



ULTRAC RSP

Room Pressure Sensor

APPLICATIONS

The ULTRAC Room Static Pressure Sensor (RSP) is designed for accurate, smooth sensing of the actual static pressure within an enclosed space such as a laboratory, clean room, or other area.



ULTRAC RSP-AL-P-S

The RSP Sensor senses average pressure changes at the exclusion of pressure waves created by moving objects or ventilation currents within the room. Precise pressure measurement and/or control of the room is possible when the RSP Sensor is used with a suitable pressure indicator or transmitter.

INSTALLATION

The RSP Sensor may be mounted on a ceiling, wall, or floor, and in any mounting position required. A ceiling mount near the center of the room, away from avoidable air currents, is the preferred location. Very large rooms may require multiple sensors with the tubing manifolded to provide an average.



ULTRAC RSP-AL-P-T

Models are available with the pressure connection on the end or side of the cylinder-shaped device. The ceiling mount is designed with the pressure connection running through the mounting plate on the end of the cylinder. This design places the process tubing above the ceiling, out of sight.

Tall or short models are offered with aluminum or stainless steel materials.

SPECIFICATIONS

SPECIFICATIONS FOR ULTRAC RSP

ACCURACY: Within 1% of average area pressure

AREA LIMITATIONS: Maximum 10,000 sq.ft. sensed area per sensor (with sensor located in a +/-15% central location)

VELOCITY EFFECT: Rejects air velocity effects to 1200 fpm, any direction (360°). Rejects single-point pulses to 5000 fpm, any direction (3 ft. or more distance from sensor, one second duration).

IMPEDANCE EFFECT: Undetectable at pressures to 1.0 psig.

MATERIALS OF CONSTRUCTION:

MODEL RSP-AL: 6061-T6 Aluminum, Federal spec. WWT 700/6, 0.237-inch wall, 3 gauge.

MODEL RSP-SS: 304 Stainless Steel, SAE 30304, ASTM A269, 0.120-inch wall, 11 gauge.

PROCESS CONNECTIONS: 1/2" NPT Standard, others available upon request.

| Dimensions | AL-Tall | SS-Tall | AL-Short | SS-Short |
|--|---------|-------------|----------|-------------|
| Outside diameter | 4.5" | 5.613" | 4.5" | 5.613" |
| Overall height | 6.0" | 6.0" | 1.75" | 1.75" |
| Internal volume | 73.2 Ci | 130.4 Ci | 19.1 Ci | 34 Ci |
| Mounting plate size | 6" x 6" | 7.5" x 7.5" | 6" x 6" | 7.5" x 7.5" |
| Mounting hole size (typical for 4 holes) | 5/16" | 5/16" | 5/16" | 5/16" |
| Center to center (mounting holes) | 4.5" | 6" | 4.5" | 6" |

ORDERING INFORMATION

ULTRAC RSP - _____ - _____ - _____

MATERIALS

- AL - Aluminum
- SS - Stainless Steel
- Z - Special

CONNECTION

- P - Plate
- C - Cylinder
- Z - Special

CYLINDER LENGTH

- T - Tall
- S - Short
- Z - Special