

Product overview

Duct/Immersion sensor for measuring air velocity and temperature in gaseous media of heating, cooling and air-conditioning systems (e.g. fresh air / exhaust air ducts).

Designed for locking on to control and display systems.



Types available

Type code	Type	Description
EXT-TN-1071672	AVT	Air velocity transmitter

Technical data

Standards	CE conformity	2004/108/EC EMC 2002/95/EC RoHS 2006/95/EC LVD 2002/96/EC WEEE
General data	Power supply	DC 24V / AC 24V(±10%)
	Power consumption	35mA (50mA with relay) + 40mA with mA output
	Measuring range	- Air velocity 0...2m/s, 0...10m/s oder 0...20m/s, selectable on the device - Temperature 0...50°C
	Output	- Air velocity 0...10V (linear to m/s), load min. 1kΩ or 4...20mA (linear to m/s), load max. 400Ω - Temperature 0...10V (linear to °C), load min. 1kΩ or 4...20mA (linear to °C), load max. 400Ω
	Material	- Housing : ABS - Cover : PC - Probe pipe : stainless steel
	Electrical connection	- Screwing terminals, max. 1.5mm ² - Cable entry M16
	Dimensions	- Housing LxWxH : 90 x 71.5 x 36 mm - Probe DxL : 10 x 210 mm Adjustable immersion length 50..190mm, with mounting flange
	Measuring element	PT1000 and NTC10k
	Accuracy	- Air velocity Range 0 ... 2m/s : <0.1m/s + 5% from reading Range 0...10m/s : <0.5m/s + 5% from reading Range 0...20m/s : <1.0m/s + 5% from reading - Temperature: <0.5°C (velocity > 0.5m/s)
	Media	Air and non-combustible gasses
	Ambient temperature	0...+50°C / max. 85% RH, non-condensing
	Storage temperature	-20...70°C
	Protection	IP54 according to EN 60529
Weight	220g	

Security advice

The installation and assembly of electrical equipment may only be performed by a skilled electrician.

The modules must not be used with equipment that supports, directly or indirectly, human health or life or with applications that can result in danger for people or animals.

Electrical connection

The devices are constructed for the operation of protective low voltage (SELV). For the electrical connection, the technical data of the corresponding device is valid.

Sensing devices with transducer should in principle be operated in the middle of the measuring range to avoid deviations at the measuring end points. The ambient temperature of the transducer electronics should be kept constant. The transducers must be operated at a constant supply voltage ($\pm 0,2V$).

When switching the supply voltage on/off, power surges must be avoided on site.

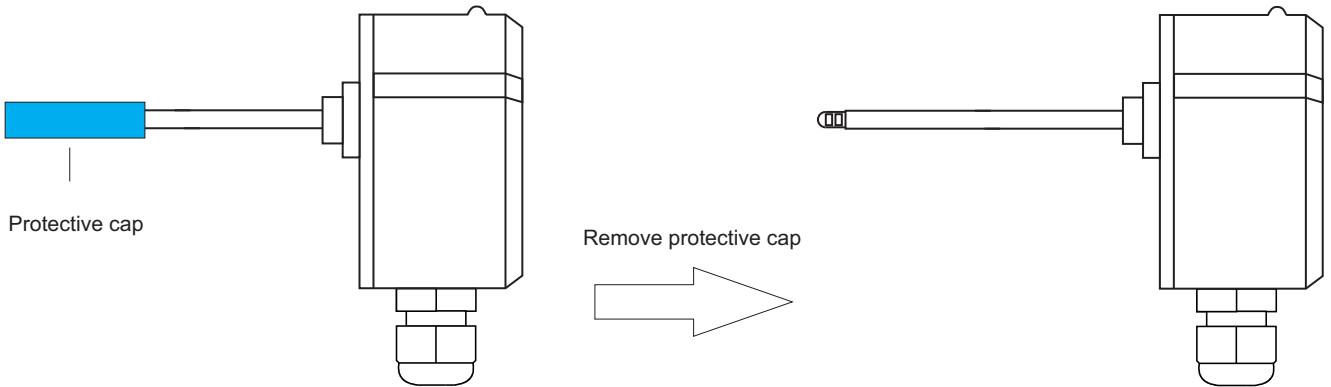
Installation

A prerequisite for the operation is a proper installation of all electrical supply, control and sensing leads as well as the pressurised connection line.

Before installing the device, the leak tightness of the pressurised connection lines must be inspected.

The air velocity transmitter AVT is supplied with a special protective cap protecting the sensitive sensor element against damage during transport.

Before installing the AVT the cap must be removed.

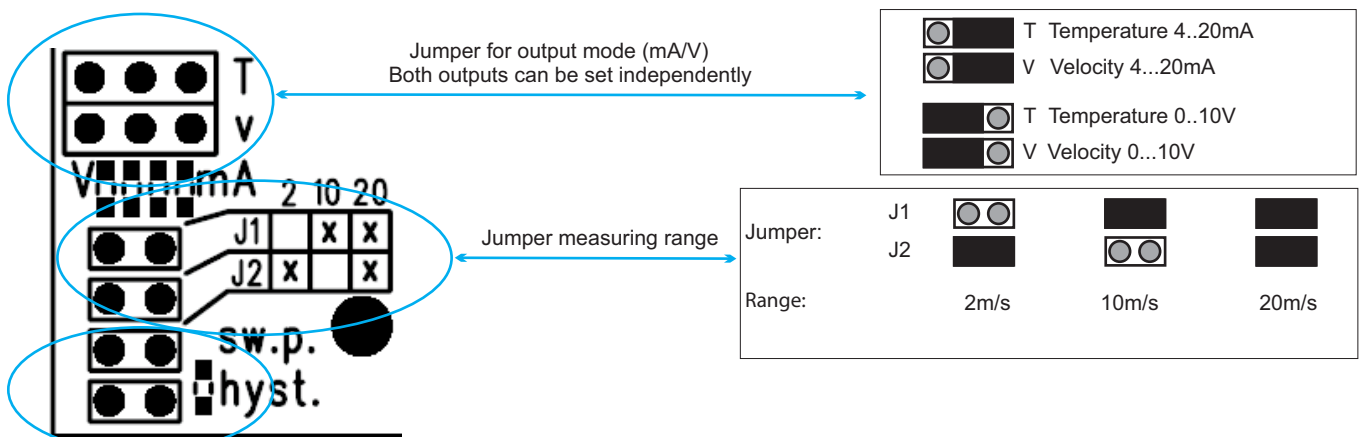


Mounting advice

The supply cable and control cable for relay should be separated, if high voltage (no safety extra-low voltage) is used as relay contact. Both of the cable has its own cable entry.

The relay settings need to be done before high voltage (no safety extra-low voltage) is connected to the device. This ensures human safety against electrical shock. The device is equipped with a lid fixing crew. The screw needs to be used when high voltage (no safety extra-low voltage) is connected to the device.

Terminal connection plan

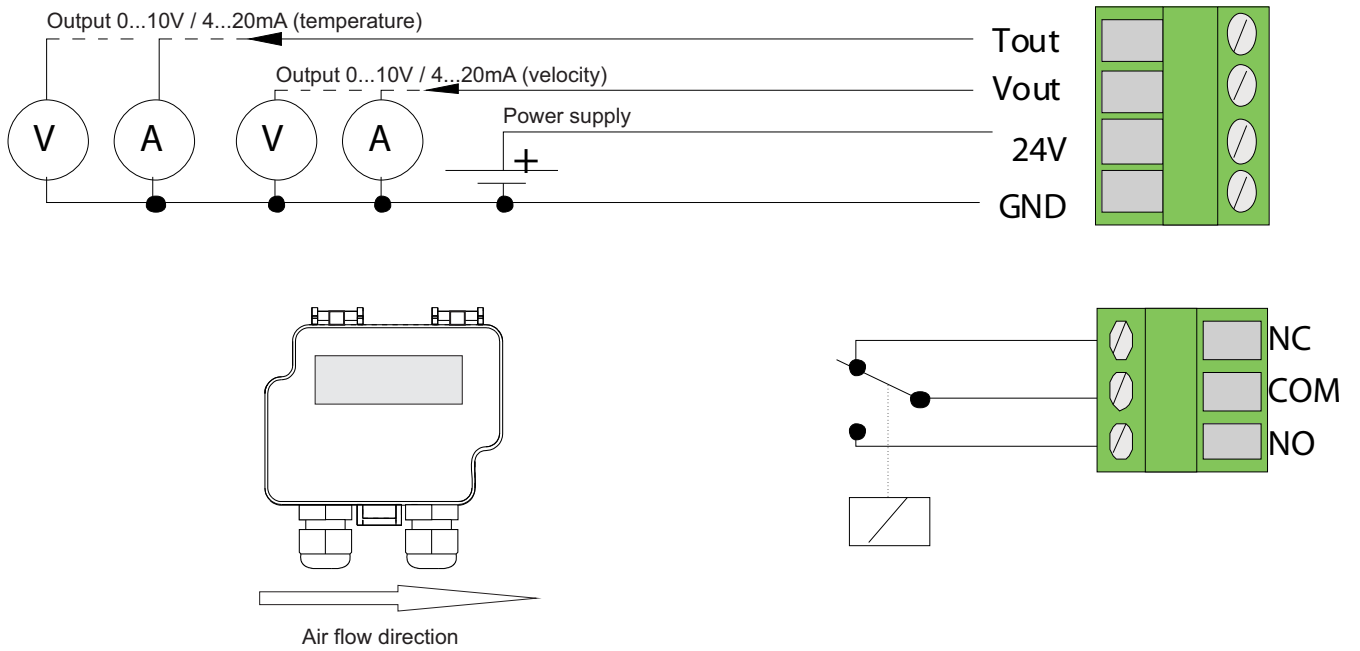


Jumper and Push button for setting the relay parameters

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 in the display.

Terminal connection plan (cont.)



Dimensions (mm)

