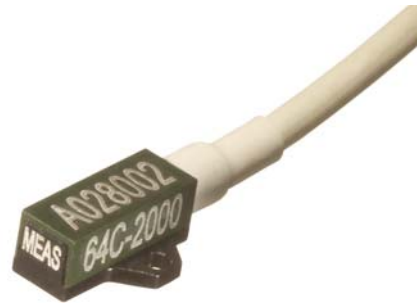


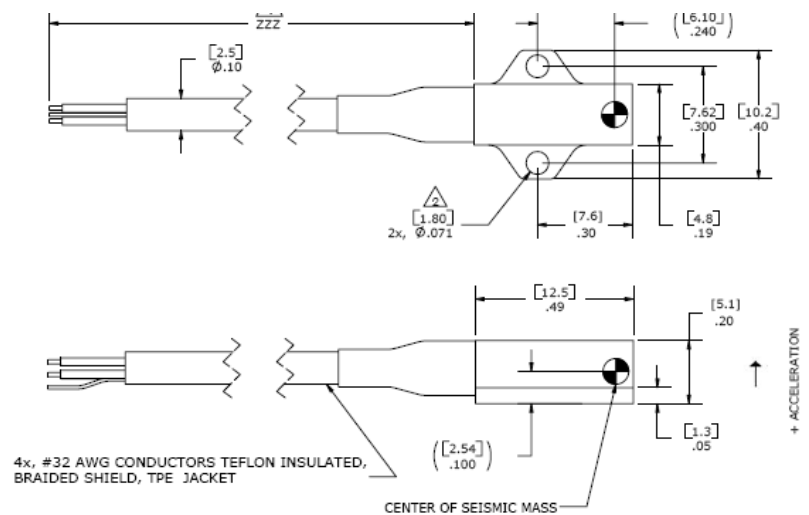
# Model 64C Accelerometer

DC Response  
Durable Cable  
Small Package  
Reliable Performance



**The Model 64C 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 64C is compliant with SAE J211 standards for anthropomorphic dummy instrumentation.

## dimensions

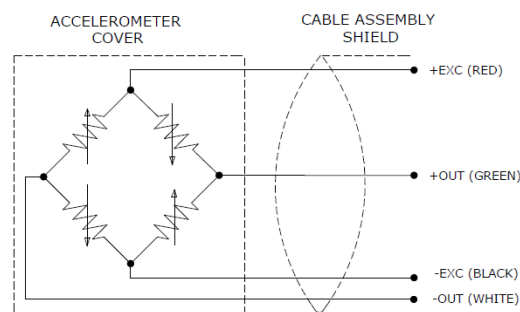


## FEATURES

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

## APPLICATIONS

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



# Model 64C 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
<b>DYNAMIC</b>							
Range(g)	$\pm 50$	$\pm 100$	$\pm 200$	$\pm 500$	$\pm 2000$	$\pm 6000$	
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)	$\pm 1$	$\pm 1$	$\pm 1$	$\pm 1$	$\pm 1$	$\pm 1$	
Transverse Sensitivity (%)	$< 3$	$< 3$	$< 3$	$< 3$	$< 3$	$< 3$	
Thermal Zero Shift (%FSO/ $^{\circ}\text{C}$ )	$\pm 0.04$	$\pm 0.04$	$\pm 0.04$	$\pm 0.04$	$\pm 0.04$	$\pm 0.04$	From 0 to $+50^{\circ}\text{C}$
Thermal Sensitivity Shift (%/ $^{\circ}\text{C}$ )	$\pm 0.1$	$\pm 0.1$	$\pm 0.1$	$\pm 0.1$	$\pm 0.1$	$\pm 0.1$	From 0 to $+50^{\circ}\text{C}$
<b>ELECTRICAL</b>							
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 ( $\Omega$ )				2400-5000			
Insulation Resistance (M $\Omega$ )	$> 100$	$> 100$	$> 100$	$> 100$	$> 100$	$> 100$	@50Vdc
Ground Isolation							Isolated from mounting surface.
<b>ENVIRONMENTAL</b>							
Shock Limit (g)	10000	10000	10000	10000	10000	10000	
Operating Temperature ( $^{\circ}\text{C}$ )							-40 to $+121$
Humidity							Epoxy Sealed, IP61
<b>PHYSICAL</b>							
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 ( $0^{\circ}\text{C}$  to  $+50^{\circ}\text{C}$  ( $32^{\circ}\text{F}$  to  $122^{\circ}\text{F}$ ))

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## ordering info

**PART NUMBERING** Model Number+Range+Excitation+Cable Length+Options  
64C-GGGG-CCCT-ZZZ

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

Example: 64C-2000-360

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

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