PARAM® TQD-G1 Air Permeability Tester

TQD-G1 is professionally designed for the determination of air permeability of decorating materials used in cars, e.g. polyurethane, expanded plastics, PVC, leather, textiles, nonwovens and other materials. Through the test, physical characteristics of materials could be controlled to meet practical application requirements.

Professional Technology

- This instrument is designed according to the standard requirements of global automakers
- 2 test modes are available for customers: fix pressure difference to test flux and fix flux to test pressure difference
- High precision sensors of electronic airflow and air pressure to ensure the accuracy of test data
- The instrument is controlled by micro-computer, with LCD, menu interface and PVC operation panel, which is convenient for customers to operate or view test data
- Equipped with micro-printer and standard RS232 port for easy connection with PC and data transfer

Test Principle

Method A

Providing a constant air flux going through the specimen vertically, the air permeability could be obtained by measuring the pressure difference.

Method B

Providing the constant pressure difference between two sides of the specimen, the air permeability could be obtained by measuring the air flux through specific area in the certain time.

This instrument conforms to the multiple national and international standards: ISO 9237, ISO 4638, ISO 5636, GB/T 10655, GB/T 5453, GB/T 4689.22, GB/T 13764, ASTM D737, TAPPI T460, JIS P8117

Applications

This instrument is applicable to the determination of:

Basic Applications	Decorating Articles of Cars	Test the air permeability of car decorating materials, e.g. polyurethane, PVC, leather, textiles and non-woven materials
	Elastic and Porous Polymer Materials	Test the air permeability of elastic and porous polymer materials, e.g. sponges
	Textiles	Test the air permeability of textiles, e.g. cloth and nonwovens
	Leather	Test the air permeability of leather
Extended Applications	Paper	Test the air permeability of paper materials, e.g. daily removable tissue and toilet rolls

Technical Specifications

Specifications	TQD-G1
Test Range of Pressure Difference	0~1000 Pa
Test Range of Flux	0~30 L/min
Specimen Size	Method A:52 mm x 52 mm
	Method B:Φ12 mm ≤ D(diameter) ≤ Φ71 mm
Port Size	Φ8 mm PU Tubing
Instrument Dimension	502 mm (L) x 334 mm (W) x 298 mm (H)
Power Supply	220VAC 50Hz / 120VAC 60Hz
Net Weight	27 kg

Configurations

Standard Configurations	Instrument, Micro-printer, Grips, Round Sample Cutter and Vacuum Pump from America
Optional Parts	Professional Software, Communication Cable and Customized Grips
Note	The gas supply port of the instrument is Φ8 mm PU tubing.

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