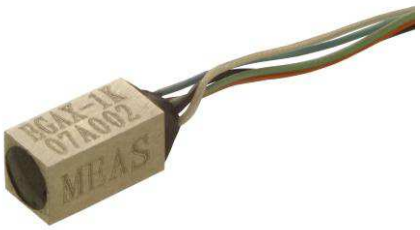
MODEL EGAS3 TRIAXIAL ACCELEROMETER



SPECIFICATIONS

- **Miniature Design**
- **DC Response, Critically Damped**
- **10,000 g 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

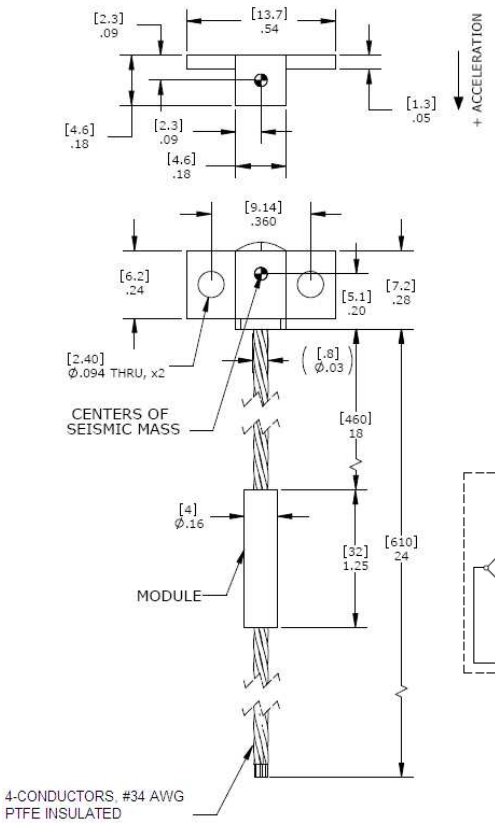
- **Small Size, Low Weight**
- **Static and Dynamic Measurement**
- **Frequency Response from DC to 3000 Hz**
- **±1% Non-Linearity**
- **-40°C to +120°C Operating Range**
- **10,000g Over-range Protection**

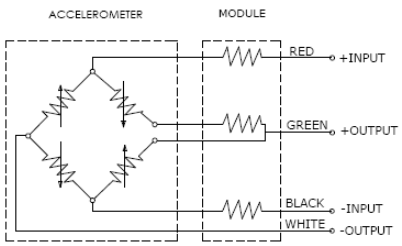
APPLICATIONS

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

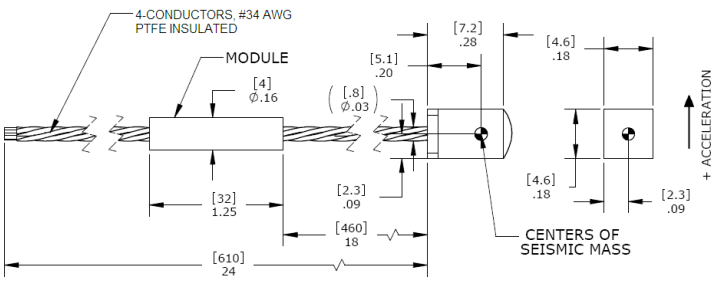
dimensions

EGAXT-F Dimensions





EGAXT Dimensions



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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										
DYNAMIC										Notes
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	

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ORDERING INFO

EGAXT–F–100–/Z1/L2M/C

Compensated Temp Ranges: **Standard = +20 to +80°C +(70 to +170°F)**

I I I___Options, otherwise leave blank **Z* = Non standard, contact factory**

I I_____ Range (100 is 100g) **Excitation Voltage:** **Standard = 15Vdc**

I_____ Housing, F for flange mount **V* = Non standard, contact factory**

(otherwise leave blank) **Special Cable Length:** **L00F = Replace “00” with length in feet**

L00M = Replace “00” with length in meter

Connector Wired to Cable: **C = Microtech type male or equivalent**

Example: EGAXT-F-100-/L2M

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

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