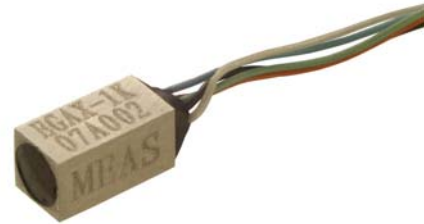


Model EGAXT Accelerometer



Miniature Design
DC Response, Critically Damped
10,000g Over-range Stops
Broad Temperature Range



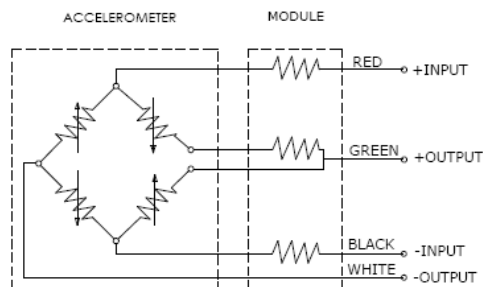
The **Model EGAXT** miniature accelerometers combine a damping ratio of 0.7 (nominal) with built-in over-range stops that protect the unit against 10,000g shocks. This is ideal for applications which may experience rough handling or in situations where the accelerometer must survive a high initial overload in order to make a low g measurement.

FEATURES

- Small Size, Low Weight
- Static and Dynamic Measurement
- Frequency Response from DC to 3000 Hz
- ±1% Non-Linearity
- -40°C to +120°C Operating Range
- 10,000g Over-range Protection

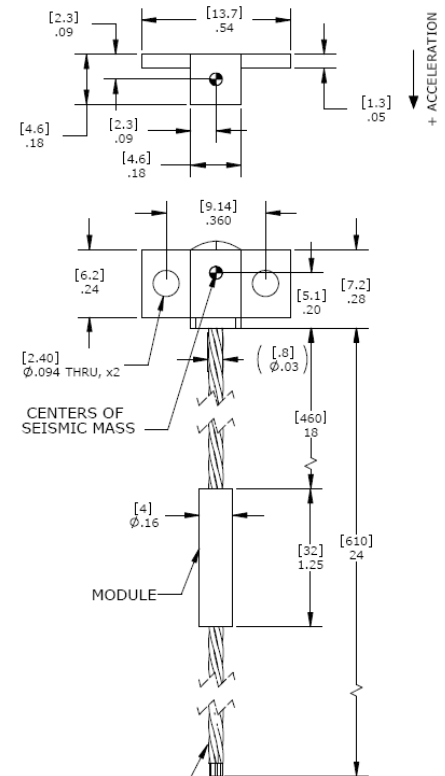
APPLICATIONS

- Flight Test & Control
- Launch Vehicles
- Robotics
- Shock Testing

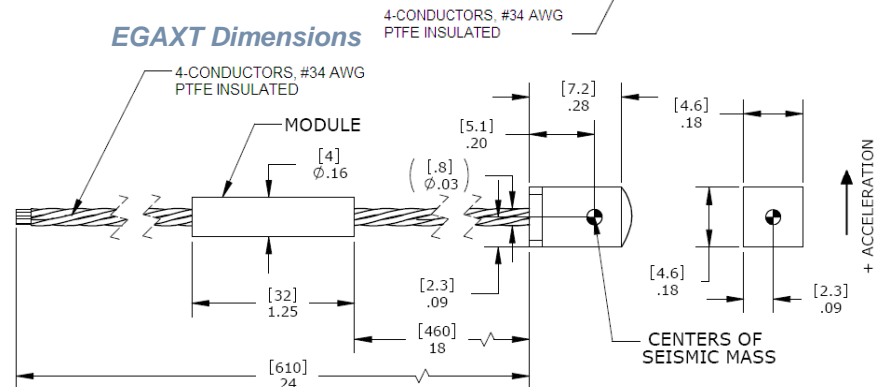


dimensions

EGAXT-F Dimensions



EGAXT Dimensions



Model EGAXT Accelerometer

performance specifications

All values are typical at +24°C, 100Hz and 15Vdc excitation unless otherwise stated. Measurement Specialties reserves the right to update and change these specifications without notice. Standard product parameters are described in PSC-1004 for Plug & Play DC Accelerometers.

Parameters											Notes
DYNAMIC											
Range (g)	±5	±10	±25	±50	±100	±250	±500	±1000	±2500		
Sensitivity (mV/g) ¹	5.2-11.3	4.2-9.0	2.1-4.5	1.57-3.38	1.05-2.25	.52-1.13	.35-.75	.17-.38	.07-.15		
Frequency Response min. (Hz)	0-120	0-140	0-300	0-350	0-400	0-500	0-750	0-1000	0-1400	±1/2dB	
Frequency Response nom. (Hz)	0-250	0-300	0-600	0-700	0-900	0-1000	0-1500	0-2000	0-3000	±1/2dB	
Natural Frequency (Hz)	500	600	1200	1400	1700	2000	3000	4000	6000		
Non-Linearity (%FSO)	±1	±1	±1	±1	±1	±1	±1	±1	±1		
Transverse Sensitivity (%)	<3	<3	<3	<3	<3	<3	<3	<3	<3		
Damping Ratio	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	Nominal	
Shock Limit (g)	2000	2000	5000	5000	10000	10000	10000	10000	10000		
ELECTRICAL											
Zero Acceleration Output (mV)	±15										Differential
Excitation Voltage (Vdc)	15 (can be used from 2 to 15Vdc but lower excitation voltage will decrease sensitivity accordingly)										
Input Resistance (Ω)	2000										Nominal
Output Resistance (Ω)	1000										Nominal
Insulation Resistance (MΩ)	>100										@50Vdc
Ground Isolation	Isolated from Mounting Surface										
ENVIRONMENTAL											
Thermal Zero Shift	±2.5mV / 50°C (±2.5mV / 100°F)										
Thermal Sensitivity Shift	+1% to -4% / 50°C (+1% to -4% / 100°F)										
Operating Temperature	-40 to 120°C (-40 to 250°F)										
Compensated Temperature	20 to 80°C (70 to 170°F), contact factory for other temperature compensation options										
Storage Temperature	-40 to 120°C (-40 to 250°F)										
Humidity	Epoxy Sealed, IP61										
PHYSICAL											
Case Material	Stainless Steel										
Cable	4x #34 AWG PTFE Leads, 24 inch										
Weight	<1 grams										
Mounting	Adhesive or Screw Mount Versions Available (-F configuration)										
¹ Output is ratiometric to excitation voltage											

Calibration supplied: CS-FREQ-0100 NIST Traceable Amplitude Calibration from 20Hz to ±1/2dB Frequency Response Limit

Optional accessories: MTG-A2 & MTG-A2M Triaxial Mounting Block
 101 Three Channel DC Signal Conditioner Amplifier
 140 Auto-zero Inline Amplifier

The information in this sheet has been carefully reviewed and is believed to be accurate; however, no responsibility is assumed for inaccuracies. Furthermore, this information does not convey to the purchaser of such devices any license under the patent rights to the manufacturer. Measurement Specialties, Inc. reserves the right to make changes without further notice to any product herein. Measurement Specialties, Inc. makes no warranty, representation or guarantee regarding the suitability of its product for any particular purpose, nor does Measurement Specialties, Inc. assume any liability arising out of the application or use of any product or circuit and specifically disclaims any and all liability, including without limitation consequential or incidental damages. Typical parameters can and do vary in different applications. All operating parameters must be validated for each customer application by customer's technical experts. Measurement Specialties, Inc. does not convey any license under its patent rights nor the rights of others.

ordering info

EGAXT-F-100-Z1/L2M/C

| | | Options, otherwise leave blank
 | | Range (100 is 100g)
 | Housing, F for flange mount
 (otherwise leave blank)

Compensated Temp Ranges:

Standard = +20 to +80°C (+70 to +170°F)
 Z* = Non standard, contact factory

Excitation Voltage:

Standard = 15Vdc

Special Cable Length:

V* = Non standard, contact factory
 L00F = Replace "00" with length in feet
 L00M = Replace "00" with length in meter
 C = Microtech type male or equivalent

Connector Wired to Cable:

Example: EGAXT-F-100-L2M

Model EGAXT, Flange Mount Housing, 100g Range, 2 Meter Cable Length