

Model 68C Accelerometer

DC response
Durable Cable
Reliable Performance
Triaxial



The Model 68C Accelerometer

is a small, compact triaxial device designed for vehicle impact and road testing. Its mechanical overload stops provide high shock protection in rugged applications. This accelerometer is compliant with J211 specifications for World Side Impact anthropomorphic dummy applications.

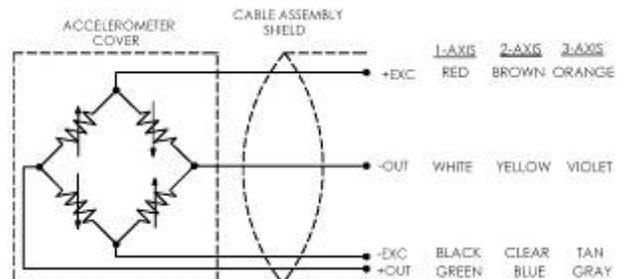
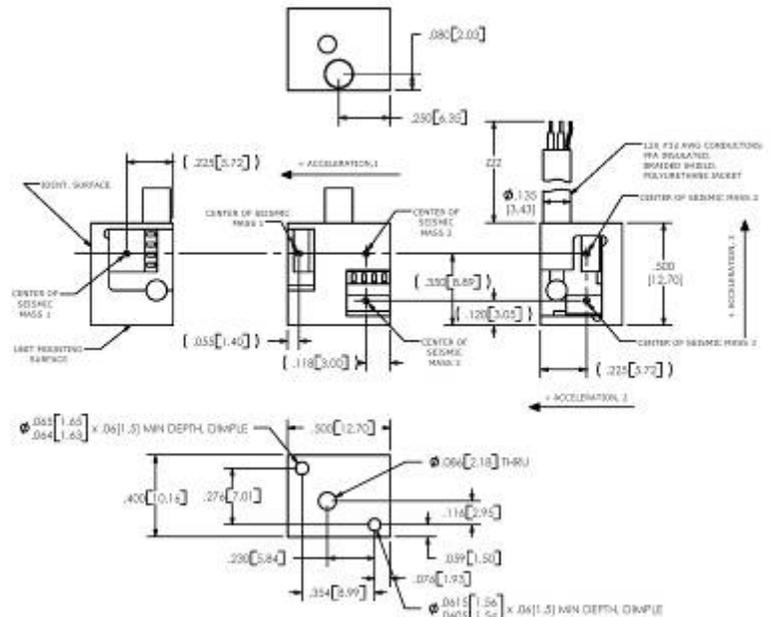
FEATURES

- 2nd Generation MEMS Sensing Elements
- 2000 g Full Scale Range
- 2-10 VDC Excitation
- 0-50 °C Temperature Compensation
- <±50 mV Zero Measurand Output
- Mechanical Overload Stops
- Replaceable Sensors

APPLICATIONS

- Crash Testing
- Impact Testing
- Off-Road Testing
- Road Testing

dimensions



Model 68C 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)	± 500	± 2000	
Sensitivity (mV/g)	.9	.15	
Frequency Response (Hz)	0-3000	0-3000	$\pm 5\%$
Natural Frequency (Hz)	>17,000	>26,000	
Non-Linearity (% FSO)	± 1	± 1	Of Reading
Transverse Sensitivity (%)	<3	<3	
Thermal Zero Shift (%FSO/ $^{\circ}\text{C}$)	± 0.05	± 0.05	From 0 to $+50^{\circ}\text{C}$
Thermal Sensitivity Shift (%/ $^{\circ}\text{C}$)	± 0.1	± 0.1	From 0 to $+50^{\circ}\text{C}$

ELECTRICAL

Zero Acceleration Output (mV)	$<\pm 50$	$<\pm 50$	
Excitation (Vdc)	2 to 10	2 to 10	
Input Resistance	3500-4800	3500-4800	
Output Resistance (Ω)	2400-4800	2400-4800	
Insulation Resistance ($M\Omega$)	>100	>100	@50Vdc
Ground Isolation			Isolated from Mounting Surface

ENVIRONMENTAL

Shock Limit (g)	5000	10000	
Operating Temperature ($^{\circ}\text{C}$)	-20 to +85	-20 to +85	

PHYSICAL

Case Material		Stainless Steel	
Cable (Polyurethane Jacket)		12 x 32 AWG Conductors	
Weight (grams)			
Mounting (Screw)	M2x0.2, 16 mm Length, Supplied	Torque 3 lb-in	

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ordering info

PART NUMBERING Model Number+Range+Excitation+Cable Length

68C-GGGG-CCC
 | |
 | | Cable (360 is 360 inches)
 | |
 | Range (0100 is 100 g)

Example: 68C-2000-360 (68CM1 includes cover at no extra cost)
 Model 68C, Standard Configuration: 2000g, 360" (30ft) cable