

Continuous Flow Leak detector

InstruMetrics
ENGINEERING

FC0754



- Graphical display of flow and pressure
- Clear PASS and FAIL lights
- 300 Product settings with up to 16 sequence steps
- Flow measurement from 0.1 cc/hr to 2000 cc/hr
- Robust steel bench-top case with optional rack mounting
- Automatic pressure regulator and dual regulators available
- Communications via RS232, RS485, USB or Ethernet
- Barcode scanner for product selection and traceable test data
- Built-in Data logger
- Programmable electrical and pneumatic I/O

Originally designed to leak test gas appliances, sub-assemblies and components to European Standards. The FC0754 combines precision, reliability and ease of use with a maximum pressure of 8 bar, increasing its scope for testing Automotive, Aerospace and Medical components.

For leak identification the instrument can operate in continuous reading mode, whereas fixed timer mode ensures maximum productivity on automatic production lines.

Built-in pressure and temperature compensation ensures repeatable accurate results.

Leak Measurement

Leak ranges	0 to 60.00 cc/h (1.000 cc/min) 0 to 200.0 cc/h (3.333 cc/min) 0 to 600.0 cc/h (10.00 cc/min) 0 to 2000 cc/h (33.33 cc/min)
Accuracy @ 20°C	10% to 100% range: < 1% reading + 1 digit 0 to 10% range: < 0.1% FSD + 1 digit
Resolution	4 digit display.
Temperature Coefficients	Zero: Automatic Span: < ± 0.15% per °C
Long Term Drift (span)	< ± 1% per year

Pressure Measurement

Pressure Ranges	5 to 99.99 mbar 20 to 400.0 mbar 50 to 999.9 mbar 0.2 to 2.000 bar 1 to 4.000 bar 3 to 8.000 bar
Accuracy @ 20°C	10% to 100% range: < ± (1% reading + 1 digit) 0 to 10% range: < ± (0.1% range + 1 digit)
Resolution	4 digit display.
Temperature Coefficients	Zero: < ± 0.05% per °C Span: < ± 0.1% per °C
Long Term Drift (span)	< ± 1% per year

Electrical

Supply Voltage	24 VDC ± 10% < 500mA
Electrical connections	Power: 2 way detachable screw terminal Outputs: 20 way detachable screw terminal Inputs: 16 way detachable screw terminal RS232: 9 pin D plug RS485: 5 pin detachable screw terminal LAN: RJ45 connector, 10base-T/100base-TX Ethernet USB: Type B connector
Control Inputs	Up to 24 Opto-isolated, active high or active low. 5 VDC to 24 VDC into 10 KΩ
Control Outputs	Up to 32 Active High transistor output (PNP). 12 VDC to 45 VDC, 120 mA (per channel)

Pneumatic

Media Compatibility	Clean dry air or non corrosive gas
Air Supply Pressure	Maximum 10 bar gauge, Minimum 5 bar gauge
Regulator Supply Pressure	Maximum 16 bar gauge or 35 bar for 30 bar option
Pneumatic Connections	Air supply – 6 mm push-in tube connector Regulator supply and output – 8 mm push-in tube connector Test/Reference 1/8" BSPF with adaptation for 6mm O/D push-on tubing. Up to 5 programmable pneumatic outputs - 4 mm push-in tube connectors
Leak Tightness	< 0.2cc/Hour

Construction

Enclosure	Steel construction enclosure with paint finish. Suitable for 19" 3U rack mounting.
Dimensions – Rack Case	482 x 133 x 296 mm (W x H x D)
Dimensions – Bench Case	366 x 147 x 296 mm (W x H x D)
Weight	8.5 kg ± 0.5 kg

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