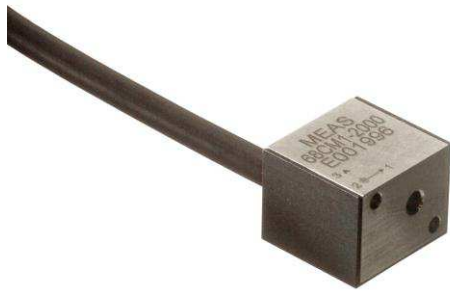
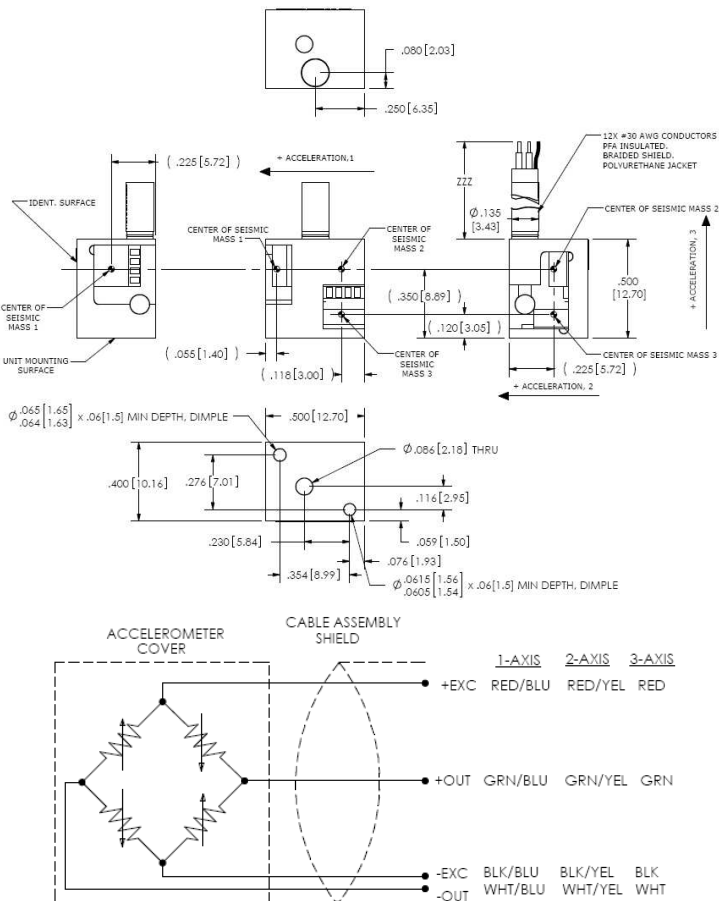


MODEL 68C ACCELEROMETER



DIMENSIONS



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

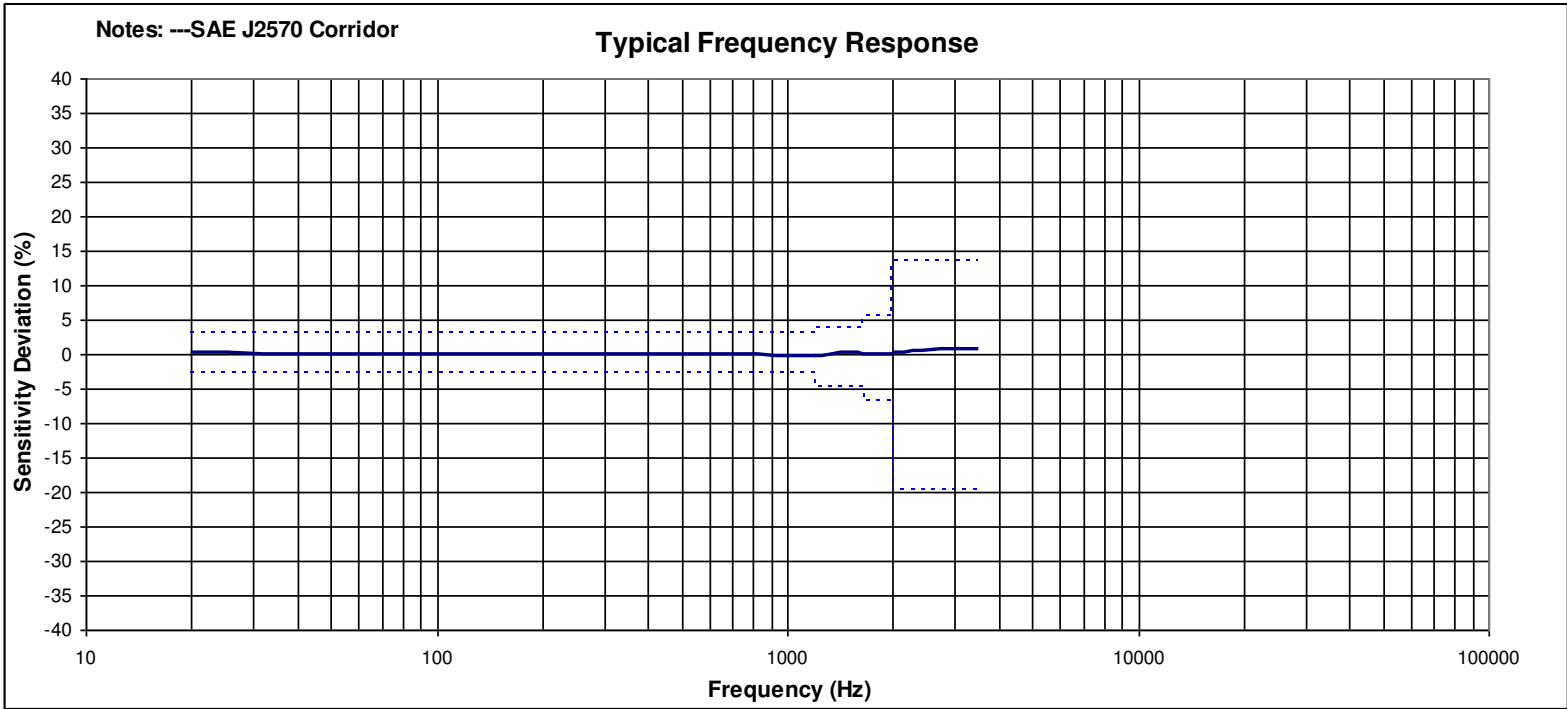
All values are typical at $\pm 24^{\circ}\text{C}$, 80Hz and 10Vdc excitation unless otherwise stated. Measurement Specialties reserves the right to update and change these specifications without notice.

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	$\pm 5\%$
Frequency Response, 1 & 2 Axis (Hz)	0-700	0-1400	0-3000	$\pm 5\%$
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 ($M\Omega$)	>100			@100Vdc
Residual Noise ($\mu\text{V RMS}$)	<10			
Ground Isolation	Isolated from Mounting Surface			
ENVIRONMENTAL				
Thermal Zero Shift (%FSO/ $^{\circ}\text{C}$)	± 0.05			From 0 to $+50^{\circ}\text{C}$
Thermal Sensitivity Shift (%/ $^{\circ}\text{C}$)	-0.20 ± 0.05			From 0 to $+50^{\circ}\text{C}$
Operating Temperature ($^{\circ}\text{C}$)	-20 to +85			
Storage Temperature ($^{\circ}\text{C}$)	-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

The information in this sheet has been carefully reviewed and is believed to be accurate; however, no responsibility is assumed for inaccuracies. Furthermore, this information does not convey to the purchaser of such devices any license under the patent rights to the manufacturer. Measurement Specialties, Inc. reserves the right to make changes without further notice to any product herein. Measurement Specialties, Inc. makes no warranty, representation or guarantee regarding the suitability of its product for any particular purpose, nor does Measurement Specialties, Inc. assume any liability arising out of the application or use of any product or circuit and specifically disclaims any and all liability, including without limitation consequential or incidental damages. Typical parameters can and do vary in different applications. All operating parameters must be validated for each customer application by customer's technical experts. Measurement Specialties, Inc. does not convey any license under its patent rights nor the rights of others.



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

NORTH AMERICA

Measurement Specialties, Inc.,
 a TE Connectivity Company
 Tel: 800-522-6752
 Email: customer-care.hmpt@te.com

EUROPE

MEAS France SAS
 a TE Connectivity Company
 Tel: 800-440-5100
 Email: customer-care.lcsb@te.com

ASIA

Measurement Specialties (China), Ltd.,
 a TE Connectivity Company
 Tel: 0400-820-6015
 Email: customer-care.shzn@te.com

TE.com/sensorsolutions

Measurement Specialties, Inc., a TE Connectivity company.

Measurement Specialties, TE Connectivity, TE Connectivity (logo) and EVERY CONNECTION COUNTS are trademarks. All other logos, products and/or company names referred to herein might be trademarks of their respective owners.

The information given herein, including drawings, illustrations and schematics which are intended for illustration purposes only, is believed to be reliable. However, TE Connectivity makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. TE Connectivity's obligations shall only be as set forth in TE Connectivity's Standard Terms and Conditions of Sale for this product and in no case will TE Connectivity be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of the product. Users of TE Connectivity products should make their own evaluation to determine the suitability of each such product for the specific application.

© 2015 TE Connectivity Ltd. family of companies All Rights Reserved.