LeakPointer (E2)
Data Sheet

Off-line micro leak detectors

- Automatic non-destructive micro leak detection using CO_2 as trace gas

Features

- Fast detection of micro leaks
- Easy to operate via touch screen
- Automatic data logging and statistics
- CO_2 as trace gas
- Robust industrial design made in stainless steel
- Complete self–diagnostics
- Easy to set up and requires minimum maintenance
- 500 configurable programmes for test parameters and data logging
- 5 user defined entry fields for product information
- Combined leak and stress test
- Test of flexible and non-flexible packages
- No calibration needed
- RS 232 computer interface for exporting logged data
- Bar code reader (optional)
- Internal printer (optional)
- Test of shipping crates up to E2 size (only LeakPointer E2)
- Table top model for smaller test samples
- Volume reducers (optional)

Introduction to the LeakPointer

The LeakPointer and the LeakPointer E2 are off-line micro leak detectors for modified atmosphere packed products where CO_2 is part of the gas composition used.

The LeakPointer performs a fast and non-destructive test of single packages or entire shipping crates. The LeakPointer E2 has been especially designed to test crates of the European standard E2, whereas the LeakPointer is a budget table top model for smaller shipping crates or single packages.

The leak detectors detect micro leaks in flexible and non-flexible packages containing a wide range of products like pasta, bread, cheese, meat, milk cans etc.

Easy operation and self-diagnostics

On the front panel the LeakPointer has a graphical LCD touch screen display. The touch screen has back light and uses unmistakable icons to guide the user through the various functions, furthermore, the user interface is available in multiple language versions. The touchscreen and the icon-based user interface make the LeakPointer very easy to set up and to operate.

The LeakPointer has two user levels. The advanced user level can be password protected.

The LeakPointer has a self-diagnostics function, which can be activated on the touch screen, the self-test will also be launched automatically upon start-up, in case of an error a message will appear in the display. Furthermore, no calibration of the sensor is needed.

Principle of operation

The carton is to be placed in the test area, whereafter the measuring chamber is closed. Now the automatic test cycle starts. PBI-Dansensor's micro leak detection system creates a user-defined vacuum in the test chamber. In case of a leak, some of the CO_2 in the package will leak out into the test measuring chamber. Based on the fast responding, solid state CO_2 sensor, developed and patented by PBI-Dansensor, the system detects any leaks in the packages using the present CO_2 as trace gas.

During the test, sample gas is continuously passing through the sensor. An increase in the CO_2 level in the test chamber indicates that there is a leak in the package.

The leak is defined as the increase of CO_2 in ppm/second starting from the moment when the testing time starts. To obtain the best result when detecting micro leaks it is recommended to have a minimum of 10% CO_2 in the packages (no upper limit).

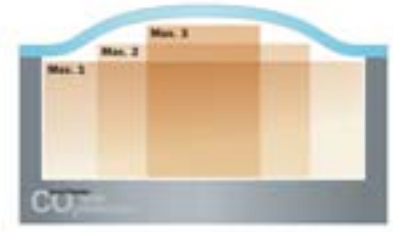
Set up programmes and data logging

The leak detection system features 500 set up programmes, where the test parameters for each package type are defined and the programme is given a name and/or number. With an optional bar code reader installed the programme and test parameters can be selected by a bar code reading of the package.

Each test result is added to the statistics under the programme used for that particular test. By the end of the day or when convenient the stored test results can be transferred to a computer or printer.

The statistical data can also be shown in the display as: Total number of tests, number of items passing the test, number of items failing the test and number of items rejected by the operator.

Test item dimensions



Due to the bubble lid the items tested can have various dimensions dependent on how they are placed in the test chamber.

Technical specifications - LeakPointer E2

Specifications: LeakPointer E2	
Test item, max. dimensions	1) 545 x 650 x 150 mm (DxWxH) 2) 410 x 630 x 210 mm - due to bubble lid 3) 270 x 500 x 270 mm - due to bubble lid
Cabinet size	815 x 1030 x 1050 mm (DxWxH)
Weight	173 kg
Applications	Complete shipping crates up to standard E2 size. Individual/mulitple packages per cycle
Vacuum pump	40 m^3/h
Voltage	400VAC, 50Hz, 1500 VA

Technical specifications - LeakPointer

Specifications: LeakPointer	
Test item, max. dimensions	400 x 500 x 115 mm (DxWxH) or 230 x 330 x 190 mm - due to bubble lid
Cabinet size	730 x 620 x 460 mm (DxWxH)
Volume	35 L - optional volume reducers 407 x 503 x 30 mm (DxWxH) 407 x 118 x 57mm (DxWxH)
Weight	Approx. 75 kg
Applications	Individual packages and small shipping crates
Vacuum pump	10 m^3/h
Voltage	115VAC 60 Hz or 230VAC 50Hz

Technical specifications - Common

Common specifications	
Sensor type	Ceramic solid state sensor for CO_2
Response time	Maximum 50 milliseconds
Detection level	Min. detection level of CO_2 is 10 ppm/sec. above ambient atmosphere level (normally 350-400 ppm)
Heating time	30-minutes from cold condition, the remaining time is displayed
Test pressure	Down to 200 mbar absolute
Control panel	Graphical backlight display with touch screen. Icon based navigation
Alarms	When exceeding the pre-defined leak limits set by the user
Interfaces	RS 232. Remote data logging
Calibration	Not necessary

PBI-DS-Da_sh-gas_tec-LP-UK-2

TENDRING pacific
www.tendringpacific.com
Norfolk House, Great Chesterford Court, Great Chesterford, Essex CB10 1PF
T: (44) 0870 240 1886 F: (44) 0870 240 1887 E: sales@tendringpacific.com

PBI Dansensor
PBI-Dansensor A/S. Roennedevej 18
DK-4100 Ringsted. Denmark
Tel.: +45 57 66 00 88. Fax: +45 57 66 00 99
www.pbi-dansensor.com . info@pbi-dansensor.com