CFA100A,B

Airflow Sensors

The CFA100A, B are high-sensitivity, high-reliability mass flow sensors with a specifically designed semiconductor chip for the sensor unit.

This airflow sensor is a thermal type mass flow sensor, which measures the airflow, without calibrating temperature and pressure

Specifications

Model No.	CFA100A	CFA100B
Measuring method	Bypass method	Direct method
Range	Differential pressure at both ends of the sensorflow connection port: 0 to 98.1Pa	Airflow volume in sensor: 0 to 300SCCM {0.018m^3/h} (CC/m, S: Standard condition at 20°C and 1 atmospheric pressure)
Applicable gas	Air and Nitrogen (not containing corrosive chlorine, sulfur, acid, etc.)	
Response speed	20ms max. (output 0→90% transient response)	
Accuracy	±5.0%FS	±4.0%FS
Repeatability	±1.5%FS	±1.0%FS
Ambient temperature	-20 to +70°C (freezing and condensation are not allowed)	
Ambient humidity	95%RH, 40°C	
Pressure range	Differential pressure between inside and outside of air flow passage: within 2942Pa	
Rated voltage	5.0Vdc	
Current consumption	10mAdc	
Output	0.5 to 3.0Vdc non-linear characteristics CFA100A: Δ P (Pressure differential) At Δ P = 0mmAq, 0.50V At Δ P = 2mmAq, 1.77V At Δ P = 10mmAq, 3.00V	 CFA100B: Q (Flow volume) At Q = 0SCCM, 0.50V At Q = 120SCCM, 1.77V At Q = 300SCCM, 3.00V
Mounting	Front is to face towards you or downwards. (Be sure to protect against the entering of water from condensation.)	
Connection	Sensor connection tube: 6mm internal dia x 300mm length (total length for both upper and down side stream flow) max.	
Connector	Part No. **1L-S-3PL-SMT** from Japan Aviation Electronics Industry Ltd., or Yamatake Part No.**81446515** (connector set)	
Weight	20 ± 2g	

Selection Guide

Model No.	Description
CFA100A	Bypass measuring method
CFA100B	Direct measuring method

Dimensions (unit:mm)