

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:

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| 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: $\Phi 12 \text{ mm} \leq D(\text{diameter}) \leq \Phi 71 \text{ mm}$ |
| Port Size | $\Phi 8 \text{ mm}$ 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

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|-------------------------|--|
| 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 $\Phi 8 \text{ mm}$ PU tubing. |

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