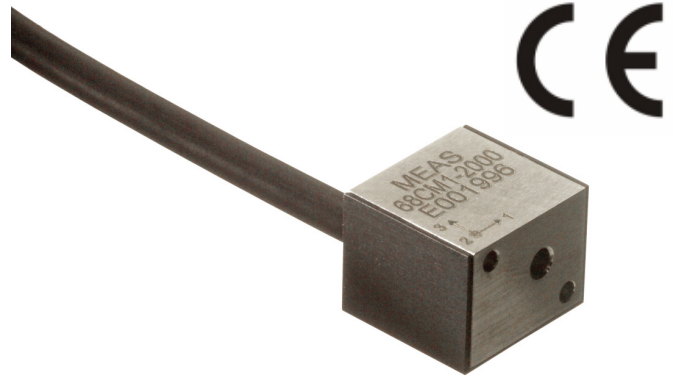


Model 68C Accelerometer

- 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.

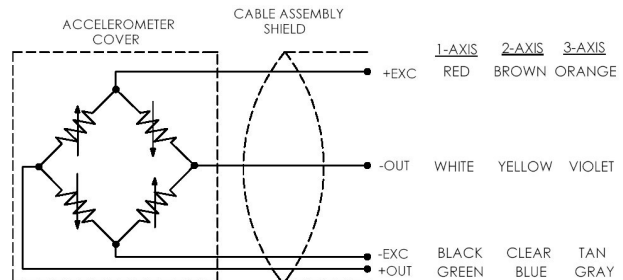
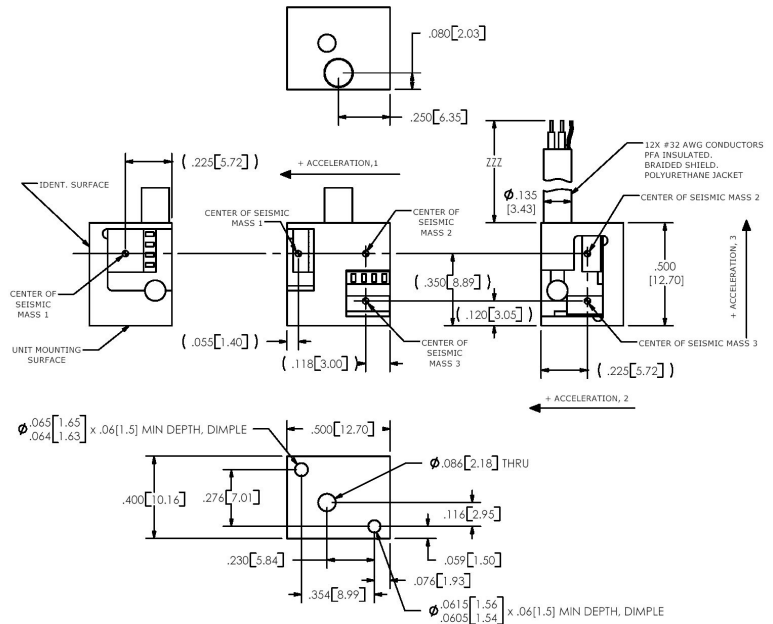
FEATURES

- 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.

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 Ω) | >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