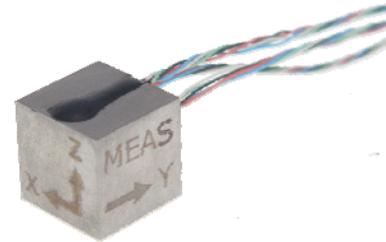


Model EGAXT3 Accelerometer



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



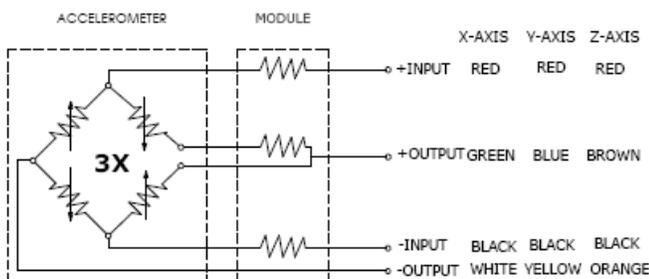
The **Model EGAXT3** miniature triaxial accelerometer combines a damping ratio of 0.7 (Nominal) with built-in over-range stops that are set to protect the unit against 10,000g shocks. This is ideal for applications which may experience rough handling or in situations where the accelerometer must survive a high initial overload in order to make a low g measurement.

FEATURES

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

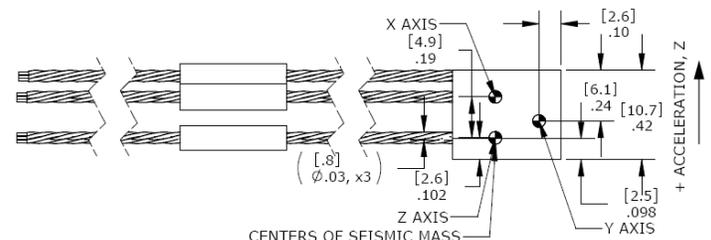
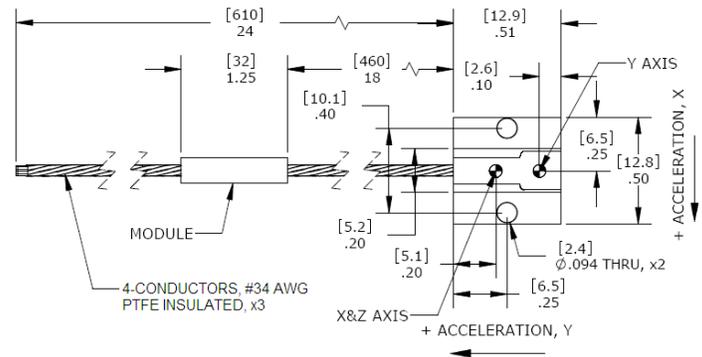
APPLICATIONS

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

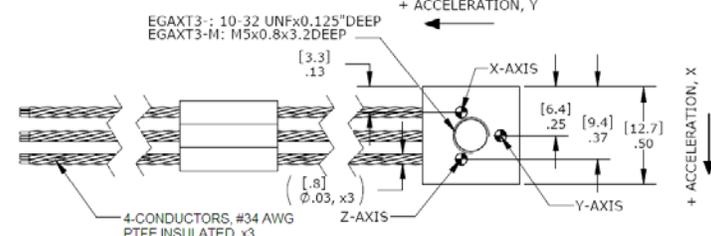
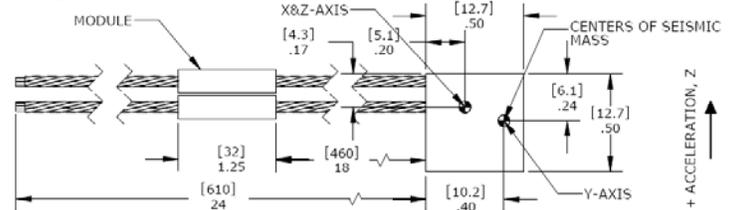


dimensions

EGAXT3-F Dimensions



EGAXT3 Dimensions



Model EGAXT3 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	±½ dB	
Frequency Response nom. (Hz)	0-250	0-300	0-600	0-700	0-900	0-1000	0-1500	0-2000	0-3000	±½ dB	
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, each axis										
Weight	<6 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:	101	Three Channel DC Signal Conditioner Amplifier									
	140	Auto-zero Inline Amplifier									

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ordering info

EGAXT3-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
 V* = Non standard, contact factory

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: EGAXT3-F-100-/L2M

Model EGAXT3, Flange Mount Housing, 100g Range, 2 Meter Cable Length