Bi-Directional Flow — Bellows Application

The flow meter is measuring the air flow to and from a contained furnace to help in maintaining consistent temperatures. Using the bi-directional meter allows for the replacement of two individual flow meters and all the associated plumbing. The temperature and pressure signals are also incorporated as safety checks. Device accuracy is based on total span: \( \pm (0.8\% \text{ of reading} + 0.2\% \text{ of total span positive full scale to negative full scale}) \)

0 volts = – Full Scale Flow
2.5 volts = Zero Flow
5 volts = + Full Scale Flow

COMMON APPLICATIONS

Respiration Modeling:
Determining healthy lung volumes for research base lines

Veterinary Drug Research:
Calculating dosage recommendations based on lung volume x animal weight

Gas Mask Quality Checks:
Assuring capacity and throughput of protective masks

Order any Alicat M Series Mass Flow Meter with Bi-Directional Calibration and Receive:

- RS-232 Digital Output for Flow with a “–” to indicate reverse flow and “+” to indicate forward flow
- 0-5Vdc Analog Output of Flow with Direction Indication
- Local LCD with “–” and “+” Flow Direction Indication
- NIST Traceable Calibration