Dwyer

SERIES AVUL

AIR VELOCITY TRANSMITTERS
3% and 5% Models, Optional BACnet or Modbus® Communication Protocols

CE BTL

VIDEO ONLINE
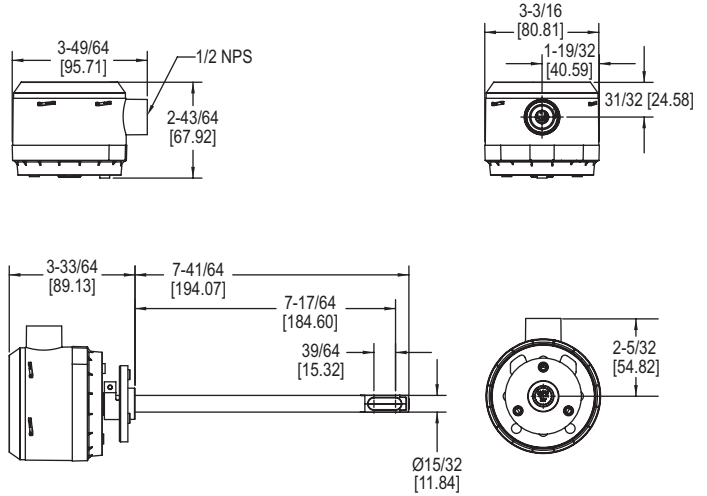
The **Series AVUL Air Velocity Transmitters** quickly and accurately measures air velocity or volumetric flow in imperial or metric units. Simultaneous current and voltage outputs on all models provide universal inputs to monitoring equipment while the output range, units, and 0 to 5/10 VDC output can be configured via local DIP switches. The optional integral display, or the portable remote display tool, provide a convenient way to locally monitor process values and configure the unit.

Models are available in 3% and 5% accuracy models to suit a variety of needs, and the optional BACnet MS/TP or Modbus® RTU/ASCII communication protocol allows units to be daisy-chained while providing access to all of the velocity and flow data, as well as additional information such as air temperature.

FEATURES/BENEFITS
• Sensing elements have been coated with an engineered conformal coating to ensure durability and longevity
• Field selectable ranges can be quickly configured without power to the unit

APPLICATIONS
• VAV systems
• Building ducts

MODEL CHART

Model	Description
AVUL-5DA1	Air velocity transmitter, 5% accuracy, duct mount, Universal current/voltage outputs
AVUL-5DA1-LCD	Air velocity transmitter, 5% accuracy, duct mount, Universal current/voltage outputs, with LCD
AVUL-5DB1	Air velocity transmitter, 5% accuracy, duct mount, BACnet communications
AVUL-5DB1-LCD	Air velocity transmitter, 5% accuracy, duct mount, BACnet communications, with LCD
AVUL-5DM1	Air velocity transmitter, 5% accuracy, duct mount, Modbus® communications
AVUL-5DM1-LCD	Air velocity transmitter, 5% accuracy, duct mount, Modbus® communications, with LCD
AVUL-3DA1	Air velocity transmitter, 3% accuracy, duct mount, Universal current/voltage outputs
AVUL-3DA1-LCD	Air velocity transmitter, 3% accuracy, duct mount, Universal current/voltage outputs, with LCD
AVUL-3DB1	Air velocity transmitter, 3% accuracy, duct mount, BACnet communications
AVUL-3DB1-LCD	Air velocity transmitter, 3% accuracy, duct mount, BACnet communications, with LCD
AVUL-3DM1	Air velocity transmitter, 3% accuracy, duct mount, Modbus® communications
AVUL-3DM1-LCD	Air velocity transmitter, 3% accuracy, duct mount, Modbus® communications, with LCD

SPECIFICATIONS
Service: Clean air and non-combustible, compatible gases.
Wetted Materials: Consult factory.
Range: 1000, 2000, 3000, 4000 FPM (5, 10, 15, 20 m/s); Field selectable.
Accuracy: ±(5% of reading + 0.2 m/s) or ±(3% of reading + 0.2 m/s) @ standard conditions, depending on model.
Temperature Limits: 32 to 122°F (0 to 50°C).
Power Requirements: 24 VDC ±20% or 24 VAC ±20%.
Humidity Limits: 5 to 95% RH, non-condensing.
Output Signals: 4 to 20 mA, 0 to 5 VDC, 0 to 10 VDC.
Response Time (90%): 10 s, typical.
Zero & Span Adjustments: Digital push-buttons.
Output Load Resistance: Current output: 0 to 1100 Ω max.; Voltage output: Minimum load resistance 1 kΩ.
Current Consumption: 60 mA max.
Display (optional): 5 digit LCD.
Electrical Connections (Analog): Power and output: four wire removable European style terminal block for 16 to 26 AWG.
Communication (optional): Connections: BACnet MS/TP or Modbus® RTU/ASCII: three wire removable European style terminal block for 16 to 26 AWG; Supported baud rates: 9600, 19200, 38400, 57600, 76800, 115200.
Device Load: 1/8th unit load.
Electrical Entry: 1/2″ NPS thread. Accessory (A-151): Cable gland for 5 to 10 mm diameter cable.
Enclosure Rating: NEMA 4X (IP66).
Mounting Orientation: Flow direction must be parallel to the sensor tip.
Weight: 6.0 oz (160 g).
Agency Approval: BTL, CE.

ACCESSORIES

Model	Description
A-151	Cable gland for 5 to 10 mm diameter cable
A-435-A	Remote display tool
A-AVUL-LCD	Field upgradeable display
A-AVUL-MTG	Replacement mounting flange
SCD-PS	100 to 240 VAC/VDC to 24 VDC power supply

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