S.A.P.Shielded Static Air Probes

The Air Monitor S.A.P. family of static air probes is designed for room or space pressurization applications where it is essential that the static pressure level within a room or space, and that of a reference pressure (corridor, adjacent space, outdoor location, etc.), be accurately sensed, free of pulsations or effects of air movement in the vicinity of the sensing probe(s). The S.A.P./R can also be utilized to sense the static pressure within fan inlet and discharge plenums or large ducts, where the presence of multi-directional and turbulent airflows prohibit the use of flow sensitive static pressure tips or probes.

Performance Specifications

- Engineered sensing ports and integral volume chamber suppress minor room, space or plenum pressure pulsations, providing a steady (non-noisy) static pressure signal.
- Capable of sensing room, space or plenum pressures within 1% of actual static pressure.
- Measurement accuracy is unaffected by airflows up to 1.000 FPM from a 360° radial source.
- Available in aluminum or stainless steel construction.
- Self draining sensing ports for applications where room or space washdown is required.
- Available in four mounting configurations:

S.A.P./B – Electrical Junction Box Mount S.A.P./P – Suspended Mount via ½" Pipe

S.A.P./S - Surface Mount

S.A.P./R - Recessed Flush Mount



Suggested Specification

Shielded Room and Space Static Pressure Sensor

Provide for each room or space, a shielded static pressure sensor suitable for surface [recessed flush; suspended; junction box; external flush] mounting, complete with multiple sensing ports, pressure impulse suppression chamber, airflow shielding, and signal connection, all contained in an aluminum [stainless steel] casing, with brushed finish on exposed surfaces. These probes shall be capable of sensing the static pressure in the proximity of the sensor to within 1% of the actual pressure value while being subjected to a maximum airflow of 1,000 FPM from a 360° radial source.

The shielded room or space static pressure sensors shall be the S.A.P. [/B /P /S /R] shielded static air probe as manufactured by Air Monitor Corporation, Santa Rosa, California.

Shielded Plenum or Duct Static Pressure Sensor

Provide where indicated for each plenum [duct], two shielded static pressure sensors suitable for mounting externally on the plenum [duct] wall in opposing positions. The plenum [duct] pressure sensors shall be complete with multiple sensing ports, pressure impulse suppression chamber, airflow shielding, and signal connection, all contained in an aluminum [stainless steel] casing, with brushed finish on exposed surfaces. These probes shall be capable of sensing the static pressure of the plenum or duct in the proximity of the sensor to within 1% of the actual pressure value.

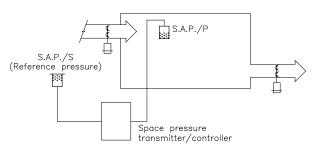
The shielded plenum or duct static pressure sensors shall be the S.A.P./R shielded static air probe as manufactured by Air Monitor Corporation, Santa Rosa, California.

Accurate airflow measurement for demanding applications

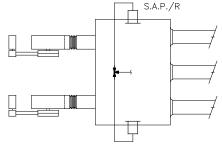


S.A.P. - Shielded Static Air Probes

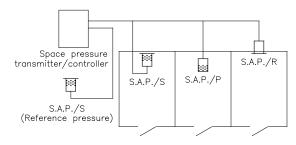
Application Examples



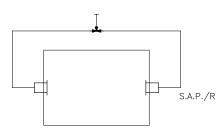
POSITIVE OR NEGATIVE SPACE PRESSURIZATION



FAN DISCHARGE PLENUM PRESSURE

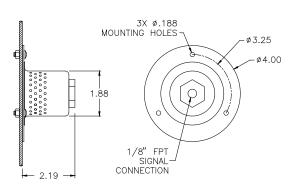


MULTIPLE ROOM PRESSURE AVERAGE SENSING

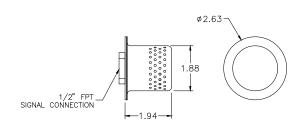


LARGE DUCT PRESSURE

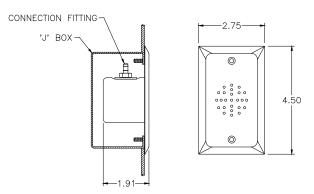
Construction / Dimensional Data



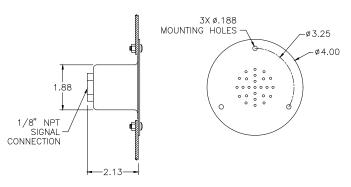
S.A.P./S Surface mount; 1/8" FPT signal connection



S.A.P./P Suspended mount via 1/2" pipe; 1/2" FPT signal connection



S.A.P./B Recessed flush mount via electrical junction box (provided by others)



S.A.P./R Recessed flush mount; 1/8" NPT signal connection

