

Tunnel Atmosphere Monitoring

TunnelMaster Air Flow Monitor

The tunnel Air Flow Monitor (AFM) uses ultrasonic technology to measure air velocity. A single transmitter and an array of four receivers are contained in the measuring head. Air velocity and direction are computed from measurements of the phase shifts of the ultrasonic signals at the receivers. The sensor is compact, contains no moving components and requires no routine maintenance. The AFM is unaffected by interruptions from passing vehicles and acoustic reflections within the tunnel and from vehicle lights and reflections.

Two 4-20mA analogue outputs are available for configuration as bi-directional flow in m/sec. A volt-free contact output may also be configured as a flow direction indicator.

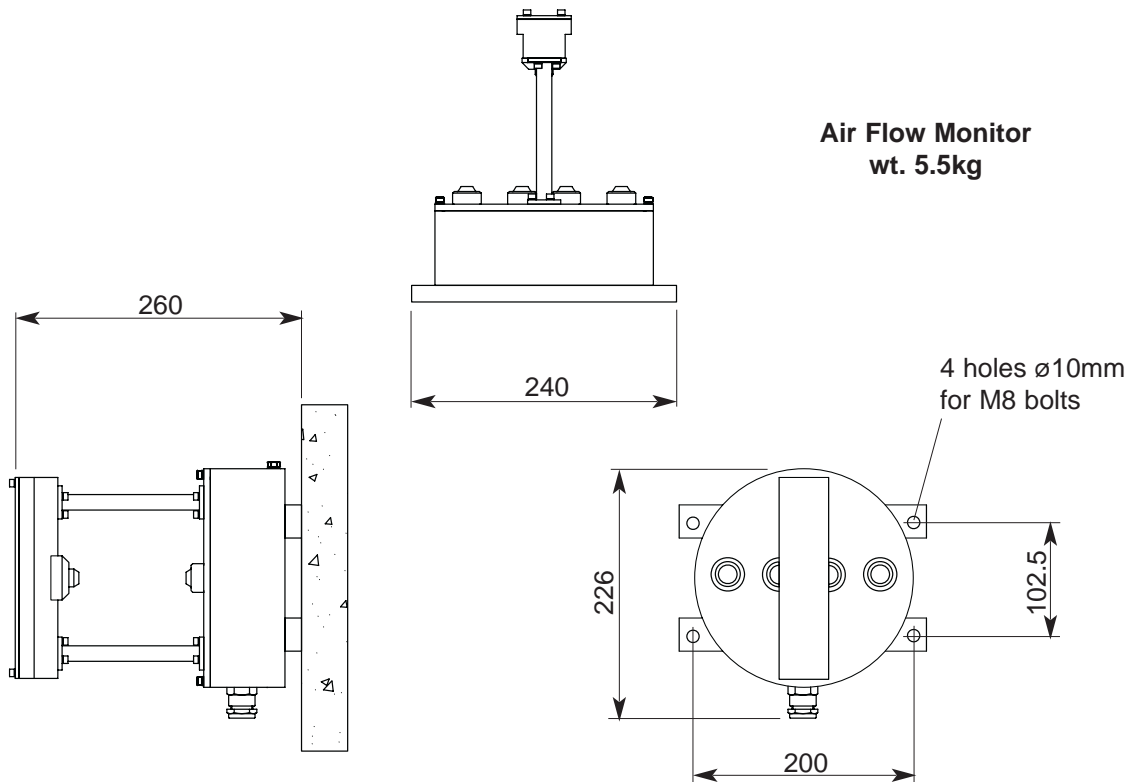
- ultrasonic measurement technology
- measurement uninterrupted by traffic flow and light reflections
- maintenance-free operation
- designed to withstand the harshest of tunnel environments
- measurement precision of $\pm 0.2\text{m/sec}$
- 2 x 4-20mA analogue outputs
- 1 x volt-free contact output for data valid
- 1 x volt-free contact output for flow direction



Total Solutions - Total Confidence



Overall Unit Dimensions



Specification

Measurements

Measurement - -20 to +20m/sec
Range

Averaging Time - 10 seconds to 60 minutes

Accuracy - ± 0.2 m/sec

Ambient Temperature - -20°C to +50°C

Compliances

EMC - 89/336/EEC directive compliant

Low Voltage - 73/23/EEC directive compliant

Outputs

Analogue Outputs - 2 x 4-20mA current outputs, isolated, 500 Ω load max.

Logic Outputs - 2 x volt-free contacts SPCO, 0.25A @ 125V AC, 1A @ 30V DC, 0.25A @ 100V DC, configurable for data valid and flow direction

Comms.

Local Comms. - RS232 serial interface via plug & socket

General

Construction - epoxy-coated aluminium to IP67

Power - 48V DC, 6VA

CODEL International Ltd.
Station Building, Station Road
Bakewell, Derbyshire DE45 1GE
England

Tel: +44 (0) 1629 814 351
Fax: +44 (0) 8700 566 307
e-mail: codel@codel.co.uk
web site: www.codel.co.uk

Distributor :

