

Model 61 Accelerometer

DC Response
Durable Cable
Small Package
Reliable Performance



The Model 61 Accelerometer is based on an advanced piezoresistive MEMS sensing element which offers exceptional dynamic range and stability. This unit features a full bridge output configuration with a temperature range from -20°C to 85°C. This unit exhibits superior shock survivability and a flat amplitude/phase response up to 5kHz.

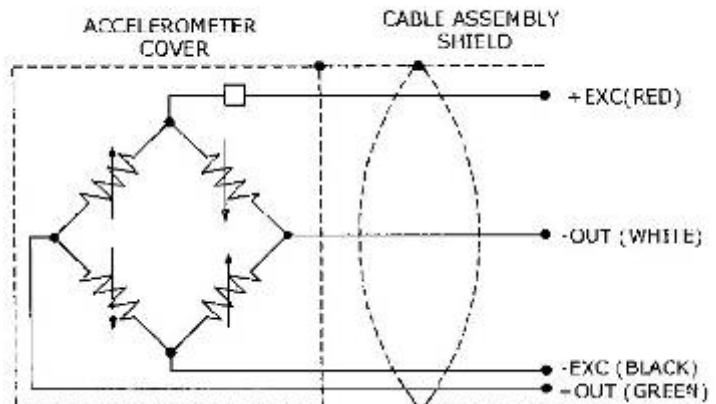
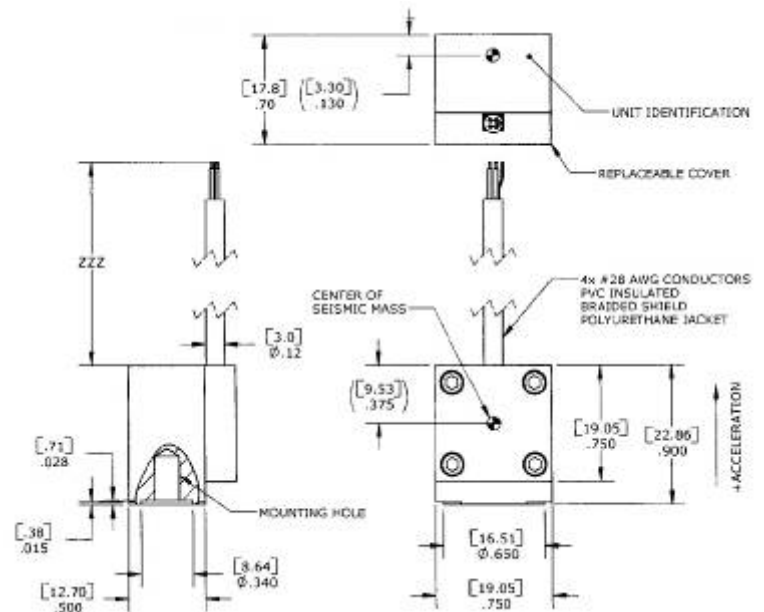
FEATURES

- 2nd GEN MEMS Sensing Element
- 2000 g Full Scale Range
- 2-10 Vdc Excitation
- <± 25 mV Zero Offset
- 1% Transverse Sensitivity Available

APPLICATIONS

- In-Dummy
 - Head
 - Thorax
 - Pelvic

dimensions



Model 61 Accelerometer

performance specifications

All values are typical at $\pm 24^{\circ}\text{C}$, 100 Hz and 10 Vdc 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)	± 750	± 2000	
Sensitivity (mV/g)	.35	.15	
Frequency Response (Hz)	0-2000	0-3000	$\pm 5\%$
	0-3000	0-5000	$\pm 1\text{ dB}$
Natural Frequency (Hz)	$>20,000$	$>26,000$	
Non-Linearity (% FSO)	± 1	± 1	Of Reading
Transverse Sensitivity (%)	<3	<3	
Thermal Zero Shift (%FSO/ $^{\circ}\text{C}$)	± 0.4	± 0.4	From 0 to $+50^{\circ}\text{C}$
Thermal Sensitivity Shift (%/ $^{\circ}\text{C}$)	± 0.4	± 0.4	From 0 to $+50^{\circ}\text{C}$

ELECTRICAL

Zero Acceleration Output (mV)	$<\pm 25$	$<\pm 25$	
Transverse Sensitivity	<3	<3	
Non-Linearity	± 1	± 1	
Excitation (Vdc)	2 to 10	2 to 10	
Input Resistance	6500-7800	6500-7800	
Output Resistance (Ω)	2400-4800	2400-4800	
Insulation Resistance (M Ω)	>100	>100	@50Vdc
Ground Isolation			Shield attached to cover.

ENVIRONMENTAL

Shock Limit (g)	5000	5000	
Operating Temperature ($^{\circ}\text{C}$)	-23 to +85	-23 to +85	

PHYSICAL

Case Material			Aluminum
Cable (Integral 30 Foot Cable)			4 x 28 AWG Conductors
Cable (Insulation Material)			Polyurethane
Weight (grams)	18	18	Cable Not Included
Mounting		10-32 UNF or M5 x 0.8	Torque 18 lb-in

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ordering info

PART NUMBERING Model Number+Range+Excitation+Cable Length+Options

61Z GGGG- CCCT - ZZZ

| | | | | Options
 | | | | | 1% Transverse Sensitivity when "T" is present.
 | | | | | Cable (360 is 360 inches)
 | | | | | Range (0750 is 750 g)
 | | | | | A is 10-32 UNF and B is M5x0.8 Metric

Example: 61A-750-10-360-XY

Model 61A, 10-32 UNF Mounting Hole, 750g, 10V Excitation, 360" (30ft) cable, No Options

CONTATO

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