

Air Flow and Aerodynamics



PRINCIPLES of AIRFLOW, FAN TEST and FLOW MEASUREMENT F100M



Year 1 study

Description

The Optional Principles of Airflow, Fan Test and Flow Measurement F100M components have been designed for operation with the Hilton Airflow System F100. The components allow students to quantitatively investigate three methods of flow measurement, the orifice plate, conical inlet and pitot static tube. The unit also allows students to utilise the flow measuring devices in conjunction with the fan throttle supplied in order to estimate the fan performance under a range of conditions.

Related Laws/Applications

- Fan discharge throttling
- Bernoulli's Equation
- Pitot Tube
- Manometer
- Conical Intake

Learning capabilities

- Comparison of pitot traverse and intake device flow measurement
- The use of flow measuring devices for measurement of fan characteristics.

Technical Specification

• 24 Pitot Tube Measuring Points

Essential Ancillaries

• F100

Recommended Ancillaries

• F100A

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What's in the Box?

- 1 x Orifice Plate
- 1 x Bell Mouth Intake
- 1 x Fan Suction Adaptor
- 1 x Pitot Tube
- 1 x Iris type damper
- 1 x throttle Type Balancing Damper
- 1 x Fast Clamp
- 3 x Flange Gasket
- Fastenings
- · Instruction manual
- Packing List
- Test sheet

Essential Services

• F100

Ordering information

To order this product, please call PA Hilton quoting the following code: F100M

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