

WVTR-398A **Water Vapor Permeability Tester**



Application

WVTR-398A is based on the humidity sensor detection method and available for the water vapor permeability test of heat exchange membranes, nonwoven fabrics and flexible barrier materials. It can test 6 specimens in one operation with independent results.

Features

- Relative humidity sensor detection method
- Embedded system, remote maintenance and update
- 6 specimens test and independently
- Highly automatic test in entire process
- Highly accurate water bath temperature control technology
- Highly accurate RH detection sensor inside
- Swagelok stainless steel pipes with long service life
- Digital flow adjustment
- 6 Chambers with independent temperature sensors monitoring (DALLAS)
- Environment temperature and humidity sensor inside
- Data curves display

- Computer control
- Overload protection
- Traceable reference film calibration
- 5 grades user managements, GAMP5 regulations
- System log file
- Supports DSM system (DSM, lab data management system)

Principles

The specimen is clamped between the upper and lower chamber, the upper chamber is high humidity side, and the other side of specimen, lower chamber is purged by a stream of dry gas, due to the effect of water concentration gradient at two sides of the specimen, water molecules will permeate through the specimen into the dry gas side, penetrated water molecules will be carried to the relative humidity sensor which generates the proportional signal, so water vapor transmission rate will be obtained by calculating the sensor signal.

Technical indexes

Test range: 5 - 6500 g/m²·24h (Standard)

500-100,000 g/m²·24h (optional)

Resolution: 0.001 g/m²·24h

Specimen Amount: 6 specimens, independent

Temperature Range: 5C-90C (Water bath)

Temperature Accuracy: ±0.1C

Test Humidity: 100%RH (Standard)

Humidity Accuracy: ±1%RH

Test Area: 13cm² (Standard)

Specimen Size: ≥150mm * 94mm

Thickness: less 1mm

Carrier Gas: dry air, or 99.999% Nitrogen

Carrier Flow: 0~200ml/min

Gas Interface: 1/8inch

Power Supply: AC 220V 50Hz

Dimension: 650 mm(L) * 690 mm(W) * 415mm(H)

Net Weight: 86kg

Standard

ASTM E398, ASTM D 6701, ISO 15106-1, TAPPI T523, JIS K7129

Configuration

Delivery: Main Unit, Computer, W-TRANS Software, Temperature Controller, Tank
Regulator, PCIE Card, Communication Cable, Sample Cutter, Vacuum Grease.

Optional: Reference Film, Vacuum Grease, Sample Cutter, DSM System.

Note: Specifications are subject to change without prior notice.