



ULTRAC ORS

Outside Reference Sensor

APPLICATIONS

The ULTRAC Outside Reference Sensor (ORS) provides accurate, smooth sensing of the static pressure existing outside of a building. It senses changes in outside pressure while excluding velocity pressures created by wind currents. This pressure measurement is typically used in reference to the pressure occurring in an enclosed space such as a laboratory or clean room.



ULTRAC ORS-ST

Pressure measurements in these areas must be accurate in order to control to very low pressures. Accurate and steady measurement of outside pressure is required since static pressure control of the inside area is only as reliable as the outside reference measurement.

DESCRIPTION

The ORS incorporates six static pressure sensors, arranged radially around the center. Pressures are averaged according to the internal volume of the unit. An accurate static pressure measurement is made regardless of wind direction or reasonable intensity. The circular plates minimize any vertical components of the wind (such as down-drafts) and prevent the accumulation of snow or ice near the sensors.

INSTALLATION

The ORS should be located at least 10 feet above the highest obstruction lying within a 100-foot radius of the sensor. It should be mounted with the two circular plates in the horizontal position.

Connection to the sensor is by means of a 2-1/2" pipe coupling. If desired, this pipe may be used as a mounting pole for the device.

SPECIFICATIONS

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ACCURACY: Within 0.5% of actual pressure

VELOCITY-INDUCED EFFECTS: Less than
0.1% with roof mounting up to 5000 fpm
(approximately 60 miles per hour)

AXIAL (COMPASS) EFFECT: Negligible

ORDERING INFORMATION

ULTRAC ORS - _____

MATERIALS

ST - Steel (Painted)

SS - Stainless Steel