

INTEGRATED **VARIABLE AIR VOLUME** SYSTEM



Energy Saving

When the fume hood is not in use and the sash is closed, the VAV airflow controller reduces the volume of air exhausted, thus reducing heating or cooling usage by up to 85%, significantly reducing costs. This system reduces energy consumption, minimizing cost and associated CO2 emissions.

Demand Control Ventillation

The Integrated Variable Air Volume (VAV) system manages airflow through the hood chamber, so as the sash is moved, the fume hood provides a constant predetermined air velocity at the face. Additionally, the system will reduce the volume of air consumed when the sashes are partially or fully closed resulting in significant energy savings.

Properly used VAV systems provide significant energy conservation advantages over Constant Air Volume systems which consume a large amount of energy when the fume hoods are not in use. The integrated VAV system is designed to provide variable airflow volume control and to ensure the face velocity remains within established guidelines.

The system measures face velocity and sash position and automatically reduces the exhaust volume while maintaining face velocity. The system is designed to be factory mounted on Mott fume hoods and, optionally, can communicate with the building management system through an analog connection and/or BACNET.

Flexible

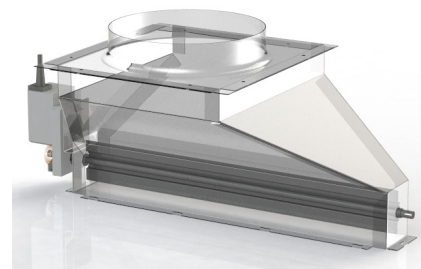
Since the controller and damper are attached to the fume hood itself, this system allows for mobile and stationary hood installation. Our integrated system does not require VAV system components to be installed elsewhere in the building. Only a simple source of exhaust is needed, making your labs easily reconfigurable to suit the ever-changing needs of scientific discovery.

Integrated VAV Blade Damper

This replaces the standard fume hood exhaust collar. Type 316 stainless steel construction which is also powder coated for additional corrosion resistance. Includes fast acting damper actuator.

Reliable

The sensor will provide stable readings over many years of operation without recalibration, ensuring reliability and safety.



Enhances Safety

The combined VAV controller, air flow monitor and alarm work to maintain airflow within established industry guidelines for safety and will alarm in the event airflow drops below safe levels. Additionally, it can adjust to changing conditions in the lab environment, such as personnel in front of the hood.



VAV Controller, Airflow Monitor & Alarm

The semi-flush VAV control, airflow monitoring and alarm system ensures the safety of users working on chemical fume hoods. Face velocity measurement and sash position sensing combine to provide higher speed operation and control.

Specifications

Digital Display Unit

- Digital velocity display fpm or m/sec
- 3 LEDs (Safe/Caution/Alarm)
- 3 configurable push buttons
- Semi-flush mounting

Range

Alarm

- 30-400fpm (0.15-2.00 m/s)
- Remote SM7 or ILS Airflow sensor

Control

- Face Velocity control with sash position sensor for higher speed operation
- 30-400fpm (0.15-2.00 m/s)

Control Resolution

- 2fpm (0.01m/sec)

Response time

- < 2 seconds

Accuracy

- Face Velocity +/-5% Power
- 3 configurable relay outputs
- 3 configurable relay inputs

Communications

- RS485 com port
- Modbus RTU and BACnet with optional adapter

Audio

- Audible alarm

Operating Temperature Range

- Monitor: 55-86°F (13-30°C)
- Airflow Sensor: 59-86°F (15-30°C)

Storage Temperature Range

- -86-150°F (-30-65°C)

Energy Saving Option Automatic Sash Closing System

For increased safety and energy savings our ASO2 Plus is an electronic occupancy sensor system that closes the sash automatically when not in use, or within a timed interval when the operator moves away from the fume hood.

