

FLOW VISUALISATION INVESTIGATION F100H



Year 1
study

Features

- Simple attachment to F100
- Very visual experiment
- Compact size

Description

The Optional Flow Visualisation Investigation F100H duct has been designed for operation with the Hilton Airflow System F100. The duct allows students to investigate simple flow visualisation techniques including smoke and cotton thread. A smoke generator generates a visual oil mist that is introduced into the airstream ahead of the test shape through a number of fine nozzles. Three standard shapes are provided that may be inserted in the duct and the flow around the shapes investigated accordingly. Two of the shapes, the aerofoil and the triangle, may be rotated in the duct in order to change the flow field around them. The three shapes, fit into a circular hole in the rear of the duct and are held in place by spring clips. The smoke generator consists of a console with a main switch, an internal pump and a flow control valve that controls the flow of smoke generating fluid through the smoke wand hose. Smoke generating fluid is supplied to the console from the smoke fluid reservoir. At the end of the hose is the smoke wand, which has an internal heater controlled from the console. By adjustment of the flow control valve the volume of smoke emitted from the wand may be controlled.

Related Laws/Applications

- Flow Visualisation
- Aerodynamics
- Fluid Dynamics
- Aircraft/Vehicle/Boat models
- Flow around Building models

Learning capabilities

- Flow Visualisation
- Aerodynamics
- Fluid Dynamics
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Technical Specification

- Smoke Wand
- Cylinder Shape
- Aerofoil Shape
- Triangle Shape
- Flow Rate Control
- Residual Current Circuit Breaker

Essential Ancillaries

- F100

Recommended Ancillaries

- F100A

What's in the Box?

- 1 x F100H with Smoke Wand
- 1 x Smoke Fluid
- 1 x Visualisation Duct
- 1 x reservoir Assembly
- 1 x Circular profile
- 1 x Triangular profile
- 1 x Wing profile
- 1 x Power lead
- Instruction manual
- Packing List
- Test sheet

Weights & Dimensions

- Weight: 13.5 kg
- Length: 500mm
- Width: 600mm
- Height: 800mm

Essential Services

- 220-240 Volts, Single Phase, 50Hz (With earth/ground)

Ordering information

To order this product, please call PA Hilton quoting the following code: F100H/230

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COUNTRY OF ORIGIN - UK WARRANTY PERIOD - 5 YEARS