

# Application Report Flow Sensors



## Ventilation Control in Cattle Barns

### Description of the application:

In livestock husbandry it is necessary to keep the barns ventilated using electric ventilators.

Due to climatic influences the ventilation air flow fluctuates, which must be compensated by the means of a volume-flow controller.

The air-flow sensor in the exhaust-air duct measures the volume flow and the connected controller keeps exhaust-air flow on the required level.

As surveys show, a correctly adjusted ventilation is very important for the health of the animals and additionally it saves a lot of energy.

The advantage of the SCHMIDT thermal air-flow sensor shows best during winter times. Then the air-flow is kept at a level, where other measuring systems do no longer work.



### Function of the Sensor:

Measures volume-flow of exhaust air.  
Exhaust-air is controlled by a specialised control, which adopts exhaust-air to need.

### Location of the Sensor:

Exhaust-air duct.

### Branch:

Ventilation in agriculture

### Sensor type used:

**SCHMIDT® SS 20.011 or SS 20.016**

0..20 m/s      360 mm

0..10 V

### Reason to choose a SCHMIDT Sensor:

- Sensor withstands aggressive contents in the exhaust air
- Measures smallest possible velocities
- No flow resistance, saves ventilator power
- Dust repellent surface