



Series
641

Air Velocity Transmitter

16 Field Selectable Ranges in FPM or MPS



Air Velocity

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]	26-9/32 [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
- 4-20 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)
641-30	30" (762 mm)
641-30-LED	30" (762 mm)
641-36	36" (914 mm)
641-36-LED	36" (914 mm)

*Other probe lengths available contact factory.

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

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

Output Filter: Selectable 0.5 – 15 (seconds).

Loop Resistance: 600 ohms 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