



**Product Code . JL-FML-10023**

## **Study of Pipe Fitting**

### **Description**

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#### **Description:-**

The Set-up consists of a  $\frac{1}{2}$  bend and elbow, a sudden expansion & sudden contraction fitting from 15 mm to 25 mm, ball valve and gate valve.

Pressure tapings are provided at inlet and outlet of these fittings under test. A differential manometer fitted in the line gives pressure loss of individual fitting.

Present Set-up is self-contained water re-circulating unit, provided with a sump tank and a centrifugal pump etc.

Flow control valve and by-pass valve are fitted in water line to conduct the experiment on different flow rates.

Flow rate of water is measured with the help of measuring tank and stop watch.

#### **Experiments:-**

To determine loss of head in the fitting at various water flow rates.

To measure the loss co-efficient for the pipe fittings.

#### **Utilities Required:-**

Water Supply and Drain

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**Electricity Supply:** Single Phase, 220 V AC, 0.5 kW.

**Technical Specification:-**

**Sudden Enlargement :** From 15 mm to 25 mm

**Sudden Contraction :** From 25 mm to 15 mm

**Bend:-**  $\frac{1}{2}$

**Elbow:-**  $\frac{1}{2}$

**Ball Valve:-**  $\frac{1}{2}$

**Gate Valve:-**  $\frac{1}{2}$

**Water Circulation:-** FHP Pump, Crompton / Sharp make

**Flow Measurement:-** Using Measuring Tank with **Piezometer, Capacity 25 Ltrs.**

**Sump Tank:-** Capacity 50 Ltrs.

**Stop Watch:-** Electronic

**Control Panel:-** On / Off Switch, Mains Indicator etc.

The whole Set-up is well designed and arranged in a good quality painted Structure

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