ULTRASONIC INTERFEROMETER (FOR LIQUIDS)

Model BL02

Simple Instrument to measure velocity of sound in liquids

- Working Principle

The Principle used in measuring the velocity by means of an Ultrasonic Interferometer is simple and is based on the accurate determination of wavelength (λ) in the medium. If the frequency of sound vibration (f) is accurately known, the sound velocity (V)can be calculated according to the relation

Velocity = wavelength x frequency
$V = \lambda \times f$

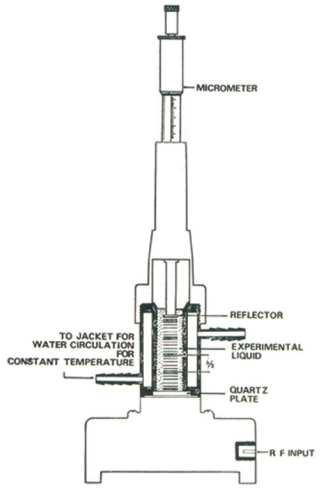
Apparatus consists of:

- High Frequency Generator
- Measuring Cell
- Connecting Cable

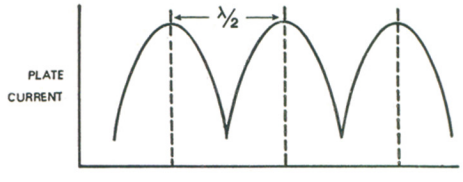
Salient Features:

- Very Small amount of liquid required
- Accuracy of measurement depends upon Micrometer provided
- Available with Micrometer of 0.01mm and 0.001mm Least Count
- Can be used for measuring over a wide range of temperature
- Jacket for water circulation to maintain constant temperature
- Measurement can be made on liquids
- No danger of change like depolymerisation in liquid as very low ultrasonic energy is used for measurement

Improved Circuit -
Easy Adjustment of
Gain & Meter



THE MEASURING CELL



POSITION OF REFLECTOR