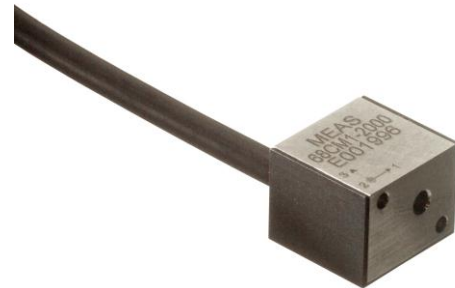


Model 68C Accelerometer



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.

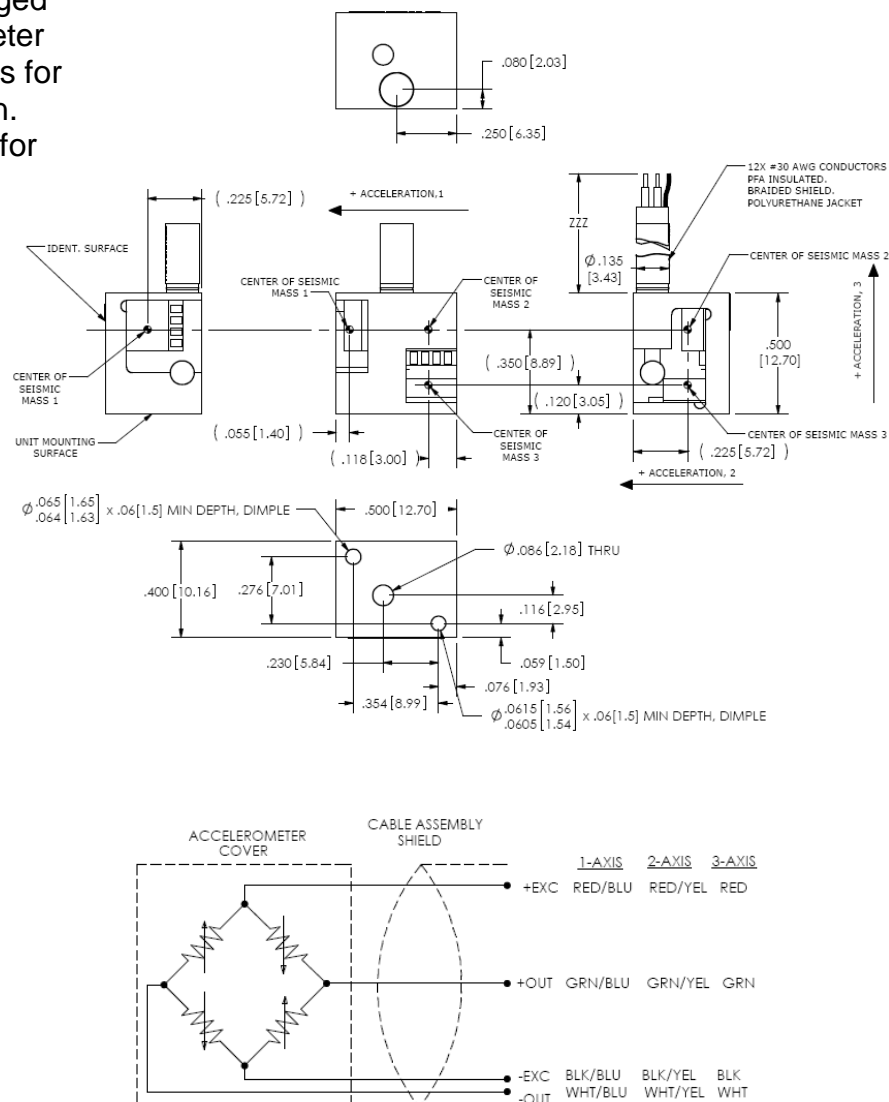
FEATURES

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

APPLICATIONS

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

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

| | ± 100 | ± 500 | ± 2000 | Notes |
|-------------------------------------|-----------|-----------|------------|------------|
| Range(g) | | | | |
| 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) | $< \pm 50$ | | | |
| Excitation Voltage (Vdc) | 2 to 10 | | | |
| Input Resistance | 2400-6000 | | | |
| Output Resistance (Ω) | 2400-6000 | | | |
| Insulation Resistance (M Ω) | > 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

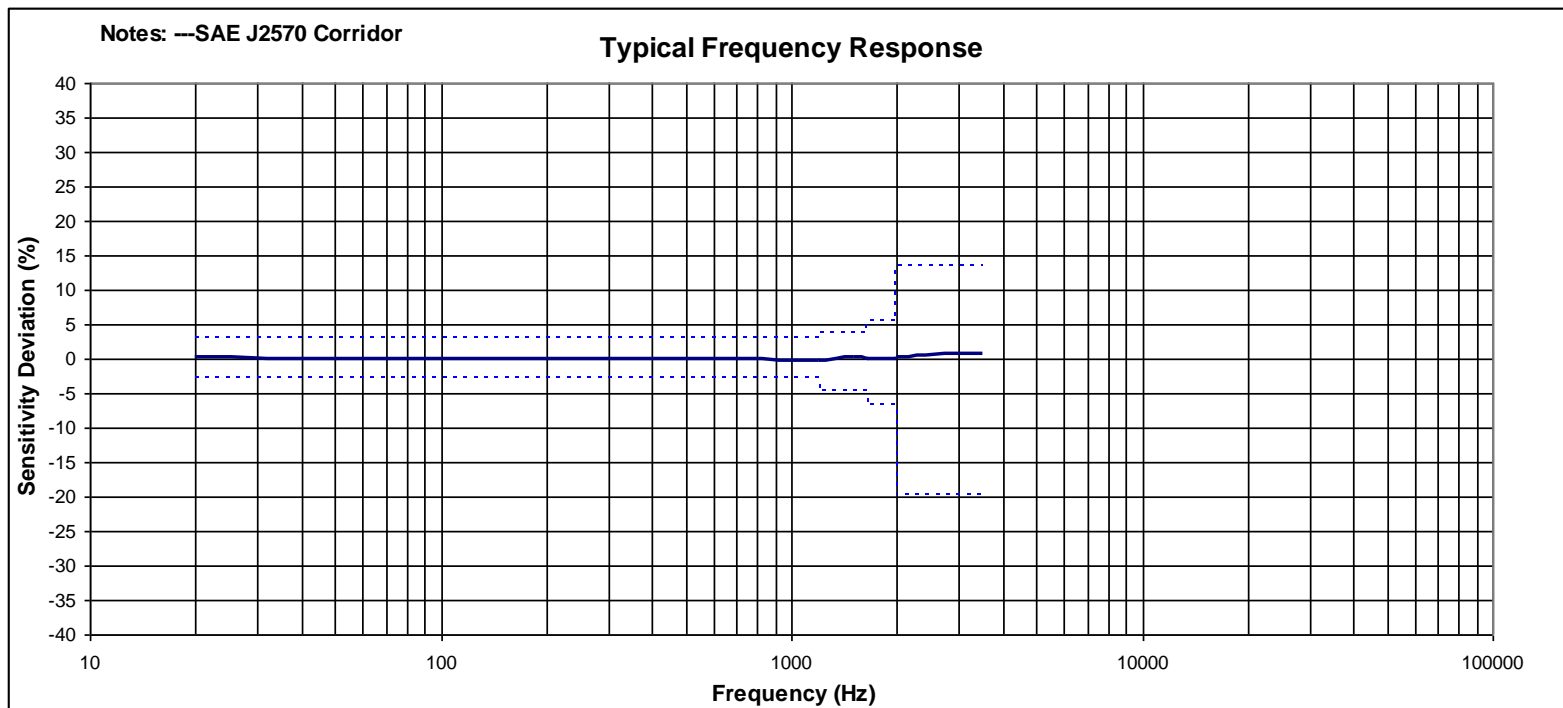
Calibration supplied: CS-FREQ-0100 NIST Traceable Amplitude Calibration from 20Hz to 3500Hz

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
140 Auto-Zero Inline Amplifier

Model 68C Accelerometer

performance specifications



ordering info

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

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

联系方式



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