

Model 64B Accelerometer

DC Response
Durable Cable
Small Package
Reliable Performance

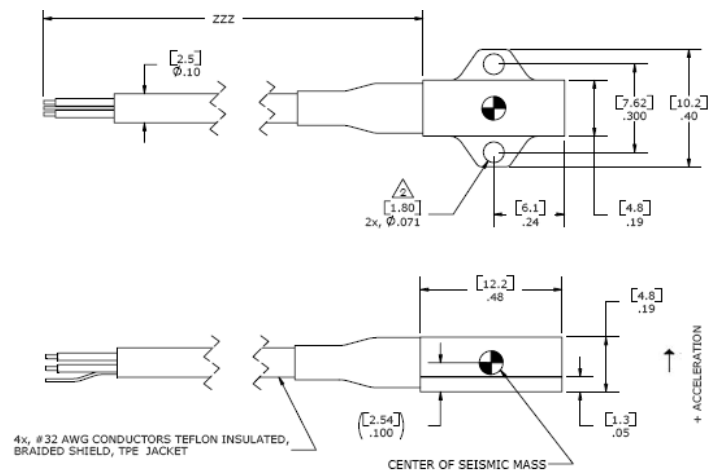


The Model 64B Accelerometer is based on an advanced piezoresistive MEMS sensing element which offers exceptional dynamic range and stability. This unit features a full bridge output configuration with a temperature range from 0 to +50° C. A slight amount of internal gas damping provides outstanding shock survivability and a flat amplitude/phase response up to 7kHz. The Model 64B is compliant with SAE J211 standards for anthropomorphic dummy instrumentation.

FEATURES

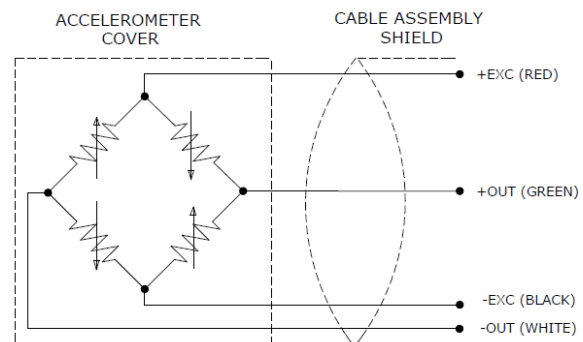
- 2nd GEN MEMS Sensing Element
- ± 50 to ±6,000 g Ranges
- 2-10 Vdc Excitation for Maximum Flexibility
- 0-50 °C Temperature Range
- High Impact Jacketed Cable
- 1% Transverse Sensitivity Available
- <± 25 mV Zero Offset

dimensions



APPLICATIONS

- Safety Crash Testing
 - Auto
 - Truck
 - Recreational Vehicles
- Shock Testing



Model 64B 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							Notes
DYNAMIC							
Range(g)	± 50	± 100	± 200	± 500	± 2000	± 6000	
Sensitivity (mV/g)	2	0.9	0.8	0.4	0.15	0.05	
Frequency Response (Hz)	0-400	0-500	0-600	0-800	0-2000	0-2000	$\pm 2\%$
	0-1000	0-1200	0-1400	0-2000	0-5000	0-5000	$\pm 5\%$
	0-1400	0-1500	0-1900	0-2800	0-7000	0-7000	$\pm 1\text{ dB}$
Natural Frequency (Hz)	4000	6000	8000	15000	26000	26000	
Non-Linearity (% of reading)	± 1	± 1	± 1	± 1	± 1	± 1	
Transverse Sensitivity (%)	< 3	< 3	< 3	< 3	< 3	< 3	
Thermal Zero Shift (%FSO/ $^{\circ}\text{C}$)	± 0.04	± 0.04	± 0.04	± 0.04	± 0.04	± 0.04	From 0 to $+50^{\circ}\text{C}$
Thermal Sensitivity Shift (%/ $^{\circ}\text{C}$)	± 0.1	± 0.1	± 0.1	± 0.1	± 0.1	± 0.1	From 0 to $+50^{\circ}\text{C}$
ELECTRICAL							
Zero Acceleration Output (mV)	$< \pm 25$	$< \pm 25$	$< \pm 25$	$< \pm 25$	$< \pm 25$	$< \pm 25$	
Excitation (Vdc)	2 to 10	2 to 10	2 to 10	2 to 10	2 to 10	2 to 10	
Input Resistance				2400-5000			
Output Resistance (Ω)				2400-5000			
Insulation Resistance (M Ω)	> 100	> 100	> 100	> 100	> 100	> 100	@50Vdc
Ground Isolation							Isolated from mounting surface.
ENVIRONMENTAL							
Shock Limit (g)	10000	10000	10000	10000	10000	10000	
Operating Temperature ($^{\circ}\text{C}$)							-40 to $+121$
Humidity				Epoxy Sealed, IP61			
PHYSICAL							
Case Material / Cover Material				Anodized Aluminum / Brass			
Cable (Integral 30 Foot Cable)							4 x 32 AWG Conductors Cable Not Included Torque 3 lb-in
Weight (grams)				1			
Mounting				2x 0=80 x 3/16 socket head cap screws			

Wiring color code: +EXC = Red, -EXC = Black, +OUT = Green, -OUT = White

Calibration supplied: CS-FREQ-0100 NIST Traceable Amplitude Calibration from 20Hz to $\pm 1\text{dB}$ Frequency Response Limit

Optional accessories: 101 Three Channel DC Signal Conditioner Amplifier

*Thermal Zero Shift (TZS) and Thermal Sensitivity Shift (TSS) over temperature (0°C to $+50^{\circ}\text{C}$ (32°F to 122°F))

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ordering info

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

64B-GGGG-CCCT-ZZZ

| | | | Options
 | | | 1% Transverse Sensitivity when "T" is present.
 | | Cable (360 is 360 inches)
 | Range (0100 is 100 g)

Example: 64B-2000-360

Model 64B, 2000g, 10V Excitation, 360" (30ft) Cable, No Options.

CONTATO

Endereço

Rua Sete de Setembro, 2671 - Centro
13560-181 - São Carlos - SP - Brasil

Telefone

+ 55 (16) 3371-0112

Fax

+ 55 (16) 3372-7800

Internet

www.metrolog.net
metrolog@metrolog.net



Metrolog Controles de Medição