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# AIR VELOCITY TRANSMITTER – AVT


## Model summary

| Product type<br><br>(-D for display)<br>(-R for relay) | Product code | Measurement range (velocity) | Accuracy of velocity | Measurement range (temperature) | Accuracy of temperature |
|---|---|---|---|---|---|
| AVT | 117.004.001 | 0…2, 0…10, 0…20 m/s | <0,1m/s +5% from reading | 0…50ºC | <0,5ºC (v > 0,5m/s) |
| AVT-D | 117.004.002 | 0…2, 0…10, 0…20 m/s | <0,5m/s +5% from reading | 0…50ºC | <0,5ºC (v > 0,5m/s) |
| AVT-D-R | 117.004.003 | 0…2, 0…10, 0…20 m/s | <1,0m/s +5% from reading | 0…50ºC | <0,5ºC (v > 0,5m/s) |
| AVT-R | 117.004.004 | 0…2, 0…10, 0…20 m/s | <1,0m/s +5% from reading | 0…50ºC | <0,5ºC (v > 0,5m/s) |

The air velocity transmitter is delivered individually packed with standard accessories (see accessories).

AVT-D-R: relay model is always equipped with display. The switching point and the hysteresis of relay can be configured by jumper, pushbutton and display user interface. See the installation chapter for more details.

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# Technical data

| | | |
|---|---|---|
| **Suitable media** | Air | |
| **Measurement element** | Pt1000 and ntc10k | |
| **Electrical interface** | Supply voltage | 24VDC/24VAC ± 10% |
| | Current consumption | 35mA (50mA with relay) + 40mA with mA-outs |
| | Output signal 1 | 0…10V (linear to ºC), L min 1kΩ or |
| | | 4…20mA (linear to ºC), L max 400Ω |
| | Output signal 2 | 0…10V (linear to m/s), L min 1kΩ or |
| | | 4…20mA (linear to m/s), L max 400Ω |
| | Optional relay output | Potential free SPDT 250VAC, 6A / 30VDC, 6A with adjustable switching point and hysteresis |
| **Materials** | Housing | ABS |
| | Cover | PC |
| | Probe pipe | Stainless steel |
| **Connections** | Electrical connections | 4 + 3 screw terminals, max 1.5 $mm^2$ |
| | Cable entry | M16 for power supply |
| | | M16 for relay output |
| **Weight** | 220 grams | |
| **Dimensions (housing)** | 90,0 x 71,5 x 36,0 mm | |
| **Dimensions (probe)** | Outer diamater 10mm, length 210mm from bottom of the cover<br>Adjustable Immersion length 50..180mm, with flange | |

**General ambient condition**

| | | |
|---|---|---|
| | Temperature range: | |
| | Operation | 0…+50° |
| | Storage | -20…+70°C |

| | | |
|---|---|---|
| **Safety** | Protection standard | IP54 |
| | Conformance | Meets the requirements for CE marking: |
| | | EMC Directive: 2004/108/EC |
| | | RoHS Directive: 2002/95/EC |
| | | LVD Directive: 2006/95/EC |
| | | WEEE Directive: 2002/96/EC |

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## Accessories

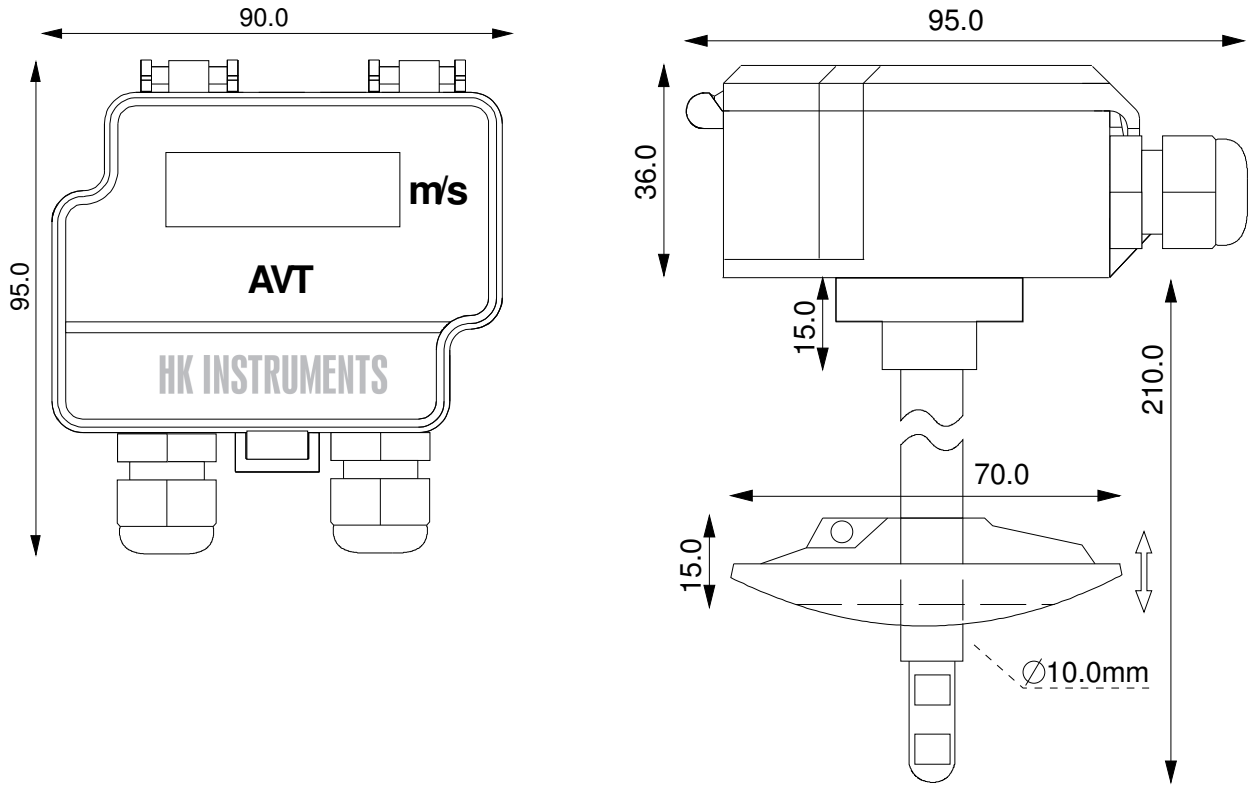
Standard accessories:

- Duct installation flange

Optional accessories:

- 1 fixing screw for relay model

## Dimensions



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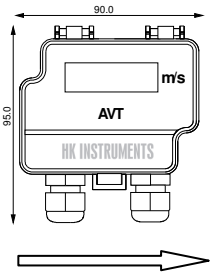
# Installation

**Installation direction**: cable entry cross direction to the duct 90 or 180 degrees



Air flow direction

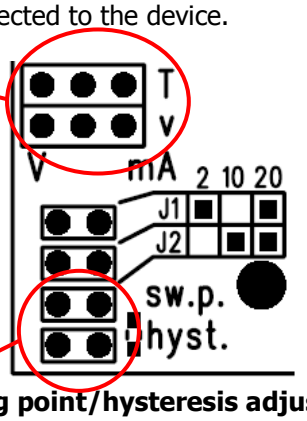
Note when using high voltage for relay (115VAC…230VAC)!

The supply cable and control cable for relay should be separated, if high voltage (115…230VAC) is used as relay contact. Both of the cable has its own cable entry.

The relay settings need to be done before high voltage (115…230VAC) is connected to the device. This ensures human safety against electrical shock.

The device is equipped with a lid fixing crew. The screw need to be used when high voltage is connected to the device.

**Jumpers for output mode (mA/V)**
Both outputs can be set independently




**Jumper + Push button for relay switching point/hysteresis adjustment (with display)**

Set the jumper switching point (sw.p.) and push the button to adjust the switching point of the relay. The value chosen (m/s) is shown on the display.

Set the jumper hysteresis (hyst.) and push the button to adjust the hysteresis of the relay switching point. The value chosen (m/s) is shown on the display.

**Electrical Connection:**

| | |
|---|---|
| Tout | Output 0…10 V / 4…20 mA |
| vout | Output 0…10 V / 4…20 mA |
| 24V | Supply voltage 24VDC/VAC |
| GND | Ground |

| | |
|---|---|
| NC | Normal Closed |
| COM | Common |
| NO | Normal open |