatic
<b>Bath:</b>	Liquid/Liquid
<b>Heating:</b>	Hot Plate
<b>Post Test Cooling:</b>	Fan assisted or Circulating liquid/external cryostat (optional)
<b>Post Test Cool-down Time (90°C to 50°C):</b>	45 minutes (Fan) 3 minutes (external cryostat)
<b>Ignitor:</b>	Quick-fit coaxial gas jet/electric hot wire, user selectable (Electric hot wire pilot light for gas jet)
<b>Temperature Probes:</b>	Class A Platinum Resistance Thermometers
<b>Flash Detection:</b>	Thermocouple
<b>Stirrer Speed:</b>	30 rpm
<b>Gas Supply (gas jet ignitor):</b>	Laboratory gas, 3kPa (0.44psi) maximum pressure
<b>Cooling Supply:</b>	Water (5°C and above) Water/Ethylene Glycol 50/50 (below 5°C) 125kPa (18psi) maximum pressure
<b>Voltage:</b>	110/120V or 220/240V, 50/60Hz, (switchable)
<b>Power:</b>	600W
<b>Size (HxWxD):</b>	47 x 45 x 34cm
<b>Weight:</b>	13kg



34200-0 mounted on a 34000-0 Base Unit with a 34012-0 Draught Screen fitted



CALIBRATION & VERIFICATION MATERIALS



SETALERT COMPATIBLE



TECHNICAL DATASHEETS AVAILABLE

**ACCESSORIES - Abel Closed Cup Module****REQUIRED**

34008-0 COOLING BOOST MODULE

**OPTIONAL**

00100-0 SETALERT REMOTE PAGING SYSTEM  
23680-0 SPIRIT LEVEL  
34003-0 RS232 CABLE, for connecting instrument to PC.  
34006-0 CRYOSTAT (-20°C).  
34007-0 SHUTTER LUBE  
34012-0 DRAUGHT SCREEN (recommended for gas tests).  
81002-2 PRINTER

**CALIBRATION VERIFICATION & TRAINING**

60005-002 DRY WELL PROBE CALIBRATOR, (for details see page 144).  
99850-0 MULTI-TEST VERIFICATION MATERIAL, IP 170 Kerosine, (for details see page 150).  
99910-0 PORTABLE DIGITAL BAROMETER, 750 to 1500 mbar absolute, (for details see page 145).  
99960-0 DIGITAL PHOTO TACHOMETER, (for details see page 147).

**CONSUMABLES - Abel Closed Cup Module**

2 Years/2000 Tests

	Qty
34100-002 SAMPLE PRT PROBE	1
34200-003 OUTER BATH PRT PROBE	1
34200-005 CO-AXIAL IGNITOR	2
34700-001 FLASH DETECTOR	2
81002-001 PRINTER PAPER, pack of 20 rolls	1