

**Product Name :**  
Losses In Pipe Friction Apparatus

**Product Code :**  
NLAB-ENGINEERINGLB20005



**Description :**

Losses In Pipe Friction Apparatus

**Technical Specification :**

**DESCRIPTION:-**

The unit consists of Major and minor losses associated with pipe flow in piping networks helps in determining the pumping power requirements, material and fittings selection. A good understanding of such losses helps engineers in designing optimum fluid distribution systems, process plants etc. This apparatus is designed to introduce students to major flow losses in Pipes. The following types of pipes are generally provided with the apparatus:-

Two Pipes -

- a. Dia. of pipe - 0.022 m (For pipe ¾")
- b. Dia. of pipe - 0.016 m (For pipe ½")

**FEATURES:-**

A flow control valve permits variation of flow rate through the circuit. Pressure tapings are incorporated so that the head loss characteristics of each fitting may be measured. These tapings are connected to a manometer

bank incorporating a manifold with air bleed valve. The circuit and manometer are attached to a support framework

#### RANGE OF EXPERIMENT:-

To determine the friction factor (major losses) for Darcy –Weisbach equation.

#### SPECIFICATION:-

- Block Type Acrylic Differential Manometer (250-0-250 mm)
- Flow control valve to change Discharge.
- Two Pipes – (Length of pipe between two pressure tapings 1 mtr.)
  - a. Dia. of pipe - 0.022 m (For pipe  $\frac{3}{4}$ "
  - b. Dia. of pipe - 0.016 m (For pipe  $\frac{1}{2}$ "
- Transparent pizometer tube with scale to measure measuring tank discharge.
- Measuring tank- 295 X 345 X 345 mm
- Sump tank- 900 X 350 X 350 mm
- Usha or Crompton Greaves motor for recalculating type unit.- 0.5H.P. Self Priming
- Stop clock.

#### SERVICE REQUIRED:-

- Suitable Water supply.
- Suitable floor space to mount apparatus.
- 15 amps Single Phase Electrical Connection.

## Naugralabequipments

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