

LEAK DETECTION SYSTEM

LEAK-MASTER® EASY



Leak detection “bubble test” for packages.

LEAK-MASTER® EASY features detection of even the smallest leaks.

The package is placed into a chamber filled with water. Then the head space above the water level is evacuated using a venturi vacuum (compressed-air) system. As a result, the package immersed in water inflates. If there is a leak, air or filling gas escapes as a visible stream of bubbles.

Benefits

- economical and uncomplicated
- visual inspection allows localization of the leak
- for all flexible and rigid packaging types
- short testing time (< 30 sec.)
- easy-to-use intuitive system – no special skills required
- easy installation and start-up
- no trace gas required in the package
- can also be used for altitude simulation
- optional accessory for vacuum packaging, vacuum set: Part No. 956992700
- no calibration required
- various chamber sizes available
- low maintenance
- easy-to-clean Perspex housing
- no vacuum pump necessary
- no electrical connections



further information on
www.leak-master.net

► Video

Type	LEAK-MASTER® EASY
Testing principle	visual
Calibration	not required
Vacuum	max. 200 mbar (2.9 psi) abs., adjustable
Vacuum generation	compressed air powered venturi injector
Compressed air pressure	min. 6 bar (87 psi), max. 8 bar (116 psi)
Connection	G 1/4
Minimum flow rate	300 l/min.
Accessories (incl.)	hose connection OD 8 mm hose connection OD 12 mm adapter G 1/4 M to 1/4" NPT
Housing	Perspex
Approvals	Company certified according to ISO 9001 and ISO 22000 for food-grade gases according to: Regulation (EC) No 1935/2004







Our manyfold accessories:

- Control unit PLUS: portable controller with various predefined measurement programmes, also for documentation of your measuring results
- Vacuum testing set: for testing vacuum packaged products and products with low gas volumes
- WITT-Flocculant 50: for long use of water filling
- AD100: calibrated pressure gauge with DKD/ DAKKS-certificate
- Vacuum holding valve: blocks the chamber after generation of vacuum. Perfect for longer test periods without permanent use of compressed air

Find more details of accessories on the following pages.

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Models		inner chamber size approx. in [mm] (inches) (HxWxD)	overall dimension approx. in [mm] (inches) (HxWxD)	Weight approx. in [kg] (lb)
	EASY 1 Part No. 5901LME-001	165 x 305 x 195 (6.5 x 12.0 x 7.7)	535 x 440 x 300 (21.1 x 17.3 x 11.8)	17 (37)
	EASY 1.5 Part No. 5901LME-002-MINI	145 x 505 x 310 (5.7 x 19.9 x 12.2)	520 x 650 x 420 (20.5 x 25.6 x 16.5)	31,5 (69)
	EASY 2 Part No. 5901LME-002	205 x 505 x 310 (8.1 x 19.9 x 12.2)	580 x 650 x 420 (22.8 x 25.6 x 16.5)	35 (76)
	EASY 3 Part No. 5901LME-003	275 x 525 x 360 (10.8 x 20.7 x 14.2)	660 x 705 x 485 (26.0 x 27.8 x 19.1)	55 (121)
	EASY 4 Part No. 5901LME-004	320 x 625 x 500 (12.6 x 24.6 x 19.7)	900 x 840 x 630 (35.4 x 33.1 x 24.8)	108 (238)
	EASY 5 Part No. 5901LME-005	340 x 760 x 500 (13.4 x 29.9 x 19.7)	920 x 970 x 630 (36.2 x 38.2 x 24.8)	120 (265)

The LEAK-MASTER® EASY Leak Detectors can be used to perform a variety of ASTM test methods for detecting leaks and seal integrity.

ASTM D3078	Standard Test Method for Determination of Leaks in Flexible Packaging by Bubble Emission
ASTM D6653	Standard Test Methods for Determining the Effects of High Altitude on Packaging Systems by Vacuum Method
ASTM D4169	Standard Practice for Performance Testing of Shipping Containers and Systems
ASTM D4991	Standard Test Method for Leakage Testing of Empty Rigid Containers by Vacuum Method
ASTM D5094	Standard Test Methods for Gross Leakage of Liquids from Containers with Threaded or Lug-Style Closures
ASTM F2096	Standard Test Method for Detecting Gross Leaks in Packaging by Internal Pressurization (Bubble Test) – Using our optional adapter

CONTROL UNIT PLUS for LEAK-MASTER® EASY



Controller for leak detector LEAK-MASTER® EASY. In combination with LEAK-MASTER® EASY features non-destructive detection of the smallest leaks without the need of costly helium.

Pre-defined measurement programmes, an altitude simulation as well as an user independently quick and continuously working mode characterise this device.



Together with the exclusive GASCONTROL CENTER software the measured results can be documented providing complete traceability. Provide your customer, auditor and so on with the results ensuring that your product has the best possible quality.

Easily connected to your LEAK-MASTER® EASY.

A flexible controller to guarantee quality and productivity of production processes.

Benefits

- minimal response time
- quick product change
- no calibration required
- simple to operate via touch-screen
- easy installation and start-up
- permanent monitoring of set limit values
- operator friendly – data and process parameter entry and administration by means of integrated keyboard or remote personal computer (e.g. MS-Excel®)
- perfect documentation by complete user- and product data as well as error logs
- remote transmission of results via Ethernet
- USB connection for file transfer by USB memory stick
- Ethernet connection for network integration
- measured data storage
- administration of product names
- user management for measurement personalization
- individual configurable error codes with identification from type and location of leak

- ideal for altitude simulation testing
- for retrofitting your existing LEAK-MASTER® EASY
- hygienic and easy to clean splash-proof stainless steel cabinet / housing

Options

- Barcode Reader for simple and quick user/product selection with IP-protection
- software GASCONTROL CENTER for recording of results (see separate data sheet)

Other models, options and accessories available upon request.

CONTROL UNIT PLUS for LEAK-MASTER® EASY



Type	Control Unit PLUS for LEAK-MASTER® EASY
Vacuum	max. 11.6 psi
Temperature (gas/environment)	32°F up to +104°F
Interfaces	Ethernet (optional WLAN) RS 232 with ASCII-output of date, time, measured value USB by memory stick for profiles, product and user data RJ45 Ethernet FTP-Server for profiles, product and user data, software Update analog output 4-20 mA or 0-10 V
Housing	stainless steel, IP43
Weight	approx. 29.8 lb
Dimensions (HxWxD) with carry handle	approx. 4.3 x 11.8 x 10.2 inches
Voltage	230 V AC 50 / 60 Hz 110 V AC 50 / 60 Hz
Power consumption	230 V AC / 0.12 A
Approvals	Company certified according to ISO 9001 and ISO 22000 CE marked according to: - EMC 2014/30/EU - Low Voltage Directive 2014/35/EU for food-grade gases according to: - Regulation (EC) No 1935/2004

LEAK DETECTION SYSTEM LEAK-MASTER® EASY

Accessories



Vacuum set

Adapter set for testing vacuum packaged products and products with low gas volumes
Easy installation and simple handling.



WITT-Flocculant 50

Flocculant for long use of water filling in your LEAK-MASTER® EASY. Clear, clean water for testing. No biofilm formation.
Significantly reduced water changes, testing processes are more frequent and without interruptions.

Calibrated pressure gauge AD100

The calibrated pressure gauge AD100 with DKD/DAkkS-certificate gives more security to the customer at the daily use of LEAK-MASTER® EASY.



Vacuum holding valve

With this option the chamber can be blocked after generation of vacuum. Perfect for longer test periods without permanent use of compressed air.

Barcode-Reader

for selection of product names and users via barcode for the electronic control unit PLUS.
Fast and save detection of all product- and user data, for manifold barcode-types, protection class IP 65.
Ideal for process optimization and optimal quality testing.

