

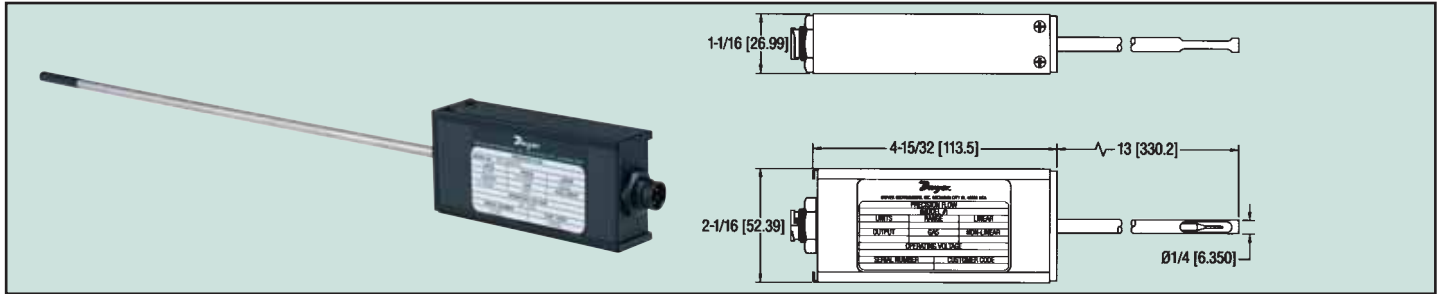


Series
PF

Precision Flow™ Air Velocity Transmitter

High Accuracy, 0.2 Second Response, 4 to 20 mA Output

Air Velocity



Precision Flow™ Air Velocity Transmitters directly monitor gas mass flow rates of free air flows or single point flows in pipes, ducts and stacks. The 4 to 20 mA output signal is linearly proportional to gas mass velocity without additional compensation needed for pressure and temperature variations. The 304 SS insertion probe contains a velocity sensor to monitor mass flow and a temperature sensor to automatically correct for temperature changes. The probe is directly mounted to a NEMA 2 anodized aluminum enclosure. Stocked models are calibrated for air.

MODELS

Model Number	Range
PF1300202	0 to 2000 SFPM
PF1300204	0 to 4000 SFPM
PF1300206	0 to 6000 SFPM

APPLICATIONS

Heating, ventilation and air conditioning (HVAC); hood and gas cabinet monitoring; cleanroom and cleanbench face velocity monitoring.

SPECIFICATIONS

Service: Air, nitrogen, or non-corrosive, non-combustible gases.

Wetted Materials: 304 SS probe, glass coated sensor, epoxy.

Accuracy: $\pm 1\%$ FS, $\pm 0.5\%$ of reading over 32 to 122°F (0 to 50°C) and 5 to 30 psia (0.35 to 2 kg/cm²).

Repeatability: 0.2% F.S.

Temperature Limits: -40 to 250°F (-40 to 121°C).

Pressure Limits: 150 psig (10 kg/cm² G) max.

Power Requirements: 15 to 18 VDC, 300 mA max.

Output: 4 to 20 mA, linear.

Response Time: 0.2 seconds to 63% of final velocity value.

Loop Resistance: 400 Ω max.

Electrical Connection: Four wire standard connector.

Probe Dimensions: 1/2" (6.35 mm) O.D., 13" (33 cm) length.

Operating Temperature: 32 to 122°F (0 to 50°C).

Weight: 0.7 lb (0.30 kg).

Suggested Specifications

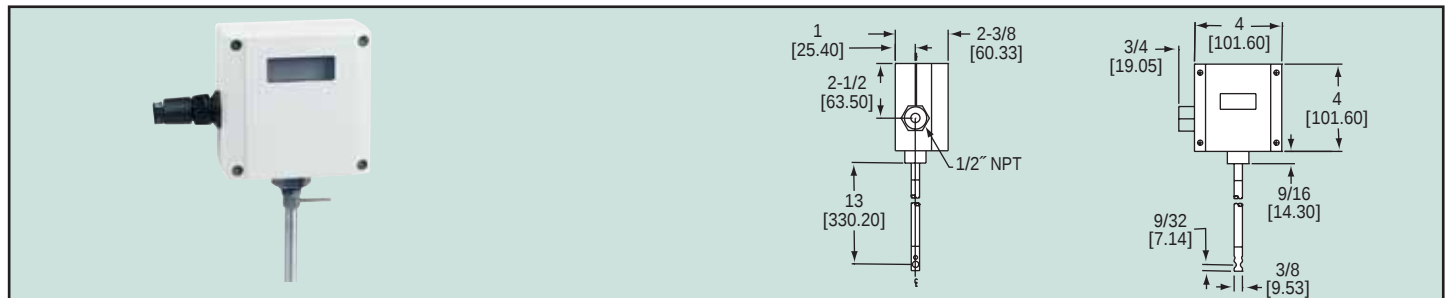
Air velocity transmitter shall be an insertion type mass flow meter with accuracy of $\pm 1\%$ FS, $\pm 0.5\%$ of reading and a 0.2 second response time. Transmitter shall provide a 4-20 mA output signal linearly proportional to gas mass velocity. Insertion probe shall be constructed of 304 SS with a glass coated sensor assembly. Electronics shall be housed in a NEMA 2 enclosure. Air velocity transmitter shall be Dwyer® Model No. PF____ Air Velocity Transmitter.



Series
PFS

Smart Air Velocity Transmitter

Field Rangeable, 0.1 Second Response, $\pm 0.2\%$ Repeatability



Series PFS Smart Air Velocity Transmitter measures mass flow rate of air, nitrogen, or other non-combustible gases and delivers a linear 4 to 20 mA output signal. The smart electronics permit field configuration of flow range and full validation of calibration. Compensate for flow profile variations or specific application conditions with the K-Factor correction feature. Series PFS include user-adjustable high and low alarm outputs and adjustable time response to track flow fluctuations. View flow rate on units with built-in display. All parameters can be quickly programmed via three push buttons or RS-232 and the Windows™ 95 based software (sold separately).

MODELS

Model Number	Range	Display
PFS1300204	0 to 4000 SFPM	No
PFS1300210	0 to 10,000 SFPM	No
PFS1300215	0 to 15,000 SFPM	No
PFS13002041	0 to 4000 SFPM	Yes
PFS13002101	0 to 10,000 SFPM	Yes
PFS13002151	0 to 15,000 SFPM	Yes

SPECIFICATIONS

Service: Air, nitrogen, or non-corrosive, non-combustible gases.

Wetted Materials: 304 SS probe, glass filled polyester sensor, epoxy, and ceramic.

Accuracy: $\pm 1\%$ FS.

Repeatability: $\pm 0.2\%$ full scale.

Temperature Limits: -40 to 250°F (-40 to 120°C).

Pressure Limits: 150 psig (10 bar) max.

Power Requirements: 18 to 30 VDC, 625 mA max.

Output: 4 to 20 mA linear, optical/galvanic isolated; proportional to point mass flow rate or velocity.

Zero and Span Adjustment: 50 to 100% FS.

Response Time: 0.1 seconds to 63% of final velocity value.

Loop Resistance: 700 Ω max.

Relay Rating: Maximum

42 VAC/VDC, 140 mA.

Electrical Connection: 1/2" female NPT.

Enclosure Rating: NEMA 4X (IP65) powder-coated cast aluminum.

Mounting: 3/8" tube compression fitting (not included).

Correction Factor Setting: 0.5 to 2.

Computer Requirements: IBM compatible 386 or above and Windows™ 95 or later with minimum 8 mB RAM (16 mB preferred) and one serial port.

Weight: 0.7 lb (0.30 kg).

Agency Approvals: CE.

Accessories

No. PFS60 Windows® Software and Connecting Cable

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