

The Baker Series B3000 Refractometers includes the following models: B3028 (0-28% Salinity), B3032 (0-32% Brix), B3082 (45-82% Brix) and B3090 (Battery/Antifreeze °C).



### Product Quality

This product has been calibrated during the manufacturing process to meet stated product specifications. If a certificate of calibration is required please contact the nearest authorized Baker distributor or authorized Service Center. Please note an additional fee for this service will apply.

### Safety

- Store your product in a clean, dry place.
- Do not immerse in or clean under running water.
- Do not drop or subject to shock or excessive force as it may result in damage to the mirror tube &/or optical components.
- Do not scratch the prism surface.
- Do not attempt to measure corrosive chemicals as it will damage the instrument.
- The prism must be cleaned thoroughly with a soft, clean damp cloth after each use - failure to do so will result in inaccurate readings and possible long term damage.

When using the Baker B3090 – use extreme care when opening the radiator cap – do not remove while engine is running or if engine is warm. Do not let battery fluid come into contact with skin or eyes which may cause personal injury.



**IT IS STRONGLY RECOMMENDED TO WEAR SAFETY GLASSES AND GLOVES WHEN OBTAINING SAMPLES OF ENGINE COOLANT OR BATTERY FLUID.**

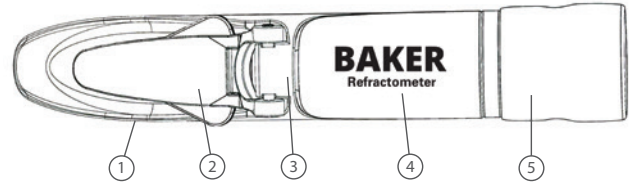
### Features

- Measure the concentration
- Easy to operate with simple to read scales
- Requires only 2 or 3 drops of sample
- Prism and lens with a simple focus adjustment provides repeatable results
- Automatic Temperature Compensation (ATC)

### Included

- Refractometer
- Cover Plate
- Calibration Adjustment Plate
- Cleaning Cloth
- Solution/Sample Applicator
- Hard Carrying Case

### Instrument Description



1. Prism
2. Cover Plate
3. Scale Calibration Screw (bottom side)
4. Mirror Tube
5. Eyepiece with Focusing Ring

### Operating Instructions

#### Initial Calibration

1. Open the Cover Plate and clean the surface of the Prism with the included Cleaning Cloth
2. Apply 2-3 drops of distilled water onto the prism surface, close the cover plate and press lightly ensuring that the distilled water spreads evenly; eliminating air bubbles while allowing it to rest for approx. 30 seconds.
3. Aim the front end of the refractometer towards the direction of a bright light and adjust the Eyepiece until the reticle is clearly visible.
4. If the boundary line does not intersect at the lowest end of your corresponding scale, turn the scale calibration screw until adjusted.
5. Wipe the water off the Prism and Cover Plate with a moist cotton cloth and store the calibration adjustment plate.

**NOTE:** While under normal operating conditions, the calibration only needs to be verified periodically.

#### Measuring Procedure

1. Open the Cover Plate and clean the surface of the Prism with the included Cleaning Cloth.
2. Apply 2-3 drops of the liquid sample onto the prism surface, close the Cover Plate and press lightly ensuring that the sample spreads evenly; eliminating air bubbles while allowing it to rest for approx. 30 seconds.
3. Aim the front end of the refractometer towards the direction of a bright light and adjust the Eyepiece until the reticle is clearly visible.
4. Read the measurement value corresponding to your scale where the boundary line intersects the scale.
5. After testing, wipe the sample off the Prism and Cover Plate with a moist cotton cloth. Allow to air dry before storing away.

#### Automatic Temperature Compensation (ATC)

Baker Refractometers include automatic temperature compensation to automatically adjust for any temperature variance between 32°F to 86°F (0°C to 30°C).

### Specifications

Model	B3028	B3032	B3082	B3090
Measuring Range	0 to 28% (Salinity)	0 to 32% (BRIX)	45 to 82% (BRIX)	-50 to 0°C (Glycol) 1.100 to 1.400 sg (Battery Fluid) 40 to 0°C (Cleaning Fluid)
Minimum Scale	0.2%	0.2%	0.5%	0.01 sg (Battery) 5°C (Propylene and Ethylene, Cleaning Fluid)
Resolution	0.2%	0.2%	0.5%	1°C
Accuracy	±0.2%	±0.2%	±0.5%	1°C
Automatic Temperature Compensation Range	0 to 30°C	0 to 30°C	0 to 30°C	0 to 30°C
Dimensions	6.5 x 1 x 1.5" (170 x 30 x 40 mm)	6.5 x 1 x 1.5" (170 x 30 x 40 mm)	6.5 x 1 x 1.5" (170 x 30 x 40 mm)	6.5 x 1 x 1.5" (170 x 30 x 40 mm)
Weight	7oz (200g)	7oz (200g)	7oz (200g)	7oz (200g)