# Dwyer SERIES 641 AIR VELOCITY TRANSMITTERS

High Accuracy, Field Selectable Ranges

## **B DIMENSION** A DIMENSION 3-1/4 [82.55] 13/16 [20.64] 1/2-14 NPT 4-29/64 [113.11] 1/2 NPT -**B DIMENSION** A DIMENSION 2-23/32 [29.06] 25/32 [19.84] ∽ 1/2-14 NPT 4-29/64 [113.11] 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]	
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 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.

#### FEATURES/BENEFITS

- 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 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	Г

## ACCESSORIES

100100011120	
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

Weight: 13.3 oz (377 g).

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 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 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).

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