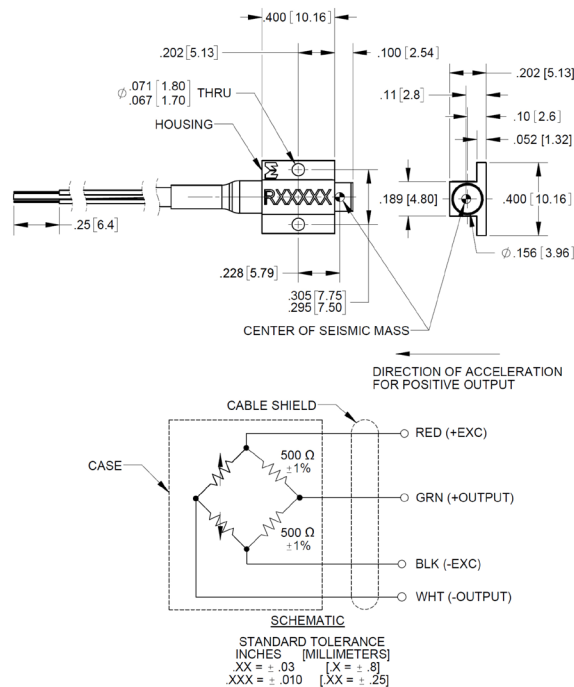
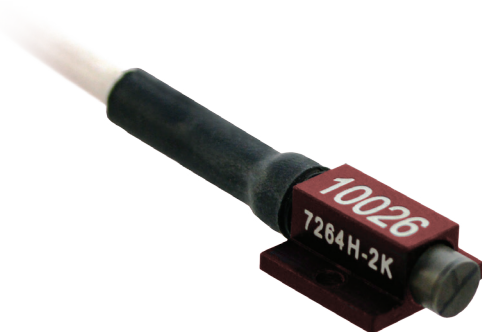


Endevco®

Damped piezoresistive accelerometer Model 7264H-2K



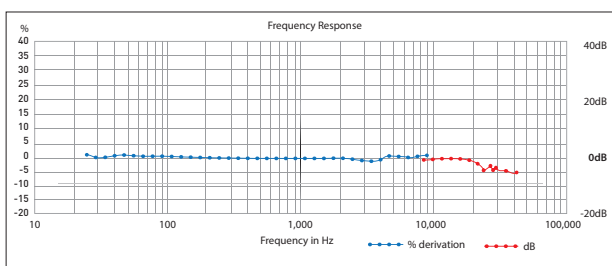
Key features

- DC response and wide bandwidth
- Multi-mode damping
- Mechanical stops
- Passenger safety testing
- SAE J211/J2570 compliant

Model 7264H is a very low mass accelerometer weighing only 1.4 grams. This accelerometer is designed for crash testing and similar applications that require damping, broad frequency response, and minimum zero shift following the event. It is equivalent in form and fit to the Endevco model 7264C-2K in that the location of the center of seismic mass is the same.

Model 7264H utilizes a unique and advanced micro-machined piezoresistive sensor, which includes multi-mode damping for exceptional bandwidth with no significant resonance response in the usable range. This monolithic sensor incorporates the latest MEMS technology for ruggedness, stability and reliability over previous designs. The accelerometer has a two active arm, full bridge circuit with fixed completion resistors to facilitate shunt calibration. Full scale output is 400mV nominal with 10 Vdc excitation. With a frequency response extending down to dc (steady state acceleration), this accelerometer is ideal for measuring long duration transient shocks.

7264H has a full scale range of 2000 g and gas damping. It is available with less than 1% transverse sensitivity and less than ± 25 mV Zero Measurand Output as the "TZ" option. 7264H comes standard with calibration data for 2V, 5V and 10V excitation.



Actual frequency response calibration of 7264H-2000

US patent 6,988,412 applies.

Recommended electronics for signal conditioning and power supply are the Endevco brand model 126 and 136 and model 436, a general purpose three channel DC conditioner and power supply.

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Damped piezoresistive accelerometer

Model 7264H-2K

Specifications

All specifications are referenced at +75°F (+24°C) and 10 Vdc, unless otherwise noted. Sensitivity and zero measurand offset are provided at 2V, 5V and 10V excitation. Calibration data, traceable to National Institute of Standards and Technology (NIST), is supplied.

| Dynamic characteristics | Units | -2K |
|--|-------------|--|
| Range | g | ± 2000 |
| Sensitivity (at 100Hz and 10g) | | |
| Minimum/Nominal/Maximum | mV/V/g | .014/.02/.03 |
| Frequency response (Referenced to 100 Hz) | | |
| ± 5% maximum | Hz | 0 to 6000 |
| Undamped natural frequency | kHz | 25 |
| Non-linearity | % | ±1 |
| Zero measurand output | mV | ±100 maximum, ±25 optional |
| Transverse sensitivity | % max | 3 (1 optional) |
| Damping ratio (2) | of critical | 0.60 |
| Thermal zero shift (nomial) | | |
| 10° to 30°C | %FSO/°C | 0.05 |
| 50° to 86°F | %FSO/°F | 0.03 |
| Thermal sensitivity shift (max) | | |
| 10° to 30°C | %/°C | 0.1 |
| 50° to 86°F | %/°F | 0.06 |
| Mounting strain sensitivity (per ISA 37.2@ 250 µ strain) | Equiv. g's | 0.01 |
| Electrical characteristics | | |
| Excitation | Vdc | 2.0, 5.0, 10.0 |
| Resistance | | |
| Input, minimum | ohms | 700 |
| Output, maximum | ohms | 3000 |
| Fixed resistors | ohms | 500 ± 1.0% |
| Insulation resistance | Mohms | 100 min @ 50 Vdc |
| Physical characteristics | | |
| Case material Electrical connections | | Hard anodized aluminum alloy, color red Integral 4 conductor, # 32 AWG Teflon insulated leads, braided shield with white Silicone jacket. |
| Mounting torque Weight | | 2.6 in-lbf (0.29 N.m) recommended/3.0 in-lbf (0.34 N.m) 0.05 oz (1.4 gm); cable 0.1 oz/ft (9 gm/m), typical |
| Environmental | | |
| Acceleration limits (any direction) | | |
| Sinusoidal vibration | | 1000 g below 5 kHz |
| Shock (half-sine pulse duration) | | 10000 g, 200 µsec or longer |
| Temperature | | |
| Operating | | - 18°C to + 66°C (0°F to + 150°F) |
| Storage | | - 54°C to + 121°C (- 65°F to + 250°F) |

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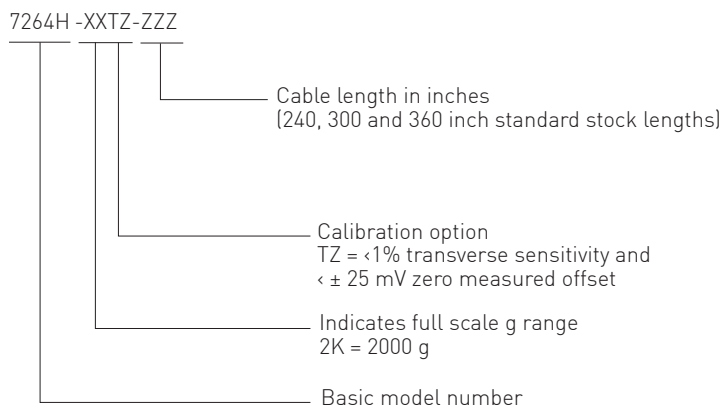
Damped piezoresistive accelerometer Model 7264H-2K

Accessories

| Product | Description | 7264H |
|---------|---|----------|
| EHM35 | Allen wrench | Included |
| EHW196 | Size-0 flat washers (x2) | Included |
| EH828 | 0-80 x 3/16 inch socket head cap screw (x2) | Included |
| 7953A | Triaxial mounting block | Optional |

Notes

1. Maintain high levels of precision and accuracy using Endevco's factory calibration services. Call Endevco's inside sales force at 800-982-6732 for recommended intervals, pricing and turn-around time for these services as well as for quotations on our standard products.
2. Damping ratio is intended to provide the user an indication of effective damping ratio. Actual results of Endevco multi-mode damping provide far superior damping response which are evident in the provided frequency sweep to 40kHz.
3. Model number definition:



Contact

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