## SECTION 40 91 23.13 - AIR FLOW MEASURING SYSTEMS

#### PART 1 - GENERAL

#### 1.1 THE REQUIREMENT

- A. General: The CONTRACTOR shall provide flow sensors, complete and operable in accordance with the Contract Documents.
- B. The requirements of Section 40 90 00 Process Control and Instrumentation Systems apply to this Section.
- C. All instruments shall be UL-approved.

#### 1.2 CONTRACTOR SUBMITTALS

A. Furnish submittals in accordance with MASS Section 10.05 Article 5.6 and Section 40 90 00 – Process Control and Instrumentation Systems.

#### PART 2 - PRODUCTS

#### 2.1 AIR FLOW SENSOR

- A. The air flow sensor shall consist of a 24 VDC power, 4-20 ma, 4-wire air velocity transmitter suitable for clean air with a temperature range of -40 degrees F to 212 degrees F. The sensor shall use a heated mass flow sensor with selectable ranges down to 250 FPS full scale and a resolution of 1 FPS. The sensor shall be position insensitive capable of being mounted in vertical pipe 4 inches in diameter. The unit shall be approximate size of a ¾" conduit body. The sensor shall include a set of controls and indicators within the unit to set the measurement range, calibrate the device, and display the air velocity. All wetted parts shall be stainless steel.
- B. The unit shall be **Dwyer Series 641**, or equal.
- C. Provide air flow sensors as shown on the Contract Drawings.

### PART 3 - EXECUTION

## 3.1 GENERAL

A. Flow sensors shall be handled, installed, calibrated, loop-tested, precommissioned, and performance tested according to Section 40 90 00 – Process Control and Instrumentation Systems.

# 3.2 INSTALLATION

A. Install the air flow sensor in accordance with the Manufacturer's requirements.

**END OF SECTION 40 91 23.13**