# Model 64B Accelerometer

DC Response
Durable Cable
Small Package
Reliable Performance


## The Model 64B Accelerometer

is based on an advanced piezoresistive MEMS sensing element which offers exceptional dynamic range and stability. This unit features a full bridge output configuration with a temperature range from 0 to +50º C. A slight amount of internal gas damping provides outstanding shock survivability and a flat amplitude/phase response up to 7kHz. The Model 64B is compliant with SAE J211 standards for anthropomorphic dummy instrumentation.

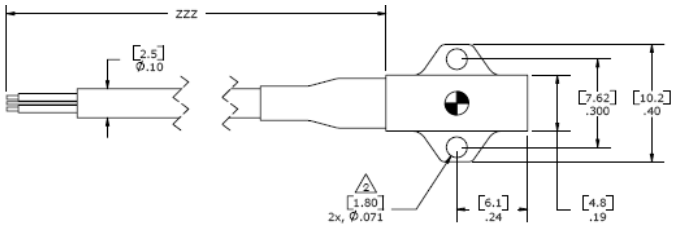
## FEATURES

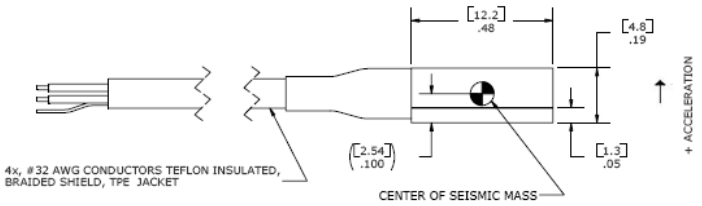
- 2nd GEN MEMS Sensing Element
- ± 50 to ±6,000 g Ranges
- 2-10 Vdc Excitation for Maximum Flexibility
- 0-50 ºC Temperature Range
- High Impact Jacketed Cable
- 1% Transverse Sensitivity Available
- <± 25 mV Zero Offset

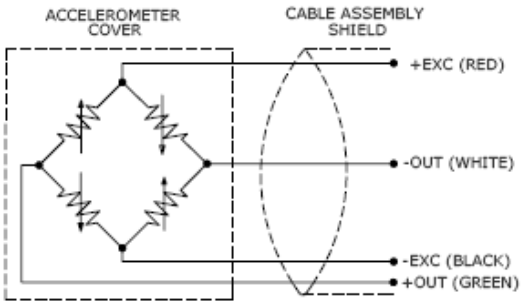
## APPLICATIONS

- Safety Crash Testing
  - Auto
  - Truck
  - Recreational Vehicles
- Shock Testing

## dimensions






32 Journey Ste. 150 Aliso Viejo, CA 92656 949-716-5377 t&m@meas-spec.com

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## performance specifications

All values are typical at ±24°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) | ±50 | ±100 | ±200 | ±500 | ±2000 | ±6000 | |
| Sensitivity (mV/g) | 0.2 | 0.9 | 0.5 | 0.4 | 0.15 | 0.05 | |
| Frequency Response (Hz) | 0-400 | 0-500 | 0-600 | 0-800 | 0-2000 | 0-2000 | ± 2% |
| | 0-1000 | 0-1200 | 0-1500 | 0-2000 | 0-5000 | 0-5000 | ± 5% |
| | 0-1400 | 0-1500 | 0-2100 | 0-2800 | 0-7000 | 0-7000 | ± 1 dB |
| Natural Frequency (Hz) | 4000 | 6000 | 8000 | 15000 | 26000 | 26000 | |
| Non-Linearity (% of reading) | ±1 | ±1 | ±1 | ±1 | ±1 | ±1 | |
| Transverse Sensitivity (%) | <3 | <3 | <3 | <3 | <3 | <3 | |
| Thermal Zero Shift (%FSO/°C) | ±0.04 | ±0.04 | ±0.04 | ±0.04 | ±0.04 | ±0.04 | From 0 to +50°C |
| Thermal Sensitivity Shift (%/°C) | ±0.1 | ±0.1 | ±0.1 | ±0.1 | ±0.1 | ±0.1 | From 0 to +50°C |
| **ELECTRICAL** | | | | | | | |
| Zero Acceleration Output (mV) | <±25 | <±25 | <±25 | <±25 | <±25 | <±25 | |
| Excitation (Vdc) | 2 to 10 | 2 to 10 | 2 to 10 | 2 to 10 | 2 to 10 | 2 to 10 | |
| Input Resistance | 3500-4800 | 3500-4800 | 3500-4800 | 3500-4800 | 3500-4800 | 3500-4800 | |
| Output Resistance (Ω) | 1700-4800 | 1700-4800 | 1700-4800 | 1700-4800 | 1700-4800 | 1700-4800 | |
| Insulation Resistance (MΩ) | >100 | >100 | >100 | >100 | >100 | >100 | @50Vdc |
| Ground Isolation | | | | | | | Isolated from mounting surface. |
| **ENVIRONMENTAL** | | | | | | | |
| Shock Limit (g) | 10000 | 10000 | 10000 | 10000 | 10000 | 10000 | |
| Operating Temperature (°C) | | | | | | | -40 to +121 |
| **PHYSICAL** | | | | | | | |
| Case Material / Cover Material | | | Anodized Aluminum / Brass | | | | |
| Cable (Integral 30 Foot Cable) | | | | | | | 4 x 32 AWG Conductors |
| Weight (grams) | 1 | 1 | 1 | 1 | 1 | 1 | Cable Not Included |
| Mounting | | | 2x 0=80 x 3/16 socket head cap screws | | | | Torque 3 lb-in |



## ordering info

PART NUMBERING Model Number+Range+Excitation+Cable Length+Options

64B-GGGG-CCCT-ZZZ
- I I I I_____Options
- I I I_____1% Transverse Sensitivity when "T" is present.
- I I_____Cable (360 is 360 inches)
- I_____Range (0100 is 100 g)

Example: 64B-2000-360
Model 64B, 2000g, 10V Excitation, 360" (30ft) Cable), No Options.



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