

## **Water Vapour Transmission Rate Tester**

No.572





Measurement cell (Ø70mm, Ø30mm)

The Water Vapour Transmission Rate Tester measures the water vapour permeability or water vapour permeability coefficient of packaging materials such as plastic film.

## **Features**

- The measurement method of this device is differential pressure type.
- Automatic water vapor transmission measurement is possible.
- Two specimen sizes are available.
- Use of high-precision absolute vacuum pressure gauge.
- Uniform temperature distribution is achieved by efficiently circulating temperature controlled water.
- Valve opening and closing can be controlled by software.
- Capable of adjusting the flow rate and pressure of humidified air to maintain a constant supply of water vapour.
- Capable of notifying by e-mail of test completion and error occurrence.
- Full range of functions to manage test conditions and test data.
- Software can control the equipment and analyze the acquired test data.

## **Specifications**

	CT1W	CT3W	
Number of specimen	1	3	
Measurement range	20 to 85°C, 80 to 90% RH (Depends on the combination)		
Temperature control	Constant temperature water circulation (By chiller)		
Specimen dimensions	• 50 x 50mm (Meas. section Ø30mm, through area 707mm <sup>2</sup> )		
	• 90 x 90mm (Meas. section Ø70mm, through area 3848mm²)		
Water vapour transmission	• Type A: 0.001 to 1.000 [g/(m <sup>2</sup> · 24h)]		
measurement range	• Type B: 0.01 to 100.00 [g/(m <sup>2</sup> • 24h)]		
	Note: Vacuum pressure gauge: Accuracy 0.25% of reading)		
Supply gas	0.5MPa (Gas cylinder recommended)		
Medium for water vapour	Water (Class A1 or better specified in JIS K 0557)		
Measurement item	<ul> <li>Water vapour transmission rate [g/(m² · 24h)]</li> </ul>		
	• Water vapour permeability coefficient [g • mm/(m² • 24h)]		
Data processing & control	PC (Windows)		
Option		Additional measurement	
		module, model MCT1W	
		(1 test station)	
		Max. 2 additional units possible	
Power supply	<ul> <li>Main unit: Single-phase, AC100V, 50/60Hz, 5A</li> <li>PC: Single-phase, AC100V, 50/60Hz, 3A</li> <li>Vacuum pump: Single-phase, AC100V, 50/60Hz, 6A</li> </ul>		
	Chiller: Single-phase, AC100V, 50/60Hz, 15A		
Compressed air	0.4MPa		
Dimensions	W550 x D560 x H470mm	W800 x D560 x H470mm	
Net weight	Approx. 50kg	Approx. 70kg	

## **Related standards**

ISO 15106-5	Plastics — Film and sheeting — Determination of water vapour transmission rate — Part 5: Pressure sensor method	
JIS K 7129-5	プラスチック-フィルム及びシート-水蒸気透過度の求め方-第5部:圧力セン サ法	

Specifications are subject to change without notice.



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