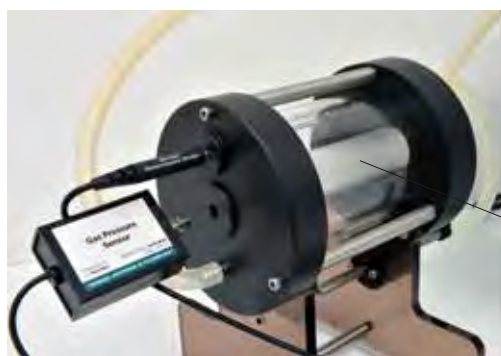


IDEAL GAS LAW RETE06-V

Description

The objective of this experiment is to measure the pressure of an ideal gas with respect to its temperature, analyze the relation between volume and pressure of the gas, investigate the change in volume of the gas depending on its temperature and calculate the universal gas constant experimentally. By changing the volume and the temperature of gas in a glass tube, the student can explore:

- Gay-Lussac's Law
- Boyle's Law
- Charles Law can be verified



CH-0010-00 Cylindrical Water Jacket
 ■ Material Type: Glass and Hard PLastic
 ■ Diameter: 12 cm

Hot water in Cylindrical Water Jacket heats the air in Gas Syringe



Gas Syringe
 ■ Material: Glass
 ■ Max 100 ml scaled



EE-0110-00 Heater and Pump Control Unit
 ■ Temperature Control
 ■ Maximum Temperature 70°C

This device is used to heat water in the Water Reservoir and pump water to the Cylindrical Water Jacket.



Water Pump

Heater Resistance

Required Units

LabQuest® 2
LABQ2



Vernier Gas Pressure Sensor
GPS-BTA



Vernier Temperature Sensor
TMP-BTA



Order Information

Item Code	Item Name
EE-0110-00.....	Heater and Pump Control Unit.....
CH-0009-00.....	Water Reservoir
CH-0010-00.....	Cylindrical Water Jacket.....
CH-0011-00.....	Volume Contolled Gas Syringe
CH-0012-00.....	Hose (3 pcs).....
TMP-BTA.....	Venier Temperature Probe (assembled)
GPS-BTA.....	Vernier Pressure Sensor (assembled).....
LABQ2.....	LabQuest® 2 (required, not included).....