The AQStick™ Ambient Volatile Organic Compound (VOC) Monitor monitors ambient air quality by detecting the VOC content in the air. Some common sources of VOC contamination are carpets, building materials, paints, cleaners, and tobacco smoke. Even low concentrations of these compounds can affect building occupants’ comfort. A computer’s USB port provides power for the sensor and the LED lights which change color in accordance with the ambient air quality. In order to correspond with ASHRAE’s standards for air quality, the VOC reading from the monitor is converted from a percentage contaminated to an equivalent PPM reading of CO2. The percentage contaminated multiplied by 2000 PPM of CO2 gives the equivalent concentration of CO2. From the factory, the LED is green under 1000 PPM CO2, yellow for 1000 to 1500 PPM CO2 and red above 1500 PPM CO2. These factory values can be changed using the free online software. When using the free online software, the AQStick™ ambient VOC monitor can log and graph how building conditions change over time.

**SPECIFICATIONS**

VOC’s Detected: Alcohols, aldehydes, ketones, organic acids, aliphatic and aromatic hydrocarbons.

Sensor: MEMS metal oxide semiconductor.

Power: Powered from PC USB port.

Temperature Limits: 32 to 122°F (0 to 50°C).

Humidity Limits: 5 to 95% RH (non-condensing).

Agency Approval: CE.

**Model AQS-1, Ambient Volatile Organic Compound Monitor**

AQStick™ is a trademark of Dwyer Instruments, Inc.

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The new Series AVFS Adjustable Air Flow Switch complements the Dwyer Instruments line of thermo-anemometer transmitters and handheld instruments. The AVFS is specifically designed to monitor air flow in ducts and provides a 3A contact output to indicate a change or loss of flow. Simply turn on the fan or air handling unit and adjust the set-point via the potentiometer to show normal status. Then alter a damper or decrease fan speed to activate the AVFS. The AVFS will signal a loss of flow and the N.O. SPST output will indicate the detected decrease. For ease of installation and system trouble-shooting, the Series AVFS possesses a red/green LED indication to provide local status if the air flow is above (green) or below (red) the set-point. The AVFS provides a +/-5% set-point repeatability across a full scale range of 1-10 m/s (197-1969 fpm) and includes a mounting bracket for quick duct mounting. The AVFS Series Adjustable Air Flow Switches come in a compact, rugged PBT enclosure that is rated IP65, making them ideal for any ventilation system installation or similar BAS application.

**APPLICATIONS**

- Fan monitoring
- Filter monitoring
- Damper feedback
- Air handlers

**SPECIFICATIONS**

Air Velocity Range: 197-1969 FPM (-10 to 50°C).

Temperature Limits: 5 to 122°F (-10 to 50°C).

Humidity Limits: 0-90% RH.

Wetted Materials: PBT body, titanium sensor.

Pressure Limit: 14.7 psig (1 bar).

Switch Type: N.O. SPST.

Electrical Rating: 3 A @ 30 VDC/250 VAC.

Response Time: 3-60 seconds. Varies with flow and set point.

Power Requirement: AVFS-1: 80 to 250 AC/DC (47 to 63 Hz AC); AVFS-2: 24 VDC ±25%.

Power Consumption: 3 VA.

Electrical Connection: 6.5 ft (2 m) cable.

Enclosure Rating: IP65.

Display: 1 Red LED/1 Green LED.

Weight: 7.2 oz (203 g).

Agency Approvals: CE.

**Model AVFS-1, 80-250 AC/DC Power Thermo Air Flow Switch**

**Model AVFS-2, 24 VDC Power Thermo Air Flow Switch**