

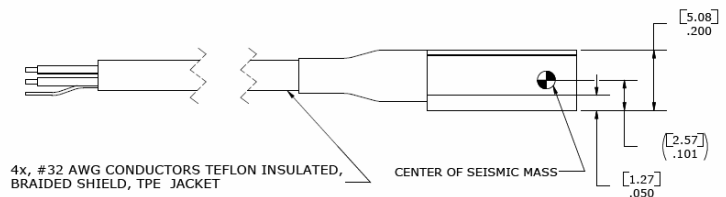
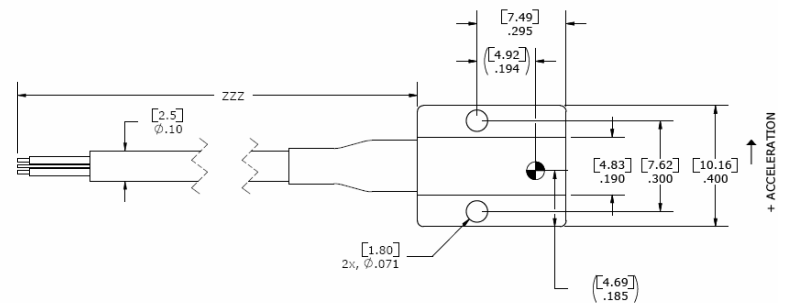
Model 64L Accelerometer

DC Response
Durable Cable
Small Package
Reliable Performance



The Model 64L 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 +50° C. A slight amount of internal gas damping provides outstanding shock survivability and a flat amplitude/phase response up to 7kHz. The Model 64L is compliant with SAE J211 standards for anthropomorphic dummy instrumentation.

dimensions

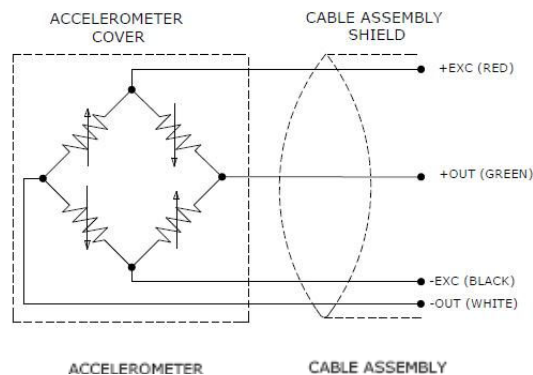


FEATURES

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

APPLICATIONS

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



Model 64L 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 | | | | | | | | Notes |
|----------------------------------------------------|----------|-----------|-----------|---------------------------------------|------------------------------------------------------------------|------------|------------|-------------------|
| DYNAMIC | | | | | | | | |
| Range(g) | ± 50 | ± 100 | ± 200 | ± 500 | ± 1000 | ± 2000 | ± 6000 | |
| Sensitivity (mV/g) | 2.0 | 0.9 | 0.9 | 0.4 | 0.4 | 0.15 | 0.1 | |
| Frequency Response (Hz) | 0-400 | 0-500 | 0-800 | 0-1200 | 0-2000 | 0-2000 | 0-2000 | $\pm 2\%$ |
| | 0-1000 | 0-1200 | 0-2000 | 0-3000 | 0-3500 | 0-3500 | 0-3500 | $\pm 5\%$ |
| | 0-1400 | 0-1500 | 0-2800 | 0-4200 | 0-4500 | 0-4500 | 0-4500 | $\pm 1\text{ dB}$ |
| Natural Frequency (Hz) | 4000 | 6000 | 8000 | 15000 | 15000 | 26000 | 26000 | |
| Non-Linearity (% of reading) | | | | ± 1 | | | | |
| Transverse Sensitivity (%) | | | | < 3 | | | | |
| Thermal Zero Shift (%FSO/ $^{\circ}\text{C}$) | | | | ± 0.04 | | | | |
| Thermal Sensitivity Shift (%/ $^{\circ}\text{C}$) | | | | ± 0.1 | | | | |
| ELECTRICAL | | | | | | | | |
| Zero Acceleration Output (mV) | | | | $< \pm 25$ | | | | |
| Excitation (Vdc) | | | | 2 to 10 | | | | |
| Input Resistance (Ω) | | | | 2400-5000 | | | | |
| Output Resistance (Ω) | | | | 2400-4800 | | | | |
| Insulation Resistance (M Ω) | | | | > 100 | | | | |
| Ground Isolation | | | | | @50Vdc Isolated from mounting surface. | | | |
| ENVIRONMENTAL | | | | | | | | |
| Shock Limit (g) | | | | 10,000 | | | | |
| Operating Temperature ($^{\circ}\text{C}$) | | | | | -40 to +121 | | | |
| PHYSICAL | | | | | | | | |
| Case Material / Cover Material | | | | Anodized Aluminum | | | | |
| Cable (Integral 30 Foot Cable) | | | | | 4 x 32 AWG Conductors Cable Not Included Torque 3 lb-in | | | |
| Weight (grams) | | | | 1 | | | | |
| Mounting | | | | 2x 0=80 x 3/16 socket head cap screws | | | | |

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ordering info

PART NUMBERING Model Number+Range+Excitation+Cable Length+Options
64L-GGGG-CCCT-ZZZ

| | | | Options
| | | 1% Transverse Sensitivity when "T" is present.
| | Cable (360 is 360 inches)
| Range (0100 is 100 g)

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