

# 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.

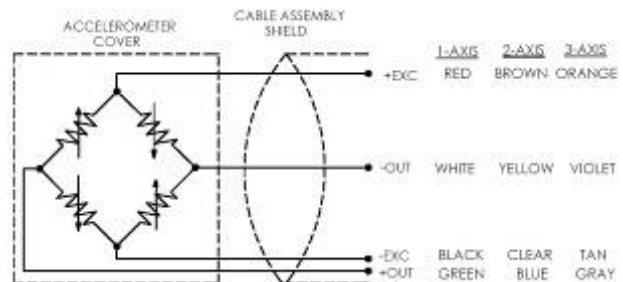
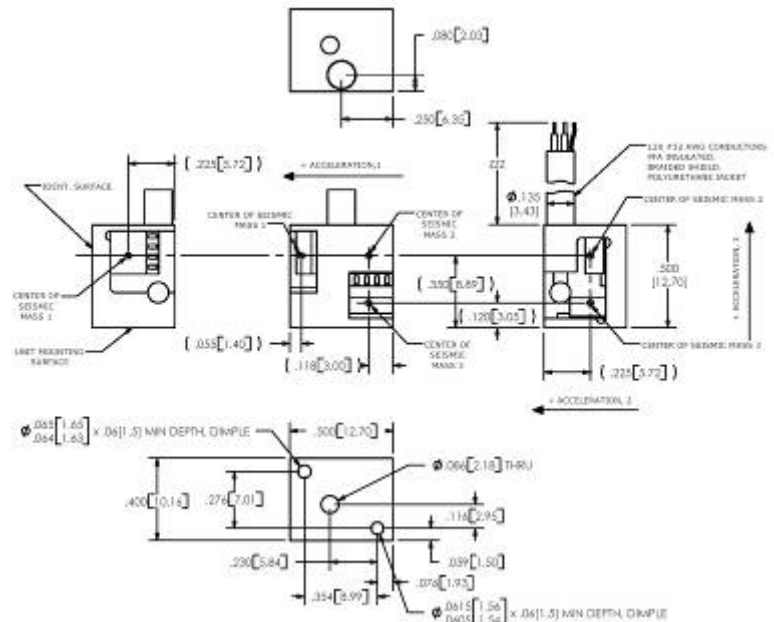
## FEATURES

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

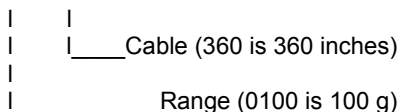
Case Material		Stainless Steel
Cable (Polyurethane Jacket)		12 x 32 AWG Conductors
Weight (grams)		
Mounting (Screw)	M2x0.2, 16 mm Length, Supplied	Torque 3 lb-in

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## ordering info

PART NUMBERING Model Number+Range+Excitation+Cable Length

68C-GGGG-CCC



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

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