



Sensing Precision

Air Measurement Specialists

Product Datasheet Pitot Tubes



S Type Pitot Tubes

Overview

The S-Type only requires a Ø35mm access hole, regardless of duct wall thickness and the integral thermocouple allows for simultaneous monitoring of duct air temperature and velocity with minimal disturbance. Non-standard lengths can be supplied upon request.

S-Type Pitot Tubes consist of a special nose casting. The casting is extremely robust and therefore makes the S-Type suitable for arduous applications. It is welded to stainless steel and the total & sub-static tubes are enclosed in a stainless-steel sheath.

It is widely used in sampling applications where particulate levels are high. As the total and sub-static sensing holes are large this makes them less prone to clogging.

S Type Pitot Tube Specifications

Standards	BS ISO 10780
Magnification Factor	1.422 with an accuracy of ±5% of reading
Standard Sizes	Ø 32mm Lengths: 0.7m, 1.2, 2.2m, & 3.2m
Temperature Range	680°C continuously (800°C intermittently)
Materials	Fully stainless steel
Special Features	Only requires 35mm access hole Cast head provide more predictable result than fabricated head Cast head more robust

L Type Pitot Tubes

Overview

L-Type Pitot Tubes feature a modified ellipsoidal head with a single forward-facing hole (for total pressure) and a ring of side holes (for static pressure). It is only necessary to drill a small access hole for insertion of the probe into the duct (or stack), at the point where the flow measurement is required. The Pitot Tube produces a Velocity Pressure signal, and when used in conjunction with a suitable manometer, the Air Velocity can be calculated.

By adopting the traverse method, it can be used to accurately determine the air volume flow rate within a closed conduit system.

L Type Pitot Tube Specifications

Standards	BS ISO 3966:2008
Magnification Factor	0.997 ±0.001 (Approximated to 1 in most cases)
Standard Sizes	Ø2.3mm, Ø4.00mm, Ø8.00mm, Ø9.50mm Lengths: 200mm – 3m
Temperature Range	Ø8.00mm, Ø9.50mm – 680°C continuously (800°C intermittently) Ø2.3mm, Ø4.00mm – up to 550°C
Materials	Fully stainless steel (Silver brazed joints on Ø2.3mm & Ø4.00mm only)
Special Features	Static pressure tapping doubles as Direction Pointer
Available Extras	K-Type Thermocouple for measuring in duct air temperature Sliding marker clips (up to 276°C), Glands & Stud Couplings Fully straight pitot tube Enlarged impact (total hole) & slotted pressure holes for high solid burden

Jointed Pitot Tubes

Overview

Jointed Pitot Tubes are designed for use on larger sized ducts of up to 4.3m. These larger Pitot's are manufactured and supplied in a jointed form consisting generally of 2 to 3 parts, a head section, middle section and tail section and are easily connected and made air tight using the two inner tubes and the special countersunk screws used to secure the assembly. Smaller sized Jointed Pitot Tubes can be provided in an optional protective carry case.

Features of Jointed Pitot Tubes

- Robust and easy to use construction
- Compact design allows for easy storage and transportation
- Complete with Carry Case
- Supplied with a 90° 9.5mm diameter head or S-TYPE cast head with 32mm diameter body, in lengths to suit customers' requirements

Pitot Tube Applications

- Velocity Measurement
- Volume Flow Measurement