

INT510[®] Air Flow Sensor

Range 0.2 ... 1 m/s or 0.2 ... 10 m/s



INT510 Air Flow Sensor

Application:

For monitoring the flow of gaseous media in the temperature range -5...+60°C.

Functional description:

The KRIWAN INT510 air-flow sensor controls the air-flow velocities in the range 0.2...10 or 0.2...10m/s based on the calorimetric principle. An equivalent analogue voltage of DC 0...10V is available as an output signal related to L-. This signal is suitable for further processing by a limit value switching relay, analogue or three

The probe is temperature compensated.

point controller, display instruments, DDC installations etc.



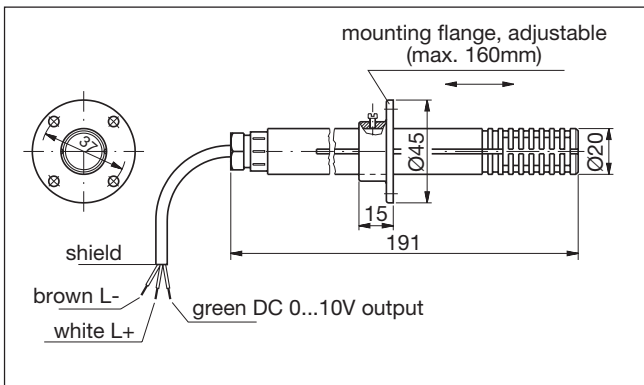
Momentary voltage cut-offs or drop-outs cause measurement errors. Due to the calorimetric measuring principle used, sensible heat is produced. For this reason the probe is recommended only for flow velocities above about 0.2m/s.

Installation instruction:

To avoid measurement errors, please bear the following points in mind when selecting the mounting location:

- As far as possible mount the probe in laminar flow.
- Do not install directly behind bends (distance approx. 3 x bend radius).
- Install the probe in the middle of the duct where possible (distance at least 1/3 of the duct diameter from the wall).

- Do not install directly behind the heating register.
- Only use shielded cables for extending the connection.
- Avoid dirt deposits, especially any moistening with water, by suitable steps (filter in the ventilator system and so on).
- The achievable measuring tolerance is dependent on the installed position of the air flow sensor (see mark on the sensor).



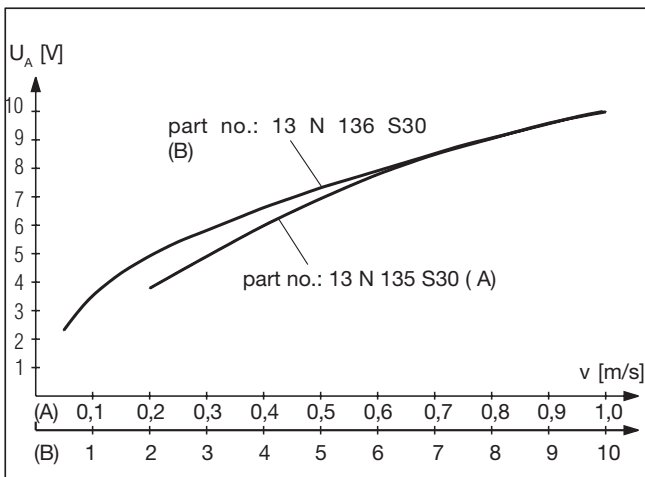
Connection diagram and dimensions in mm

Technical data:

Supply voltage	DC 24V ± 20%
max. power consumption	DC 50mA
Admissible ambient temp.	-5...+60°C
Range	
0.2...1m/s	(diagram A)
0.2...10m/s	(diagram B)
Accuracy	± 8% of full range at 20°C
Output voltage	DC 0...11V max.
max. admissible velocity	35m/s
Build-up time after application of supply voltage	< 20s
Thermal time constant	< 5s
Mounting position of probe	arrow in flow direction
Housing	PA6 GF30
Protection class	
acc. to EN 60529	IP20
Connection cable	2.50m long
Mounting	screw-mounted
Weight	approx. 150g

Part No.:

INT510 air flow sensor	
Range 0.2...1m/s	13 N135 S30
Range 0.2...10m/s	13 N136 S30



Characteristic diagram

Subject to technical modification without notice