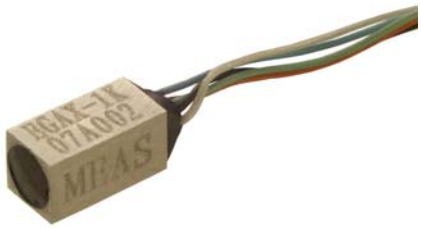
Model EGAXT Accelerometer

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



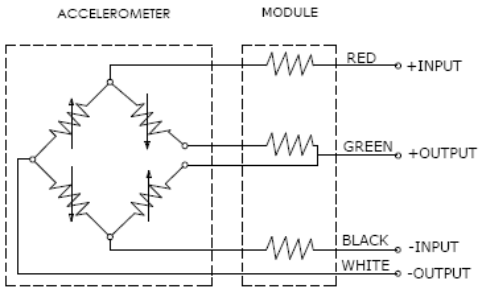
The Model EGAXT miniature accelerometers combine a damping ratio of 0.7 (nominal) with built-in over-range stops that protect the unit against 10,000g shocks. This is ideal for applications which may experience rough handling or in situations where the accelerometer must survive a high initial overload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

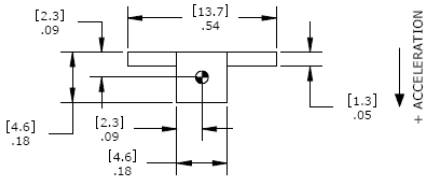
APPLICATIONS

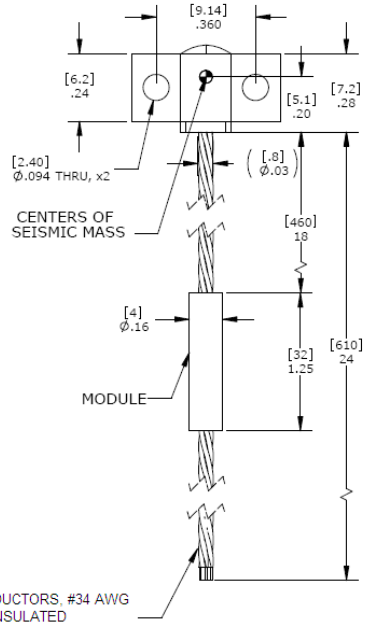
- Flight Test & Control
- Launch Vehicles
- Robotics
- Shock Testing



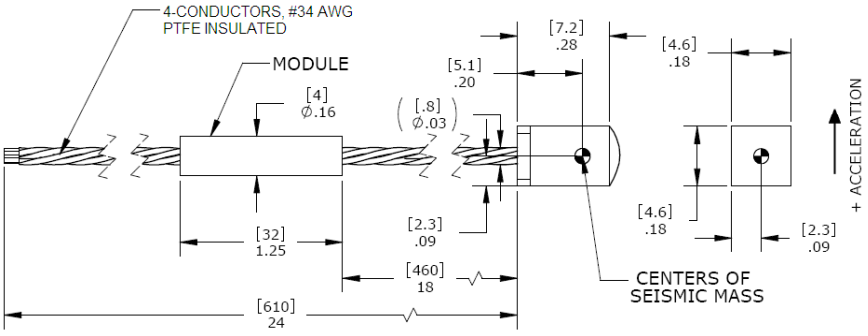
dimensions

EGAXT-F Dimensions





EGAXT Dimensions



32 Journey Ste. 150 Aliso Viejo, CA 92656 949-716-5377 t&m@meas-spec.com

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										
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

ordering info

EGAXT–F–100–/Z1/L2M/C

- I I I___Options, otherwise leave blank
- I I_____ Range (100 is 100g)
- I_____ 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: EGAXT-F-100-/L2M
Model EGAXT, Flange Mount Housing, 100g Range, 2 Meter Cable Length

32 Journey Ste. 150 Aliso Viejo, CA 92656 949-716-5377 t&m@meas-spec.com