



# Velometer® Thermal Anemometers Model AVM410

The Model AVM410 is a solid choice for a digital Air Velocity Meter, without compromising accuracy or precision. Excellent for troubleshooting HVAC systems and conducting commissioning work.

# Models AVM430 and AVM440

The Model AVM430 and AVM440 are like having multiple meters for the price of one, yet they are simple to operate. Purchase instruments with a straight or articulated probe—all in one compact package.

### Features and Benefits

- Accurate air velocity measurement
- · Large, easy to read display
- · Calibration certificate included

## Models AVM430 and AVM440

- Simultaneously measures temperature and velocity
- Displays up to three measurements simultaneously
- Calculates volumetric flow, and actual/standard velocity
- Articulated probe versions available
- Data logging and LogDat2™ downloading software included
- Measures humidity (AVM440)

# **Applications**

- · HVAC system performance
- Commissioning
- · Plant maintenance
- · Critical environment certification
- Duct traverses



# Anemometers

# Thermal Anemometers

# Models AVM410, AVM430 and AVM440

# **Specifications**

Models AVM410, AVM430 and AVM440

#### Velocity

Range (AVM410)0 to 4,000 ft/min (0 to 20 m/s)

Range (AVM430, AVM440)

0 to 6,000 ft/min (0 to 30 m/s)

Accuracy (AVM410)<sub>1&2</sub>

 $\pm$ 5% of reading or  $\pm$ 5 ft/min ( $\pm$ 0.025 m/s),

whichever is greater

Accuracy (AVM430, AVM440)182

 $\pm 3\%$  of reading or  $\pm 3$  ft/min ( $\pm 0.015$  m/s),

whichever is greater

Resolution1 ft/min (0.01 m/s)

#### Duct Size (AVM430, AVM440)

Dimensions1 to 250 inches in increments of 0.1 in.

(1 to 635 cm in increments of 0.1 cm)

#### Volumetric Flow Rate (AVM430, AVM440)

RangeActual range is a function of velocity, and duct size

#### Temperature

Range (AVM410, AVM430)

0 to 200  $\mbox{\ensuremath{\mbox{\footnotemath{\footnotemath{\mbox{\footnotemath{\mbox{\footnotemath{\footnotemath{\mbox{\footnotemath{\footnotem}\footnotemath{\footnotemath{\footnotemath{\footnotemath{\footnotem}\footnotemath{\footnotemath{\footnotemath{\footnotemath{\fo$ 

Range (AVM440)14 to 140 F (-10 to 60 ℃)

Accuracy₃ ±0.5 F (±0.3 °C)

Resolution 0.1 F (0.1 °C)

#### Relative Humidity (AVM440 only)

Range0 to 95% RH

Accuracy<sub>4</sub>±3% RH

Resolution0.1% RH

#### Wet Bulb Temperature (AVM440 only)

Range40 to 140  $\Upsilon$  (5 to 60  $\Upsilon$ )

Resolution 0.1 F (0.1 °C)

#### Dew Point (AVM440 only)

Range5 to 120 𝔭 (-15 to 49 ℃)

Resolution 0.1 F (0.1 °C)

#### Instrument Temperature Range

Operating (Electronics)

40 to 113 𝓕 (5 to 45 ℃)

Model AVM410, AVM430 Operating (Probe)

0 to 200 F (-18 to 93 ℃)

Model AVM440 Operating (Probe)

14 to 140 ℉ (-10 to 60 ℃)

Storage-4 to 140  $\mbox{F}$  (-20 to 60  $\mbox{C})$ 

#### Data Storage Capabilities (AVM430, AVM440)

Range12,700+ samples and 100 test IDs

#### Logging Interval (AVM430, AVM440)

1 second to 1 hour

#### Time Constant (AVM430, AVM440)

User selectable

#### **External Meter Dimensions**

3.3 in. x 7.0 in. x 1.8 in. (8.4 cm x 17.8 cm x 4.4 cm)

#### Meter Weight with Batteries

0.6 lbs. (0.27 kg)

#### Meter Probe Dimensions

Probe Length40 in. (101.6 cm)

Probe Diameter of Tip

0.28 in. (7.0 mm)

Probe Diameter of Base

0.51 in. (13.0 mm)

#### **Articulating Probe Dimensions**

Articulating Section Length

7.8 in. (19.7 cm)

Diameter of Articulating Knuckle

0.38 in. (9.5 mm)

#### Power Requirements

Four AA-size batteries or AC adapter

	AVM410	AVM430, AVM430-A	AVM440, AVM440-A
Velocity range 0 to 4000 ft/min (0 to 20.00 m/s)	•		
Velocity range 0 to 6000 ft/min (0 to 30.00 m/s)		•	•
Temperature	•	•	•
Flow		•	•
Humidity, wet bulb, dew point			•
Probe	Straight	Straight orStraig -A articulated -A	
Variable time constant		•	•
Manual data logging		•	•
Auto save data logging Statistics			•
Review data		•	•
LogDat2 downloading software		•	•
Certificate of Calibration		•	•
		•	•

- $^{1}$  Temperature compensated over an air temperature range of 40 to 150  $\mbox{\ensuremath{\mathbb{F}}}$  (5 to 65  $\mbox{\ensuremath{\mathbb{C}}}).$
- 2 The accuracy statement begins at 30 ft/min through 4,000 ft/min (0.15 m/s through 20 m/s) for the Model AVM410, and 30 ft/min through 6,000 ft/min (0.15 m/s through 30 m/s) for Models AVM430 and AVM440.
- 3 Accuracy with instrument case at 77  $\pm$  (25  $\pm$ C), add uncertainty of 0.05  $\pm$ /  $\pm$  (0.03  $\pm$ /  $\pm$ C) for change in instrument temperature.
- 4 Accuracy with probe at 77  $\mp$  (25 °C). Add uncertainty of 0.1% RH/  $\mp$  (0.2% RH/ °C) for change in probe temperature. Includes 1% hysteresis.

Specifications subject to change without notice.



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