



Angular Servo Accelerometer

Developed for the Structural Data Recording Set, AN/ASH-37



This Servo Accelerometer is a closed-loop, force-balance transducer with much greater accuracy and stability than that of an open-loop type accelerometer.

Features a rugged acceleration sensor with direct current output signal proportional to acceleration.

PRODUCT FEATURES:

- Small in Size
- Range: $\pm 30 \text{ RAD/SEC}^2$
- Measurement of Aircraft Angular Accelerations

SPECIFICATIONS:

Weight: 4.7 oz. nominal

Range: $\pm 30 \text{ rad/sec}^2$

Output Current: -1.6 mA to +1.6 mA

Bias (Zero Output): $\pm 0.1\% \text{ F.R.}$

Bias TC: $13 \text{ uA/}^\circ\text{C}$

Composite Error: $0.2\% \text{ F.R.}$

Scale Factor TC: $0.05\% \text{ }^\circ\text{C maximum}$

Sensitivity Axis

Alignment: 0.5°

Natural Frequency: 10 Hz to 20 Hz

Damping: 0.7 ± 0.2

Power Required: $\pm 15 \text{ VDC}$: less than 20 mA

Operating Temp.: -40°C to $+71^\circ\text{C}$

Storage Temp.: -40°C to $+85^\circ\text{C}$

Shock: 500G, 5 ms

Vibration: 15G RMS

Accuracy: 4% of F.R. over environmental conditions

