







AirPerm Air Permeability Tester

Air permeability is a critical performance feature of air bags, active wear, parachutes, sails, tents, awnings, gas filters and vacuum cleaner bags. For apparel, air permeability is a major contributor to comfort and weather resistance of rainproof fabrics. For industrial and military uses, it can play a vital role in protection.

In each market, satisfying the demands of consumers and producers requires ways to accurately and consistently test material air flow. SDL Atlas offers the most versatile, accurate, and reliable air permeability tester on the market, allowing manufacturers to control production processes and validate their performance claims.

Versatile and Intuitive

The AirPerm makes air permeability testing much more affordable while maintaining confidence that test results meet international and retailer standards. Designed to meet air permeability standards for paper, textiles, and non-wovens, the AirPerm provides quick, straightforward results in the unit of measure of your choice.

The SDL Atlas AirPerm automatically measures the flow of air through a given area of fabric under a set of controlled variables: a selected orifce, specific pressure drop, and designated test area. The instrument is suitable for most fabrics including woven, nonwoven, air bag fabrics, blankets, napped fabrics, knitted fabrics, layered, and pile fabrics. These fabrics may be untreated, heavily sized, coated, resin treated, or otherwise treated.



Features



Automatic Pressure Range Sensor

Intuitive and easy to use, the AirPerm features an automatic ranging system that detects the size of the installed head and predetermines the appropriate pressure range required for accurate testing of a sample. The instrument's sensor eliminates the need for operator pretesting and manual adjustments.

Accommodating Table and Arm

The long arm and large table of the AirPerm allows large samples to be evaluated in multiple areas without cutting. Pressing the arm against the sample begins the test and unclamping the arm ends it.



Powerful Vacuum

The vacuum is both powerful and quiet. It accommodates a variety of test plates to suit every application and features easy calibration for daily checks.

Mobility and Compact Design

Heavy-duty casters and a self contained design make the AirPerm easy to transport from the laboratory to the production floor for on site testing or off site storage.



Test Head Selection						
STANDARD	100200* 5 cm ²	100201 20 cm ²	100202 25 cm ²	100203 38 cm ²	100204 50 cm ²	100205 100 cm ²
adidias TM 6.08	5 CIII	20 CIII	25 (111	36 (111	30 CIII	TOO CITI
ASTM D737				•		
ASTINDIST	•			•		•
BS 5636	•					
DIN 53887		•			•	•
EDANA 140.1		•			•	
EDANA 140.2		•			•	
GB/T 5453	•	•			•	•
ISO 9237	•	•			•	•
JIS L 1096-A				•		
TAPPIT251				•		
WSP 70.1	•	•	•	•	•	•
Dense Samples						•

Specifications

20 cm² Standard, 5 cm², 25 Test Mode **Automatic** Test Head/Area

cm², 38 cm², 50 cm², 100 cm² Test Pressure 10 - 2500 Pa

Sample Thickness up to 8 mm Air Flow 0.1 - 40,000 mm/s (5 cm²)

Clamping Force 50 +/- 5 N Rise Time 5 - 50 sec

Calibration Check Plate For 20 cm² (Standard)

Fall Time 3 sec LCD 80 x 28 mm Display

Total Measuring Time 10 - 58 sec Displayed Test Results Average dynamic air perme-

ability and exponent of the Start Pressure 10 Pa air permeability curve in the Lower Pressure Limit 10 Pa

selected test pressure range RS232 connect to PC (with Data Output **Upper Pressure Limit** 2500 Pa

Net Weight

software - optional) +/- 2% Accuracy $59 \times 90 \times 100 \text{ cm}$

Dimensions (WxDxH) **Test Units**

mm/s, cfm, cm³/cm²/s, l/m²/s, I/dm²/min, m³/m²/min,

m³/m²/h, dm³/s

Standard Configuration

M021A - AirPerm 220V/110V, 20 cm² Test Head, 20 cm² Calibration Check Plate, Rubber Plate, Mains Leads with Multi-Pin Plugs, USB Drive with Manual, Fuse

Test Materials

Test Materials are a critical part of many textile tests. SDL Atlas produces and distributes a complete line of test materials. Each batch is thoroughly tested to ensure conformity and consistency from batch to batch.

Our test materials offerings include:

- Multifiber
- Cork Liners
- **Abradents**
- Phenolic Yellowing
- **Detergents**
- Ballasts
- Crocking Fabric

Calibration & Service

- **UKAS** calibration
- ISO calibration
- Service support
- Factory trained representatives
- SDL Atlas service technicians



80 kg

SDL Atlas is a UKAS accredited calibration laboratory No. 0688. With fully trained technicians located in Europe, Asia, and North America, we are prepared to support our customers in maintaining their investments and their confidence in their testing instruments.

Providing confidence in standard based testing through expertise and global partnering



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