Velocity Monitor

Setra's Velocity Monitor is a multi-function non-BACnet device designed to monitor velocity while also giving the user the option to measure and display flow, differential pressure, temperature and humidity. The Velocity Monitor offers three velocity ranges as well as three pressure ranges, giving the user the option to choose the appropriate range for their application. The Velocity Monitor has a 3-color backlit display for easy menu navigation and audible/visual alarm capability for velocity, flow, pressure, temperature, humidity and door input. The velocity and flow measurements are based on differential pressure and require the use of a single point Pitot tube or averaging probe.

Simplify Your Velocity Measurement

The Velocity Monitor offers velocity ranges of 2000 ft/min, 4000 ft/min and 8000 ft/min as well as three meter ranges of 0-10, 0-20 and 0-40 m/s. The Velocity Monitor automatically calculates the velocity and volumetric flow rates based on differential pressure, eliminating the need for a manual square root calculation. Air density correction can be set as a STD condition or use as a external temperature sensor input.

Alarm Everything You Monitor

The Velocity Monitor provides audible and visual alarming for velocity, flow, pressure, temperature and humidity to give you peace of mind in your critical environment. High and low alarm set-points for each parameter are easily configurable through a four-button membrane keypad. A digital input is also provided to show door status.

Three Color Easy-to-See Status Screen

The Velocity Monitor utilizes a three-color backlit screen which allows the end user to easily view the status of the monitored space with green (normal), yellow (warning) and red (alarm) status screens. Alarms can be configured to be delayed to ensure that each Velocity Monitor is configured to the specific needs of the end user.

Save Time and Money on Calibration

With requirements in place to calibrate pressure sensors anywhere from 1-3 times annually, the Setra Velocity Monitor offers a solution to help you save on calibration time. The Velocity Monitor allows the end user to remove the sensor without detaching any wiring or plumbing, attach to the Setra calibration fixture and complete the calibration in minutes.

- **Maximize Patient Safety**
- **Alarm on 5 Parameters**
- **Save on Calibration & Installation**

Velocity Monitor Features:

- 3-Color LCD Display for Easy Setup and Room Display
- On-board Sensor - Industry Best Accuracy
- Analog Inputs for External Temp & Humidity Sensors
- Analog Outputs 4-20 mA, 0-5 and 0-10 VDC Field
- Selectable
- Monitor & Alarm Velocity, Flow, Pressure, Temp & RH
- Configurable Audible & Visual Alarms
- Adjustable Filtering to Reduce Noisy Pressure and Velocity Inputs
- Flush Mount and Surface Mount Available
- Removable Faceplate for No Hassle Calibration
- CE & RoHS Compliant

Parameters:

- Air Velocity
- Volumetric Airflow
- Differential Pressure
- Air Changes Per Hour

Phone: 800-257-3872 • Fax: 978-264-0292 • setra.com

Velocity Monitor

ORDERING INFORMATION

S R I M V – [ ][ ][ ][ ] – [ ][ ] – [ ][ ]

Model	Ranges				Output[1]		Mounting/Logo	
SRIMV = Velocity Monitor	ft/min		m/s		11	4 to 20mA	WL	Wall Mount w/ Logo
	20CF	2000	010M	0-10	2B	0 to 5 VDC	DL	Duct Mount w/ Logo
	40CF	4000	020M	0-20	2C	0 to 10 VDC	WN	Wall Mount, No Logo
	80CF	8000	040M	0-40			DN	Duct Mount, No Logo
							SN	Wall Mount, Stainless Steel Bezel, No Logo
							SL	Wall Mount, Stainless Steel Bezel, w/ Logo

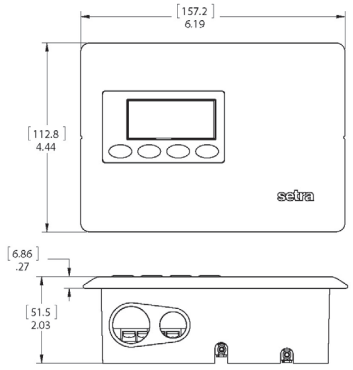
Example: Part No. SRIMV010M11WL = Model SRIMV, 0 to 10 m/s Velocity Range, 4 to 20 mA Output, Wall Mount with Logo.

ACCESSORIES

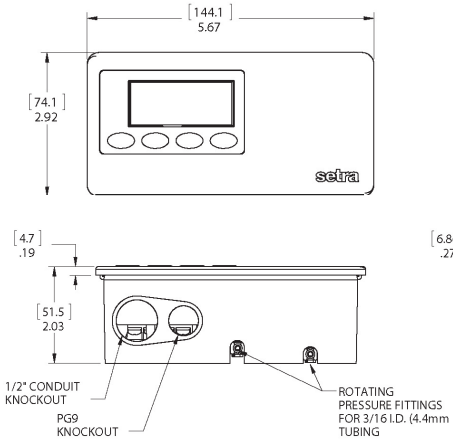
Part Number	Probe Length "A"	Description
242915-01	3- 5/32"	Averaging flow sensor
242915-02	5- 13/32"	Averaging flow sensor
242915-03	7- 21/32"	Averaging flow sensor
242915-04	9- 29/32"	Averaging flow sensor
242915-05	12- 1/2"	Averaging flow sensor
242915-06	14- 3/4"	Averaging flow sensor

DIMENSIONS

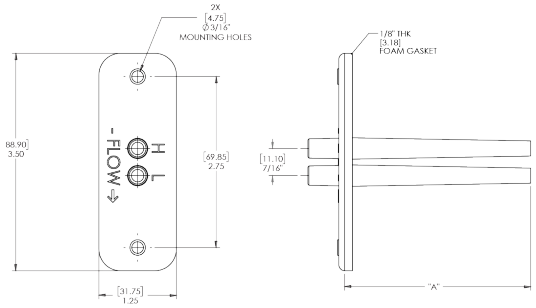
WALL MOUNT



DUCT MOUNT



AVERAGING FLOW SENSOR



GENERAL SPECIFICATIONS

Range	Accuracy	Environmental Data	
0-2000 ft/min	±2.5% Reading ± 10 f/t from 0-500 ft/min, ±2.5% Reading ±20 ft/min from 500 to 2000 ft/min	Operating Temp. °F (°C)	22 to +140 (-6 to +60)
0-4000 ft/min	±2.5% Reading ± 10 f/t from 0-500 ft/min, ±2.5% Reading ±20 ft/min from 500 to 4000 ft/min	**Electrical Data**	
0-8000 ft/min	±2.5% Reading ± 10 f/t from 0-500 ft/min, ±2.5% Reading ±20 ft/min from 500 to 8000 ft/min	Circuit	3-Wire (Exc, Out, Com)
0-10 m/s	±2.5% Reading ±.05 m/s from 0-3m/s, ±2.5% Reading ±0.1 m/s from 3 to 10 m/s	Output	0 to 5 VDC, 0 to 10 VDC, 4 to 20 mA
0-20 m/s	±2.5% Reading ±.05 m/s from 0-3m/s, ±2.5% Reading ±0.1 m/s from 3 to 20 m/s	Power	18 to 30 VDC or 24 VAC ±10%
0-40 m/s	±2.5% Reading ±.05 m/s from 0-3m/s, ±2.5% Reading ±0.1 m/s from 3 to 40 m/s	Power Consumption	4 W. MAX (24 VDC) 8 W. MAX (24 VAC)
Long Term Stability	0.5% FS/yr	**Physical Description**	
Thermal Effects		Electrical Connection	Screw Terminal
Compensated Range °F (°C)	40 to 120 (4.5 to 50)	Dimensions	See Diagram to Left
Zero/Span Shift %FS	±0.02% FS/C Typ	Weight	10.7 oz.
Overpressure	Up to 10 PSI	Display	Custom 2-Line Character LCD
Pressure Media		Pressure Fittings	Barbed Fittings for 1/4" Tubing
Clean air or other non-conducting gases.		Case	Fire Retardant Plastic UL94V-0
Certifications			
CE	EN61326-1 & EN61326-2-3 BASIC Immunity & Class B Emission		
RoHS			

SSP-SRIMV REV. B 7/2017

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