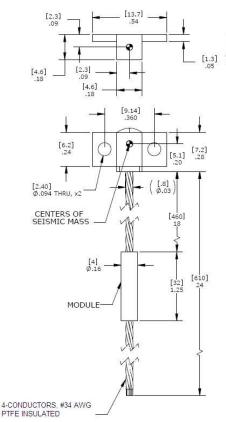




## <u>dimensions</u>

## **EGAXT-F Dimensions**



# MODEL EGAS3 TRIAXIAL ACCELEROMETER

## **SPECIFICATIONS**

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

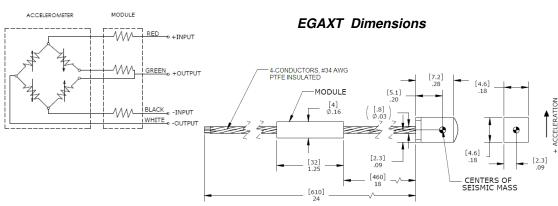
The Model EGAXT miniature accelerometers combine a damping ratio of 0.7 (nominal) with built-in over-range stops that protect the unit against 10,000g shocks. This is ideal for applications which may experience rough handling or in situations where the accelerometer must survive a high initial overload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



## 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	Notes
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	.3575	.1738	.0715	
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 Differential +15

(mV)

Excitation Voltage (Vdc) 15 (can be used from 2 to 15Vdc but lower excitation voltage will decrease sensitivity

accordingly)

2000 Input Resistance (Ω) 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) -40 to 120°C (-40 to 250°F)

Operating Temperature

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

4x #34 AWG PTFE Leads, 24 inch Cable

Weight <1 grams

Adhesive or Screw Mount Versions Available (-F configuration) Mounting

Output is ratiometric to excitation voltage

Calibration supplied:

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

Response Limit

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

140 Auto-zero Inline Amplifier

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#### **MODEL EGAXT ACCELEROMETER**

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EGAXT-F-100-/Z1/L2M/C +(70 to +170°F)	Compensated Ter	np Ranges:	Standard = +20 to +80°C		
I IOptions, otherwise leave contact factory	e blank		Z*	= Non standard,	
I I Range (100 is 100g)	Excitation Voltage	e:	Standard = 15Vdc		
I Housing, F for flange mo	ount		V*	= Non standard,	
(otherwise leave blank)	Special Cable Length: L00F		Replace "00" with length in feet		
with length in meter			LOOM	= Replace "00"	
male or equivalent	Connector Wired	to Cable:	С	= Microtech type	
Example: EGAXT-F-100-/L2M					

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

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SENSOR SOLUTIONS ///Model EGAXT Rev B