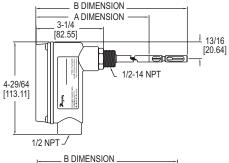


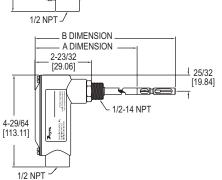
# **AIR VELOCITY TRANSMITTERS**

High Accuracy, Field Selectable Ranges

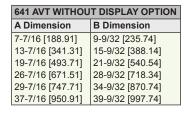
CALIBRATION SERVICES AVAILABLE







| 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] |  |





The **Series 641 Air Velocity Transmitters** are 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.

### BENEFITS/FEATURES

- Ranges from 250 FPM (1.25 MPS) to 15,000 FPM (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 aurphy and exhaust tracking.
- Fan supply and exhaust tracking
- Clean room ventilation monitoring

| MODEL CHART                                     |                |
|---|----------------|
| 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. |                |

| OPTIONS              |  |  |
|----------------------|--|--|
| To order add suffix: | Description                            |  |
| -NIST                | NIST traceable calibration certificate |  |
| Example: 641-6-NIST  |  |  |

| ACCESSORIES |   |  |
|-------------|---|--|
| Model       | Description                               |  |
| 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                     |  |

#### **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 and 122 to 212°F (-40 to 0°C and 50 to 100°C).

Response Time: Flow: 1.5 s 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. 1.5 A rating required on supply due

to initial power surge drawn by transmitter.

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

Output Filter: Selectable 0.5-15 (s). Loop Resistance:  $600~\Omega$  max. Current Consumption: 300~mA max. Electrical Connections: Screw terminal. Process Connections:  $1/2^{\prime\prime}$  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).