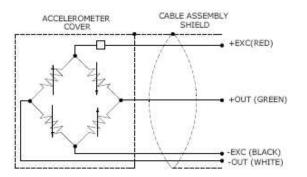




### [17.8] ([3.30]) UNIT IDENTIFICATION **(B)** REPLACEABLE COVER #28 AWG CONDUCTORS PVC INSULATED BRAIDED SHIELD POLYURETHANE JACKET CENTER OF SEISMIC MASS 0 0 [9.53] .375 [19.05] .750 22.86 [.71] 0 0 [8.64] [16.51] Ø.650 [19.05] ,750 [12.70]



# **MODEL 61 ACCELEROMETER**

# **SPECIFICATIONS**

- DC Response Accelerometer
- Durable Cable, Small Package
- ±750 & ±2000g Ranges
- 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</p>
- 1% Transverse Sensitivity Option

### **APPLICATIONS**

- In-Dummy
  - Head
  - o Thorax
  - o Pelvic

### PERFORMANCE SPECIFICATIONS

All values are typical at  $\pm 24^{\circ}$ C, 80Hz and 10Vdc excitation unless otherwise stated. Measurement Specialties reserves the right to update and change these specifications without notice.

Parameters			
DYNAMIC			Notes
Range(g)	±750	±2000	
Sensitivity (mV/g)	.35	.15	
Frequency Response (Hz)	0-2000	0-3000	± 5%
,	0-3000	0-5000	± 1 dB
Natural Frequency (Hz)	>20,000	>26,000	
Non-Linearity (% FSO)	±1	±1	Of Reading
Transverse Sensitivity (%)	<3	<3	_
Thermal Zero Shift (%FSO/°C)	±0.04	±0.04	From 0 to +50°C
Thermal Sensitivity Shift (%/°C)	±0.10	±0.10	From 0 to +50°C
, , ,			

#### **ELECTRICAL**

Zero Acceleration Output (mV)  $<\pm25$ Excitation (Vdc) 2 to 10 Input Resistance 5700-7800 Output Resistance ( $\Omega$ ) 2400-5000 Insulation Resistance ( $M\Omega$ ) >100

Ground Isolation Shield attached to cover

**ENVIRONMENTAL** 

Shock Limit (g) 5000
Operating Temperature (°C) -23 to +85

Humidity Epoxy Sealed, IP61

**PHYSICAL** 

Case Material Aluminum

Cable (Integral 30 Foot Cable) 4x #28 AWG, Braided Shield, PU Jacket

Weight (grams) 18 Cable Not Included Mounting 10-32 UNF or M5 x 0.8 Cable Not Included Torque 18 lb-in

Calibration supplied: CS-FREQ-0100 NIST Traceable Amplitude Calibration from 20Hz to ±1dB Frequency Limit

Optional accessories: 121 Three Channel DC Signal Conditioner Amplifier

140A Auto-zero Inline Amplifier

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@50Vdc

# **ORDERING INFORMATION**

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

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

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

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