PRODUCT BROCHURE

Dansensor®
LIPPKE® VC1400
VACUUM LEAK DETECTION SYSTEM

Dansensor LIppke VC1400 with standard vacuum chamber

Benefits

- High precision vacuum regulation
- No adjustments required for different package sizes or types
- Clear and concise on-screen test results
- One-touch documentation print-out with external printer
- Easy installation and operation
- Automatically capture and store data
- Test package integrity with blue dye or bubble test

Test for leaks and package integrity with blue dye or bubble test

The vacuum leak detection system Dansensor® Lippke® VC1400 finds even the smallest leaks in blister packages, glass vials and other flexible, semi-rigid or rigid packages. It meaures seal strength and package integrity for quality control checks, R&D package testing and process optimization on the packaging line.

This bench-top instrument automates the classic methylene blue dye test and bubble emission test, with exact, definable and reproducible results. It is compliant with ASTM standard D3078. It is available in two variations, either with an integrated vacuum ejector (requires pressurized air) or with an external, stackable vacuum pump (PU1400).

The Dansensor Lippke VC1400 has an intuitive graphic user interface with touchscreen. This new interface gives easy access to features and settings, such as adjusting the vacuum, test and penetration times. Pre-defined test parameters ensure optimal reproducibility of tests.

The integrated USB port makes data import and export a breeze with cloning and back-up options. In addition, it enables the easy integration of optional accessories, such as a barcode scanner, keyboard or printer.

Features

- Touch screen with GUI for user-friendly operation
- Vacuum generation with vacuum pump or compressed air
- Individual user logins
- Store test parameters for repeatability
- Data capture, storage and export
- USB port for connecting optional barcode scanner, keyboard or printer
- Optional accessories incl. vacuum chambers, vacuum pump unit and barcode scanner
- Multilingual user interface
- Compliant with ASTM D3078
- IQ/OQ validation documents available

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HOW DOES IT WORK?

Detect even the smallest leaks

Integrity test on blister packages (Methylene Blue Dye Test)

- Evacuate the vacuum chamber
- Stress the package during the predefined test time and pressure
- Vent the chamber and remove the package
- The blister pack remains under atmospheric pressure, ensuring that the dye penetrates into fine capillaries

Bubble emissions test by applying vacuum (ASTM D3078)

- Evacuate the vacuum chamber
- The package balloons under the negative pressure and any leaks become visible with the release of bubbles from the package
- Vent the chamber

Lippke VC1400 and standard vacuum chamber
Depending on the type of test being conducted, different lids are recommended for the vacuum chamber

Methylene blue dye test with domed lid

Bubble emissions test with flat lid

Lippke VC1400 and PU1400
Stackable and compact, no need for pressurized air

Technical Specifications

Specifications	Dansensor Lippke VC1400
Package types	Flexible, semi-rigid and rigid packages
Test types	Methylene blue dye test or Bubble test
Test package size	Smaller than vacuum chamber Ø 240 mm x 70 mm
Test time	Vacuum time: 24 hours (max) Penetration time: 24 hours (max)
Measuring range	Ejector variant: 100-800 mbar (1.5-11.6 psi) External vacuum pump variant: 100-900 mbar (1.5-13.1 psi)
Displayed resolution	1 mbar
Accuracy of measurement	± 2 mbar or ± 1% of setpoint (including overshoot when regulating to a fixed pressure)
Number of test definitions	999
Data collection capacity	Test data from more than 1,000,000 tests
Data collection type	Exported to CSV file
Dimensions (WxDxH) and weight	284 mm x 236.5 mm x 185 mm (11.2" x 9.3" x 7.3") 3.4 kg (7.5 lbs) Vacuum chamber size: Ø 240 m x 70 m
IP class	IP 20
Ambient temperature	+2°C to +35°C
Relative humidity	10 to 90 %RH (non-condensing)
Ambient pressure	900-1050 mbar
Power supply and consumption	100-240 VAC, 50-60 Hz Max 40W
Air supply pressure and connection	4.5-6.0 bar (optimal performance at approx. 5 bar) Ø6/4mm tube DIN ISO 8573-1:2010 [4:4:3]
Air consumption	Max 60 L/min
Connectivity	LAN: RJ-45 Ethernet 10/100 Mbit/s, DHCP client or fixed IP USB: 1 x Host, USB 2.0 Type A; 1 x Device, USB 2.0 Type B (max current 500 mA)
Compliance	CE, China RoHS II
Standards	ASTM D3078

PB-PTPS-Dansensor Lippke VC 1400-EN-1

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