Series VTT
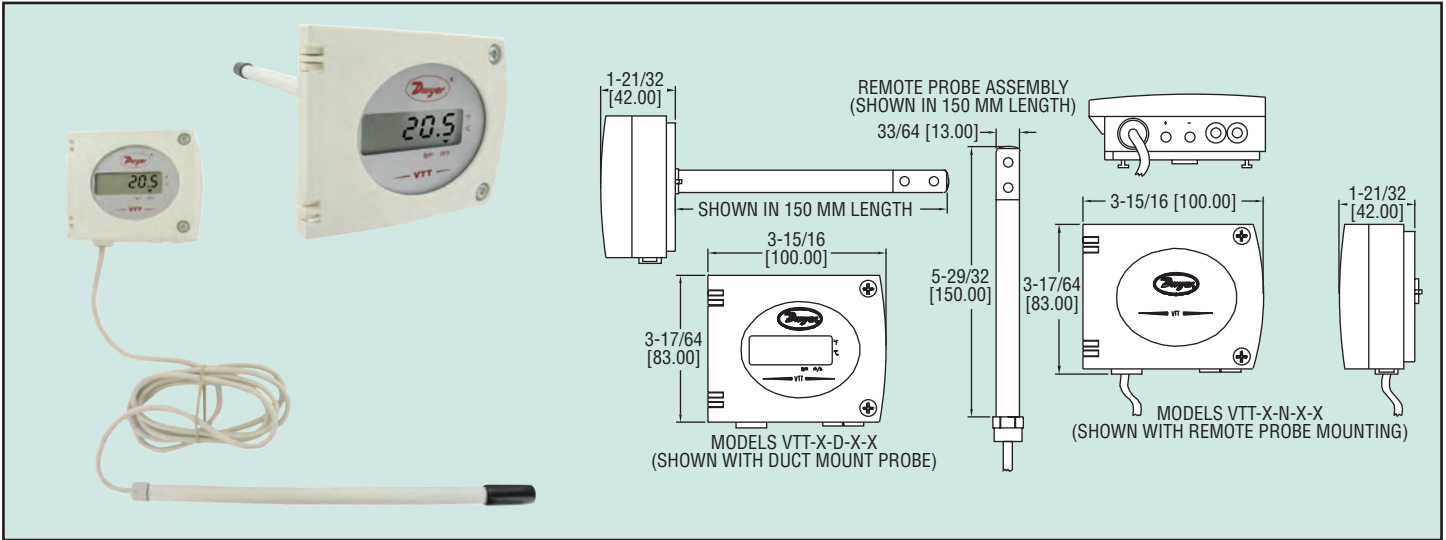
Hot-Wire Air Velocity/Temperature Transmitter

Configurable Air Velocity Ranges, Available with 5 Digit Display

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1-21/32 [42.00]

REMOTE PROBE ASSEMBLY (SHOWN IN 150 MM LENGTH)

33/64 [13.00]

SHOWN IN 150 MM LENGTH

3-15/16 [100.00]

3-17/64 [83.00]

5-29/32 [150.00]

3-17/64 [83.00]

3-15/16 [100.00]

1-21/32 [42.00]

MODELS VTT-X-D-X-X (SHOWN WITH DUCT MOUNT PROBE)

MODELS VTT-X-N-X-X (SHOWN WITH REMOTE PROBE MOUNTING)

The Series VTT Hot-Wire Air Velocity and Temperature Transmitter provides a versatile unit for air velocity and temperature needs. The VTT offers five field-selectable ranges as well as operating in metric (m/s, °C) or english (fpm, °F) units. The VTT can measure up to 30 m/s (6000 fpm) and 50°C (122°F). The units are available with or without an LCD display which alternates between velocity and temperature. Series VTT can be ordered in duct mount or remote mount configurations with 4-20 mA or 0-10V outputs. The VTT is a useful transmitter for many common HVAC applications.

Field Selectable Velocity Ranges

Metric	Imperial
0 to 5m/s	0 to 1000 fpm
0 to 10m/s	0 to 2000 fpm
0 to 15m/s	0 to 3000 fpm
0 to 20m/s	0 to 4000 fpm
0 to 30m/s	0 to 6000 fpm

SPECIFICATIONS

Service: Clean air and compatible, non-combustible gases.
Accuracy: Air velocity: ±3% of reading ±60 fpm (±0.3 m/s); Temperature: ±0.5% of reading ±0.6°F (±0.4°C).
Temperature Limits: Ambient and process: 32 to 122°F (0 to 50°C); Note chart below for temperature effects on range. Storage: 14 to 158°F (-10 to 70°C).
Power Supply: 24 VAC/VDC (±10%) 3-4 wires.
Current Consumption: 4-20 mA output: 80 mA maximum; 0-10 V output: 40 mA.
Response Time: Air velocity: 2 seconds to 1/e (63%) of final value; Temperature: 5 seconds to 1/e (63%) of final value.
Maximum Loop Resistance: 4-20 mA output: 500 Ω; 0-10 V output: 1 kΩ.
Display: 5 digit; Resolution 1 fpm (0.1 m/s) 1.0°F (0.1°C). Alternates between velocity and temperature.
Electrical Connection: Screw terminal block.
Cable Length (Remote Probe): 6.56 ft (2 m).
Enclosure Rating: ABS rated NEMA 4X (IP65).
Mounting: Can be mounted in any orientation. Probe must be aligned with airflow. Mounting accessory included.
Weight: With display: 0.32 lb (145 g); Without display: 0.24 lb (110 g).
Agency Approvals: CE.

Model	Output	Display	Mounting	Probe Length
VTT-A-N-D-1	4-20 mA Output	No Display	Duct Mount	150 mm (6″)
VTT-A-N-D-2				300 mm (11.8″)
VTT-A-N-R-1			Remote Mount	150 mm (6″)
VTT-A-N-R-2				300 mm (11.8″)
VTT-A-D-D-1		5 Digit Display	Duct Mount	150 mm (6″)
VTT-A-D-D-2				300 mm (11.8″)
VTT-A-D-R-1			Remote Mount	150 mm (6″)
VTT-A-D-R-2				300 mm (11.8″)
VTT-V-N-D-1	0-10 V Output	No Display	Duct Mount	150 mm (6″)
VTT-V-N-D-2				300 mm (11.8″)
VTT-V-N-R-1			Remote Mount	150 mm (6″)
VTT-V-N-R-2				300 mm (11.8″)
VTT-V-D-D-1		5 Digit Display	Duct Mount	150 mm (6″)
VTT-V-D-D-2				300 mm (11.8″)
VTT-V-D-R-1			Remote Mount	150 mm (6″)
VTT-V-D-R-2				300 mm (11.8″)

Air Velocity Range Capability vs. Temperature

air velocity

30 m/s
25 m/s
20 m/s
15 m/s
10 m/s
5 m/s

maximum possible measurements ranges based on working temperatures

V max. f(T°)

temperature

0°C   10°C   20°C   30°C   40°C   50°C