QVM62.1 Air Velocity Sensor

Description
The QVM62.1 Air Velocity Sensor/Transmitter is ideal for ventilation control applications requiring a high degree of accuracy and reliability. The sensor features an innovative hot film anemometer element which provides high accuracy throughout the measuring range. The hot film anemometer element is less sensitive to dust and dirt than other common anemometer designs. This increases reliability and decreases maintenance costs.

Features
- Mounting flange allows the installer to vary the probe insertion length into the duct space for best control.
- Mounting flange dampening gasket minimizes vibration.
- Graduated probe ensures maximum flow accuracy.
- Flow directional arrow provides for the most accurate reading.
- Connection cable provides mounting flexibility.
- Three jumper selectable flow measuring ranges accommodate any application or environment.
- Output is field-configurable for 0 to 10V or 4 to 20mA.

Ordering Information

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<th>Description</th>
<th>Part Number</th>
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<tr>
<td>Air Velocity Sensor, 0 to 3000 FPM</td>
<td>QVM62.1</td>
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## Specifications

**Power supply**  
Operating voltage: 24 Vac +/- 20%  
Frequency: 50/60 Hz  
Power consumption: ≤ 5 VA (maximum 200 mA)  
Output impedance: <20 ohm

**Measuring data**  
Measuring ranges, adjustable:  
- 0 to 16 ft/s (0 to 5 m/s)  
- 0 to 33 ft/s (0 to 10 m/s) (factory setting)  
- 0 to 49 ft/s (0 to 15 m/s)  
Measuring accuracy at 68°F (20°C), 45% rh, 1013 hPa: ± 0.7 ft/s (0.2 m/s + 3% of measured value)  
Permissible air velocity: 66 ft/s (20 m/s)  
Direction dependence: < 0.3% of measured value at < + 10°  
Time constant t₉₀ at 10 m/s: 4 seconds

**Signal output**  
Voltage: 0 to 10 Vdc  
Current: 4 to 20 mA

**Line length**  
Permissible length to controller at:  
- 20 AWG copper cable: 164 ft (50 m)  
- 18 AWG copper cable: 492 ft (150 m)  
- 16 AWG copper cable: 984 ft (300 m)  
Line length to the sensor head: 3 ft (1 m) (prewired)

**Connections**  
Mechanical: Screw connection  
Electric: Screw terminal, maximum 2 × 18 AWG

**Degree of protection**  
Degree of protection provided by enclosures as per EN 60 529:  
- Transducer: IP 42  
- Sensor head: IP 20  
Degree of protection as per EN 60 730: III

**Environmental conditions**  
Climatic conditions:  
- Temperature: -13°F to 122°F (-25°C to 50°C)  
- Humidity (non-condensing): <95% rh  
- Mechanical conditions: Class 3M2  
- Chemical conditions: Class 3C2  
Storage (transducer and immersion stem):  
- Temperature: 23°F to 113°F (-5°C to 45°C)  
- Humidity (non-condensing): <95% rh  
- Mechanical conditions: Class 1M2  
Transportation:  
- Temperature: 23°F to 113°F (-5°C to 45°C)  
- Humidity (non-condensing): <95% rh  
- Mechanical conditions: Class 2M2

**Materials and colors**  
Housing bottom: Polycarbonate, RAL 7001 (silver-gray)  
Housing cover: Polycarbonate, RAL 7035 (light gray)  
Sensor pipes: Polycarbonate, RAL 7001 (silver-gray)  
Sensor head, extension, enc: Polycarbonate, RAL 7035 (light gray)  
Connecting flange: Polycarbonate, RAL 7001 (silver gray)  
Sensor: Silicone-free

**Weight**  
With packaging: 12 oz (0.352 kg)

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