FCO732

Laminar
Flow Meter

- Flow measurement from 0.01 ml/min to 5000 litres/min
- Measures pressure and flow simultaneously
- Programmable cycle times for production testing
- Up to 50 test settings
- Robust steel bench-top case
- Communications via RS232 or RS485

The FCO732 is a cost effective air/gas flow meter suitable for production line testing of gas industry appliances and valves, calibration of fuel injectors and many other flow measuring applications. The FCO732 can be easily interfaced to PLCs or PCS where integration is required.

Using the well proven Furness Controls laminar flow technology, the FCO732 adds temperature and barometric pressure compensation to provide an accurate flow measuring system with high resolution. The inherent low flow resistance of the design ensures minimal interference with the flow path.

Furness Controls
Pressure | Flow | Leak Detection

FC0732

Flow Measurement

Flow ranges	0 to 20 ml/min 0 to 200 ml/min 0 to 2 litres/min	0 to 6 litres/min 0 to 10 litres/min 0 to 20 litres/min	0 to 30 litres/min 0 to 100 litres/min 0 to 200 litres/min	0 to 2000 litres/min 0 to 5000 litres/min
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: Automatic Zero facility , Span: < 0.1% per °C			
Long Term Drift (span)	< 1% per year			

Pressure Measurement

Pressure Ranges	50 mbar vacuum 300 mbar vacuum 800 mbar vacuum	2 mbar 20 mbar 50 mbar	200 mbar 400 mbar 1 bar	4 bar 6 bar 8 bar	14 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% < 500 mA
Electrical connections	Power: 2 way detachable screw terminal Outputs: detachable screw terminal Inputs: detachable screw terminal RS232: 9 pin D plug RS485: 5 pin detachable screw terminal
Control Inputs	Up to 12 Opto-isolated, active high or active low. 5 VDC to 24 VDC into 10 KΩ
Control Outputs	Up to 16 Active High transistor output (PNP). 12 VDC to 45 VDC, 120 mA (per channel)

Pneumatic

Media Compatibility	Clean dry air or non corrosive gas
Gas Temperature at LFE	0 – 50°C
Relative Humidity of Gas	0 – 95% Non-condensing
Air Supply Pressure	Maximum 10 bar gauge, Minimum 5 bar gauge
Regulator Supply Pressure	Maximum 16 bar gauge
Pneumatic Connections	Air supply – 6 mm push-in tube connector Regulator supply and output – 8 mm push-in tube connector Pneumatic pilot outputs - 4 mm push-in tube connectors Pressure sense port - 4 mm push-on tube connectors Laminar Flow Element ports – Size dependent on range: 20, 200 ml/min 6/4mm Push-on tube fitting 2, 6, 10, 20, 30 litres/min 12mm Plain Spigot 100 litres/min 22mm Plain Spigot 200 litres/min 28mm Plain Spigot 2000, 5000 litres/min 76mm i/d 184mm o/d flange.
LFE Operating pressure	Maximum static pressure 4 bar.

Construction

Enclosure	Steel construction enclosure with paint finish. Suitable for 19” 3U rack mounting.
Dimensions – Rack Case	267 x 133 x 296 mm (W x H x D) (excluding LFE)
Dimensions – Bench Case	232 x 147 x 296 mm (W x H x D) (excluding LFE)
Weight	5 kg (excluding LFE)

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Furness Controls has a UKAS accredited laboratory which offers pressure calibration from 0 to 40 kPa and flow calibration from 0.1 ml/min to 2000 litres/min

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UKAS CALIBRATION 0580

nqa ISO 9001 QUALITY MANAGEMENT

UKAS MANAGEMENT SYSTEMS 0015