

AIR FLOW AND VELOCITY TRANSMITTERS AVT SERIES

Multifunctional air velocity transmitters for building automation systems

The AVT series air velocity transmitters are engineered for building automation in the HVAC/R industry. The AVTs measure air velocity and temperature, with field selectable range and output options in a single device. Designed with a duct mount probe and adjustable collar suitable for round or rectangular ducts.

AVT series devices include:

- 3 field selectable measurement ranges for air velocity, selectable via jumper (see Model Summary).
- Separate readings and outputs for air velocity and temperature.
- Proportional output options include: voltage (0–10 V) and current (4–20 mA).

AVT series device options offer:

- Backlit display
- Field adjustable relay

The versatility of the AVT series air velocity transmitters ensures that the right product for your application is available.



SIMILAR PRODUCTS

- DPT-FLOW series air flow transmitters

APPLICATIONS

AVT series devices are commonly used in HVAC/R systems for:

- in-duct air flow and velocity monitoring
- in-duct temperature monitoring
- VAV applications

MODEL SUMMARY

Measurement ranges Velocity: (m/s) Temperature: °C (field selectable via jumper)	0...2 / 0...10 / 0...20 m/s 0...50 °C	
Description	Model	Product code
All-in-one air velocity transmitters	AVT	117.004.001
- with display	AVT-D	117.004.002
- with display and relay	AVT-D-R	117.004.003

AIR FLOW AND VELOCITY TRANSMITTERS

AVT SERIES

SPECIFICATIONS

Performance

Measurement ranges:

Velocity:
Range: 0–2 m/s
Range: 0–10 m/s
Range: 0–20 m/s
Temperature: 0–50 °C

Accuracy:

Velocity:
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
Thermal shift: ±0.8 % FS / °C
Units calibrated at 22 °C. Rapid thermal shift
stabilisation time 10 min.
Temperature: <0.5 °C (velocity > 0.5 m/s)

Technical Specifications

Media compatibility:

Dry air or non-aggressive gases

Measuring units:

m/s and °C

Measuring element:

Temperature: ntc10k
Velocity: Pt1000

Environment:

Operating temperature: 0...50 °C
Storage temperature: -20...70 °C
Humidity: 0 to 95 % rH, non-condensing

Physical

Dimensions:

Case : 90.0 x 95.0 x 36.0 mm
Probe: OD 10 mm, length 210 mm from bottom of the
cover
Immersion Length with Flange: Adjustable 50–180 mm

Weight:

220 g

Mounting:

Mounting flange, ø 4.0 mm

Materials:

Case: ABS
Lid: PC
Probe: Stainless steel 304
Mounting flange: LLPDP

Protection standard:

IP54

Display:

3 1/2 digit LCD backlit display
Size: 45.7 x 12.7 mm

Electrical connections:

Power supply & signal out: 4-screw terminal block
12–24 AWG (0.2–1.5 mm²)
Relay Out: 3-screw terminal block
12–24 AWG (0.2–1.5 mm²)

Cable entry:

M16

Electrical

Input: 24 VDC / 24 VAC ± 10 %
Current consumption 35 mA (50 mA with relay)
+ 40 mA with mA-outs
Output signal 1: (T out)
0–10 V (linear to temperature)
L min 1 kΩ
4–20 mA (linear to temperature)
L max 400 Ω
Output signal 2: (v out)
0–10 V (linear to m/s)
L min 1 kΩ
4–20 mA (linear to m/s)
L max 400 Ω
Relay Out: 3-screw terminal block
(NC, COM, NO)
Potential free SPDT
250 VAC, 6A / 30 VDC, 6 A adjustable switching point
and hysteresis

Conformance

Meets the requirements for CE marking:
EMC Directive 2014/30/EU
RoHS Directive 2011/65/EU
LVD Directive 2014/35/EU
WEEE Directive 2012/19/EU

COMPANY WITH
MANAGEMENT SYSTEM
CERTIFIED BY DNV GL
= ISO 9001 = ISO 14001 =



HOW TO GENERATE A MODEL?

Example: AVT-D-R	Product series			
	AVT	Air velocity transmitter		
		Display		
		-D	With display	
			Without display	
			Relay	
			-R	With relay
Model	AVT	-D	-R	Without relay