

# QUALITY • SUPPORT • RELIABILITY

## MERIAM LAMINAR FLOW ELEMENTS

## Precise flow instruments for the measurement of air flow including engine air intake applications.

Meriam Laminar Flow Elements measure volume flow rate of gas by operating on capillary flow principles. The LFE generates a differential pressure which is near-linear to flow rate passed resulting in excellent performance in terms of accuracy, repeatability and turndown.

They are available in a number of line sizes to suit a choice of flow ranges, gases and applications. Each LFE is calibrated independently and supplied with co-efficients to allow flow rate to be determined by measuring differential pressure.

24 VDC

Signal

Filter

#### Features:

Measures clean, dry air/gases Wide flow turndown (20:1) Flow ranges from 5 cc/min to 64,000 LPM Line sizes : 1/4" to 8" Diameter Accuracy: +/- 0.72 % of Reading Filtered meters available Choice of line connections (Hose, flanged or threaded)

### Applications Include:

Engine Air Intake Measurement (ambient) Emissions Analysis Flow Benches Calibration Standards/Reference Component Leak Detection

#### Specifications for Engine Air Intake:

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Model: 50MC2	-2F	-4F	-6F	-8F
Line Size:	2"	4"	6"	8"
Max Flow (scfm)	100	400	1000	2250
Max Flow (LPM)	2800	11000	28000	64000
Overall Accuracy: +/- 1.0% of Reading				
Input: 24 VDC				
Analogue Output: 0-5V DC or 1-5 VDC				
Digital Output: RS485 / RS232				

FLOW

The 50MC2 model of LFE is an ideal choice for determining engine air intake. It is available in 4 different line sizes and measures upto 64,000 LPM. The upstream filter allows the meter to be used in dynamometer conditions and connected, via flexible hosing, to the intake of an engine. Meraim's 1500 Differential pressure transmitter can be scaled and calibrated with the LFE to provide an overall flow meter with an accuracy of +/- 1.0 % of reading.

Laminar Flow Element

FLOW (to

engine)

1500 DP

Transmitter

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