Honeywell

Honeywell Zephyr™ Digital Airflow Sensors:

HAF Series–High Accuracy

10 SLPM, 15 SLPM, 20 SLPM, 50 SLPM, 100 SLPM, 200 SLPM or 300 SLPM

Datasheet

Honeywell Zephyr™ Digital Airflow Sensors HAF Series - High Accuracy

Honeywell Zephyr™ HAF Series sensors provide a digital interface for reading airflow over specified full-scale flow and compensated temperature ranges. The thermally isolated heater and temperature sensing elements help these sensors provide a fast response to air or gas flow.

Zephyr sensors are designed to measure mass flow of air and other non-corrosive gases. Standard flow ranges are 10 SLPM, 15 SLPM, 20 SLPM, 50 SLPM, 100 SLPM, 200 SLPM or 300 SLPM, with custom flow ranges available. The sensors are fully calibrated and temperature compensated with an onboard Application Specific Integrated Circuit (ASIC).

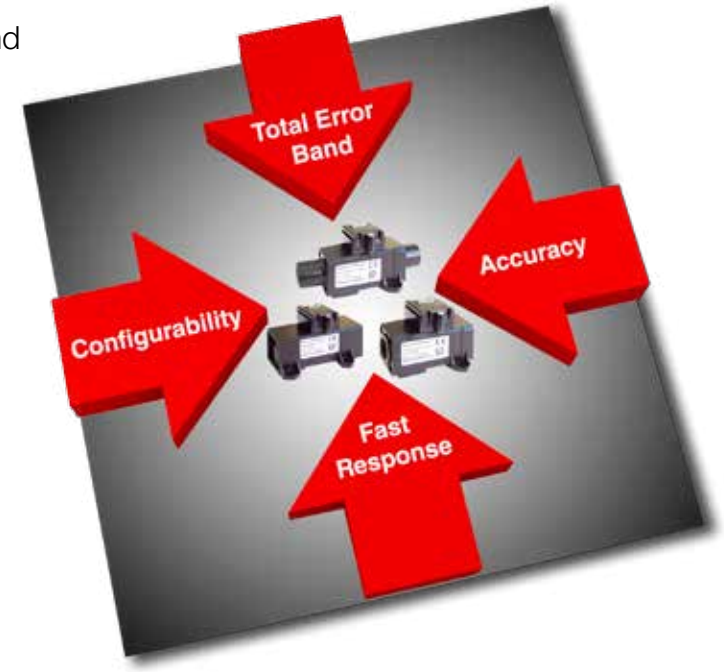
The HAF Series >10 SLPM is compensated over the calibrated temperature range of 0 °C to 50 °C [32 °F to 122 °F]. The state-of-the-art ASIC-based compensation provides digital (I^2C) outputs with a response time of 1 ms.

These sensors operate on the heat transfer principle to measure mass airflow. They consist of a microbridge Microelectronic and Microelectromechanical System (MEMS) with temperature-sensitive resistors deposited with thin films of platinum and silicon nitride. The MEMS sensing die is located in a precise and carefully designed airflow channel to provide repeatable response to flow.

Zephyr sensors provide the customer with enhanced reliability, high accuracy, repeatable measurements and the ability to customize sensor options to meet many specific application needs. The combination of rugged housings with a stable substrate makes these products extremely robust. They are designed and manufactured according to ISO 9001 standards.

What makes our sensors better?

- **Precise measurement:** The industry's smallest Total Error Band, fast response time, and high accuracy provide precise measurement and high performance in the customer's application
- **Saves time:** Configurable and customizable with a choice of port styles simplifies design and reduces production time
- **Cost-effective:** Reduces printed circuit board (PCB) size and overall design and production costs



TIGHT TOTAL ERROR BAND • HIGH ACCURACY • FAST RESPONSE