

2100 Series Mass Flow Leak Detectors

Simple. Fast. Easy. Leak and flow restriction testing technology from V.I.C. gets accurate, reliable results—every time.

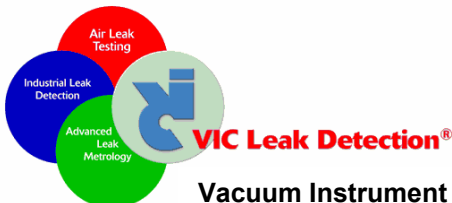
Applications:

- Brake calipers
- Air brake components and systems
- Castings: aluminum, steel, magnesium
- Exhaust systems: mufflers, catalytic converters, Y-pipes, assemblies, etc.
- Medical components: catheters, syringes, etc
- Radiators
- Oil Coolers
- Faucets
- Gearboxes, gear housings
- Connectors: fuel line, oil cooler, etc
- Refrigerator water and ice dispensers
- Air operated nailer guns
- Complete engine cavities
- Air conditioning and heating components: evaporators, heater cores
- Valves
- Copier toner cartridges
- Oil pumps
- Cylinder heads
- Fuel system components

www.vicleakdetection.com



Laboratory Benchtop and NEMA Type Enclosures



Vacuum Instrument Corporation – Air Leak Testing Division

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2100 SERIES MASS FLOW LEAK DETECTORS

The 2100 Series offers versatile, easy-to-use pneumatic leak detectors designed for industrial laboratory environments. Two models are available: The Model 2110 Benchtop and the Model 2120, which utilizes a NEMA-12 enclosure.

The mass flow technique makes the 2100 Series inherently superior

-Test results in engineering units are not dependent upon operator judgment

-Dry testing eliminates contamination due to immersion

-Direct leak rate readout is independent of part volume

Standard features include:

-Mass flow leak detection technique optimizes testing under all conditions. It speeds testing and assures minimum cycle time while it is self adjusting with temperature changes. Parts cannot be over pressurized

-Menu prompted keypad display allows easy test setup, test status and diagnostics monitoring/indication

-Automatic setup establishes all noncalibration related parameters. The operator simply loads a part then presses the start button and the test parameters are automatically determined and stored. Generates and stores unique parameters that are checked with each test to assure parts are properly tested under any conditions

-Patented thermal mass flow sensor assures ultimate performance

-Patented fill process optimizes test cycle time and eliminates any need for multiple calibration setups

Test parts of varying sizes with no change in setup

-Self-contained pneumatics package with pilot operated valving

-“Early Kick-Out” test mode saves substantial cycle time compared with other methods

-Multiple part selection library for quick changeover of multiple part numbers and associated parameters

-SPC data collection with individual part or batch reporting. Test readings can be transmitted with each test or stored and periodically downloaded

-Clamp mechanism control output

-Ideal for automated testing. 2100 Series leak detectors communicate with host PLC for unattended, trouble-free operation

-NIST Traceable Calibration Certification

Performance 2100 Series Leak Detector Specifications

Leak Rate Ranges: 0~10, 0~50, 0~100, 0~500 sccm

0~1, 0~5, 0~10, 0~50, 0~100 slpm

0~1, 0~5, 0~10, 0~50 scfm

Pressure Ranges: 0~1, 0~5, 0~30, 0~60, 0~100 psig

0~10, 0~100 in. wc

0~25 in. Hg Vacuum

Test Method: Mass flow technique with direct readout in leak rate

SPC Data Collection: Counters for parts tested, accepted and rejected; individual test report with part number, leak rate reading, time and date; batch report with part number total tested, accepted, rejected, average, minimum, maximum, range, standard deviation and time and date stamp; reports transmitted via integral RS 232C port

Transducer

Temperature compensated thermal mass flowmeter:

Accuracy: $\pm 1\%$ FS

Repeatability: $\pm 0.1\%$ FS

Response Time: 60 mSec time constant

Pressure Drop: Maximum 1inch wc at full scale leak rate

Temperature Range: 50~110^o F

Control Inputs: Optically isolated inputs include Start and Reset

Control Outputs: Optically isolated outputs, 1A max. Specify 5~60 VDC or 12~280 VAC operation.

Outputs include End of Test, Go/No-Go, Diagnose and Clamp Control

Calibration: N.I.S.T. traceable calibration with certification

Keypad: Membrane keypad with alphanumeric data entry

Display: 4 line x 40 character blue-green vacuum fluorescent display

Enclosure

Model 2110: 11"h x 19"w x 15"d Benchtop enclosure with side handles

Model 2120: 20"h x 16"w x NEMA-12 enclosure

Weight: 25 kilograms (55 pounds)

Air Supply: Clean, dry compressed air, 30 psig above test pressure, 95% max R.H., oil-free

Electrical Power: 115/230 VAC, 50~60 Hz, 350 VA

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* Specifications subject to change without notice.

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