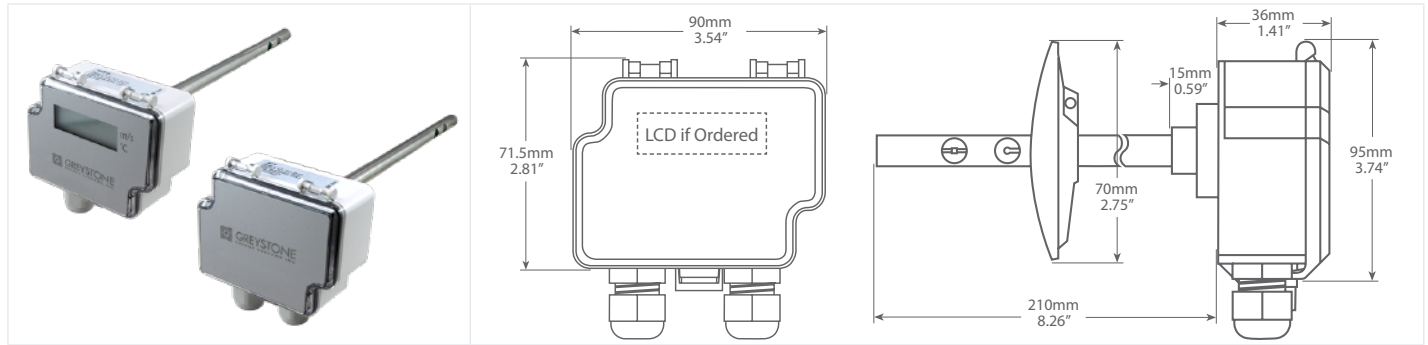




## DUCT AIR VELOCITY TRANSMITTER



### AVDT SERIES

## DESCRIPTION

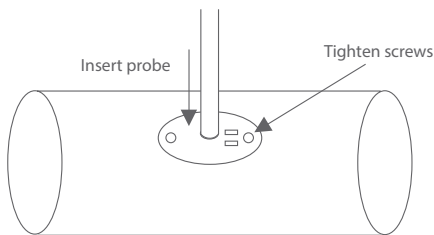
The AVDT series of air velocity transmitters is engineered for building automation in the HVAC/R industry. The AVDT measures air velocity and temperature, with field selectable ranges and output options in a single device. Designed with a duct mount probe and adjustable collar suitable for round or rectangular ducts. Options include a relay, and a backlit LCD available in Metric or Imperial measurements.

## TYPICAL INSTALLATION

**For complete installation and wiring details, please refer to the product installation instructions.**

The AVDT should be mounted in an easily accessible location in a straight section of duct at least five feet from corners or other items that may cause disturbances in the air flow.

Ensure that the end of the probe reaches the middle of the duct. Tighten the screws on the flange to hold the probe in position.

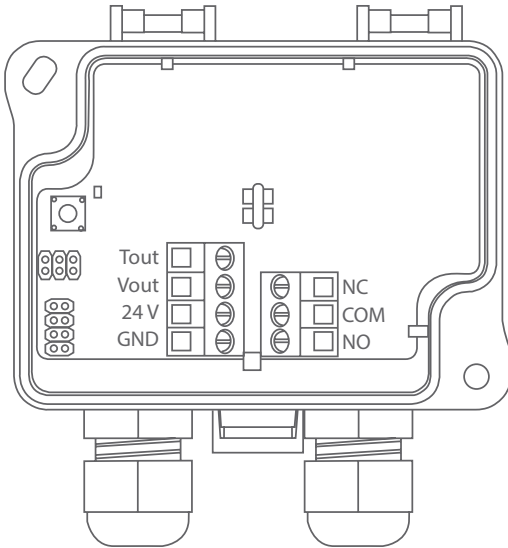


## SPECIFICATIONS

<b>VELOCITY RANGES</b>	<b>Base &amp; Metric Models:</b> 0-2, 10 & 20m/s, field selectable <b>Imperial Model:</b> 0-400, 2000 & 4000 fpm, field selectable
<b>VELOCITY ACCURACY</b>	<b>Metric:</b> Range - 0...2 m/s: <0.2 m/s + 5% from reading Range - 0...10 m/s: <0.5 m/s + 5% from reading Range - 0...20 m/s: <1.0 m/s + 5% from reading <b>Imperial:</b> Range - 0...400 fpm: <20 fpm + 5% from reading Range - 0...2000 fpm: <100 fpm + 5% from reading Range - 0...4000 fpm: <200 fpm + 5% from reading
<b>THERMAL SHIFT</b>	±0.8 %FS / °C
<b>CALIBRATION</b>	Units calibrated at 22°C (71.6°F). Rapid thermal shift stabilization time 10 min.
<b>TEMPERATURE RANGE</b>	0 to 50°C (32 to 122°F)
<b>TEMPERATURE ACCURACY</b>	<0.5°C for velocity >0.5 m/s (<0.9°F for v > 100 fpm)
<b>OPERATING CONDITIONS</b>	0 to 50°C (32 to 122°F), 0 to 95 %RH, non-condensing
<b>STORAGE TEMPERATURE</b>	-20 to 70°C (-4 to 158°F)
<b>MEDIA COMPATIBILITY</b>	Dry air or non-aggressive gases
<b>OUTPUT SIGNAL 1 (TOUT)</b>	0-10 Vdc (linear to temperature) L min 1K Ω 4-20 mA (linear to temperature) L max 400 Ω
<b>OUTPUT SIGNAL 2 (VOUT)</b>	0-10 Vdc (linear to m/s) L min 1K Ω 4-20 mA (linear to m/s) L max 400 Ω
<b>OPTIONAL RELAY OUTPUT</b>	Potential free SPDT (NC, COM, NO) 250 Vac, 6A / 30 Vdc, 6A adjustable switching point and hysteresis
<b>POWER SUPPLY</b>	24 Vdc / 24 Vac ±10%
<b>CURRENT CONSUMPTION</b>	<b>Current:</b> 75 mA (90 mA with relay) <b>Voltage:</b> 35 mA (50 mA with relay)
<b>OPTIONAL DISPLAY</b>	4 digit backlit display <b>Size:</b> 45.7mm W x 12.7mm H (1.79" x 0.5")
<b>DISPLAY UNITS</b>	Metric: m/s and °C Imperial: fpm and °F Alternating Velocity/Temperature in 5 second intervals
<b>ENCLOSURE</b>	Case: ABS Cover: Polycarbonate Ratings: IP54 (NEMA 3) Probe: 304 series stainless steel Mounting Flange: LLLPDP
<b>DIMENSIONS</b>	Case: 90mm W x 71.5mm H x 36mm D (3.5" x 2.8" x 1.4") Probe: OD 10mm (0.394"), length 210mm (8.26") from bottom of cover
<b>MOUNTING</b>	Mounting Flange: Ø4mm (11/64")
<b>INSERTION LENGTH WITH FLANGE</b>	Adjustable 50 to 180mm (2" to 7.08")
<b>DUCT WIDTH/DIAMETER</b>	100 to 380 mm (4" to 15")
<b>ELECTRICAL CONNECTIONS</b>	Power Supply & Signal Out: 4-screw terminal block 12-24 AWG (0.2 to 1.5mm <sup>2</sup> ) Relay Out: 3-screw terminal block 12-24 AWG (0.2 to 1.5mm <sup>2</sup> )
<b>CABLE ENTRY</b>	M16 (0.625") cable gland
<b>WEIGHT</b>	220g (7.76oz)
<b>APPROVALS</b>	CE, RoHS
<b>COUNTRY OF ORIGIN</b>	Finland



## WIRING INFORMATION



TERMINAL	FUNCTION
Tout	Analog Output
Vout	Analog Output
24 V	Power Supply
GND	Common
NC	Digital Output
COM	Common
NO	Digital Output

## ORDERING

PRODUCT	<b>AVDT</b>	Duct Air Velocity Transmitter
DISPLAY (REQUIRED IF RELAY OPTION SELECTED)	<b>X</b>	None
	<b>M</b>	Metric (m/s, °C)
	<b>I</b>	Imperial (fpm, °F)
RELAY	<b>X</b>	None
	<b>R</b>	Adjustable relay (requires LCD)

## PART NUMBER

<b>AVDT</b>

NOTE: Greystone Energy Systems, Inc. reserves the right to make design modifications without prior notice.