

## SERIES 641 | AIR VELOCITY TRANSMITTER

### FEATURES/BENEFITS

- Field selectable ranges from 250 FPM (1.25 m/s) to 15,000 FPM (75 m/s) suit almost any application and reduces inventory
- Optional bright LED display easily provides local indication
- Easy push button set-up reduces installation time
- Compact housing minimizes installation footprint
- 4 to 20 mA output for use with most building management systems
- Digital filter for signal damping

### APPLICATIONS

- Exhaust stack flow monitoring
- HVAC air velocity measurements
- Clean room fresh air supply
- Air control in drying processes
- Fan Supply and exhaust tracking
- Ensuring proper lab hood exhaust flow rates

### DESCRIPTION

The **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 provide it the versatility to be selected for several air flow applications. The optional LED produces a complete, cost effective solution for local indication of air flow.



### SPECIFICATIONS

<b>Service</b>	Clean air and compatible, non-combustible gases.
<b>Field Selectable Ranges</b>	FPM: 250, 500, 1000, 2000, 3000, 5000, 10000, 15000; m/s: 1/25, 2.5, 5, 10, 15, 25, 50, 75.
<b>Accuracy</b>	3% FS Process gas: 32 to 122°F (0 to 50°C); 4% Process gas: -40 to 32°F & 122 to 212°F (-40 to 0°C & 50 to 100°C).
<b>Response Time</b>	Flow: 1.5 seconds to 95% of final value (output filter set to minimum).
<b>Temperature Limits</b>	Process: -40 to 212°F (-40 to 100°C); Ambient: 32 to 140°F (0 to 60°C).
<b>Pressure Limits</b>	100 psi (6.89 bar) maximum.
<b>Humidity Limit</b>	Non-condensing.
<b>Power Requirement</b>	12 to 35 VDC, 10 to 16 VAC. 1.5 A rating required on supply due to initial power surge drawn by transmitter.
<b>Output Signal</b>	4 to 20 mA, isolated 24 V source, 3 or 4 wire connection.
<b>Output Filter</b>	Selectable 0.5 to 15 (seconds)
<b>Loop Resistance</b>	600 Ω max.
<b>Current Consumption</b>	300 mA max.
<b>Electrical Connections</b>	Screw terminal.
<b>Process Connections</b>	1/2" male NPT.
<b>Enclosure Rating</b>	Designed to meet NEMA 4X (IP66) for non-LED models only.
<b>Mounting Orientation</b>	Unit not position sensitive. Probe must be aligned with airflow.
<b>Weight</b>	12.6 oz (357.2 g).
<b>Agency Approvals</b>	CE.

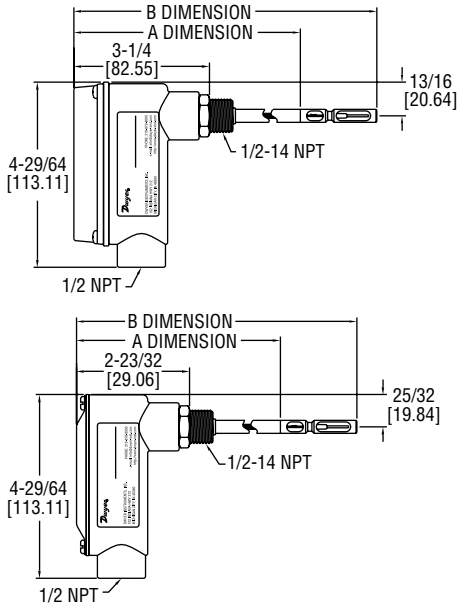
### OPTIONAL DISPLAY VERSION SPECIFICATIONS

<b>Display</b>	4-1/2 digit 1/2" red LED.
<b>Resolution</b>	1 FPM, 0.01 MPS (10 FPM @ 10,000 and 15,000 FPM ranges).
<b>Weight</b>	13.3 oz (377 g).





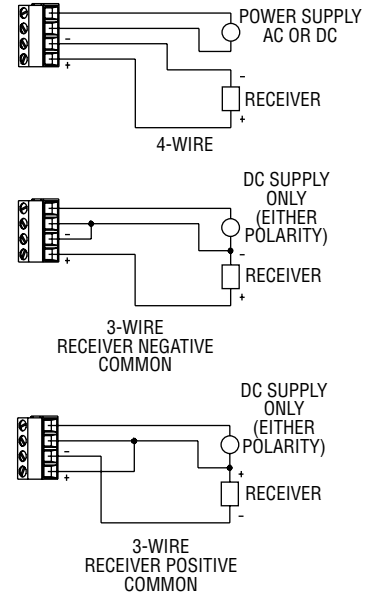
## DIMENSIONS



641 AVT WITH DISPLAY OPTION		
Probe	A Dimension in [mm]	B Dimension in [mm]
6"	7-63/64 [202.80]	9-13/16 [249.24]
12"	13-63/64 [355.20]	15-13/16 [401.64]
18"	19-63/64 [507.60]	21-13/16 [554.04]
24"	26-63/64 [685.40]	28-13/16 [731.84]
30"	32-63/64 [837.80]	34-13/16 [884.24]
36"	37-63/64 [964.80]	39-13/16 [1011.24]

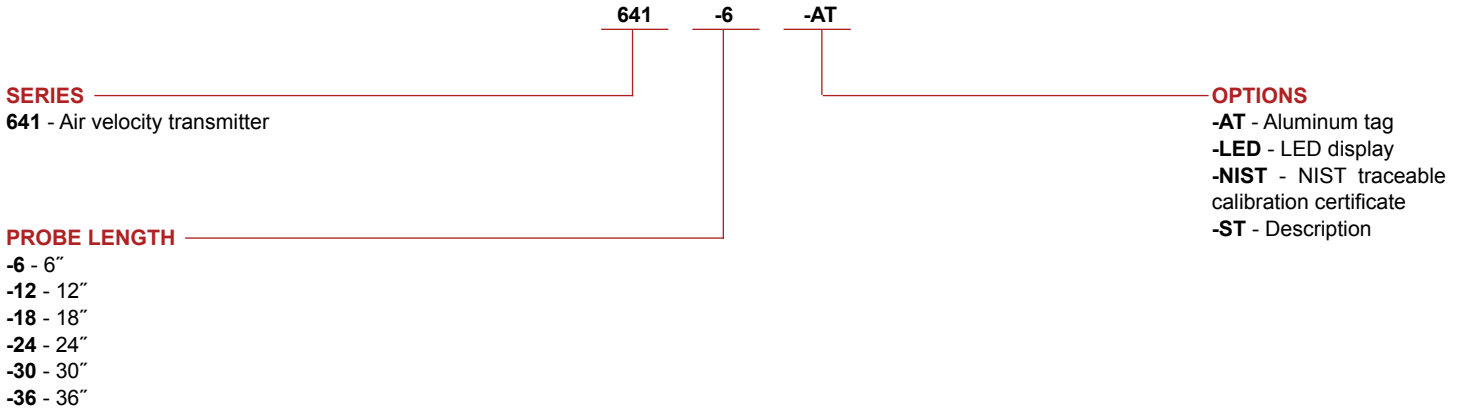
641 AVT WITHOUT DISPLAY OPTION		
Probe	A Dimension in [mm]	B Dimension in [mm]
6"	7-7/16 [188.91]	9-9/32 [235.74]
12"	13-7/16 [341.31]	15-9/32 [388.14]
18"	19-7/16 [493.71]	21-9/32 [540.54]
24"	26-7/16 [671.51]	21-9/32 [540.54]
30"	29-7/16 [747.71]	34-9/32 [870.74]
36"	37-7/16 [950.91]	39-9/32 [997.74]

## WIRING DIAGRAM



## HOW TO ORDER

Use the **bold** characters from the chart below to construct a product code.

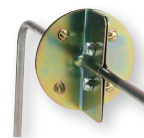


## ACCESSORIES

Model	Description
A-156	Flange mounting plate with 1/2" female NPT
A-158	Split flange
A-159	Mounting gland with 1/2" male NPT
641-LED	Field upgradeable LED



A-156



A-158



A-159

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