



Series
641

Air Velocity Transmitter

16 Field Selectable Ranges in FPM or MPS



AIR QUALITY

Air Velocity Transmitters

B DIMENSION
A DIMENSION

3-1/4
[82.55]

13/16
[20.64]

4-29/64
[113.11]

1/2-14 NPT

1/2 NPT

B DIMENSION
A DIMENSION

2-23/32
[29.06]

25/32
[19.84]

4-29/64
[113.11]

1/2-14 NPT

1/2 NPT

| 641 AVT with Display Option | |
|-----------------------------|-----------------------|
| A Dimension | B Dimension |
| 7-63/64 [202.80] | 9-13/16 [249.24] |
| 13-63/64 [355.20] | 15-13/16 [401.64] |
| 19-63/64 [507.60] | 21-13/16 [554.04] |
| 26-63/64 [685.40] | 28-13/16 [731.84] |
| 32-63/64 [837.80] | 34-13/16 [884.24] |
| 37-63/64 [964.80] | 39-13/16 [1011.24] |

| 641 AVT without Display Option | |
|--------------------------------|---------------------|
| A Dimension | B Dimension |
| 7-7/16 [188.91] | 9-9/32 [235.74] |
| 13-7/16 [341.31] | 15-9/32 [388.14] |
| 19-7/16 [493.71] | 21-9/32 [540.54] |
| 26-7/16 [671.51] | 28-9/32 [718.34] |
| 29-7/16 [747.71] | 34-9/32 [870.74] |
| 37-7/16 [950.91] | 39-9/32 [997.74] |

The new Series 641 Air Velocity Transmitter is the ideal instrument for monitoring air flow. This transmitter uses a heated mass flow sensor which allows for precise velocity measurements at various flow rates and temperatures. The 641's 16 field-selectable ranges provides it the versatility to be selected for several air flow applications. The optional LED produces a complete, low-cost solution for local indication of air flow.

FEATURES

- Ranges to 15,000 FPM or 75 MPS
- Optional bright LED display
- Easy push button set-up
- Compact housing
- 4 to 20 mA output
- Digital filter for signal damping

APPLICATIONS

- Exhaust stack flow monitoring
- Air control in drying processes
- HVAC air velocity measurements
- Fan supply and exhaust tracking

| Model | Probe Length* |
|------------|----------------|
| 641-6 | 6" (152.4 mm) |
| 641-6-LED | 6" (152.4 mm) |
| 641-12 | 12" (304.8 mm) |
| 641-12-LED | 12" (304.8 mm) |
| 641-18 | 18" (457.2 mm) |
| 641-18-LED | 18" (457.2 mm) |
| 641-24 | 24" (609.6 mm) |
| 641-24-LED | 24" (609.6 mm) |

*Other probe lengths available contact factory.

OPTION

For NIST traceable calibration certificate, add suffix -NIST to model numbers. Example: 641-6-NIST.

SPECIFICATIONS

Service: Clean air and compatible, non-combustible gases.

Accuracy: 3% FS process gas: 32 to 122°F (0 to 50°C); 4% FS process gas: -40 to 32°F & 122 to 212°F (-40 to 0°C & 50 to 100°C).

Response Time: Flow: 1.5 seconds to 95% of final value (output filter set to minimum).

Temperature Limits: Process: -40 to 212°F (-40 to 100°C); Ambient: 32 to 140°F (0 to 60°C).

Pressure Limit: 100 psi (6.89 bar) maximum.

Humidity Limit: Non-condensing.

Power Requirements: 12 to 35 VDC, 10 to 16 VAC. 1.5A rating required on supply due to initial power surge drawn by transmitter.

Output Signal: 4 to 20 mA, isolated 24V source, 3 or 4-wire connection.

Output Filter: Selectable 0.5 –15 (seconds).

Loop Resistance: 600 Ω max.

Current Consumption: 300 mA max.

Electrical Connections: Screw terminal.

Process Connections: 1/2" male NPT.

Enclosure Rating: Designed to meet NEMA 4X (IP66) for non LED models only.

Mounting Orientation: Unit not position sensitive. Probe must be aligned with airflow.

Weight: 12.6 oz (357.2 g).

Agency Approval: CE.

OPTIONAL DISPLAY VERSION:

Display: 4-1/2 digit 1/2" red LED.

Resolution: 1 FPM, 0.01 MPS
(10 FPM @ 10,000 and 15,000 FPM ranges).

Weight: 13.3 oz (377 g).

ACCESSORIES

A-156, Universal Mounting Plate 1/2" female NPT

A-158, Split Flange Mounting Kit

A-159, Duct Mounting Gland

641-LED, Field-upgradeable LED