

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

Description	Part Number
Air Velocity Sensor, 0 to 3000 FPM	QVM62.1

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 t_{90} 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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