Micromanometers

Model PVM620

Micromanometer

Models PVM620, PVM610

The PVM620 is a rugged, compact, comprehensive Micromanometer that measures pressure, and calculates velocity and volumetric flow rate. It can be used with Pitot tubes to measure velocity and then calculate flow rates with user–input duct size and shape. Premium features make it ideal for HVAC, environmental safeguards, commissioning, process control and system balancing.

The PVM610 is an easy to use, hand held digital Micromanometer for fast, accurate and reliable pressure measurement. It can also calculate velocity.

Features and Benefits

- Measure differential and static pressure from -3735 to +3735 Pa (-15 to +15 in. H_2O)
- Calculate and display velocity when using a Pitot tube

Added Features PVM620

- Calculates volumetric flow rate in duct from velocity and user-input duct size and shape
- Records data points in duct traverse using sampling function
- Data logging with time and date stamp
- Includes LogDat2™ downloading software
- Programmable K factors

Applications

- HVAC commissioning and troubleshooting
- Testing and balancing
- Pitot tube duct traverses
- Static pressure measurements
- Environmental air flow testing

Accurate. Reliable. Every Time.

TSI AIRFLOW™ INSTRUMENTS

Specifications

Models PVM610 and PVM620

Static/Differential Pressure

Range[1]	-28.0 to +28.0 mm Hg, -3735 to +3735 Pa (-15 to +15 in. H_2O)
Accuracy	±1% of reading ±1 Pa (±0.01 mm Hg, ±0.005 in. H_2O)
Resolution	0.1 Pa, 0.01 mm Hg (0.001 in. H_2O)

Velocity From a Pitot Tube

Range[2]	1.27 to 78.7 m/s (250 to 15,500 ft/min)
Accuracy[3]	±1.5% at 10.16 m/s (2,000 ft/min)
Resolution	0.1 m/s (1 ft/min)

Duct Size (PVM620)

Dimensions	1 to 635 cm in increments of 0.1 cm (1 to 250 inches in increments of 0.1 in.)

Volumetric Flow Rate (PVM620)

Range	Actual range is a function of velocity, pressure, duct size, and K factor

Instrument Temperature Range

Operating	5 to 45°C (40 to 113°F)
Storage	-20 to 60°C (-4 to 140°F)

Data Storage Capabilities (PVM620 only)

Range	12,700+ samples and 100 test IDs

Logging Interval (PVM620 only)

From 1 second to I hour

Time Constant (PVM620 only)

User selectable

External Meter Dimensions

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

Meter Weight with Batteries

0.6 lbs (0.27 kg)

Power Requirements

PVM620	Four AA-size batteries or optional AC adapter
PVM610	Four AA-size batteries

	PVM610	PVM620
Differential and static pressure	•	•
Velocity with pitot tube	•	•
Calibration Certificate	•	•
Sample statistics		•
Volumetric flow rate		•
Actual and standard velocity		•
Variable time constant		•
LogDat2 data logging software		•
K factor		•

[1] Overpressure range = 7 psi (190 in. H_2O, 360 mmHg, 48 kPa).
[2] Pressure velocity measurements are not recommended below 1000 ft/min (5 m/s).
[3] Accuracy is a function of converting pressure to velocity. Conversion accuracy improves when actual pressure values increase.

Specifications subject to change without notice.