LT7 Series Single Head Bottle Leak Detectors

Overview

The LT7 was designed to meet the need for a low cost, reliable, simple to use, single channel bottle leak detector.



LT7 Leak Detector Front Panel

The LT7 is designed for 100% leak testing of blow moulding machine output. Several options are now available to allow this system to perform a variety of important additional bottle operations.

Benefits

• High Accuracy Leakage Measurement

Measurement Errors are minimized through the use of a sensitive pressure transducer with a low noise amplifier and high-speed, highresolution analog to digital converter.

• Soft-Touch Panel

The operator interface is a soft-touch panel with alphanumeric LCD and LED pressure indication bar graph. Settings and bottle counts can be easily viewed or altered as required.

• Compact Design

Its ultra-compact format means that the control cabinet and the test head can be fitted as a single assembly, resulting in an extremely neat and simple system. Cable and piping lengths are reduced to a minimum; further improving reliability and ease of installation.

• High Reliability

Advanced technologies reduce the number and complexity of internal components. In-depth understanding of failure mechanisms, coupled with the integration of all electronic functions onto the PCB, assures that the LT7 meets only the highest standards of reliability.

Modular Pneumatic System and Design

Modular design allows quick, flexible customisation of the LT7 system to meet special needs and facilitate easier expansion even after installation.

• Flexible Bottle Transport System

Timings can always be easily adjusted to maintain optimum bottle transport without sacrificing test time.

• Cost Effective

The LT7 circuit cards have been designed and programmed specifically for flexibility. Great care has been taken to ensure that the

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system is easily re-programmable and expandable to meet rapidly changing needs. With this system, the performance limitations of using a bought-in PLC are easily avoided.



50 Million Cycle Valves



Self tuning photoswitches

Options

- Choked Bore / Ovality Test
- Flash Detection
- Fallen Bottle Rejection
- Batch Counter / Diverter
- Vacuum Operation
- Collating Table ControlBottle Orientation
- Angled Neck Bottle Testing

Specification

Hole Size Detected / Bot- tle Throughput	0.1mm / 50 bottles per minute. See performance Graph for de- tails.
Number of Test Channels	1
Leak Test Method	Ratiometric Pressure Decay, Auto-zero, Auto-Scale. Adap- tive pressurisation algorithm.
Power Supply	110/120 VAC single phase. Switch-able.
Power Consumption	30 VA maximum (excludes conveyor)
Air Supply	60-150 psi (4-10 bar)
Air Consumption	0.2 litre per minute typical
Minimum Bottle Volume	None
Maximum Bottle Volume	10 litres (2 gallons)
Test Pressure	Adjustable, 0.15 - 0.6 p si (10 - 40 mB)
Cycle Time	0.5 - 20.0 seconds
Transducer	Semiconductor strain gauge diaphragm, 0.00 - 65.00 mB, 0.02% resolution, x20 Over- pressure Protection.

LT7 Performance

To use this graph, First choose the coloured line corresponding to the bottle size of interest. Follow the line up from zero until it crosses the required Parts Per Minute line as shown on the horizontal axis. Read off the Hole Size Detected from the scale on the left. Contact the office if in doubt!

UK HEAD OFFICE **Plastech Control Systems Ltd** Unit 17c, West Side Ind. Est., Jackson Street, St.Helens, Merseyside, WA9 3AT, UK Tel +44(0)1744 734123 Fax +44(0)1744 734340 Web http://www.plastech-controls.com email uk-sales@plastech-controls.com



If the required performance cannot be met with the single head LT7, contact us for details of our multi-head leak testers.



LT7 Performance Graph

Ordering Information

The LT7 is available complete including conveyor system, or alternatively as a kit for system integrators or for fitting to an existing customer conveyor.

For more details contact the office, our distributors or see our web site **www.plastech-controls.com**, where you can obtain complete on-line sales literature, user manuals and technical documentation.