

# Experimentation with Thermal Expansion Nvis 6043 (Pullingger's Apparatus)



**Nvis 6043 Experimentation with Thermal Expansion** (Pullingger's Apparatus) illustrates the concept of conduction of heat in solids. With the help of this product one can understand how Linear Thermal expansion occurs in solids. Pullinger's Apparatus is used to determine Coefficient of Linear Expansion of a given sample. Thermal Expansion Coefficient is a thermodynamic property of a substance or we can say Thermal Expansion is the tendency of matter to change volume in response to a change in temperature.

### **Features**

- Precise measurement by Spherometer
- Electric Oven is provided for heating
- Buzzer indicator
- Samples for study-Copper, Brass, Aluminum
- Self-contained and easy to operate
- Online product tutorial

## **Scope of Learning**

- To determine the coefficient of Linear Expansion of a given Sample
- Comparison of the coefficient of thermal expansion of given samples of material & verification of

$$a_{copper} < a_{brass} < a_{aluminium}$$



# **Technical Specifications**

#### Steam Jacket

Type : Brass Length : 50cm

Diameter : 11mm Inner

32mm Outer

## Sample

Type : Copper, Steel, Aluminum

Length : 52cm
Diameter : 10mm

## Spherometer

Main Scale : 10 - 0 - 10mm

Circular Scale : 100 divisions

Least Count : 0.01mm

**Buzzer Indicator** : 1.5 - 15V DC

**Mains Supply** : 230V ±10%, 50Hz

Adaptor Output : 5V, 500mA