

*a measurable difference...*



## Digital Air Permeability Tester

### Model: A0002 Digital

The Digital Air Permeability Tester is an instrument for monitoring the permeability performance of textile fabrics, including those such as woven, non-woven airbag fabric, blankets, napped fabrics, knitted or layered fabrics and pile fabrics.

Permeability is the rate of air flow passing perpendicularly through a known area under a prescribed air pressure differential between the two surfaces of a material. It is generally expressed in SI units as  $\text{cm}^3/\text{s}/\text{cm}^2$  and in inch pound units as  $\text{ft}^3/\text{min}/\text{ft}^2$ .

The knowledge of permeability of certain textiles allows the evaluation and comparisons necessary to determine the end use performance in such things as raincoats, tents, shirting, parachutes, sail cloths, industrial filters, pillow cases and doona coverings.

Manufacturing factors and finishing techniques have an effect on air permeability by causing changes in the lengths of airflow passages in the fabric. A different airflow from the same fabric can be caused through different surface finishes on either side, which allow different relative airflow.

The principle of the Digital Air Permeability Tester is that air is drawn through a specified area of fabric, which is adjustable to suit specific textiles being evaluated. The Digital Air Permeability tester is easy to use, with adjustment needed only on the Pa panel meter via the flow speed dial knob. Once the pascal pressure has been set, air flow rate readings are obtained automatically from the air flow rate panel meter.



### Applications:

- Textile Fabrics
- Non-woven airbag fabric
- Blankets
- Napped fabrics
- Knitted or layered fabrics
- Pile fabrics

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### Benefits of the Air Permeability Tester:

- Digital operation
- Quick and simple process
- Useful for quality control
- Precise, repeatable tests
- Able to test and inspect incoming material.

### Features:

- Digital Flow range: **5 – 500 L/min:**
  - Accuracy: 5 – 50 L/min =  $\pm 1\%$  FS
  - Accuracy: 50 – 500 L/min =  $\pm 3\%$  rdg
- Digital Manometer: 200 – 2000 Pa (0.2 – 2 kPa)
- Variable Flow Range
- Test Head Area: 38cm<sup>2</sup>
- Toggle clamps to clamp down sample

### Standards:

- ASTM D737

### Options:

- Test Head Area: 5cm<sup>2</sup>
- Test Head Area: 20cm<sup>2</sup>

### Connections:

- **Electrical:** 220/240 VAC @ 50 HZ or  
110 VAC @ 60 HZ

*(please specify when ordering)*

### Dimensions:

- **H:** 650mm • **W:** 650mm • **D:** 850mm
- **Weight:** 40kg

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