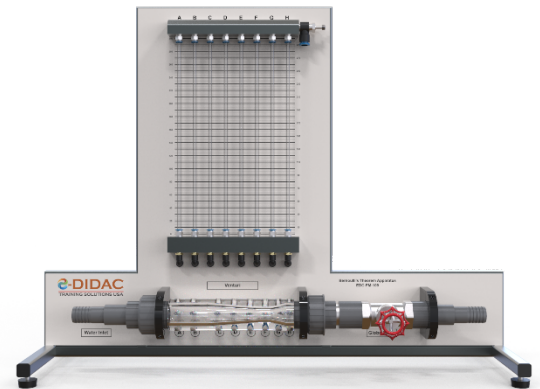


## Bernoulli's Theorem Apparatus (EDC-FM-101)

### EXPERIMENTAL DATA:

- Direct measurement of the static head distribution along a Venturi tube.
- Comparison of experimental results with theoretical predictions.
- Measurement of the meter coefficient of discharge at various flow rates.
- Determination of Flow coefficient



### DESCRIPTION:

This experimental unit consists of a pipe section containing a venturi tube and a flow control valve downstream. Used to study Bernoulli's principle which describes the relationship between the flow velocity of a fluid and its pressure. All pressure tapings connect to manometers held on a vertical panel behind the pipe work. The manometers measure and show pressure distribution against a calibrated scale. To perform experiments, students connect the water supply and set a low, steady flow through the apparatus.

This unit can be used with EDC-FM-100 or can also be used with laboratory water supply. The on-board flow control valve allows students to observe the pressure losses at different flow rates.

To adjust the datum water level in the manometer tubes, students connect a hand-pump (included) to the valve above the manometer tubes.



## **TECHNICAL DATA:**

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- PVC Piping
- 300mm calibrated manometer
- 8 Tubes Manometer
- Venturi meter
  - Upstream Diameter: 26mm
  - Downstream Diameter: 16mm
  - Angle at the inlet: 11°.
  - Angle at the outlet:4°.
- Flow control valve

## **DIMENSIONS AND WEIGHT:**

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L x W x H (mm):750 x 400 x 600

Weight: 22 kg

## **SCOPE OF DELIVERY:**

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- 1 x EDC-FM-101
- 1 x Instructional Manual