

Worker Leak, Leak/flow or leak/occlusion tester

The TME Worker™ is a high resolution (0.0001 psi) test instrument that can be configured as a Leak Tester, a Leak and Flow Tester, or a Leak and Occlusion Tester and is available in both pressure and vacuum models. The two-line vacuum fluorescent display is easy to see and large lighted indicators indicate pass/fail test results. The TME Worker has PLC controls for semi-automatic operation and two-way RS-232 communication capability for downloadable program selection and uploadable data. Ethernet connectivity is optional. The TME Worker is an affordable, dependable tool for your day-in, day-out leak, flow and occlusion testing requirements.

Leak testing with the TME Worker is simply pressure sensing, with its high performance resulting from our proprietary sensing technology and low internal volume design. When the tested product is connected to the front panel test port, internal valves allow air (or another gas) to pressurize the part and connect the part to the sensing transducer. Pressure changes as low as 0.0001 psi are detected from leaks in the tested part.

Vacuum decay testing functions similarly to pressure decay tests; however, vacuum tests are limited to less than one atmosphere test pressure and are usually performed where specifications of the test part demand this pressure differential.

Flow testing uses a precision mass flow sensor to make a direct measurement of air flow through the tested part. A direct flow reading means no separate pressure measurements or special calculations are made in the instrument.

Occlusion testing is a special type of flow test in which the instrument measures the backpressure of air flowing through the part to determine the extent to which the part is occluded.



Features

- Program and store up to 100 different tests or test parameters and store 5000 test results in the Data Log. Easily adjust set-up times and set reject limits to detect fine or gross leaks.
- Available in Pressure or Vacuum Decay. Pressure ranges are available up to 300 psig and flow ranges available from 10 sccm to 10 lpm.
- Repeatable, quantitative results; high decay resolution (0.0001 psi or 0.01 mbar) per second.
- Two way RS232 computer connection standard or data collection and remote parameter control; Ethernet connectivity available to allow data to be transmitted from the instrument to a LAN.

Technical specifications

Dimensions.

8.0"W x 13.7"D x 8.7"H

Power

90-240V

Storage and/or Operating Environment

5-40°C (40-100°F)

RH < 80%, non-condensing

Controls

Tactile Push Buttons, Keylock, Power ON/OFF Switch

Test Channels

Single Port

Test Mode

Pressure or Vacuum, Single or Differential

Single Tests

Leak, Flow, Occlusion

Dual Tests (depending on model)

Leak/Flow, Flow/Leak, Leak/Occlusion, Occlusion/Leak

Display

Vacuum Fluorescent, Two Line Alphanumeric

Units

PSI, Inches of H₂O, kPa, mbar, others available

DATALOG Memory

Up to 5000 Tests

PROGRAM Memory

Up to 100 Programs

Manual Output

Test Setup Parameters, Current Results, Datalog and Statistics on Demand

Automatic Output

Current Test Results to Pre-Set-Up Printer

Auxiliary Output

24V Opto Isolated PLC Interface

Communications Port

RS232 Connector Program Input/Data Output

Calibration

NIST Traceable

Timer Ranges

1 to 1000 Sec.

Model pressure ranges

0.5-15, 1-50, 2-100,

2-150, 5-300 psig

Vacuum range

-0.5 to -12.5 psi

Resolution: Decay

Maximum .0001 psi (.01 mbar/sec)

Flow range (sccm)

Standard 100-5000

Available 10 sccm to 10 lpm

Flow resolutions

Standard 1 sccm

Available 1.0 sccm to 1.5 lpm

Optional accessories

- Straining plate fixtures for leak testing pouches have semiporous surfaces to stabilize expansion during pressurization without blocking any holes in the surface material. Restraining plate fixtures for seal strength tests provide consistent stress loading on all seals.
- LA-05 filter drying assembly dries and removes water, oil and particulate matter from pressurizing air. The TME Worker requires clean, instrument quality air in order to maintain the warranty on the instrument.
- RS-01 Radial sealing fixture is a pneumatically operated clamp that provides either a sealed leak tight access to a tubular product or a sealed leak tight dead end to the product during pressure decay leak testing. The radial sealing fixture can be configured to diameters from approximately 0.022 to 6.000 inches.