SFMS
SENSORS AND FLUID MANAGEMENT SYSTEMS
AMETEK®



ACCELEROMETER & FATIGUE

Piezoelectric Accelerometers

Overview

AMETEK's piezoelectric accelerometers are designed to meet the operational and reliability requirements of aerospace applications. With over fifty years of experience, AMETEK offers piezoelectric accelerometers in all three modes of operation: compression, shear, and bender. AMETEK also designs accelerometers for a wide range of temperatures, environments, frequency responses, sensitivities, and configurations. AMETEK's piezoelectric accelerometers meet the following performance requirements: high accuracy, high sensitivity, wide-band frequency response, ultra-low cross-axis sensitivity, isolation from mounting forces and temperature gradients and fully-welded construction for isolation from extreme pressures and environments.

AMETEK has design experience with low noise softline cables, hardline cables for high temperature operations, cable braiding, special connectors, uni-axial, bi-axial, and tri-axial sensors, integral electronics, and special mounting configurations. Performance, established 'in- field' reliability, and experience makes AMETEK's piezoelectric accelerometers the optimum choice.

AMETEK will custom design and manufacture piezoelectric accelerometers to cost-effectively meet customer-specific requirements.

Features

- *Ultra-sensitive, high accuracy*
- *measurement of vibration and acceleration.*
- *Operating temperature above 1000°F (538°C).*
- *Wide frequency response. Low cross-axis sensitivity. Stable output through environmental extremes. Custom configurations including integral electronics, cables, connectors, and mounting arrangements.*
- *Hermetically sealed construction for isolation from external environments.*

Applications

- Aircraft engines Helicopters
- Land gas turbines Centrifugal pumps Compressors
- Gas generators Launch vehicles Missiles
- Marine vehicles

Specifications

Charge Sensitivity:	1 to 1,050 pC/g
Mounted Resonant Frequency:	Dependent on requirements, including sensitivity
Frequency Response:	Minimum 2Hz, maximum strongly dependent on design
Transverse Sensitivity:	5% maximum, special models 1% maximum
Temperature Response:	+5% to +10% of charge sensitivity within operational temperature range

SFMS
SENSORS AND FLUID MANAGEMENT SYSTEMS
AMETEK®

www.ameteksfms.com

© 2024 AMETEK Corporation. All Rights Reserved. Specifications are subject to change without notice.
Other company names and product names used in this document are the registered trademarks or trademarks of their respective owners.

SFMS-DS-10020A - 02/24