

# WATER AND SEDIMENT DETERMINATION BY AUTOMATIC CENTRIFUGE

## Test Method

Centrifugation provides a convenient means of determining sediment and water content in crude oil, fuel oils, middle distillate fuels, and biodiesel. Also used in determining the precipitation number, demulsibility characteristics, trace sediments, and insolubles in used lubricating oils.

## Automatic Heated Oil Test Centrifuge

- Choice of long, short, pear, or finger rotor assembly to accommodate corresponding centrifuge tubes
- Accommodates four (4) centrifuge tubes of 6 or 8" conical ASTM types, long, short, pear or finger tubes
- Automatic control of acceleration ramp, centrifugation speed, and timing functions.
- 4½" LCD Touch Screen Control Panel
- Substantial Insulation for Reduced Heat Loss
- Precise balancing, Quiet Operation
- Large, clear, top opening lid
- Class 1, Division 2 explosion resistant rating

Fully automatic bench top centrifuge designed expressly for petroleum testing applications. Features a 4½" LCD touch screen control panel. This integrated touch screen can be used to turn the heat on and off, set the duration of the test, set the RCF/RPM values and choose the type of rotor assembly and corresponding glassware to be used during the test. The motor speed mechanism allows the user to simply set the desired speed and the instrument will attain that speed. This mechanism calculates RPM based on the given RCF and type of Rotor selected. The large, clear, top opening lid provides for easy access to the rotor and tube holders and for cleaning of the unit. The lid has a 18½" diameter viewing window allowing the operator to view inside the chamber for checking the status of the rotor and checking for possible spillage of the centrifuge tubes. Molded PTFE cushions provide for maximum protection and easy positioning of the tubes.

## Safety Features

The Centrifuge comes equipped with a Safety Lockout Mechanism. Upon emergency shutdown the door is locked and cannot be unlocked until the unit comes to a complete stop, the unit is turned back on, and the stop/unlock key is pressed on the touch screen display. Furthermore, the centrifuge cannot start while the door of the chamber is open and the latch is not engaged. The "Nitrogen Purge" feature allows for a slow release of Nitrogen into the bowl of the centrifuge. This feature requires an external Nitrogen Gas source and can easily connect to an Inlet port located at the back of the unit

## Specifications

Conforms to the specifications of:

ASTM D91, D96, D893, D1796, D1966, D2273, D2709, D2711, D4007, D5546; IP 75, 145, 359; API MPMS Chapter 10.4, API 2542, 2548; ISO 3734; DIN 51793; NF M 07-020

Capacity: Four (4) oil test centrifuge tubes: long (100mL), short (100mL), pear (100mL), or finger tubes (12.5mL)

Maximum Speed: 2200 RPM

Maximum RCF: 1327 (long); 1170 (short); 865 (pear-shaped)

Timer: 0 to 999 min

Set Speed: 200 - 2200 RPM

Speed Readout: 0 - 2200 RPM

Temperature Control: ambient to 93°C (200°F)

Temperature Readout: Digital

Brake: Automatic Dynamic

## Electrical Requirements

115V 60Hz, 10A

230V 50/60Hz, 5A

## Dimensions

l x w x h, in. (cm)

23x30x13½ (51x76x34)

Net Weight: 93 lbs (42 kg)

## Shipping Information

Shipping Weight: 110 lbs (50 kg)

Dimensions: 11.2 Cu. ft.



K60002 Automatic Heated Oil Test Centrifuge

## Ordering Information

### Catalog No.

<b>K60002</b>	Automatic Heated Oil Test Centrifuge, 115V 60Hz with Long Tube Rotor Assembly
<b>K60092</b>	Automatic Heated Oil Test Centrifuge, 230V 50/60Hz with Long Tube (RA*)
<b>K60002-ST</b>	Automatic Heated Oil Test Centrifuge, 115V 60Hz, Short Tube (RA*)
<b>K60092-ST</b>	Automatic Heated Oil Test Centrifuge, 230V 50/60Hz with Short Tube (RA*)
<b>K60002-PT</b>	Automatic Heated Oil Test Centrifuge, 115V 60Hz, Pear Tube (RA*)
<b>K60092-PT</b>	Automatic Heated Oil Test Centrifuge, 230V 50/60Hz with Pear Tube (RA*)
<b>K60002-FT</b>	Automatic Heated Oil Test Centrifuge, 115V 60Hz, Finger Tube (RA*)
<b>K60092-FT</b>	Automatic Heated Oil Test Centrifuge, 230V 50/60Hz with Finger Tube (RA*)

\*Rotor Assembly

## Accessories

<b>K60002-LT-1</b>	Rotor Assembly for Long Tubes
<b>K61101</b>	Centrifuge Tube, Long, 100mL, 8", marked in mL (ASTM D91, D96, D893, D1796, D4007)
<b>K61106</b>	Centrifuge Tube, Long, 100mL, 8", marked in 200 parts (ASTM D96)
<b>K61110</b>	Centrifuge Tube, Long, 100mL, 8", marked in mL every 1mL above 10mL (ASTM D96, D4007)
<b>K61112</b>	Centrifuge Tube, Long, 100mL, 8", marked in 200 parts every 2 parts above 20 parts (ASTM D96)
<b>K61109</b>	Centrifuge Tube, Cone-Shaped, 100mL with capillary tip capable of measuring 0.01 mL and readable by estimation to 0.005% (ASTM D2273, D2709) (K61153 cushion required for each tube)
<b>K61153</b>	PTFE cushion for Long Tubes w/capillary tip (Req. for K61109 tubes)
<b>K60002-ST-1</b>	Rotor Assembly for Short Tubes
<b>K61102</b>	Centrifuge Tube, Short, 100mL, 6", marked in 200 parts every 4 parts above 20mL (ASTM D96)
<b>K61105</b>	Centrifuge Tube, Short, 100mL, 6", marked in mL (ASTM D96)
<b>K61107</b>	Centrifuge Tube, Short, 100mL, 6", marked in mL every 2mL above 10mL (ASTM D96)
<b>K61108</b>	Centrifuge Tube, Short, 100mL, 6", marked in 200 parts (ASTM D96)
<b>K60002-PT-1</b>	Rotor Assembly for Pear Tubes
<b>K61104</b>	Centrifuge Tube, Pear, 100mL, marked in mL (ASTM D1966)
<b>K61152</b>	Centrifuge Tube, Pear, 100mL, with tube tip having graduations of 0.01mL over the range 0 to 0.2mL (ASTM D2709)
<b>K61111</b>	Cork Stopper for Centrifuge Tubes
<b>K60002-FT-1</b>	Rotor Assembly for Finger Tubes
<b>K61141</b>	Centrifuge Tube, Finger Tube (API 2542)