



CFS

Cross Flow Sensor



The new CFS Cross Flow Sensor, developed by Nailor Engineering is the result of over 30 years experience in designing and manufacturing industry leading terminal units for the commercial HVAC industry. The design addresses the critical issues for optimum performance in today's high performance buildings, where accurate airflow measurement and control is required to meet outside air ventilation requirements and energy efficiency. VAV boxes with today's advanced digital controls can only perform as well as the accuracy of the sensor that measures airflow.

Features

- **Multi-point Center Averaging Design.** 12 upstream total pressure pick-up ports in the four sensor legs and 4 downstream static pressure pick-up ports are strategically located to measure inlet velocity and maximize accuracy where less than ideal inlet conditions result in non-uniform airflow. Large pressure averaging chambers in the center of the sensor collect and average the pressure readings. Flared connectors securely fasten the control signal tubing. Control tubing is sealed with grommets at the inlet collar.
- **Aerodynamic Profile.** The CFD validated design ensures that self-generated noise and pressure drop are negligible.
- **Optimized Velocity Pressure Amplification.** The CFS has an average amplification of x 2.0 across the range of available sizes (6" to 16" dia.). This provides an optimum signal for today's DDC PE transducers that commonly have a range of 0 - 1.5" w.g. Amplifying the velocity pressure signal that is sent to the controller enhances accuracy, especially under low flow conditions. Precise control at minimum flow settings is critical to ensure ASHRAE minimum ventilation rates are met.
- **High Impact Polycarbonate Construction.** An elongated aerodynamic fin on the downstream side of each sensor leg provides molded reinforcement for additional strength and rigidity. Plastic components are fire resistant and meet UL 94 V-0.

