Product Abstract

Unique challenges. Quality solutions.

Pitot-Static probes are fundamental measurement tools used by engineers and scientists since the 18th century. Recognizing this, Aeroprobe has leveraged its multi-hole probe expertise to produce a line of miniature, capable Pitot-Static probes.

Pitot-Static probes measure total and static pressure, and using simple, well-known equations can be used to compute flow velocity. Useful for an immense variety of flow measurement application in air, water or other fluids and at high or low temperatures, Pitot and Pitot-Static probes are simple and effective measurement tools. Aeroprobe's Pitot and Pitot-Static probes are available in stainless steel, Hastelloy, and Inconel, in several different standard geometries.

+1 (540) 443 - 9215  
sales@aeroprobe.com  
www.aeroprobe.com  

Aeroprobe Corporation  
200 Technology Drive  
Christiansburg, VA 24073  
United States
INNOVATIVE TECHNOLOGY

For applications where fluid flow angle is not important or relevant, Aeroprobe will recommend its Pitot-Static probes. Easy to set up, understand and use, Pitot probes are an excellent way to make basic flow measurements. Aeroprobe will support Pitot-Static probes with its renowned calibration services to ensure maximum accuracy, no matter what the application.

When Pitot-Static probes are no longer sufficient, moving to Aeroprobe’s multi-hole probes is a straightforward advancement. Aeroprobe can supply Pitot-Static probes suitable for high-temperature measurements or unsteady measurements. When high angle flows are encountered, but angular information is unnecessary, Aeroprobe can supply Kiel-style Pitot-Static probes. Please contact the factory for more information about these Pitot-Static configurations.

CAPABILITIES

- Tip diameters as small as 1.6mm
- Temperature Ratings to 1200°C
- Average Measured Angular Deviation of <1°
- Frequency Response up to 4.5 kHz
- Average Measured Velocity Deviation of ±1% or ±1 m/s (whichever is larger) **
- Probe Calibrations from 5 m/s to Mach 2.0

** Reported probe calibration accuracies are based on the measured error values for a comprehensive set of test points collected in Aeroprobe’s wind tunnel facilities. Flow environments exist where expected errors could be larger. Contact Aeroprobe for more information.

ABOUT AEROPROBE

Aeroprobe provides air data measurement systems to aerospace, automotive, turbomachinery, wind turbine, and wind tunnel testing industries around the world. Aeroprobe’s air data systems for unmanned aircraft provide real time air speed, angle of attack and angle of sideslip for improved flight performance. Turnkey systems include instrumentation for measurement, hardware for data collection, and software for data reduction, analysis and visualization. High temperature probes operate in flows up to 1200°C. Omniprobes, featuring a 300° flow angle range, are capable of measuring reversed flow. Fast response probes provide a frequency response exceeding 4 KHz. Rake configurations allow for simultaneous multi-point, unsteady measurements. The company conducts international business through a network of over 20 distributors.