

Product Name :
Astra Scientific Air Blower Test Setup

Product Code :
ThermalLab0021



Description :

Astra Scientific Air Blower Test Setup

Technical Specification :

The experimental bench top unit for studying the air flow measurement and airflow characteristics in optional apparatus.

The set uses an industrial type centrifugal blower with inlet and outlet ducts, flow straighteners, a damper, various flow measuring devices using manometers for the study of air flow measurement according to BS 848 and 1042, ISO 5167. Various measuring devices for the study of airflow are provided as an option.

Radial fans are used to transport gases with non-excessive pressure differences. The medium is drawn in axially to the drive shaft of the radial fan and is deflected by 90° by the rotation of the rotor and discharged radially.

The experimental unit provides the basic experiments to get to know the operating behavior and the most important characteristic variables of radial fans.

FEATURES:

- Airflow measurement.
- Bernoulli's experiment.
- Flow around a bend.
- Airflow in pipes.
- Free jet study.
- Airflow drag.
- Boundary layer.
- Flow Visualization

SPECIFICATIONS:

- Blower ratings :

Maximum flow rate (un choked) :Over 12 m³/min.

Maximum head (fully choked) :Over 80 mm. water.

- Inlet duct : with flow straightener.
- Outlet duct : with flow straightener and damper.
- Measuring instruments:
- Airflow rate : Venturi nozzle, orifice plate, inlet cone, and traveling pitot using inclined water manometer.

Differential pressures: Twin inclined water manometers., 0-450 mm x 1 mm graduation, multiple slope 1:10, 1:5, 1:2 and 1:1.

- Accessories : Thermometer and barometer.
- Power supply : 220 V, 1 Ph, 50 Hz. Other power supply is available on request.



Astra Scientific

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