

Flow Measurement Apparatus (EDC-FM-110)

EXPERIMENTAL DATA:

- Application of the Bernoulli equation for incompressible fluids
- Direct comparison of flow measurement using a Venturi meter, orifice plate and rotameter



DESCRIPTION:

This experimental unit consists of a pipe section containing three flow measurement devices, Rotameter, Orifice plate and Venturi meter. 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:

PVC Pipes

Orifice plate diameter: 16mm

Venturi meter

o Upstream Diameter: 26mm o Downstream Diameter: 16mm

Flow control valve Rotameter: 30 1/min

Manometer tubes: 8

SCOPE OF DELIVERY:

1 x EDC-FM-110

1 x Instructional Manual

DIMENSIONS AND WEIGHT:

L x W x H (mm):870 x 300 x 750

Weight: 18 kg

