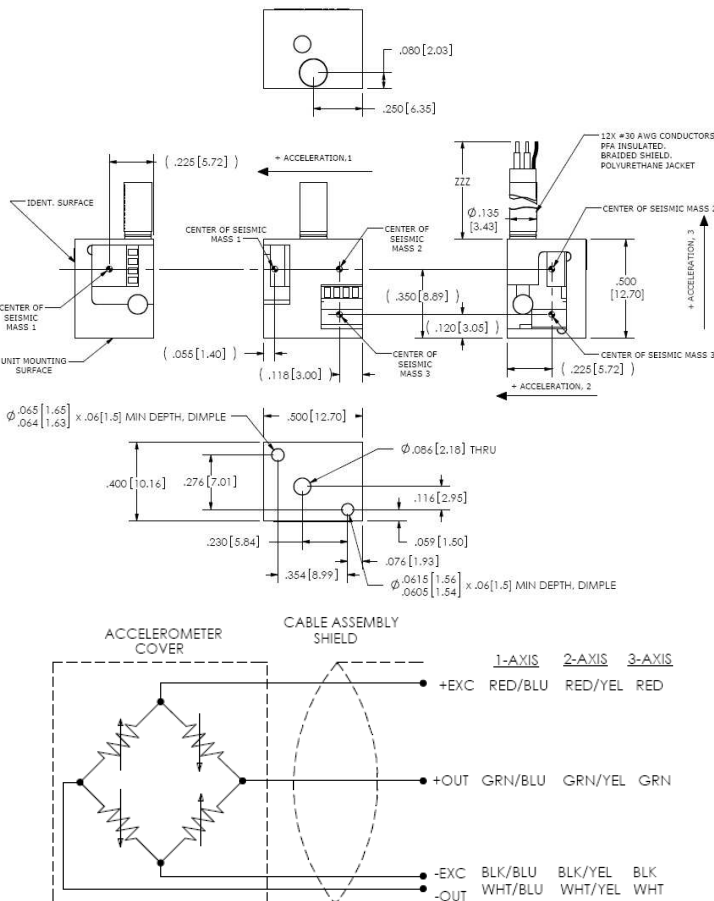


DIMENSIONS



MODEL 68C ACCELEROMETER

SPECIFICATIONS

- Triaxial Accel, DC Response
- Durable Low Noise Cable
- Reliable Performance
- SAE J2570 Compliant

The Model 68C Accelerometer is a small, compact triaxial device designed for vehicle impact and road testing. The unit incorporates three replaceable sensing modules with mechanical overload stops that provide high shock protection in rugged applications. The model 68C accelerometer is compliant with SAE-J211 specifications for anthropomorphic dummy instrumentation. The model 68CM1 has a cover installed for additional protection.

FEATURES

- ±100g to ±2000 g Ranges
- 2-10 Vdc Excitation
- Temperature Compensation
- Mechanical Overload Stops
- Replaceable Sensors
- Optional Cover
- WorldSID Approved

APPLICATIONS

- Crash Testing
- Impact Testing
- Off-Road Testing
- Road Testing
- Dummy Instrumentation

PERFORMANCE SPECIFICATIONS

All values are typical at ±24°C, 80Hz and 10Vdc excitation unless otherwise stated. Measurement Specialties reserves the right to update and change these specifications without notice.

Parameters				Notes
DYNAMIC				
Range(g)	±100	±500	±2000	
Sensitivity (mV/g) ¹	2.0	0.45	0.15	
Frequency Response, 3 Axis (Hz)	0-1000	0-2000	0-4000	±5%
Frequency Response, 1 & 2 Axis (Hz)	0-700	0-1400	0-3000	±5%
Resonant Frequency (Hz)	4000	11,000	26,000	
Damping Ratio	0.5	0.3	0.05	Typical
Shock Limit (g)	5000	5000	5000	
Non-Linearity (% FSO)	±1	±1	±1	Of Reading
Transverse Sensitivity (%)	<3	<3	<3	
ELECTRICAL				
Zero Acceleration Output (mV)	<±50			
Excitation Voltage (Vdc)	2 to 10			
Input Resistance	2400-6000			
Output Resistance (Ω)	2400-6000			
Insulation Resistance (MΩ)	>100			@100Vdc
Residual Noise (µV RMS)	<10			
Ground Isolation	Isolated from Mounting Surface			
ENVIRONMENTAL				
Thermal Zero Shift (%FSO/°C)	±0.05			From 0 to +50°C
Thermal Sensitivity Shift (%/°C)	-0.20 ±0.05			From 0 to +50°C
Operating Temperature (°C)	-20 to +85			
Storage Temperature (°C)	-40 to +90			
Humidity	Epoxy Sealed, IP61 (M1 option)			
PHYSICAL				
Case Material	Stainless Steel			
Cable	12x #30 AWG Conductors PFA Insulated, Braided Shield, PU Jacket			
Weight (grams)	9.0			Cable not included
Mounting (Screw)	M2 x 0.4, 16mm Length, Supplied			Torque 3 lb-in

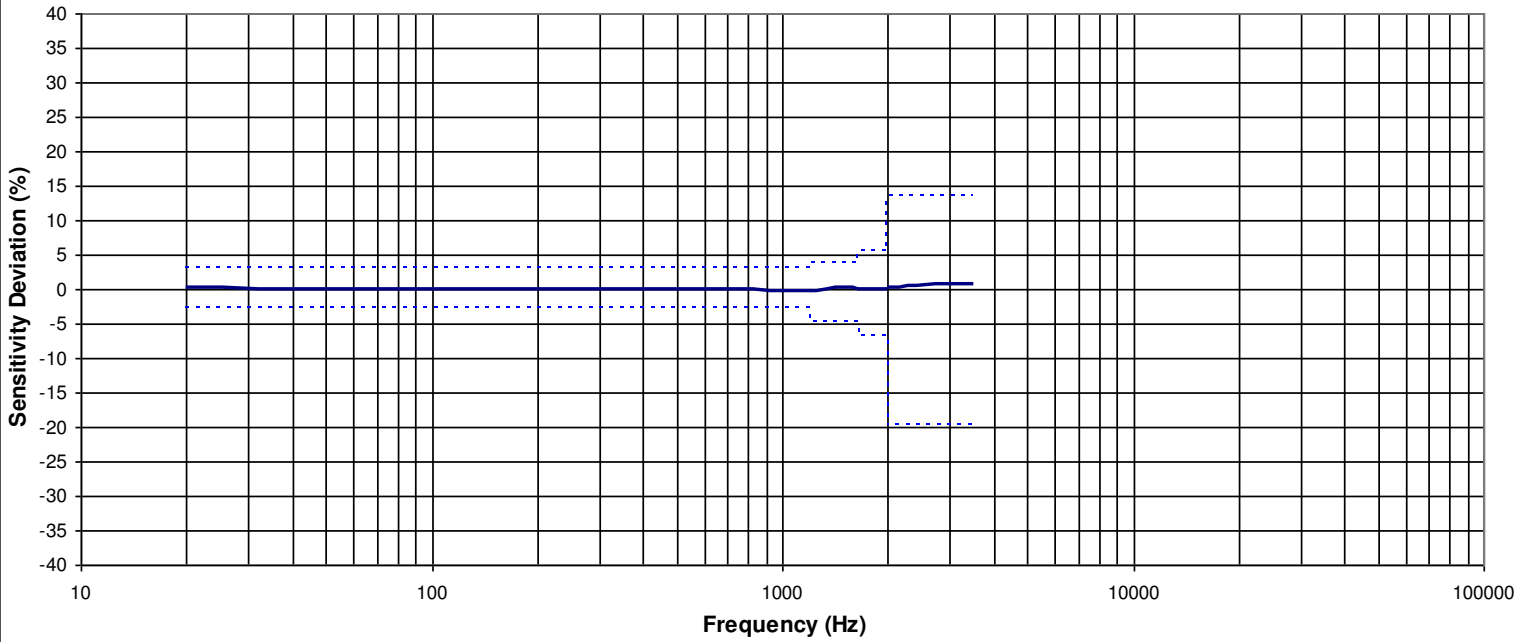
¹ Output is ratiometric to excitation voltage

- Calibration supplied:** CS-FREQ-0100 NIST Traceable Amplitude Calibration from 20Hz to 3500Hz
- Supplied accessories:** AC-A02591 1x M2 x 0.4 (16mm length) Phillips Pan Head Screw & Washer
- Optional accessories:** 121 3-Channel Precision Low Noise DC Amplifier
140A Auto-Zero Inline Amplifier

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Notes: ---SAE J2570 Corridor

Typical Frequency Response



ORDERING INFORMATION

PART NUMBERING Model Number+Range+Cable Length+Options

68C-GGGG-CCC-ZZ

| | | Options
 | | Cable (360 is 360 inches)
 | Range (0500 is 500 g)

Optional Dash Numbers

-01 5Vdc Calibration
 -03 3.3Vdc Calibration

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

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