

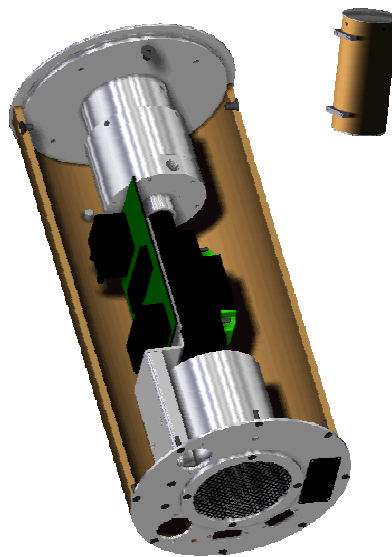
NebbPerm

Quality measuring of permeability, temperature and humidity

To determine product properties in the felt and wire clothing, it is important to measure permeability. The object of permeability measurements is to display how efficient the product removes water and humidity from the paper-pulp. In order to simplify the measuring process, these measurements are carried out by using air instead of water.

Permeability

Permeability is defined as the amount of air which passes through a product per time-unit within a fixed area and with a given pressure difference. The influence of humidity, atmospheric pressure and temperature is normalized to 20 °C, 1013 mbar and 65% rH (ISO 139).



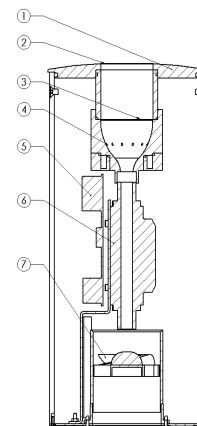
Diameter	150 mm
Height	320 mm
Mass	3.5 kg
Orifice area	20 cm ² or 5cm ²

The instrument is mounted in a cylindrical housing with a disc-top touching the product. The disc-top is made of stainless steel with a convex shape to ensure a proper tightening around the opening towards the textile-product.

An RPM controlled turbine in the bottom of the instrument provides stable working pressure.

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- In accordance with the ISO 9237 standard.
- Two orifice sizes; 20 cm² for felt, 5cm² universal.
- A Profibus interface for easy integration with process control systems, or an ethernet interface.
- Automatic filter purge.
- Precision sensors are mounted in the tube to measure air flow, pressure, humidity and temperature.
- All sensors are calibrated in accordance with the ISO/IEC 17025 standard.



1. Stainless steel top
2. 20 or 5cm² orifice
3. Filter 10μ
4. Purge nozzles
5. Electronics
6. Sensors
7. Vacuum turbine

Technical data	Parameter	Conditions	Minimum	Typical	Max 5cm ²	Max 20cm ²	Units
Permeability	Dynamic range		90.0 5.0		13000.0 710.0	3300.0 180.0	m/ h @ 125 Pa and 20°C cfm/ft ² @ 125 Pa, 20°C
	Resolution			0.3 0.02			m/ h cfm/ft ²
	Accuracy	23°C		2.0			% FS
Temperature	Dynamic Range		0.00		70.00		°C
	Resolution			0.01			°C
	Accuracy	23°C		0.50			°C
Humidity	Dynamic Range		0.00		100.00		% rH
	Resolution			0.03			% rH
	Accuracy	10 – 90%rH		2.50			% FS