

# Model EGAXT Accelerometer



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

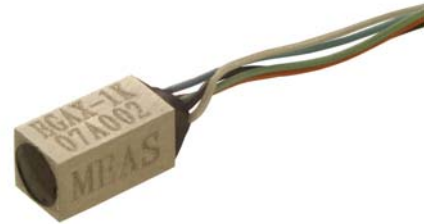
The **Model EGAXT** miniature accelerometers combine a damping ratio of 0.7 (nominal) with built-in over-range stops that protect the unit against 10,000g shocks. This is ideal for applications which may experience rough handling or in situations where the accelerometer must survive a high initial overload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

## FEATURES

- Small Size, Low Weight
- Static and Dynamic Measurement
- Frequency Response from DC to 3000 Hz
- $\pm 1\%$  Non-Linearity
- $-40^{\circ}\text{C}$  to  $+120^{\circ}\text{C}$  Operating Range
- 10,000g Over-range Protection

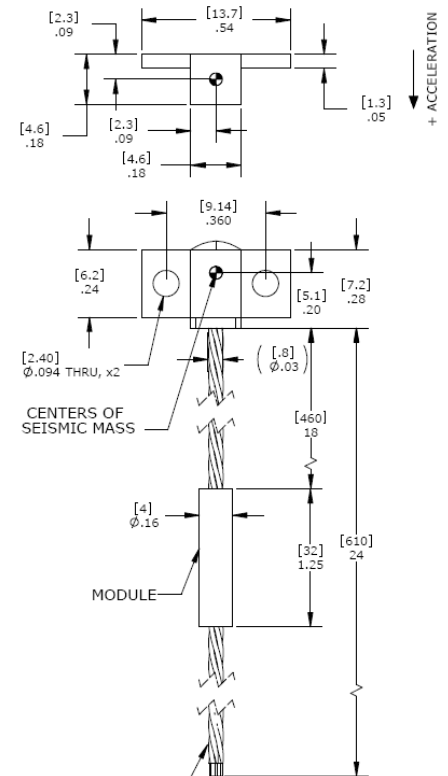
## APPLICATIONS

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

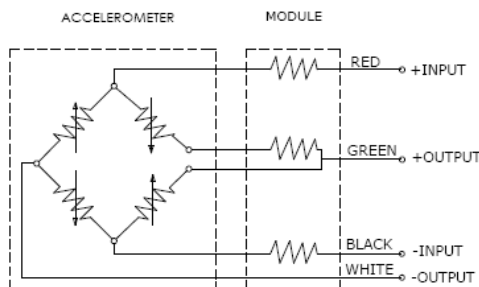
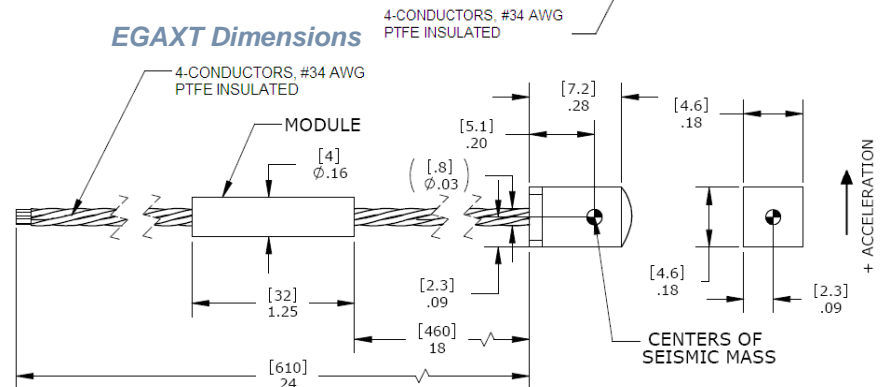


## dimensions

*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
<b>DYNAMIC</b>											
Range (g)	±5	±10	±25	±50	±100	±250	±500	±1000	±2500		
Sensitivity (mV/g) <sup>1</sup>	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		
<b>ELECTRICAL</b>											
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										
<b>ENVIRONMENTAL</b>											
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										
<b>PHYSICAL</b>											
Case Material	Stainless Steel										
Cable	4x #34 AWG PTFE Leads, 24 inch										
Weight	<1 grams										
Mounting	Adhesive or Screw Mount Versions Available (-F configuration)										
<sup>1</sup> 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

## 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

## 联系方式



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