

Model 64 Accelerometer

- DC Response
- Durable Cable
- Small Package
- Reliable Performance



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

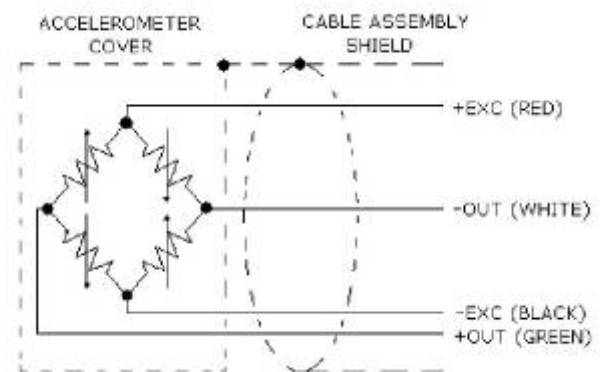
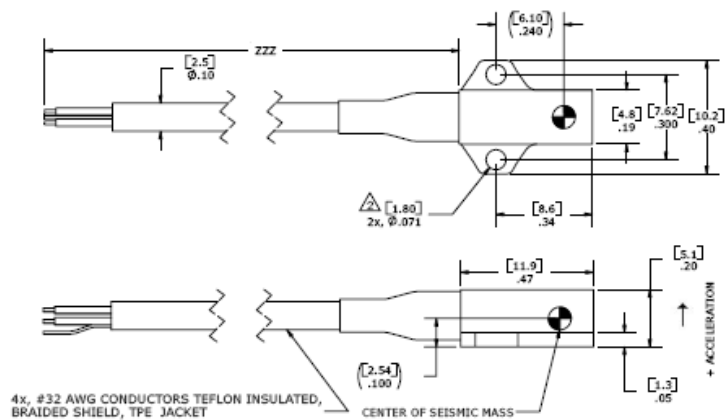
FEATURES

- 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

APPLICATIONS

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

dimensions



Model 64 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)	0.2	0.9	0.5	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	0-1500	0-2000	0-5000	0-5000	$\pm 5\%$
	0-1400	0-1500	0-2100	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	3500-4800	3500-4800	3500-4800	3500-4800	3500-4800	3500-4800	
		4800	4800	4800	4800	4800	
Output Resistance (Ω)	1700-4800	1700-4800	1700-4800	1700-4800	1700-4800	1700-4800	
		4800	4800	4800	4800	4800	
Insulation Resistance (M Ω)	> 100	> 100	> 100	> 100	> 100	> 100	@50Vdc
Ground Isolation							Cable shield to case.
ENVIRONMENTAL							
Shock Limit (g)	10000	10000	10000	10000	10000	10000	
Operating Temperature ($^{\circ}\text{C}$)							-40 to $+121$
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	1	1	1	1	1	
Mounting	2x 0=80 x 3/16 socket head cap screws						

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ordering info

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

64-ZZZZ-ZZZT-ZZZ

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

Example: 64-2000-360

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