

Angle of Attack Transducer

DESCRIPTION

AMETEK Aerospace Angle-of-Attack (AOA) transducers and the Stall Warning Systems which incorporate them are precision sensing devices that combine design simplicity, versatility, and component commonality. The result is reliable angle-of-attack and stall warning information for the pilot.

Developed originally to meet stringent military requirements, AMETEK AOA transducers, or vanes, met the challenge and went on to establish a reputation for in-service reliability.

The safety factor is a consideration every pilot expects and one every aircraft should provide. At AMETEK, the safety factor is paramount; safety is engineered into every product. Emphasis on safety in design and performance has been the keystone to our success.

Features include high reliability, single/dual output devices such as synchro, resolver, and potentiometer, temperature compensated damping, and a reliable self-regulating, deicing/anti-icing vane heater design.

AMETEK's engineering has been on the leading edge of aerospace technology for decades. Program by program, AMETEK's reputation for innovative product design and development has been built on an extensive line of reliable, high technology products. AOA and Stall Warning components offer ease of maintenance and conform to all applicable FAA, TSO, and military specifications.



FEATURES

- TSO C-54 Certified
- Multiple Outputs for Redundant Stall Warning and/or Ground Proximity Windshear Systems
- Port and Starboard AOA Transducers Are Interchangeable
- Self-regulating Vane Heaters for Deicing and Anti-icing
- Damping to Minimize the Effect of Turbulent Flutter
- Field Repairable

APPLICATIONS

- Business/Commuter Aircrafts: Metroliner, Merlin, Challenger, Learjet, and Falcon Jet
- Commercial Aircrafts: B727, B737, B747, B747-400, DC-9, DC-10, MD-11
- Military Aircrafts: C-1, C-5, C-17, B-1, C-141, F-5, T-38, and CF-117

Angle of Attack Transducer

SPECIFICATIONS

Angular Range: $\pm 30^\circ$ typical. Other ranges available.

Total Output Accuracy: $\pm 0.25^\circ$ at 90 knots

Vane Heater: 28 VDC at 270 W or 115 VAC, 400 Hz

ELECTRICAL CHARACTERISTICS

Output: 1 or 2 synchros, resolvers, RVDT, or potentiometric wirewound or film

Excitation Voltage: 26 V or 11.8 V at 400 Hz

Vane Heater: 270 W at 28 VDC or 115 VAC, 400 Hz

Scale Factor:

Series 25147A: 36 ohms per degree of AOA

Pre-Flight Self-Test Excitation/Pre-Position:

Series 2568A: Two discrete angles (4.5° , 12.5°) per side

Self-Test Excitation:

Series 2568A: 115 VAC at 400 Hz

ENVIRONMENTAL CHARACTERISTICS

Temperature: -67° to 185°F (-19° to 85°C)

Altitude: -1,000 ft. to 50,000 ft.

Humidity/Vibration/Shock/Electromagnetic Compatibility:

Compatible with business/commuter, military, or commercial aviation requirements, depending on application.

PHYSICAL CHARACTERISTICS

Electrical Connector: Most designs circular, quick disconnect

Dimensions:

Series 2566A: 6.42 x 3.15 in. diameter maximum

Series 2562A: 3.5 x 4.0 in. diameter maximum

Series 25147A: 2.50 x 3.40 in. diameter maximum

Series 2568A: 4.25 x 7.03 in. diameter maximum

Weight:

Series 2566A: 2.7 lb. maximum

Series 2562A: 2.7 lb. maximum

Series 25147A: 1.8 lb. maximum

Series 2568A: 4 lb. maximum

Configuration Controls: Type Certified, TSO-C54, or Military QPL-25627

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

